Basic Principles for a National Emergency Telecommunications Plan

Bogota, Colombia (24-26 July 2012)

Cosmas L. Zavazava, PhD.
Chief of Department,
Projects and Knowledge Management
International Telecommunication Union

National Emergency Telecommunications Plan (NETP)

- The NETP is an integral part of the National Plan on Disaster Management (NPDM)

- It describes the Management Arrangements for Telecommunications 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.

National Emergency Telecommunications Plan (NETP)

- The NETP calls for the active participation of all stakeholders under the coordination of the relevant national authorities.

- This draft is generic in nature and should be adapted to local needs and realities in each country.

- This framework is flexible but represents findings on a recent research by the ITU that included countries from all the world's continents.

Proposed NETP

This draft 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:

- Prevention and mitigation
- Preparedness
- Response
- Recovery

Prevention and mitigation

- Establish legal and regulatory frameworks   supporting emergency telecommunications and ICT

- Identify critical telecommunications infrastructure

- Carry out risk analysis of critical telecommunications infrastructure

- Take measures to reduce telecom network vulnerability

- Improve network resilience

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 priority), and material resources.

- Embark on a vigorous educational campaign to raise public awareness on 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

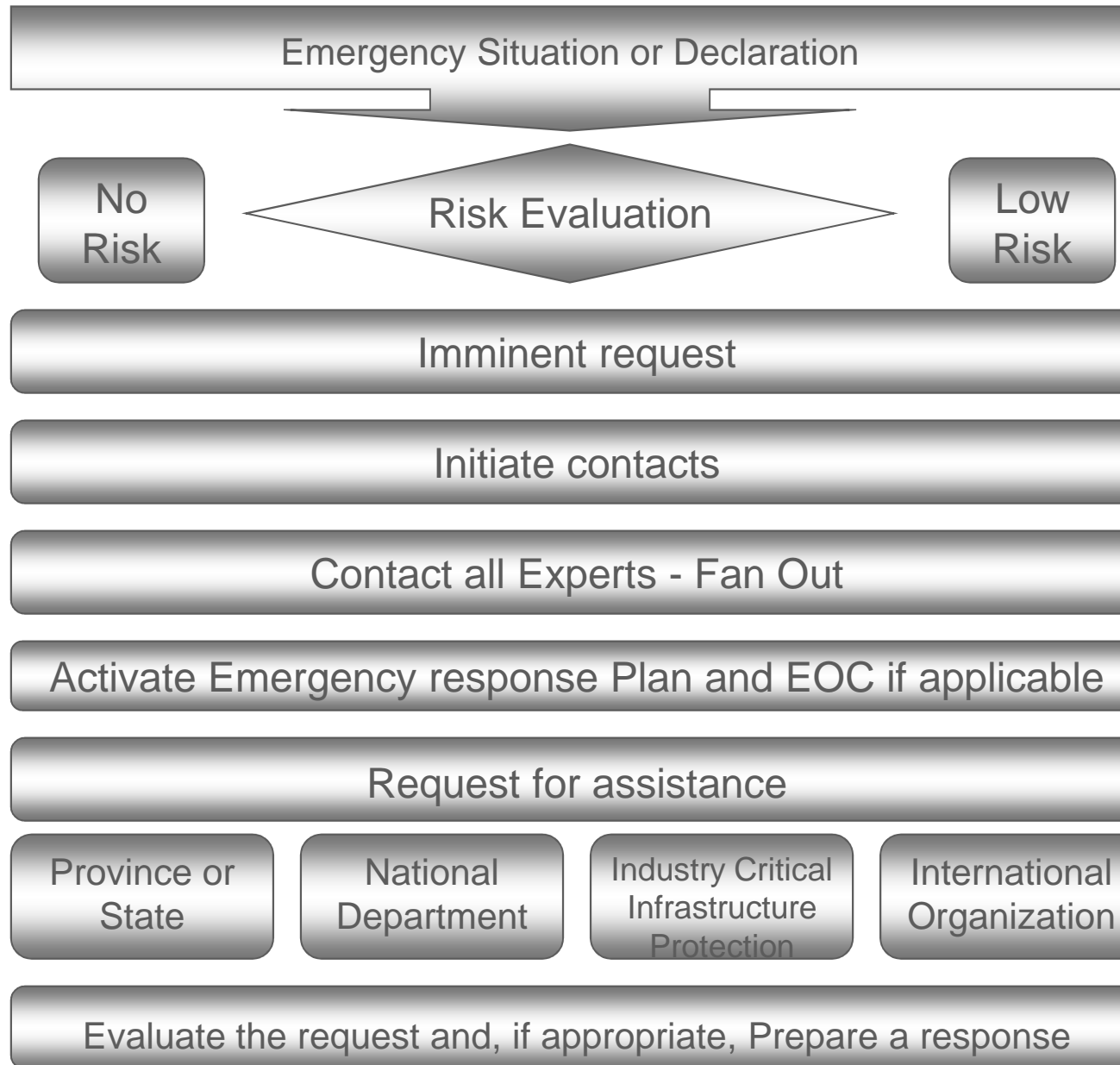- Draw up ET Business Continuity Plan (BCP)

Response

- Carry out an audit of telecommunications infrastructure to assess telecommunication needs

- Ensure that Emergency Telecommunications teams work closely with the National Disater Management Institution and that resources are deployed where most needed

- Mobilize additional resources from other entities as required e.g. radio amateurs, private sector, international organizations 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 → Risk Evaluation ← Low Risk

Imminent request

Initiate contacts

Contact all Experts - Fan Out

Activate Emergency response Plan and EOC if applicable

Request for assistance

| Province or State | National Department | Industry Critical Infrastructure Protection | International Organization |

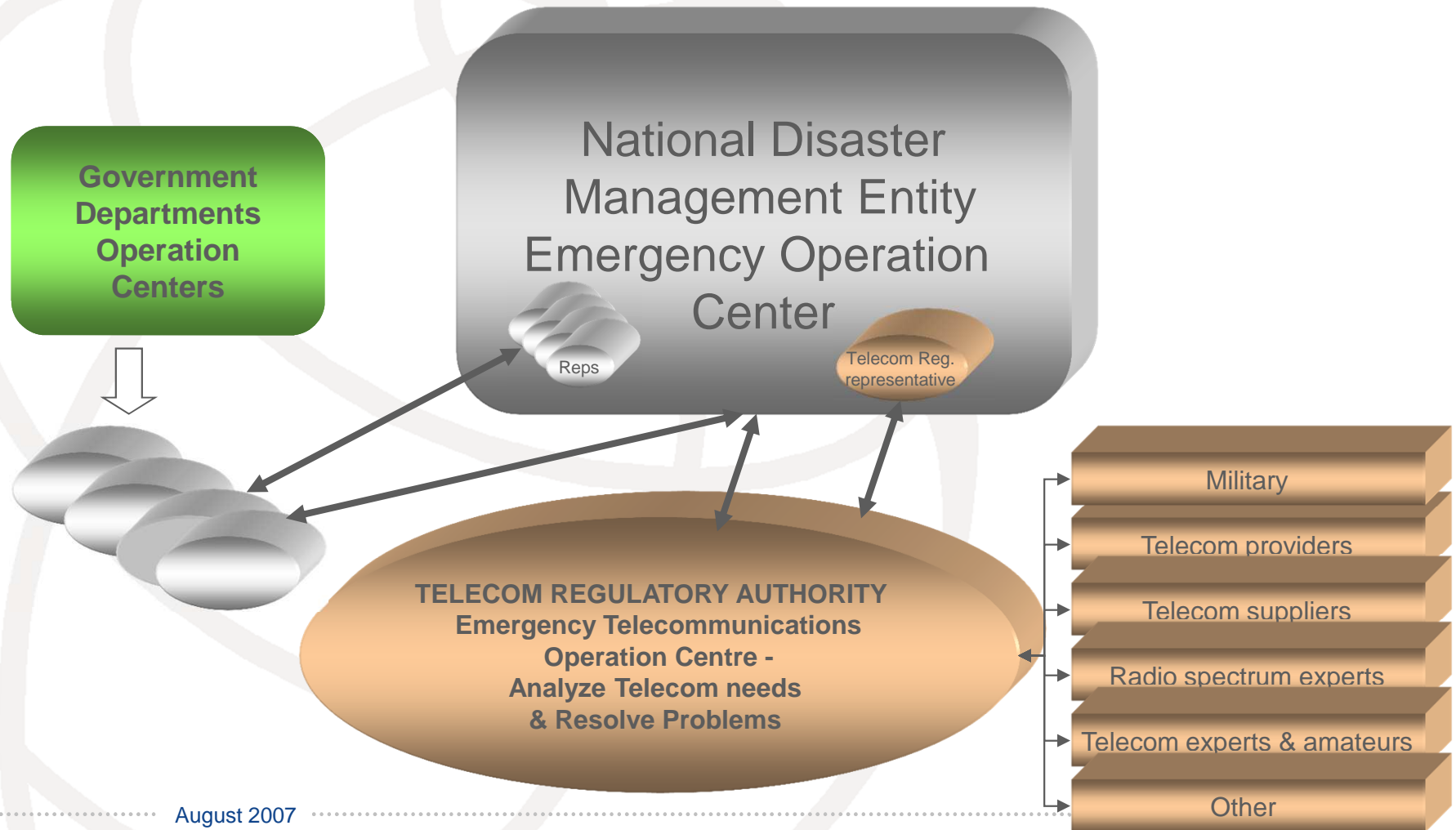Evaluate the request and, if appropriate, Prepare a response

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 OTHERS DO IT …
Administrative Arrangements for Emergency Telecommunications in support of National Disaster Management efforts

Government Departments Operation Centers

National Disaster Management Entity Emergency Operation Center

Reps

Telecom Reg. representative

TELECOM REGULATORY AUTHORITY
Emergency Telecommunications Operation Centre -
Analyze Telecom needs
& Resolve Problems

Military

Telecom providers

Telecom suppliers

Radio spectrum experts

Telecom experts & amateurs

Other

Concluding Remarks

- The Emergency Telecommunications Plan (ETP) should be an integral part of the National Plan on Disaster Management.

- All stakeholders, at one stage or another, require telecommunication services. Therefore the ETP is of interest to them too.

- Consultation and coordination are the key words.

- Simulations and drills can lead to the successful execution of any plan, that includes the ETP.

Thank You

Emergency Situation or Declaration

- The **municipality** affected is normally responsible for managing the emergency in the first instance.
- If the crisis increases, assistance can be requested from the **regional or provincial or state emergency preparedness authorities**.
- If the crisis is nation wide the responsibility will be taken over by the **ministry of emergency planning**.
- The general approach is that national **departments are responsible for managing the crisis in their own field of expertise**. For example, ministry of transport authorities will manage a transportation crisis, a health crisis by the ministry of health. Telecommunication and ICT support is provided to these entities by the ministry responsible for telecommunication at national level.
- The highest level of co-ordination will be invoked when a disaster or crisis has national impact involving more than one ministerial area. **The EOC or ECC at the Ministry of National Emergency planning** will co-ordinate under the supervision of the Minister, who may call upon other ministries to become part of the Prime Minister or President crisis decision-making structure.

Risk Evaluation

- **Pro active attitude**

- Immediately evaluate the risk of telecommunications needs or problems

**No
Risk**

- ## No risk for telecommunications needs:

- ## End

**Low
Risk**

- **<u>Low risk for telecommunication
  needs:</u>**

- Standby and be prepared to support

Imminent request

- ## **Imminent request**

- Obtain ministerial approval for the activation of emergency telecommunication response plan and expand response capabilities

- Note: Delegation of authority could be obtained in advance

Initiate contacts

- **Initiate contact**

- If not yet contacted, then contact the Department responsible for National Emergency Management

- For a first situation report (SITREP)

Contact all experts – Fan Out

- **Contact all emergency telecommunication partners identified in emergency response plan:**
  - ➢ Experts in radio spectrum management
  - ➢ Experts in broadcasting
  - ➢ Experts from other federal departments
  - ➢ Experts and emergency planners from the telecommunication industry

- Request them to be on standby or to physically report for duty

- Provide those experts with a situation report (SITREP)

Activate Emergency response Plan and EOC if applicable

- ## **<u>Activate</u>**

  - ➤ Emergency telecommunication Response Plan

  - ➤ and Emergency Operation Center (EOC) if does exist

Request for assistance

- # Request for assistance

- # Emergency telecommunication

  - ➤ From a Provincial or State Government
  - ➤ From a national Department
  - ➤ From an Industry
  - ➤ From an International organization

Province or State

- **From a provincial or a State government:**

  ➢ In an emergency, the first response is almost at municipal or at state/provincial level.

  ➢ Should a province/state require telecommunication emergency support; they will contact the National Emergency Management Operation Centre.

National Department

- **From a national department:**

  - ➢ If a national department requires telecommunication emergency support they contact the National Emergency Management operation Centre

  - ➢ They may directly contact the Lead department for emergency telecom.

Industry
Critical Infrastructure Protection

- If a telecom industry, or a critical industry (electricity, water, transport, etc) needs help, then they will:

  ➢ Request for government support for telecommunications or for help to restore the telecom infrastructure

  ➢ They may contact the provincial or the national emergency management operation control Center (EOC)

International Organizations

- Will normally communicate with a national Point of Contact i.e the department of Foreign Affairs.

- If approved Department of Foreign Affairs contacts the National Emergency Operation Centre (EOC)

Evaluate the request and, if appropriate, Prepare a response

- The department responsible for national emergency planning will evaluate the requests made

- If appropriate will transmit those requests to the department responsible for emergency telecommunications or recommend a direct contact between the requesting organization and the department responsible for emergency telecommunications and ICT.

- For telecommunications, provide advice and assistance:
    - **To the emergency management community**
    - **To the telecommunication industry to restore critical infrastructures**
    - **To authorities, in order to facilitate international and inter-governmental communications**
    - **In the facilitation of the provision of appropriate telecommunications equipment or services**
    - **In receiving and analysing requests for radio frequencies and authorizations to operate**
    - **In facilitating the public warning effort**