

### **Satellite Application for Early Warning Systems**

Maritza Delgado
Programme Officer
Emergency Telecommunications Division

## **Emergency Telecommunications**

Better preparedness

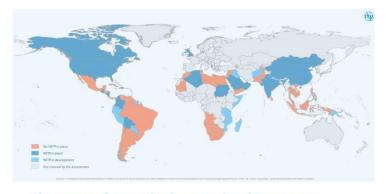
## National Emergency Telecommunication Plans

A National Emergency Telecommunication Plan (NETP) is an overall document that includes not only the regulatory framework for disaster risk management, but also all activities and actions that need to be developed and implemented in each of the phases of the disaster management cycle beyond the ICT sector.

### Why are NETPs needed?

The speed and effectiveness of emergency response depends on the availability of communications to enable the exchange of information between different actors in real time or as fast as feasible.

These plans and national coordination mechanisms not only promote harmonization across all levels of government, private sector and humanitarian actors, but also engage all stakeholders to work together through a multi-stakeholder approach assigning roles and responsibilities.



### About 28% of countries have National Emergency Telecommunication Plan (NETP)

...out of 94 countries covered by ITU Emergency Telecommunication Baseline Assessments (carried out in 2021-2023)

#### PHASES OF DISASTER MANAGEMENT



All actions aimed at restoring or improving livelihoods and health, as well as economic, physical, social cultural and environmental assets, systems and activities of an affected population.



Preparedness

Aims to build the capacities needed to efficiently manage all types of emergencies and achieve to deliver prompt response to the affected population.



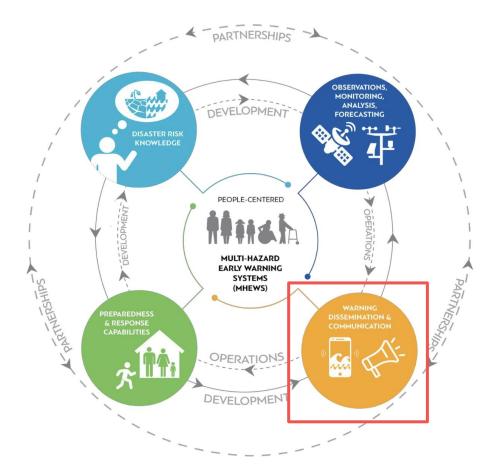
All the activities needed to provide timely help to those affected. ICTs are key to ensure timely flow of vital information for fast decision making.

# **UN Initiative on Early Warning Systems for All**

In March 2022, the UN set a new target to ensure that everyone on Earth should be protected by early warning systems by 2027.

ITU is the lead of Pillar 3 on "Warning dissemination and communication"





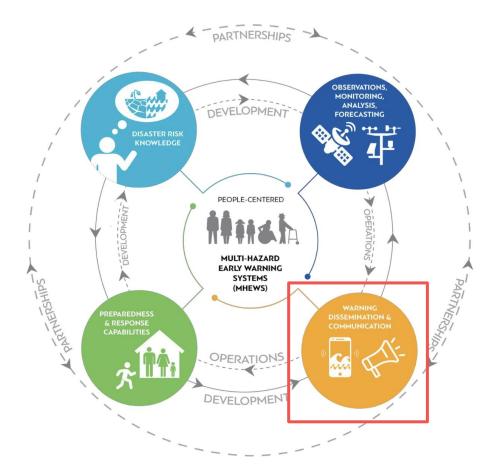
Multi-Hazard Early Warning System(MHEWS) Value Cycle – 4 pillars

# **UN Initiative on Early Warning Systems for All**

In March 2022, the UN set a new target to ensure that everyone on Earth should be protected by early warning systems by 2027.

ITU is the lead of Pillar 3 on "Warning dissemination and communication"





Multi-Hazard Early Warning System(MHEWS) Value Cycle – 4 pillars



## Multi-channel Approach for Warning Dissemination and Communication

- In warning dissemination and communication, a multi-channel approach increases the effectiveness of an alert and help address the diversity of communities at risk.
- Digital transformation is bringing huge opportunities in strengthen this pillar and allows us to reach more people through information and communication technologies (ICTs) --such as sending alerts to mobile phones.
- Satellite





### Satellite Direct-to-handset Alert Dissemination

- Work closely with satellite industry to look into direct-to-handset solution.
- Complementarity between the alert by satellite and the alert via CB and/or LB-SMS
- Global coverage including for communities in remote areas without connection.
- Ensure people at risk could be alerted even when the connectivity is down/affected by disasters
- The Case of Europe: Galileo's Emergency Warning Satellite Service

Satellite Industry Commitment to EW4All



"Satellites provide coverage to 99% of the world's geography and plays a critical life-saving role in emergency messaging in all environments and geographies and is also able to provide reliable service in disaster situations that might render other technologies and communication mediums inoperable. The satellite industry has longstanding experience in emergency messaging and will be an essential component of any truly global emergency warning and messaging system. We are committed to the ambition of the Early Warnings for All Initiative for everyone to be protected by 2027.

Under the leadership of GSOA, the satellite industry is committed to do its best efforts to supporting the ambitious goal of the EW4all initiative. This includes identifying opportunities and addressing challenges in the area of direct-to-handset. Through cross-sector collaboration and sharing of expertise and best practices, we will make progress in helping protect everyone. GSOA, in collaboration with key satellite partners, will work to assess and, as appropriate, address, the remaining challenges for the adoption of these lifesaving technological solutions and applications. This could include reaching out to relevant stakeholders outside the satellite industry, including device manufacturers and standardization bodies, terrestrial service providers and other relevant trade associations. "



Smoke signals, alerts (cell broadcast, TV/radios SMS...)

TV/radios SMS...) Satellites

Sirens Variable Social

Variable message signs

Social media, apps...



Thank you!