



Telecommunications/ICT for Disaster Management

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BDT/LSE - ITU

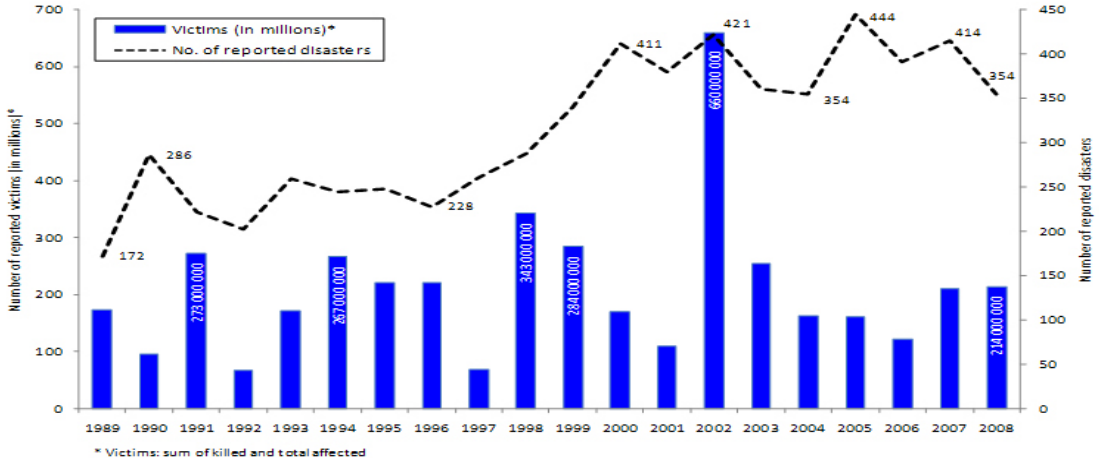


International
Telecommunication
Union

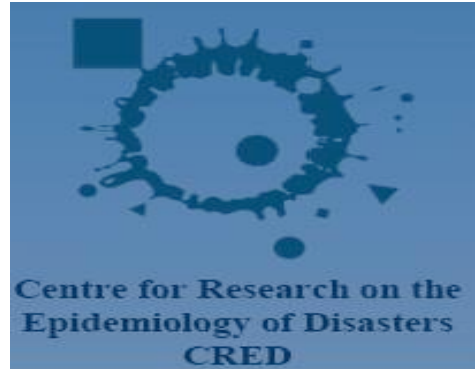
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The human and economic losses caused by natural disasters in 2008 were devastating. More than 235.000 people were killed, 214 million people were affected and economic costs were over 190 billion US\$.

Figure 1 – Trends in occurrence and victims

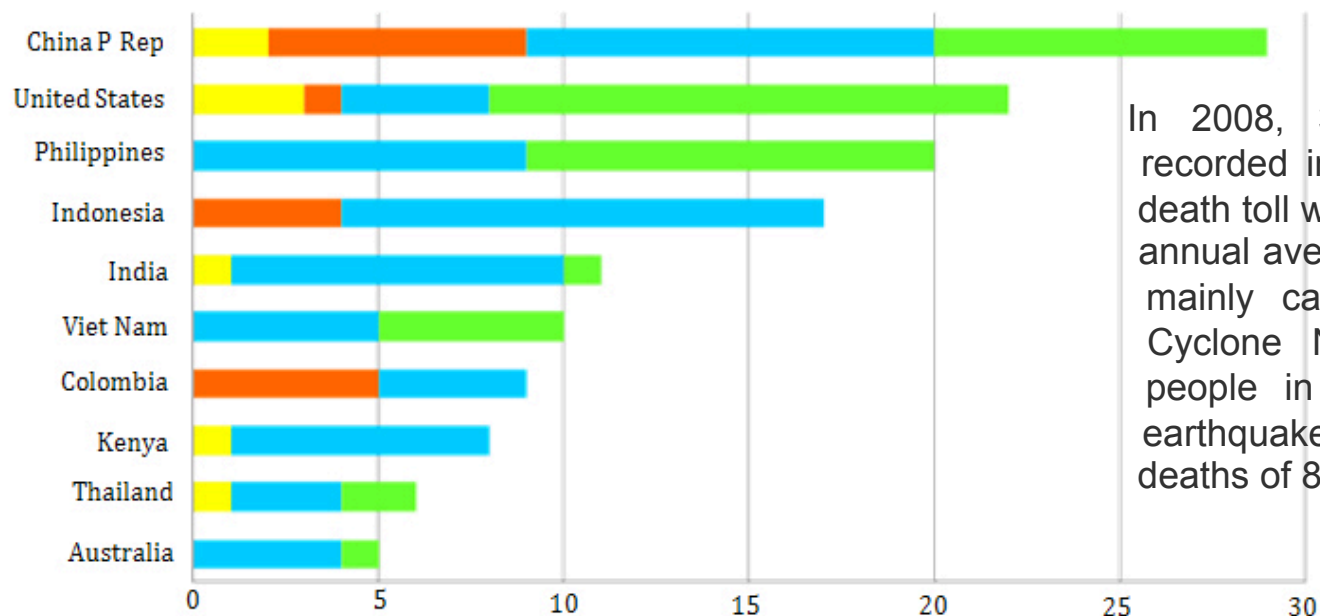


Source: "EM-DAT: The OFDA/CRED International Disaster Database
www.emdat.be - Université Catholique de Louvain - Brussels - Belgium"



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Top 10 countries by number of reported events in 2008



In 2008, 354 natural disasters were recorded in the EM-DAT database. The death toll was three times higher than the annual average of 66.813 for 2000-2007, mainly caused by two major events: Cyclone Nargis which killed 138.366 people in Myanmar and the Sichuan earthquake in China which caused the deaths of 87.476 people.

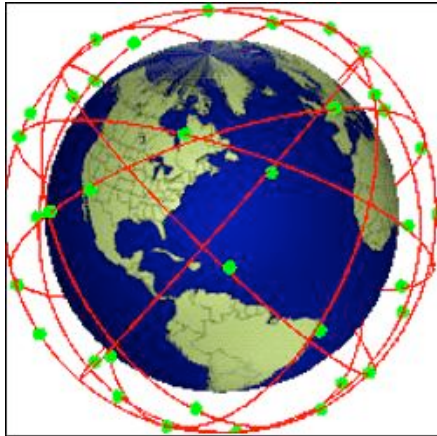
	China P Rep	United States	Philippines	Indonesia	India	Viet Nam	Colombia	Kenya	Thailand	Australia	Total
Climatological	2	3	0	0	1	0	0	1	1	0	8
Geophysical	7	1	0	4	0	0	5	0	0	0	17
Hydrological	11	4	9	13	9	5	4	7	3	4	69
Meteorological	9	14	11	0	1	5	0	0	2	1	43
Total	29	22	20	17	11	10	9	8	6	5	137

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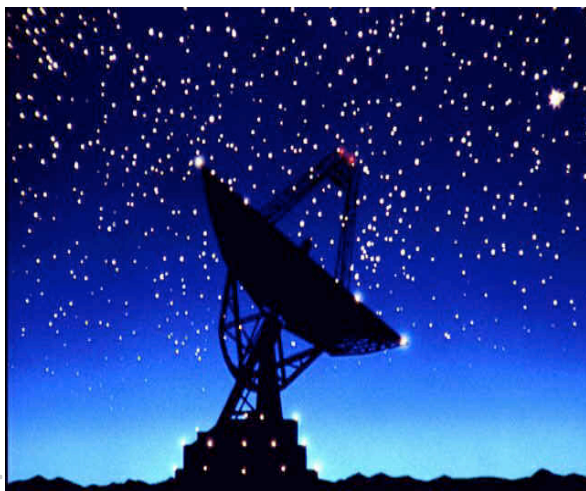
In 2008, China (29), the United States (22) and the Philippines (20) were most often hit by natural disasters. These three countries, together with India and Indonesia, have occupied the top ranking of disaster occurrence during the last three years.



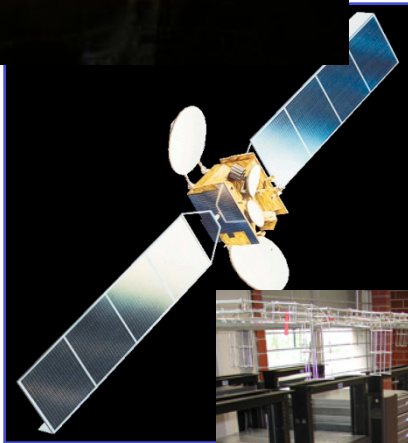
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ITU is the leading United Nations agency for information and communication technology issues, and the global focal point for governments and the private sector in developing networks and services.



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ITU has been defining and adopting the globally agreed technical standards to have the information and communication technologies interconnecting people all around the world, using different equipment, regulating the use of the radio-frequency spectrum and ensuring all international wireless communications remain interference-free to ensure the relay of vital information around the earth.



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ITU-T:

Telecommunication
standardization
network and service
aspects

ITU-R:

Radiocommunication
standardization and
global radio spectrum
management

ITU-D:

Assistance delivery and
implementation of
telecommunications in
developing countries

Member States: 191
Sector Members: 567
Sector Associates: 100



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Emergency Preparedness consists of actions, arrangements and procedures taken in anticipation of an emergency to ensure a rapid, effective and appropriate response that may save lives and livelihoods

Phases:

1. PREPAREDNESS

- Assess country needs
- Identify the vulnerable areas (GIS)
- Establish early warning systems integrating ICTs



- Monitoring systems, satellite and earth observations



Emergency Telecommunication Plan

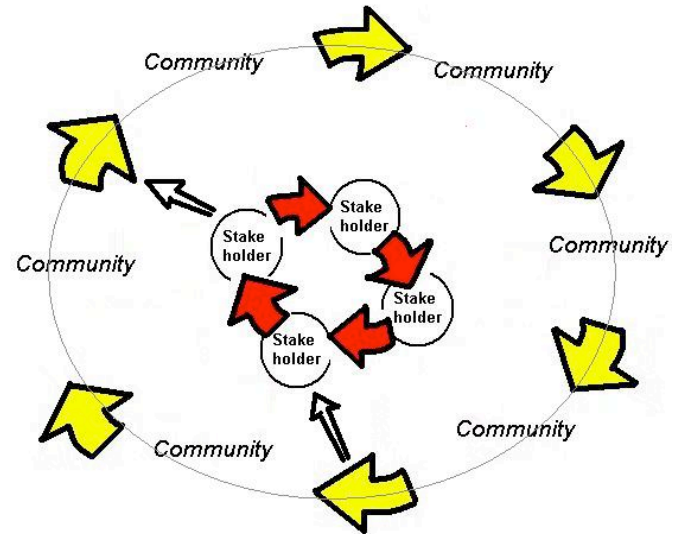
Phases:

1. PREPAREDNESS

- Develop standard operating procedures

Communications Protocols between:

- stakeholders
- community and stakeholders
- stakeholders and community
- community



Emergency Telecommunication Plan

Disaster response is a phase of the disaster management cycle. Its preceding cycles aim to reduce the need for a disaster response, or to avoid it altogether.

Phases:

2. RESPONSE

- Make an evaluation on damages and needs assessments



Emergency Telecommunication Plan



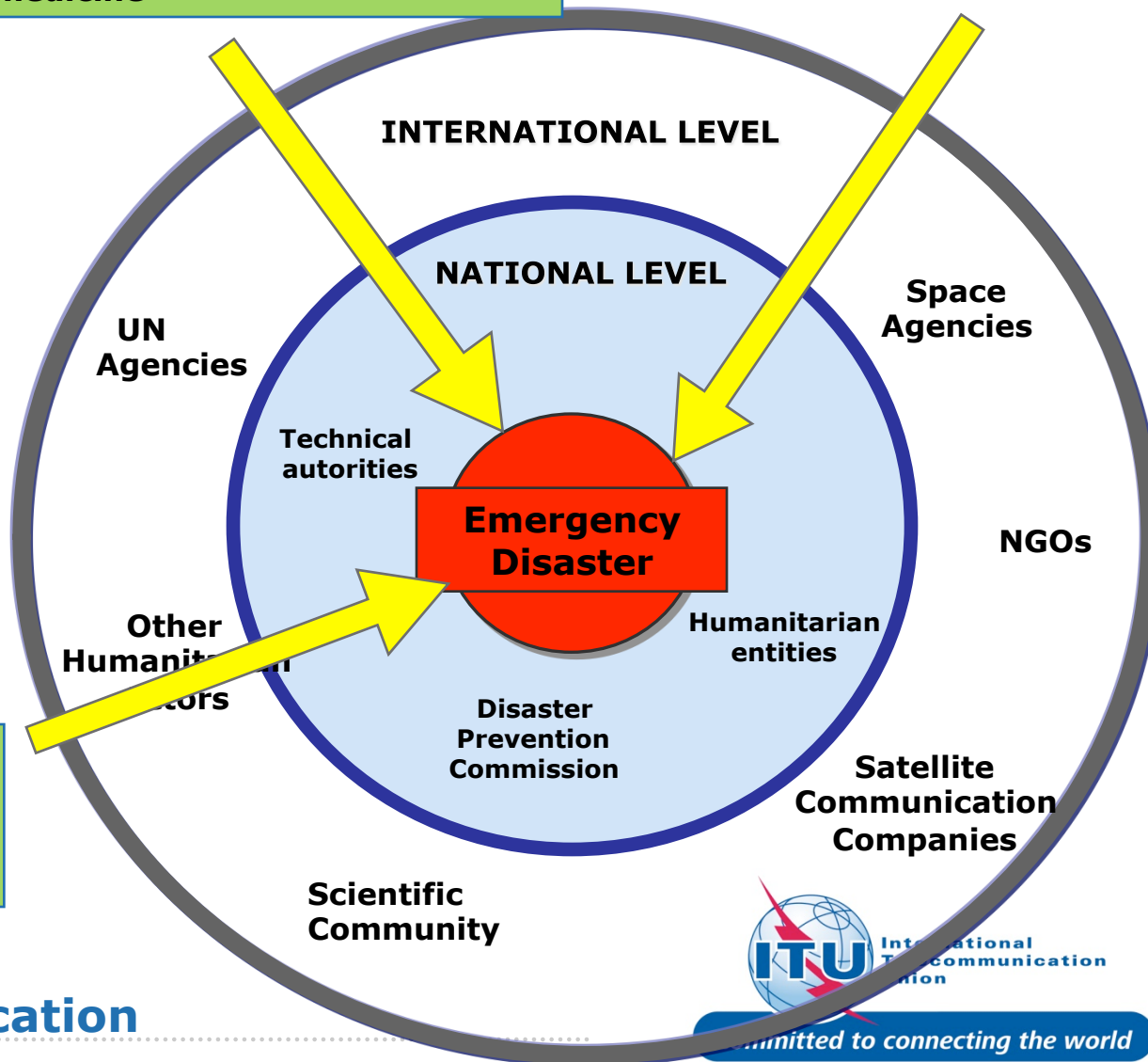
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Phases:

2. RESPONSE

- ITU** Deployment of Satellite
• Basic Communication
• Telemedicine

- Ask for humanitarian assistance at local, regional, national and international level



ITU Assessment of Telecommunication Network Damage

Emergency Telecommunication Plan

Following a disaster and when the initial crisis is over, people affected and the communities that support them are still in a state of heightened vulnerability. Post-emergency rehabilitation programmes are frequently needed.

Phases:

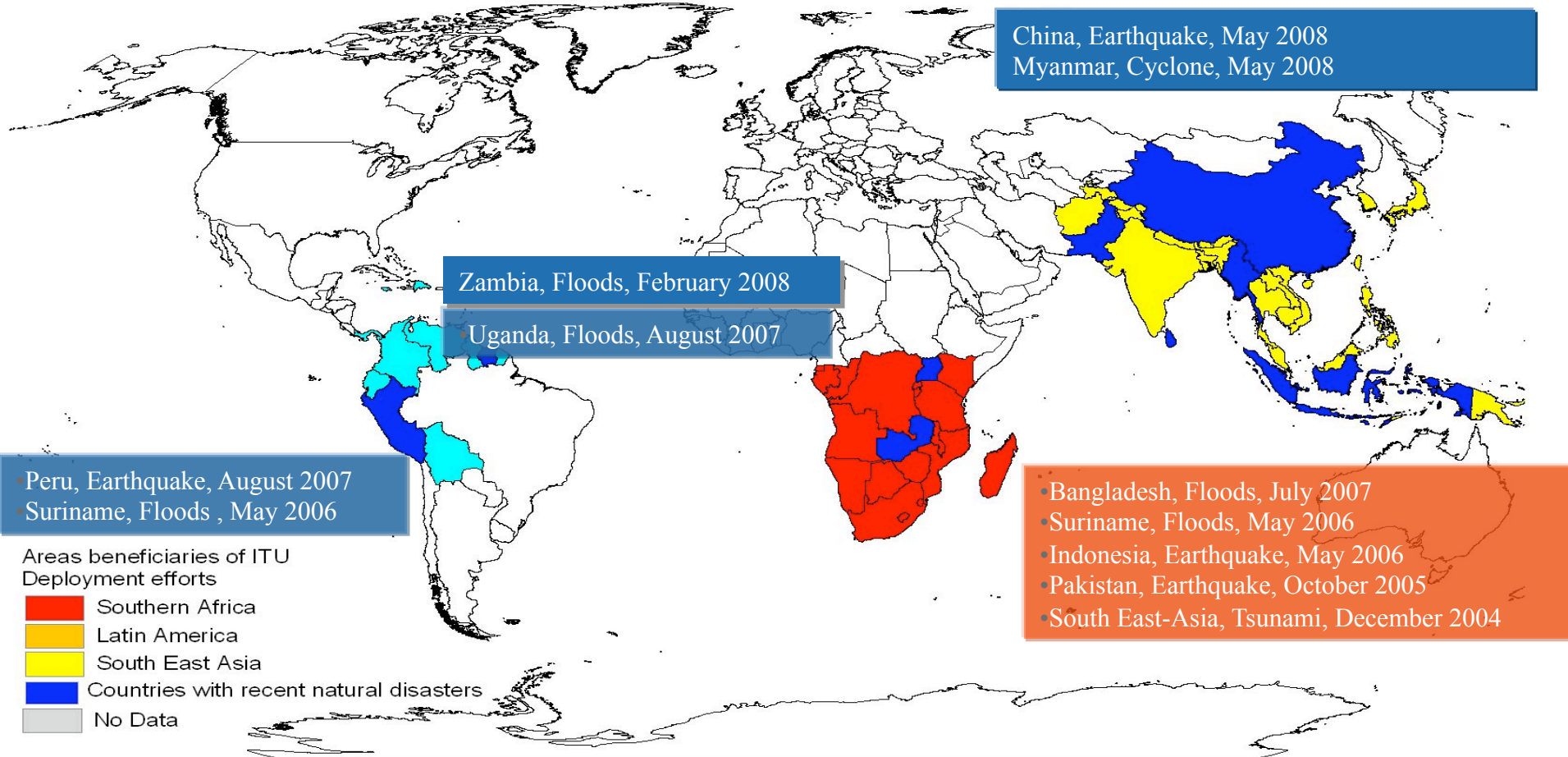
3. REHABILITATION AND RECONSTRUCTION

- Reconstruction of the telecommunication systems that had been damaged
- ITU helps developing this task

Emergency Telecommunication Plan



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Map Produced by ITU-BDT-LSE February 2008

Data Source: ITU - Emergency Telecommunication <http://web/ITU-D/emergencytelecoms/response/index.html>

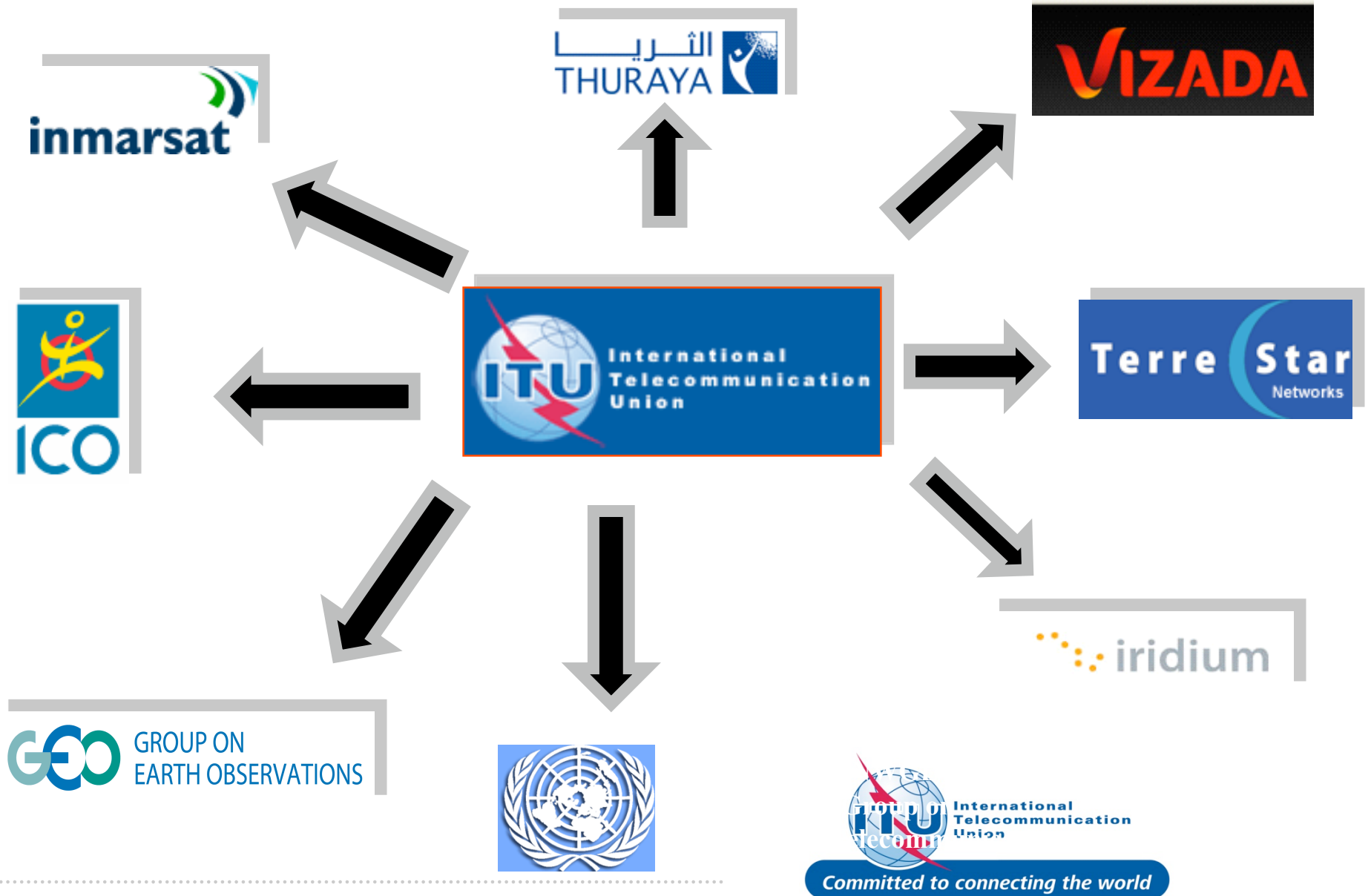
The boundaries and names shown and the designation used on this map do not imply official endorsement or acceptance by the United Nations

Most recent ITU Deployments



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Partnering for Humanitarian Work



Conclusions:

Encourage of the countries to

∅ Develop their own emergency telecommunication plan;

∅ Design an early warning system depending on natural phenomena that can affect the region;

∅ Include ICTs on early warning systems;

∅ Ask for help and advise to ITU;

∅ Integrate emergency telecommunication plan to national emergency plan.



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Thank you

Maritza Delgado

**PROGRAMME OFFICER
EMERGENCY TELECOMMUNICATION, LEAST DEVELOPED
COUNTRIES AND SMALL DEVELOPING STATES**



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