



# EMERGENCY TELECOMMUNICATIONS GET - 2016

Dr. Cosmas ZAVAZAVA
Chief of Department,
Projects and Knowledge Management,
ITU



1964-2007: Heat waves and droughts cut cereal output nearly 10%. (Nature, 2016)

# Sea Level Rose 225mm (1880-2013)

Estimated economic loses by 2050 = 1 trillion \$ a year. (Source: NASA, 2016)





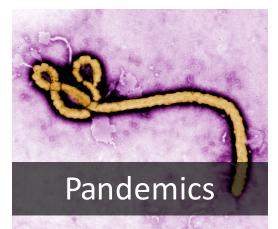
# 2015 Was Hottest Year in Historical Record

#### **20-YEAR REVIEW SHOWS 90% OF DISASTERS ARE WEATHER-RELATED**







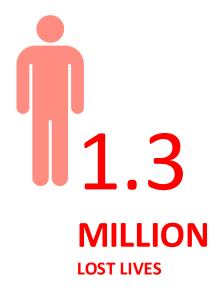


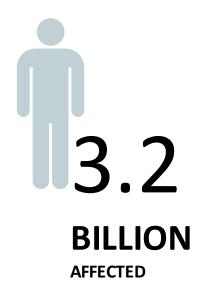




# **IMPACTS (2000-2015)**









### ITU APPROACH: ICT FOR DISASTER RISK MANAGEMENT



#### Risk assessment

- Hazard prediction and modeling
- Systemic, multi-risk approach
- Vulnerability management
- •Building resilient communities...

#### **Post Disaster**

- Lessons learnt
- Scenario update
- •Socio-economic and environmental impact assessment
- Vulnerability re-assessment

#### Preparedness

- •Scenarios development
- •Emergency Planning maps
- Training

#### Alert

- •Real time monitoring & for ecasting
- •Early warning
- Public warning
- Scenario identification

#### **Recovery**

- •Early damage assessment
- •Re-establishing life-lines

transport &communication infrastructure

#### Response

- •Emergency telecommunication
- Command control coordination
- •Situational awareness, crisis maps
- Information communication
- Dispatching of resources
- Victims identification and tracing

# ITU KEY OPERATIONAL ACTIVITIES



POLICY, LEGAL AND REGULATORY FRAMEWORKS



DESIGN NATIONAL EMERGENCY TELECOMMUNICATION PLANS



SETTING UP EARLY WARNING SYSTEMS



**CAPACITY BUILDING** 



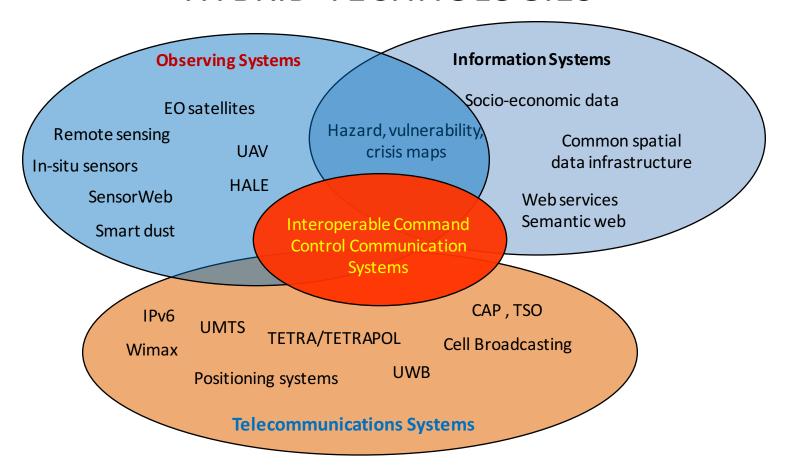
DEVELOPMENT OF ICT APPLICATIONS FOR EPIDEMICS (EBOLA, DENGUE FEVER, BIG DATA)



**DISASTER RESPONSE** 



## **HYBRID TECHNOLOGIES**









Techno	logy	<b>Partne</b>	ŗ
--------	------	---------------	---

- Satellite Operators and Service Providers
- Land Earth Station Operators
- Telecom Operators
- GIS and Remote Sensing Operators
- Radio
   Communication
   Equipment Providers

#### **Financial Partners**

- Governments
- Private Sector
- Development Banks
- Regional Economic Groups
- Philanthropic foundations
- International Organizations

#### **Logistics Partners**

- International Couriers
- Air-Transport Operators
- National Airlines
- International Organizations

#### **POWER OF PARTNERSHIPS**















































du Canada



















🏿 **un**itar

Întreprinderea de Stat **Centrul National** pentru Frecvente Radio





















