



TURKSAT

**“Turksat's SatCom and Earth Observation
Capabilities/Practices for Disaster Management and
Emergency Response”**

**NIHAT OKTAY
DEPUTY GENERAL MANAGER**



Agenda

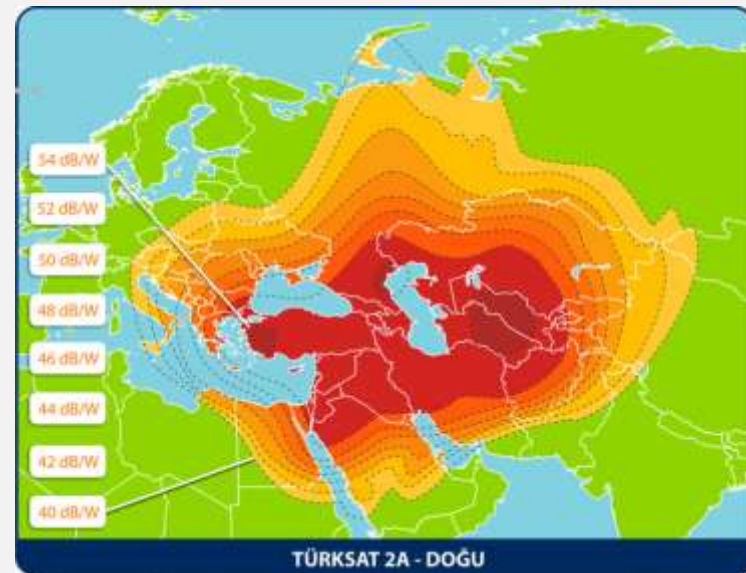
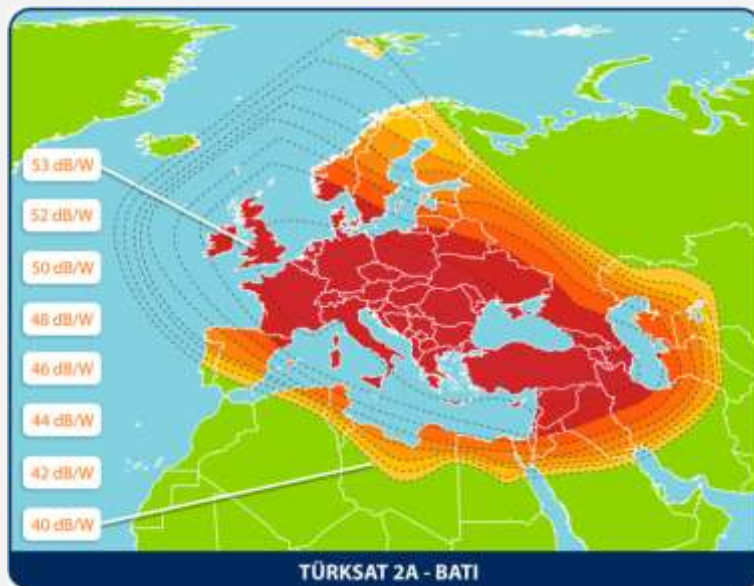
- **Overview**
- **Disaster Management in Turkey**
- **Conclusion**

Turksat - Today

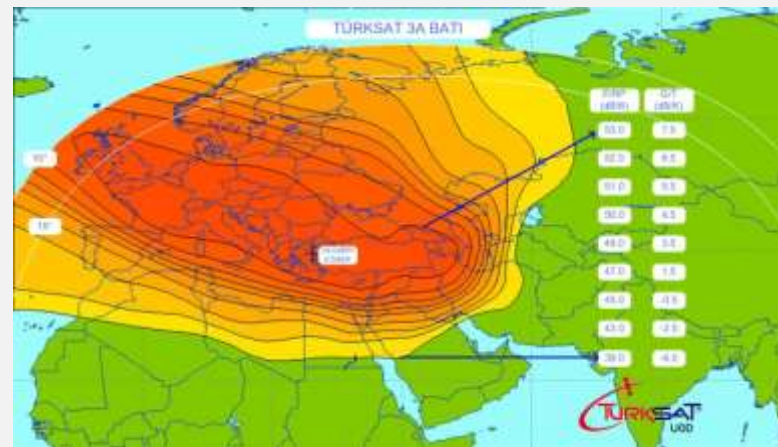
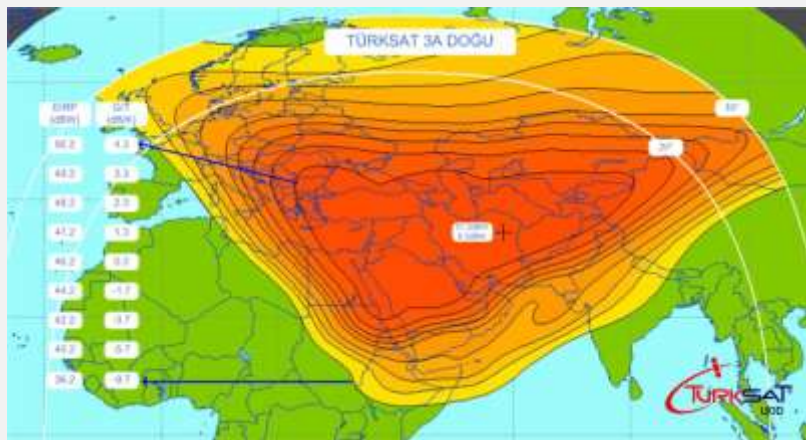


- **The Leading Satellite Operator In the Region**
- **The Major Integrated ICT Services Provider**
- **The Growing Cable Platform Company**
- **GIS Services and Earth Observation**

Turksat 2A Coverage Map



Turksat 3A Coverage Map



TÜRKSAT UPLINK CENTERS



UPLINK
CENTERS



Services

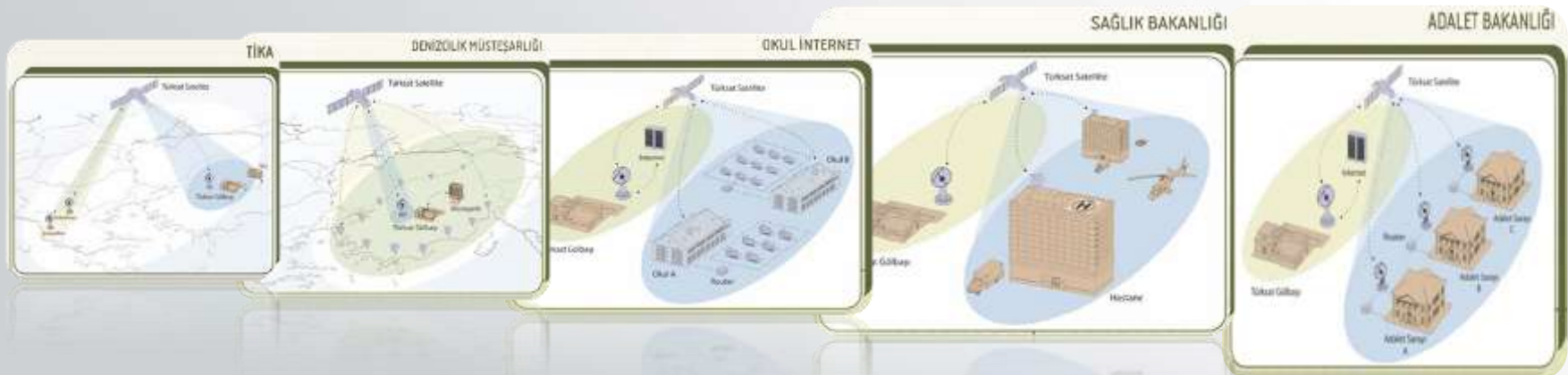
- Uplink and Teleport Services
- TV/Radio Broadcast with Turksat satellites
- Emergency Communications
- Broadband Access
- VSAT Applications



TurksatVSAT

VSAT (Very Small Aperture Terminal) (0.8 – 2,4 mt)

- **Broadband Internet Access**
- **Point to Point IP Communications**
- **VoIP, Video Conference Services**
- **Mobile Services,**



Turksat VSAT



Ministry of Education VSAT Network

- 4917 Schools Connected
- Broadband Internet Access
- Centralized Management and Security



Ministry of Justice VSAT Network

- 685 Local Branches Connected
- Working Both As Primary and Backup Line
- Has been Operational for 4 Years

TurksatVSAT for Ministry of Health

- Turkish Ministry of Health uses Turksat VSAT in Pakistan for two mobile hospitals after flood disaster.



TurksatVSAT for Turkish Red Crescent



VSAT

- Vsat terminals -Earthquake Monitoring System across the country for Turkish Disaster Management Center
- Developed Satellite based communication infrasutructure for Istanbul Disaster Management Center



Turksat GIS Services

- GIS Data and Services
- Satellite Imaging,
- Integrated GIS Projects,
- Software Development,



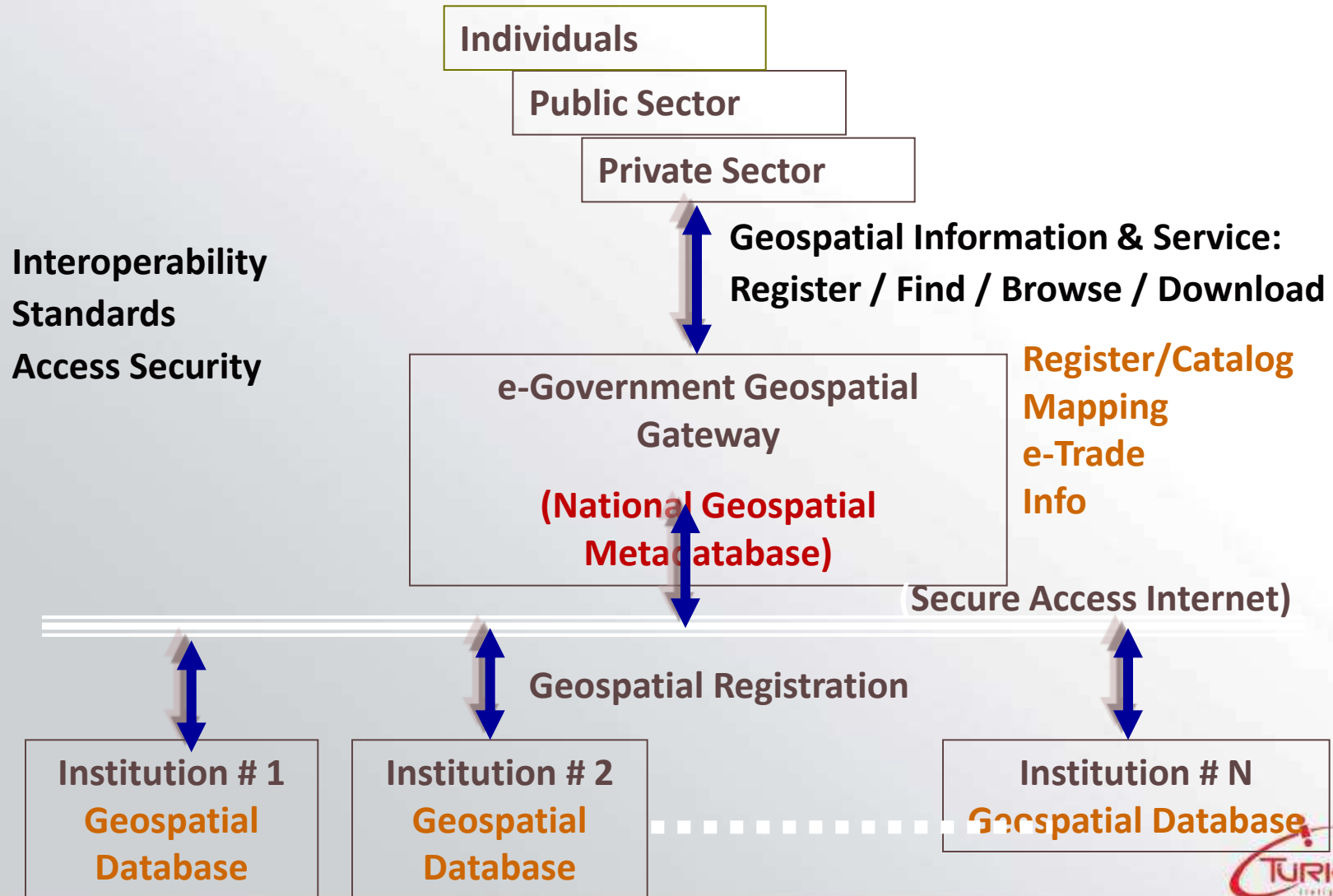
- Interoperability
- Database Management

Turksat GIS-Change Detection

Measuring Flooded Areas



NSDI-TR Project (Feasibility Study) (National Spatial Data Infrastructure of Turkey)



ICT Services - TurksatICT

- System Design and Application Development
- Interoperability Solutions
- Disaster Recovery and Back up Center,
- Customized ICT projects for Government,
- Datacenter Design and Development

Facts about Disasters

- %75 of the world's population live in the areas affected by one of the known disasters
- In the past two decades over three million people have been lost their lives and one million have been affected by natural disasters

in Turkey



- cost of the last earthquake (17 August 1999) is about 19 billion \$. (Turkey Statistics)
- The earthquake monitoring and early warning system has been established in İstanbul, Ankara and other most populated cities

Disaster Management in Turkey



- Disaster risk management in Turkey is under the supervision of the Disaster and Emergency Management Body

Conclusion

- Satellite
 - Independent from terrestrial infrastructure
 - VSAT network for emergency response,
- Fiber infrastructure,
 - 3 million home pass capacity
- GIS services and earth observation
- ICT infrastructure,
 - Human Resources
 - Software Development
 - Integrated Solutions
 - Interoperability



Q & A

NIHAT OKTAY
DEPUTY GENERAL MANAGER

