

# INTERNET : DURING & POST DISASTER

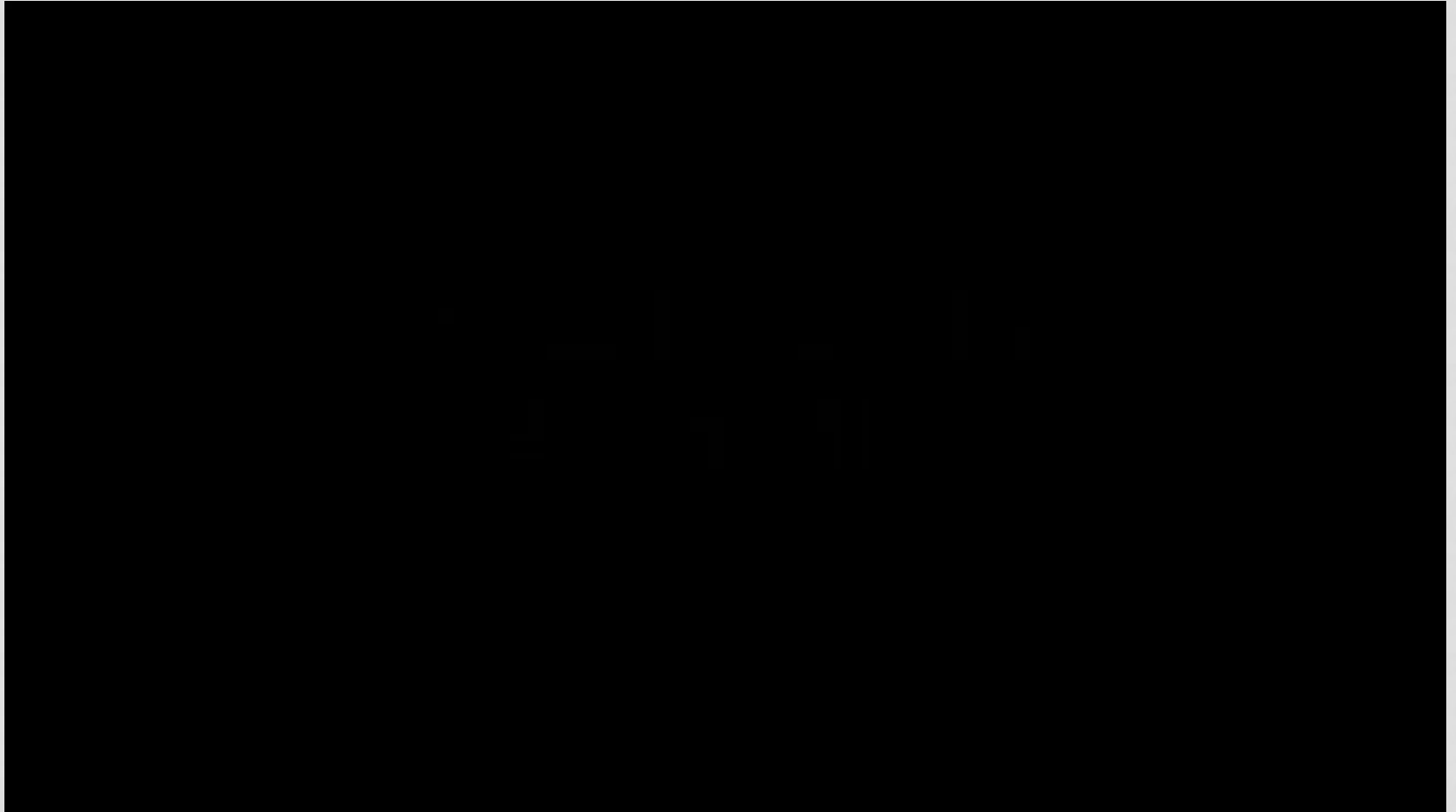


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# #EARTHQUAKENEPAL

- 25<sup>th</sup> April 2015 | Barpak Gorkha | 7.8 Richter Scale
- 12<sup>th</sup> May 2015 | Kodari, Sindhupalchowk | 7.3 Richter Scale

# REALITY OF THE DISASTER



HOW LONG IS YOUR LIFE ?



WHAT YOU DO IMMEDIATELY ?

- Try to connect
  - Connect your Immediate family !
    - Spouse/Children
  - Connect your Extended Family
    - Parents/Siblings
  - Connect to Friends
  - Rest of the People

# WHAT SITUATION MIGHT HAVE THERE?

- No Signal of Telecommunication Services due to Collapse of physical Infrastructure
- No Signal of Telecommunications Service Due to peripheral infrastructure)
- Congestion of the Network !
  - Due to large number of calls
  - Switched to emergency responders
- Validity might have expired: No recharge vouchers available or No top-up service is available
- Batteries of the Device might have exhausted and there might have power cut

# LOSS OF TELECOM SECTOR

S.N	Name of the operator	Physical/ Equipment/ Maintenance loss	Revenue Loss	Reduction in Traffic	Total
1	Nepal Telecom	461,418,577	156,983,791	70,000,000	618,402,368
2	NCELL	1,019,000,000	2,673,000,000		3,762,000,000
3	United Telecom	240,000,000	360,000,000		600,000,000
4	Smart Telecom	1,458,305	50,080,723		51,539,029
5	Nepal Satellite	100,000,000	102,000,000		202,000,000
Total		1,821,876,882	3,342,064,514	70,000,000	5,233,941,397.52
Source: NTA					

Name of the Operator	No of BTS Towers Destroyed
Nepal Telecom	167
NCELL	100
Smart	17
UTL	17
Source: NTA	

# WHAT INTERNET/TELECOM PLAY ?

- What role ?
  - Prevent,
  - Prepare and
  - Effectively respond
- What for ?
  - To save life
  - To establish human relationship
  - To facilitate search and rescue
  - To facilitate relief work

# WHERE ICT FITS

- Mitigation - includes any activities that prevent a disaster, reduce the chance of a disaster happening, or reduce the damaging effects of unavoidable disasters.
- Preparedness - includes plans or preparations made to save lives or property, and to help the response and rescue service operations.
- Response - includes actions taken to save lives and prevent property damage, and to preserve the environment during emergencies or disasters. The response phase is the implementation of action plans.
- Recovery - includes actions that assist a community to return to a sense of normalcy after a disaster.

# DISASTER RECOVERY PHASES

- Preparation and Early Warning System (EWS) (-day)
- Emergency Response
- Restoration and Repair
- Reconstruction and Redevelopment

# POSSIBLE INTERVENTION AREA

Satellite Phones

HAM Radios

Emergency  
Internet Hotspot

Power Supply to  
BTS Towers

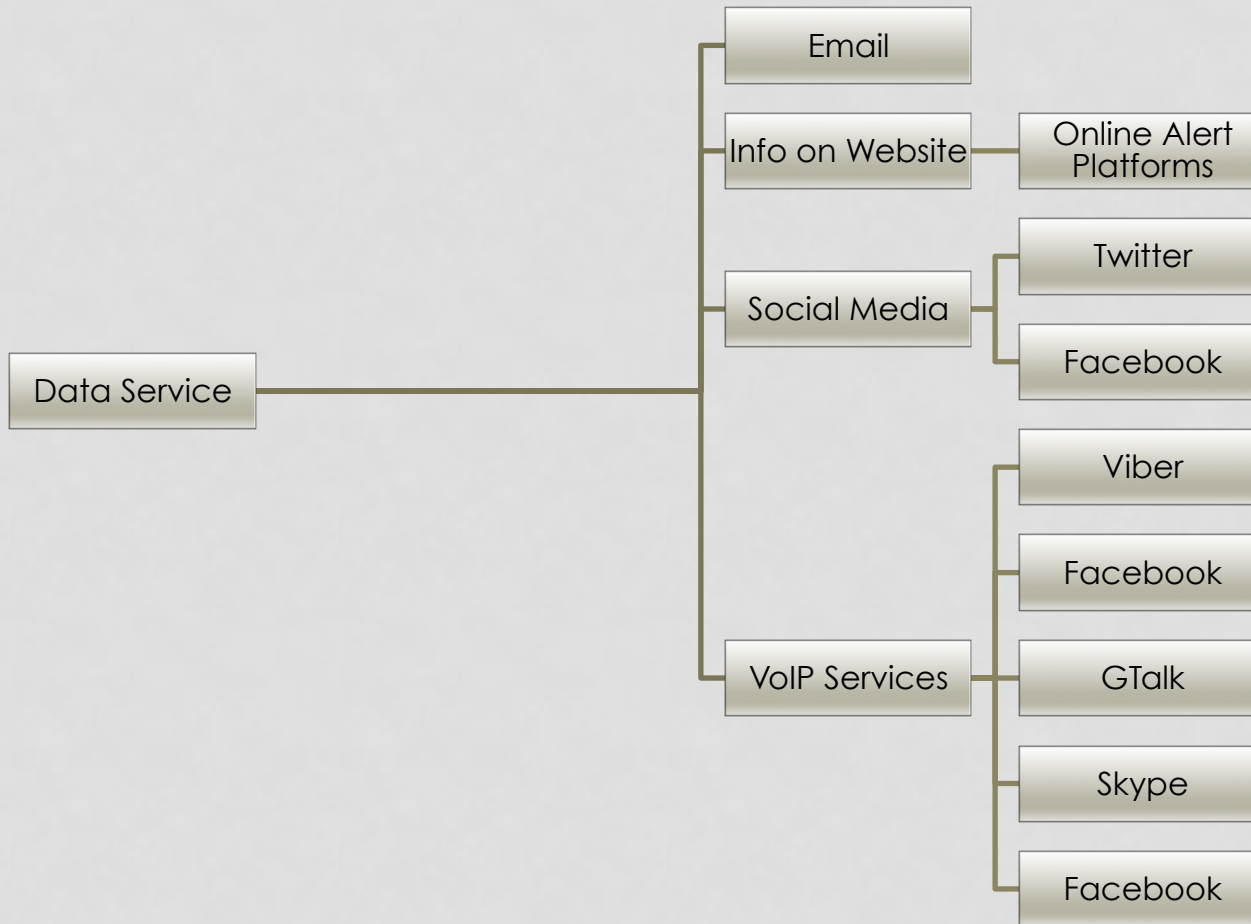
Power  
Generators to  
the Tented  
Camps

Community  
Radio  
Operation

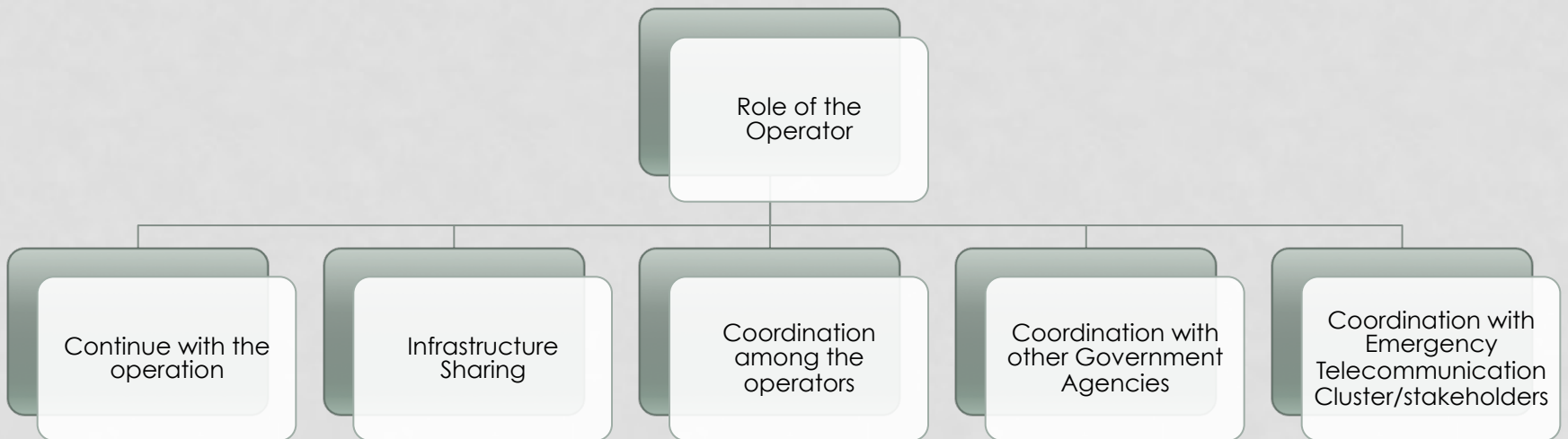
Mobile Phone  
Charging  
Stations

Long life  
batteries

# ROLE OF DATA SERVICE



# ROLE OF THE OPERATOR



# INTERVENTION BY REGULATOR

Intervention by  
Regulator

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graph TD; A[Intervention by Regulator] --> B[Opening up emergency bandwidth]; A --> C[Order on Infrastructure Sharing]; A --> D[Coordination among the operators]; A --> E[Coordination with other Government Agencies];
```

Opening up  
emergency  
bandwidth

Order on  
Infrastructure  
Sharing

Coordination  
among the  
operators

Coordination  
with other  
Government  
Agencies

# ROLE OF CIVIL SOCIETY



# WHAT WE DID

- Emergency Internet Hotspot
- Power Supply to BTS Towers
- Power Generators to the Tented Camps
- Restoration of operation of to Community Radios
- Solar Mobile Phone Charging Stations
- Power Banks for Cellular Mobile Sets (Who were involved in rescue and relief Operation)

# WHAT WE DID

Emergency Internet  
Hotspot

Power Supply to BTS  
Towers

Power Generators to  
the Tented Camps

Restoration of  
operation of to  
Community Radios

Solar Mobile Phone  
Charging Stations

Power Banks for  
Cellular Mobile Sets  
(Who were involved  
in rescue and relief  
Operation)

# WHAT WE DID ?



# THANK YOU !

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