

# IMPACT OF EARTHQUAKE ON NEPAL'S INTERNET 2015

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# Earthquake in Nepal At Glance

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- Date: 25 April 2015
- Magnitude: 7.9
- Casualties: 8,898 dead, 22,309 injured
- Damage: more than \$ 5 billion

# Status of Internet After EQ



- Nepal's international links generally survived the earthquake
- Serious damage occurred on Last mile connectivity

# BGP DATA

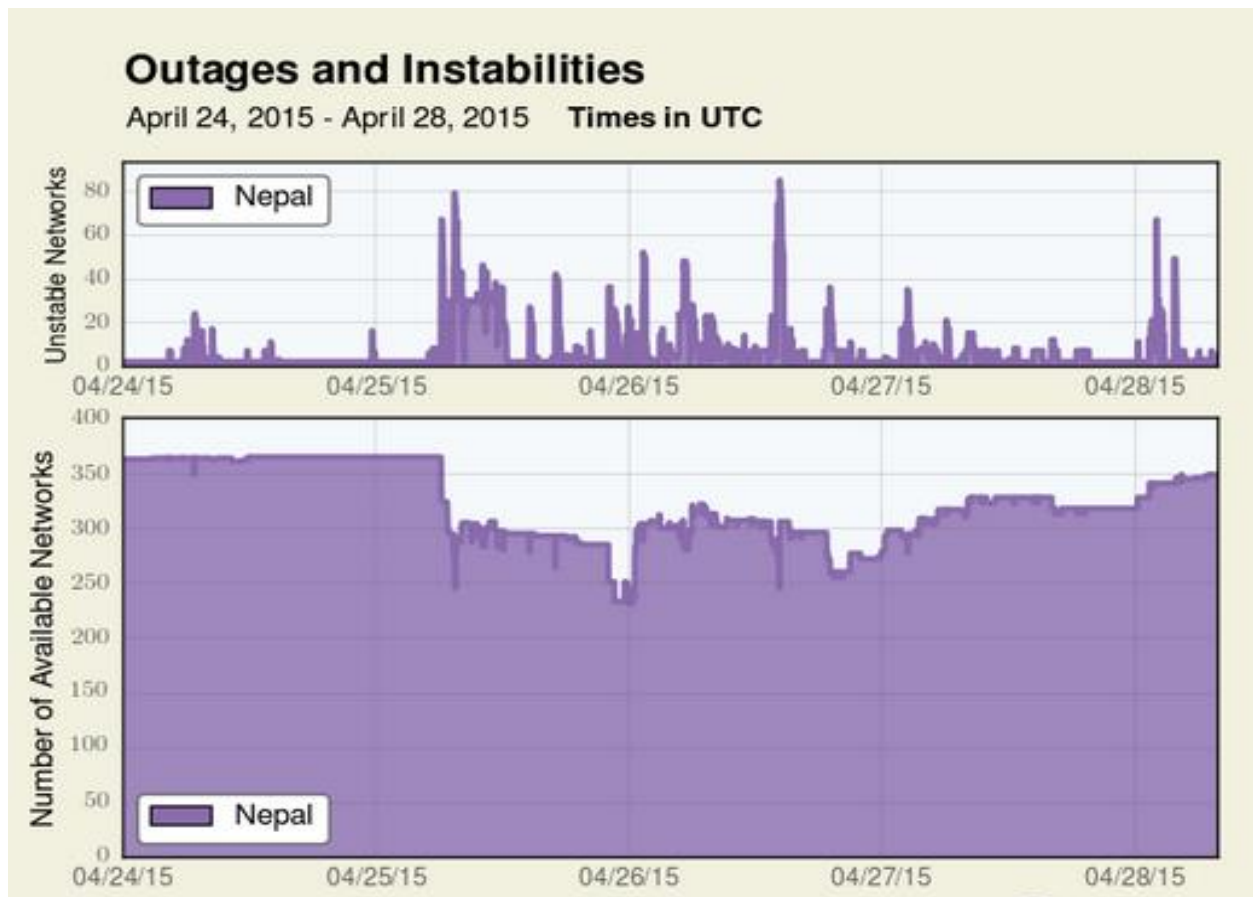


Fig.1: BGP peering

# NTC Upstream

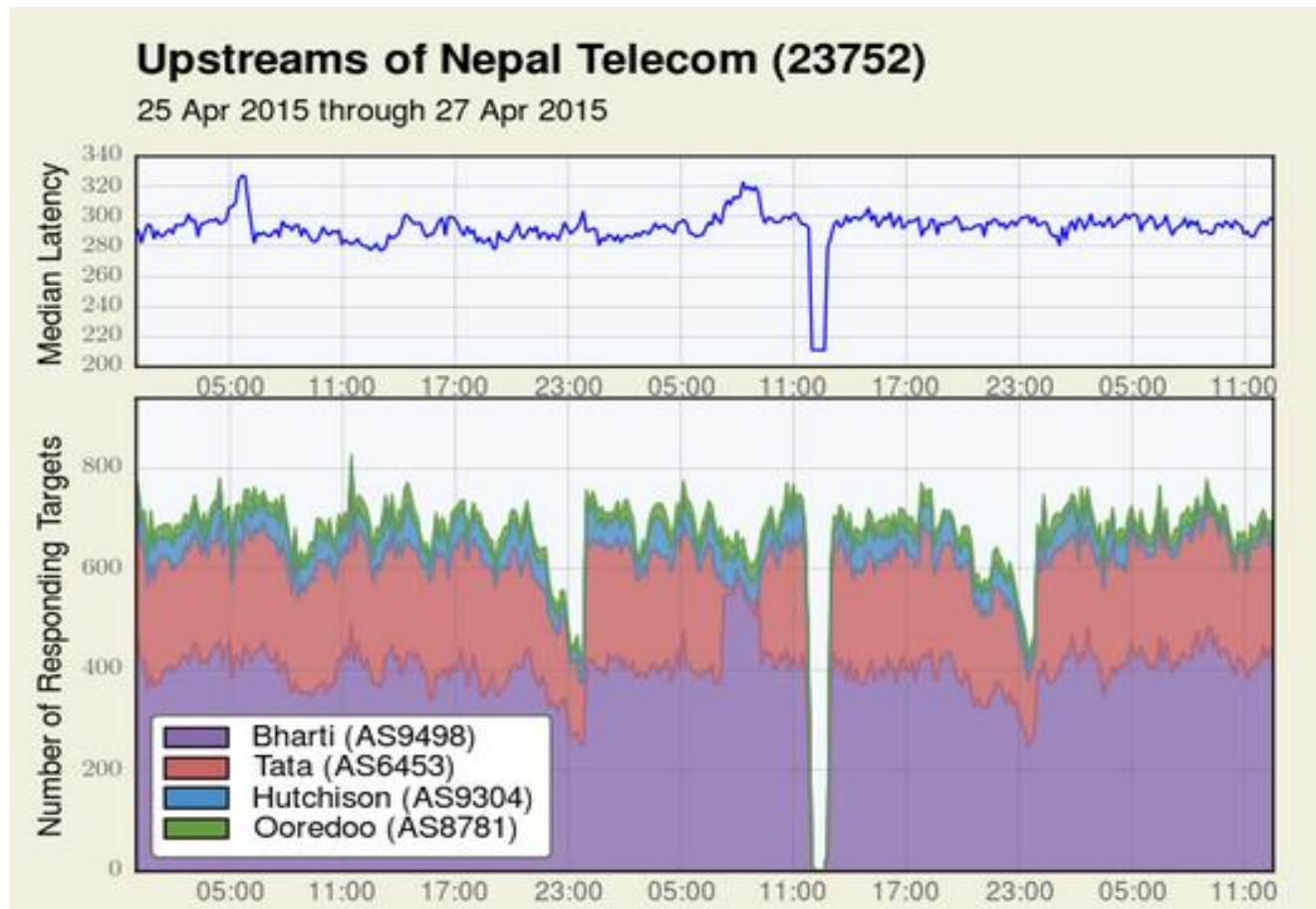


Fig. 2: Upstream of NTC

# WSN Upstream 1

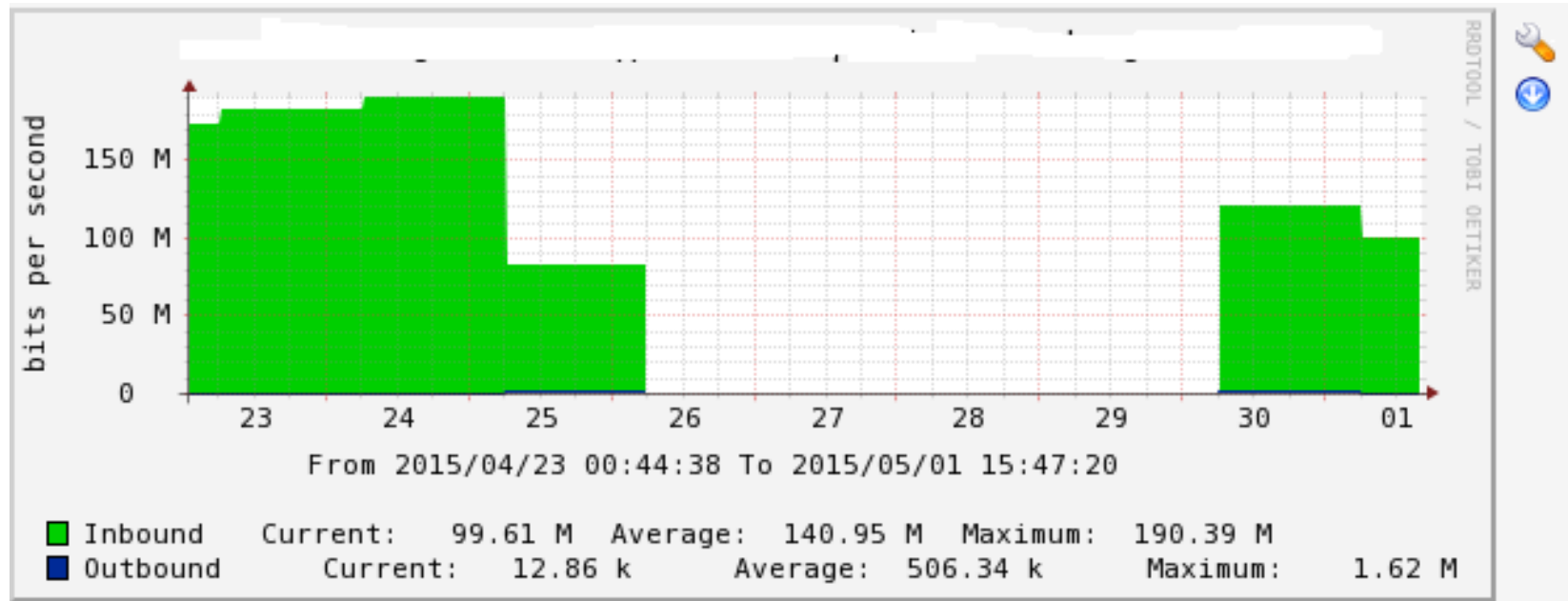


Fig. 3: WSN Upstream airtel1

# WSN Upstream 2

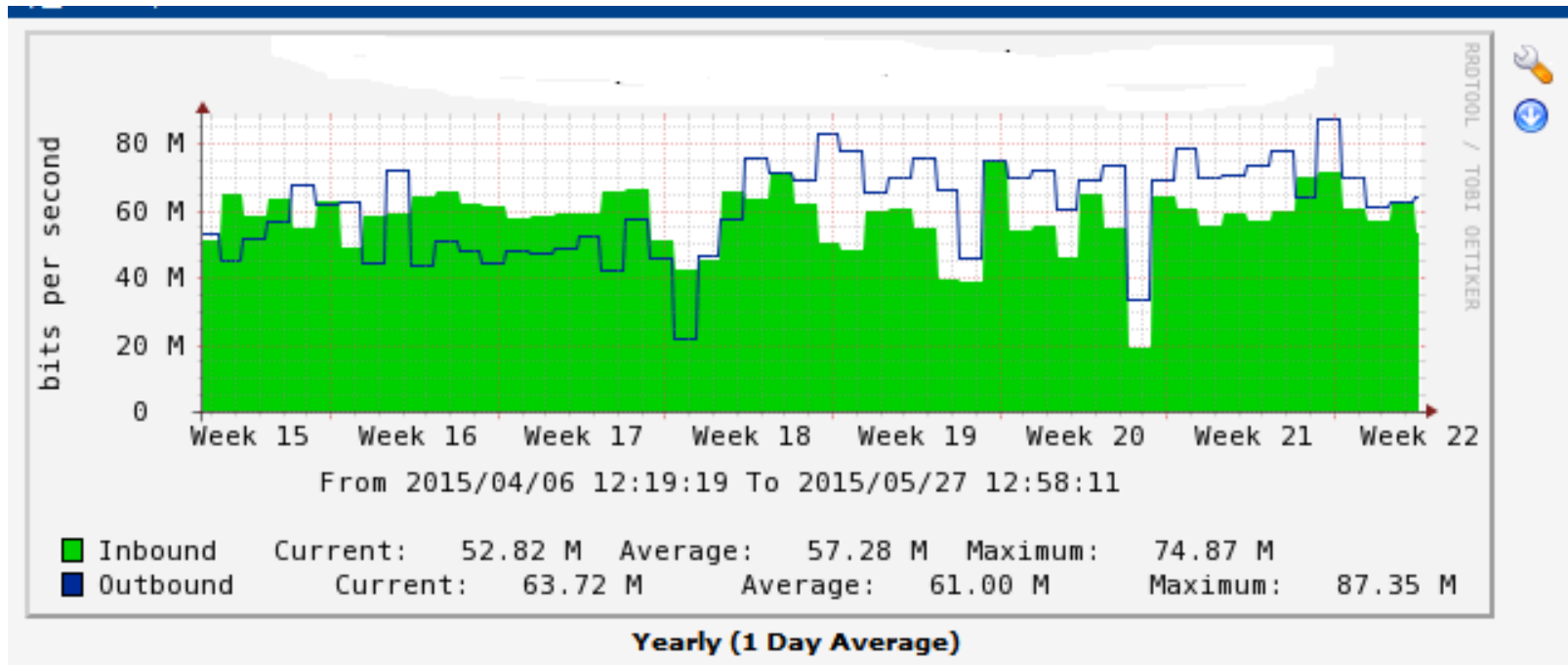


Fig. 4: WSN Upstream airtel 2

# WSN Upstream 3

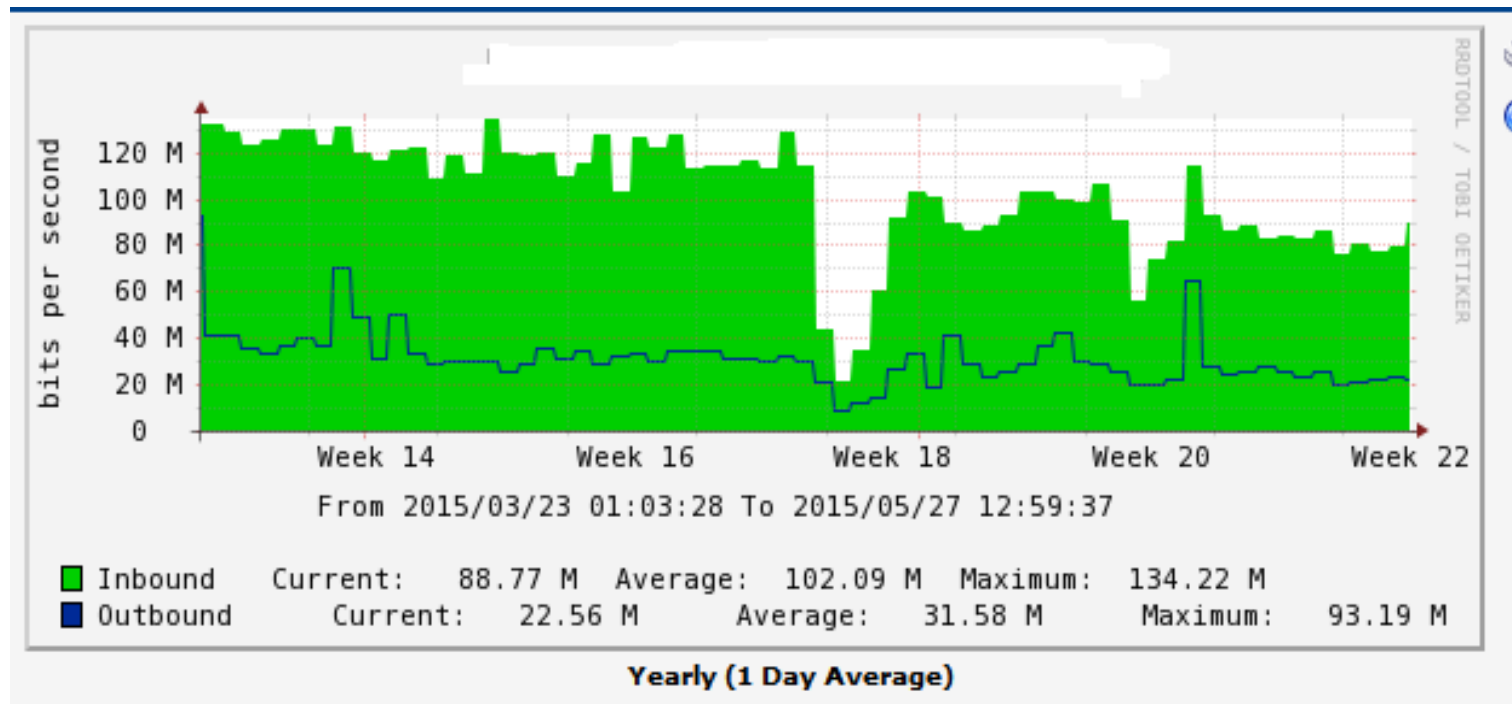


Fig. 5: WSN Upstream NIIG



# MICET Foundation

- ❑ Non Profit distribution company established on September 2010 to provide ICT services in rural areas located at Melamchi, Sindhupalchok.
- ❑ Face heavy damage during massive earthquake 2015
- ❑ System totally devastated by fire caused by earthquake
- ❑ Internet connectivity from Websurfer Communication System Pvt. Ltd. Katmandu was disconnected

# Background of Establishment

- ❑ To avail high speed broadband Internet.
- ❑ To provide access to information and economic opportunities through broadband Internet in rural villages in Nepal.
- ❑ To implement a community-shared broadband access model that can overcome distance and terrain barriers, and can deliver Internet speeds comparable to ADSL.

# Network Coverage

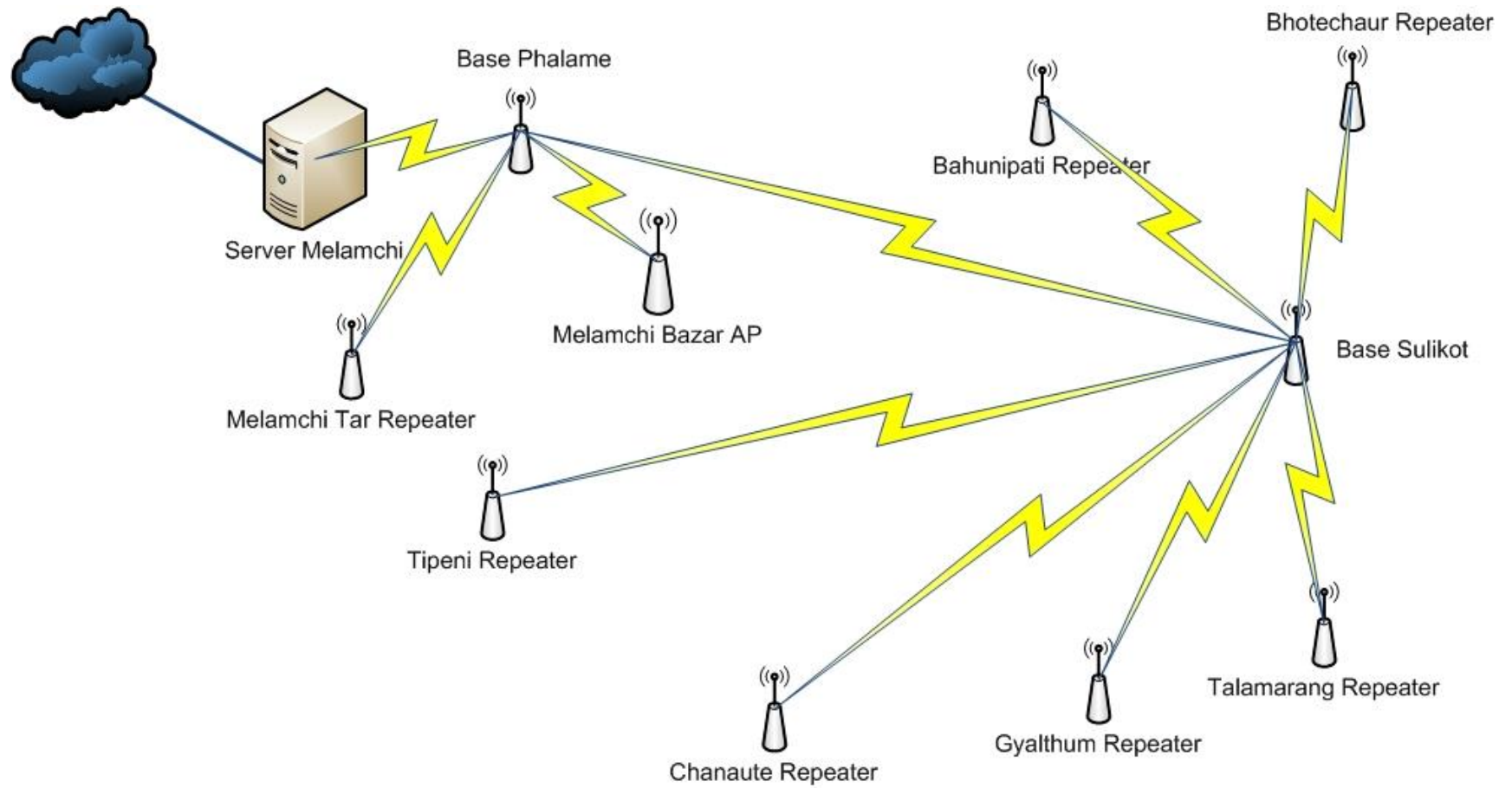


Fig. 6: MICET Network Coverage

# Reason Behind Dis-connectivity

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- ❑ Outage of electricity
- ❑ System devastation

# Action Taken after Dis-connectivity

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- For electricity, Solar Backup System was implemented
- For user connectivity, hotspot services was implemented for instant internet access
- Mobile wireless POD was established to provide Free Wi-Fi for needed people at public place

# Main Station of MICET



Fig. 7: Main POD of MICET

# Solar backup System

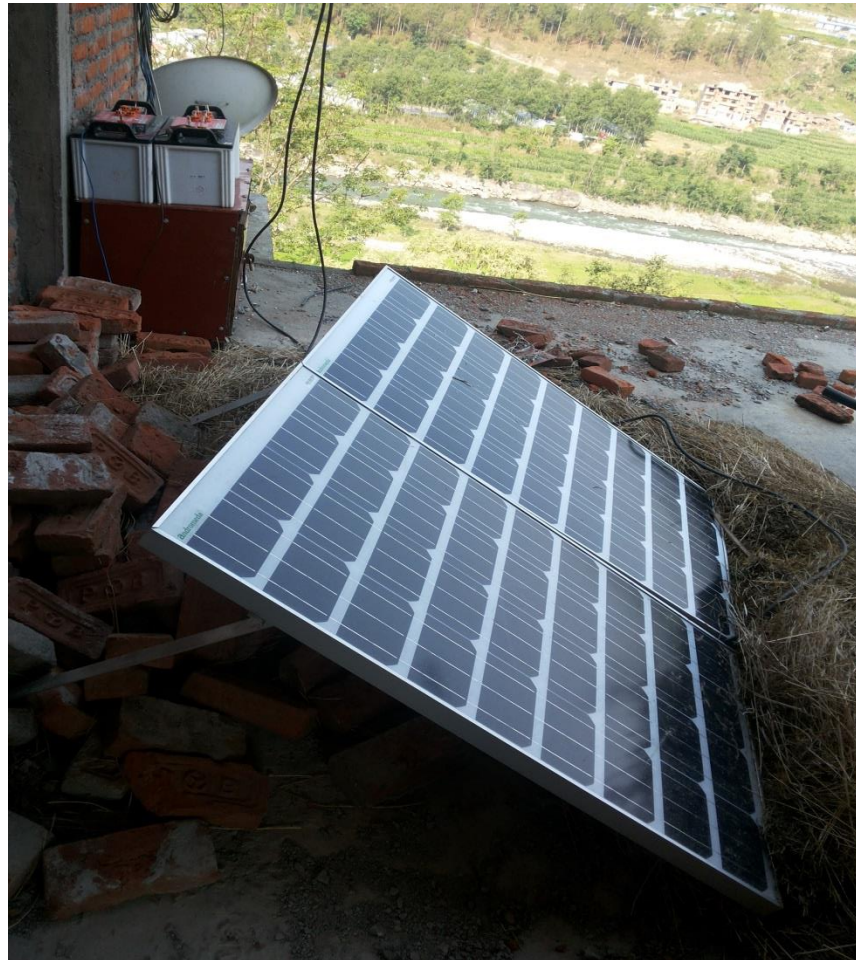


Fig. 8: Solar Backup System deployed at MICET after EQ



# Mobile Wi-Fi POD



Fig. 9: Mobile WiFi POD deployed at MICET after EQ



# MICET System Before EQ



Fig. 10: System of MICET before EQ



Fig. 11: Power Backup System of MICET before EQ

# MICET After EQ



Fig. 12: MICET office after EQ



# Some Glimpses during EQ



Fig. 13: Fire after EQ at MICET office



Fig.14: Rescue operation at MICET office

# Providing Client Support after EQ



Fig. 15: Providing client support at WSN



# Helping People to Communicate after EQ



Fig 16: Helping people to communicate

# Taking benefit of Free WiFi



Fig 17: Exploring internet using MICET Free WiFi

# Free Wi Fi coverage in News Portal

- <http://np.karobardaily.com/2015/05/54422/>
- <http://www.onlinekhabar.com/2015/05/279632/>
- <http://www.nepalreports.com/news/8820>
- <http://nepalpati.com/news/10109/my-set-wifi>
- <http://onlinepatrika.com/29248/>

# Conclusion

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- Earthquake Nepal 2015, international link survived but last mile connection affected
- Solar backup system very effective to provide power at the time of disaster
- Free WiFi, at the time of disaster very useful means of communication





Any Queries ?



Thank You