ITU/PITA RRS-16 for Asia & Pacific

Emergency Communications: The Role of Satellites

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Largest Satellite Operator in Asia

- Japan Communications Satellite Co. established in 1985
- First satellite launched in 1989
- Over 25 years of experience in satellite business both in Japan and globally
  - Government
  - Power Companies / Gas Companies
  - Telephone / Mobile phone companies
  - TV/Media
- Managed VSAT services
- Extensive experience in SATCOM during natural disasters
Fleet of 17 satellites + 3 more satellites in the near future!
1. Island Nations in the Pacific Ocean
   ◆ Multiple islands

2. World Rugby Rankings (as of 2016/9/19)
   ◆ Fiji (10th), Japan (12th), Samoa (14th), Tonga (15th)

3. Prone to Natural Disasters
   ◆ Earthquake
   ◆ Tsunami
   ◆ Typhoon / Cyclone
Coincidence or a trend?

~88 years

1923/9/1
Magnitude 8.0
East Japan (Tokyo)

2011/3/11
Magnitude 9.0
East Japan (Tohoku)

~4 years

1919/6/25
Magnitude 8.1
Samoa

2009/9/29
Magnitude 8.1
Samoa

~90 years

Note:
Information on this slide is about the dates of the events. Any findings derived from the dates have no scientific background.
3 Phases of Natural Disasters

(Pre&)Occurrence

Search & Rescue

Restoration & Recovery

Earthquake Warning System

Broadcast
TV / Media, status updates from affected regions, etc.

Communication for Government, Military, Police, Fire fighters, etc.

Communication for Telephone Companies & Mobile Backhaul

Communication at Evacuation Shelters
Case study: Earthquake Warning System

(Pre&)Occurrence  Search & Rescue  Restoration & Recovery

Real story from 2011

On 3/11, a printing company in the Tohoku area received the earthquake warning 5 seconds prior to the initial shock. All employees escaped safely and were able to prepare for aftershocks.
Japan Self Defense Force (JSDF) and Police Force immediately commenced reconnaissance missions and sent their respective servicemen & servicewomen to the affected area.

Search & Rescue Operations commenced immediately using live info from affected areas.
Case study: SATCOM for Mobile Backhaul

Terrestrial systems were destroyed by the tsunamis, SATCOM was used for mobile backhaul. Approx. 40 vehicle-mounted satellite systems were operated by mobile phone companies in 2011.

Source: KDDI Corporation
JSAT provided Free Internet via satellite to Evac. Shelters

Access to the internet enabled evacuees to gather information and served as a pastime for children. Over 150 satellite internet systems were provided to evac. shelters and temporary housing.
JSAT Coverage for Pacific Islands

JCSAT-2B Satellite

Ku-band

C-band

in dBW

in dBW
Fa’afetai! Thank you!

Visit our website at www.sptvjsat.com/en!

For information on Space & Satellite Business visit www.jsat.net/en/!

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