

The Workshop on Emergency Broadcasting, ITU-R SG6

Emergency Broadcasting to Protect the General Public in Japan

- The Great East Japan Earthquake -

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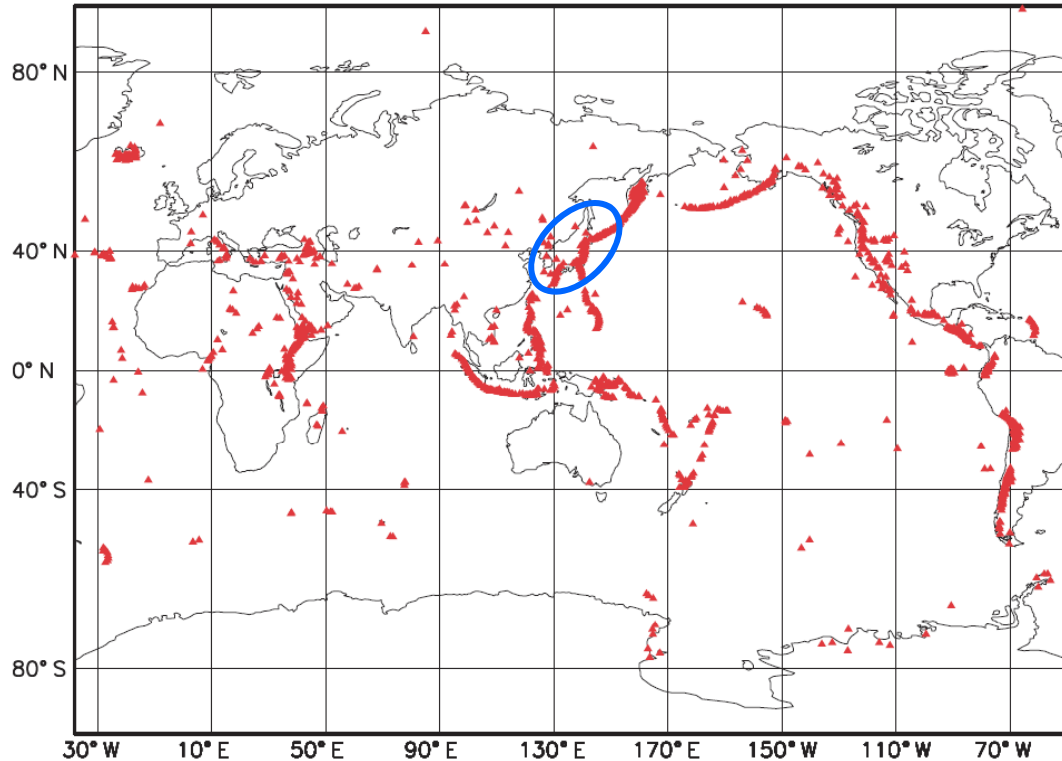
- Japan's Sole Public Broadcaster
- Operating 2 Terrestrial TV Networks, 2 Satellite TV Channels, 3 Radio Networks, plus International TV and Radio Services



- Reaching All Households (about 52 Million) in Japan
- 54 Stations across Japan, 30 Bureaus Worldwide
- Designated Public Corporation under the Basic Disaster Countermeasures Act

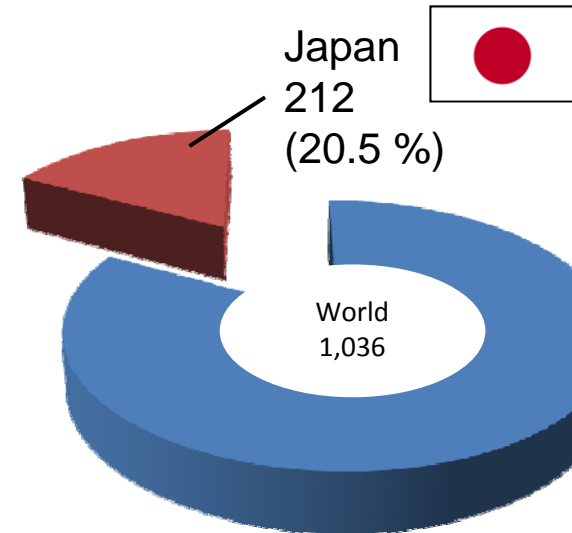


A Country Prone to Natural Disasters



Principal Volcanoes in the World

Source: Prepared by the Japan Meteorological Agency based on data from the Smithsonian National Museum of Natural History



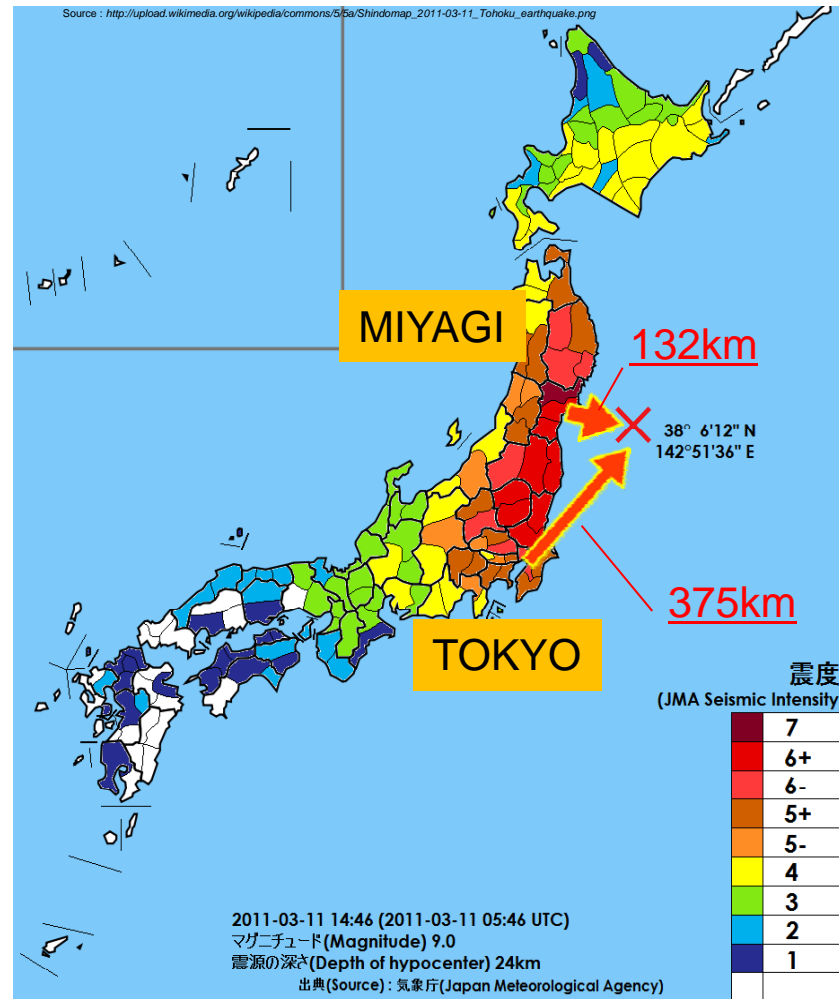
Number of earthquakes with magnitude of 6.0 or greater (2000-2009)

Source: Cabinet Office on the basis of data from the Japan Meteorological Agency and USGS



An average 11 typhoons a year

The Great East Japan Earthquake



2:46:18 (JST) PM, 11 March, 2011

- Magnitude 9.0
- Maximum seismic intensity 7
- The 4th largest in the world since 1900

Huge Tsunami

- Over 10m high
- Maximum run-up height of 40.5m

Nuclear Crisis

- Leakage of radioactive materials
- Mass evacuation, disease, food supply

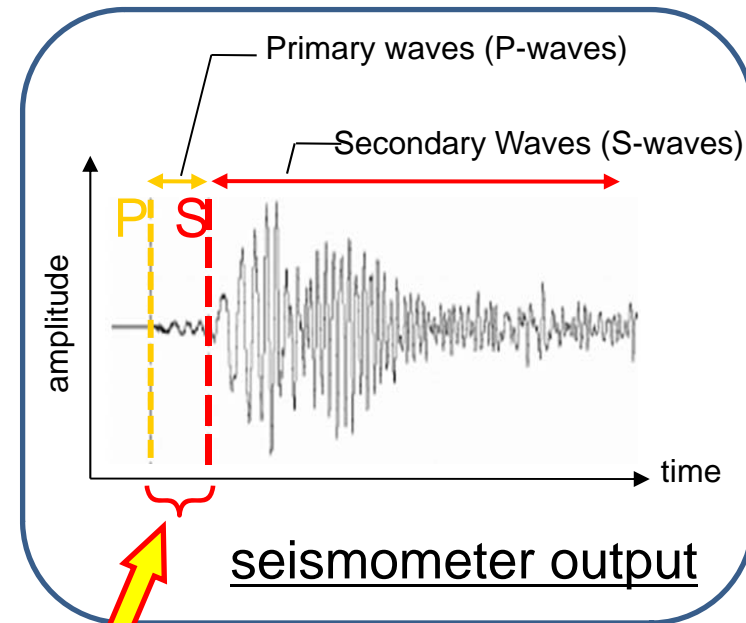
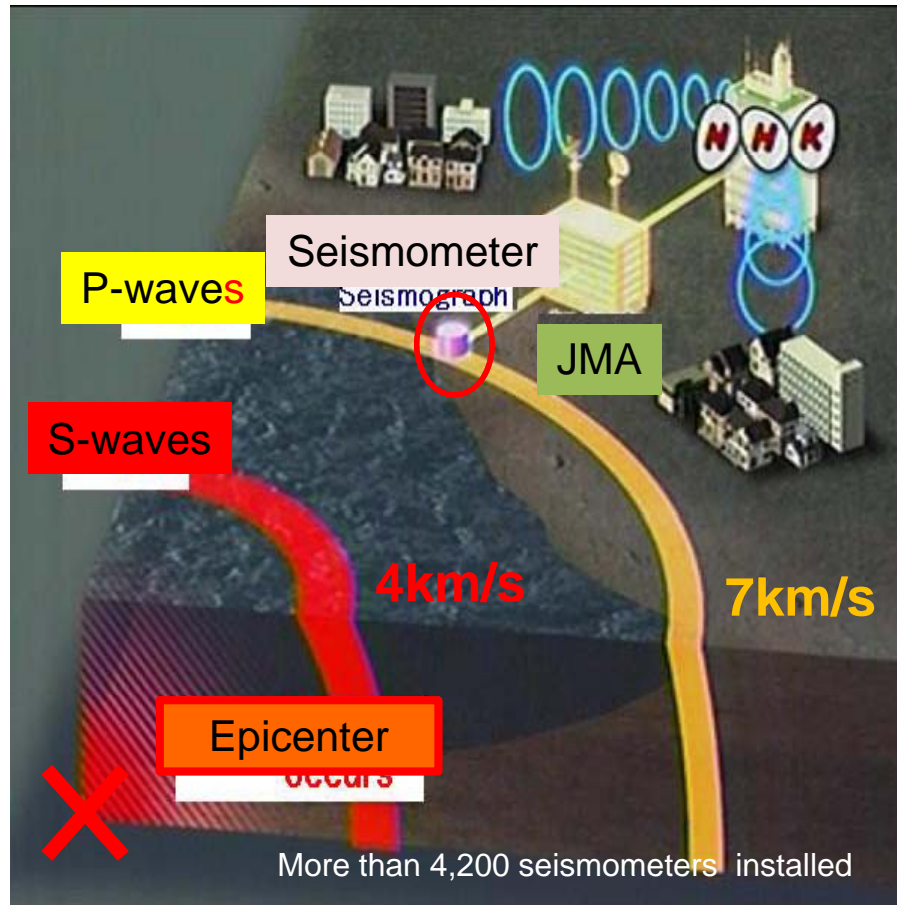


What NHK Reported in the Initial 90 Minutes



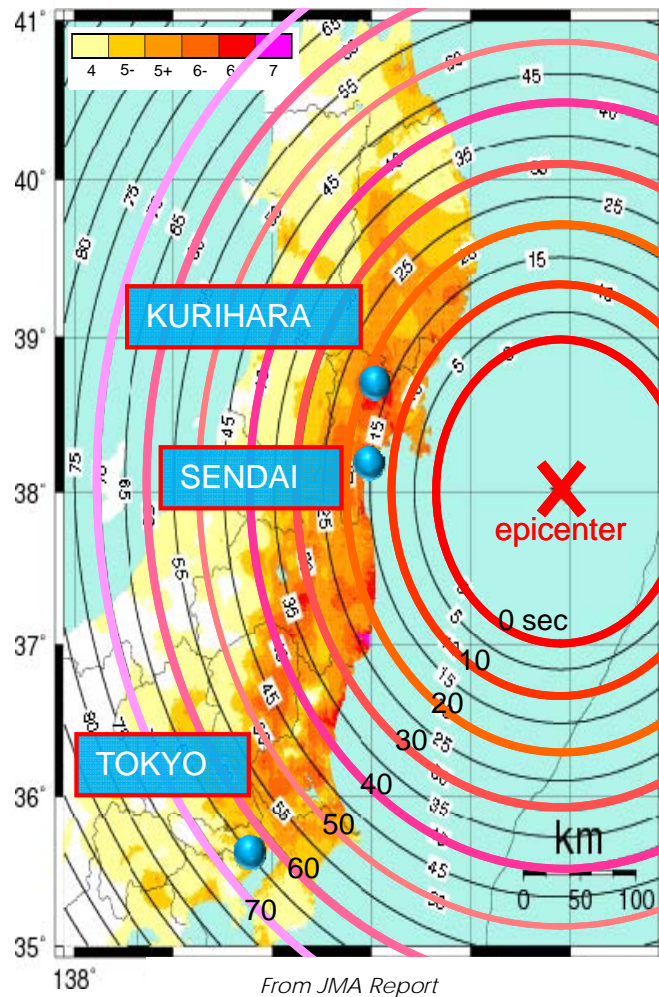
Earthquake Early Warning

Launched by the Japan Meteorological Agency(JMA) on October 1st, 2007



This time lag provides valuable seconds for self-protection and evacuation.

Earthquake Early Warning Message



Superimposed Map message

Time lag between EEW and the shaking.

SENDAI CITY	16 sec
KURIHARA CITY	18 sec
TOKYO	65 sec

Earthquake Early Warning

by Data Broadcasting function



The shaking still had not reached Tokyo
When the warning appeared.

Disaster Broadcasting Equipment



Satellite OB Van



Helicopter



Power Generator at
Transmission Site



Portable SNG Equipment



Vehicle for Emergency Transmission



Remote Controlled Camera

Remote-controlled Camera System

NHK has installed over 460 remote-controlled cameras all over Japan

- Emergency News Footage

Installed in coast areas, nuclear power plants, motorways, stations, airports, etc...

- Attractive Daily Weather Programs

More than 460 Cameras!



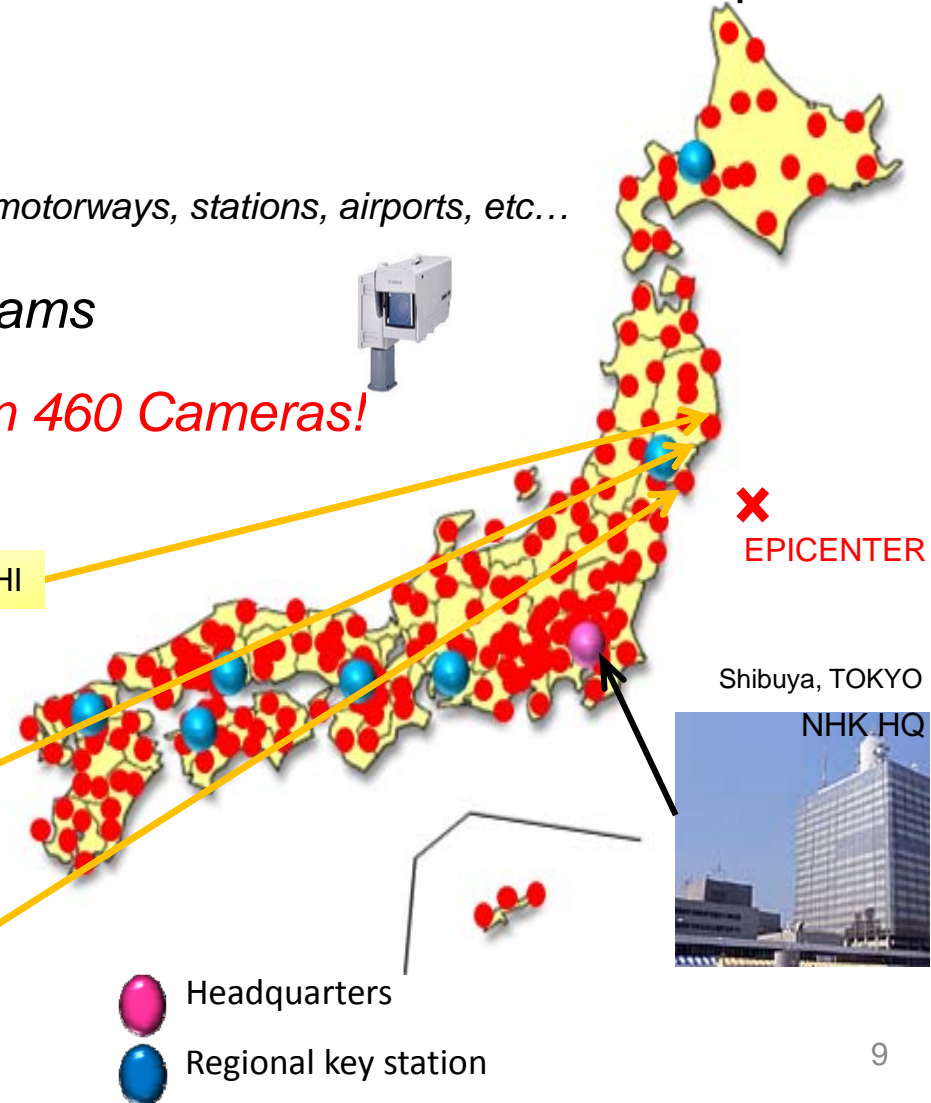
KAMAISHI



KESENNUMA

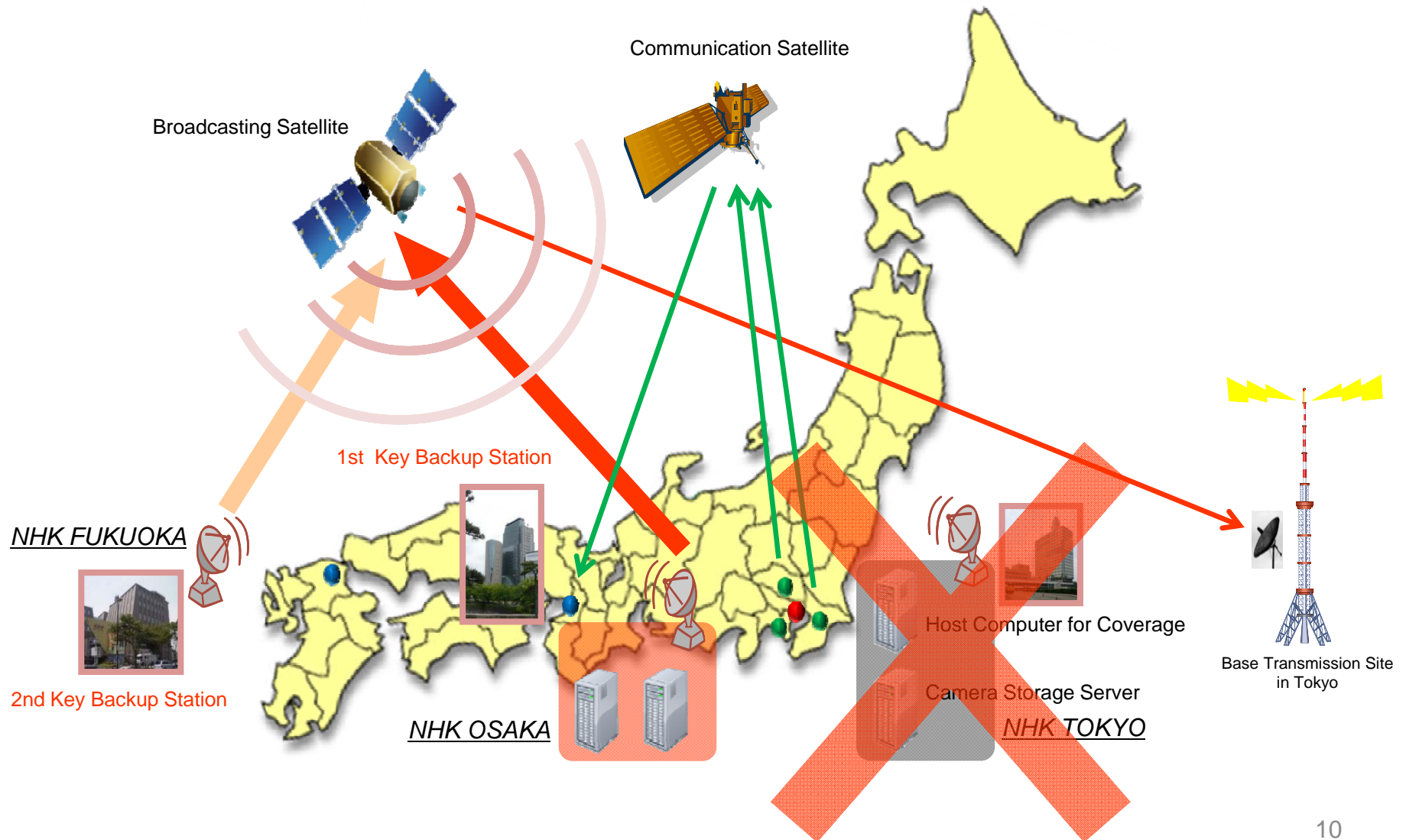


ISHINOMAKI



Backup Scheme

To Continue Broadcasting in any Situation



The Importance of Broadcasting during a Disaster

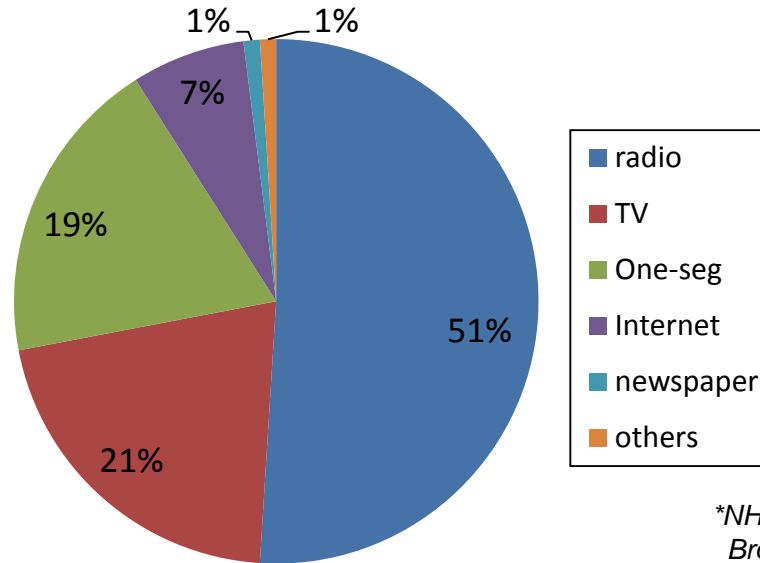


Figure A

Media accessed by people in stricken areas straight after the Great East Japan Earthquake.

**NHK Broadcasting Culture Research Institute, The NHK Monthly Report on Broadcast Research September 2011*

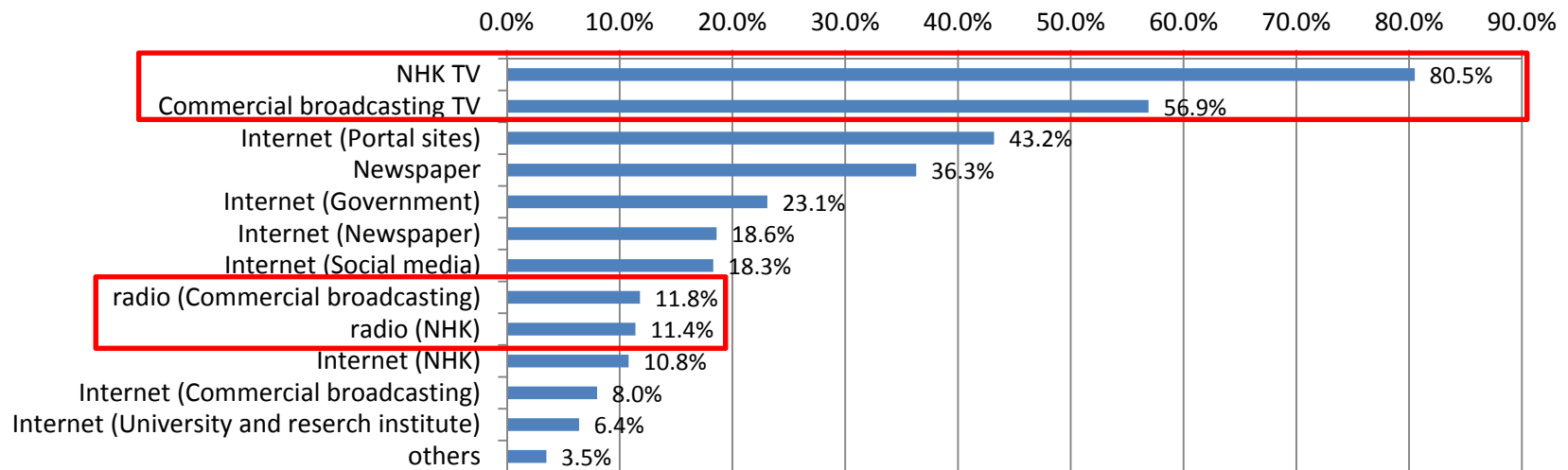


Figure B Reliable media for information concerning the Great East Japan Earthquake

**Nomura Research Institute, News Release, 3 May 2011*



Conclusion

- Broadcasting is the most effective medium for disseminating information to the general public in a disaster situation.
- Radio receivers and mobile TV's, such as "One-Seg", which can operate with a small battery, are useful tools for accessing information in power cuts.
- We believe that **the importance of broadcasting will grow** in view of its reliability, accuracy and celerity.