



WASEDA University

Broadcasting and Community TV in Japan



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Outline

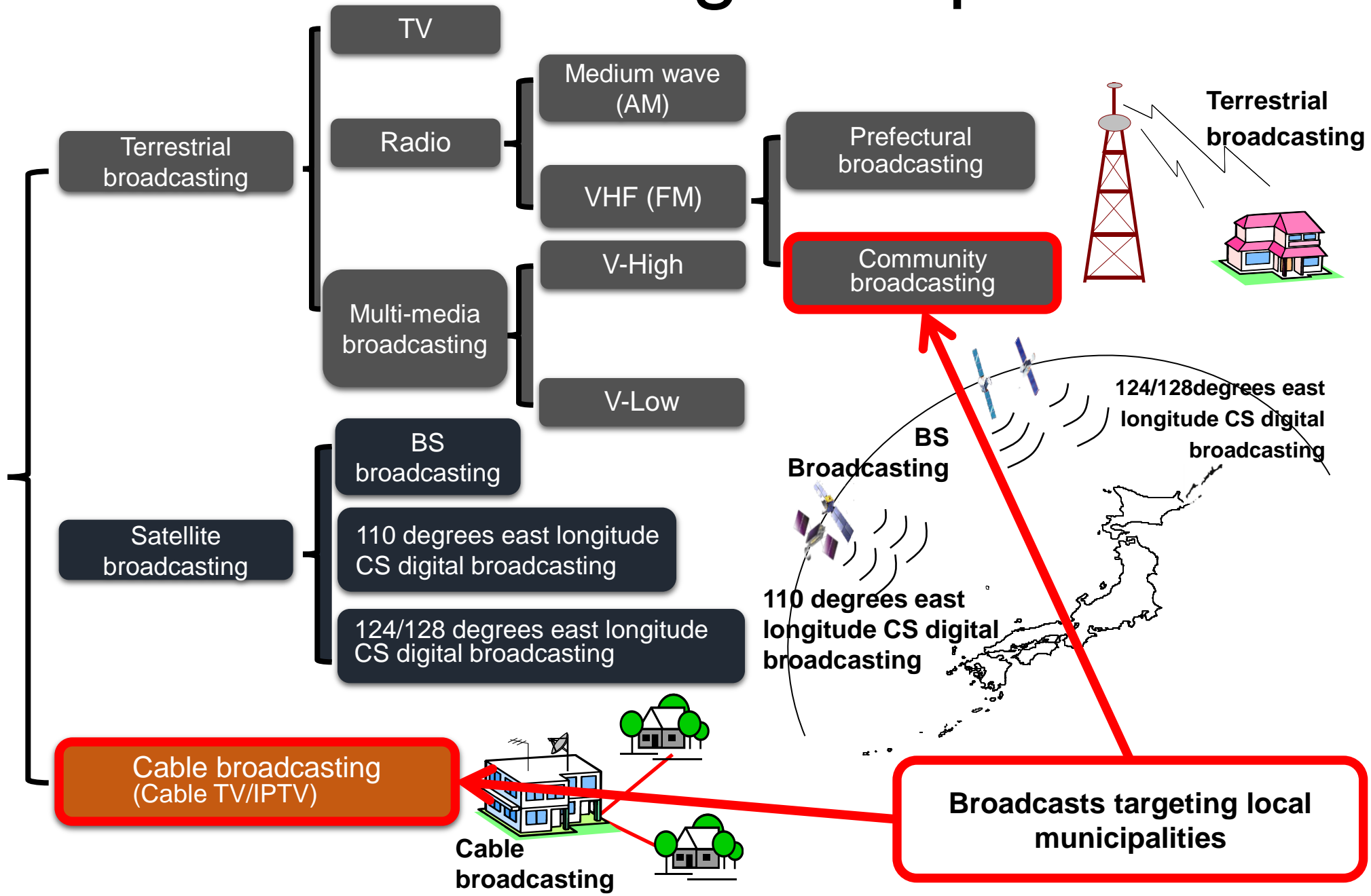
1. A Glance at Broadcasting in Japan
2. Digitization of Broadcasting
3. Broadcasting for Communities

Summary

- Japan doesn't have public community TV dedicated to providing information or programs to local communities.
- Instead, CATV, local terrestrial broadcasting and community FM radio have played the role.
- The Government is aware of importance of providing information to local communities.
- Thanks to the technology development, a variety of media will be able to take the role.

1. A Glance at Broadcasting in Japan

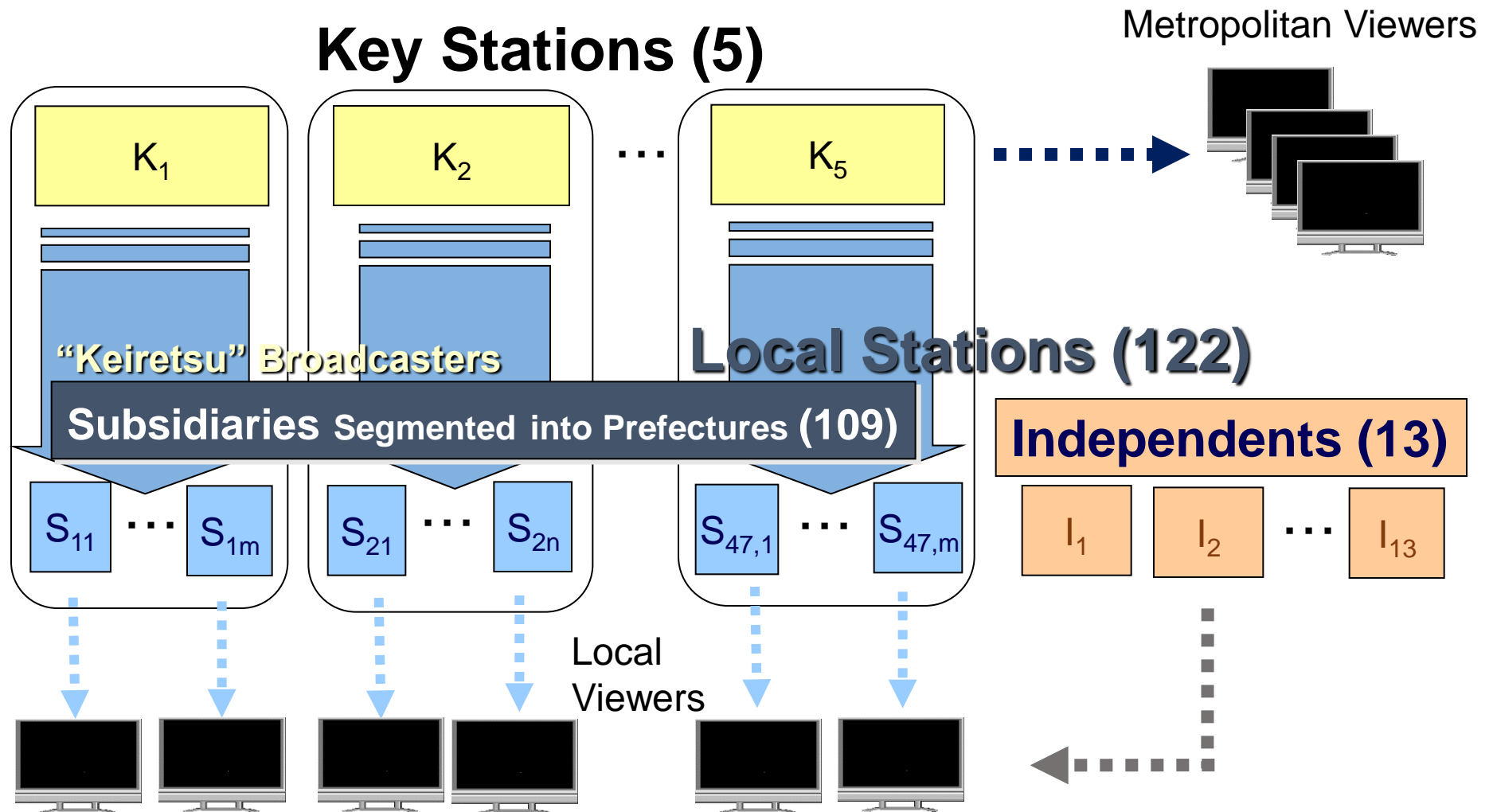
Broadcasting in Japan



The Number of Broadcasters or Channels in Japan

- 1 public nationwide broadcaster (NHK)
- 127 private broadcasters
 - 5 key stations
 - 109 subsidiary local broadcasters
 - 13 independent local broadcasters
- 99 radio stations
- 545 cable broadcasters
- Satellite
 - BS(Broadcasting Satellite) 29 Channels
 - CS(Communication Satellite)
 - 54 Channels at 110° East Longitude
 - 162 Channels at 124/128° East Longitude

Structure of the Japanese Terrestrial Broadcasting Stations



Source of Revenue

- NHK (Public broadcaster)
 - Covered by viewing fees which are collected from viewers.
 - Paying the viewing fees is regarded as an obligation for citizens.
 - Terrestrial = ¥1,260/month; Terrestrial + satellite = ¥2,230
- Commercial broadcasters
 - Advertisement revenue
- CATV and other wired TV
 - Subscription fees + advertisement
 - Internet services
 - Some are supported by local governments.

Recent Trend in TV Broadcasting

- There are threats from the Internet, especially Subscription VOD.



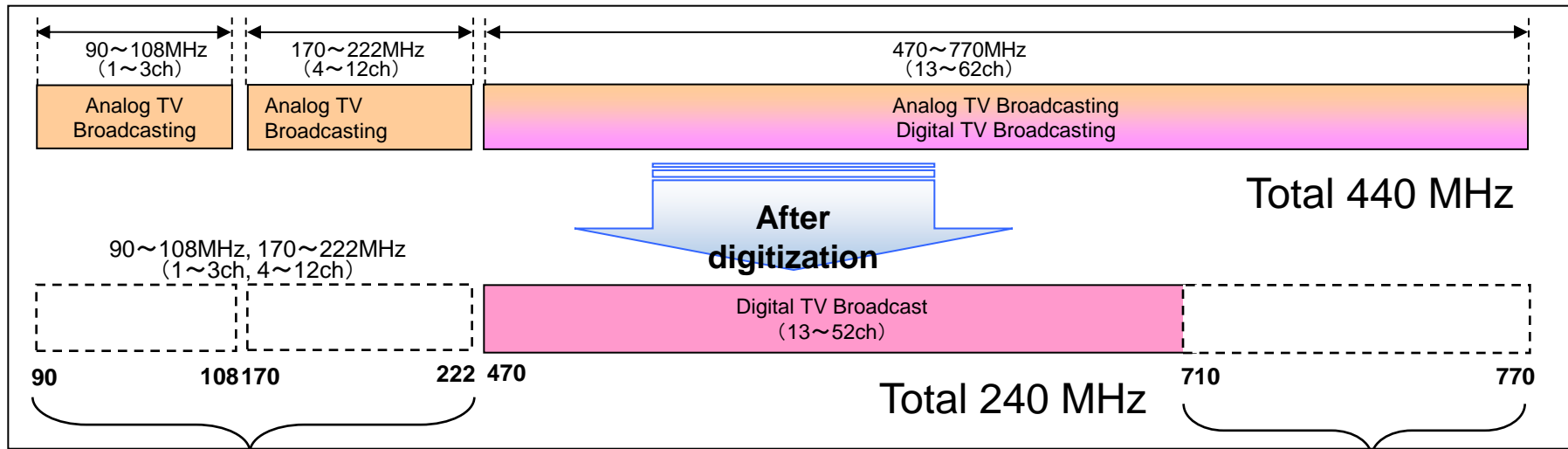
- NHK and Key commercial broadcasters have started to provide their programs through the Internet.
- Net TV may decrease the **geographical diversities** of programs.

2. Digitization of Broadcasting

Digitization of Terrestrial Broadcasting

- Digitization was determined in July 2001.
- ISDB-T (Europe: DVB-T, US: ATSC) adopted.
- Roll-out started on December 1st, 2003.
- Analog termination was designated by law on July 24, 2011.
- Completed in July 2011 except 3 prefectures close to the seismic center of 2011 East Japan Earthquake.
- 4 years were necessary for the follow-up

Spectrum Reallocation

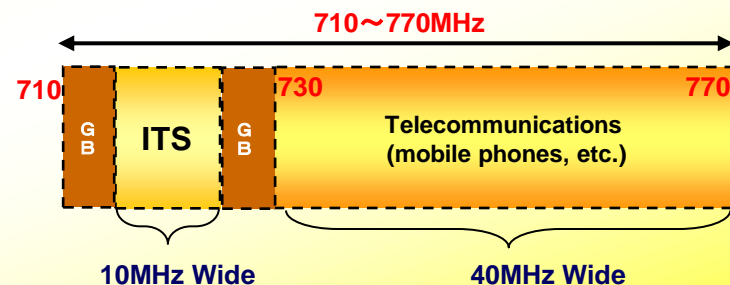


The Frequency Assignment Plan revised on December 2007.

VHF Band

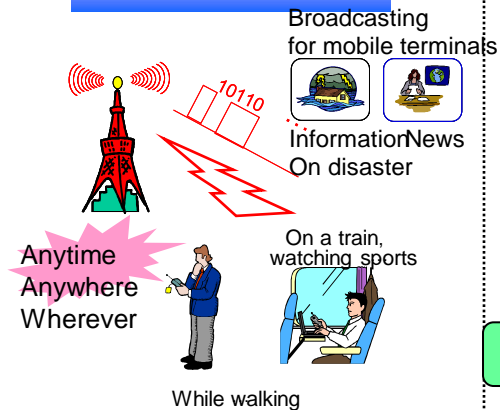


UHF Band



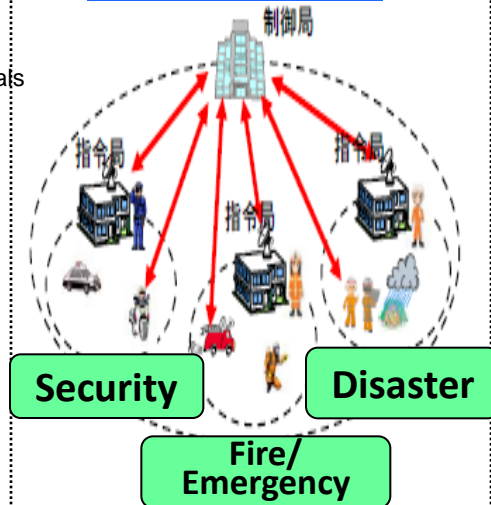
Radio Frequencies Reallocated after Digitalization of TV

Multimedia Broadcast



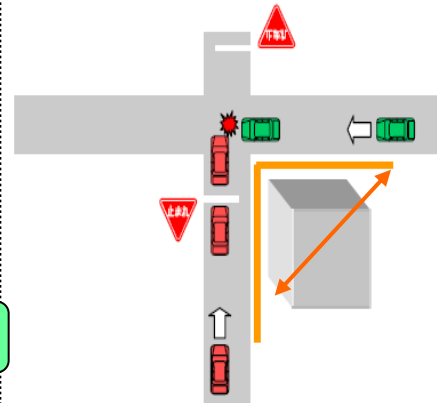
- Realization of new broadcasting service providing various information for wireless mobile

Public Broadband



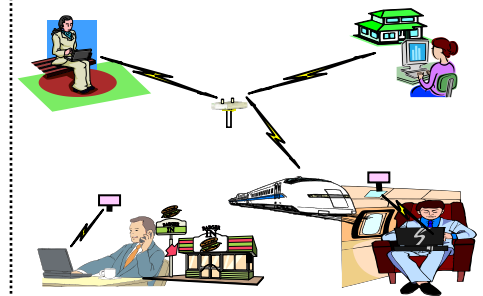
- Broadband mobile communication system for safe and secure society

ITS



- Collision detection by vehicle-to-vehicle communication

Mobile Telecommunications



- To meet the increasing demands for mobile phones

3. Broadcasting for Communities

Broadcasting for Communities

- Combination of the following system
 1. Local terrestrial broadcasting (public + commercial)
 2. CATV*
 3. Community radio*
 4. White space
 5. Multimedia broadcasting

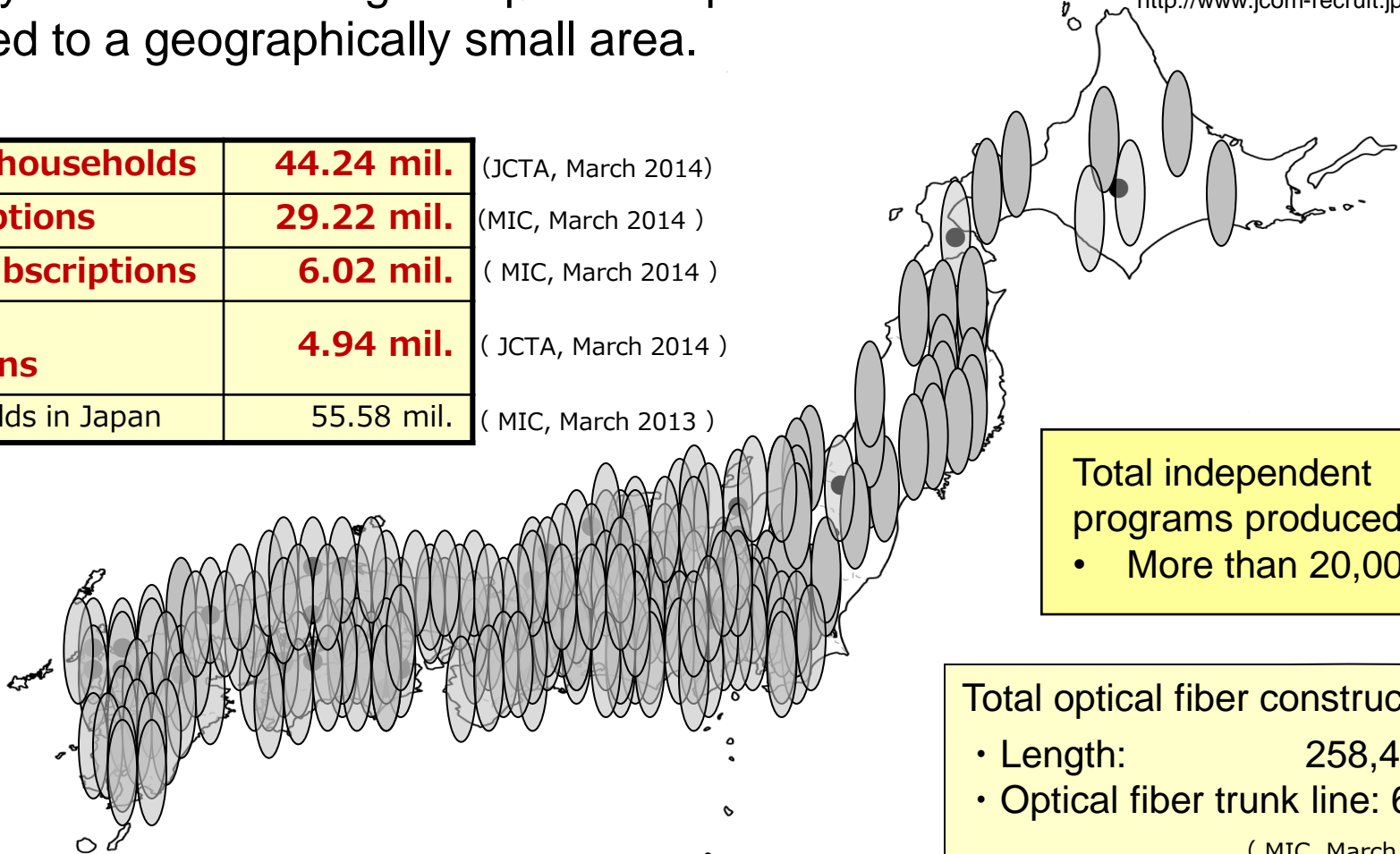
CATV in Japan

- Currently more than 500 CATV stations exist in Japan, but few Multiple System Operators (MSOs).
- Originally as a measure against poor reception of terrestrial.
- Restricted to a geographically small area.



http://www.jcom-recruit.jp/sp/bis_12.html

Reachable households	44.24 mil.	(JCTA, March 2014)
TV subscriptions	29.22 mil.	(MIC, March 2014)
Internet subscriptions	6.02 mil.	(MIC, March 2014)
Telephone subscriptions	4.94 mil.	(JCTA, March 2014)
Total households in Japan	55.58 mil.	(MIC, March 2013)



Total independent programs produced

- More than 20,000

Total optical fiber construction

- Length: 258,489km
- Optical fiber trunk line: 64.6%

(MIC, March 2014)

Source: JCTA

The Role of CATV

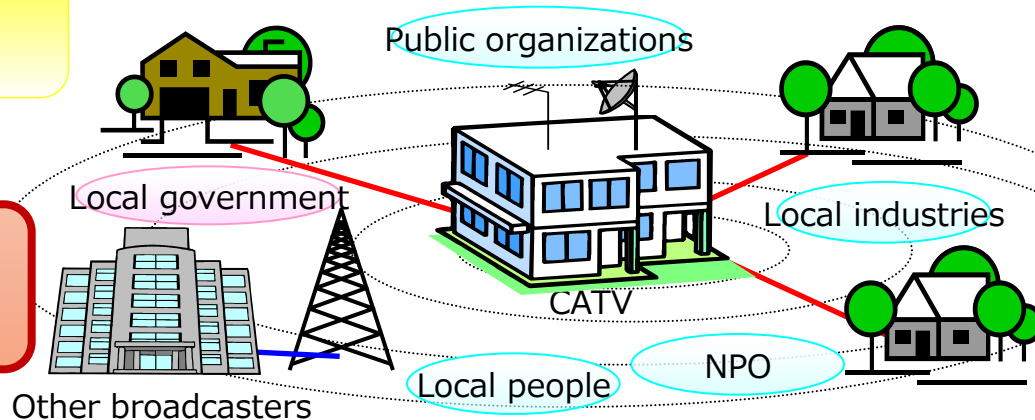
1. **Community-based broadcasting**
2. The main role is **retransmission** of programs released from key stations.
3. **Community channels** for providing information to local communities are provided.
4. Triple-play service (broadcasting, telephone, broadband)

Broadcasting

Multi-channel
broadcasting
Retransmission of CS

Community channel
Independent programs
released for local communities

Retransmission of
terrestrial TV programs



Broadband, IP
phone

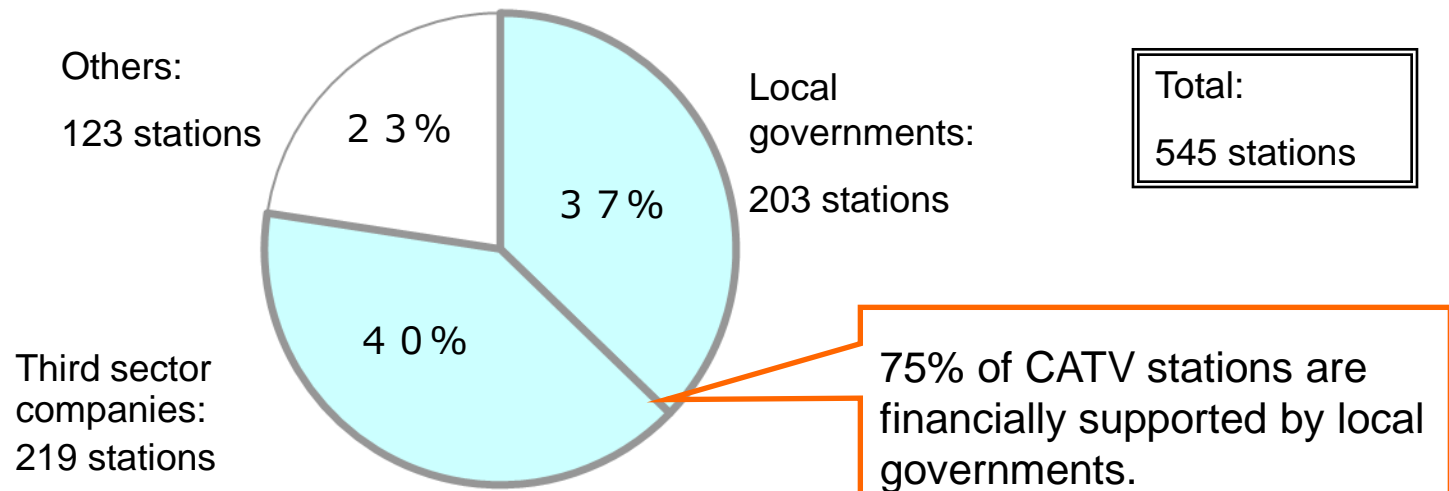
Public information service
Disaster prevention, medical/health
care, education, public service support

- Providing a wide range of services from local content to community-oriented applications

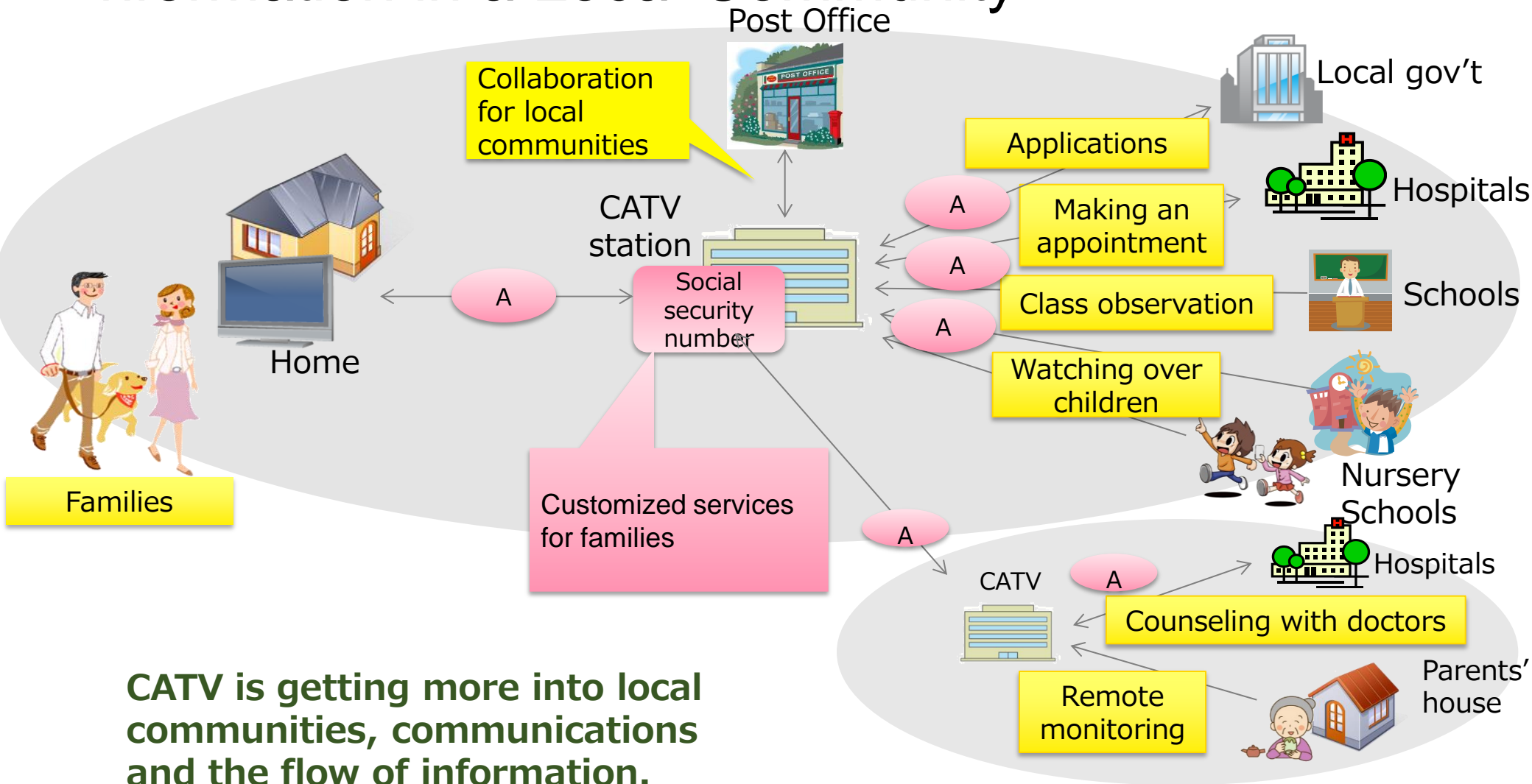
Close Relationship with Local Communities

- Most CATV stations were established by local community including local governments for eliminating poor reception of terrestrial TV and revitalizing local economies
- A major capital investor is local governments.

Major capital investors of CATV stations



CATV Seeks to Be a Key Player in the Flow of Information in a Local Community

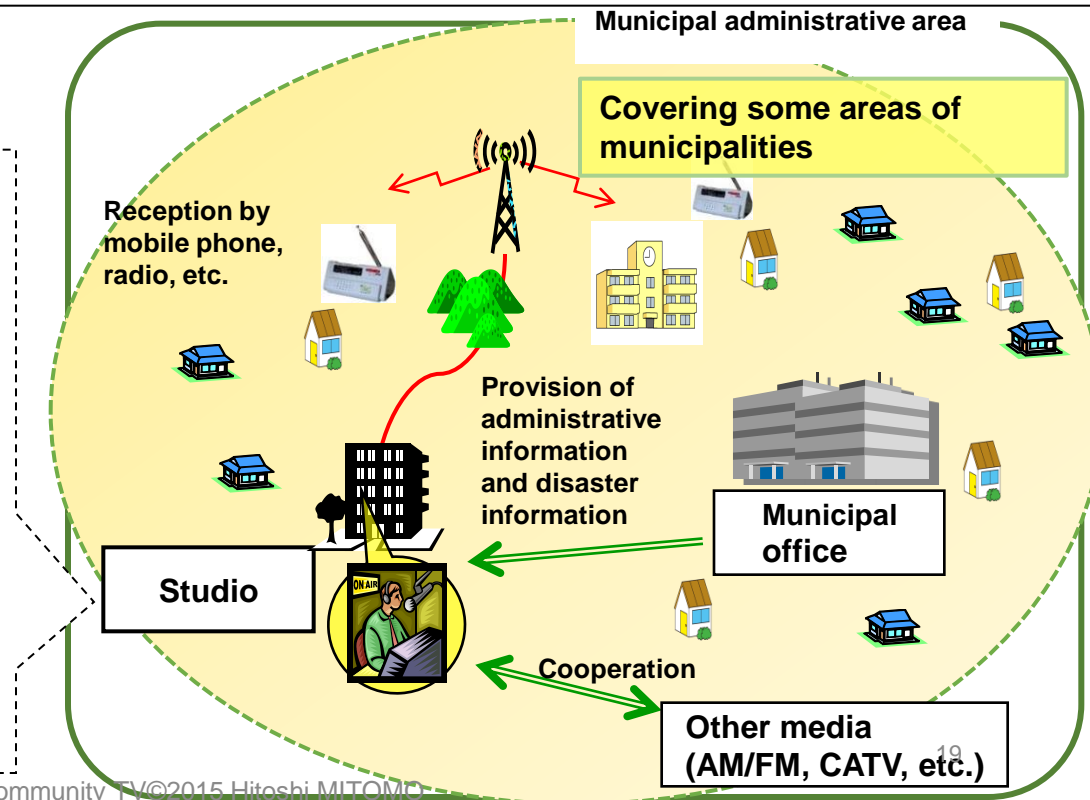


Community Broadcasting (FM Radio)

- Community broadcasting as community-based media* was first introduced in January 1992.
 - Objectives:
 - to provide information closely related to local communities
 - To contribute to enhancing communication in local communities.
- * In a radius of 5 to 15 km, receivable with commercially available FM radio receivers.



A community FM station in Ishigakijima, Okinawa
http://blog.livedoor.jp/thp_cfm/archives/51049841.html

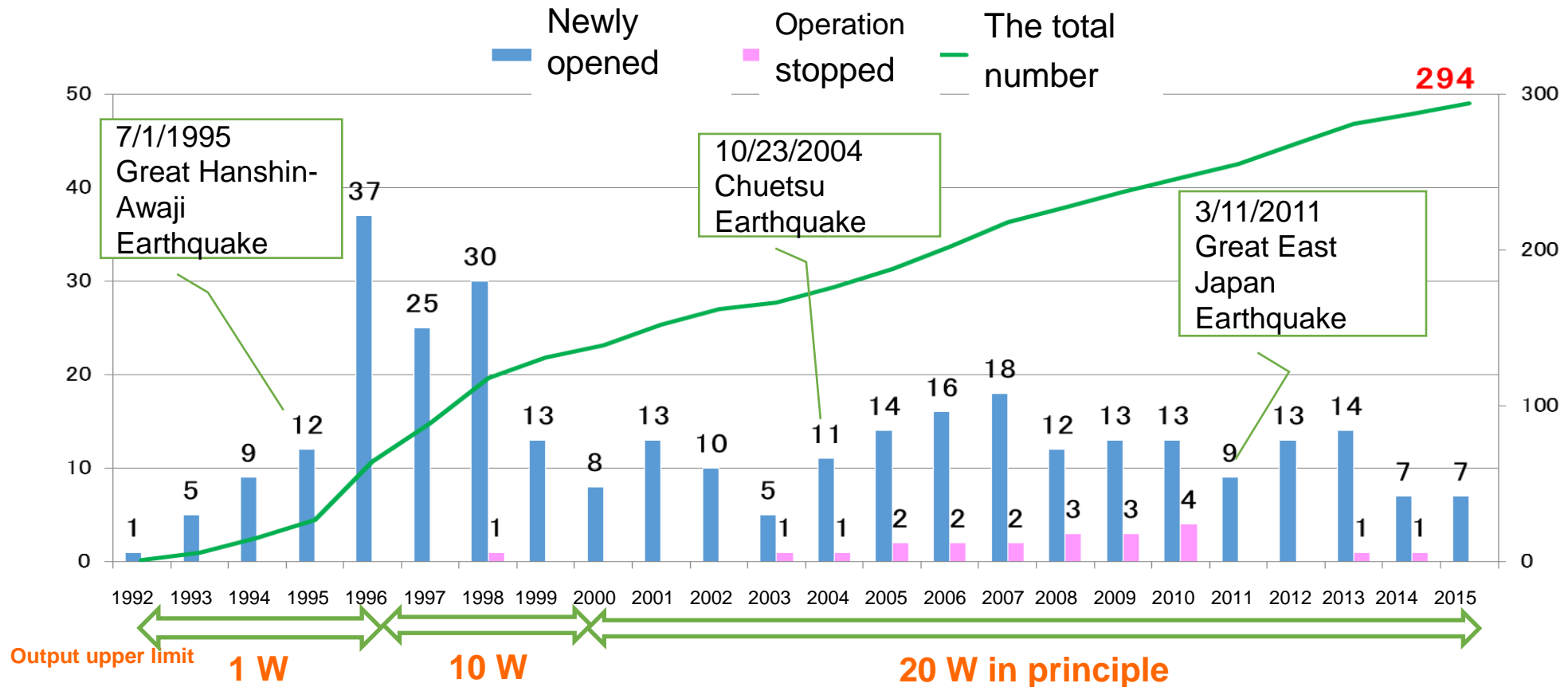


Programs Released from Community Broadcasting

- Life information
 - Road traffic
 - Hospitals
 - Weather forecasts
 - Entertainment
- Administrative information
 - Municipal public relations,
 - Municipal parliament information
 - Disaster information
- Tourist information
 - Sightseeing spots
 - Tourist facilities
 - Events
- Local news

Growth of the Number of Community Broadcasting Stations

- Community FM stations have been steadily spreading.
- Approximately 10 stations newly open every year.
- As of November 2015, a total of 294 stations are open in 46 prefectures.



Temporary Broadcasting Stations in the Case of Disasters

- A disaster broadcasting station is an FM radio station temporarily opened in time of a disaster, such as a storm, heavy rain, flood, earthquake, or large-scale fire.
- Local governments make the most of it as a means of providing and collecting information.
- Effective in providing locally customized information regarding shelters and lifeline restoration for disaster victims.

History

- One month after the 1995 Great Hanshin-Awaji Earthquake, a license was issued to Hyogo Prefecture for an FM station in response to the request of by the Prefecture.

Procedures

- Frequencies: Selected from idle frequencies reserved for FM radio.
- Licensing: Simple immediate licensing procedures
 - ⇒ Oral application and licensing

Cases of Setting Up Temporary Broadcasting Stations after Disasters

Type	Station established
Earthquake (34)	Great Hanshin-Awaji Earthquake (1995) 1 station (Hyogo Prefecture), Chuetsu Earthquake (2004) 2 stations, Chuetsu Offshore Earthquake (2007) 1 station,
	Great East Japan Earthquake (2011) 30 stations in 28 cities and towns (including 10 stations still in operation in 9 cities) <u>(In operation: Iwate Prefecture (3 stations in 3 municipalities), Miyagi Prefecture (5 stations in 4 cities), and Fukushima Prefecture (2 stations in 2 municipalities))</u>
Heavy rain and flood (4)	Tsuwano-cho (heavy rain in July 2013) (Already closed) Tamba (heavy rain in August 2014) (already closed) Joso (heavy rain from September 10, 2015 (Typhoon No. 18) (opened on September 14, 2015 and still in operation)) Tochigi (heavy rain from September 10, 2015 (Typhoon No. 18) (opened on September 15, 2015 and still in operation))
Snow damage (1)	Yokote (Tohoku heavy snow in January 2011)
Volcano (2)	Abuta-cho (Mt. Usu in Hokkaido from May through March 2000) Takaharu (Mt. Shinmoedake from April 2011 through March 2012)

Temporary Broadcasting Stations in the time of the Great East Japan Earthquake in 2011

- Local governments opened broadcasting stations as a means of providing disaster information, evacuation information, etc.
- The first station opened on the day of the earthquake, providing rescue information, water and food supplies.



<http://blogs.yahoo.co.jp/yoshimizushrine/folder/1511484.html?p=1>



http://www.jayamagata.or.jp/news/news110418_02.html

- Opened in 21 cities and towns damaged by the tsunami within a month after the quake.
- A total of 30 stations opened in 28 cities and towns.
- Currently, ten stations are in operation in nine cities and towns.

Differences between Temporary Broadcasting and Community Broadcasting

	Temporary disaster broadcasting station	Community broadcasting
Antenna power	Minimum required antenna power.	Less than 20 W in principle
Licensee	Local governments	Private corporations
Period of license	Period until the lives of victims have become stable. Re-licensing possible.	5 years. Re-licensing possible.

Pros and Cons of Community Broadcasting from the Japan's Experience

- Pros

- Provides locally customized information
- Creates stronger ties within local communities
- Useful especially when a disaster strikes local communities

- Cons

- Financial difficulties for start-up and low profitability
- Weak management bases
- Limited commercial sponsorship
- Necessity of public assistance
- Low abilities of gathering information and program production
- Competition with other broadcasting