

**ITU Workshop on Making Television Accessible –
From idea to reality” hosted and supported by
Nippon Hōsō Kyōkai (NHK)**

(Tokyo, Japan, 28 May 2012)

**Proposal for Universal Design
Broadcasting from the Deaf and the
Hard of Hearing**

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Tokyo, Japan, 28 May 2012



Good Reasons to Promote Broadcasting targeting the Disabled

**1. Amendment of the Basic
Act for Persons with Disabilities
supported by the Convention
on the Rights of Persons with
Disabilities**

Good Reasons to Promote Broadcasting targeting the Disabled

**2. Unequal accessibility of
information revealed through
the Great East Japan
Earthquake and the
subsequent nuclear accident**

the Great East Japan Earthquake

- Wataricho, Watari-Gun, Miyagi Prefecture



Tokyo, Japan, 28 May 2012

the Great East Japan Earthquake

- Watari cho, Watari-Gun, Miyagi Prefecture



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Good Reasons to Promote Broadcasting targeting the Disabled

**3. Switchover to terrestrial
digital broadcasting and
development of IT technologies**

Closed-Captioning in Terrestrial Broadcasting is underdeveloped:

- 1. Most of the local broadcasters do not provide closed-captioning;**

Closed-Captioning in Terrestrial Broadcasting is underdeveloped:

**2. Only 1%
of the broadcasting provides
sign language;**

Closed-Captioning in Terrestrial Broadcasting is underdeveloped:

3. Relatively high costs in Japan (7~10 times of those abroad) prevent live subtitling in emergency situations

New, regrettable examples of Non-Accessibilities in New Digital Terrestrial Broadcasting Standards

- 1. Outreach (off-the-picture) captioning not foreseen;**

New, regrettable examples of Non-Accessibilities in New Digital Terrestrial Broadcasting Standards

2. Audio Description not possible in the new 5.1 channel

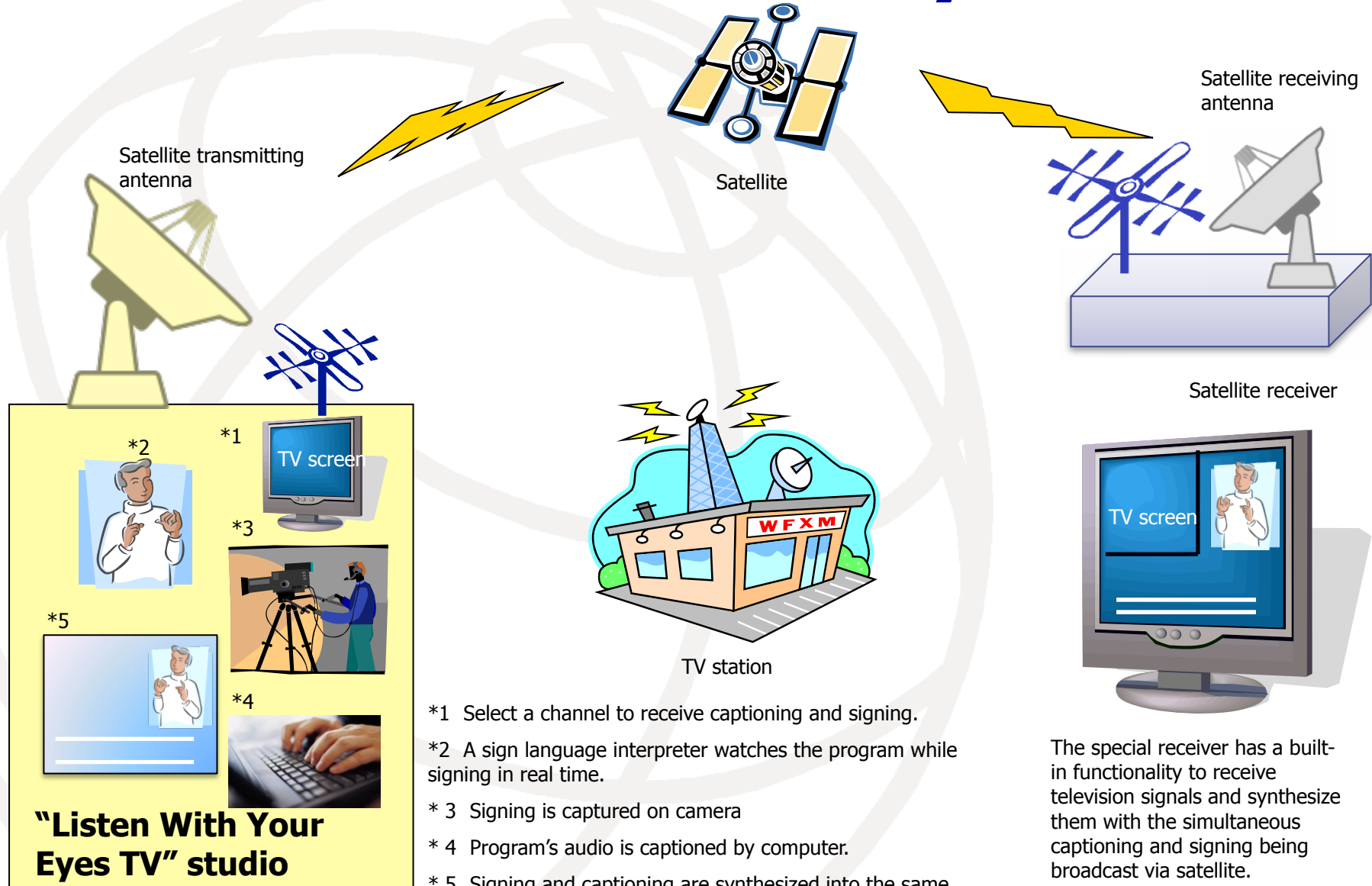
New, regrettable examples of Non-Accessibilities in New Digital Terrestrial Broadcasting Standards

3. Closed signing not possible

...COULD HAVE been prevented, IF the vision- or hearing-impaired were involved in.....:

- 1. development of 3D-TV standards**
- 2. development of hybrid-casting system**
- 3. development of super-hi-vision system**

Illustration of the system



Service Screen Configuration

The service is extremely effective for news programs broadcast live or during a disaster when the broadcaster does not (or cannot) provide captioning or signing services.



Captioning and signing screen conveying the TV broadcast audio, transmitted via satellite. (Live)

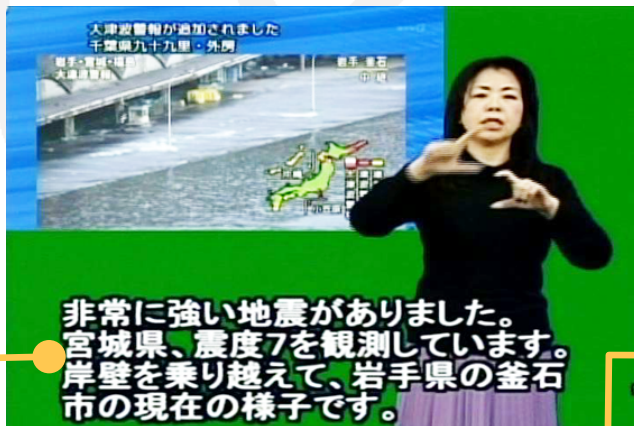
Display which has synthesized the TV broadcast with the satellite image using the designated receiver.

Television screen reporting on the unfolding disaster. (Live)

The Emergency Broadcast of “Listen with Your Eyes TV” during the “Great East Japan Earthquake

“Listen with Your Eyes TV” immediately began emergency disaster broadcasting after the earthquake

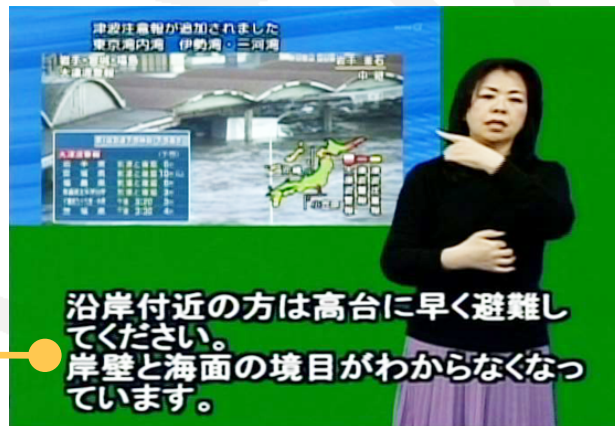
It broadcasted the call to quickly flee to higher ground from the coast area simultaneously with the tsunami forecast.



[Disaster broadcasting immediately after the earthquake]

A giant tsunami warning was also issued for Chiba Prefecture's Kujukuri and Sotobo

There was an extremely strong earthquake. A seismic intensity of 7 was recorded in Miyagi Prefecture. Tsunami is Overtaking the wharf, this is the current situation in Kamaishi City in Iwate Prefecture.



[Tsunami warning and calls to seek refuge]

A tsunami advisory was also issued for Tokyo Bay (inner bay), Ise Bay, and Mikawa Bay

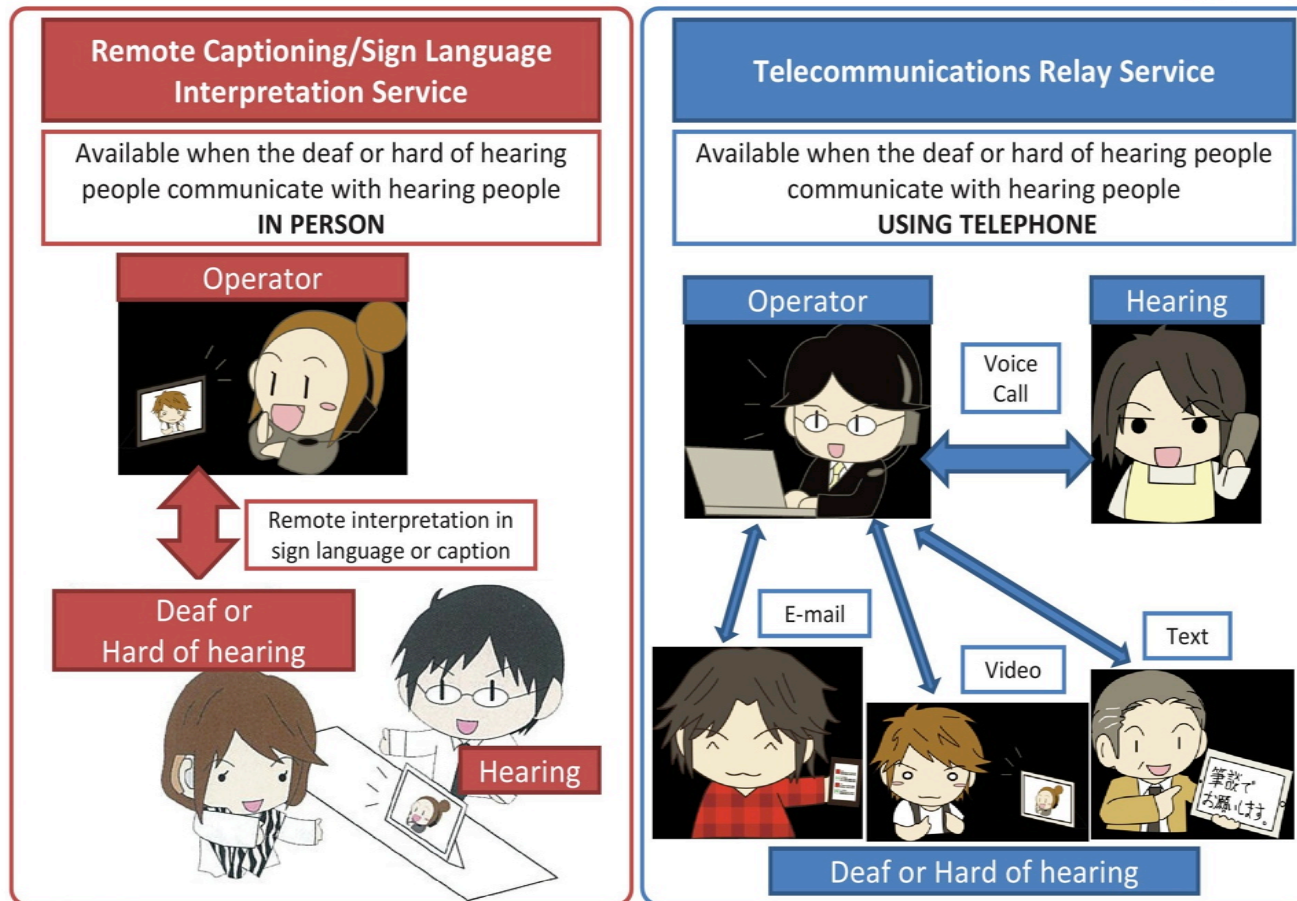
If you are near the coast, quickly flee to higher ground. The boundary between the wharf and sea surface is no longer recognizable.



[Relay broadcasting from the disaster site]

It's really a big mess... The tsunami really came from over there...

Supporting the Deaf/Hard of Hearing Individuals affected by the Great East Japan Earthquake



Services are available, free of charge, for the earthquake affected persons who are Deaf and Hard-of-Hearing in the Tohoku region (Iwate, Miyagi, and Fukushima) Project Period: 1 year (Sept 2011 until Sept 2012)

東日本大震災被災聴覚障害者向け



日本財団
The Nippon Foundation

遠隔情報・コミュニケーション支援事業

岩手県

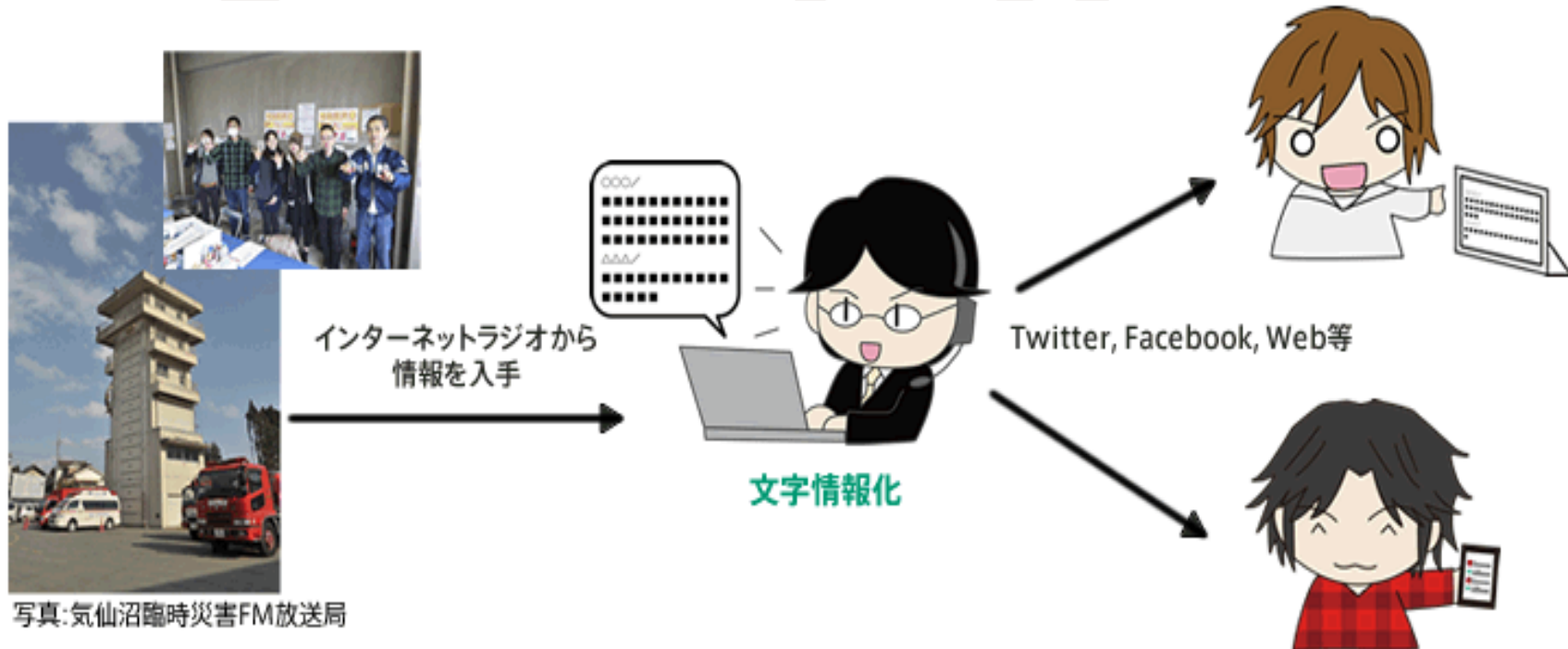
ラヂオもりおか、みやこさいがいFM

宮城県

RADIO3、ラジオ石巻、BAYWAVE、fmいずみ、りんごFM、なとらじ、南三陸災害FM、女川さいがいFM放送局

福島県

エフエムモットコムFMいわき南相馬さいがいFM郡山コミュニティFM



Conclusions and Recommendations

■ Policy makers' commitment is imperative in:

1. legislation to make broadcasting standards obligatory that reflect the amendment of the Basic Act for Persons with Disabilities
2. building of public consent on universal-design broadcasting as social responsibility of the broadcasters
3. implementation guideline and budgeting by the government

Conclusions and Recommendations

■ Promoting Universal-Design Media through:

1. designing universal media
2. improvement of media literacy in the society
3. support by local communities