

One Year after the Great East Japan Earthquake

**The Great East Japan Earthquake:  
Transition of Information  
Transmitted within the 72 Hours after the Quake<sup>1</sup>**

**~ Analyzing TV coverage  
of the Disaster by Three Tokyo-based Stations~**

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<sup>1</sup> This article is based on the authors' article "Higashinihon-Daishinsai Hassei kara 72 jikan Terebi ga Tsutaeta Jyoho no Suii ~Zaikyo 3 kyoku no Hodo Naiyo Bunsekikara~" [The Great East Japan Earthquake: Transition of Information Transmitted within 72 Hours after the Quake ~Analyzing TV coverage of the Disaster by Three Tokyo-based Stations], published in the March 2012 issue of *Hoso kenkyu to chousa*, the monthly journal of the NHK Broadcasting Culture and Research Institute.  
[http://www.nhk.or.jp/bunken/summary/research/report/2012\\_03/20120301.pdf](http://www.nhk.or.jp/bunken/summary/research/report/2012_03/20120301.pdf)

## Introduction

This article presents a content analysis of TV coverage by three television networks based in Tokyo during the first 72 hours after the Great East Japan Earthquake. Earlier in the December issue, we reported on a similar analysis during the first 24 hours. In this March issue, we not only extend the time span to 72 hours but also introduce broader scope of analysis, including details of contents of information or of who were giving the information on screen. However, while the previous study covered all the six networks based in Tokyo, this time we need to limit our analysis to three of them due to the vast amount of samples. The three are the General TV channel of NHK, Japan's sole public broadcaster, and two commercial broadcasters, Nippon Television Network and Fuji Television Network. We have chosen the three because, in the previous analysis, we found that NHK's General TV and Fuji Television were widest apart in their characteristics of news coverage, while Nippon Television was in between.<sup>1)</sup>

In Chapter 1, we analyze changes in basic scenes of the disaster coverage, contents of news reports and areas covered during the 72 hours after the earthquake. It is the same analysis we conducted previously for the first 24 hours with the expansion of the time frame. Chapter 2 focuses on the lifeline information and information on sufferers of the disaster, which is a vital part of disaster reporting for the survival of the affected people. We report on what kind of information the three broadcasters delivered and how they reported on the voices of sufferers and the ways they were rescued. In Chapter 3, we observe and analyze how the three broadcasters conceived casualties and damage caused by this complex and broad-scale disaster which Japan has never experienced before. In Chapter 4, we take up the nuclear accident at Fukushima Daiichi Nuclear Power Station. We report on how news reports on the accident changed along with the time, analyzing the contents and the volumes of coverage. We also observe people who commented or explained about the accident, and how news conferences on the accident were reported.

Here is one word about the way we present statistics and ratios in this report. In the December issue, we included average numbers of all the six broadcasters when presenting

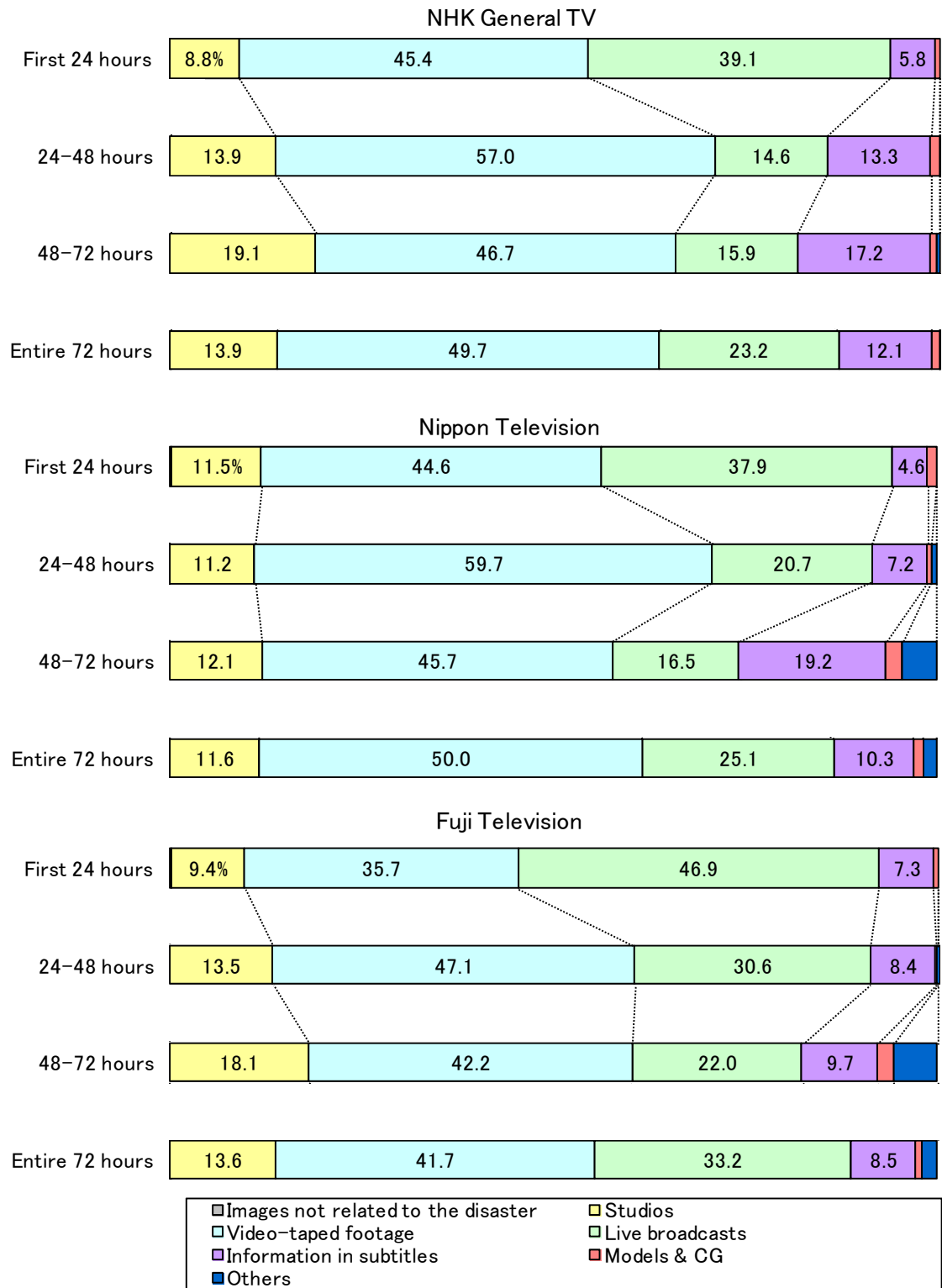
figures. It is to indicate general trends. However, this time, the average numbers are not shown because we limited our analysis to the three of them and we considered such averages do not represent an entire picture. Thus, numbers used in this report are basically for each broadcaster alone.

## **1. Changes in Basic Scenes, Contents of News Reports, and Areas Covered**

### **1-1: “On-the-Spot Live Broadcasts” Gradually Decreased**

During the first 24 hours after the earthquake, “on-the-spot live broadcasts” generally accounted for about 40 percent of news coverage. This decreased hour by hour. Instead, the images of “studios” gradually increased (see **Figure 1**). NHK gave 39.1 % of its airtime to “on-the-spot live broadcasts” during the first 24 hours, 14.6 % during the 24-48 hours, and 15.9 % during the 48-72 hours. At Nippon Television, airtime for “live broadcasts dropped from 37.9 % to 20.7 % to 16.5 %, and at Fuji Television, from 46.9 % to 30.6 % to 22.0 %. Among the three networks, Fuji gave the highest ratio of airtime, 33.2 %, to “live broadcasts” during the entire 72 hours, NHK, 23.2 % and Nippon Television, 25.1 %.

**Figure 1. Changes in Basic Scenes**



As to the contents of information delivered in the form of images in “on-the-spot live broadcasts” (see **Table 1**), NHK General TV reported more on “how tsunami is hitting land” (14.4 %) and “devastation caused by tsunami” (11.5 %). Nippon Television reported more on “devastation caused by tsunami” (16.5 %), “persons” appearing on screen (12.9 %), and “razing fires” (10.2 %). Fuji Television reported more on “devastation caused by tsunami” (23.2 %), “rescue operations and information” (12.7 %), and “razing fires” (12.0 %).

**Table 1. Contents of “On-the-Spot Live Broadcasts”**

	NHK General TV	Nippon Television	Fuji Television
How tsunami is hitting land	14.4%	2.6%	4.2%
Devastation caused by tsunami	11.5	16.5	23.2
Razing fires	9.4	10.2	12.0
Transport information	5.2	6.7	3.4
Stranded commuters, commuters trying to go home, commuters the next morning	5.5	5.0	2.5
Related to the nuclear power plant	2.1	0.7	1.8
Evacuation centers & sufferers there	8.3	8.2	8.7
Rescue operations & information	2.5	4.7	12.7
Persons	6.5	12.9	9.9
Nothing is happening. Or it is unclear what is happening.	3.8	8.3	3.3
News conferences and announcements by the government concerning the nuclear power plant	8.9	6.3	6.0
News conferences and announcements by the Nuclear and Industrial Safety Agency concerning the nuclear power plant	8.2	4.5	2.6

100%=Live broadcasts of each broadcaster during the 72 hours

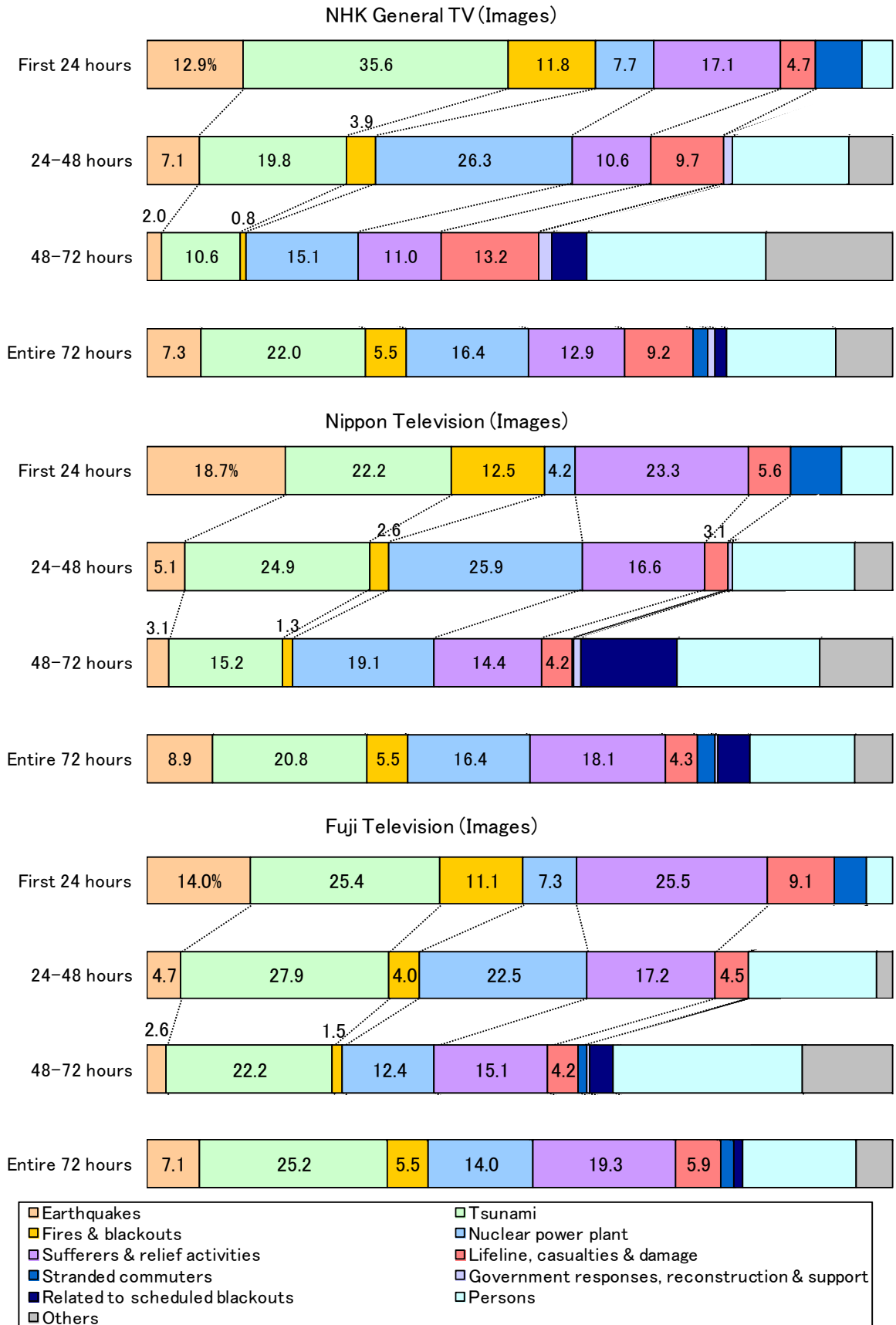
## 1-2 Changes in Contents of News Reports

**Figure 2** shows how the contents of news reports changed by every 24 hours.

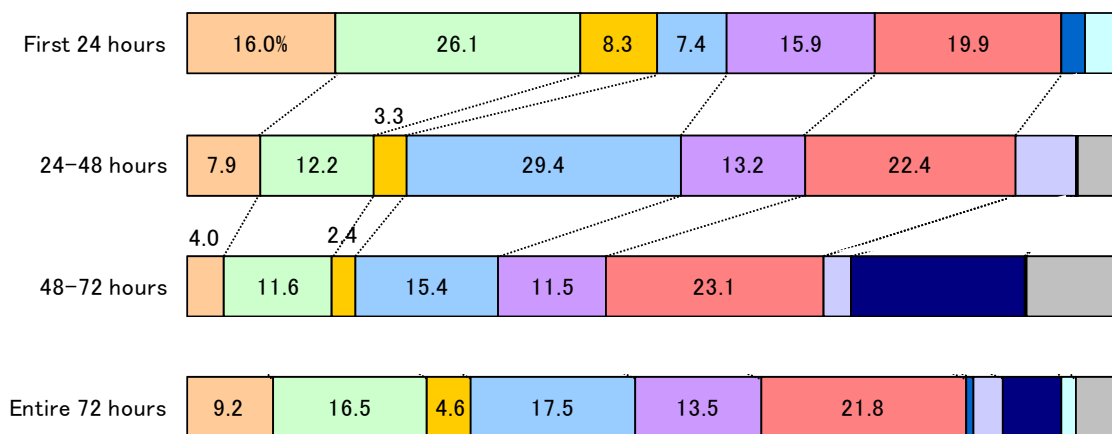
During the first 24 hours, the three broadcasters reported on tsunami most prominently both in images and sounds. Then, information on tsunami gradually decreased. During the 24-48 hours, the nuclear power plant became heavily covered. We will elaborate on this category of news in Chapter 4.

“Information on sufferers and relief activities,” that is, information coming from sufferers and areas hit by the disaster, was reported as much as “tsunami” during the first 24 hours. All through the 72 hours, the three broadcasters used more than ten percent of their airtime to report on this. However, they are different on their ratios of airtime for “lifeline information.” That is information for sufferers and areas hit by the disaster. NHK General TV relatively heavily reported on this. It did so especially in sounds. (21.8 % of airtime during the 72 hours) Both Nippon Television and Fuji Television reported on this relatively less. We will discuss the details of these two kinds of news reports, “sufferers and relief activities” and “lifeline information,” in Chapter 2.

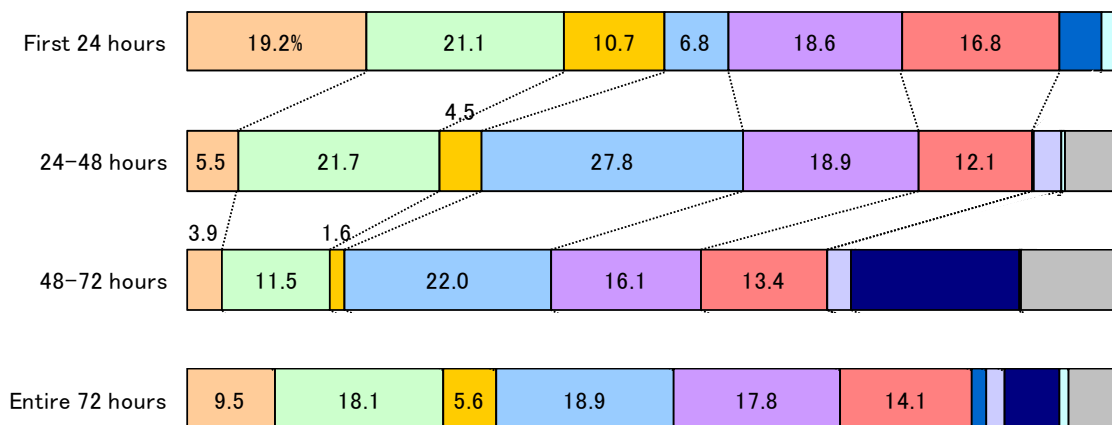
**Figure 2. Changes in Contents of Information**



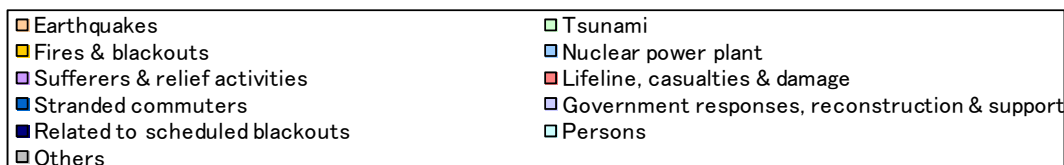
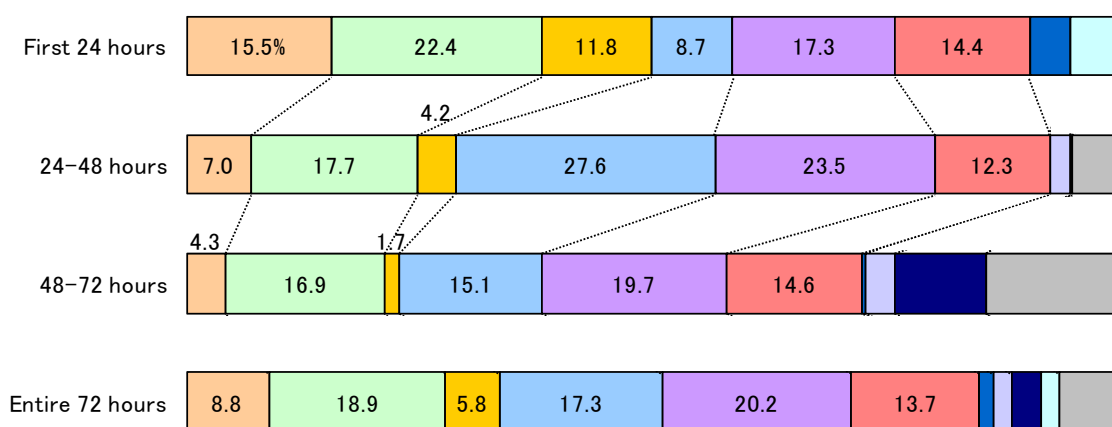
### NHK General TV (Sounds)



### Nippon Television (Sounds)



### Fuji Television (Sounds)

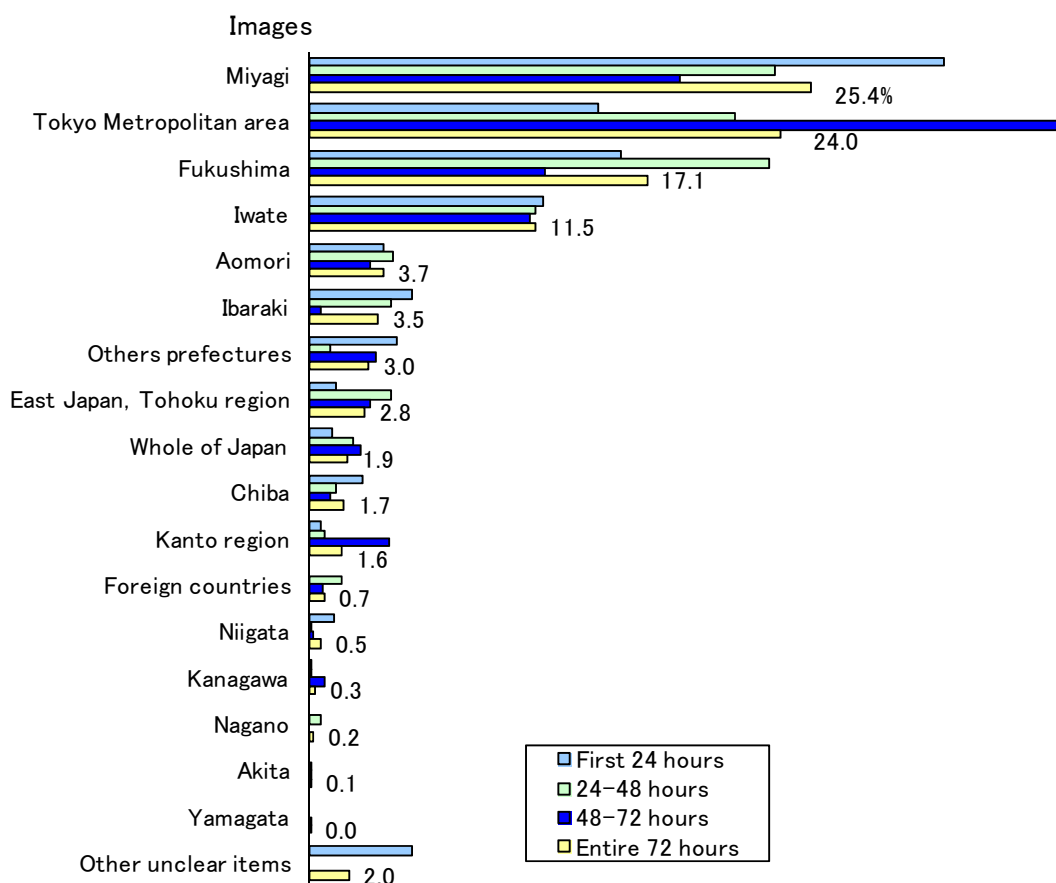




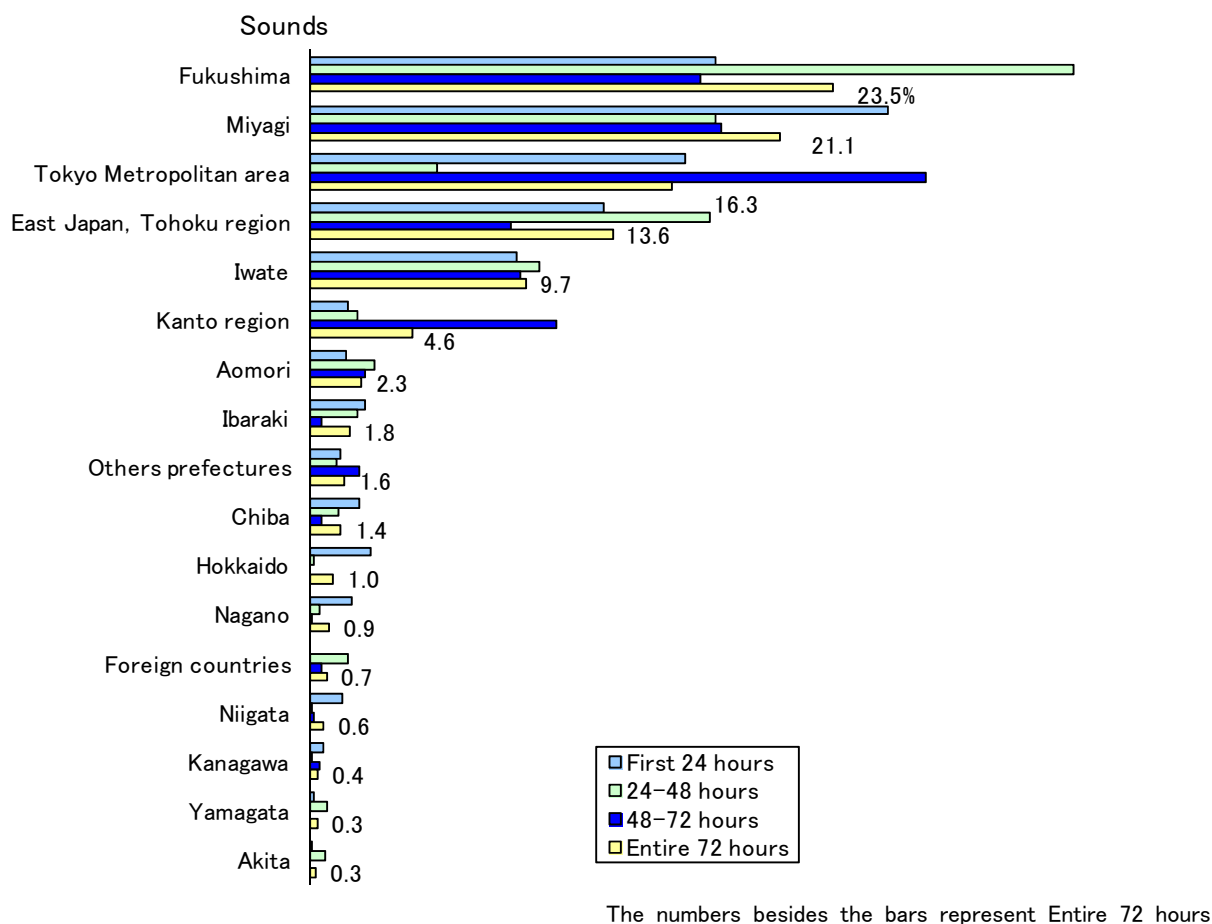
### 1-3 Changes in Areas Covered

In analyzing changes in areas covered by the three networks, we excluded data on news reports whose basic scenes are studios. This is because of our decision that if basic scenes are studios, we are to use the location codes of their broadcasting stations as the locations from which those news reports originated. As a result, if basic scenes are our studios in Minato or Shibuya wards in Tokyo or in the city of Sendai, it became impossible to tell whether particular reports originated from somewhere else and were relayed through those studios or whether those reports originated from the locations of the broadcasting stations where the studios are. **Figure 3** shows changes in areas covered by NHK General TV by every 24 hours.

**Figure 3. Changes in Areas Covered by News Reports**  
(NHK General TV: excluding those whose basic scenes are studios)



The numbers besides the bars represent Entire 72 hours



As for information delivered in the form of images, Miyagi prefecture was covered most during the entire 72 hours. However, its coverage decreased by the hour. Instead, information on Tokyo and the Metropolitan area increased. The images of Fukushima increased during the 24-48 hours, because of the nuclear accident. Those of Iwate prefecture remained relatively unchanged during the three time frames, that is, the first 24 hours, the 24-48 hours, and the 48-72 hours. In all those time frames, images of Iwate were fewer than those of Miyagi prefecture or of Fukushima prefecture.

As for information delivered in the form of sounds, Fukushima prefecture was most heavily covered during the entire 72 hours. This was followed by information on Miyagi prefecture, the Tokyo Metropolitan area, East Japan, the Tohoku region and Iwate prefecture by that order. We notice that increasingly more information in sounds becomes defined as coming from wider areas such as East Japan or the Tohoku region. This is taken to indicate that the networks are beginning to report on disaster situations from broader perspectives.

Here again, the volume of information in sounds on Fukushima prefecture jumps up during the 24-48 hours, due to the nuclear accident at Fukushima Daiichi Nuclear Power Station. However, during the 48-72 hours, the ratios of information in sounds originating from the Tokyo Metropolitan area go up. This is mainly because the government, Tokyo Electric Power Company, the Nuclear and Industrial Safety Agency and other organs held news conferences in Tokyo.

We also examined areas covered by news reports by narrower districts, that is, cities, towns and villages. We again excluded news reports whose basic scenes are studios. In this particular section, we used the total numbers of coverage given to such municipalities by the three broadcasters, instead of the numbers of coverage by any single one of them. This is to find, generally speaking, which municipalities were covered relatively more and which were not. **Table 2** shows cities, towns and villages covered by images or sounds by every 24 hours with the most covered on top.

**Table 2. Cities, Towns and Villages Covered by Images or Sounds**  
(Total numbers of coverage by the three broadcasters, Top 50 listed.)

First 24 hours (Images)				First 24 hours (Sounds)			
	city, town, village	coverage	ratio(%)		City, Town, Village	Coverage	Ratio(%)
1	Sendai, Miyagi	317	21.8	1	Okumamachi, Fukushima	246	16.9
2	Kesennuma, Miyagi	284	19.5	2	Sendai, Miyagi	221	15.2
3	Chiyoda, Tokyo	246	16.9	3	Kesennuma, Miyagi	206	14.2
4	<b>Ofunato, Iwate</b>	<b>230</b>	<b>15.8</b>	4	<b>Ofunato, Iwate</b>	<b>180</b>	<b>12.4</b>
5	Okumamachi, Fukushima	188	12.9	5	Natori, Miyagi	115	7.9
6	Natori, Miyagi	145	10.0	6	Shibuya, Tokyo	104	7.2
7	Minato, Tokyo	144	9.9	7	<b>Soma, Fukushima</b>	<b>92</b>	<b>6.3</b>
8	Hachinohe, Aomori	114	7.8	8	Minamisoma, Fukushima	84	5.8
9	<b>Soma, Fukushima</b>	<b>112</b>	<b>7.7</b>	9	Chiyoda, Tokyo	76	5.2
10	Miyako, Iwate	106	7.3	10	Hachinohe, Aomori	74	5.1
11	Shinjuku, Tokyo	99	6.8	11	Ichihara, Chiba	72	5.0
12	Minamisoma, Fukushima	98	6.7	12	Minato, Tokyo	68	4.7
13	Ichihara, Chiba	92	6.3	13	Miyako, Iwate	61	4.2
14	Rikuzentakata, Iwate	78	5.4	13	Ishinomaki, Miyagi	61	4.2
15	Shibuya, Tokyo	70	4.8	15	Shinjuku, Tokyo	60	4.1
16	Ishinomaki, Miyagi	69	4.7	16	Rikuzentakata, Iwate	52	3.6
17	<b>Iwaki, Fukushima</b>	<b>57</b>	<b>3.9</b>	17	<b>Iwaki, Fukushima</b>	<b>40</b>	<b>2.8</b>
18	Kamaishi, Iwate	43	3.0	18	Kamaishi, Iwate	38	2.6
19	Shirakawa, Fukushima	42	2.9	18	Shirakawa, Fukushima	38	2.6
20	Oaraimachi, Ibaraki	41	2.8	20	Sakaemura, Nagano	36	2.5
21	Fukushima, Fukushima	35	2.4	21	Oaraimachi, Ibaraki	28	1.9
22	Koriyama, Fukushima	32	2.2	22	Minamisanrikucho, Miyagi	27	1.9
22	Niigata, Niigata	32	2.2	23	Fukushima, Fukushima	22	1.5
24	Minamisanrikucho, Miyagi	31	2.1	24	Machida, Tokyo	19	1.3
25	Machida, Tokyo	28	1.9	25	Onagawacho, Miyagi	18	1.2
26	Onagawacho, Miyagi	23	1.6	25	Futabagun, Fukushima	18	1.2
27	Nagano, Nagano	23	1.6	25	<b>Shinchimachi, Fukushima</b>	<b>18</b>	<b>1.2</b>
28	Yamamotocho, Miyagi	21	1.4	28	Tokamachi, Niigata	17	1.2
28	<b>Wataricho, Miyagi</b>	<b>21</b>	<b>1.4</b>	29	Koriyama, Fukushima	15	1.0
28	Sakaemura, Nagano	21	1.4	29	Kasumigaura, Ibaraki	15	1.0
31	Ota, Tokyo	20	1.4	29	Ota, Tokyo	15	1.0
32	Kuji, Iwate	19	1.3	32	Sapporo, Hokkaido	13	0.9
32	<b>Shinchimachi, Fukushima</b>	<b>19</b>	<b>1.3</b>	32	<b>Wataricho, Miyagi</b>	<b>13</b>	<b>0.9</b>
34	Morioka, Iwate	18	1.2	32	Narahamachi, Fukushima	13	0.9
34	Shichigahamamachi, Miyagi	18	1.2	35	Hitachi, Ibaraki	12	0.8
34	Kasumigaura, Ibaraki	18	1.2	35	Koto, Tokyo	12	0.8
37	Mito, Ibaraki	17	1.2	37	Hakodate, Hokkaido	11	0.8
37	Chuo, Tokyo	17	1.2	38	Kushiro, Hokkaido	11	0.8
39	Futabagun, Fukushima	16	1.1	38	Aomori, Aomori	11	0.8
39	Shinagawa, Tokyo	16	1.1	38	Shichigahamamachi, Miyagi	11	0.8
41	Hakodate, Hokkaido	15	1.0	38	Futabamachi, Fukushima	11	0.8
42	Omitama, Ibaraki	14	1.0	38	Niigata, Niigata	11	0.8
42	Chuo, Chiba, Chiba	14	1.0	38	Tsunanmachi, Niigata	11	0.8
44	Yokohama, Kanagawa	14	1.0	44	<b>Tagajo, Miyagi</b>	<b>10</b>	<b>0.7</b>
45	Kushiro, Hokkaido	13	0.9	45	Choshi, Chiba	9	0.6
45	Hitachi, Ibaraki	13	0.9	46	Morioka, Iwate	8	0.6
45	Chiba, Chiba	13	0.9	46	Chiba, Chiba	8	0.6
48	Choshi, Chiba	12	0.8	46	Chuo, Tokyo	8	0.6
49	Aomori, Aomori	11	0.8	46	Yokohama, Kanagawa	8	0.6
50	Sapporo, Hokkaido	10	0.7	50	Kurihara, Miyagi	7	0.5
				50	Chuo, Chiba, Chiba	7	0.5

White letters against black : the names of municipalities where at least 1,000 are dead or missing

Shaded letters : at least 500 dead or missing

Letters in bold types : At least 100 dead or missing

Based on data announced by the Major Disaster Management Headquarters of the Fire and Disaster Management Agency on Oct. 11, 2011

24-48 hours (Images)			
	City, Town, Village	Coverage	Ratio(%)
1	Chiyoda, Tokyo	550	38.2
2	Okumamachi, Fukushima	498	34.6
3	Kesenuma, Miyagi	295	20.5
4	Minamisanrikucho, Miyagi	181	12.6
5	Sendai, Miyagi	155	10.8
6	Rikuzentakata, Iwate	122	8.5
7	Hachinohe, Aomori	118	8.2
8	Miyako, Iwate	111	7.7
8	<b>Ofunato, Iwate</b>	<b>111</b>	<b>7.7</b>
10	Natori, Miyagi	98	6.8
11	Ishinomaki, Miyagi	80	5.6
12	Kamaishi, Iwate	74	5.1
13	Higashimatushima, Miyagi	68	4.7
14	Otsuchicho, Iwate	66	4.6
15	Onagawacho, Miyagi	31	2.2
16	<b>Iwaki, Fukushima</b>	<b>29</b>	<b>2.0</b>
16	<b>Soma, Fukushima</b>	<b>29</b>	<b>2.0</b>
18	Morioka, Iwate	28	1.9
19	Fukushima, Fukushima	27	1.9
19	Shirakawa, Fukushima	27	1.9
19	Minamisoma, Fukushima	27	1.9
22	Hitachinaka, Ibaraki	20	1.4
23	Ota, Tokyo	18	1.3
24	<b>Shinchimachi, Fukushima</b>	<b>16</b>	<b>1.1</b>
24	Minato, Tokyo	16	1.1
24	Shibuya, Tokyo	16	1.1
27	Kushiro, Hokkaido	15	1.0
28	Shichigahamamachi, Miyagi	13	0.9
29	<b>Tagajo, Miyagi</b>	<b>12</b>	<b>0.8</b>
29	Futabamachi, Fukushima	12	0.8
31	Narashino, Chiba	11	0.8
32	Yamamotocho, Miyagi	10	0.7
32	Miharumachi, Fukushima	10	0.7
32	Mito, Ibaraki	10	0.7
32	Tokamachi, Niigata	10	0.7
36	Shinjuku, Tokyo	9	0.6
36	Tsunanmachi, Niigata	9	0.6
36	Sakaemura, Nagano	9	0.6
39	Hakodate, Hokkaido	8	0.6
39	Aomori, Aomori	8	0.6
39	Naka, Ibaraki	8	0.6
42	Sapporo, Hokkaido	6	0.4
43	Hanamaki, Iwate	5	0.3
44	Shiogama, Miyagi	4	0.3
44	<b>Iwanuma, Miyagi</b>	<b>4</b>	<b>0.3</b>
44	Sukagawa, Fukushima	4	0.3
44	Futabagun, Fukushima	4	0.3
48	Tomakomai, Hokkaido	3	0.2
48	Misawa, Aomori	3	0.2
48	Yamadamachi, Iwate	3	0.2
48	Hachioji, Tokyo	3	0.2
48	Nagano, Nagano	3	0.2

24-48 hours (Sounds)			
	City, Town, Village	Coverage	Ratio(%)
1	Okumamachi, Fukushima	834	57.9
2	Kesenuma, Miyagi	244	16.9
3	Minamisanrikucho, Miyagi	144	10.0
4	Sendai, Miyagi	135	9.4
5	Chiyoda, Tokyo	107	7.4
6	Rikuzentakata, Iwate	102	7.1
7	<b>Ofunato, Iwate</b>	<b>94</b>	<b>6.5</b>
8	Miyako, Iwate	91	6.3
9	Hachinohe, Aomori	85	5.9
10	Natori, Miyagi	84	5.8
11	Kamaishi, Iwate	66	4.6
12	Higashimatushima, Miyagi	58	4.0
13	Ishinomaki, Miyagi	56	3.9
14	Otsuchicho, Iwate	51	3.5
15	Onagawacho, Miyagi	31	2.2
16	<b>Soma, Fukushima</b>	<b>29</b>	<b>2.0</b>
17	Shirakawa, Fukushima	24	1.7
18	Futabamachi, Fukushima	20	1.4
20	Minato, Tokyo	20	1.4
20	<b>Iwaki, Fukushima</b>	<b>16</b>	<b>1.1</b>
20	Minamisoma, Fukushima	16	1.1
22	Fukushima, Fukushima	15	1.0
23	Kushiro, Hokkaido	14	1.0
23	Morioka, Iwate	14	1.0
25	Yamamotocho, Miyagi	13	0.9
25	Shichigahamamachi, Miyagi	13	0.9
25	<b>Shinchimachi, Fukushima</b>	<b>13</b>	<b>0.9</b>
28	Hakodate, Hokkaido	10	0.7
28	<b>Tagajo, Miyagi</b>	<b>10</b>	<b>0.7</b>
28	Shibuya, Tokyo	10	0.7
31	Tokamachi, Niigata	9	0.6
32	Hitachinaka, Ibaraki	8	0.6
32	Tsunanmachi, Niigata	8	0.6
34	Sakaemura, Nagano	7	0.5
35	Miharumachi, Fukushima	6	0.4
35	Futabagun, Fukushima	6	0.4
35	Narashino, Chiba	6	0.4
38	Mito, Ibaraki	5	0.3
39	Sapporo, Hokkaido	4	0.3
39	Misawa, Aomori	4	0.3
39	Shiroishi, Miyagi	4	0.3
39	<b>Iwanuma, Miyagi</b>	<b>4</b>	<b>0.3</b>
43	Tomakomai, Hokkaido	3	0.2
43	Hanamaki, Iwate	3	0.2
43	Yamadamachi, Iwate	3	0.2
43	Shiogama, Miyagi	3	0.2
43	Nihonmatsu, Fukushima	3	0.2
43	Onomachi, Fukushima	3	0.2
49	Otaru, Hokkaido	2	0.1
49	Aomori, Aomori	2	0.1
49	Hashikamicho, Aomori	2	0.1
49	Tono, Iwate	2	0.1
49	<b>Wataricho, Miyagi</b>	<b>2</b>	<b>0.1</b>
49	Koriyama, Fukushima	2	0.1
49	Sukagawa, Fukushima	2	0.1
49	Kawauchimura, Fukushima	2	0.1
49	Oaraimachi, Ibaraki	2	0.1
49	Koto, Tokyo	2	0.1
49	Ota, Tokyo	2	0.1
49	Yokohama, Kanagawa	2	0.1
49	Nagano, Nagano	2	0.1

48-72 hours(Images)			
	City, Town, Village	Coverage	Ratio(%)
1	Chiyoda, Tokyo	575	39.9
2	Okumamachi, Fukushima	172	11.9
3	Sendai, Miyagi	163	11.3
4	Rikuzentakata, Iwate	160	11.1
5	Kesenuma, Miyagi	135	9.4
6	Ishinomaki, Miyagi	98	6.8
7	Futabamachi, Fukushima	98	6.8
8	Minamisanrikucho, Miyagi	95	6.6
9	Kamaishi, Iwate	73	5.1
10	<b>Ofunato, Iwate</b>	<b>68</b>	<b>4.7</b>
11	Natori, Miyagi	65	4.5
12	Shirakawa, Fukushima	59	4.1
13	Miyako, Iwate	47	3.3
14	Hachinohe, Aomori	45	3.1
15	<b>Iwaki, Fukushima</b>	<b>42</b>	<b>2.9</b>
16	Shinjuku, Tokyo	33	2.3
17	Minato, Tokyo	30	2.1
18	Onagawacho, Miyagi	29	2.0
19	Otsuchicho, Iwate	28	1.9
20	Higashimatsushima, Miyagi	23	1.6
21	Shibuya, Tokyo	22	1.5
22	Minamisoma, Fukushima	20	1.4
23	Miharumachi, Fukushima	18	1.3
24	Yamamotocho, Miyagi	12	0.8
25	Soma, Fukushima	11	0.8
25	Ota, Tokyo	11	0.8
27	Koriyama, Fukushima	9	0.6
27	Futabagun, Fukushima	9	0.6
27	<b>Shinchimachi, Fukushima</b>	<b>9</b>	<b>0.6</b>
27	Chuo, Tokyo	9	0.6
27	Machida, Tokyo	9	0.6
32	Saitama, Saitama	8	0.6
32	Narashino, Chiba	8	0.6
32	Shinagawa, Tokyo	8	0.6
32	Yokohama, Kanagawa	8	0.6
36	Setagaya, Tokyo	7	0.5
37	Morioka, Iwate	6	0.4
37	Yamadamachi, Iwate	6	0.4
37	Shiroishi, Miyagi	6	0.4
37	Omiya, Saitama, Saitama	6	0.4
41	Bunkyo, Tokyo	5	0.3
42	Fukushima, Fukushima	4	0.3
42	Oaraimachi, Ibaraki	4	0.3
42	Urawa, Saitama, Saitama	4	0.3
42	Urayasu, Chiba	4	0.3
46	Ichinoseki, Iwate	3	0.2
46	<b>Tagajo, Miyagi</b>	<b>3</b>	<b>0.2</b>
46	Nihonmatsu, Fukushima	3	0.2
46	Kawamatamachi, Fukushima	3	0.2
46	Chiba, Chiba	3	0.2
46	Matsudo, Chiba	3	0.2
46	Nishi, Yokohama, Kanagawa	3	0.2

48-72 hours(Sounds)			
	City, Town, Village	Coverage	Ratio(%)
1	Okumamachi, Fukushima	287	19.9
2	Futabamachi, Fukushima	153	10.6
3	Rikuzentakata, Iwate	138	9.6
4	Sendai, Miyagi	106	7.4
5	Kesenuma, Miyagi	99	6.9
6	Ishinomaki, Miyagi	91	6.3
7	Minamisanrikucho, Miyagi	81	5.6
8	Natori, Miyagi	65	4.5
9	<b>Ofunato, Iwate</b>	<b>64</b>	<b>4.4</b>
9	Chiyoda, Tokyo	64	4.4
11	Kamaishi, Iwate	54	3.8
12	Onagawacho, Miyagi	52	3.6
13	Shirakawa, Fukushima	49	3.4
14	Miyako, Iwate	40	2.8
15	Hachinohe, Aomori	33	2.3
16	<b>Iwaki, Fukushima</b>	<b>30</b>	<b>2.1</b>
17	Higashimatsushima, Miyagi	24	1.7
18	Otsuchicho, Iwate	21	1.5
19	Shinjuku, Tokyo	19	1.3
20	Miharumachi, Fukushima	17	1.2
21	Minamisoma, Fukushima	16	1.1
22	Yamamotocho, Miyagi	12	0.8
22	<b>Soma, Fukushima</b>	<b>12</b>	<b>0.8</b>
24	Futabagun, Fukushima	11	0.8
25	<b>Shinchimachi, Fukushima</b>	<b>10</b>	<b>0.7</b>
26	Minato, Tokyo	9	0.6
27	Saitama, Saitama	8	0.6
27	Machida, Tokyo	8	0.6
27	Yokohama, Kanagawa	8	0.6
30	Narashino, Chiba	7	0.5
31	Shiroishi, Miyagi	6	0.4
31	<b>Tagajo, Miyagi</b>	<b>6</b>	<b>0.4</b>
31	Omiya, Saitama, Saitama	6	0.4
31	Setagaya, Tokyo	6	0.4
35	Yamadamachi, Iwate	5	0.3
35	Chuo, Tokyo	5	0.3
37	Morioka, Iwate	4	0.3
37	Koriyama, Fukushima	4	0.3
37	Oaraimachi, Ibaraki	4	0.3
37	Urawa, Saitama, Saitama	4	0.3
41	Tono, Iwate	3	0.2
41	Fukushima, Fukushima	3	0.2
41	Nihonmatsu, Fukushima	3	0.2
41	Mito, Ibaraki	3	0.2
41	Urayasu, Chiba	3	0.2
41	Nerima, Tokyo	3	0.2
47	Iwaizumicho, Iwate	2	0.1
47	Nodamura, Iwate	2	0.1
47	Aizuwakamatsu, Fukushima	2	0.1
47	Sukagawa, Fukushima	2	0.1
47	Kawamatamachi, Fukushima	2	0.1
47	Choshi, Chiba	2	0.1
47	Matsudo, Chiba	2	0.1
47	Ota, Tokyo	2	0.1
47	Higashikurume, Tokyo	2	0.1
47	Nishi, Yokohama, Kanagawa	2	0.1
47	Kawasaki, Kanagawa	2	0.1

Entire 72 hours (Images)				Entire 72 hours (Sounds)			
	City, Town, Village	Coverage	Ratio(%)		City, Town, Village	Coverage	Ratio(%)
1	Chiyoda, Tokyo	1371	31.6	1	Okumamachi, Fukushima	1367	31.5
2	Okumamachi, Fukushima	858	19.8	2	Kesenuma, Miyagi	549	12.7
3	Kesenuma, Miyagi	714	16.5	3	Sendai, Miyagi	462	10.7
4	Sendai, Miyagi	635	14.7	4	<b>Ofunato, Iwate</b>	<b>338</b>	<b>7.8</b>
5	<b>Ofunato, Iwate</b>	<b>409</b>	<b>9.4</b>	5	Rikuzentakata, Iwate	292	6.7
6	Rikuzentakata, Iwate	360	8.3	6	Natori, Miyagi	264	6.1
7	Natori, Miyagi	308	7.1	7	Minamisanrikucho, Miyagi	252	5.8
8	Minamisanrikucho, Miyagi	307	7.1	8	Chiyoda, Tokyo	247	5.7
9	Hachinohe, Aomori	277	6.4	9	Ishinomaki, Miyagi	208	4.8
10	Miyako, Iwate	264	6.1	10	Hachinohe, Aomori	192	4.4
11	Ishinomaki, Miyagi	247	5.7	10	Miyako, Iwate	192	4.4
12	Kamaishi, Iwate	190	4.4	12	Futabamachi, Fukushima	184	4.2
12	Minato, Tokyo	190	4.4	13	Kamaishi, Iwate	158	3.6
14	<b>Soma, Fukushima</b>	<b>152</b>	<b>3.5</b>	14	<b>Soma, Fukushima</b>	<b>133</b>	<b>3.1</b>
15	Minamisoma, Fukushima	145	3.3	15	Minamisoma, Fukushima	116	2.7
16	Shinjuku, Tokyo	141	3.3	16	Shibuya, Tokyo	114	2.6
17	<b>Iwaki, Fukushima</b>	<b>128</b>	<b>3.0</b>	17	Shirakawa, Fukushima	111	2.6
17	Shirakawa, Fukushima	128	3.0	18	Onagawacho, Miyagi	101	2.3
19	Futabamachi, Fukushima	114	2.6	19	Minato, Tokyo	97	2.2
20	Shibuya, Tokyo	108	2.5	20	Higashimatushima, Miyagi	88	2.0
21	Otsuchicho, Iwate	101	2.3	21	<b>Iwaki, Fukushima</b>	<b>86</b>	<b>2.0</b>
22	Higashimatushima, Miyagi	93	2.1	22	Shinjuku, Tokyo	79	1.8
22	Ichihara, Chiba	93	2.1	23	Otsuchicho, Iwate	78	1.8
24	Onagawacho, Miyagi	83	1.9	24	Ichihara, Chiba	73	1.7
25	Fukushima, Fukushima	66	1.5	25	Sakaemura, Nagano	43	1.0
26	Morioka, Iwate	52	1.2	26	<b>Shinchimachi, Fukushima</b>	<b>41</b>	<b>0.9</b>
27	Ota, Tokyo	49	1.1	27	Fukushima, Fukushima	40	0.9
28	Oaraimachi, Ibaraki	47	1.1	28	Futabagun, Fukushima	35	0.8
29	<b>Shinchimachi, Fukushima</b>	<b>44</b>	<b>1.0</b>	29	Oaraimachi, Ibaraki	34	0.8
30	Koriyama, Fukushima	43	1.0	30	Yamamotocho, Miyagi	29	0.7
31	Machida, Tokyo	37	0.9	31	Machida, Tokyo	27	0.6
32	Niigata, Niigata	32	0.7	32	Morioka, Iwate	26	0.6
33	Shichigahamamachi, Miyagi	31	0.7	32	<b>Tagajo, Miyagi</b>	<b>26</b>	<b>0.6</b>
34	Sakaemura, Nagano	30	0.7	32	Tokamachi, Niigata	26	0.6
35	Yamamotocho, Miyagi	29	0.7	35	Kushiro, Hokkaido	25	0.6
35	Futabagun, Fukushima	29	0.7	36	Shichigahamamachi, Miyagi	24	0.6
35	Mito, Ibaraki	29	0.7	37	Miharumachi, Fukushima	23	0.5
38	Kushiro, Hokkaido	28	0.6	38	Hakodate, Hokkaido	21	0.5
38	Miharumachi, Fukushima	28	0.6	38	Koriyama, Fukushima	21	0.5
40	Narashino, Chiba	26	0.6	40	Tsunanmachi, Niigata	20	0.5
40	Chuo, Tokyo	26	0.6	41	Ota, Tokyo	19	0.4
40	Shinagawa, Tokyo	26	0.6	42	Narashino, Chiba	18	0.4
40	Nagano, Nagano	26	0.6	42	Yokohama, Kanagawa	18	0.4
44	Yokohama, Kanagawa	24	0.6	44	Sapporo, Hokkaido	17	0.4
45	Hakodate, Hokkaido	23	0.5	45	<b>Wataricho, Miyagi</b>	<b>16</b>	<b>0.4</b>
46	Aomori, Aomori	21	0.5	46	Kasumigaura, Ibaraki	15	0.3
46	Kuji, Iwate	21	0.5	47	Aomori, Aomori	14	0.3
46	<b>Wataricho, Miyagi</b>	<b>21</b>	<b>0.5</b>	47	Mito, Ibaraki	14	0.3
49	<b>Tagajo, Miyagi</b>	<b>20</b>	<b>0.5</b>	47	Koto, Tokyo	14	0.3
49	Hitachinaka, Ibaraki	20	0.5	50	Narahamachi, Fukushima	13	0.3
				50	Chuo, Tokyo	13	0.3

As for information delivered in images during the first 24 hours, the city of Sendai in Miyagi prefecture was most heavily reported. It is followed by the city of Kesenuma in the same prefecture. The third is Chiyoda ward in Tokyo, the fourth, the city of Ofunato in Iwate prefecture, and the fifth, the town of Okuma in Fukushima prefecture, home of Fukushima Daiichi Nuclear Power Station. As for information delivered in the form of sounds, the town of Okuma comes on top. Chiyoda ward in Tokyo comes lower. The cities, towns and villages well covered in sounds are basically the same as those covered in images.

During the 24-48 hours, Chiyoda ward in Tokyo was covered most in images. This was because the government and other organizations held news conferences there. Images covering this location account for nearly 40 percent in this time frame. This is followed by those covering the town of Okuma, the site of the nuclear power plant. Information delivered in images on these two places accounts for more than 70 percent.

As for areas hit by tsunami, the city of Kesenuma, the town of Minamisanriku, the city of Sendai, all in Miyagi prefecture, and the city of Rikuzentakata in Iwate prefecture were widely covered in images in that order. In sounds, too, information on the town of Okuma accounted for nearly 60 percent, because of the nuclear power plant. This was followed, as in images, by the city of Kesenuma, and the town of Minamisanriku, as they were hit heavily by tsunami. A similar trend continues during the 48-72 hours especially among those prominently covered.

The number of cities, towns and villages covered was the largest during the first 24 hours. In images, 107 areas were covered, and in sounds, 118 were covered. The number of the municipalities covered gradually decreased. During the 24-48 hours, 84 were covered in images and 83 in sounds, and during the 48-72 hours, 88 in images and 78 in sounds. In the entire 72 hours, 149 municipalities were covered in images and 151 in sounds.

Now, are those heavily reported areas heavily hit areas, too? **Table 3** shows, on its left side, the names of cities, towns and villages with the one with the largest number of the dead and missing on top. This is based on data announced by the Fire and Disaster Management Agency on October 11, 2011. On its right side are numerical figures that show in what orders those municipalities were covered by news reports by time frame.



We can see that Kesenuma and Sendai in Miyagi and Ofunato in Iwate were always within the tenth from the top, indicating that they were well covered by news reports. The town of Otsuchi in Iwate prefecture and the city of Higashimatsushima in Miyagi prefecture were barely reported during the first 24 hours. However, as the severe damage being recognized with the passage of time, they began to be relatively well reported on. The town of Yamamoto and the city of Tagajo, both in Miyagi Prefecture, were also severely hit. Nevertheless, they were not covered much during the 72 hours. The town of Yamada in Iwate prefecture, the town of Namie in Fukushima prefecture and the city of Iwanuma in Miyagi prefecture were hardly covered during the entire 72 hours, or only a little, if at all.

**Table 3. Cities, Towns and Villages with Large Numbers of the Dead and Missing and Orders in which they were reported on**

Names of Cities, Towns and Villages	the Dead	the Missing	Total	First 24 hours		24-48 hours		24-48 hours		24-48 hours	
				Images	Sounds	Images	Sounds	Images	Sounds	Images	Sounds
Ishinomaki, Miyagi	3175	717	3892	16 <sup>th</sup>	13 <sup>th</sup>	11 <sup>th</sup>	13 <sup>th</sup>	6 <sup>th</sup>	6 <sup>th</sup>	11 <sup>th</sup>	9 <sup>th</sup>
Rikuzentakata, Iwate	1554	385	1939	14	16	6	6	4	3	6	5
Kesenuma, Miyagi	1027	377	1404	2	3	3	2	5	5	3	2
Otsuchicho, Iwate	802	551	1353	55	52	14	14	19	18	21	23
Higashimatsushima, Miyagi	1044	94	1138	77	52	13	12	20	17	22	20
Kamaishi, Iwate	884	194	1078	18	18	12	11	9	11	12	13
Natori, Miyagi	911	70	981	6	5	10	10	11	8	7	6
Onagawacho, Miyagi	571	409	980	26	25	15	15	18	12	24	18
Minamisanrikucho, Miyagi	561	341	902	24	22	4	3	8	7	8	7
Yamadamachi, Iwate	604	211	815	—	91	48	43	37	35	65	58
Sendai, Miyagi	704	26	730	1	2	5	4	3	4	4	3
Yamamotocho, Miyagi	671	19	690	55	64	32	25	24	22	35	30
Minamisoma, Fukushima	640	23	663	12	8	19	20	22	21	15	15
Miyako, Iwate	420	121	541	10	13	8	8	13	14	10	10
Soma, Fukushima	456	3	459	9	7	16	16	25	22	14	14
Ofunato, Iwate	339	107	446	4	4	8	7	10	9	5	4
Iwaki, Fukushima	310	38	348	17	17	16	20	15	16	17	21
Wataricho, Miyagi	257	13	270	28	32	—	49	—	58	48	45
Tagajo, Miyagi	188	1	189	67	44	29	28	46	31	49	32
Namiemachi, Fukushima	146	38	184	—	78	—	—	66	—	118	98
Iwanuma, Miyagi	182	1	183	55	52	44	39	—	—	62	55
Shinchimachi, Fukushima	109	1	110	32	25	24	25	27	25	29	26

Letters in bold types : Within top 10

Shaded letters : 30th to 49th

White letters against black : 50th or lower

Based on data announced by the Major Disaster Management Headquarters of the Fire and Disaster Management Agency on Oct. 11, 2011

## 2. Information on Lifelines and on Sufferers

### 2-1 Information on Lifelines

#### (1) Limited Lifeline Information on TV

**Table 4** shows how much the three broadcasters reported on information on lifelines during the first 72 hours. Here, the lifeline information refers to “areas under power blackouts and information on blackouts” (except on scheduled blackouts), “transport information,” “information on water and gas supplies,” “information on telephone and other communications services,” and “information on hospitals and medical services.”

**Table 4. Ratios of Kinds of Lifeline Information Reported**

	NHK General TV		Nippon Television		Fuji Television	
	Images	Sounds	Images	Sounds	Images	Sounds
Areas under power blackouts and information on blackouts	0.9%	1.8%	0.5%	1.8%	0.1%	0.9%
Transport information	5.4	7.6	2.3	4.0	2.2	3.8
Information on water and gas supplies	0.3	1.1	0.2	0.7	0.0	0.5
Information on telephone and other communications services	0.4	1.0	0.1	0.4	0.1	0.3
Information on hospitals and medical services	0.5	0.8	0.3	0.2	0.1	0.2

100%=Entire 72 hours

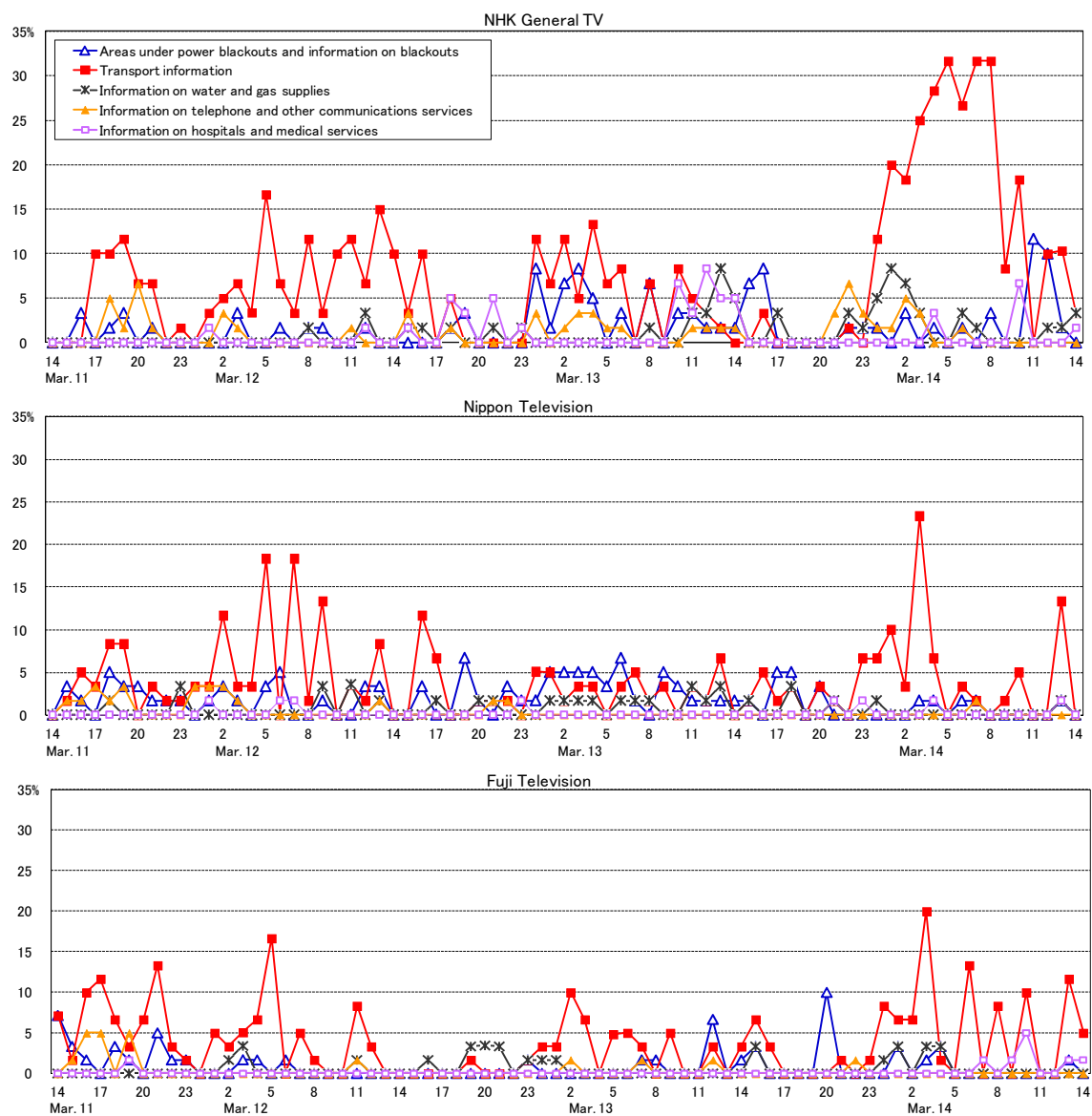
When we look at the ratios of airtime given to lifeline information during the entire 72 hours, they are very small. Among the three broadcasters, NHK General TV aired relatively more information on various kinds of lifelines than the other two.

Looking into the contents of lifeline information, we can see that transport information was covered most. NHK General TV gave 7.6 % of its airtime in sounds to this information, Nippon Television and Fuji Television, about 4 %. Next, the three networks covered information on power blackouts. They also reported on water and gas supplies, telephone and other communications services, and hospitals and medical services. However, the ratios of their airtime for these areas are all limited.

## (2) Changes in Transport Information by Time Frame

Figure 4 shows, in line graphs, changes in the volumes of lifeline information delivered in the form of sounds by time frame.

Figure 4. Lifeline Information (reported in the form of sounds)



The three networks tended to broadcast lifeline information more from early morning to noon, especially “transport information.”

When we examine highs in the line graphs for transport information, we can see major changes in three stages.

The first stage is from the evening to the night of March 11, the day when the earthquake occurred. The three networks reported on how the disaster was affecting transport systems in the Tokyo Metropolitan area. The information centered on railway services and road traffic, as more and more commuters became stranded on their way home. However, the ratios of information on this are not high, around 10 percent. Shortly before 17:00, NHK suspended its transport information and reported on how tsunami was striking the city of Hachinohe in Aomori prefecture. Likewise, the three networks were giving priority to information on casualties and damage in the Tohoku region.

The second stage is from March 12 to 13. The three networks reported on summaries of which railway services were canceled or disrupted. Their reports on the recovery of railway services and road traffic increased, as time went by. On the morning of March 12, for example, NHK General TV reported that the Tohoku, Yamagata and Akita Shinkansen services were suspended for the day. Including this, it reported that transport services in the Tohoku region were unlikely to be restored any time soon. At the same time, NHK reported that the Tokaido Shinkansen, lines linking Tokyo and Osaka would operate from the first run at six o'clock on March 12. It continued to report on new developments on transport services, such as when train runs on the JR-Yamanote Lines in Tokyo were resumed or traffic on the Tomei Expressway between Tokyo and Nagoya was reopened.

The third stage is on the morning of March 14. The three networks reported markedly more on transport information. This is because Tokyo Electric Power Company, the operator of the nuclear power plant inflicted with the accident, was scheduled to carry out power blackouts. The planned blackouts were postponed until 17:00 on March 14. However, as railway services were suspended one after another, commuters were affected to a great extent. March 14 was the first Monday after the earthquake. The three networks used much time to report on confusion that hit commuters hard.

### **(3) Limits to Diversity of Lifeline Information**

As to information on lifelines except transport services, NHK set itself into a practice of periodically reporting on it in an organized way, following news reports related to the disaster. Between 3:00 a.m. to 3:59 a.m. on March 13, for example, NHK's announcer first read out a summary of the latest information on the earthquake and aftershocks. Then, he reported on the following: "information on power blackouts in Tohoku and Kanto," "information on railway services in Tohoku and Kanto (both on Shinkansen and conventional lines)," "JR (former national railways) services and private conventional railway services in the Metropolitan area," "airport information," "telephones and other communications services," "transports of emergency relief goods," and "information on housing support." From 13:00 to 13:59 on March 13, NHK also reported on "information on water supplies in disaster-stricken areas," "hospitals accepting people with slight injuries and patients undergoing dialysis" and "banks where people can withdraw money."

All this indicates the networks were trying hard to give people detailed lifeline information on a variety of areas. However, this was a broad-scale, complex disaster that hit many people in wide areas in many different ways. It would be safe to say that this disaster is beyond the scope of general broadcasting that is possible for nationwide networks based in Tokyo. It is expected that to offer information fit to diversified needs of people, L-shaped space on TV screen, radio and other forms of media have their own specific roles to play. The internet is expected to be important part of this picture, enabling individuals to search the kinds of information they need.

## 2-2 Information on Sufferers

### (1) Different Responses to “Rescue Operations”

Table 5 shows the result of classifying information on sufferers into four codes: “evacuation centers and sufferers there,” “requests and appeals of sufferers,” “information on relief activities,” and “rescue operations and information.”

**Table 5. Ratios of Different Codes of Information Reported on Sufferers**

	NHK General TV		Nippon Television		Fuji Television	
	Images	Sounds	Images	Sounds	Images	Sounds
Evacuation centers and sufferers there	7.2%	5.1%	8.1%	6.7%	6.7%	7.1%
Requests and appeals of sufferers	0.4	1.0	0.1	0.7	0.3	0.3
Information on relief activities	0.4	1.4	0.6	1.9	0.5	2.5
Rescue operations and information	1.3	1.7	3.4	3.6	7.0	7.5

100%=Entire 72 hours

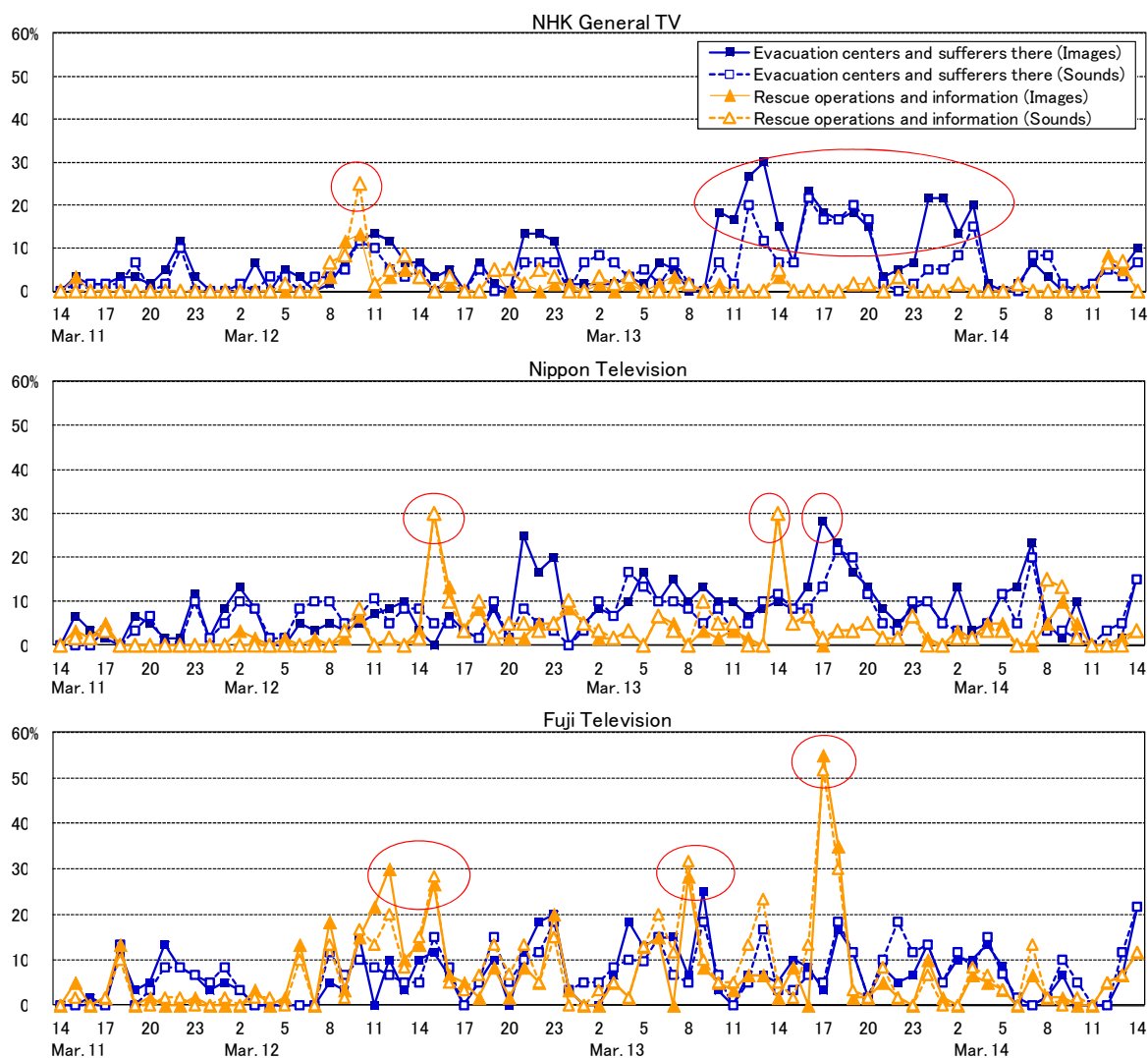
Looking at the entire 72 hours, all the three networks reported on “evacuation centers and sufferers there” most. On the other hand, their air time allocated to requests and appeals of sufferers was less than one percent. Reports on information on “relief activities” were not much, either. In sounds, Fuji Television reported most on this. However, its airtime for this is just 2.5 %, and NHK’s airtime for this, 1.4 %

The three networks differ from one another on their ways to report on “rescue operations and information.” NHK General TV allotted less than 2 percent to this both in images and sounds. Fuji Television gave it more than 7 percent of airtime both in images and sounds. It reported on this as much as it did on “evacuation centers and sufferers there.”

## (2) The Networks Divided over “Rescue Operations”

Figure 5 shows changes in airtime the three networks allotted to different codes of information along the time.

Figure 5. How the Three Networks Reported on Sufferers and Rescue operations



We examined what kinds of information the three networks delivered during the time frames when they are marked high on the line graphs with large circles. This is to determine the characteristics of news reports by each of the three networks.

〈NHK〉

At around 10:00 a.m. on March 12, NHK's reports on "rescue operations" sharply increased. This is because it reported live on how people stranded on the roof of a building were rescued by helicopter in Ofunato in Iwate prefecture.

After this time frame, NHK shifted its focus from "rescue operations" to "evacuation centers and sufferers there." This is especially so on March 13. During the daytime on this day, reports on this category continued to be many. Reporters repeatedly broadcast, from evacuation centers in the town of Minamisanriku in Miyagi prefecture and the city of Hachinohe in Aomori prefecture, on how sufferers were living at evacuation centers and what kinds of supplies they needed most. At the back of this was the fact that NHK was able to set up a system of broadcasting live from disaster-stricken areas by dispatching relay vehicles.

〈Nippon Television〉

Nippon Television increased its coverage of "rescue operations" on the afternoon of March 12. That is because it reported live on how people left on the roof of a building, this time in the city of Kesenuma in Miyagi prefecture, were rescued by helicopter. Also on the evening of March 13, it reported live and by video tape how rescuers were working to save people from the roof of a building in Kesenuma, while black smoke was rising from the building.

In addition to "rescue operations," Nippon Television increased its reports on sufferers on the night of March 12. That is because the network broadcast interviews with survivors for a relatively long time, asking them how they were rescued. Its coverage on evacuation centers increased on the evening of March 13, as it aired a video-taped report in which a reporter accompanied some evacuees when the evacuees went shopping, to find out what supplies were needed most.

〈Fuji Television〉

Unlike the other two networks, Fuji Television broadcast much more on rescue operations during the entire 72 hours. Most of its reports on this category are live coverage of



rescue operations conducted by helicopter.

On the morning of March 12, Fuji Television broadcast a set of live relays of rescue operations by helicopter in the city of Minamisoma in Fukushima prefecture, the city of Kesenuma in Miyagi prefecture, the district of Arahama in the city of Sendai, the city of Ofunato in Iwate prefecture and other places. The network broadcast comments by reporters riding on helicopters. While watching the live images, news casters and commentators in studio described how the rescue operations were going, and explained how difficult it is to rescue people while helicopters are hovering.

All through the morning of March 13, Fuji Television reported by video how a Self-Defense Forces unit was carrying out rescue operations in the city of Rikuzentakata, which was completely devastated by the earthquake and tsunami. It also reported live on a rescue operation in Kesenuma.

And on the evening of March 13, it devoted more than half the airtime during that time to “rescue operations” both in the forms of images and sounds. The network responded to the information that two of the four people, buried alive by a landslide in the city of Shirakawa in Fukushima prefecture, have been found. The network continued to report on the rescue operation for these two people live.

Behind this is believed to be a consideration that reporting on rescue operations can bring higher ratings. However, it should be pointed out that there is a fear. Showing people being rescued one after another at different places may give people unfounded optimism and expectations, and may give them a wrong sense of safety. We may need to take a closer look at how news reports on rescue operations could affect sufferers.

### (3) Relatively Scanty Reports on What Sufferers have to Say

**Table 6** shows who are speaking on TV screens.

**Table 6. Speakers on Screen**

	NHK General TV	Nippon Television	Fuji Television
Announcers, News casters	63.4%	58.8%	49.2%
Reporters, Commentators	16.9	16.8	22.2
Experts, Scholars	4.4	8.5	13.3
Politicians, Officials of ministries and agencies, Their news conferences	9.9	8.5	8.4
Governors, mayors, Officials of local governments	0.9	0.3	0.4
Sufferers, People in disaster areas	2.9	4.4	4.8

100%=Entire 72 hours

As to “Sufferers and people in disaster areas,” NHK gave the smallest ratio of airtime to this code, 2.9 %. This was followed by Nippon Television with 4.4 % and Fuji Television with 4.8 %.

A general impression is that the three networks gave not much time to the voices of sufferers. Even Fuji Television, which gave the highest ratio of airtime to this category, allotted less than five percent.

This is not to say that the three networks did not report on the plight of sufferers. In some cases, they reported on the remarks of the heads of local governments appealing about the hardship of sufferers. In other cases, their reporters or commentators reported on the voices of sufferers as part of their comments. However, it should be noted that all these may not be a match to what sufferers themselves tell about their stories.

Examining people who spoke on camera, we can see different strategies of the three networks concerning so-called stage effects. At NHK, its own announcers, reporters, commentators or other staff spoke on camera in more than 80 % of air time given to this category. Only in 4.4 %, outside experts did so. At Nippon Television, the ratio of its own staff speaking on camera is relatively high at 75.6 %. However, outside experts also speak on

camera in a relatively high ratio of 8.5 %. At Fuji Television, the ratio of its own staff speaking on camera is the lowest among the three at 71.3 %, while that of outside experts is 13.3 %. That is nearly three times as high as the ratio at NHK.

All these indicate that NHK has a basic pattern of organizing information in the form of written scripts and have the scripts conveyed by announcers, reporters or commentators. Fuji Television tends to invite more than one expert to its studio and present news, while letting the guests speak relatively freely.

### **3. Summaries of Casualties, the Missing and Damage, Looking-backs**

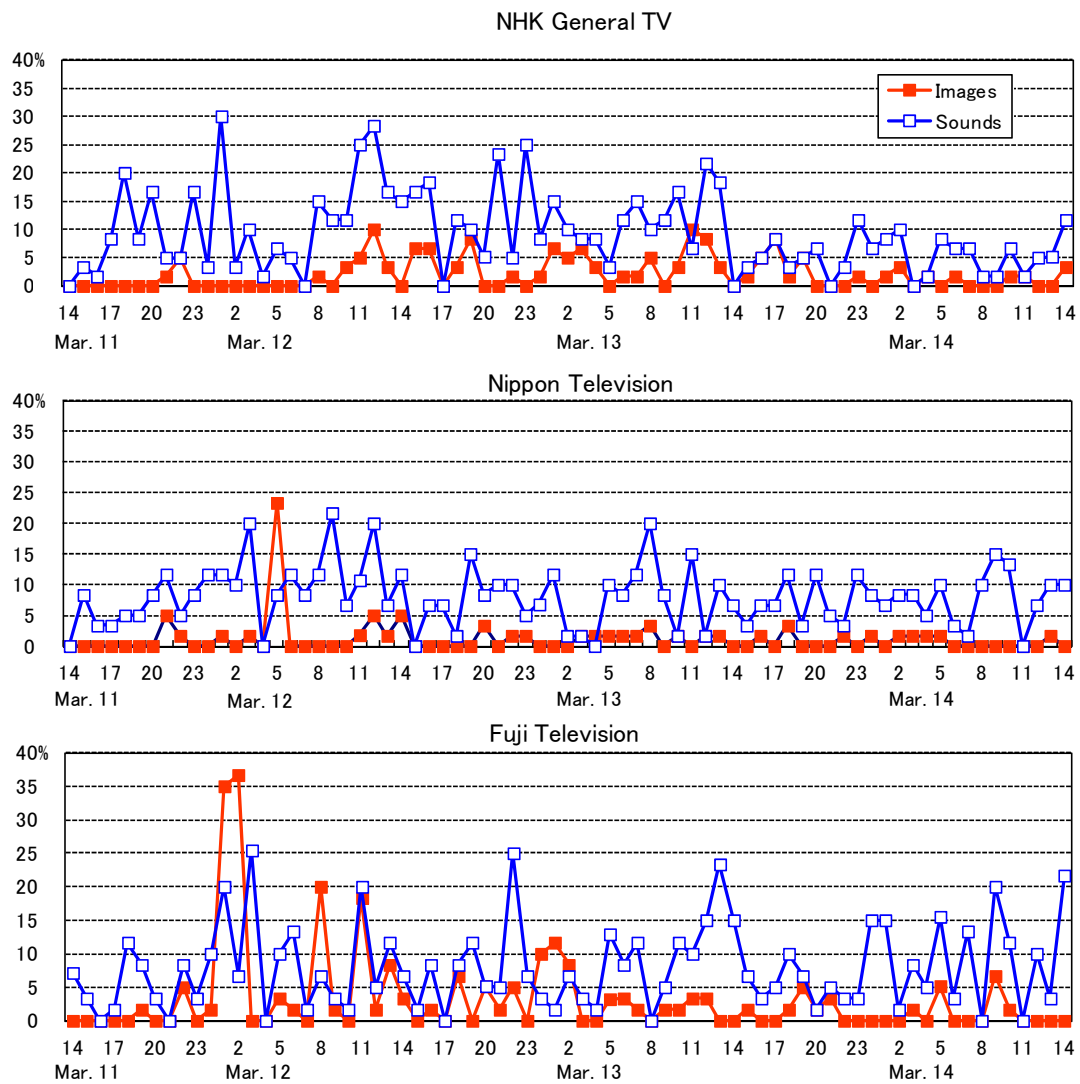
How were casualties, the missing and damage being grasped during the first 72 hours? **Figure 6** shows the changes in the ratios of airtime given to the category of “summaries of casualties, the missing and damage, looking-backs” delivered in the form of images and sounds.

The code of “summaries of casualties, the missing and damage” is defined as the numbers of people killed, injured or missing and of houses destroyed or damaged as a result of this disaster. “Looking-backs” is defined as summing-ups of changing situations after the earthquake <sup>2)</sup> (Refer to the manual at the end of this paper).

“Summaries of casualties, the missing and damage” was more often reported in the form of sounds, while “looking-backs” more often in the form of images.

Though the numbers of casualties and others are also reported in subtitles at the bottom of the screen or in the L-shaped section on TV screen, this analysis does not cover information given in such forms.

**Figure 6. Airtime given to “Summaries of Casualties, the Missing and Damage, Looking-backs”**



### 3-1 Grasping Casualties, the Missing and Damage Situations

This disaster has left nearly 20,000 people dead or missing.<sup>3)</sup> However, the entire picture of the disaster and its scale were hard to grasp at first. **Table 7** shows part of the summaries of changes in casualties, the missing and damage reported by the three networks in different time frames. Even though the networks reported from time to time on police announcements of the numbers of the dead and the missing, those were the numbers confirmed by the police. The anticipated scale of the disaster was far greater. In addition to confirmed deaths, the discoveries of human bodies were also reported. We can say that when

the three networks reported on the numbers of people confirmed dead, they were trying hard to inform people of a sheer scale of this disaster by saying that a large number of bodies were also found and that the safety of a large number of people was yet to be confirmed.

**Table 7. Changes in Reported Information (Part of it) on Casualties, the Missing and Damage**

	NHK General TV	Nippon Television	Fuji Television
3:00–5:59, on Mar. 12	188 people confirmed dead (NHK summary). More than 700 people missing, a total of more than 1,000 people dead or missing	As of 2:00 a.m., 151 people are dead as a result of this earthquake (National Police Agency)	168 dead nationwide, 246 missing (FNN summary). Also, 200 to 300 bodies found in Arahama in Wakabayashi ward, Sendai
8:00–11:59, on Mar. 12	At least 227 confirmed dead (NHK summary). 200 to 300 bodies found in Wakabayashi ward in Sendai. More than 650 people missing in Iwate, Fukushima, Miyagi and Aomori	As of 8:00 a.m., 217 people dead as a result of the earthquake (National Police Agency). 200 to 300 bodies confirmed in Wakabayashi ward, Sendai, 681 people missing nationwide	223 dead and 628 missing nationwide (FNN summary). In addition, 200 to 300 bodies found in Wakabayashi ward, Sendai
19:00–21:59, on March. 12	So far, 649 people confirmed dead, more than 1,000 people feared dead as a result of this earthquake	As of 6:30 p.m., 606 dead nationwide (National Police Agency and others). 654 missing nationwide	In the town of Minamisanriku in Miyagi prefecture, the safety of 10,000 residents unknown
5:00–9:59, on Mar. 13		A total of more than 1,500 dead or missing so far	691 dead and 642 missing (FNN summary). Also, more than 200 unidentified bodies found, more than 1,530 people dead or missing
13:00–13:59, on Mar. 13	No contact can be taken with more than half of the population of the town of MinamiSanriku in Miyagi prefecture, or about 10,000 people. Including this, the safety of more than 10,000 people unknown.		
18:00–18:59, on Mar. 13			972 dead in 13 prefectures, 1,697 missing (FNN summary). Also, more than 400 unidentified bodies. In all, more than 3,000 people dead or missing
23:00–23:59, on Mar. 13	More than 1,300 people confirmed dead so far. Miyagi prefectural police estimate that more than 10,000 people may have died in the prefecture as a result of the disaster.	More than 3,200 dead or missing, the safety of more than 20,000 people unknown (National Police Agency and others). The death toll in Miyagi prefecture certain to be more than 10,000	
1:00–1:59, on Mar. 14			1,352 dead and 1,920 missing in 13 prefectures (FNN summary). Also, more than 400 unidentified bodies found, more than 3,600 people dead or missing
5:00–8:59, on Mar. 14		1,597 dead and 1,912 missing (summary by National Police Agency)	1,597 people dead and 1,920 missing in 13 prefectures (FNN summary). more than 3,900 people dead or missing
12:00–13:59, on Mar. 14	More than 1,000 bodies washed up on the shores of Oshika Peninsula in Miyagi prefecture. 1,000 bodies found in the town of Minamisanriku, 401 people confirmed dead in Fukushima prefecture.	More than 10,000 people certain to have died in Miyagi prefecture (the head of Miyagi prefectural police)	

### 3-2 Images in Looking-Backs

Within the first 72 hours, the three networks already set up corners in which they broadcast summaries of events after the earthquake by editing images.

We examined what the three networks were doing during the time frames in which they gave higher ratios of airtime to broadcast programs coded as “summaries of casualties, the missing and damage, looking-backs.” We found that NHK General TV broadcast relatively little as specifically edited as summaries. For about five minutes from 19:00 on March 12, it broadcast a summary, in the form of images, of how tsunami hit a port in the city of Kamaishi in Iwate prefecture and of people who evacuated to higher places. However, this is not a general summary of various places hit by tsunami or a summary of casualties, the missing and damage as a whole.

Between 5:00 and 5:59 on March 12, Nippon Television broadcast a summary of what happened on the previous day in an edited form for about 13 minutes. The summary showed the earthquake shaking houses violently, furniture falling, people squatting on roads, tsunami surging and advancing on land, roads collapsed, debris piled up, fires razing in Chiba and Tokyo, and commuters stranded. The network broadcast this with reporters’ videotaped comments from disaster-stricken areas.

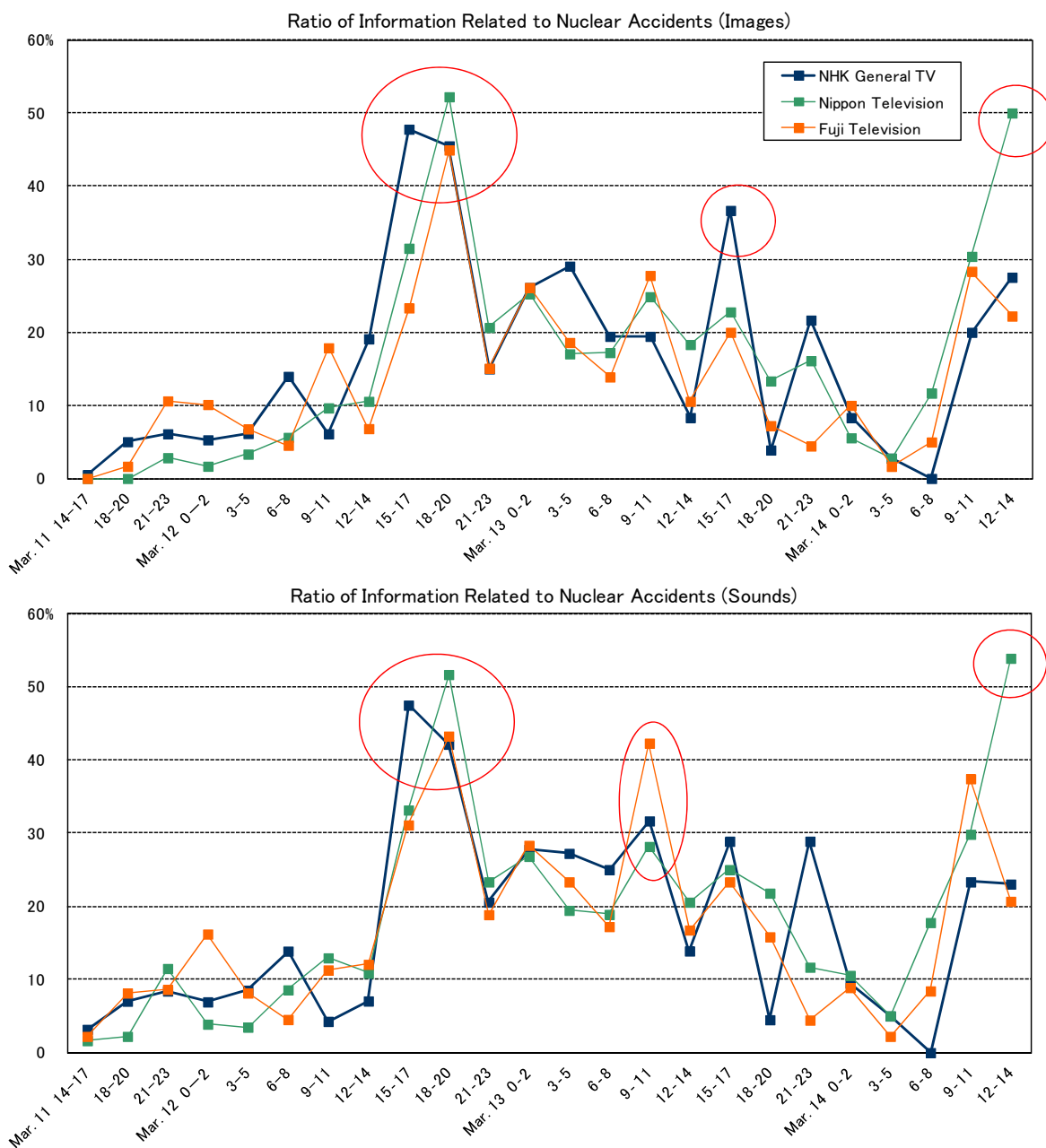
Among the three networks, Fuji Television broadcast such summaries relatively more than the others, and set up such looking-back corners with edited images at an early stage. Between 1:00 and 1:59 a.m. on March 12, it broadcast a summary, in a corner for a little shorter than ten minutes, of the shakings of the earthquake, tsunami hitting Miyako and Ofunato, fires at Daiba in Tokyo and the city of Ichihara in Chiba prefecture, confusion in transport services and traffic in the Metropolitan area, a fire in the city of Kesenuma, and what were left after the onslaught of tsunami. Between 8:00 to 8:59 a.m., it broadcast a similar summary with a narration by a male announcer. Between 19:00 to 19:59 on March 12, it broadcast a summary corner of about eight minutes, focusing on rescue operations. From midnight to early morning on March 13, it repeatedly broadcast a summary of casualties, the missing and damage so far.

## 4. How the Nuclear Accident Was Reported

### 4-1 Changes in Contents of Reports

#### (1) Rises or Falls of Volumes of News Reports on This Item Similar among 3 Networks

Figure 7. Changes in the Volumes of News Reports on the Nuclear Accident



**Figure 7** shows changes in the volumes of news reports on the nuclear accident along with the time. It is to be noted that the three networks show similar timings in increasing and decreasing its coverage of the accident.

First of all, let's examine what happened at the time of the three peaks in the line graphs, which are marked with large circles.

The first peak comes when a hydrogen explosion occurred at Unit 1 of Fukushima Daiichi Nuclear Power Station. As to abnormalities involving this reactor unit, Fuji Television was the first to report. Shortly after 11:00 a.m. on March 12, Fuji Television broadcast, as information coming from the Nuclear and Industrial Safety Agency, that fuel rods in this unit's reactor were exposed and that it was possible some of them might have melted. Then, at 12:12, NHK reported that fuel rods at Unit 1 were exposed up to 90 centimeters.

At 15:24, the Nuclear and Industrial Safety Agency said, in a news conference, that a venting operation was conducted and that it was effective. Immediately after this, the situation turned worse. At 15:36, a hydrogen explosion occurred at Unit-1.

However, it was shortly before 17:00, more than one hour after the explosion, that news reports on the hydrogen explosion sharply increased. At 16:52, more than one hour after the explosion, NHK reported, as an eyewitness account, that at around four o'clock, the sound of an explosion was heard around the Unit-1 building, and that something like smoke was seen. A reporter belonging to the Science & Culture Division of the News Department referred to the possibility of a hydrogen explosion.

Nippon Television possessed scoop footage captured by Fukushima Central Television Station, an affiliate. The footage caught the moment an explosion occurred. But the network was cautious about reporting on the hydrogen explosion. At 16:49, a reporter from Nippon Television reported from Fukushima Central Television, showing the footage, but only said that something that looked like steam popped out. Then, in a studio in Tokyo, a scholar of Tokyo Institute of Technology commented that it looked as if it were an explosion, but that he considered the nuclear plant intentionally released steam.

After that, NHK broadcast the footage of the reactor building, which had been reduced to a framework after the explosion. By showing this skeleton of the building, an NHK



reporter in the studio explained, “It is possible a serious situation has developed and that radioactive materials may have been released.” The reporter advised people to evacuate indoors, stop air conditioners, and take all the other safety measures.

At 17:47, more than two hours after the hydrogen explosion, Chief Cabinet Secretary Yukio Edano said there was what he called “some kind of explosive phenomenon,” but that it was not confirmed that the phenomenon had involved a nuclear reactor.

The second peak came when the networks reported on possibilities of whether or not a hydrogen explosion could occur at Unit 3. At around 10:00 on March 13, Fuji Television increased its news reports on the nuclear power plant. We can confirm this by the line graph for information delivered in the form of sounds. Fuji Television reported in detail the statement of an official of the Nuclear and Safety Agency in a news conference that Unit 3 had lost its cooling functions. However, after this, Fuji and the two other networks reported less on the nuclear power plant. In its news at 12:00 on the same day, NHK carried Edano’s statement that an explosion such as at Unit 1 would not occur at Unit 3.

Looking at the line graph for news delivered in the form of images, the three networks’ reports on the nuclear accident again increased in the afternoon. This is because Edano reversed his earlier statement, which was reported by NHK at noon, and now said there was a fear that an explosion similar to that at Unit 1 could occur at Unit 3.

Also, during the same time frame, the three networks broadcast the news that high levels of radiation doses were detected at Onagawa Nuclear Power Plant in Miyagi prefecture in addition to the latest information on the nuclear accident at Fukushima Daiichi plant. They reported this together with a news conference given by Onagawa’s operator, Tohoku Electric Power Company. The fact that the networks reported on information on the two nuclear power plants, together with reports of news conferences on them, led to increases in news coverage on this issue.

The third peak came when Unit 3 was hit by a hydrogen explosion shortly after 11:00 on March 14.

Earlier on the morning of March 14, the three networks reported very little on information related to the nuclear accident. This is because they mostly broadcast, instead,

about “scheduled blackouts” planned by Tokyo Electric Power Company. The blackouts were postponed until evening. However, the expected blackouts led to suspension of railway services on various railway lines, causing confusion among commuters. The networks were reporting on this.

Then, at 11:01 a.m., an explosion occurred at Unit 3. News on the nuclear accident increased sharply. After the explosion, the Nuclear and Industrial Safety Agency and Chief Cabinet Secretary Edano held news conferences. The networks broadcast them live.

Nippon Television’s news reports on this increased markedly both in images and sounds. That is because it was able to film the moment of the explosion at Unit 3, too. It broadcast the footage many times.

## **(2) News Conferences Could Have Been the Key in Volumes of News Reports**

The line graphs that indicate rises or falls in the volumes of news on the nuclear accident show marked similarity among the three networks. We consider that the factor behind this is news conferences.

A reporter belonging to NHK’s Science & Culture Division is quoted as saying that he hopes the government and Tokyo Electric Power Company should provide residents and media with essential information. This remark signifies the irritation that all the news organizations were feeling at that time. A limited number of sources were giving them only scanty and insufficient information.

The fact that news reports on the nuclear accident increases at the same time at the three networks means just one thing. The networks had to depend on the same news sources at the same time, that is, news conferences given by the government, Tokyo Electric Power Company, or such.

Then, why did news reports on this issue decreased as sharply at the three networks at the same time, just as they increased as sharply together?

The volumes of news reports on the explosion at Unit 1 on March 12 remained high until 21:59. The volumes dropped at 22:00 at the three networks. We infer that this has

something to do with Chief Cabinet Secretary Edano's statement in a news conference at 20:41. He acknowledged, for the first time, that there was a hydrogen explosion. Then, he said the explosion had caused no damage to Unit 1's containment vessel, in which the nuclear reactor sits.

From shortly before noon to afternoon on March 13, the volumes of news reports on the nuclear accident decreased, when the government said there would be no fear of hydrogen explosion at Unit 3. They increased, however, when the government said a hydrogen explosion could occur there.

After the hydrogen explosion at Unit 3 on the morning of March 14, Nippon Television increased its news reports on the explosion. It had the exclusive footage of the moment of the explosion. Fuji Television sharply decreased news reports on the explosion at around noon. NHK also tended to decrease them gradually. In its news program at noon, NHK reported, as a statement by Chief Cabinet Secretary Edano, that after the hydrogen explosion, "the integrity of the containment vessel is maintained, and that the possibility is low that a large volume of radioactive materials has been scattered in the air. After the explosion, when radiation doses in the air were announced, Fuji Television broadcast an expert explaining that those doses were not high. An announcer closed the news program by saying to viewers, "You may feel a little safer now."

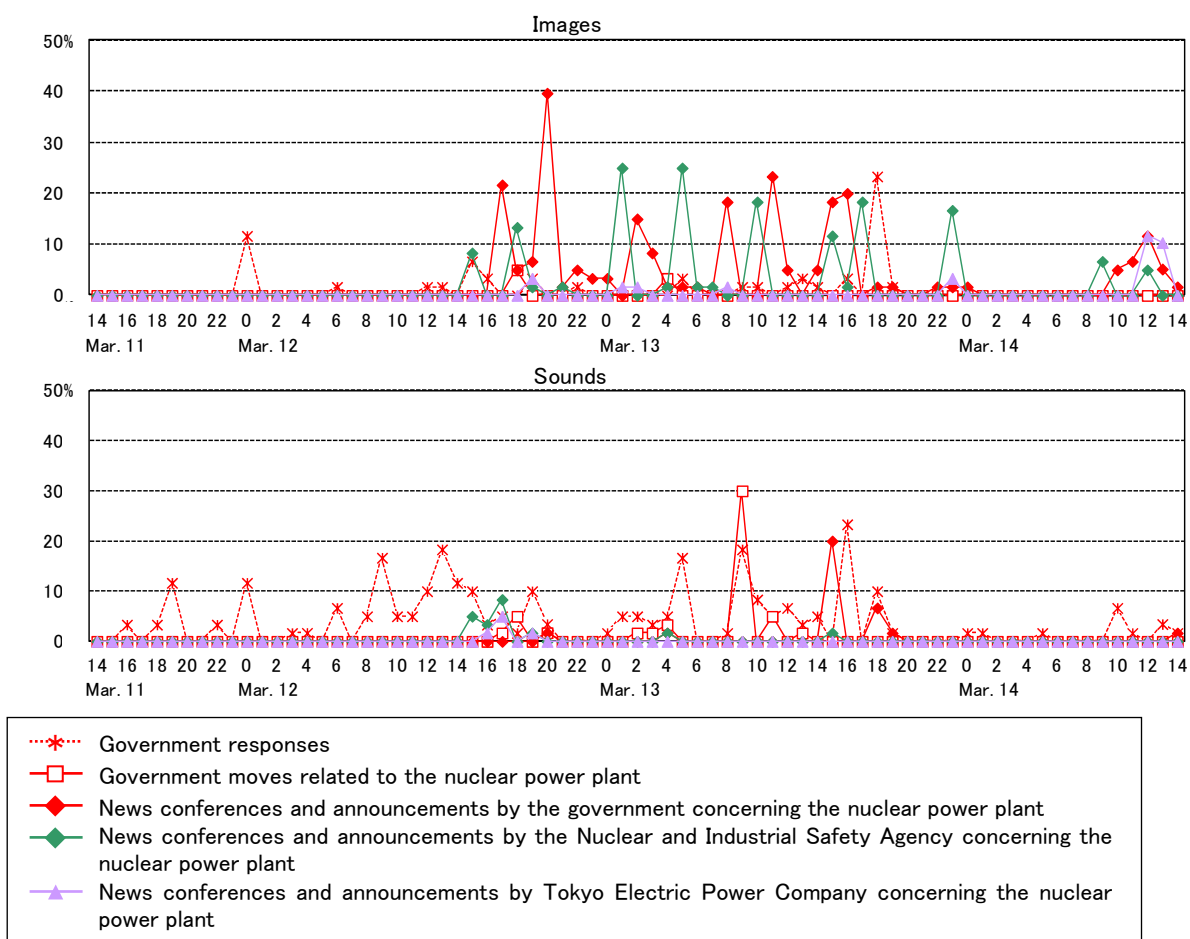
Behind the overall decrease of news reports on the nuclear accident is the tendency that news media accepted information given by the government without doubting it. We believe this delayed the media's awareness of how serious the situations actually were.

#### **4-2 How News Conferences Were Reported**

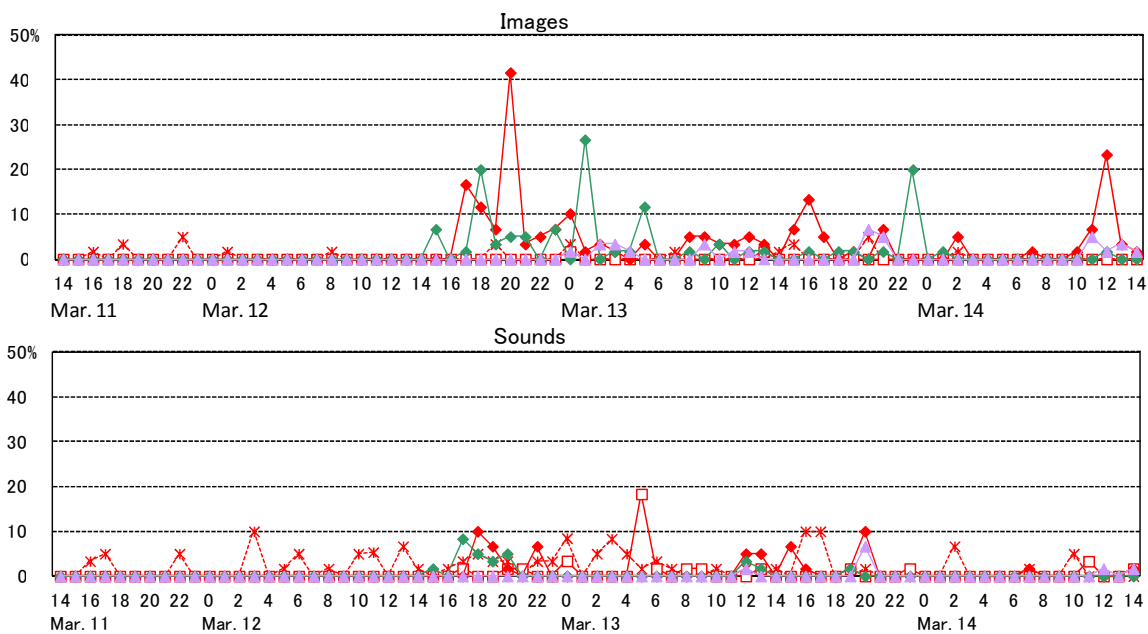
Let's examine how the networks reported on government responses and news conferences. In our analysis of news reports during the first 24 hours, we set up one code for this kind of news, "government responses." In the current analysis for the first 72 hours, we added four more codes by classifying information on the nuclear accident according to news

sources. The four codes are “government moves related to the nuclear power plant,” “news conferences and announcements by the government concerning the nuclear power plant,” “news conferences and announcements by the Nuclear and Industrial Safety Agency concerning the nuclear power plant,” and “news conferences and announcements by Tokyo Electric Power Company concerning the nuclear power plant.” The original code, “government responses,” includes matters not related to the nuclear power plant as well. **Figure 8** shows the changes in the ratios of news reports under the five codes by time frame.

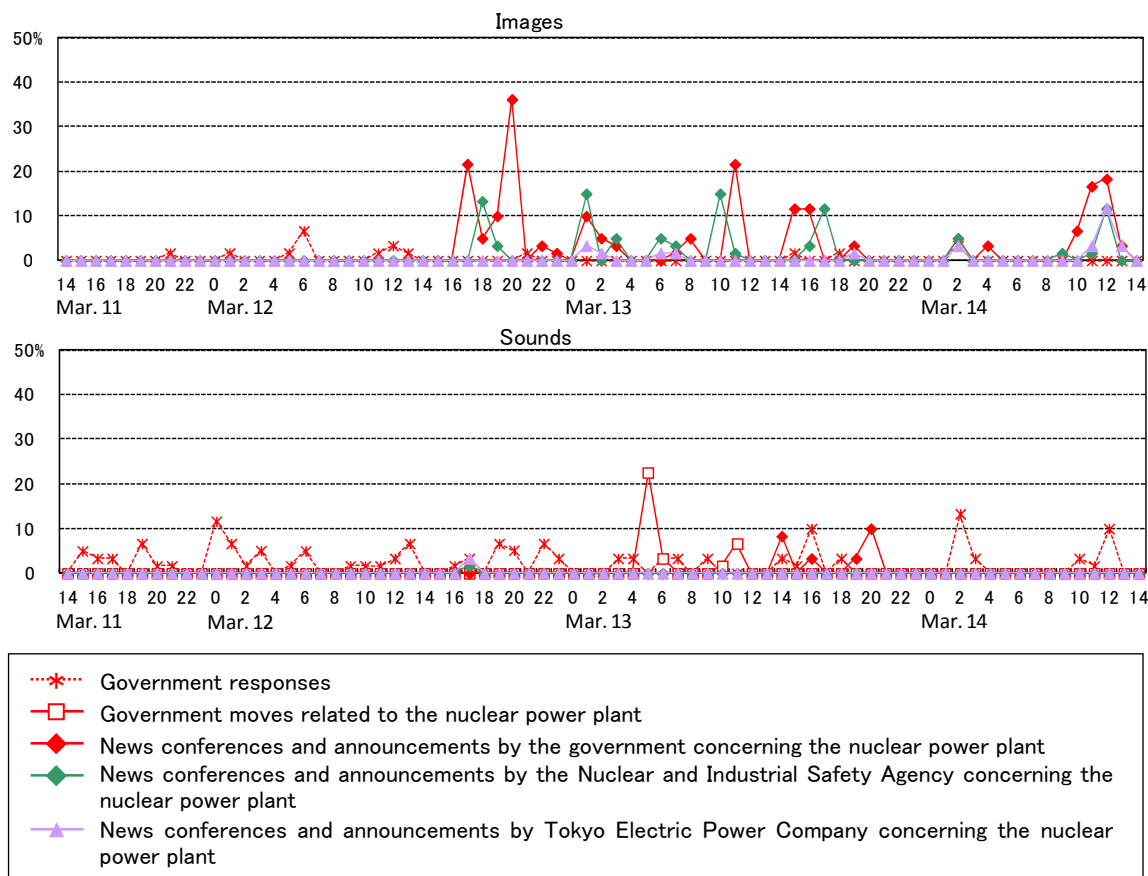
**Figure 8a. How news conferences and announcements were reported (NHK General TV)**



**Figure 8b. How news conferences and announcements were reported (Nippon Television)**



**Figure 8c. How news conferences and announcements were reported (Fuji Television)**



From 20:00 to 20:59 on March 12, the three networks allotted about 40 percent of their air time to news conferences by the government in images. NHK General TV also gave considerable airtime to government news conferences during one hour from 8:00, from 11:00, from 15:00, and from 16:00, all on March 13. It also reported on news conferences given by the Nuclear and Industrial Safety Agency during one hour from 1:00, from 5:00, from 10:00, from 17:00, from 23:00 and other times, on March 13. Nippon Television and Fuji Television also reported on them by similar timings. However, they gave relatively less airtime to them than NHK General TV in the form of images.

News reports of this code delivered in the form of sounds do not necessarily correspond with the timings of such reports delivered in images. They increased from around 15:00 toward night on March 13.

When we examine who are speaking to give information on news conferences, when such information is delivered in the form of sounds, NHK General TV more often uses the sounds of the prime minister or the Chief Cabinet Secretary, if the news conferences were given by the government. If news conferences were given by the Nuclear and Industrial Safety Agency or Tokyo Electric Power Company, NHK more often had its own announcers or news casters deliver the information.

Nippon Television tends to use the voices of officials of the Nuclear and Industrial Safety Agency or Tokyo Electric Power Company more often, when those officials gave news conferences. Fuji Television reported very little on news conferences by those two organizations in the form of sounds. When they did report on them in sounds, they conveyed information through its announcers or news casters (see **Table 8**).

**Table 8. Information on news conferences and others related to the nuclear power plant and who are conveying such information**

《NHK General TV》	Information conveyed concerning the nuclear power plants (Sounds)				
	Government responses	Government moves related to the nuclear power plant	News conferences, announcements by the Government	News conferences, announcements by the Nuclear and Industrial Safety Agency	News conferences, announcements by Tokyo Electric power Company
Who are conveying	N=172	N=31	N=20	N=13	N=5
Announcers, News casters	57.0%	25.8%	30.0%	84.6%	60.0%
Reporters, Commentators	2.9	6.5	0.0	0.0	20.0
Experts, Scholars	0.0	0.0	0.0	0.0	0.0
Politicians, Officials of ministries and agencies	22.1	54.8	0.0	0.0	0.0
Prime minister, Chief Cabinet Secretary	14.0	12.9	70.0	0.0	0.0
The Nuclear and Industrial Safety Agency	0.0	0.0	0.0	15.4	0.0
Tokyo Electric Power Company	0.0	0.0	0.0	0.0	20.0
Governors, mayors, Officials of local governments	4.1	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0

《Nippon Television》	Information conveyed concerning the nuclear power plants (Sounds)				
	Government responses	Government moves related to the nuclear power plant	News conferences, announcements by the Government	News conferences, announcements by the Nuclear and Industrial Safety Agency	News conferences, announcements by Tokyo Electric power Company
Who are conveying	N=87	N=25	N=35	N=18	N=7
Announcers, News casters	54.0%	32.0%	14.3%	38.9%	28.6%
Reporters, Commentators	14.9	12.0	0.0	0.0	0.0
Experts, Scholars	8.0	4.0	0.0	0.0	0.0
Politicians, Officials of ministries and agencies	8.0	44.0	0.0	0.0	0.0
Prime minister, Chief Cabinet Secretary	11.5	8.0	85.7	0.0	0.0
The Nuclear and Industrial Safety Agency	0.0	0.0	0.0	61.1	0.0
Tokyo Electric Power Company	0.0	0.0	0.0	0.0	71.4
Governors, mayors, Officials of local governments	0.0	0.0	0.0	0.0	0.0
Others	3.4	0.0	0.0	0.0	0.0

White letters against black : 50% and higher

Shaded letters : 20% to 49%

《Fuji Television》	Information conveyed concerning the nuclear power plants (Sounds)				
	Government responses	Government moves related to the nuclear power plant	News conferences, announcements by the Government	News conferences, announcements by the Nuclear and Industrial Safety Agency	News conferences, announcements by Tokyo Electric power Company
Who are conveying	N=97	N=21	N=15	N=1	N=2
Announcers, News casters	41.2%	38.1%	6.7%	100.0%	100.0%
Reporters, Commentators	10.3	0.0	0.0	0.0	0.0
Experts, Scholars	17.5	4.8	0.0	0.0	0.0
Politicians, Officials of ministries and agencies	19.6	52.4	0.0	0.0	0.0
Prime minister, Chief Cabinet Secretary	10.3	4.8	93.3	0.0	0.0
The Nuclear and Industrial Safety Agency	0.0	0.0	0.0	0.0	0.0
Tokyo Electric Power Company	0.0	0.0	0.0	0.0	0.0
Governors, mayors, Officials of local governments	1.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0

## In Closing

We have reported here an outline of the result of our analysis of what was reported by the three networks based in Tokyo, NHK General TV, Nippon Television and Fuji Television, during the first 72 hours after the Great East Japan Earthquake. We realize this is mostly an introduction of data we have collected, and that we have not gone far enough into the details of the contents of news reports. This is especially so about the nuclear accident at Fukushima Daiichi Nuclear Power Station. In fact, as to the accident, various turns of events developed one after another after the time frame of this report and the entire volume of news reports on the accident increased markedly. We intend to conduct a deeper analysis of media reports on the accident and also on “information for and from sufferers of the disaster.” In doing so, we will also pay attention to what concrete styles of expressions broadcasters used in images or sounds in reporting such information.

(Takanobu Tanaka / Yumiko Hara)



## Notes:

- 1) The coding for news reports in the first 24 hours was conducted by a group of students belonging to the seminar of Professor Takemaru Nakase of Nihon University. The coding after that time frame was done by those who kindly responded when we called for cooperation among new NHK employees from April 2012. Professor Nakase helped us in training the coders. The manual we used for this analysis is based on the one used for the analysis for the 24 hours. But it was slightly revised and added to, due to changes (and increases) in the contents of information. (Part of the manual we used is on pp. 20-21.)
- 2) As for news reports that should fall under the code of “summaries of casualties, the missing and damage, looking-backs,” it was difficult in many cases to distinguish them from those that fall under different codes. Some of them may be coded based on their specific contents of news. For such items, we are hoping to confirm their contents and analyze them again.
- 3) According to data announced by the Major Disaster Management Headquarters of the Fire and Disaster Management Agency on October 11, 2011, 16,019 people are dead and 3,805 others are missing as the result of this disaster.

## **The Manual for Analyzing News Reports on the Great East Japan Earthquake**

(Oct. 31, 2011 Version)

〈Explanation • Items for Attention〉 (Omitted)

### **1. Objects of Analysis**

We analyze news reports broadcast by NHK General TV and key commercial networks based in Tokyo during the first 72 hours after the Great East Japan Earthquake. The analysis of news reports during the first 24 hours, that is, from 2:46 p.m. on March 11 to 2:59 p.m. on March 12, is already done. This analysis covers news reports broadcast from 3:00 p.m. on March 12, 2011, to 2:59 p.m. on March 14

### **2. Units of Analysis**

We are to record the contents of TV screens at the 22<sup>nd</sup> second of every minute. (The 22<sup>nd</sup> second is a randomly chosen point. In this analysis, our objects are in continuous flows of time. So, we divide objects in a unit of one second and add such units up, based on assumption that they can give us a whole picture. That means we are collecting data at intervals of one-sixtieth of a minute.

### **3. Names of Staff and Their Serial Numbers (Omitted)**

### **4. Starting Point of Analysis**

At first, you set the starting point of analysis, the point in the program that was being broadcast at 14:46 on March 11, the moment the earthquake occurred. For this, you use the starting time of a video tape in which the program is recorded, and calculate exactly how many minutes passed after the program began before 14:46. Then, the image that appears on screen at the point of time that indicates 22 on the time code for seconds is the first object of analysis.

For example, at Fuji Television, the first program recorded for this analysis is “1407: Taruja’s Spring (Replay).” The recording of this program started at 14:07. The earthquake hit Japan 39 minutes later. (14:46 – 14:07=39) The image that appears on screen at 00:39:22 on the time code is the first object of analysis.

### **5. Sample ID (Omitted)**

## 6. About News Items Whose Codes are Not Clear

If particular news items do not belong to any codes set hereby or if you are not sure which codes they belong to, tag them as “99.”

## 7. Channels, Broadcast Days and Times (Omitted)

## 8. Classification Codes

The following are codes for classification. Please examine the contents of news reports and write down the codes that fit descriptions.

### 8-1 **Basic Scenes** (Explanation of basic scenes omitted)

- 1 Studio: What is shot in studio is shown on screen.
- 2 VTR: What is recorded in a video tape in the past is shown on screen.
- 3 Live relay: Images shot live on the spot are shown. This includes those taken by remote-controlled (robot) cameras set on the roofs of buildings or other places.
- 4 Caption information: Information is mainly given in subtitles on screen. This code applies if main information is given in subtitles, even though images are used at their back. It also includes information in the form of drawings, such as Japanese maps indicating seismic intensities or tsunami warnings at specific places.
- 5 Models, CG's: Models or illustrations in studios, and images of CG animations.
- 6 Others.

### 8-2 **Persons** Appearing on Screen

Specify what kinds of persons are appearing on screen, and write down appropriate code numbers based on the following definitions. These are people appearing on TV screen, such as studio guests, persons giving news conferences, and persons being interviewed. You need not specify people walking on the street or sufferers at evacuation centers, that is, people who happen to be on screen. If more than one kind of persons is seen on screen, write down the codes of up to three main characters. The words, “areas hit by the disaster” or “sufferers,” refer to “areas or people mentioned as such in news reports involved,” regardless of whether casualties or damage was big or small or where the locations are. If no persons appear on screen, write “0.”

10 Announcers, news casters

- 20 Reporters, commentators
- 30 Experts, scholars
- 40 Politicians, officials of central government offices other than those mentioned in 41 and 42
- 41 Prime minister, Chief cabinet secretary
- 42 Staff of the Nuclear and Industrial Safety Agency
- 50 Heads or staff of local governments
- 60 Staff of the Japan Meteorological Agency
- 70 People at police, fire-fighting offices, or the Self-Defense Forces
- 80 Sufferers, people in disaster
- 90 Stranded commuters
- 100 Personalities (those who give comments other than experts or scholars)
- 110 Others
- 120 People from Tokyo Electric Power Company

### **8-3 Information Delivered in the Form of Images**

Determine which code a piece of information delivered in the form of images on screen belongs to, and write down the number of the code. In almost all cases, more than one piece of information is given on screen. So, choose one that you decide is the main. Don't count the information given in subtitles in L-shaped spaces on screen, or in subtitles on maps indicating locations where tsunami warnings are issued. "Summaries of casualties, the missing and damage" is the total numbers of the dead, injured and missing and of buildings destroyed or damaged. "Looking-backs" are programs that chronologically summarize what has happened since the earthquake. If you are not sure whether or not particular programs are chronologically summarized, code them by their contents as "13: Casualties, the missing and damage caused by the earthquake," "23: devastation by tsunami" or others.

- 11 Shakings caused by the earthquake that occurred at 14:46 on March 11 (studios shaking, and the shakings of buildings, streets and others captured by remote-controlled cameras)
- 12 Information on seismic intensities on the Japanese scale, the epicenter of the earthquake, and the mechanism of the quake.
- 13 Casualties, the missing and damage caused by the earthquake (excluding those by fires and power blackouts. Code fires as 31 and blackouts as 32.)
- 14 Emergency Earthquake Warnings
- 15 Shakings by aftershocks (all the other earthquakes that occurred after the main earthquake at 14:46 on March 11)
- 21 How tsunami is hitting land (tsunami flooding towns and fields Massive water

- rushing)
- 22 Tsunami warnings, information on estimated arrival times of tsunami, information on tsunami as they were observed
  - 23 Devastation caused by tsunami (how it looks after tsunami receded, how houses, buildings and fields are inundated)
  - 24 Explanations of tsunami and its mechanism
  - 31 Razing fires
  - 32 Areas under blackouts, information on blackouts (except on scheduled blackouts)
  - 41 Transport information (roads disrupted or jammed, railway services cut off, flights canceled, etc.)
  - 42 Information on water and gas supplies
  - 43 Information on telephone and other communications services
  - 44 Information on hospitals and medical services
  - 45 Summaries of casualties, the missing and damage, looking-backs
  - 46 Other lifeline information
  - 51 Stranded commuters, commuters trying to go home, commuters the next morning
  - 61 Information related to the nuclear power plant and other nuclear facilities other than what is listed from 621 to 66
  - 621 News conferences and announcements by the government concerning the nuclear power plant
  - 622 News conferences and announcements by the Nuclear and Industrial Safety Agency concerning the nuclear power plant
  - 623 News conferences and announcements by Tokyo Electric Power Company concerning the nuclear power plant
  - 63 Explanations of the nuclear power plant, radiation and other related matters
  - 64 Situations at the nuclear power plant
  - 65 Calls for evacuation and actions after the nuclear accident at the nuclear power plant
  - 66 Government moves and responses related to the nuclear power plant
  - 71 Calls for evacuation, calls for actions for safety, anti-disaster information
  - 72 Evacuation centers and sufferers there
  - 73 Requests and appeals of sufferers
  - 74 Information on relief activities
  - 75 Rescue operations and information
  - 76 Persons (those on screen such as announcers in studio)
  - 77 Responses by the central or local governments
  - 78 Information on restoration, reconstruction and support
  - 80 Nothing is happening. Or it is unclear what is happening.
  - 81 Others

- 82 Weather forecasts
- 83 Related to scheduled blackouts
- 90 Commercials

#### **8-4 Images of Where?**

##### **Codes for regions and prefectures**

Specify which areas images on screen are showing or which areas are presented as the topic of the news, and give codes for those regions or prefectures as is listed in Appendix 1 (Omitted).

If images are showing studios, write the codes for the locations of their broadcasting stations.

##### **Codes for districts**

If you can specify the names of cities, towns or villages, write the code numbers for districts in Appendix 2 (Omitted). If you cannot find the names, write down the names of districts.

In other words, if you can find which cities, towns or villages particular pieces of information given in images or sounds are referring to, write the code numbers for such municipalities according to the table of codes in Appendix 2. If the names are not found there, write the names of cities, towns or villages, instead.

If a number of areas are mentioned one after another, like in the case of expected arrival times of tsunami, write code numbers for regions and prefectures alone. And write “0” for district codes.

If studios are shown on screen, write the code numbers for the locations of their broadcasting stations.

If cities, towns, villages or countries cannot be specified, enter “0.”

In the case of foreign countries, refer to the table of code numbers for countries, and write their codes in alphabet.

**Codes for regions and prefectures** (We use standard codes for regions used by the

**Statistics Bureau of the Ministry of Internal Affairs and Communications, Omitted)**

**Division codes** (Same above, Omitted)

**8-5 Information Delivered in the Form of Sounds**  
**(The same as 8-3, Omitted)**

If the 22<sup>nd</sup> second of one minute has no sound at all, use the sound immediately after it. Determine the contents of information in sounds not only as to what reporters or announcers say in reading out scripts, but also as to what people say in news conferences and interviews. Even though nobody speaks on air, if you hear the sounds of tsunami striking land, sounds that indicate something is broken, or sounds that tell something about situations in certain locations, give them appropriate codes such as “13: casualties, the missing and damage by the earthquake,” or “23: devastation by tsunami.”

**8-6 Sounds of Where? (The same as 8-4, Omitted)**

**8-7 Persons speaking** (The same as 8-2, Omitted)

**8-8 With or without background music** (Omitted)

**8-9 Items for special attention** (Omitted)

(In making this Manual, we were able to have kind cooperation of Professor Takemaru Nakase of the College of Humanities and Sciences of Nihon University.)