

## IX. Communication regarding the Accident

### 1. Communication with residents in the vicinity and the general public in Japan

#### (1) Expectations for communication

Information on any accident provided in emergency is unavoidable to be one-way communication. However, in the stage when the emergency has been reduced in some degree, two-way communication is necessary to appropriately provide information which meets the need of the receivers. In addition, all of transparency, accuracy and promptness are important in the communication on any accident with people.

For the current accident, we have taken communication opportunities such as press releases and provided press conferences to provide information necessary for the receivers. Some improvements have been made during the process, as in the case of the joint press conferences to be mentioned below. However, we need to continue to make every effort in the process by exploring how to make the contents of communication easier to be understood.

Communicating the progress of the accident and the view of the government with general public, etc. through press releases and press conferences is only one way of the two-way communication in a sense. Only when absorbing the feedback and reflect it in the activities of the government and other organizations, communication will be established. In this context, questions and answers at such press conferences, inquiries from press at the Emergency Response Center (hereinafter referred to as “ERC”) and general counseling service (hereinafter referred to as “counseling service”) for general public to be mentioned below are prerequisite for such two-way communication.

Overall evaluation whether communication has been sufficiently made has not been implemented yet, but by examining the comments and feedback from experts and citizens delivered to counseling service, a certain level of review is stated below.

#### (2) Press release and press conference

- 1) Since the occurrence of the accident, the Chief Cabinet Secretary has provided information on the accident status and the government views on the accident directly to the general public at the press conferences. Questions on the accident have been asked at almost every

press conference, if including those related to support for accident sufferers and delivered the views at each time.

- 2) The Nuclear Inspection and Safety Agency (hereinafter referred to as “NISA”) distributed “Regarding the Impact on Nuclear Facilities by the Earthquake (1<sup>st</sup> release)” via “Mobile NISA” at 15:16 on March 11 (Japan time; the same shall apply hereinafter), 30 minutes after the occurrence of Tohoku Region - Off the Pacific Ocean Earthquake. Subsequently, the first release of “Seismic Damage Information” was released and press conference was conducted by a spokesman of NISA.

The press releases and press conferences have continued after the occurrence of a nuclear accident at Fukushima Dai-ichi NPS. We sent out 155 press releases and held 182 press conferences by NISA spokespersons as of May 31, 2011. We held a daily average of seven press conferences over three days after the occurrence of the accident. As the situation stabilized, the frequency was decreased to the current once or twice a day.

These press conferences are a precious tool to directly communicate with citizens using visual images. It is necessary to use more audience-friendly ways of communication than the materials used for press releases to be mentioned below. A considerable number of experts and callers to the counseling service said that creative efforts were not made sufficiently.

Also, some criticized that the briefings have focused on incidents of the accident and very few explanation about “Things to keep in your mind for evacuation,” which is extremely important for securing safety in the suffered area and citizens.

- 3) The Ministry of Education, Culture, Sports, Science and Technology (hereinafter referred to as “MEXT”) has conducted an environmental radioactivity survey in all the prefectures of Japan and has worked with Fukushima Prefecture, the Japan Atomic Energy Agency, power operators and other organizations to conduct comprehensive monitoring including surveys of air dose rates, dust in the atmosphere and soil in the surrounding area of Fukushima Dai-ichi NPS. Such information has been shared at press conferences and other occasions.
- 4) The Nuclear Safety Commission (hereinafter referred to as “NSC Japan”) held press conference every day for 31 days from March 25 to April 24, and NSC Japan themselves including the Chairman of NSC Japan provided an explanation on advice made by NSC

Japan and assessment of environmental monitoring results conducted by MEXT. Moreover, press conference is held after NSC Japan meeting eight times in total from April 25 (as of May 19).

- 5) Also, the nuclear operator, Tokyo Electric Power Co. Inc. (hereinafter referred to as “TEPCO”) has held press conferences on the current nuclear accidents. Daily press conferences by NISA and TEPCO held at different timings and other reasons made the press think that some discrepancies appeared in the information and comments delivered at the conferences of both organizations. To respond to this issue, joint press conferences participated by NISA, TEPCO and other relevant organizations have been held at the Joint Headquarters of Fukushima NPS Emergency Reponse since April 25 in order to share comprehensive and detailed information related to the current accidents uniformly and consistently and to increase accuracy and transparency. (This headquarters was renamed as the Government - TEPCO Integrated Response Office on May 9.) The joint press conferences have been participated by Special Advisor to Prime Minister Hosono, NISA, TEPCO, NSC Japan and MEXT and other organizations.

Among the opinions received at hotlines and counseling services, they pointed out that the government and the nuclear operator held press conferences separately and their views were different. Similarly, experts suggested that a significant problem is that “One Voice,” the principle of emergency publicity, was not thoroughly communicated in the initial stage.

- 6) When developing the press release materials, graphs and pictures have been used to help non-specialists more easily understand technical and specialized information on reactors and radiation status. Some people calling the counseling services suggested they would welcome materials that are easy-to-understand for laypeople, which means the materials did not meet the needs of diverse types of readers. It would be endless task to pursue ways to make easy-to-understand material to a satisfactory extent, but it is necessary to make continuous efforts.

As it is also applicable to the briefing at press conferences, experts suggested that information on anticipated and future risks and scenarios was mostly missing. Such feedback has been received at the counseling services. However, the government, which is accountable for the accuracy of the statements, usually hesitates to comment on uncertain things about the future except for definite and certain incidents, but it’s important to try to provide information publicly required.

The ERC of NISA can be accessed by those related to the press, which followed up some technical issues insufficiently explained by released materials and some points difficult to thoroughly communicated.

As the views of the media side have been expressed through their media, how the news on the accident is reported should be followed. Based on it, we need to increase briefing opportunities to cover the missing parts in the previous briefings or change the way of explanation. Also, they should be reflected in the policy making process to come up with specific actions.

The Nuclear Emergency Response Headquarters (hereinafter referred to as “NERHQs”) summarize related information on situation of the accident at Fukushima Dai-ichi NPS and the governmental responses in an integrated fashion as needed from the initial stage of the accident, and provide information extensively and generally on the Cabinet website. Press releases have been posted on respective websites of the Ministry of Economy, Trade and Industry (hereinafter referred to as “METI”), MEXT and NSC Japan and other agencies. The website of METI covers comprehensive information on the Great East Japan Earthquake, for example, allowing people to access monitoring data conducted by agencies of MEXT and local governments.

### (3) Inquiries from general public

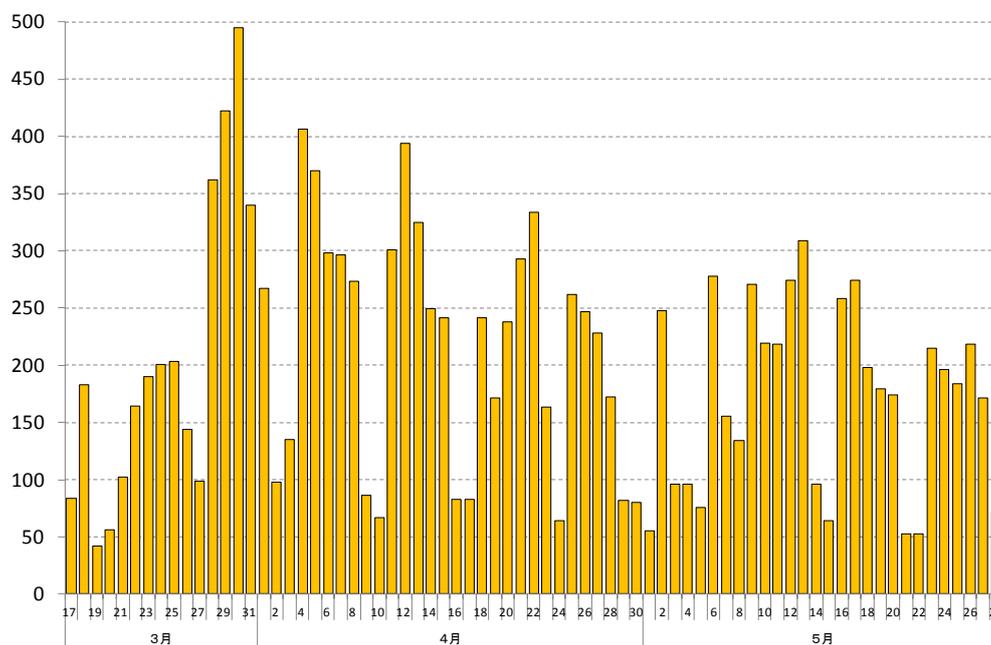
- 1) Inquiries on the above-mentioned press releases, etc. from the general public were responded to by NISA staff in charge around the clock since the occurrence of Fukushima NPS accidents. In response to development of nuclear accidents and the occurrence of various incidents regarding radiation safety, the number of staff was increased, supported by the Japan Nuclear Energy Safety Organization (hereinafter referred to as “JNES”), and also the number of telephone lines grew (to 13 lines from 5 during the daytime) on March 17. This service has been sequentially reinforced with the support of JNES. We received a total of 15,000 calls and inquiries between March 17 and May 31. Currently, the number of calls has been decreasing compared with the number received when the service started, but a considerable number of inquiries are still being received.

The comments and feedback on public relations among all the inquiries increased in May from the initial stage of the accident. This might be related with the change in interests

from simple questions and complaints to public relations due to the stabilized progress of the plant incidents, but the verification will be implemented later on.

The percentage of publicity-related feedback among the total inquiries has been small. This might be explained that there have been more simple questions and complaints because the press releases and conferences were involved with progress of incidents at NPS are not well understood and related to daily life and, once an accident occurs, such events became closely related to daily life.

Figure IX-1-1 Number of inquiries to NISA’s counseling service



(Period: March 17 to May 31)

- 2) On March 17, MEXT cooperated with the Japan Atomic Energy Agency (hereinafter referred to as “JAEA”) to open a health counseling hotline to provide health counseling and disseminate correct information. It has received a total of 17,500 calls as of May 18. The National Institute of Radiological Sciences (hereinafter referred to as “NIRS”) has opened a hotline to provide medical information on radiation exposure and health counseling to the general public, which had received a total of 7,800 calls as of May 18.
- 3) The parties concerned to academies such as the Atomic Energy Society of Japan also

provide explanation and information with the public actively.

- 4) The Fukushima Prefectural Government supported by the national government opened counseling service on radiation in the Fukushima Prefectural Office. More than 14,000 inquiries have been received there since the opening.

#### (4) Public relations activities of the Local Nuclear Emergency Response Headquarters

The residents around NPS including evacuees are the most important target for communication.

Regarding public relations of the Local Nuclear Emergency Response Headquarters (hereinafter referred to as the “Local NERHQs” ), considering the criticality of the incidents, press conferences by spokespeople of the Local NERHQs have been held and materials released. Some of the handout materials have been independently developed by the Local NERHQs.

As different radiation protection measures should be taken depending on suffering areas, and also because many of those live in shelters, they need more detailed information on radiation safety as well as daily life, etc. Also, it’s necessary to note the situation that in many disaster areas the media such as television and the Internet are not available. To respond to their needs, since March 29, the Local NERHQs published a newsletter and distribute to each evacuation site, and since April such information has been periodically broadcasted through local radio stations (Five editions of newsletters and 62 radio broadcasting as of May 10).

Materials regarding instructions under the name of the Director-General of Nuclear Emergency Response Headquarters, press releases on monitoring data of MEXT, monitoring data by geographic area and materials on support measures for local business corporations are provided to local municipalities depending on their need. Such information is immediately released to the local media through press conferences, etc.

#### (5) Publicity to local residents on evacuation zones

In the initial stage of the accident occurrence, the Director-General of Nuclear Emergency Response Headquarters determined evacuation areas and instructed evacuation in order to ensure the safety of the residents and other citizens as soon as possible.

After such instructions were issued, the secretariat of NERHQs called the Local NERHQs and

Fukushima Prefecture to deliver evacuation instructions and stay indoors instructions. Relevant municipalities received calls on such instructions through the Local NERHQs and Fukushima Prefecture. Additionally, the NERHQs directly called those municipalities. However, since communication services including telephone lines were heavily damaged by the massive earthquake, not all the direct calls reached the affected municipalities. Prior notification to local governments was not satisfactorily delivered because some municipalities did not receive evacuation instruction either directly or indirectly.

The police transmitted direction to evacuate to the local governments through police radio. In order to promptly publicize evacuation instructions right after they were issued, the Chief Cabinet Secretary has announced the details of each instruction at press conferences as well as using television and radio to spread out the information.

## 2. Communication with international community

### (1) Communication with international organizations such as the IAEA

The accident at the nuclear power plant is a concern of the entire global community. The Japanese government made every effort to provide information promptly and accurately to the IAEA, the most important international organization dealing with nuclear safety issues. Since 16:45 on March 11 (Japan time; the same shall apply hereinafter), two hours after 14:46 when the earthquake occurred, pursuant to the Convention on Early Notification of a Nuclear Accident, NISA has notified the IAEA periodically on incidents occurred and how Japan is coping with them as much as possible. As of May 31, a total of some hundreds reports including press release, plant parameter and monitoring results were sent to the IAEA and approximately 100 individual inquiries from the IAEA were answered. Information was also provided from the Japanese Government through diplomatic channels of the Permanent Mission of Japan to the International Organizations in Vienna shared information with the IAEA pursuant to the same Convention as needed. The IAEA has provided information to the press and the general public based on the gathered information.

The Japanese government has provided information to the World Health Organization (hereinafter referred to as “WHO”) pursuant to the International Health Regulations (hereinafter referred to as “IHR”) when needed.

In addition, at various international conferences held after the accident occurred, officials and

staff related to the Japanese Government explained the status of the accident and how Japan has coped with it and answered questions from the participants. (Please refer to Attachment IX-1 for dates, names and overviews of briefings, etc. at international conferences.) Responding to import restrictions of exported goods from Japan, we have requested the international community to take action based on a scientific basis.

## (2) Communication with governments of other countries

The Japanese Government has highly emphasized information provision to countries and regions around the world including neighboring countries and regions. Hence, after the occurrence of the accident, 46 briefings to diplomats in Tokyo as of May 11 were held daily from March 13 to May 18, 3 days a week from May 19 onward in principle. (Please refer to Attachment IX-2 for the list of briefing dates, speakers, and contents.) In addition, simultaneous emergency notices were released as needed (Refer to Attachment IX-3 for the dates and contents of emergency notices) and individual communication on such emergency notices was made with neighboring and other countries in principle from April 6 onward. The Japanese Government has explained against the imposition of import restrictions of export goods from Japan to diplomats in Tokyo and to governments of other countries through the diplomatic missions in their countries assigned and requested them to take actions based on scientific basis.

## (3) Communication with foreign media and citizens whose mother language is not Japanese

From March 13 onward, joint press conferences by relevant ministries and agencies for foreign media on the accident status and actions taken by the Japanese government (Refer to Attachment IX-4 for dates, places, speakers and contents of the press conference. Japanese-English simultaneous interpreters have been introduced to the press conferences of the Chief Cabinet Secretary in addition to those of Prime Minister. Videos of press conferences have been posted on websites of Japanese Government Internet TV and the Foreign Press Center Japan.), interviews with ministers and officials with foreign media (Refer to Attachment IX-5 for dates, interviewees, and media name of the interviews), the contribution to major foreign media by the Prime Minister and the Foreign Minister (Refer to Attachment IX-6 for the posted article) were conducted. When apparent factual errors and fear-mongering were identified in earthquake-related coverage by foreign media, the Japanese Government has promptly addressed them and encouraged such media to place the counterarguments of Japan.

On March 12 onward, websites of the Japanese governmental organizations posted relevant

information in English, Chinese and Korean. (Refer to Attachment IX-7 for the list of posted dates and contents.)

In addition, the Prime Minister of Japan and His Cabinet created Twitter and Facebook accounts under the name of Kantei to send summaries of the press conferences of the Prime Minister and Chief Cabinet Secretary to a wide range of audience as needed.

Along with information provision from the diplomatic missions of Japan to their countries assigned as needed, the diplomatic missions posted related information on websites of the diplomatic offices in a total of 29 different languages. (Refer to Attachment IX-8 for the list of diplomatic offices, dates and contents of the postings) This websites are accessible to everyone through the Internet.

Japan has held briefings to businesses of overseas both in Japan and overseas.

### 3. Provisional evaluations based on rating of International Nuclear Events Scale (INES)

Japan has used INES since August 1992. When any trouble occurs at any nuclear power plant, NISA issues provisional evaluation and investigated the cause, and after the reoccurrence preventive measures is established, the Nuclear and Industrial Safety Subcommittee of the Advisory Committee for Natural Resources and Energy of METI validates them from a technical point of view and then formally evaluates them.

Based on the development of the accident at Fukushima Dai-ichi NPS, provisional evaluation was updated in reports from 1st to 4th. (Please refer to the Appendix IX-9 for details of provisional evaluation)

#### 1) The first report

A provisional evaluation of Level 3 was issued based on the fact that the emergency core cooling system for water injection became unusable at 16:36 on March 11, because motor operated pumps were disabled due to total power loss at Unit 1 and Unit 2 of Fukushima Dai-ichi NPS.

#### 2) The second report

On March 12, an explosion of the vent of reactor containment and reactor building of Unit 1

of Fukushima Dai-ichi NPS occurred. Based on environmental monitoring, NISA confirmed the emission of radioactive iodine, cesium and other radioactive materials, and a provisional evaluation of Level 4 was announced because we suspected the emission of over 0.1 % of radioactive materials from fuel assemblies in the reactor core inventory. As the incidents have not been restored, “People and the environment” in the INES User’s Manual Edition 2008 is to be evaluated.

### 3) The third report

On March 18, as some incidents to cause fuel damage were identified at Unit 2 and Unit 3 of Fukushima Dai-ichi NPS as well as judging from all the information obtained at the moment including the status of Unit 1, NISA announced the provisional evaluation Level 5 because we suspected the release of several percent of the core inventory.

The cooling and water supply system of spent fuel pit did not work in Unit 4. Due to explosion and damage to the reactor building, we suspected no safety equipment remains in it and we announced provisional evaluation of Level 3.

### 4) The fourth report

On April 12, regarding the estimated amount of radioactive materials released in the atmosphere from the reactors of Fukushima Dai-ichi NPS, NISA announced the estimate at 370,000 TBq of radioactivity in iodine equivalent from analytical results of the reactor status and others by JNES. The NSC also estimated the total amount of radioactive materials released in the atmosphere from Fukushima Dai-ichi NPS based on the monitoring results by the same day. Based on these results, NISA announced provisional evaluation of Level 7 on the entire site of Fukushima Dai-ichi NPS, on the same day.

## 4. Evaluation on communication regarding the accident

(1) How information should be provided to residents in vicinity and general public in Japan and international community

- 1) The main channel of information provision has been through the mass media, which has transmitted press conferences and press releases to residents in the surrounding area, general public in Japan and international community. Hence, it is important to identify the

needs of the mass media in addition to adequately communicate what people want to know. For example, when a hydrogen explosion occurred at reactor building of Units 1 and 3, television broadcast it almost real-time. The mass media strongly requested the ERC right after the explosion for an explanation of the accident by someone with appropriate knowledge in front of the camera about what really happened there and how the explosions would affect the reactors and so on. However, because it took time to verify the related facts, their needs were not always satisfied. As this issue is liable to be involved with trade-off between swiftness and accuracy, it would have been appropriate to develop a manual to respond to such situations in advance.

- 2) As mentioned above, it is true that the Japanese government made all kinds of efforts to help non-specialists understand technical and detail information in developing materials for press releases. However, visually-effective materials were not always developed at time-pressing occasions such as immediately after new facts were identified.

From the perspective of encouraging residents in the surrounding area, general public and international community to understand the situations, it would be effective to use information technology and graphs, pictures and other visual support both in Japanese and other languages which are prepared regularly in advance.

- 3) As mentioned above, communication and prior notification to local municipalities as well as industry organizations about outflow of water with high-level radioactivity and discharge of stagnant water with low-level radioactivity to the sea by TEPCO were delayed. Above all, communication and notification to such organizations are required to be conducted in a timely manner and thoroughly by taking every possible measure.
- 4) Japan has been making efforts to share information with the international community promptly and accurately, but it will be adequate to further promote approaches for information provision to the international community keeping pace with information provision in Japan, and so it is desirable to consider utilizing simultaneous interpretation at press conferences. Moreover, as this accident received remarkable attention from overseas, news reports different from the fact were sometimes made by foreign news media who do not have accurate knowledge about general information on Japan or actual condition about the accident. Therefore it's desirable to actively provide opportunities that foreign news media learn our actual conditions more widely and adequately.

(2) What information provision in power outage should be

While monitoring data has been quickly publicized, we need to come up with some ways to promptly communicate necessary information to the sufferers who want to obtain information but do not have access to the Internet due to power failure in such a case as combined emergency with natural disaster.

(3) Importance of communication closely with neighboring countries and regions

- 1) Although the Japanese Government has made every effort to share information promptly and accurately, looking at some individual cases, initially information was not always fully shared in advance especially with neighboring countries and regions. Although communication was not intentionally delayed, the Japanese Government could not identify part of actual status of the accident after it occurred; as a result information was not always provided in a timely manner.

For instance, TEPCO discharged stagnant water with low-level radioactivity to the sea in order to prevent water with higher-level radioactivity from outflowing to the sea on April 4. NISA notified the IAEA of the discharge in advance. However, since the development of the situation was very urgent and information was not fully shared among the relevant government authorities, this urgent measure was taken before the neighboring countries and regions were fully notified through diplomatic channels.

The Japanese government sincerely regrets that we had to discharge stagnant water, even though with low-level radioactivity, to the sea, and recognized that much needs to be improved regarding the communication with neighboring countries on this discharge. Therefore, we reviewed the communication channels in the governmental organizations and explained to individual countries and areas about the background of the discharge, the relevant data and other information. Also, we identified a contact point where the Japanese government can maintain around-the-clock communication with the neighboring countries and regions. Subsequently, prior notification on specific areas of interest for the neighboring countries and regions such as shift of INES level, establishment of restricted zone, evaluation of contaminated water and opening of the airlock (Please refer to the above 2. (2)).

(4) What accident notification should be

- 1) The Japanese government, as mentioned in the above 2, has continuously provided necessary information on the status of nuclear reactor facilities in Japan pursuant to the Convention on Early Notification of a Nuclear Accident. The Japanese government recognizes that maximum level of information required by the Convention has been provided to IAEA and all the relevant countries through IAEA since the occurrence of the accident.
  
- 2) Generally speaking, it would not be always easy to determine whether the current accident is applicable to “the event of any accident from which a release of radioactive material occurs or is likely to occur and which has resulted or may result in an international transboundary release that could be of radiological safety significance for another State” as stipulated in the Convention on Early Notification of a Nuclear Accident immediately after occurrence of a nuclear accident. It would be more difficult especially for a country like Japan surrounded by the sea on all sides. The Japanese government considers that, for the purpose of ensuring smooth and steady international communication when nuclear accident occurs, it is adequate to discuss establishment of an international process for notification to the IAEA, whenever a certain level of accident occurs, regardless of resulting in an international transboundary release of not.

(5) Import restriction of export goods, etc. from Japan

The Japanese government understands the global concerns about the possibility of impact on exported goods from Japan by radioactive materials released by the current accident. However, the Japanese government considers it is important to use scientific data when taking any action toward this issue. It cannot be denied that such cases, where information was not fully provided, have led to unduly concerns in the international community.

From these perspectives, we have continuously held briefings to diplomats in Tokyo, shared information and explanation with relevant governments and international organizations and explained to the countries, etc. which are taking such measures because the Japanese government considers necessity of such measures are to be reexamined on scientific grounds. Some of those countries etc. have eased such restrictions.