Events and highlights on the progress related to

recovery operations at Fukushima Daiichi NPS

March, 2014

Section 1: Executive summary

(1) The fact sheet uploaded in the link below is a summary of the current situation

http://www.kantei.go.jp/foreign/96_abe/decisions/2014/pdf/140221factsheet.pdf

(2) Information update from the previous fact sheet

The following information was updated from the previous fact sheet: 1) important events that happened after October 2013 were added and 2) examples of "preventive and multi-layered" measures that were additionally adopted in December 2013.

(3) The link of the previous fact sheet

The previous fact sheet is available online

http://www.iaea.org/newscenter/news/2014/fukushima-october-factsheet.pdf

Section 2: Current conditions and forecast onsite

2.1: Relevant information pertaining to issues related to the recovery (including spent fuel and fuel debris management)

(1) New Information

(i) Newly added topics (in the past three months)

Newly added topics in the past three months are as follows. For additional details of these issues, please refer to the "related information" section.

- NRA's Action to TEPCO's Fuel Removal from Unit 4, <Vol. 4>(Nuclear Regulation Authority (NRA))(February 14, 2014)

  http://www.nsr.go.jp/english/newsrelease/data/20140214.pdf

- Decommissioning of Units 5 and 6 at Fukushima Daiichi Nuclear Power Station (Tokyo Electric Power Company (TEPCO)) (January 31, 2014)

  http://www.tepco.co.jp/en/announcements/2014/1233973_5932.html

- Nuclear Emergency Response Headquarters decided Preventive and Multi-layered Measures for Decommissioning and Contaminated Water Management (Ministry of Economy, Trade and Industry (METI))(December 20, 2013)

  http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20131226_001.pdf

- The results of the investigation and examining on the unidentified and unsolved matters of the Fukushima Nuclear Accident (TEPCO)(December 13, 2013)
  http://www.tepco.co.jp/en/press/corp-com/release/2013/1233101_5130.html

- NRA's Action to TEPCO's Fuel Removal from Unit 4, <Vol. 3 >(NRA)(December 9, 2013)
  http://www.nsr.go.jp/english/data/131209.pdf
- Fuel removal from Unit 4 spent fuel pool has started at Fukushima Daiichi NPS (TEPCO)(November 18, 2013)
  http://www.tepco.co.jp/en/press/corp-com/release/2013/1232272_5130.html
- Nuclear Regulatory Authority (NRA)'s actions toward TEPCO's fuel removal from Unit 4 reactor building, Fukushima Daiichi NPS (NRA)(November 14 and 15, 2013)
  http://www.nsr.go.jp/english/data/131115-1.pdf

  http://www.nsr.go.jp/english/data/131114-1r.pdf

(ii) Information update on the decommissioning process

Progress status report is made monthly by METI. This report is the summary of the recent progress of the decommissioning made after the last progress status report was publicized. The link of the progress report is as follows:

- The latest Progress status reports (for Dec 26 2013 and Jan 30, 2014) are available online
  http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20131226-e.pdf

  http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20140130-e.pdf

  The reports discuss many recent updates to the decommissioning process such as start of removing rubble from the Unit 3 spent fuel pool and the contamination survey on the 1st floor of the Unit 1 reactor building. The below figures show some parts of the recent progress.

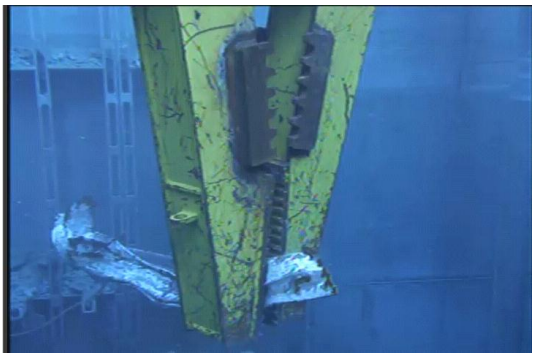

Figure 1: Rubble removal from SFP

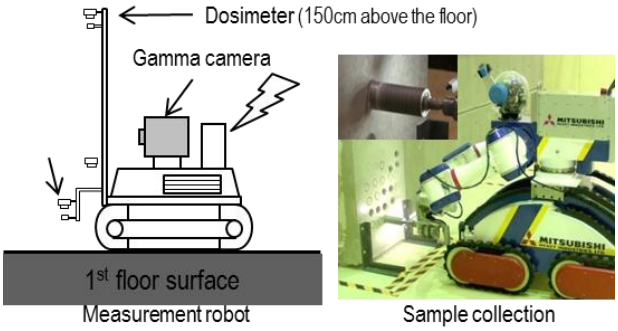

Figure 2: Image of survey equipment

- Archives of the status report are available online:

  http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/#progress_status

(2) Related information

As for other relevant issues, "METI's website for decommissioning" covers various issues in detail:

- METI's website for decommissioning
  http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/index.html
- For NRA's recent news releases, please see the following link.
  http://www.nsr.go.jp/english/newsrelease/
- For TEPCO's activities, please see TEPCO's website. TEPCO's website for current situation of Fukushima Daiichi and Daini nuclear power stations

  http://www.tepco.co.jp/en/nu/fukushima-np/index-e.html

2.2 Recent incidents and progress (in past months)

(1) Related information:

- Water was discovered leaking from the upper part of Tank C-1 in H-6 Tank Area (NRA)(February 20, 2014)
  http://www.nsr.go.jp/english/newsrelease/data/20140220.pdf
- Water was discovered leaking from a flange of a water pressure measuring instrument at TEPCO's Fukushima Daiichi NPS (NRA)(February 6, 2014)
  http://www.nsr.go.jp/english/newsrelease/data/20140206.pdf
- A water leakage was identified at first floor of Unit 3 Reactor Building at Fukushima Daiichi NPS (TEPCO) (January 21, 2014)
  http://www.tepco.co.jp/en/press/corp-com/release/2014/1233734_5892.html
- TEPCO provided an explanation on the reported steam generation on the operation floor at Unit 3 at Fukushima Daiichi Nuclear Power Station (TEPCO) (January 10, 2014)
  http://www.tepco.co.jp/en/announcements/2014/1233524_5932.html

Section 3: Monitoring results

3.1: Onsite monitoring results reported by TEPCO

3.1.1 Radionuclide releases to the atmosphere

(1) Outline of the item

On-going monitoring of the air at the site of Nuclear Power Station has detected no significant increase in radiation levels.

(2) Noteworthy change in data in the past months

Except for the slight changes in the concentrations of Cs-134, Cs-137 which were nearly negligible, the monitoring result is ND (ND indicates that the measurement result is below the detection limit). In this regard, no announcement has been made by TEPCO for this item.

* Slight changes in the concentrations of Cs-134 were reported on January 17th and 24th

* Slight changes in the concentrations of Cs-137 were reported on January 17th, 22nd, 24th and 29th

(3) Monitoring result data

The monitoring results in the air at the site of Nuclear Power Station are available in the following webpage (Please see the calendar titled "in the air at the site of Power Station"). This monitoring result is updated every day on this site.

http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/index-e.html

3.1.2 Radionuclide releases to the sea (including groundwater monitoring results)

(1) General outline of the item

Results of radioactive nuclide analysis are published for the samples of groundwater at the east side of Unit 1-4 Turbine Buildings and seawater at the port in order to monitor the source and the extent of the radioactive materials in the groundwater, and to determine whether the materials included in groundwater are reaching the sea.

Increased radioactivity has been observed within the port, in an area smaller than 0.3 km^2. However, ongoing monitoring in the surrounding ocean area has detected no significant increase in radiation levels outside the port or in the open sea, and has shown that radiation levels in these areas remain within the standards of the World Health Organizations guidelines for drinking water.

(2) TEPCO's report on radionuclide releases to the sea

TEPCO issued a report which includes progress and status of the ground improvement and historical data of radioactive concentration in the groundwater.

This report is available online:

http://www.tepco.co.jp/en/nu/fukushima-np/handouts/2014/images/handouts_2tb-east-e.pdf

(3) Related information

Analyses regarding radionuclide releases are conducted in different parts of the sea (outside of the port, inside of the port, and inside of Unit 1-4 water intake channel). Results of these analyses and analysis results of groundwater are as follows (the information is automatically updated every day).

- Analysis Results of Groundwater (Unit 1-4 Bank Protection)

  http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2014/images/tb-east_map-e.pdf

- Analysis Results of Seawater (Outside of the Port)

  http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2014/images/seawater_map-e.pdf

- Analysis Results of Seawater (Inside of the Port)

  http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2014/images/intake_canal_map-e.pdf

- Analysis Results of Seawater (Inside of Unit 1-4 Water Intake Channel)

  http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2014/images/2tb-east_map-e.pdf

3.2: Offsite monitoring results

3.2.1 Monitoring results of air dose rates in the 20 Km radius zone around Fukushima Daiichi Nuclear Power Station (NPS)

(1) Outline of the item

The monitoring of air dose rates in the 20 Km radius zone around Fukushima Daiichi NPS has been conducted at 50 points in the zone (the types of detectors used for monitoring are NaI scintillation detectors and/or an ionization chamber type survey meters). The air dose rates in the 20 Km radius zone have continuously been decreasing since May 2011 (after the accident at Fukushima Daiichi NPS on March 11, 2013).

(2) Noteworthy updates in the past months

As described in 3.2 (1), the air dose rates in the 20 Km radius zone around the NPS have been in a downward trend, and the monitored air dose rates were stable in January 2014. Based on these results, any further announcement was not made on this item (e.g., significant increase of air dose rates in the 20 Km radius zone) in January2014.

(3) Monitoring results

The following URL leads to the monitoring results of air dose rates in the 20 Km radius zone around Fukushima Daiichi NPS in January 2014:

http://radioactivity.nsr.go.jp/en/list/239/list-201401.html

The following URL leads to an archive of monitoring results:

http://radioactivity.nsr.go.jp/en/list/239/list-1.html

3.2.2 Monitoring results of dust in air and soil in the 20 Km radius zone around Fukushima Daiichi NPS

(1) Dust

The monitoring results of dust obtained in January 2014 show that the concentrations of dust were either ND (ND indicates that the measurement result is below the detection limit) or very low. Based on the results, any further announcement was not made on this item (e.g., significant increase of the concentrations of dust) in January 2014.

The following URLs lead to the monitoring results (dated 13 February, 2014) of dust:

http://radioactivity.nsr.go.jp/en/contents/8000/7990/24/223-20140213.pdf

(2) Soil

Radiation monitoring of soil is conducted as appropriate. The latest monitoring of soil was conducted in January 2014. The following URL leads to the monitoring results (dated February 6, 2014) of soil:

http://radioactivity.nsr.go.jp/en/contents/8000/7962/24/223_20140206.pdf

(3) Previous monitoring results

The following URL provides the previous monitoring results (from April 2011 to the present) of dust in air and soil:

http://radioactivity.nsr.go.jp/en/list/240/list-1.html

3.2.3 Estimated values and measured values of environmental radioactivity at 1m height from the ground surface in other prefectures (46 prefectures in total) other than Fukushima Prefecture

(1) Outline

The air dose rates measured using the monitoring stations installed in other prefectures have mostly returned to the same level of the air dose rates before the accident.

(2) Updates in January 2014

The estimated and measured values were relatively stable in January 2014. Based on the results, any further announcement was not made on this item (e.g., significant increase of the estimated and measured values) in January 2014.

(3) Monitoring results

The following URL leads to the estimated and measured values, and new monitoring results are uploaded nearly every day:

http://radioactivity.nsr.go.jp/en/list/192/list-1.html

3.3: Marine monitoring results of seawater, sediment and biota

(1) Outline

Marine monitoring results in the area around Fukushima Daiichi NPS have indicated that the radiation levels outside the port or in the open sea have been relatively stable.

(2) Updates in January 2014

The marine monitoring results in January 2014 were relatively stable as described in (1) above. Based on the results, any further announcement was not made on this item (e.g., significant increase of marine monitoring results) in January 2014.

(3) Related information

The sea area monitoring is classified to be conducted in 5 areas (Area 1: Sea area close to TEPCO's Fukushima Daiichi NPS, Area 2: Coastal area, Area 3: Off-shore area, Area 4: Outer sea area, and Area 5: Tokyo bay area), and this information is available under the "Monitoring of Sea Water" section of the NRA webpage entitled "Readings of Sea Area Monitoring". This webpage also includes monitoring results of sediment under the "Monitoring of Marine Soil" section, and it is also classified into 4 areas (Area 1: Sea area close to TEPCO's Fukushima Daiichi NPS, Area 2: Coastal area, Area 3: Off-shore area, Area 4: Tokyo bay area). The NRA has been providing a weekly report on sea area monitoring results. "Readings of Sea Area Monitoring" webpage covers various issues and the webpage's information is periodically updated several times a week. The following URLs lead to this webpage and the weekly report on sea area monitoring results:

- Readings of Sea Area Monitoring

  http://radioactivity.nsr.go.jp/en/list/205/list-1.html

- Sea Area Monitoring (Weekly Report)

  http://radioactivity.nsr.go.jp/en/list/295/list-1.html

Section 4: Food products

4.1: Summary of testing

Food samples are routinely monitored to ensure that they are safe for all members of the public. During the month of January 2014, 25,017 samples were taken and analysed. Among these samples, 33 samples were found to be above the limits (Cs-134+Cs-137: 100 Becquerel/kg). This represents 0.13 percent of all samples.

Restrictions are imposed on the distribution of food products, if the level of radioactive contaminants of the food product exceeds the limit (Cs-134+Cs-137: 100 Becquerel/kg). Restrictions are to be removed, when the level of radioactive contaminants of the food product is monitored to be constantly below the limit for a certain period of time. Therefore, the products on which the distribution restrictions are newly imposed are the products whose radioactive contaminant level exceeded the limit in the past month. By the same logic, the products whose restrictions are newly removed are the products whose radioactive contaminant level has been lower than the limit for a certain period of time.

4.2: Results of monitoring food products

(1) Current situation and protective measures

The fact sheet uploaded in the link below is the summary of the current situation and the measures taken by the Government of Japan:

http://www.mhlw.go.jp/english/topics/2011eq/dl/food-130926_1.pdf

(2) Noteworthy updates in the past month

The lists of food products whose status regarding the restriction was changed are as follows.

(i) Products whose distribution was newly restricted in January

- None

(ii) Products whose restrictions were removed in January

- Japanese eel in Naka river in Ibaraki prefecture

(3) Monitoring results data

See the link below (new monitoring results are added nearly every day):

http://www.mhlw.go.jp/english/topics/2011eq/index_food_radioactive.html

(4) Information focused on the safety of the fishery products

The information that is provided above in (1)-(3) cover fishery products, but in addition to this information, further detailed information is available on the Fisheries Agency's website

http://www.jfa.maff.go.jp/e/inspection/index.html

(i) Summary of monitoring on fishery products

The first half of the website consists of summary of monitoring on fishery products. For further information and to see the actions taken to ensure the safety of fishery products, please referred to the fact sheet uploaded in the site. This fact sheet is available in English, French, Spanish, Russian, Chinese and Korean.

(ii) Monitoring results data

The second half of the website consists of various monitoring results on radioactivity measured in fishery products.

Section 5: Actions taken by the Japanese Government

5.1: Currently implemented public protective actions in place (i.e., food restrictions)

(1) Actions having been taken regarding food safety in January, 2014

Actions to restrict food distribution or removal of these restrictions are taken based on the monitoring results. For the products whose distribution was newly restricted or whose restrictions were removed in January, please refer to 4.2(2)

(2) Further information on this topic is available online:

http://www.mhlw.go.jp/english/topics/2011eq/index_food_press.html

(3) Supplementary note (explanation for fishery products)

The scope of the protective actions cover not only agricultural products but also fishery products. For further information about the monitoring result of the fishery products, please refer to Section 4.2(4).

5.2: Measures implemented to improve public communication

5.2.1 Information from the last months

The Government of Japan has actively been strengthening its communication process to ensure timely dissemination of accurate information on the current status of activities onsite in multiple languages for the international community. In 2014 Japan provided updates in January on 9, 15, 22 and 30, in February on 5, 17, 21, 26 and 28 and so far in March on 4. All of the updates provided to the IAEA are available on this webpage:

http://www.iaea.org/newscenter/news/2013/japan-basic-policy-full.html

5.2.2. Relevant activities in disseminating information to the public

(1) Press Conference

Recovery operations at Fukushima Daiichi NPS including contaminated water issues are one of the major issues which the Government of Japan has been focusing on. Since progress has been made frequently, there are updates arising on a daily basis. To explain the updates to the public, the Government of Japan disseminates the relevant information through press conferences. The Chief Cabinet Secretary and the Minister of Economy, Trade and Industry are the main briefers of the press conference, but other ministers or press secretaries may also be the briefer, depending on the subject.

(2) Information delivery to media

The government has been providing relevant information for both the domestic and the foreign press including that stationed in Tokyo and for other media, using various means such as press conferences, press briefings, press tours and press releases. For example, the Fisheries Agency has conducted a media tour to a radioactivity monitoring site for fishery products (Marine Ecology Research Institute) in order to facilitate better understanding for monitoring on fishery products.

(3) Providing information to foreign nations through diplomatic channels

Whenever there is a significant update, the Ministry of Foreign Affairs sends out a notification with relevant information to all foreign missions stationed in Tokyo. The same information is conveyed to all Japanese embassies, consulate generals, and missions. As necessary, the information would be shared with foreign nations and relevant organizations through these diplomatic channels.

In addition, the Ministry of Foreign Affairs holds briefing sessions on Fukushima Daiichi NPS issues for the foreign missions stationed in Tokyo, when there is a significant update. The information on the last briefing session is shown in the link below.

http://www.mofa.go.jp/policy/page3e_000121.html

(4) Disseminating information to Japanese populations

In general, the information is shared with Japanese populations through the channels shown above in (1)-(2). In addition to these efforts, the Government of Japan has improved the public communication by enriching the content of relevant ministries' webpage and by hosting a local briefing session on a case by case basis. METI regularly informs the progress of the decommissioning activities and contaminated water countermeasures to Fukushima prefecture and 13 local municipalities surrounding the site through video conference and direct visits.

5.2.3 Related websites

Information is frequently shared in English on the following websites:

- The Ministry of Foreign Affairs:

  http://www.mofa.go.jp/policy/page3e_000072.html

- The Nuclear Regulation Authority:

  http://www.nsr.go.jp/english/

- The Ministry of Economy, Trade and Industry:

  http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/index.html

- The Food Safety Commission of Japan:

  http://www.fsc.go.jp/english/emerg/radiological_index_e1.html

- The Ministry of Health Labour and Welfare:

  http://www.mhlw.go.jp/english/topics/2011eq/index_food_policies.html

- The Ministry of Agriculture, Forestry and Fisheries:

  http://www.maff.go.jp/e/quake/press_110312-1.html

- TEPCO (Information on water leakage):
  http://www.tepco.co.jp/en/nu/fukushima-np/water/index-e.html
- TEPCO (General information on activities onsite):
  http://www.tepco.co.jp/en/nu/fukushima-np/index-e.html

IAEA assessment on aspects presented in the March 2014 report *"Events and highlights on the progress related to recovery operations at Fukushima Daiichi NPS"*

Water overflow from a tank in H6 area on 20 February 2014

On 20 February 2014, TEPCO announced that approximately 100 tons of water overflowed from a tank storing radioactive concentrated saltwater from the reverse osmosis desalination system (http://www.tepco.co.jp/en/press/corp-com/release/2014/1234394_5892.html). According to TEPCO, this incident happened because valves in the inlet pipe were left open improperly, and this led to overfilling of the tank. The excess water escaped through the flange of the top plate and flowed to the ground through a rainwater drain pipe connected to the upper part of the tank. TEPCO was able to stop the overflow by closing the valves, and immediately started removing accumulated water and contaminated soil from the surrounding area. TEPCO believes none of the overflowed water reached the ocean as there is no pathway leading from that area to the sea, which is approximately 700 meters away. TEPCO checked the other storage tanks to make sure there were no additional overflows, and started an investigation into the cause of this incident.

Considering the high radioactivity concentration of the water stored in the tank, the IAEA recommends that TEPCO should take adequate measures to monitor and limit the spread of contamination due to this incident. The IAEA also encourages TEPCO to complete a thorough investigation and determine the root cause of this incident, and to take appropriate actions to prevent a similar occurrence in future.

When this incident occurred, the IAEA was notified and quickly shared this information with the international community through the public IAEA website and other communication channels. The IAEA considers the actions taken by Japan's Nuclear Regulatory Authority (NRA) following this incident to be appropriate. Based on the information that has been provided, IAEA experts consider that the leak poses no danger to the public.

- http://iaea.org/newscenter/pressreleases/2014/prn201404.html

Other reports on leaking storage water tanks

The NRA reported on leaks of contaminated water that were detected within the on-site area on 21 January 2014, 6 February 2014 and 20 February 2014. These spills were limited to the immediate vicinity of the leak; areas outside the Fukushima Daiichi Nuclear Power Plant (NPP) were not affected. The IAEA considers the actions ordered by NRA to be appropriate measures to prevent further dispersion of the radioactive spills.

Progress on the removal of fuel assemblies from the spent fuel pools

Removal of the first fuel assemblies from the Unit 4 spent fuel pool began on 18 November 2013. As of 3 March 2014, 418 (396 spent fuel assemblies and 22 non-irradiated fuel assemblies) out of 1533 fuel assemblies (1331 spent fuel assemblies and 202 non-irradiated fuel assemblies) have been transferred to the common pool. Since 17 December 2013, the work to remove rubble, such

as steel, deck plates and the roof torus from the Unit 3 spent fuel pool have been underway as a preparatory step to begin the installation process for a fuel removal cover.

On 25 February 2014, TEPCO announced that the work for removing fuel assemblies from the Unit 4 spent fuel pool was suspended due to a power failure, "caused by an incidental damage of a cable during an excavation work at the south side area of Unit 4." According to TEPCO, the cooling system was restarted approximately four hours after the power was restored, and fuel removal work then resumed.

The IAEA considers that substantial efforts have been employed by TEPCO to achieve this specific milestone towards decommissioning the plant. The IAEA also considers that although the event related to incidental damage of the cable is not significant, safety should always be the highest priority to ensure that adequate measures are taken to prevent human errors and to promptly mitigate their consequences. The IAEA welcomes the continued progress in the removal of the fuel at Unit 4 and on the decommissioning of the plant.

Monitoring of groundwater and seawater

Radionuclides in groundwater are monitored at 30 locations on the site of the Fukushima Daiichi NPP. Results are reported regularly for ^{134}Cs, ^{137}Cs, the total activity of beta-emitters, tritium and occasionally for ^{90}Sr. The measured activity levels vary from one observation point to another. On March 6, tritium was detected in all but three monitoring points. In eight of the monitoring points, caesium isotopes could not be detected. In two monitoring points, ^{137}Cs levels above 100 Bq/L were observed. Based on the information available, IAEA experts consider that the radionuclides being measured in these on-site wells do not cause any radiological impacts to the public as there is no connection between these wells and the public water supply.

Monitoring of radionuclides in seawater is performed regularly based on the document, *Implementation Guides on Sea Area Monitoring in FY2013* from 1 April 2013. This monitoring comprises primarily fish, but also seawater, sediment and marine biota collection.

- http://radioactivity.nsr.go.jp/en/contents/8000/7147/24/274_s_20130401.pdf

Recent results in the sea area around Fukushima Daiichi NPP have indicated that the concentration levels outside the port and in the open sea have been relatively stable. The monitoring programme includes seven measurement points in the immediate vicinity of the port of the plant and also covers offshore areas. On March 6, ^{137}Cs could only be detected in one of the samples with a reported level below 1 Bq/L. Tritium was not detected in any of the sampling points. Based on the information available, IAEA experts consider that these levels in the seawater do not cause any radiological concerns.

Marine monitoring results in recent months were relatively stable as previously described. Even the levels directly inside the port of the Fukushima Daiichi NPP are relatively low with most measurements less than 1 Bq/L for radio-cesium. This indicates that the measures from TEPCO to prevent contamination of the sea have been successful. The levels in seawater in the vicinity of the plant area are relatively stable. In most cases, ^{134}Cs and ^{137}Cs are below the detection limit of the analytical methods, and mostly below 1 Bq/L. The concentrations measured after the accident in March, April and May were approximately a factor of 100 000 times higher compared to present levels. The levels of tritium are below any concern.

- http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2014/images/intake_canal_map-e.pdf
- http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2014/images/seawater_map-e.pdf

The attached graph shows the trend over time of radio-caesium activity concentration at one station directly off-site the plant, as reported since March 2011. ^{131}I has a relatively short half-life and has been virtually undetectable in the area since the summer of 2011.

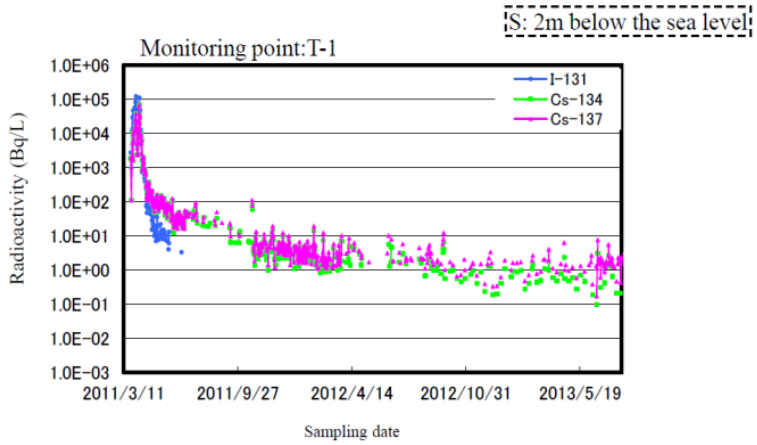

Fig 1: Temporal trend of ^{137}Cs, ^{134}Cs and ^{131}I activity concentration at Monitoring Point T1, near the discharge point from the NPP. This graph has been taken from the NRA website: http://radioactivity.nsr.go.jp/en/contents/8000/7742/24/engan.pdf. This website provides further information about temporal trends of several monitoring points.

There is a strong gradient of concentration in seawater from the discharge point to offshore areas, with higher levels at the coast and lower levels at offshore areas. This is illustrated in the following two figures on the next pages, which show surface water measurements based on the information provided by the NRA and TEPCO for 18 February 2014. These figures show that at more than 200 km offshore, there are measurements that are only slightly above the pre-accident background levels.

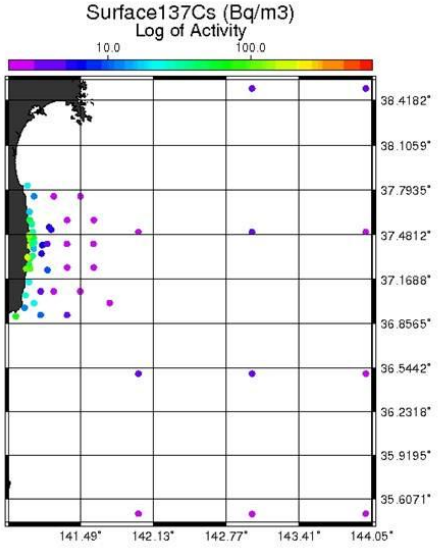

Fig 2: Surface activity concentration in seawater merged with data provided for 18 February 2014. The concentration is indicated with a logarithmic scale in order to cover the large gradient from the source near the Fukushima Daiichi NPP to the offshore area. The picture covers about 260 km offshore from the coast.

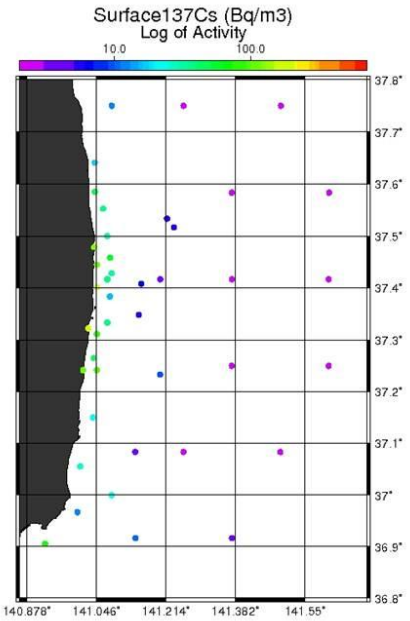

Fig 3: Surface activity concentration in seawater merged with the data provided for 18 February 2014. The concentration is indicated with a logarithmic scale in order to cover the large gradient from the source near the Fukushima Daiichi NPP to the offshore areas. The picture is the same as Fig. 2, but covers only 50 km offshore from the coast.

Regarding the monitoring of food products

The situation regarding food and agricultural production remains stable. Monitoring of food, including seafood, both on the market and also in production fields, continues and has been in place since the early days of the emergency. Due to the reported leaks of radionuclide contaminated water at the Fukushima Daiichi NPP, there is a heightened interest in monitoring of the terrestrial and marine environments in the vicinity of the Fukushima Daiichi NPP. It is, therefore, understandable that reports from the authorities in Japan highlight the information available on the monitoring of fishery products in relation to the continuing suspension of general fishing activities offshore of Fukushima prefecture.

The results of monitoring and surveillance of caesium radionuclides in food items is complementary to the environmental monitoring of radionuclide levels in the immediate vicinity of the Fukushima Daiichi NPP. Food monitoring results do not indicate any new or any immediate issues for food products or the food supply chain. Revisions and up-dates to food restrictions are based on the levels of caesium radionuclides detected in food. Any changes to food restrictions indicate the continued vigilance of the authorities in Japan, and demonstrate their commitment to protecting consumers, commerce and trade.

Sampling results indicate that caesium radionuclides in the majority of food items sampled are either not measurable or their concentrations are below regulatory limits. However, some food samples (much less than 1%) are found to contain levels of caesium radionuclides above regulatory limits (mainly in the meat of wild animals such as boar, pheasant and deer, but also to a lesser degree in fish). A comprehensive surveillance and control regime remains in place in Japan. The monitoring and sampling regime is used to identify where and when foods become affected as the caesium radionuclides disperse in the environment. The mechanism for placing restrictions on affected food products is based on the results of surveillance monitoring targeted specifically at food commodities. Legal measures apply under domestic food law to prevent unacceptable food from being marketed and, where necessary, further legal restrictions or voluntary measures are

also applied to production fields or activities related to the collection or distribution of food. In summary, systems are in place to prevent food and agricultural products with caesium radionuclide levels in excess of Japan's legal limits from entering the supply chain, and these systems continue to be implemented.

Based on the information that has been made available, the Joint FAO / IAEA Division understands that the measures taken to monitor and rapidly respond to any issues in the food system regarding radionuclide contamination are appropriate, and that the food supply chain in Japan is safely under control.

Reporting on hilgendorf saucord (a type of fish) restrictions implemented in late February

On 28 February 2014, Japan provided the IAEA with an information update, stating that they have taken actions in response to a sample of hilgendorf saucord (a type of fish) caught offshore in the Fukushima region that was monitored and found to exceed national criteria for distribution to markets.

- http://www.iaea.org/newscenter/news/2014/infcirc_mofa280214.pdf

The sample that exceeded the Japanese criteria had a combined ^{137}Cs, ^{134}Cs specific activity of 112.266 Bq/kg. Based on this survey, the distribution of all the hilgendorf saucord that were caught on 27 February 2014 was suspended (total amount of approximately 13.2 kg). Any of the hilgendorf saucord caught in the same survey will never be provided to the market. The experts at the IAEA consider that compared to the normal results reported for the fish in the area, this specific measurement appears to be an exception. Most of the fish monitored generally have levels less than 100 Bq/kg.

The Agency considered that this situation demonstrated the capability of the monitoring programme in Japan to detect food that exceeds national criteria, and to take appropriate measures in response. The Agency considered that this information provided good assurance on the quality of the management and the safety of the food supply chain.

Japan request for an Integrated Regulatory Review Service mission

The IAEA has received a request for conducting an Integrated Regulatory Review Service (IRRS) mission in Japan to be scheduled for late 2015, and the Agency is currently working with NRA to prepare for the upcoming IRRS, including the self-assessment of the governmental and regulatory nuclear and radiation safety infrastructure, which is a pre-requisite for an IRRS mission. The first activity, covering the IRRS process and the IAEA self-assessment methodology is planned for May 2014.