

# Events and highlights on the progress related to recovery operations at Fukushima Daiichi NPS

December, 2013

## 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/2013/pdf/factsheet.pdf](http://www.kantei.go.jp/foreign/96_abe/decisions/2013/pdf/factsheet.pdf)

(2) Information update from the previous fact sheet

There have been no updates from a previous fact sheet.

(3) The link of the previous fact sheet

There is no previous fact sheet at the moment.

## 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 topic (in past three months)

Newly added topics of the past three months are as follows. For the detail of these issues, please refer to (2) "related information".

- Fuel removal from Unit 4 spent fuel pool has started at Fukushima Daiichi NPS (November 18, 2013)

- Nuclear Regulatory Authority (NRA)'s actions toward TEPCO's fuel removal from Unit 4 reactor building, Fukushima Daiichi NPS (November 14 and 15, 2013)

- METI (Ministry of Economy, Trade and Industry) selected a successful applicant for subsidy project for the contaminated water issue (large scale demonstration project of multi- nuclide removal equipment with superior performance) (Oct, 10, 2013)

- METI selected a successful applicant for subsidy project for the contaminated water issue (large scale demonstration project of land-side impermeable walls utilizing the frozen soil method) (Oct, 9, 2013)

- Identification of risks of contaminated water and examination of countermeasures (Sep, 27, 2013)

- METI invites technical proposals for countermeasures against contaminated water from inside and outside Japan (Sep, 20- Oct, 23, 2013)

(ii) Information update on the decommissioning process

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

- The latest Progress status report (as of Oct 31, 2013) is available online  
<http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20131031-e.pdf>

The current report discusses many recent updates to the decommissioning process such as an accomplishment of major preparatory process (e.g., installation of overhanging crane, Fuel Handling Machine, and cover), aiming commencement of fuel removal from the Unit 4 spent fuel pool in November 2013. The figure below shows some parts of this new progress.

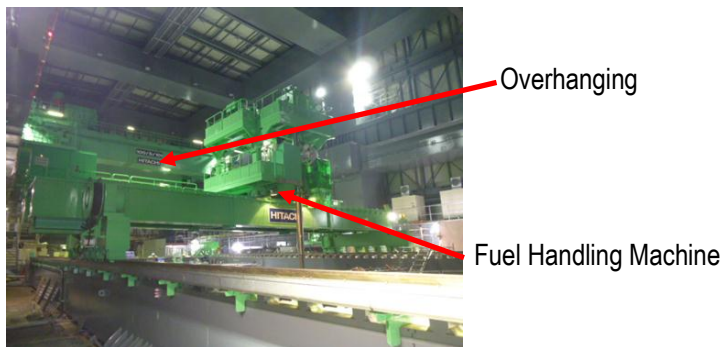


Figure 1: Installation of overhanging crane and Fuel Handling Machine in Unit 4



Figure 2: Unit 4 with a cover for fuel removal installed

- Archives of the status report are available online:  
[http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/#progress\\_status](http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/#progress_status)

(2) Related information

Information provided in the link below includes the description and the schedule of countermeasures (both immediate and fundamental) for the contaminated issues in order to remove the source of contamination, isolate groundwater from contamination, and prevent further leakage of contaminated water.

[http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20130903\\_01a.pdf](http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20130903_01a.pdf)

However, the schedule of the implementation of the countermeasures was revised. Therefore, as for the newest schedule and identified risks, please see the following link (These documents will be revised soon).

[http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20130927\\_001a.pdf](http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/20130927_001a.pdf)

As for other relevant issues, “METI’s website for decommissioning” covers various issues.

- METI's website for decommissioning  
<http://www.meti.go.jp/english/earthquake/nuclear/decommissioning/index.html>  
For NRA’s recent news release see the following link.
- <http://www.nsr.go.jp/english/newsrelease/>  
For TEPCO’s activity, please see TEPCO’s website.

- TEPCO's website for current situation of Fukushima Daiichi and Daini nuclear power station  
<http://www.tepco.co.jp/en/nu/fukushima-np/index-e.html>

## 2.2 Recent incidents and progress (in past three months)

Related information:

- Water leakage from a desalination system at TEPCO's Fukushima Daiichi NPS (October 9, 2013) <http://www.nsr.go.jp/english/data/131010-2.pdf>
- Water leakage from a tank in B Tank South Area at TEPCO's Fukushima Daiichi NPS (October 3, 2013) [http://www.nsr.go.jp/english/e\\_news/data/13/1003.pdf](http://www.nsr.go.jp/english/e_news/data/13/1003.pdf)

## Section 3: Monitoring results

### 3.1: Onsite monitoring results reported by TEPCO including details on

#### -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 month

Except for the slight changes in the density 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 density of Cs-134 were detected on November 22<sup>nd</sup>, 23<sup>rd</sup> and 29<sup>th</sup>

\* Slight changes in the density of Cs-137 were detected on November 8<sup>th</sup>, 15<sup>th</sup>, 22<sup>nd</sup>, 23<sup>rd</sup> and 29<sup>th</sup>

##### (3) Monitoring result data

The monitoring results in the air at the site of Nuclear Power Station is available in the following webpage (In the middle of the page, there is a calendar titled "in the air at the site of Power Station"). The monitoring result is updated every day in 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 whether the materials included in groundwater affect the sea.

Increased radioactivity has been observed within the port, in an area smaller than 0.3 km<sup>2</sup>. 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 WHO's guidelines for drinking water.

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

Regarding the analyses of radionuclide released to the sea, TEPCO issued a report which includes the trend of the transition of radioactive concentration and other relevant information. This document helps capturing the recent features of the radionuclide release to the sea. The report has been made available on the IAEA webpage that accompanies this report.

#### (3) Related information

Analyses regarding radionuclide releases are conducted in different parts of the sea (1 outside of the port, 2 inside of the port, and 3 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 to the latest data everyday).

- Analysis Results of Groundwater (Unit 1-4 Bank Protection)  
[http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2013/images/tb-east\\_map-e.pdf](http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2013/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/2013/images/seawater\\_map-e.pdf](http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2013/images/seawater_map-e.pdf)
- Analysis Results of Seawater (Inside of the Port)  
[http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2013/images/intake\\_canal\\_map-e.pdf](http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2013/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/2013/images/2tb-east\\_map-e.pdf](http://www.tepco.co.jp/en/nu/fukushima-np/f1/smp/2013/images/2tb-east_map-e.pdf)

### 3.2: Offsite monitoring results

#### 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 55 points in the zone (the types of detectors used in the monitoring are a NaI scintillator detector or an ionization chamber type survey meter). The air dose rates in the 20 Km radius zone have continuously been decreased since May 2011 (after the accident occurrence at Fukushima Daiichi NPS on March 11, 2011).

(2) Noteworthy updates in the past months

As described in (1) above, 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 have been stable in November 2013. 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 November 2013.

(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 November 2013:

<http://radioactivity.nsr.go.jp/en/list/239/list-201311.html>

The following URL leads to an archive of monitoring results:

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

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 November 2013 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 November 2013.

The following URLs lead to the monitoring results (dated 21 and 29 November, 2013) of dust:

[http://radioactivity.nsr.go.jp/en/contents/8000/7630/24/223\\_1121.pdf](http://radioactivity.nsr.go.jp/en/contents/8000/7630/24/223_1121.pdf)

[http://radioactivity.nsr.go.jp/en/contents/8000/7666/24/223\\_1129.pdf](http://radioactivity.nsr.go.jp/en/contents/8000/7666/24/223_1129.pdf)

(2) Soil

Radiation monitoring of soil is conducted as appropriate. The latest monitoring of soil was conducted in October 2013. The following URL leads to the monitoring results (dated October 8, 2013) of soil:

[http://radioactivity.nsr.go.jp/en/contents/8000/7467/24/223\\_1023.pdf](http://radioactivity.nsr.go.jp/en/contents/8000/7467/24/223_1023.pdf)

(3) Previous monitoring results

The following URL leads to 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. Estimated values and measured values of environmental radioactivity at 1m height from the ground surface in other prefectures (46 prefectures in total) than Fukushima Prefecture

(1) Outline

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

(2) Updates in November 2013

The estimated and measured values were relatively stable in November 2013. Based on the results, any further announcement was not made on this item (e.g., significant increase of the estimated and measured values) in November 2013.

(3) Monitoring results

The following URL leads to the estimated and measured values, and new monitoring results will be 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 November 2013

The marine monitoring results in November 2013 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 November 2013. Also, a new action was taken by the Government of Japan in November as follows:

- Enhancement of sea area monitoring by the Nuclear Regulation Authority (NRA) (November 19, 2013) <http://www.nsr.go.jp/english/data/131119.pdf>

(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 "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). And 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 will be 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 November, 34,721 samples were taken and analysed. Among these samples, 84 samples were found to be above the limits (Cs-134+Cs-137: 100 Becquerel/kg). This represents 0.24 percent of all samples.

Restrictions are imposed on 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 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](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 November
  - Wild mushroom produced in Aizumisato-machi, Fukushima prefecture.
  - Japanese eel captured in Tone river (limiting lower reaches from Sakai Ohashi but including its branches), Ibaraki prefecture.
  - Japanese eel captured in Tone river (limiting lower reaches from Sakai Ohashi, but including its branches and excluding upper reaches from Inba drainage pump station and Inba floodgate; lower reaches from Ryosoyousui Daiichi water pumping station; Yasuji river; Yodaura lake and Yodaura river), Chiba prefecture.
  
- (ii) Products whose restrictions were removed in November
  - Tea leaves in Kasumigaura-shi and Tsukubamirai-shi, Ibaraki prefecture
  - (partial cancelation) Soybeans produced in Motomiya-shi (limiting to former Wagisawa-mura (Shirasawa-mura)) and Minamisoma-shi (limiting to former Ishigami-mura)), Fukushima prefecture

#### (3) Monitoring results data

See the link below (a new monitoring result will be added nearly every day):

[http://www.mhlw.go.jp/english/topics/2011eq/index\\_food\\_radioactive.html](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 as follows:

(i) Summary of the actions taken for the safety of the fishery products

The fact sheet uploaded in the link below is the summary of the safety of the fishery products:

<http://www.jfa.maff.go.jp/e/inspection/pdf/131203english.pdf>

(ii) Monitoring results data

See the link below (Report for the monitoring results on cesium is provided quarterly and the report for the monitoring results on strontium has become newly available in Nov 2013)

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

## **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 November, 2013

Restrictions of food distribution or removal of the restrictions are taken according to the monitoring results. As for the detail of the products whose distribution was newly restricted or whose restrictions were removed in November, please refer to 4.2(2)

2. Further information is available online:

[http://www.mhlw.go.jp/english/topics/2011eq/index\\_food\\_press.html](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 covers 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**

1. Information from the last month

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. During the month of November 2013 the Government of Japan provided several specific updates to the IAEA on 8, 15, 19 and 27 November:

-<http://www.iaea.org/newscenter/news/2013/japan-basic-policy9.html>

-<http://www.iaea.org/newscenter/news/2013/japan-basic-policy10.html>

-<http://www.iaea.org/newscenter/news/2013/japan-basic-policy11.html>

-<http://www.iaea.org/newscenter/news/2013/japan-basic-policy12.html>



## 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 the other media, using various means such as press conferences, press briefings, press tours and press releases.

### (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](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 municipals surrounding the site through video conference and direct visits.

## 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](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](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](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](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 December 2013 report “Events and highlights on the progress related to recovery operations at Fukushima Daiichi NPS”**

### **Current conditions onsite**

The *International Peer Review of Japan's Mid-and-Long-Term Roadmap towards the Decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station Units 1-4* conducted a visit to Fukushima Daiichi Nuclear Power Station from 25 November to 4 December 2013. Participants of the IAEA Decommissioning Mission had an opportunity to observe some of the listed activities on-site and also to view more detailed technical information which was presented by Japanese counterpart during the Mission. Progress in implementation of on-site activities has been significant, but the recovery situation remains complex. A preliminary summary report was submitted to the Government of Japan on 4 December 2013. The report highlighted:

- TEPCO has successfully begun to remove fuel assemblies from the Spent Fuel Pool of Reactor Unit 4, a task that is essential to ensuring the long-term stability of the accident site;
- While many challenges remain, the Government of Japan and TEPCO have developed a comprehensive set of well-defined measures to manage Fukushima Daiichi's extensive contaminated water issues;
- The NRA and other Japanese institutions have established a comprehensive monitoring programme to track concentrations of significant radionuclides and associated radiation levels in the environment around the accident site; and

TEPCO and METI have pressed forward with developing innovative tools to address key technical problems. For example, the development of remote technology to identify the location of reactor

leaks has seen initial success and should serve as a significant step towards repairing the containment vessels.

In addition, the IAEA team made an assessment and provided advice in areas where current practices could be improved. For example:

- The Government of Japan and TEPCO were encouraged to continue their efforts to address water issues at the site, including preventing groundwater from entering the reactor buildings and monitoring the effectiveness of all such measures;
- Regarding the growing amounts of contaminated water at the site, TEPCO should bolster its efforts to treat this water and then examine all options for its further management, including the possibility of resuming controlled discharges in compliance with authorized limits. To pursue this option, TEPCO should prepare appropriate safety and environmental impact assessments and submit them for regulatory review;
- Japan needs to continue its transition to long-term stability of the site and to develop waste management solutions. Waste facilities should be planned to support the decommissioning process for its lifetime, and a laboratory should be established for waste characterization; and
- The NRA should enhance the seawater monitoring programme by coordinating inter-laboratory comparisons to ensure good harmonization of the environmental data.

It is expected that the situation onsite will continue to be very challenging and will require eventual resolution to ensure the plant's long-term stability.

A press release was issued by the IAEA on the date the mission concluded which has additional information:

<http://www.iaea.org/newscenter/pressreleases/2013/prn201327.html>

The preliminary summary report is available online which contains 19 acknowledgements and advisory points that were provided by the team:

<http://www.iaea.org/newscenter/focus/fukushima/missionreport041213.pdf>

### **Increased measurements in the sea**

It is important to acknowledge that although increased radionuclide concentrations have been monitored in the sea, these have occurred only in a small area within the port of the Fukushima Daiichi Nuclear Power Station. The monitoring results that have been provided for the surrounding sea region and off shore areas indicated no rise in radionuclide concentrations and remain within the WHO guidelines for drinking water. The Japanese Government has been providing weekly updates to the IAEA on the monitoring results in the marine environment. Based

on these reports and the information that has been made available, the IAEA considers the public is safe and sees no reason why this should not continue to be the case in the future.

### **Monitoring of food products**

Since the latter part of 2013 there has been an increased level of interest regarding radionuclides in food items, especially fish, due to the reports of radionuclide contaminated water leakage at the Fukushima Daiichi Nuclear Power Station. Monitoring of food, both on the market and from production areas, continues and has been in place since the early days of the emergency. The results of monitoring and surveillance of food items does not indicate any new or any immediate issues for food products. The implementation and the removal of restrictions on food indicate the continued vigilance of the authorities in Japan and their commitment to protecting consumers and trade.

While caesium radionuclides remain at higher concentrations in some of such food products as wild meats, fish at the bottom of the sea and wild fungi, the vast majority of monitoring results indicate that radionuclide levels in foods are below levels of concern. A comprehensive surveillance and control regime is in place in Japan. A monitoring and sampling regime is used to identify where and when foods become affected as the inventory of caesium radionuclides in the environment is dispersed. The mechanism for placing restrictions on affected products is dynamic in order to respond to the surveillance monitoring. Legal measures apply under domestic food law to prevent unacceptable food from being marketed and further legal restrictions (or voluntary measures if more appropriate) are also applied or up-dated to cover production areas or activities related to the distribution of food. In summary, mechanisms are in place to prevent food with radionuclide levels in excess of the legal limits from entering the supply chain and these mechanisms 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 public food supply is safe.

### **IAEA comments on improvements to public communication**

It is clear that measures are being implemented to improve public communication by the Japanese Government on the situation of the recovery operations at the Fukushima Daiichi Nuclear Power Station. The Agency recognizes these concrete and clear actions that have been undertaken to improve global communication and foster a broader understanding of the wide range of the on-going activities. The IAEA welcomes such clear efforts and will continue to share this information provided by the Government of Japan with its Member States and the public.