## Press briefing at the Prime Minister's Office for members of the foreign press

## 18 April 2011

Mr. Noriyuki Shikata, Deputy Cabinet Secretary for Public Relations: Good evening. We would like to start this evening's press briefing for the international press. My name is Noriyuki Shikata, Deputy Cabinet Secretary for Public Relations at the Prime Minister's Office. Today's briefers are the following officials: to my right is Mr. Hidehiko Nishiyama, Deputy Director-General of the Nuclear and Industrial Safety Agency (NISA); and to his right is Mr. Takeshi Matsunaga, Assistant Press Secretary of the Ministry of Foreign Affairs (MOFA); and to my left is Mr. Shinichi Kawarada, Advisor to the Ministry of Education, Culture, Sports, Science and Technology (MEXT); and to his left is Mr. Masanori Shinano, Counselor Secretariat of the Nuclear Safety Commission (NSC); and lastly to his left is Mr. Eiichi Yokota, Senior Technical Officer of the Food Safety Department of the Ministry of Health, Labour and Welfare (MHLW).

At the outset, I would like to just introduce to you a couple of points made by Chief Cabinet Secretary Edano at today's press conference. Regarding Tokyo Electric Power Company's (TEPCO) roadmap, before getting into Mr. Edano's comments, Prime Minster Kan mentioned that the government will fully cooperate to realize the roadmap TEPCO announced as soon as possible. Mr. Edano mentioned that as for the prospects for bringing the accidents at Fukushima Daiichi Nuclear Power Station under control, the Japanese government is of the view that it is certainly possible under the roadmap, and the government will scrutinize how to proceed in settling this situation step-by-step towards regaining control of Fukushima Daiichi Nuclear Power Station.

Regarding the issue of the residents near the power plant returning to their homes, at this juncture it is difficult for the government to develop a new outlook until having firmly checked the soil in each area. I am talking about the 20 or 30km radius. For this reason, the Japanese government would like to demonstrate the outlook with necessary research by bringing the accidents under control at an early stage.

Lastly, what Mr. Edano mentioned is, regarding the issue of going back home, the Japanese government will make the utmost efforts in bringing the accident under control so that the residents who wish to go back home can work on reconstruction, though the

timing may be different from the residents' wishes. So the government will make utmost efforts in realizing residents going back home at an early juncture.

So now let me move onto the next speaker, Mr. Nishiyama of NISA.

Mr. Nishiyama: Thank you, Mr. Shikata. Based on the roadmap towards the restoration of Fukushima Daiichi Nuclear Power Station announced by TEPCO, which was referred to by Mr. Shikata earlier, I would like to describe our short- to mid-term strategy for each plant and other parts of Fukushima Daiichi Nuclear Power Station. Short- to mid-term means around three months or so.

Regarding Unit 1, as we injected nitrogen into the containment vessel of Unit 1, we came to know that the water we introduced to the pressure vessel has been accumulating in the containment vessel. Taking advantage of this fact, we are aiming to flood the containment vessel up to the top of the active fuel as a cooling measure. In addition to the flooding, we will seek to install heat exchangers. We need to conduct on-site research and draw a detailed design before we begin the work. The heat exchangers will most likely utilize air as the coolant.

Regarding Unit 2, this unit suffered from an explosion at the suppression pool. Therefore, it will be difficult for us to flood the containment vessel of Unit 2 because of the damage there. We will consider a sealing measure at the damaged location. If we are successful, we will implement cooling measures similar to those for Units 1 and 3, which I will mention later. In the meantime, it is important to store the highly-irradiated water in the irradiated waste disposal system, which will be ready very soon and decontaminate and dissolve the water with newly-created water processing facilities and store it in tanks. We need to examine and implement back-up measures such as the installation of additional tanks or pools for leakage prevention by coagulation for highly-irradiated water. For water with lower levels of radiation, we need to increase storage capacity by adding tanks, barges, and megafloats. We may be able to reuse the processed water as reactor coolant.

For Unit 3, it is important to remove debris so that we can do the following work smoothly. First, we will inject nitrogen into the containment vessel of Unit 3. Upon seeing the result of this, we will flood the containment vessel up to the top of the active fuel, as we will do with Unit 1. We will seek to install heat exchangers. We need to

conduct on-site research on Unit 3 to draw a detailed design before we begin the work, as I said earlier with Unit 1. These heat exchangers will also most likely use air as the coolant.

To do that work, and especially to install the heat exchangers, it is important to have access to the reactor buildings. We are assessing the condition there with robots. We found the radiation dose in Units 1 and 3 ranging from 10 to 50mSv/h.

Regarding the spent fuel pools of Units 1, 3, and 4, currently fresh water is being injected into those units from outside with concrete pumping machines. In the case of Unit 2, we are introducing water through the unit's normal cooling line. We will continue to inject water in the same way and we will try to restore the normal cooling systems of Units 1, 3, and also 4. We will be able to install heat exchangers to cool down the spent fuel.

Regarding Unit 4, very recently we threw approximately 140t of fresh water into the spent fuel pool of Unit 4, yesterday. Regarding the spent fuel pool of Unit 4, we will try to install a supporting structure under the bottom of the pool of Unit 4.

Regarding the mitigation of the release of radioactive materials into the atmosphere and from the soil, we recognize that debris are scattered outside the buildings and radioactive materials are being scattered. We will inhibit the scattering of radioactive materials by the full-scale dispersion of an inhibitor, which is a synthetic plastic emulsion, after confirming its performance by tests. We will remove debris with remotely controlled units. Separately, we will begin installing reactor building covers with ventilators and filters; this is for shielding radiation.

Lastly, we will expand and enhance monitoring and inform our results fast and accurately to the public. That is all for my description of the reflection of the roadmap to the actual situation of the plants.

In concluding my remarks, I would like to touch upon METI Minister Kaieda's comments regarding this roadmap. Minister Kaieda commented on three points: The government will request TEPCO to ensure implementation of this roadmap steadily and as early as possible. To this end, NISA, our agency, and others, will make regular follow-ups, monitoring the progress of the works and necessary safety checks. Secondly,

the government will request TEPCO to ensure the mobilization and deployment of workers, the procurement and preparation of equipment and materials, and the arrangement of accommodation and other facilities, which are necessary to ensure implementation of the roadmap. Lastly, at the end of Step 2, which is when the release of radioactive materials will be under control – at this stage, the Government will review the deliberate evacuation area, and the evacuation prepared area, and up until that time, we will consider the details of review criteria, and we will decontaminate the widest possible area. By implementing this, we would like to announce within 6 to 9 months, as our target, to the residents of some of the areas, as to whether they will be able to go home. Thank you. That is all for my report.

Mr. Shikata: I would like to ask Mr. Shinichi Kawarada of MEXT to go next.

Mr. Kawarada: Thank you, I am Kawarada. MEXT has been carrying out the monitoring of the environmental radioactivity in the area 20km out of the Fukushima Daiichi Nuclear Power Plant. We are doing air, sea, and land monitoring. The general trend is, as we have been covering, the same as we have reported.

Please look at page 5 in the material we have distributed. The trend of the spatial radiation dosage is shown here and for the past five days or so it has been flat.

Today, we have the data on the sea on page 8. I do not have the English.

From pages 8, 9, and 10, you will see that there are monitoring posts located in the areas as indicated here, and there is Fukushima Daiichi Nuclear Power Plant, and there are monitoring posts maybe 30km out from this Fukushima Daiichi Nuclear Power Plant. I am sorry, I was referring to the wrong pages. These are on pages 12 and 13. I am sorry, they are only in Japanese, but you will see that they are off of the coast by maybe 30km from the Fukushima Daiichi Nuclear Power Plant. These are data that are indicated here.

On page 13 and 14, the radioactive water release seems to have impacted these monitoring posts. Especially on page 14, you will notice that there are iodine 131 and cesium 137 detected in this chronological order. Number 3, 5, and 7 monitoring posts, and as the days go by, you will see that there is a significant amount detected.

Also, MEXT has obtained the data from all the prefectures, and on pages 23 and 24, these are the spatial radiation doses. Of course, Fukushima has a high dosage rate, but in the areas surrounding Fukushima, these prefectures have come back to the normal level of the radiation dosage.

On page 26, iodine 131 and cesium 137 data are indicated. There are hardly any points where detection is made. In the areas very close to Fukushima, in some of these prefectures, there is a minute amount, very small amount found. So, this is the report from us.

Mr. Shikata: I would like to ask Mr. Shinano of the NSC to go next.

Mr. Shinano: Thank you, good evening. Now, on behalf of the NSC, we have prepared two sets of materials. One looks familiar: it is a daily report, being the evaluation of environment radiation monitoring results. Another sheet of paper is titled, "The 23<sup>rd</sup> Extraordinary Meeting of the NSC." It was convened at 5:00 this afternoon.

Let me start with the first document: The evaluation of the environment radiation monitoring results. The evaluation results based on the information published between 10:00 on 16 April to 10:00 on 17 April are described in this document. Overall, we have not detected any data that might harm the human health.

If you go to the second item, the spatial iodine and cesium both showed some increase. However, cesium is below the standard, and for the iodine, it is above the standard. But, again, it does not result in any adverse effects on people's health. Going to the environmental sample for iodine and cesium, the surface layer of the seawater demonstrated some increase, but if you go down to the lower layer, they are not detected, neither the iodine nor cesium. And also, if you look at the dust over the sea, the numbers are below the data of the previous day. So on a qualitative basis, the spread is on a horizontal basis rather than a vertical basis.

Going to the fifth item, which is the environmental radioactivity survey by prefecture, the tap water cesium and iodine numbers were above those of the previous day, but again, they were below the limit for the intake. Therefore, we conclude that they do not pose any threat to human health. So these are the evaluation results of the data monitored.

There is another piece of paper, which is the agenda of the NSC meeting that was convened earlier this afternoon. The NSC meets on a regular basis once a week. This has been our practice, and of course the meeting this afternoon is a part of those series of meetings.

There were three agenda items focused on the impact of the recent earthquakes on the nuclear power plant. The NSC, during the meeting, listened to the official report of NISA. It is not that which would trigger any immediate action on the side of the NSC, but the meeting was convened to obtain the formal report of NISA.

The first agenda item was the status of the accident at Fukushima Daiichi Nuclear Power Plant. Reports were made on the fuel within the reactor.

The second was the additional instructions by NISA for nuclear facilities to ensure urgent safety responses. So the NSC heard the report by NISA.

The third has to do with Tohoku Electric Power at Onagawa Nuclear Power Plant. On 1 April in the emergency diesel generator that has been in the process of testing they found a problem, and therefore the damage and the actions taken after there were reported, for this emergency diesel generator A at Unit 1 of Onagawa Nuclear Power Plant.

The fourth and fifth are not related to the disaster. But this is again, our practice, to receive reports on such. Also, again, we discussed the activities of the NSC.

So, Japanese details of the meeting will be posted by the end of the day, and part of those, the critical points, will be translated into English and will be posted on our website for your reference.

Mr. Shikata: I would like to ask Mr. Yokota from MHLW to go next.

Mr. Yokota: During the weekend, Friday, Saturday and Sunday, there were some testing results provided on foodstuff.

On pages 1 and 2, you will see those that were reported on 11 April. There were 34 samples that were tested, and the results are seen on the right hand column. There were none that exceeded the provisional regulations.

On pages 3 and 4, the results that were posted on 16 April are found. There were 65 samples for which the test results were reported, and you will see on the right hand side that they are all under the provisional standard.

On page 5, you will see the result reported on Sunday, 17 April. There were all together 51 sample reports reported, and you will see the results of that. There is one that is grey. For these four samples, they exceeded the provisional regulatory value. Their prefecture is Fukushima, and the product involved is shiitake. Of these four samples, three are Minamisoma, Date, and Iidate produce. And the shipment was banned as of 13 April already. For the cities of Fukushima, we understand that they have not shipped any of these shiitake. Today, we also instructed the ban on shipments, so none of these shiitake have been shipped.

There is another sheet which is the compilation of results thus far. So if you could refer to them. So that is the report from me.

Mr. Shikata: I would like to ask Mr. Matsunaga of MOFA to go next.

Mr. Matsunaga: Thank you Mr. Shikata. I would like to report to you today that the number of embassies in Tokyo which are temporarily closed is only five, with the reopening of a few additional embassies in Tokyo today. The number once was 33, and as I mentioned, the number is now only five.

That is all I have to say today. Thank you.

Mr. Shikata: Thank you very much. Now we would like to open the floor for questions, when you ask a question, please identify yourself with your name and affiliation and limit it to only one question. Anthony? Please use the microphones.

QUESTION (Mr. Rowley, Singapore Business Times): My question is to Mr. Nishiyama. This is obviously a very difficult and complicated task you have, but what can you tell us could go wrong at this stage? Could you say now with any certainty that

a meltdown in any of the reactors is impossible now, that you have reached the point where you have the worst case scenario under control, in other words, that there cannot be a meltdown in any of the reactors? And just following on that, the covers that you referred to, can you say a little bit more about what you intend to cover the reactors with, and how long the reactors would remain in place in this covered state?

Mr. Nishiyama: First of all, in regard to the reactor meltdown, we want to ensure that no such incident occurs, and therefore, we want to maintain the current relatively stable situation. For this purpose, we are, for example, injecting water into the reactors, so as to ensure that the stable condition be maintained.

Looking at it historically and also looking at what has happened around the world up to this time it is truly unprecedented. What we are trying to do here is trying to fill up a containment vessel with water, and therefore we have to take into consideration various possibilities and proceed with the work very carefully.

Now as for the cover for the reactors, we think this will only be a temporary measure. To just give you an image of what we're talking about here, please try to imagine the construction sites where they are demolishing buildings and the sheet that is covering it to try to keep fragments from dispensing.

Also, in order to avoid this cover hindering the work and also to provide a good working environment for the workers, we have to ensure that the cover is designed in such a way that air can be taken in. We also believe that we need to secure the necessary access roads.

QUESTION (Mr. Eckert, Reuters): For Mr. Nishiyama. Today in the Japanese briefing, there was a bit of confusion about how much water there was in Unit 4 - I think the figure was 20cm and then 5m. Can you explain that and then, does that mean you have to remove a lot more water than originally expected?

Mr. Nishiyama: In regard to Unit 4, unlike Units 1 to 3, the problem is only the spent fuel pool, and therefore if we can secure enough water inside this pool to cool it, then that in itself will be sufficient. Therefore we do not believe that for Unit 4 it is an essential priority issue that we have to remove the stagnant water inside.

QUESTION (Mr. Bradshaw, New York Times): When I asked Mr. Hosono yesterday about the biggest risk to the project, he responded that nobody had ever done these kinds of heat exchangers before. That prompted questions from my editors because we hadn't heard that much about the heat exchangers and so they were wondering if you're going to need to build one heat exchanger for each spent fuel pool and one heat exchanger for each reactor, or is this one giant heat exchanger? How many heat exchangers are you talking about building? And then also just a point of clarification - when Mr. Hosono talked about decontamination, do you start with the five communities that are more than 30km away or do you start with the area between 20 and 30km? It wasn't clear which of those comes first.

Mr. Nishiyama: First of all, with regard to the heat exchangers, in principle there is to be one heat exchanger for each reactor, and also one for each spent fuel pool, so there will be one for each. If it should be that the heat exchangers already installed are not usable, that would mean that we have to install six new heat exchangers from the outside. Excuse me, I should correct that number to seven because there is the Unit 4 spent fuel pool.

As for the decontamination, I don't believe that there is a detailed plan in place yet, but I do believe that it will be in both areas.

QUESTION (Mr. Azhari, PanOrient News): When we hear in the Middle East about a "road map" we automatically think about the Middle East Peace Process, but of course it's different in Japan and we hope that your plan will work, but can you tell me, when you say you want to control the radiation by the end of three months, what does that mean exactly? And if I can ask another quick question, when you say the radiation doesn't affect people's health, do you include children in this statement? Thank you.

Mr. Nishiyama: In response to your first question about getting the radioactive materials under control, this would mean that we should ensure that there is no further damage done to the nuclear fuel so as to prevent further emission of radioactive substances from inside the reactor. To ensure this, we would continue to inject water for cooling purposes and also install the heat exchangers.

Another thing which is very important is that we must ensure that the highly radioactive stagnant water which has been built up inside is not released into the sea. For this we

have to ensure that the water is properly controlled and we carry out the purification of the contaminated water so that it can be reused for cooling purposes. This is the plan we have in place and we want to ensure that it happens.

Mr. Shinano: To answer your second question about the radiation dose being at a level that has no health impact, the target is all people; male, female, young and old, adults and children all included.

QUESTION (Mr. Rowley, Singapore Business Times): I'm not clear about the difference between cooling and controlling the fission process. I mean I'm not an expert at all but I understand that the control rods in the reactor actually reduce the nuclear fission process. Does cooling do the same thing? And, assuming you are able to keep the fuel rods cooled down, how long would it be before you can actually do something with them, either dismantle them or move them or whatever you plan to do with them?

Mr. Nishiyama: First of all, in regard to the nuclear fission, actually the control rods did stop the nuclear fission following the earthquake. But then afterwards there was the release of the so-called decay heat. Unless this is controlled, if the water were to be reduced, in other words if the water were to be evaporated, then the temperature of the fuel would rise and this would cause damage to the fuel.

Therefore, at present there is no nuclear fission occurring, but unless we continue to cool the nuclear fuel, the fuel will be damaged; meaning the radioactive substances inside the fuel will be released outside.

As for your question as to how long it would take for us to be able to bring this under control, if the cooling were to function, I think it depends on the cooling method that is adopted. So it is not easy to say generally, but by just soaking the fuel in water would mean that it would take a very long time to cool down the fuel.

At any rate, I believe that in order for us to be able to dismantle the fuel and place the fuel in a different location would require time in the order of years.

QUESTION (Global Times): I would like to ask a question to Mr. Matsunaga. We hear that as a result of the various reports with regard to what is happening here in Japan, China is saying that we cannot import any food or plants from Japan. So the Chinese

side is saying that in the future there needs to be a certificate to prove that whatever is to be imported into China is not contaminated. Unless there is such a certificate they cannot admit any importation. Meanwhile the Japanese side is saying that there is no such institution to issue such certificates. How do you intend to address this issue?

Mr. Matsunaga: Thank you very much for your question. With respect to the Japanese vegetables exported, those vegetables are safe. There is a very strict and thorough monitoring mechanism under which our vegetables are checked. Those vegetables with potential risk of contamination, which could adversely affect health, have been stopped from being shipped to the market. Under such a mechanism it is safe to have consumed vegetables that have been put in the market.

Having said that, with respect to import restrictions additionally put in place by other countries, the government of Japan is encouraging those countries not to take excessive measures. In that connection we are continuing dialog with those relevant countries. At this point in time I am not very well informed as to the stage of the preparations with respect to the issuance of the certification, but as I mentioned, the mechanism for monitoring and checking the safety of Japanese food is so thorough and strict that people can be very much assured that all vegetables and other foods put into the market is very safe. Thank you.

Mr. Shikata: If I may add to that, as a result of the harmful rumors going around, especially for the produce from Fukushima Prefecture in the vicinity around the power station, the farmers and the fisheries industry is being inflicted with major harm and losses. Therefore we believe that this is the reality and we think that it is quite regretful that such a thing is happening.

Especially when it comes to the Japanese, food safety is something particularly important and the Japanese people are very sensitive towards food safety. Therefore if it is a Japanese product, be it agricultural or fishery products and also including industry products, because we have such a strict quality control system in place we believe that the Japanese products in the market are safe. This also applies to the products that are being exported from Japan.

We believe that WTO members have to comply with the WTO rules. They have an obligation to do so. We would like to say to the Japanese trade partners that they refrain

from overreacting and implementing excessive import restrictions against Japanese products and instead base their judgment on scientific data. This is something that we would like to strongly request to our trading partners.

QUESTION (Mr. Rowley, Singapore Business Times): Following up on what you just said, agricultural reform is underway in Japan or it will be. The idea was that Japan would be able to increase its agricultural exports with a more efficient farming sector. Do you think this incident is going to damage that plan in any way because people will be less willing to import Japanese agricultural products?

Mr. Shikata: As you mentioned, we have been trying to come up with a more export-oriented agriculture in this country. We have during the last several years tried to cultivate new overseas markets. This is in the context of our efforts to improve the competitiveness of our agricultural sector, but at the same time, as I already mentioned, we have strong concerns that there may be the spread of so-called reputational damage which we do not think is based on science. We are aware of the need to work harder in terms of clarifying the safety of our food, and as I have already mentioned, we have been trying to convey a message to our trading partners, that WTO members are not supposed to take excessive import restrictions without scientific grounds and so forth. We think it is necessary to continue to communicate with our trading partners and consumers around the world, that our food and products are safe. These will be the ongoing efforts that we will be engaged in.

QUESTION (Mr. Rowley, Singapore Business Times): Mr. Nishiyama, thank you for your clear explanation to my last question. But you said that it could be years before the reactors could be moved to a different location. If that is so, can you say that the reactors during those years would be safe, that they would not be emitting dangerous levels of radiation and that people could possibly live reasonably close to those reactors while they are cooling?

Mr. Nishiyama: Even if we are unable to dismantle and remove the nuclear fuel, provided that we have a sustainable cooling system and the fuel is constantly being cooled down, then that would mean that the radiation itself would be going down. And if you were to add to that a cover to cover the reactors, it would make the environment even safer.

But if you were to ask then if that would mean that the residents who used to live in the vicinity could immediately return to their homes, in order for that to happen we have to try to remedy the radioactive substances that have already been emitted and released into the environment, so that has to be done first.

Mr. Shikata: We would like to conclude today's briefing. Tomorrow we are planning to hold a press briefing at the Foreign Correspondent's Club of Japan from 2 p.m. I hope you will make it tomorrow too. Thank you very much for coming.