**Second Annual UK-Japan Nuclear Dialogue**

**Date:** 30-31 October 2013

**Venue:** Foreign and Commonwealth Office, London

**Co-Chairs:**

 Prof Robin Grimes (Chief Scientific Adviser, FCO, UK)

Mr Koichi Hasegawa (Deputy Director General, European Affairs Bureau, MOFA, Japan)

**Background**

Prime Minister Noda and Prime Minister Cameron held a summit meeting in Japan and produced a joint statement during PM Cameron’s visit to Japan on 10 April 2012.  The ‘Japan-UK Framework on Civil Nuclear Energy Cooperation,’ which was annexed to the joint statement, states that Japan and the UK decided to launch an annual dialogue at senior level to strengthen bilateral cooperation across the full range of civil nuclear activities.  The first Annual Japan-UK Nuclear Dialogue was held on 4th and 5th October 2012 in Tokyo, Japan. The second Annual was hosted by the Foreign and Commonwealth Office (FCO) in London, UK on 30th and 31st October 2013.

1. **Session One: Decommissioning and Clean-up**

To open, presentations were made by Adrian Simper (NDA, UK), Hironori Nakanishi (METI, Japan) and Masako Ogawa (MoE, Japan). Adrian Simper described the activities of the Decommissioning and Clean-up Working Group over the past year since its establishment at the 2012 Dialogue. Adrian Simper shared views based on his role as a member of IRID (International Research Institute for Nuclear Decommissioning)’s International Expert Group and discussed areas where the UK can provide help with the issues being faced at Fukushima. There was a discussion of UK and Japanese decommissioning strategies including training people to undertake decommissioning.

Hironori Nakanishi described the current situation with regard to contaminated water and decommissioning at TEPCO’s Fukushima Dai-ichi Nuclear Power Plant. He described the countermeasures which the Japanese Government and TEPCO are undertaking. He noted the UK-Japan cooperation to support decommissioning efforts at Fukushima.

 Masako Ogawa (MoE, Japan) described MoE’s role in decontaminating areas around Fukushima and related policies. She also described the government’s plans for an Interim Storage Facility (ISF). In the subsequent discussion, participants emphasised the importance of stakeholder engagement and public understanding when tackling decontamination, with a focus on decontaminating off site areas.

The Dialogue agreed to:

1) Continue the Working Group’s activities, which over the past year have enabled the dialogue to share learning and experience. This had included:

- A visit by TEPCO engineers to learn about UK nuclear decommissioning at sites in the UK

- A workshop held between UK and Japanese experts on various aspects of nuclear decommissioning.

- The appointment of a UK national to lead TEPCO’s nuclear safety oversight committee

- Direct support given by the NDA and the UK embassy to the decommissioning efforts in Japan.

2) Support the Working Group convening a further workshop in the first quarter of 2014 on the topic of planned decommissioning of nuclear facilities, and the removal of fuel debris.

3) Support for involvement in activities on Public/Stakeholder Engagement

1. **Nuclear Research and Development**

The Dialogue discussed various options for UK-Japan nuclear R&D cooperation. Robin Grimes (FCO) opened the session with an overview of UK civil nuclear R&D policy and the series of recent reviews and reports. He highlighted the positive nature of bilateral cooperation in nuclear R&D - the two countries share a high standard in the level of research in civil nuclear and wish to further advance this relationship. Following an outline on recent UK policy advancements, Robin Grimes described the activities conducted over the past year for UK-Japan research collaboration including a UK-Japan Nuclear Safety R&D Workshop (October 2012), and the conclusion of an arrangement between the JAEA and Scottish Universities Environmental Research Centre. Next, Bruce Hanson (University of Leeds) presented research surrounding radioactive particulate materials and potential waste forms as an example of UK expertise that could be a potential area for collaboration.

 Masaaki Tanaka (MEXT, Japan) provided an outline of Japanese nuclear R&D policy and issues surrounding the reform of JAEA. Hironori Nakanishi (METI) also provided information on activities and the global openness of the newly-established IRID. There was an active discussion on various themes on potential areas for UK-Japanese (including through IRID and JAEA) collaboration. Robin Grimes introduced the idea of EPSRC bilateral research funding to be used for Japanese collaborative research and consider joint funding of projects in future. Both sides gained a better understanding on what each side is doing to develop nuclear skills and of social science impacts. We also developed a deeper understanding of activities and international scope of IRID.

The Dialogue agreed to:

1) Continue current collaborative UK-Japan research activities

2) Establish a Working Group for this strand consisting of FCO/British Embassy Tokyo, MEXT and relevant funding/research bodies, to identify collaborative research areas to take forward

3) Work towards the establishment of a UK-Japan joint research fund

1. **Aspects of Nuclear Policy**

This year, in this session, the Dialogue discussed the following issues: latest Japanese nuclear policy, plutonium management, UK electricity market reform and nuclear new build.

Hirobumi Kayama (METI, Japan) discussed the Abe administration’s nuclear energy policy. He explained the current situation surrounding plutonium management and introduced a number of ideas for potential UK-Japanese collaboration in this field.

Adrian Simper (NDA) updated the Dialogue on UK spent nuclear fuel and management policy. Richard Marriott (DECC) outlined current UK policy and strategy on nuclear new build including electricity market reform, related Feed in Tariffs, Contracts for Difference (CfD) and benefits available for communities hosting large infrastructure projects strategically important to the UK.

The UK welcomed the interest and involvement of Japanese companies in developing plans for building new nuclear power stations in the UK. Japan was interested to learn about the regulatory framework (in particular the Contracts for Difference) designed to support long term infrastructure investment.

Japan and the UK helpfully developed a deeper understanding of each other’s domestic situations and policy positions related to plutonium management.

The Dialogue agreed that:

1) It was important to continue discussing each other’s policy positions/options and directions of plutonium management including technology developments which might be relevant to the UK’s approach for managing plutonium.

2) It had been helpful for the UK to better understand Japan’s nuclear policy and for Japan to better understand UK electricity market reform and recent developments in new build.

1. **Nuclear Safety and Regulation**

The Dialogue discussed Japan’s new safety regulations and measures, and collaboration with UK counterparts. A productive discussion was held that will enhance cooperation in mutual areas of regulatory interest.  These include public communication, openness and transparency, regulatory independence and safety culture.  Separate work streams to progress these areas will be set up under the Working Group, which had already met several times since the last Nuclear Dialogue.

David Senior (ONR) presented on the current state of dialogue with Japanese regulators. Naoto Ichii (NRA, Japan) introduced outline of nuclear regulation and safety in Japan. Hirobumi Kayama (METI, Japan) followed by introducing Industry’s voluntary nuclear safety improvements.

Participants agreed that existing Information Exchange Agreements between NRA and ONR were valuable and would continue to be implemented to further regulatory exchange.

The Dialogue agreed to:

1) Continue cooperation in information exchange between ONR and NRA for the future to include public communication, openness and transparency, and regulatory independence and safety culture.

2) Establish a process for sharing experience of ONR's preparations from the IRRS[[1]](#footnote-1) review and areas where the UK believes it has learning to share.

3) Identify opportunities to transfer knowledge that enhances greater understanding of regulatory independence from industry and government - including how this forms part of the regulators approach and culture.

4) Consider whether there is benefit in bringing together information into a document that compares and contrasts the UK and Japanese regulatory approaches.

1. **Public Communication**

The Dialogue discussed UK and Japanese experiences in developing strategies for public communication and engagement following a nuclear accident. This included a discussion of how discharges of radio-nuclides into water have been communicated to the public in Japan and the UK, how independent scientists present scientific data to the media and the population at large, and the development of a strategy in the UK to increase general public understanding of radiation from nuclear discharges.

Gerry Thomas (Imperial College London, UK) presented on public perception of risk, how to communicate real rather than perceived risk, the importance of putting data into context, and how stakeholder engagement on nuclear related risks is conducted in the UK.  Tom Sheldon (Science Media Centre, UK) presented on the role of the UK Science Media Centre in facilitating interactions between scientists and the media, and approaches to communicating risk. Adrian Simper (NDA) presented on the communication of radioactive discharges from UK nuclear power plants. Sarah Swash (DECC) presented on UK Emergency Preparedness measures, and explored the possibility of further talks in this area.  From the Japanese delegation, Hitoshi Yamada (METI, Japan) explained the current Japan’s PR policy and Japan’s challenges in restoring public trust in energy policies - including nuclear power. Naoto Ichii (NRA) presented on the public communication of regulation.

The Dialogue agreed to:

1) Establish a Working Group to:

- Share approaches to local public/stakeholder engagement; and

- Share experiences on science communication including approaches to communicating risk and uncertainty.

2) Ask the working group to organise workshops on Public Communication, and on Stakeholder Engagement.

1. **Concluding Remarks**

The co-chairs, Robin Grimes and Koichi Hasegawa agreed that the Second Annual UK-Japan Nuclear Dialogue had facilitated valuable discussions and provided an important high-level, official framework to further the already strong UK-Japanese cooperation in the area of civil nuclear energy. The Dialogue identified existing and new areas for mutually beneficial cooperation. They agreed that the UK and Japan share common values and see each other as natural partners to pursue further opportunities. The Dialogue agreed that they would gather next in Tokyo during 2014 to continue the positive relationship.

 **(Attachment) List of Acronyms:**

NDA – Nuclear Decommissioning Authority (UK)

METI – Ministry of Economy, Trade and Industry (Japan)

MoE – Ministry of the Environment (Japan)

IRID – International Research Institute for Nuclear Decommissioning (Japan)

TEPCO – Tokyo Electric Power Company (Japan)

JAEA – Japan Atomic Energy Agency (Japan)

MEXT – Ministry of Education, Culture, Sports, Science and Technology (Japan)

EPSRC – Engineering and Physical Sciences Research Council (UK)

DECC – Department of Energy and Climate Change (UK)

ONR – Office for Nuclear Regulation (UK)

NRA – Nuclear Regulation Authority (Japan)

1. The IAEA Integrated Regulatory Review Service [↑](#footnote-ref-1)