

Eleventh Annual Japan-UK Nuclear Dialogue (Summary of Discussions)

Date: 2 November

Venue: Ministry of Foreign Affairs, Tokyo

Co-Chairs:

Mr ITO Shigeki (Deputy Director General, Disarmament, Non-Proliferation and Science Department, MOFA, Japan)

Mr Chris HEFFER (Director, Nuclear Power and Decommissioning, BEIS, UK)

Background

The 'Japan-UK Framework on Civil Nuclear Energy Cooperation', annexed to the joint statement at the Japan-UK summit meeting in April 2012, stated that Japan and the UK would launch an annual dialogue at senior level to strengthen bilateral cooperation across the full range of civil nuclear activities. The eleventh annual meeting was hosted in Tokyo by MOFA on the 2 November 2022.

Session 1: Nuclear Research and Development

This session covered an overview of nuclear R&D in Japan and the UK as well as an update on joint research projects. The updates covered both fission and fusion research.

Skills and workforce were a key theme in this session. Both sides recognised the need to promote nuclear to the younger generation to attract a diverse workforce for the future of the nuclear industry. There was productive discussion and sharing of experience on this topic, including how the UK and Japan communicate to different audiences, the importance of storytelling and different communication styles such as visual graphics, the role of press and media, and local vs national communications.

There was also an update on joint research projects. The UK and Japan recognised the benefits gained from collaboration on shared research projects and will continue to explore further areas for collaboration in areas of shared needs. Both sides noted the challenge of practical application of innovation for on the ground activities as well as academic research, especially in decommissioning.

Session 2: Decommissioning and Environmental Remediation

There was appreciation of the extensive successful collaboration between the UK and Japan in this area including between NDA and NDF, TEPCO and Sellafield Ltd, NDA and JAEA, and between regulators, and the significant mutual benefits this collaboration has brought.

The UK updated on the NDA's decommissioning and waste management strategy and Japan provided a detailed update on the current situation at TEPCO's Fukushima Daiichi Nuclear Power Station, including the process for the discharge of the ALPS treated water at the site. The current situation of off-site environmental remediation was also shared by MOE.

Both sides provided an update on the decommissioning and waste management situation in their respective countries and recognised that both countries shared many similar challenges. Through respective updates, both sides acknowledged the breadth of these shared challenges, and the benefit of working with and learning from each other's experiences. The importance of transparency to build confidence from the public for decommissioning activities was clearly stated.

The UK offered to share its experiences and lessons learnt from Sellafield and other space-constrained decommissioning sites on spatial planning, which had been a real challenge for the UK and could have relevance to Japan. The importance of local engagement to understand real concerns around decommissioning and waste management and the challenge of getting national and local dialogue right was explored. The UK and Japan noted the benefits of further deepening knowledge sharing and collaboration to improve safety, reduce cost and increase effectiveness.

Japan also provided an update on non-accident site decommissioning and waste management plans. This was recognised as an area where there has been more limited UK-Japan collaboration in the past but there was openness and ambition to collaborate more deeply in this area. The UK offered to share its experience of setting up the Nuclear Decommissioning Authority. Funding and prioritisation were key challenges for the body when it was set up, and sharing experience and lessons learnt could be useful for Japan as it proceeds with its ambition to set up a new strategic body to direct decommissioning efforts.

Session 3: Nuclear Energy Policy

The UK and Japan provided an update on their policies and latest domestic developments with respect to nuclear energy. Both sides noted the need for secure energy systems given the current geopolitical context and high oil and LNG prices. There was a discussion on medical isotopes and peaceful uses of nuclear which both sides hoped to continue after the Dialogue. It was noted that Japan will hold the G7 presidency next year; the Dialogue hoped to see the topic of nuclear energy should be progressed from the commitment made in the leaders' statement this year. Both sides also hoped to follow up with more detailed discussions on the resilience of the global nuclear fuel supply chain.

The UK also provided an update on the HTGR demonstration programme and the collaboration happening between NNL and JAEA, and other UK and Japanese partners. The UK and Japan see benefit in collaboration in next generation nuclear energy, especially in the field of small and advanced modular reactors. Both sides discussed the particular importance of HTGRs in supporting future clean energy goals. Japan's existing knowledge and operating expertise with the HTTR was recognised.

Finally the UK updated on its progress for disposition of nuclear materials and both sides discussed management of the Japanese-owned material held in the UK. The UK welcomed the positive engagement and progress made in this area.

Session 4: Public Communication on Nuclear

Japan presented an update on public communication with interested parties regarding the ALPS treated water discharge from TEPCO's Fukushima Daiichi

Nuclear Power Station and reflected on the importance of being clear on the science behind the decision. The UK reiterated its support of the science behind the decision and the role of the IAEA as an independent body monitoring this matter, and outlined that it sees no reason why the treated water should not be discharged, provided consideration is given to appropriate dilution and rate of discharge. .

Both sides reflected on the importance of consistency, simplicity and candidness in public comms on nuclear. Both sides felt that transparency builds confidence with both the general public and local communities. This was exemplified in a case study presented by EDF Energy on public attitudes around Hinkley Point C in the UK and useful lessons they had learnt to build confidence of the local population in the project.

Session 5: Nuclear Safety and Regulation

Regulators from the UK and Japan shared updates on regulation focus in their respective countries and recent milestones. The UK's nuclear regulator, the ONR, provided an update on their enabling regulatory approach to innovation and advanced nuclear technologies, and the status of the DCO on Sizewell C, the Generic Design Assessments being undertaken, and reflections on the NRA secondee in the ONR.

Japan's nuclear regulator, the NRA, updated on the status of restarts of nuclear power plants in Japan and their thoughts on harmonisation and standardisation of Small Modular Reactors and working with the IAEA on this issue.

The UK also updated on its plans for regulating nuclear fusion which will be the responsibility of the Health and Safety Executive, rather than the ONR. There was a useful discussion about how assessment of accident scenarios have been considered. An upcoming visit to Japan from the BEIS fusion team was discussed and it was proposed that more detailed meetings on this topic be carried out at that time.

Closing Remarks

The co-chairs, Mr ITO Shigeki and Mr Chris HEFFER, reflected on key areas and shared challenges to take forward discussions on. Themes that ran through the eleventh dialogue covered skills, fuels, peaceful uses, public communications, and the importance and benefits of international cooperation. Both sides were grateful to have been able to meet in person for the first time since the pandemic began and the UK looked forward to welcoming the Japanese side to the UK in 2023 for the twelfth nuclear dialogue.

The co-chairs also reaffirmed that the UK and Japan share common values and see each other as natural partners to pursue further opportunities and deepen what is a historic relationship for the long term.

Acronym list

ALPS: Advanced Liquid Processing System

BEIS: Department for Business, Energy and Industrial Strategy

GDF: Geological Disposal Facility

HTGR: High Temperature Gas-Cooled Reactor

HTTR: High Temperature Test Reactor

IAEA: International Atomic Energy Agency

JAEA: Japan Atomic Energy Agency

JAEC: Japan Atomic Energy Commission

METI: Ministry of Economy, Trade and Industry

MEXT: Ministry of Education, Culture, Sports, Science and Technology

MOE: Ministry of the Environment

MOFA: Ministry of Foreign Affairs

NDA: Nuclear Decommissioning Authority

NDF: Nuclear Damage Compensation and Decommissioning Facilitation Corporation

NRA: Nuclear Regulation Authority

ONR: Office for Nuclear Regulation

TEPCO: Tokyo Electric Power Company Holdings, Inc.