

Fourteenth Annual UK-Japan Civil Nuclear Dialogue: Summary of Discussions

3 December 2025 – Manchester, UK

Co-Chairs:

- Mr Chris HEFFER (Director, Nuclear Power, Infrastructure and Decommissioning, Department for Energy Security and Net Zero, UK)
- Mr MATSUMOTO Kyosuke (Ambassador, Deputy Director General, Disarmament, Non-Proliferation and Science Department, Ministry of Foreign Affairs, Japan)

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 fourteenth annual meeting was hosted in Manchester by the UK Department for Energy Security and Net Zero (DESNZ) on 3 December 2025, following deep dive workshops held on topics of particular interest to both sides between 8 October and 2 December.

Session 1: Safety and Regulation

The UK's Office for Nuclear Regulation (ONR) and Japan's Nuclear Regulation Authority (NRA) gave updates on regulation in their respective countries and their ongoing collaborations, including regulatory secondments. Both sides noted the ongoing opportunities for collaboration in a range of areas. Both sides expressed interest in continuing to exchange views on the management of radioactive waste for decommissioning and agreed to arrange follow-up discussions on this topic. The UK expressed an interest in receiving NRA's views on regulatory frameworks for High Assay Low Enriched Uranium (HALEU) fuel through upcoming UK-led multilateral regulators discussions on this topic, considering the importance of harmonised regulatory approaches.

DESNZ provided an update on ongoing nuclear security and emergency preparedness collaborations between the UK and Japan. The UK expressed interest in further learning from Japan's experience in emergency preparedness, including as part of preparation for the UK's upcoming Tier 1 exercise.

Japan's Ministry of Foreign Affairs (MOFA) fed back from the deep dive workshop held on the Japan-UK Nuclear Cooperation Agreement (NCA). Outputs from this workshop included:

- To consider approaches to improve practical implementation of UK-Japan Government-to-Government Assurances, where appropriate

Session 2: Public Communications

The Japan Atomic Energy Commission (JAEC) and DESNZ gave updates on the status of public opinion towards nuclear energy in their countries. The two sides discussed the importance of local, national and international public perceptions of nuclear, and of continuing to exchange opinions and sharing best practice in this area.

Session 3: Research and Development

DESNZ and Japan's Ministry of Education, Culture, Sports, Science, and Technology (MEXT) gave updates from both sides on nuclear research and development (R&D) interests and efforts for human resource and skills development. The two sides noted the wide range of existing collaborations in R&D and the UK and Japan's complementary research interests, providing opportunity for deepened collaboration.

DESNZ fed back from the deep dive workshop held on R&D collaboration. Outputs from this workshop included:

- To explore opportunities to increase programmes of personnel exchange and reciprocal access to research facilities
- To share lessons learned from the UK's Destination Nuclear campaign in more detail with Japan
- To explore the possibility of more extensive discussions to assess potential for R&D collaboration in detail in areas of shared interest (including national laboratories and academia), following a proposal mainly by the UK side. During the workshop, potential areas of shared interest were suggested to include:
 - Advanced reactors, including High Temperature Gas Reactors
 - Advanced fuels, including Coated Particle Fuels
 - Fuel cycle, including plutonium handling (whether for immobilisation purposes in the UK or fuel purposes in Japan)
 - Medical isotopes
 - Decommissioning, including robotics and radiation mapping
 - Nuclear forensics
 - Researcher exchange and reciprocal access to research facilities

Session 4: Decommissioning, Waste Management and Environmental Remediation

Japan's Ministry of Economy, Trade and Industry (METI) presented on recent developments in decommissioning of the Fukushima Daiichi Nuclear Power Station (FDNPS) and shared existing and potential collaboration with the UK related to FDNPS. MEXT gave an overview on the decommissioning of nuclear research facilities in Japan. Japan's Ministry of the Environment (MOE) shared progress on off-site environmental restoration in the affected area of Fukushima prefecture and the managed recycling of removed soil.

METI also updated the UK on the discharge of Advanced Liquid Processing System (ALPS) treated water from FDNPS. Following the update by METI, MOFA emphasised the international efforts to confirm its safety through International Atomic Energy Agency (IAEA) monitoring and reviews. The UK reiterated its support for the science behind the discharge of ALPS treated water and Japan's collaboration with the IAEA on this matter. The UK noted the long experience of safe aqueous discharges of tritium (both in the UK and globally) at much higher levels than those planned from FDNPS; and the importance of allowing focus on decommissioning of higher hazard areas of the site.

The UK Nuclear Decommissioning Authority (NDA) gave an update on their current decommissioning projects and the organisational structure of the NDA. The NDA highlighted their expectation that, as Japan accelerates its decommissioning programme (especially at FDNPS), learning from Japan's decommissioning will be able to provide useful experience into the UK's programme, alongside the UK's experience feeding into Japan.

Both sides welcomed the deep and strong partnership in decommissioning between the UK and Japan and noted the opportunities to collaborate further. It was noted that, considering the wide range of shared decommissioning challenges, the NDA's concept of "lead and learn" in decommissioning could be extended beyond the UK programme to include facilities in Japan.

The NDA fed back from the deep dive workshop held on decommissioning. Outputs from this workshop included:

- Encouragement of enhanced information sharing, including:
 - Widening attendance at next year's decommissioning workshop to include Japanese arms-length and private sector decommissioning organisations, as well as regulators
 - To share UK experience on local stakeholder engagement with METI

- To share experience on decontamination processes, including decontamination of reprocessing facilities and for metal decontamination
- To exchange views and experience on the clearance (out of scope) system for waste management in both countries
- To further discuss decommissioning funding and governance models, in order to share UK experience and to assess potential benefits of deepened cooperation between NDA and Japan's Nuclear Reprocessing and Decommissioning Facilitation Organisation (NuRO)
- To explore continued facilitation, subject to funding, of exchange of local students between Fukushima and areas around NDA sites
- To explore potential to further deepen collaboration in the use of robotics for decommissioning
- To exchange technical views on decommissioning challenges posed by novel fuels and Gen IV reactor technologies

Session 5.1: Fusion Energy Policy

DESNZ and MEXT presented the latest developments in fusion energy in both countries. The attendees noted the ambitious goals for fusion energy in both the UK and Japan, the rapidly growing collaboration between the two countries (including through recent signature of a Memorandum of Cooperation (MoC) between DESNZ and MEXT on the Sustainable Development of Fusion Energy) and the opportunities to further deepen this partnership.

MEXT and DESNZ fed back from the (online) deep dive workshop held on fusion energy, which also served as the inaugural meeting under the Japan-UK fusion energy MoC. Outputs from this workshop included:

- As Japan develops its roadmap towards social implementation of fusion energy, to further information exchange on siting, ownership and related matters from the UK STEP programme
- To continue exchange on harmonised and proportionate regulatory frameworks and codes and standards; including through direct engagement with and between UK and Japanese regulators and through a planned UK delegation to Japan to discuss harmonised codes and standards
- Noting the range of opportunities and interests for laboratory-to-laboratory collaboration (including through LIBRTI, CHIMERA, RACE, JT-60SA, etc.) to arrange a more in-depth discussion on a framework for reciprocal facilities access and collaborative R&D between the UK Atomic Energy Authority (UKAEA) and Japan's National Institute for Quantum Science and Technology (QST) and National Institute for Fusion Science (NIFS)

- To follow up on a range of proposals from J-Fusion and the Fusion Cluster to deepen UK-Japan supply chain cooperation in fusion
- For both sides to assess proposals for public-private partnerships and to engage on these proposals between governments if of mutual interest
- To arrange follow up meeting(s) in person between DESNZ and MEXT in the near future to discuss all these topics

Session 5.2: Nuclear Policy

DESNZ and METI gave an update on the latest position of nuclear policy on both sides. The UK noted its upcoming plans for an Advanced Nuclear Technologies (ANT) Framework, and that the UK would welcome a Japanese proposal regarding High Temperature Gas-Cooled Reactors (HTGR) into this framework, whether Japanese-led or alongside a UK partner. The UK also shared the outcomes of the recent Nuclear Regulatory Review and promised to keep interested Japanese organisations informed on the progress of implementation of the review.

DESNZ fed back from the deep dive workshop held on nuclear fuels. Outputs from this workshop included:

- To assess the potential, subject to funding, for continued R&D collaboration into Coated Particle Fuels (CPF)
- To continue to share views bilaterally (as well as multilaterally through the Sapporo 5) on divestment from Russian nuclear fuel supplies, in the UK, Japan and like-minded countries
- For the UK to keep Japan informed on plans to legislate to ban Russian uranium in the UK, to ensure smooth continuation of fuel supplies
- To encourage and endorse engagement between UK and Japanese regulators on regulatory frameworks for HALEU fuels

The Japan Atomic Energy Agency (JAEA) fed back from the deep dive workshop held on ANTs. Outputs from this workshop included:

- After the publishing of the UK's ANT Framework, to arrange a follow-up discussion between DESNZ and METI in Spring 2026 to discuss potential submissions of High Temperature Gas Reactor (HTGR) proposals into the UK ANT Framework
- Noting the importance of CPF for any HTGR design, to assess the potential, subject to funding, for continued R&D collaboration into CPF

METI fed back from the (online) deep dive workshop held on financing of new nuclear. Outputs from this workshop included:

- To continue discuss financing plans and models in both countries as they develop, including sharing ongoing learning from the application of the Regulated Asset Base (RAB) model for Sizewell C

Closing Remarks

The co-chairs Mr. Chris HEFFER and Mr. MATSUMOTO Kyosuke recognised the breadth and depth of UK-Japan collaboration on nuclear energy, the benefits to both countries from these links, and the opportunities to further grow collaboration going forward. The co-chairs welcomed the new structure of this year's Nuclear Dialogue to include deep dive workshops, noting that it allowed deeper conversation on areas of particular mutual interest, and noted the wide range of outputs from the workshops and importance of following up on these. The co-chairs looked forward to a report on progress against these outputs, and to repeating this format, at the next Nuclear Dialogue.

The co-chairs reaffirmed their commitment to the UK-Japan civil nuclear relationship and noted they were looking forward to meeting in Japan next year for the Fifteenth UK-Japan Civil Nuclear Dialogue.