

## **CONCEPT PAPER**

# Joint NEA and NDF Workshop on the Characterisation of Large Quantities of Unconventional and Legacy Waste

An International Support Initiative for Fukushima Dai-ichi

> 31 August – 01 September 2022 Iwaki, Japan





# Joint NEA and NDF Workshop on the Characterisation of Large Quantities of Unconventional and Legacy Waste

An International Support Initiative for Fukushima Dai-ichi

### **CONCEPT PAPER**

31 August – 01 September 2022

The Nuclear Energy Agency (NEA) and Damage Compensation and Decommissioning Facilitation Corporation (NDF) are co-organising an international Workshop on the Characterisation of Large Quantities of Unconventional and Legacy Waste. This activity aims at supporting progress on the clean-up of Fukushima Daiichi.

### **Background**

The workshop builts on the work of the former NEA Expert Group on Characterisation Methodology of Unconventional and Legacy Waste (EGCUL)<sup>1</sup>. The group has published the "Characterisation Methodology for Unconventional and Legacy Waste" report<sup>2</sup> in 2021 on characterisation in terms of safe management of radioactive waste by considering both the radiological and non-radiological hazards. Several case studies have been prepared from France, Japan, Russia, Ukraine and the United Kingdom supported by a range of material provided by NEA member countries during the meeting held in December 2019 by the Committee on Decommissioning of Nuclear Installations and Legacy Management. The case studies provide perspectives from a variety of different sites which each have their own specific prevailing circumstances. The challenges and lessons learnt provide valuable insights which could be beneficial to those developing characterisation strategies, objectives and plans.

<sup>&</sup>lt;sup>1</sup> Expert Group Webpage: <a href="https://www.oecd-nea.org/jcms/pl">https://www.oecd-nea.org/jcms/pl</a> 28646/

<sup>&</sup>lt;sup>2</sup> See NEA Report (2020), Characterisation Methodology for Unconventional and Legacy Waste: https://www.oecd-nea.org/jcms/pl\_62389/

### **Objectives**

With the aim to develop or update of any characterisation and categorisation methodology for unconventional waste, e.g. post-accident or legacy radioactive waste, the workshop aims at:

- Sharing the overview and outcomes of the *Characterisation Methodology for Unconventional and Legacy Waste* report <sup>2</sup>;
- Sharing the current experience and advancement in characterisation and categorisation methodology;
- Identify characterisation methodology and strategy for decommissioning to support Fukushima Dai-ichi;
- Based on the exchange of experience, identify potential future work in the areas of waste mangement and decommissioning;

### **Workshop format**

The workshop will be held in connection to the 6th International Forum on the Decommissioning of the Fukushima Daiichi Nuclear Power Station (**28-29 August 2022**): <a href="https://ndf-forum.com/en/">https://ndf-forum.com/en/</a> (please note that a separate registration over the NDF-Forum webpage is necessary).

For a limited amount of participants, a site visit to Fukushima Daiichi Nuclear Power Station (TEPCO), Okuma Analysis Center (JAEA), and Naraha Center for Remote Control Technology Center (JAEA) will be organized (**30 August 2022**). The exact visiting sites will depend on the condition of COVID in Japan and the measures for acceptance.

The workshop will be a two-day event (31 August - 01 September 2022). The participants at the venue of the workshop will be limited to 50 people. A virtual component of the workshop might be considered, dependend on the venue and resources. For participants, a reception will be held in the evening of 31 of August 2022. The concept of the workshop forsees the following sessions:

### - Opening Session:

Welcome remarks, Aims and goals of the Workshop;

### - Topical Session:

Findings and Outcome of the EGCUL Work and Report <sup>2</sup>, International Country Reports and Lessons Learned;

### - Group Activity:

Speakers and Participants will be invited to carry out a collaborative brainstorming and breakout group work to assess and propose ways to support development of an updated methodology for characterisation; The group findings should be presented by a group volunteer;

### - <u>Key Note Speec</u>h:

Selective contribution (such as invited lecturer)

### - Panel Discussion on Technical Perspective:

Experts of the Panel are invited to build on the individual presented information (EGCUL report, Country Reports, Group Work and Key Note) and engage in a discussion on how to progress on solving the technical challenges and required next steps for the Methodology for Characterisation at 1F (and potentially beyond) in Japan. Participants will be invited to support this collaborative discussion. These could include:

- scope of materials, buildings, items and areas to support a comprehensive material inventory (justify exclusions);
- o purpose, requirements, and quality standards for waste characterisation (including safe and efficient waste managed and disposal);
- priorities for characterisation according to several factors (e.g. activity and radionuclide type, hazard potential, etc.)
- challenges and solutions to charactering large volumes of low activity waste in an effective way (including statistical methods, to compensate the lack of physical data);

### - Panel Discussion on Policy Regulatory and Stakeholder Perspective:

Experts of the Panel are invited to build on the individual presented information (EGCUL report, Country Reports, Group Work and Key Note) and engage in a discussion on how to progress on solving the regulatory and stakeholder engagement challenges and required next steps for the Methodology for Characterisation at 1F (and potentially beyond) in Japan that will enable radioactive waste disposal routes to be defined which are acceptable to communities and regulators. Participants will be invited to support this collaborative discussion. These could include:

- definition of the roles and responsibilities of organisations for the development and implementation of a waste management strategy;
- processes for the development of Waste Acceptance Criteria (WAC) and other regulatory and technical requirements for treatment and disposal;
- o integrated, graded and transparent decision-making;
- o engagement with affected communities and actors;

### Conclusion Session:

Findings and main proposals will be summarized and presented to workshop participants; Participants will be invited to provide feedback and comments to the suggested outcomes of the workshop;

### Venue

Iwaki Business Innovation Center (LATOV 6<sup>th</sup> Floor) 120 Taira Tamachi, Iwaki city, Fukushima, Japan

### Language

The working language is English. Breakout discussions as well as questions (and answers, if needed) can be accommodated in Japanese.

### Registration

Interested participants are requested to complete the registration on the public webpage by **19 August 2022**. The number of workshop attendees is restricted based on the venue and hygiene measures in place.

A hybrid virtual participation is being considered, but virtual participants participation might be limited.

### Workshop Webpage

The workshop webpage can be accessed at <a href="https://www.oecd-nea.org/jcms/pl\_71354">https://www.oecd-nea.org/jcms/pl\_71354</a>.

All workshop materials can be found by registered participants on the dedicated password-protected myNEA SharePoint (regularly updated):

https://mynea.oecd-nea.org/sites/EGCUL%20Workshop/

### **Workshop Chair**

The workshop will be (co-)chaired by:

Steve HARDY NDA, UKKazuyuki KATO NDF, Japan

### **Programme Committee**

The Programme Committee (PC) members for the developing of the programme and preparation for the workshop are:

Kazuyuki KATO NDF, Japan Daisuke TAKENOUCHI NDF, Japan Steve HARDY NDA, UK

Rebecca TADESSE NEA Head of RWMD Division

Martin BRANDAUER NEA RWMD Yuko MAEHASHI NEA RWMD

### **Key preparatory milestones**

Opening of Registration15 July 2022Deadline for submission of presentation11 August 2022Deadline of Registration19 August 2022

**Workshop** 31 August – 1 September

### **Contacts**

Contact at NDF: Kazuyuki KATO (<u>kato-kazuyuki@ndf.go.jp</u>) and Daisuke TAKENOUCHI (<u>takenouchi-daisuke@ndf.go.jp</u>)

For more information regarding this document, please contact Martin BRANDAUER (Martin.BRANDAUER@oecd-nea.org).

For further information regarding the logistics, please contact Yuko MAEHASHI (Yuko.MAEHASHI@oecd-nea.org).

### **Related links**

NDF <a href="https://www.dd.ndf.go.jp/">https://www.dd.ndf.go.jp/</a>

NEA www.oecd-nea.org/

1FD6 Event <a href="https://ndf-forum.com/en/">https://ndf-forum.com/en/</a>

EGCUL Webpage <a href="https://www.oecd-nea.org/jcms/pl\_28646/">https://www.oecd-nea.org/jcms/pl\_28646/</a>
EGCUL Report <a href="https://www.oecd-nea.org/jcms/pl\_62389/">https://www.oecd-nea.org/jcms/pl\_62389/</a>
Workshop Webpage <a href="https://www.oecd-nea.org/jcms/pl\_71354">https://www.oecd-nea.org/jcms/pl\_71354</a>