



Regional Workshop on the Development and Implementation of Long-Term Storage Technologies for Different Types of Waste

Hosted by

The Government of the Kingdom of the Netherlands

through the

COVRA N.V.

Nieuwdorp, Kingdom of the Netherlands

22 to 26 April 2024

Ref. No.: ME-RER9164-2300584

Information Sheet

Purpose

The purpose of the event is to discuss and share the current approaches and practices regarding the storage different radioactive waste classes, including the design of storage facilities for these classes, the ageing management, monitoring and upgrade of these facilities, and their associated waste packages.

Working Language

The working language of the event will be English. There will be no interpretation provided. All communications, abstracts and papers must be submitted in English.

Deadline for Nominations

Nominations received after **12 March 2023** will not be considered.

Project Background

The storage of radioactive wastes is an integral part of all stages of waste management from raw waste to fully conditioned waste packages awaiting final disposal. The purpose of a storage facility or structure is to contain the packaged radioactive waste safely and securely in an organized and retrievable fashion for a defined time that is supposed to be less than the facility design life, while ensuring that the radiation protection of workers, the public and the environment are properly addressed according to applicable regulations and the ALARA principle.

The storage methodology of a Member State will be determined by the type of waste (raw, conditioned, low-level, high-level, etc.), the characteristics of the waste package and storage facility available. Management of well-designed and well-constructed storage facilities together with the use of suitable waste packages has demonstrated that radioactive wastes can be stored satisfactorily and safely for extended durations.

To support Member States in the long-term safe storing of different waste packages using different storage facilities, the IAEA is organising a dedicated workshop on the development and implementation of different storage technologies for different types of waste.

Expected Outputs

As a result of the workshop, the participants will have the knowledge regarding:

- The key concepts and activities involved during the development and planning of storage facilities for different waste streams;
- The interlinkages between waste package selection, waste acceptance criteria and operation of a storage facility during designing or establishing a storage facility;
- Designing different storage facilities and placement of waste inside facilities (as part of practical exercises);
- Ageing management and monitoring programs for different storage facilities (as part of practical exercises).

Scope and Nature

The five-day regional workshop will include lectures, structured discussions and underpinned by exercises designed to practice and reinforce the development and implementation of long-term storage technologies for different types of waste. Examples of contents that are being planned (depending on availability of experts) of the five-day workshop are:

Day 1: General Lectures:

- Introductions;
- Stakeholder considerations when selecting a waste storage strategy (alignment with national and local policies and strategies, waste minimization, regulatory compliance, societal, etc.);
- Information required to establish a waste storage facility;
- Influence of waste package/storage container on storage facility selection.

Day 2: Storage configurations:

- Storage facilities for LLW:
Unshielded storage facility;
Shielded storage facility;
Above ground shielded vault;
Inground storage facility;
Mound as storage facility.
- DSRS storage facilities;
- Storage facilities for ILW;
Shielded storage facility;
- Storage facilities for core waste and HLW.

Day 3: Design of a storage facility:

- Key concepts and activities involved during the development and planning of storage facilities for different waste streams;
- Interlinkages between waste package selection, waste acceptance criteria and operation of a storage facility during designing or establishing a storage facility;
- Developing a list of suitable storage options;
- Selecting type of storage facility;
- Selecting ventilation system;
- Selecting shielding;
- Selecting mechanical handling equipment.

Day 4: Operation of a storage facility:

- COVRA site visit;
- Scenario exercise.

Day 5: Lectures and closing:

- Storing of emergency wastes;
- Ageing management steps for Storage Facilities.

Participation

The event is targeted at representatives with a current or future programme or project regarding the development and implementation of long-term storage technologies for different types of waste packages. In order to maximize the exchange of information, individuals attending should be from all Member States with nuclear facilities, NPPs, waste management facilities, regulatory body, research facilities or from non-governmental or international organizations that represent such programmes regionally or worldwide.

Participants must be nominated by the competent national authority of the Member State and, most specifically, by the Member States' official counterpart for the project.

Please note that participants will be expected to share information outlining their experience or needs regarding the development and implementation of long-term storage technologies for different types of waste packages as part of a radioactive waste management plan.

Participants' Qualifications and Experience

The meeting is open to Member States participating in the **RER9164** project: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Georgia, Greece, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malta, Montenegro, North Macedonia, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Tajikistan, Türkiye, Turkmenistan, Ukraine and Uzbekistan.

Papers and Presentations

The IAEA encourages participants to give presentations outlining their experience or planned activities regarding the planning of storage facilities for different waste packages as part of a radioactive waste management plan, highlighting challenges and issues on the work of their respective institutions that falls under the topics listed above.

Participants who wish to give presentations are requested to submit the presentation electronically to Mr Willie Meyer (W.Meyer@iaea.org), the Scientific Secretary of the event, not later than **15 March 2024**. Authors will be notified of the acceptance of their proposed presentations **by 8 April 2024**.

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) using the candidate's existing Nucleus username and password. If the candidate is not a registered Nucleus user, she/he must create a Nucleus account (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) before proceeding with the event application process below.
2. On the InTouch + platform, the candidate must:
 - a. Finalize or update her/his personal details, provide sufficient information to establish the required qualifications regarding education, language skills and work experience ('Profile' tab) and upload relevant supporting documents;
 - b. Download and complete the [Designation of Beneficiary and Emergency Contact Form](#), and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step; and
 - c. Search for the relevant technical cooperation event (EVT2300584) under the 'My Eligible Events' tab, answer the mandatory questions and lastly submit the application to the required authority.

NOTE: Completed applications need to be approved by the relevant national authority, i.e. the National Liaison Office, and submitted to the IAEA through the established official channels by the provided designation deadline.

For additional support on how to apply for an event, please refer to the [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

Should online application submission not be possible, candidates may download the nomination form for the meeting from the [IAEA website](#).

NOTE: A medical certificate signed by a registered medical practitioner dated not more than four months prior to starting date of the event must be submitted by candidates when applying for a) events with a duration exceeding one month, and/or b) all candidates over the age of 65 regardless of the event duration.

Administrative and Financial Arrangements

Nominating authorities will be informed in due course of the names of the candidates who have been selected, and will at that time be informed of the procedure to be followed with regard to administrative and financial matters.

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency AX Travel Management, or a travel allowance, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

Disclaimer of Liability

The organizers of the event do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

Note for female participants

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

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