



RER/9/154: Enhancing the Implementation of Integrated Programmes for the  
Safe Management of Radioactive Waste

# **Regional Workshop on Durability Measurements of Conditioned Waste Packages Based on Future Repository Conditions**

**Hosted by**

**IAEA**

**24-28 July 2023**

**Ref. No.: ME-RER9154-2300581**

## **Information Sheet**

### **A. Purpose**

The purpose of this workshop is to teach participants the planning of durability measurements for waste packages (as needed for the safety assessment) for future waste disposal repositories using different nearfield scenarios.

### **B. Working Language(s)**

The working language(s) of the event will be English with no interpretation provided. All communications, abstracts and papers must be submitted in this language.

### **C. Deadline for Nominations**

Nominations received after **28 April 2023** will not be considered.

## **D. Project Background**

The International Atomic Energy Agency (IAEA) promotes the safe and peaceful uses of nuclear energy including the management of radioactive waste according to nationally and internationally agreed principles and standards with safe disposal as endpoint for all waste types.

To ensure that the conditioned waste will conform with the relevant waste acceptance criteria, it is necessary to perform a number of tests to establish the performance of the waste form and waste container over the envisaged timescales and conditions of disposal. Short term waste form tests in laboratories are referred to as waste form performance tests and long-term testing of waste packages under disposal conditions is referred to as durability testing. In the absence of disposal facilities, the most practical approach to obtain a better understanding of the durability of waste packages earmarked for disposal is to initially focus on performance testing of the waste form itself, its compatibility with the waste container, and the influence of proposed geochemical disposal conditions. This is currently being performed on well characterized disposal facilities. However, alternative disposal facilities (borehole, cylindrical trenches, in situ encapsulation of facilities, etc.) are also suggested as future disposal concepts.

To support Member States in the establishing effective durability programs for durability measurements of conditioned waste packages based on future repository conditions, the IAEA is organising a dedicated five-day regional workshop that will include lectures, structured discussions.

## **E. Expected Outputs**

As a result of the workshop participants will be able to:

- Interpret environmental factors influencing durability disposed waste packages in current approved disposal sites;
- Identify international protocols regarding long-term durability determination of waste package for these different disposal sites (for instance leaching, mechanical strength, transportation requirements, radiation durability and geochemical durability.)
- Take recognise of alternative disposal facilities (borehole, cylindrical trenches, in situ encapsulation of facilities, etc.) as future disposal sites
- Application of workshop information in group exercises to propose efficient and cost-effective durability measurements for future disposal sites.

## F. Participation

The meeting is open to Member States participating in the **RER9154** 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

## G. Participants' Qualification and Experience

The event is targeted at representatives of Member States with a current or future programme responsibility regarding the safe management of radioactive waste as part of radioactive waste management activities at either a facility or at national level.

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 developing of durability programmes for disposal of waste packages in planned repositories.

## H. Papers and Presentations

The IAEA expects participants to give presentations outlining their experience or planned activities regarding the developing of durability activities in order to fulfil disposal requirements.

Participants who wish to give presentations are requested to submit the presentation electronically to Mr Meyer ([W.Meyer@iaea.org](mailto:W.Meyer@iaea.org)) the Scientific Secretary of the event not later than **23 June 2023**.

Authors will be notified of the acceptance of their proposed presentations by **30 June 2023**.

# I. 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 (**EVT2300581**) 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](mailto: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 and submit their applications to their National Authorities. The nomination forms once fully approved can be submitted by e-mail in a PDF format through the official channels via the IAEA Official E-Mail ([Official.Mail@iaea.org](mailto:Official.Mail@iaea.org)) with copy to Ms Deufrains ([K.L.Deufrains@iaea.org](mailto:K.L.Deufrains@iaea.org)) and Mr Bru ([Y.Bru@iaea.org](mailto:Y.Bru@iaea.org)).

**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.

## **J. 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.

## **K. 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.

## **M. 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.

## IAEA Contacts

Programme Management Officer (responsible for substantive matters):

Ms Katherina Deufrains  
Division for Europe  
Department of Technical Cooperation  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA  
Tel.: +43 1 2600 26647  
Email: [K.L.Deufrains@iaea.org](mailto:K.L.Deufrains@iaea.org)

Scientific Secretary (responsible for technical matters):

Mr Willie Meyer  
Division of Nuclear Fuel Cycle and Waste Technology  
Department of Nuclear Energy  
International Atomic Energy Agency  
Tel.: +43 1 2600 22607  
Email: [W.Meyer@iaea.org](mailto:W.Meyer@iaea.org)

Administrative Contact (responsible for administrative matters):

Mr Yann Bru  
Division for Europe  
Department of Technical Cooperation  
Tel.: +43 1 2600 25804  
Email: [Y.Bru@iaea.org](mailto:Y.Bru@iaea.org)