



# **Regional Workshop on Establishing a Radioactive Waste Inventory and Related Characterisation Aspects**

**Hosted by**

**International Atomic Energy Agency (IAEA)  
Vienna, Austria**

**Room M2**

**19 – 23 January 2026**

**Ref. No.: ME-RER9164-EVT2504241**

## **Information Sheet**

### **Purpose**

The purpose of the event is to strengthen the capacities of participating Member States in the development and implementation of fit-for-purpose radioactive waste inventory systems and characterization programmes. Accurate waste inventories and proportionate characterization underpin the safe, effective and sustainable operation of national radioactive waste management programmes, and are essential inputs to strategic planning, regulatory compliance, infrastructure design and decision making throughout the waste lifecycle from generation and collection to processing, storage, and disposal.

The workshop will bring together technical experts, regulators, and facility operators to exchange experiences and good practices aligned with the IAEA safety standards and explore the infrastructure, roles and responsibilities, and coordination that recognizes the interdependencies between waste management steps needed to support an integrated, quality-assured approach to inventory and characterization.

### **Working Language**

The working language of the event will be English.

### **Deadline for Nominations**

Nominations received after **28 September 2025** will not be considered.

## Scope and Nature

The main objective of radioactive waste management, as stated in the IAEA Safety Standards Series No. GSR Part 5, is to “*deal with radioactive waste in a manner that protects human health and the environment now and in the future without imposing undue burdens on future generations*”. Waste management includes the collection, characterization, treatment, conditioning, storage and disposal of waste and all steps must be undertaken in a manner that ensures safety and protection throughout the waste management lifecycle.

A reliable and fit-for-purpose radioactive waste inventory is essential to achieving this objective. Inventories provide structured information on the types, quantities, and characteristics of waste, including that generated from current operations, legacy materials, and future decommissioning. They support decision making, regulatory oversight, safety and the development of safe and cost-effective solutions for long-term waste management.

Characterisation provides the necessary information to classify waste, determine appropriate management options, and demonstrate compliance with Waste Acceptance Criteria (WAC). It includes radiological, physical and chemical data relevant to the safe handling, processing, storage and disposal of waste. To be effective, characterisation must be proportionate to the hazard and complexity of the waste and provide sufficient information to support current decisions while maintaining flexibility to accommodate future requirements. It also supports consistent record keeping and traceability ensuring that data are complete, accurate and suitable for long-term use by both operators and regulators.

Inventory and characterisation are inherently interdependent and connected: accurate inventories rely on adequate characterisation, and characterisation strategies must be aligned with the intended management route and disposal endpoint. Recognizing the interdependencies among all steps in radioactive waste management is a fundamental principle of safe waste management by maintaining a systematic and optimized approach. An integrated, quality-assured system enables coordination across predisposal and disposal, supports efficient use of resources, and contributes to the long-term safety and sustainability of the programme.

Such an approach also promotes the use of harmonised data systems and formats, ensuring consistency in how information is collected, maintained, and exchanged across waste management facilities and responsible organizations. It facilitates coordinated planning for infrastructure and resources—including laboratory capabilities and human resource development—and establishes feedback mechanisms through which updated inventory and characterisation data inform ongoing treatment, conditioning, and disposal decisions.

To manage radioactive waste safely and effectively, it is essential to maintain an up-to-date inventory and a sound understanding of the waste characteristics. A fit-for-purpose inventory supports planning for the management of existing waste, projected waste from facility operation and decommissioning, and waste arising from nuclear applications in medicine, industry, agriculture, and research. Radioactive waste may exhibit a wide range of radiological, physical, and chemical properties depending on its origin. Characterisation of these properties ensures that waste is managed safely and appropriately throughout its lifecycle—from generation through to disposal.

The workshop will explore good practices and recent developments in establishing and maintaining national and facility-level inventories, as well as approaches, methodologies, and technologies for the characterisation of low- and intermediate-level radioactive waste. It will also address infrastructure requirements, data and information management, and quality systems, and highlight how proportionate,

decision-based inventory and characterisation processes can contribute to regulatory compliance, programme sustainability, and effective long-term planning.

## **Expected Outputs**

The workshop is expected to enhance participants' understanding of how to plan for and implement integrated radioactive waste inventory and characterisation programmes. Through expert presentations, facilitated discussions, and the sharing of national experiences, participants will identify common challenges and practical solutions related to the development, operation, and improvement of these systems.

The event will contribute to strengthening the technical knowledge and practical capabilities of Member State representatives in key areas such as logistical and infrastructure planning, laboratory capabilities, data and information management, and the application of quality assurance systems. Participants will gain insight into the requirements for establishing and maintaining a reliable inventory supported by proportionate characterisation, and how these elements contribute to overall programme safety and effectiveness.

The workshop will also support the development of preliminary national action plans or roadmaps aimed at enhancing inventory and characterisation activities in line with international good practices and IAEA guidance.

## **Participation**

The workshop is open to Member States participating in the RER9164 project. Participants must be officially nominated by the competent Member State national authority and specifically, by the Member States' official designated counterpart for the RER9164 project.

## **Participants' Qualifications and Experience**

The workshop is intended for individuals directly involved in radioactive waste management, including operators of predisposal and disposal facilities, regulators overseeing waste inventories and safety, technical experts working in characterisation, and national decision-makers or planners responsible for waste management strategies.

Participants may be invited by the Scientific Secretaries to prepare and deliver a presentation during the workshop. Presentations may include an overview of national capabilities and experiences in establishing and implementing radioactive waste inventories and characterisation programmes, or a focused presentation on a specific technical or strategic aspect of these efforts.

## **Structure**

This five-day workshop will include following components:

- Lectures on methodologies for developing and maintaining waste inventories and implementing characterisation programmes, including quality assurance systems and decision-making frameworks.
- Practical exercises and facilitated discussions focused on inventory planning, characterisation techniques, and the integration of these elements into national programmes.

- Presentations from participating Member States highlighting national experiences, infrastructure, and challenges related to inventory and characterisation.
- Interactive Q&A and panel sessions to encourage peer-to-peer learning, technical exchange, and the identification of practical needs for developing and implementing inventory and characterisation systems.

## Project Background

RER9146 supports the advancement of national radioactive waste management programmes across the region by strengthening Member States' institutional and technical capacities. The project aims to improve baseline competencies and enable more informed, sustainable, and cost-effective decision-making throughout the waste management lifecycle.

Radioactive waste must be safely managed from generation to disposal in line with national frameworks—comprising policy, strategy, and programme elements—and consistent with international safety standards and obligations. RER9146 focuses on enhancing capabilities in waste characterization, selection of fit-for-purpose processing technologies, facility design, storage, and implementation of suitable disposal solutions. Special attention is given to the management of institutional and legacy waste, alongside routine operational and decommissioning waste.

The project uses a variety of capacity-building approaches, including regional workshops, expert missions, and practical exercises with case studies, to help Member States optimize their programmes and maintain a well-characterized, safely managed waste inventory.

## 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 (EVT2504241) 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](#).

**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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