



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

## **Regional Workshop on Waste Acceptance Criteria Development and Use**

**Hosted by**

The Government of Austria

**Through the**

International Atomic Energy Agency (IAEA)

Vienna, Austria

**12 -16 December 2022**

**Ref. No.: ME-RER9154-2204294**

### **Information Sheet**

#### **A. Purpose:**

The main purpose of the workshop is to strengthen the Member States representative's knowledge in Radioactive Waste Management practices, and to enhance the understanding of the process of predisposal and disposal WAC development, implementation and application, by sharing information and providing a forum for discussions on the practices and challenges associated with the subject matter.

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

The working language(s) of the event will be English.

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

Nominations received after **23 October 2022** will not be considered.

## D. Project Background

Nuclear techniques and technologies implementation and use lead to radioactive waste (radwaste) generation. Such waste needs to be processed through segregation, treatment, conditioning and packaging to be either stored or disposed of. The disposal of radwaste is an issue that needs to be dealt with in most Member States. There is a continuous need to improve technology and human resources to enhance and strengthen the technical capacity, efficiency and safety of existing or new predisposal waste management facilities related to waste processing or storage. Countries with small amounts of radwaste usually do not have solutions for final disposal. During the peer reviews of national reports under the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention) it was acknowledged that there was a need to update and/or develop the comprehensive radwaste management policy and strategy of many of countries in the Europe region in a timely manner. This is because predisposal management of radwaste needs to be aligned with the disposal solutions, which is essential for the safe and effective management of radwaste.

In the management of radioactive waste, a waste package (waste form plus container) is often utilized by design as one of the engineered components for providing safety functions, not least, containment. It also represents a principal unit of waste and is used as a reference for controlling information, record keeping, and making decisions with due consideration of the interdependencies, impacts and information needs at all the various management stages.

Often, the various steps are performed by different organizations, and this means that, as the waste passes from one organization to the next, so too does the responsibility for safety and the associated liability and risk. Such multi-party arrangements demand careful attention to interfaces and in the case of radioactive waste management, to the development and documentation of Waste Acceptance Criteria (WAC) as the principal means of ensuring clear interfaces. WAC aim to ensure that activities performed in one waste management step (e.g., waste conditioning) do not preclude any anticipated and necessary activities in subsequent waste management steps, such as waste storage or disposal. Waste management facilities (e.g., for processing, storage and disposal) operate under distinct and strictly controlled licence conditions. It is essential that when waste is transferred from one facility to the other, it meets the licence conditions of the receiving facility.

Given that disposal is considered the final step (or endpoint) of safe waste management, developing and implementing requirements for the safe disposal of waste packages is an unavoidable prerequisite for the entire radioactive waste management process. Thus, Waste Acceptance Criteria (WAC) are most commonly defined as quantitative and qualitative technical and administrative requirements that are to be met by waste packages before they can be accepted at a storage or a disposal facility. *However, it should be noted that WAC are typically used for all waste management steps.* These criteria thus serve as a benchmark for repository operators who accept radioactive waste for disposal, or storage operators who accept waste for storage, or for processors who accept waste for processing (i.e., pre-treatment, treatment or conditioning). Using WAC, the acceptability of waste can be assessed in relation to the specific conditions of a given waste management step and the licence conditions of the involved facility.

Through the lifecycle of radioactive waste there is a need for a careful and methodical development of well defined, clear, practicable and verifiable waste acceptance criteria (WAC) via full dialogue and consultation with all relevant stakeholders, and with an understanding of the implications the specification of acceptance criteria may have on waste processing and waste form development to meet the criteria. It is essential that waste processing and waste storage facilities develop their WAC's as far as practicable taking into account the requirement for waste disposability.

## **E. Expected Output(s):**

The workshop expected outputs are from participants which will gain improved knowledge in development and implementation of WAC that specify the requirements for the several steps to be undertaken in the complete radioactive waste management cycle.

## **F. Scope and Nature**

This five-day Workshop will include overview lectures on practices and trends in development, implementation and application of waste acceptance criteria, covering few major topics:

1. Key elements in developing waste acceptance criteria.
2. Relationship between disposal WAC and other waste management facilities.
3. Roadmap from generic WAC to established disposal WAC.
4. Predisposal WAC when no disposal concept is available.
5. WAC development and application in pre-disposal management of radioactive waste, covering stakeholder's responsibility issues, content and structure of WAC, waste qualification process, methods for conformity checking, departures and non-conformities, examples of acceptance requirements for predisposal facilities or activities, others.
6. Development of WAC for existing facilities (legacy), compliance checking and applicable solutions to improve the safety.

The Workshop will also include participant's presentations outlining Member State experience and issues aligned to emphasise the above-mentioned topics.

## **G. G. Participation**

This workshop is open to Member States who are 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

## **H. Participants' Qualifications and Experience**

The event is targeted at operators, regulators and decision makers in connection with the management of LILW in both pre-disposal and disposal stages. Preference will be given to candidates having direct involvement and responsibilities in radioactive waste operation, or in regulatory oversight of them as well as to professionals

involved in establishing, implementing and reviewing waste acceptance criteria's for both predisposal and disposal stages of the waste lifecycle.

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 prepare presentations or share information outlining their experience regarding the status of the radioactive waste characterization system, highlighting the challenges and issues faced. The presentations shall be sent to the workshop Scientific Secretary – Ms Felicia Dragolici ([F.N.Dragolici@iaea.org](mailto:F.N.Dragolici@iaea.org)) prior to the event start date.

## 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. Search for the relevant technical cooperation event (**EVT2204294**) 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.

## **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 American Express, or a travel grant, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

## **K. J. 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.

## **L. K. 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

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Programme Management Officer (responsible for substantive matters):

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