

# Training Workshop on the Assessment of the National Nuclear Infrastructure to Support a New Research Reactor Project

IAEA Headquarters, Vienna, Austria

Hybrid event

14 – 17 April 2025

Ref. No.: EVT2404923

# **Information Sheet**

## Introduction

The interest of IAEA Member States in developing research reactor projects has grown significantly in recent years and currently, several Member States are in different stages of new research reactor projects for the development of their nuclear science and technology programmes, including nuclear power.

To support Member States in such efforts, the IAEA, in 2012, published *Specific Considerations and Milestones for a Research Reactor Project* (IAEA Nuclear Energy Series No. NP-T-5.1), also known as the 'Milestones' publication for research reactors, which provides guidance on the timely preparation of a research reactor project through systematic development phases.

To continue the process of facilitating the successful development of new research reactor programmes, in conjunction with other already existing IAEA standards, guidance and services, the IAEA has developed and published *Specific Considerations in the Assessment of the Status of the National Nuclear Infrastructure for a New Research Reactor Programme* (IAEA Nuclear Energy Series No. NR-T-5.9) to assist Member States in assessing the status of their national nuclear infrastructure needed to support a research reactor programme and to identify gaps and needs for improvement.

This publication supports Member States in ensuring that all 19 infrastructure issues are reviewed and to ensure that results are compiled to provide an integrated view of progress. An assessment can be carried out at any time; however, the basis of evaluation provided in this publication is specifically appropriate to

the end of Phase 1 and the end of Phase 2. Such an assessment will allow the Member States to identify those areas that need more focus or additional resources or to confirm its readiness to move to the next phase.

The publication is meant to be used in conjunction with the *Feasibility Study for a New Research Reactor Project* (IAEA Nuclear Energy Series No NG-T-3.18, published in 2018 [12]), *Code of Conduct on the Safety of Research Reactors* [6], IAEA Safety Standards and other IAEA publications referenced therein. The guidance applies to all research reactor types and technologies, and therefore is not recommending a specific reactor type, technology or a specific design.

### **Objectives**

The workshop is intended to provide participating Member States with practical information and knowledge relating to the application of *Specific Considerations in the Assessment of the Status of the National Nuclear Infrastructure for a New Research Reactor Programme* (IAEA Nuclear Energy Series No. NR-T-5.9), the establishment of the infrastructure for a new research reactor, relevant IAEA safety standards and other related IAEA publications.

The workshop also aims to provide a forum at which participants can share and discuss experiences, challenges and lessons learned in the development and implementation of new research reactor projects.

### **Target Audience**

The workshop is intended for individuals from IAEA Member States that are building, or are considering building, a new research reactor. Participants should be representatives of the core team involved in and responsible for the new research reactor project, the future operating organization, governmental institutions, national safety and regulatory authorities, the research reactor users' community and other stakeholders.

Member States are strongly encouraged to identify suitable women participants.

### Working Language

The working language of the workshop will be English. No interpretation will be provided.

## **Expected Output**

The expected output of the meeting is a report based on the papers and presentations provided by the participants and on subsequent discussions. The report will:

• Provide an overview of the status of Member States' new research reactor projects;

- Collect and share experiences, challenges and lessons learned from the development and implementation of new research reactor projects, including the development of the corresponding national infrastructure;
- Identify issues of common concern related to new research reactor projects and ways to address them, including with the IAEA assistance.

### Structure

The meeting will consist of plenary sessions and group discussions to share and discuss experiences, challenges and lessons learned in the development and implementation of recent and ongoing new research reactor projects. Time will be allocated for the meeting participants to present the Member State experiences and needs.

The meeting will start on Monday 14 April 2025, at 10 am, and will be concluded by Thursday 17 April 2025, at 12.00 pm.

## **Topics**

The following topics will be addressed and discussed during the workshop:

- The IAEA 'Milestones Approach' for the establishment of a research reactor project;
- National nuclear infrastructure requirements;
- Government commitment associated with the establishment of a research reactor project;
- Legislative and regulatory framework for nuclear safety;
- Safeguards and nuclear security considerations;
- Research reactor applications, justification and future utilization assessment, including methods and criteria to identify and quantify stakeholders' and users' needs;
- Considerations for on-site survey, selection and evaluation for research reactors;
- Feasibility study of a research reactor project, including all the information needed for making an informed decision on establishing a research reactor;
- Nuclear Infrastructure peer review missions for research reactors;
- Management system for nuclear facilities and activities;
- Human resources development for research reactors;
- Fuel cycle alternatives, including comparison of fuel options and spent fuel management issues;
- Emergency planning for research reactors; and
- Use of a graded approach in the application of the safety requirements for research reactors.

During the plenary sessions, participants will be asked to give presentations on the status of their new research reactor projects and to share their experiences in the development of national infrastructure and/or

recently established research reactors. Participants need to provide in advance a summary of their presentations to be included in the final report of the workshop.

## **Participation and Registration**

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State or invited organization, participants are requested to submit their application via the InTouch+ platform (<u>https://intouchplus.iaea.org</u>) to the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organization for onward transmission to the IAEA by **28 February 2025**, following the registration procedure in InTouch+:

- 1. Access the InTouch+ platform (<u>https://intouchplus.iaea.org</u>):
  - Persons with an existing NUCLEUS account can sign into the platform with their username and password;
  - Persons without an existing NUCLEUS account can register here.
- 2. Once signed in, prospective participants can use the InTouch+ platform to:
  - Complete or update their personal details under 'Complete Profile' and upload the relevant supporting documents;
  - Search for the relevant event under the 'My Eligible Events' tab;
  - Select the Member State or invited organization they want to represent from the drop-down menu entitled 'Designating Authority' (if an invited organization is not listed, please contact InTouchPlus.Contact-Point@iaea.org);
  - If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
  - Based on the data input, the InTouch+ platform will automatically generate the Participation Form (Form A) and/or the Grant Application Form (Form C);
  - Submit their application.

Once submitted through the InTouch+ platform, the application, together with the auto-generated form(s), will be transmitted automatically to the required authority for approval. If approved, the application, together with the applicable form(s), will automatically be sent to the IAEA through the online platform.

NOTE: The application for financial support should be made, together with the submission of the application, by **28 February 2025**.

For additional information on how to apply for an event, please refer to the <u>InTouch+ Help</u> page. Any other issues or queries related to InTouch+ can be sent to <u>InTouchPlus.Contact-Point@iaea.org</u>.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the <u>Agency's Personal Data and Privacy Policy</u> and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA's scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA's mandate. Further information can be found in the Data Processing Notice concerning IAEA InTouch+ platform.

### **Papers and Presentations**

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed in above Topics Section.

## **Expenditures and Grants**

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made, together with the submission of the application, by **28 February 2025.** 

### Venue

The event will be held at the Vienna International Centre (VIC), IAEA's Headquarters, M7. Participants must make their own travel and accommodation arrangements.

General information on the VIC and other practical details, such as a list of hotels offering a reduced rate for IAEA participants, are listed on the following IAEA web page:

https://www.iaea.org/events.

Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

### Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

## **Reference Documents**

[1] INTERNATIONAL ATOMIC ENERGY AGENCY, Specific Consideration and Milestones for a Research Reactor Project, IAEA Nuclear Energy Series No. NP-T-5.1, IAEA, Vienna (2012).

[2] INTERNATIONAL ATOMIC ENERGY AGENCY, Technical Requirements in the Bidding Process for a New Research Reactor, IAEA Nuclear Energy Series No. NP-T-5.6, IAEA, Vienna (2014).

[3] INTERNATIONAL ATOMIC ENERGY AGENCY, Utilization Related Design Features of Research Reactors: A Compendium, Technical Report Series No. 455, IAEA, Vienna (2007).

[4] INTERNATIONAL ATOMIC ENERGY AGENCY, Applications of Research Reactors, IAEA Nuclear Energy Series No. NP-T-5.3, IAEA, Vienna (2014).

[5] INTERNATIONAL ATOMIC ENERGY AGENCY, Strategic Planning for Research Reactors, No. NG-T-3.16, IAEA, Vienna (2017).

[6] INTERNATIONAL ATOMIC ENERGY AGENCY, Code of Conduct on the Safety of Research Reactors, IAEA, Vienna (2006).

[7] INTERNATIONAL ATOMIC ENERGY AGENCY, Safety of Research Reactors, IAEA Safety Standards Series No. SSR-3, IAEA, Vienna (2016).

[8] INTERNATIONAL ATOMIC ENERGY AGENCY, Safety Assessment of Research Reactors and Preparation of the Safety Analysis Report, IAEA Safety Standards Series No. SSG-20 (Rev.1), IAEA, Vienna (2022).

[9] INTERNATIONAL ATOMIC ENERGY AGENCY, Safety Analysis for Research Reactors, Safety Reports Series No. 55, IAEA, Vienna (2008).

[10] INTERNATIONAL ATOMIC ENERGY AGENCY, Leadership and Management for Safety, General Safety Requirements No. GSR Part 2, Vienna (2016)

[11] INTERNATIONAL ATOMIC ENERGY AGENCY, Implementation of a Management System for Operating Organizations of Research Reactors, Safety Reports Series No. 75, IAEA, Vienna (2013).

[12] INTERNATIONAL ATOMIC ENERGY AGENCY, Feasibility Study for a New Research Reactor Project, IAEA Nuclear Energy Series No NG-T-3.18, Vienna (2018).

## **IAEA Contacts**

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on other matters related to the event to the Administrative Secretary.

## **Event Web Page**

Please visit the following IAEA web page regularly for new information regarding this event: <u>www.iaea.org/events/EVT2404923</u>



# Form for Submission of a Paper

### Training Workshop on Assessment of the National Nuclear Infrastructure to Support a New Research Reactor Programme

#### IAEA Headquarters, Vienna, Austria

#### 14 to 17 April 2025

To be completed by the participant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: <u>Official.Mail@iaea.org</u> or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary (<u>A.Sitnikov@iaea.org</u>) and to the Administrative Secretary (<u>N.Cannavan@iaea.org</u>).

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

#### Deadline for receipt by IAEA through official channels as per Conference Announcement: 28 February 2025

Title of the paper:		
If applicable: Abstract ID in IA	EA-INDICO:	
Family name(s) and first name(s) of all author(s): e.g. Smith, John	Scientific establishment(s) in which the work has been carried out	City/Country
1.		
2.		
3.		
Family name and first name(s) of author presenting the paper: e.g. Smith, JohnMr/Ms:		
Mailing address:	i	
Tel. (Fax):		
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Date:

Signature of main author: