



Technical Meeting on Safety Considerations in the Use of Artificial Intelligence Applications for Research Reactors

IAEA Headquarters, Vienna, Austria

10 – 14 August 2026

Ref. No.: EVT2503557

Information Sheet

Introduction

The International Atomic Energy Agency (IAEA) Safety Standards Series No. SSR-3, Safety of Research Reactors, contains provisions related to the use of computer-based equipment in systems important to safety. In that regard, a number of requirements for standards and practices related to the development, testing, and implementation of software in research reactors, particularly for systems important to safety, are described. These requirements are supported by the guidance published by the IAEA in Safety Standards Series No. SSG-37, Instrumentation and Control Systems and Software Important to Safety for Research Reactors, and Nuclear Energy Series Guide No. NR-G-5.1, Digital Instrumentation and Control Systems for New and Existing Research Reactors.

A notable trend in the area of research reactors has emerged, where various types of artificial intelligence applications are being used in several important areas. Previous technical meetings have demonstrated strong and continuing interest in the development, testing, and implementation of artificial intelligence applications for research reactors, including areas important to safety.

In this context, the IAEA is organizing this Technical Meeting on Safety Considerations in the Use of Artificial Intelligence Applications for Research Reactors, scheduled from 10 to 14 August 2026 at IAEA's Headquarters in Vienna, Austria.

Objectives

The purpose of the event is to provide a forum for Member States to exchange information and share experiences on the development and implementation of artificial intelligence applications in research reactors, focusing on regulatory aspects and safety implications.

Target Audience

Participation in the Technical Meeting is subject to designation by governments of national organizations. The meeting is open to participants from all IAEA Member States with existing or planned research reactors.

To ensure maximum effectiveness in the exchange of information, participants should be research reactor managers, designers, or persons responsible for development, testing, or implementation of artificial intelligence software related to research reactors. Persons from regulatory bodies and technical support organizations responsible for the safety of research reactors may also participate in the meeting.

Member States are strongly encouraged to identify suitable women participants.

Working Language(s)

The working language of the Technical Meeting will be English.

Expected Outputs

The expected outputs of the meeting include an internal report on the activities of the meeting to be used in the planning of future related activities and new or revised IAEA publications in the subject matter of the meeting. The meeting report may include recommendations or suggestions which may be used to enhance the understanding of the subject matter. The participants will gain improved understanding of the IAEA Safety Standards and how they can be better applied to the development, deployment, and use of artificial intelligence applications for research reactors.

Topics

In addition to presentations by IAEA representatives, the Technical Meeting will include presentations by participants on their experiences in the development, testing, and implementation of artificial intelligence software for research reactor applications. Participants are encouraged to review the list of expected topics to identify areas in which their experiences can be presented.

The topics that are expected to be covered include:

- IAEA Safety Standards for research reactors;
- IAEA activities related to the use of artificial intelligence at research reactors;
- Safety considerations in the use of artificial intelligence applications for research reactors;
- Qualification, testing, and assessment of artificial intelligence applications for research reactors;
- Lessons learned in the development and testing of artificial intelligence applications;
- Research reactor applications for which artificial intelligence is being considered or used;

- Challenges in meeting safety standards or requirements with respect to artificial intelligence;
- Human factors considerations regarding the interface between artificial intelligence and operators;
- Regulatory framework considerations for review and assessment of artificial intelligence applications for research reactors.

Presentations will be followed by discussion in working groups on various aspects related to the use of artificial intelligence and the potential impacts to the safety of research reactors. The meeting will particularly identify challenges in these areas as well as actions which may be used to address these challenges.

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 (<https://intouchplus.iaea.org>) 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 **15 May 2026**, following the registration procedure in InTouch+:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):
 - Persons with an existing NUCLEUS account can sign in to 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 a paper is being submitted and complete the relevant information;
 - 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 **15 May 2026**.

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

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 [Agency's Personal Data and Privacy Policy](#) 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.

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 **15 May 2026**.

Venue

The event will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. 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:

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.

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary/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:

www.iaea.org/events/EVT2503557