



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

Technical Meeting on Development of Measures for Incorporation of Proliferation Resistance for Research Reactors

IAEA Headquarters, Vienna, Austria
and virtual participation via Cisco Webex

24 to 27 July 2023

Ref. No.: EVT2205350

Information Sheet

Introduction

In a 2019 resolution, and subsequent annual resolutions, the General Conference of the International Atomic Energy Agency (IAEA) “calls upon the Secretariat and Member States in a position to do so to investigate new reactor and fuel cycle technologies with improved utilization of natural resources and enhanced proliferation resistance.”

Past IAEA efforts related to proliferation resistance, particularly through the International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO), have focused on front-end fuel cycle facilities and new build nuclear powerplants. Pursuant to the General Conference resolution and building upon the successful work by INPRO, an effort was begun to address the question of incorporating proliferation-resistance during the research reactor design stage. The IAEA held a Consultancy meeting in May 2022 which brought together experts to discuss this topic and their recommendations included proposal of a publication to provide the framework for integration of proliferation resistance considerations into new research reactor projects.

In response to the May 2022 recommendation, a publication proposal was prepared and approved for a publication on this topic. Most recently, an IAEA Consultancy Meeting was held in December 2022 to develop the table of contents and identify contributors to the publication.

Objectives

The objective of the event is to further develop and define measures for enhancing the proliferation resistance of new or substantially modified research reactors. The meeting will further outline key proliferation resistance attributes, both extrinsic and intrinsic, and provide guidance on applying them to research reactor core, fuel and auxiliary facilities.

The following will be addressed and discussed during this meeting:

- Illustrate the key considerations and attributes of proliferation resistance for research reactors and their intersection with complimentary activities such as INPRO, safeguards-by-design and security by-design.
- Illustrate the value proposition associated with integrating proliferation resistance into the design of the core, fuel and auxiliary systems in research reactors.
- Enhance understanding between research reactor vendor and operator participants on proliferation resistance in the context of new research reactor projects.
- Discuss the approach for integrating proliferation resistance into research reactor systems design and project implementation through case study submissions by member states.
- Identify additional information to include in the publication under development providing information on incorporation of proliferation resistance into the design of the core, fuel and auxiliary systems in research reactors.

Target Audience

Participants of this technical meeting will include technical experts from facilities considering new research reactor construction or major upgrades, from research reactor designers/ vendors, and from national nuclear research institutes. Additionally, the IAEA participants will include experts from the Research Reactor Section, Safeguards, and INPRO.

Working Language(s)

English.

Expected Outputs

Following the meeting, Minutes will be prepared documenting the discussions and outlining future contributions to the publication from Member States or the IAEA. A publication plan for the proposed guidance document and its contributions will also be prepared, as well as a schedule for completion of same.

Topics

- Overview of the Benefits and Impacts of the Application of Proliferation Resistance to Research Reactor Projects
- Relationship to Safeguards, Security, and INPRO
- Overview of Member States Research Reactor Projects
- Technical Aspects of Proliferation Resistance
 - Fuel Design
 - Core Design
 - Auxiliary System Design
- Integration of Proliferation Resistance into Research Reactor Projects
- Discussion of the Proposed Publication

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, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **12 June 2023**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

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.

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 using the **Grant Application Form (Form C)**, which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **12 June 2023**.

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:

<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.

Additional Information

The TM will also take place virtually via Cisco WebEx. The agenda and access link will be sent to the participants before the event.

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