

Interregional workshop on Safety Considerations for Transportable Nuclear Power Plants

Hosted by

The Government of the People's Republic of China

through the

China Nuclear Power Engineering Co., Ltd.

Beijing, China

13-17 October 2025

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Information Sheet

Purpose

The purpose of the event is to discuss and provide an overview of the existing IAEA Safety Standards on Nuclear and Transport Safety and raise awareness about the technical and specific safety issues or challenges to be addressed before the introduction of transportable nuclear power plants (TNPPs).

Working Language

The working language of the event will be English.

Deadline for Nominations

Nominations received after **31 May 2025** will not be considered.

Project Background

To meet the growing demand for energy and to mitigate global climate challenge, the interest in Small Modular Reactors (SMRs) and Micro-Reactors (MRs) is growing, especially with regions inaccessible to large electricity grids and regions with smaller electricity grids that need technology options deployed incrementally to closely match increasing energy demand. SMRs and MRs are also viable options for users that need beyond electricity supply, e.g., district heating, desalination, industrial process heat, as well as hydrogen. The purpose of the "INT2023" Supporting member States' Capacity Building on Small Modular Reactors and Micro-reactors and their Technology and Applications as a Contribution of Nuclear Power to the Mitigation of Climate Change" project is to provide broad support to Member States in the development and deployment of SMRs and MRs. The project provides a broad range of forum to enable effective capacity building through training and technology transfer activities on all aspects of SMR development. The project also covers the emerging MRs, the deployment of SMRs for electric and non-electric applications, and the coupling of such nuclear systems with renewables in integrated energy systems. The aim of the project is to enable national stakeholders to gain enhanced understanding on key characteristics of SMR and MR technologies and their applications, and to formulate, in line with international safety standards, countries' specific legal and regulatory frameworks, and generic user requirements and criteria for SMR technologies.

Scope and Nature

The event is planned to foster the exchange of experience and insights on safety considerations on design safety, safety assessment and transport safety for TNPPs. It will facilitate the presentation and specific examples of TNPP designs being considered for different applications, floating and land based, which includes different SMR technologies (e.g., light water cooled SMR, high temperature gas cooled SMR, sodium cooled fast SMR, lead cooled fast SMR, molten salt SMR etc.). The workshop is planned to focus on the specific safety considerations for the design of TNPPs, having due consideration for applicability of the IAEA Safety Standards for nuclear power installation safety and for transport safety.

The scope of the workshop includes different transportable concepts, including both floating and land reactor concepts. It will include presentations from the selected participants providing their national experience on design safety, safety assessment of SMRs with particular focus on transportable focus. Invited experts and IAEA staff will present and share their experiences, highlighting good practices, practical arrangements, and specific examples. When discussing safety considerations, potential interfaces with security and safeguards are expected to also be discussed during the workshop.

In addition, the IAEA will disseminate information about the progress and insights form the work on TRS-1000 series publication on Design Safety and Security Considerations of Floating NPPs.

Expected outputs

The expected outputs of the workshop are:

- Participants will gain insights on TNPP technologies and their safety aspects;
- Participants will exchange experience in how to address safety considerations in design safety, safety assessment and transport safety for TNPPs.
- Participants will get updated information on the details of the reviews of the applicability of TNPPs in IAEA Safety Standards and on the IAEA efforts on TRS-1000 series publication on Design Safety and Security Considerations of Floating NPPs.
- Feedback to IAEA to tailor its future activities in the area of TNPP

Participation

The event is open to up to 40 participants from the following Member States participating in the TC Project INT2023:

Algeria, Argentina, Armenia, Belarus, Bolivia, Brazil, Bulgaria, Croatia, Czech Republic, Egypt, El Salvador, Estonia, Ethiopia, Georgia, Ghana, Greece, Guatemala, Hungary, Indonesia, Islamic Republic of Iran, Jamaica, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Latvia, Libya, Lithuania, Madagascar, Malaysia, Mexico, Morocco, Myanmar, Namibia, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Rwanda, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, Sri Lanka, Thailand, Tunisia, Türkiye, United Republic of Tanzania, Uzbekistan, Zambia.

At no cost to the IAEA, participants from following countries can also be considered: Belgium, Canada, China, Denmark, Finland, France, Italy, Japan, Republic of Korea, Russian Federation, Spain, United Kingdom, United States of America.

Participants' Qualification and Experience

The target audience of this event are those individuals working in Member States' governments, regulatory bodies, technical support organizations, or prospective owner/operator organizations and TNPP developers, particularly those needing to understand the key issues and challenges associated with safety consideration for TNPPs. Practical experience from countries who have started developing TNPP designs or interesting in deploying TNPPs is essential for detailed discussion and sharing experience on safety considerations during the workshop.

Application Procedure

Candidates wishing to apply for this event should follow the steps below:

- Access the InTouch+ home page (<u>https://intouchplus.iaea.org</u>) 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 (<u>https://websso.iaea.org/IM/UserRegistrationPage.aspx</u>) 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 <u>Designation of Beneficiary and Emergency Contact Form</u>, and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step;
 - c. Search for the relevant technical cooperation event (EVT2207326) 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. **All nominations must include a scan of the candidate's first page of passport with photo.**

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

Should online application submission not be possible, candidates may download the nomination form for the event from the <u>IAEA website</u>.

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 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.

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.

Programme Management Officer

Mr Jing Zhang Division for Europe Department of Technical Cooperation International Atomic Energy Agency Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA Tel.: +43 1 2600 26540 Fax: +43 1 26007 Email: J.Zhang@iaea.org

Administrative Contact

Ms Saiyi GAN Division for Europe Department of Technical Cooperation International Atomic Energy Agency Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA Tel.: +43 1 2600 22303 Fax: +43 1 26007 Email: <u>S.Gan@iaea.org</u>