

# 24<sup>th</sup> INPRO Dialogue Forum on the Sustainable Deployment of Floating Nuclear Power Plants for Transitioning to Net Zero

IAEA Headquarters Vienna, Austria

19-23 May 2025

Ref. No.: EVT2306611

## **Information Sheet**

### Introduction

The International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO), launched in 2000, aims to ensure sustainable nuclear energy development in the 21st century. INPRO, endorsed by the IAEA General Conference resolution GC (44)/RES/21, integrates all aspects crucial for nuclear energy sustainability. Its membership includes 43 IAEA Member States (MSs) and the European Commission.

The 32<sup>nd</sup> INPRO Steering Committee Meeting in 2023 endorsed the organization of an INPRO Dialogue Forum in 2024 on various applications of nuclear energy as a sustainable energy source to mitigate the global climate change.

The 24<sup>th</sup> INPRO Dialogue Forum aims to build upon the insights from the 2023 FNPP Symposium and the 22<sup>nd</sup> INPRO Dialogue Forum in Jeju, Republic of Korea. This forum will gather key stakeholders from the nuclear and maritime industries, regulatory bodies, and international organizations to discuss strategies for expediting Floating Nuclear Power Plant (FNPP) deployment.

The focus will be on addressing unique technical and regulatory challenges, enhancing international cooperation, and promoting technological and financial innovations. Through collaboration and knowledge sharing, the forum aims to develop actionable plans to ensure the safe, efficient, and timely deployment of FNPPs, contributing to global energy security and sustainability.

## Objectives

The purpose of the event is to provide a platform for Member States and other stakeholders to share ideas, concepts and information related to current and/or emerging topics regarding nuclear energy system development and sustainability.

The following are the objectives of the 24<sup>th</sup> INPRO Dialogue Forum:

- Address Technical and Operational Challenges: Identify technical and institutional issues related to specialized factory requirements, refuelling, maintenance, and remote operations.
- **Facilitate Industry and Regulatory Collaboration**: Enhance cooperation between nuclear developers, manufacturers, and regulatory bodies to streamline FNPP deployment processes.
- Evaluate and Discuss Standards: Examine existing international safety, security, and safeguard standards for FNPPs, and explore ongoing harmonization efforts to identify gaps and areas for further development.
- **Promote Economic Feasibility**: Evaluate integration of nuclear quality standards into factory production models to achieve cost-effective and efficient FNPP manufacturing.
- Assess Coordination Platforms: Review existing platforms (e.g. Nuclear Energy Maritime Organization (NEMO), Atomic Technology Licensed for Applications at Sea (ATLAS)) for stakeholder interaction and coordination, share best practices, and evaluate the need for additional mechanisms to address emerging challenges.

### **Target Audience**

The INPRO Dialogue Forum is primarily open to participants from the INPRO Member States and Observers. The forum is also open to other interested IAEA Member States and international organizations. Participation in the forum will be operators, regulatory bodies, relevant industries, technology holders, government officials, technical support organizations, representatives of international organization, along with technical and legal experts working on FNPPs and in related nuclear energy programs. The Forum may also be of interest to non-governmental organizations and academic institutions. INPRO encourages the participation of women, early career professionals, and individuals from developing countries.

### Working Language(s)

The working language of the event is English. All communications, abstracts and papers/presentations must be in English.

## Topics

The event will consist of the following session topics:

- **Technological Innovations and R&D**: Advances in FNPP technology to improve safety, efficiency, and sustainability, including modular construction methods, advanced reactor designs, and robust safety systems.
- **Regulatory Frameworks and Licensing Procedures**: Strategies for developing streamlined licensing processes for FNPPs, focusing on harmonized international transport/maritime laws and regulations.
- **Operational and Economic Considerations**: Economic viability of FNPPs by considering unique indicators such as construction times, land use, refuelling cycles, and maintenance, as well as comparing levelized cost of electricity (LCOE) with other energy sources in remote locations.
- International Cooperation and Partnerships: Strategies for fostering global collaboration and sharing best practices among nations, industry leaders, and regulatory bodies to ensure consistent standards and practices.
- **Financing and Investment Models**: Innovative financial strategies and investment opportunities to support FNPP projects, considering costs for construction, operation, and maintenance, especially considering remote or offshore locations.

## **Participation and Registration**

All persons wishing to participate in the event must be designated by an IAEA Member State or should be members of organisations invited to attend.

To be designated by an IAEA Member State or invited organisation, 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 organisation 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 using their username and password.
- Persons without an existing NUCLEUS account can register <u>here</u>.

2. Once signed in, prospective participants can use the InTouch+ platform can perform the following.

- 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 organisation they want to represent from the drop-down menu entitled 'Designating Authority' (if an invited organisation 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 organisations).
- 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 regarding 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 <u>Data Processing Notice</u> concerning IAEA InTouch+ platform.

The event is, in principle, open to all officially designated persons. The IAEA, however, reserves the right to limit participation should this become necessary due to limitations imposed by the available seating capacity. It is therefore recommended that interested persons take the necessary steps to obtain their official designation as early as possible.

### **Papers and Presentations**

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

Participants who wish to give presentations are requested to submit an abstract of their work. The abstract will be reviewed as part of the selection process for presentations. The abstract should be in A4 page format, should be no more than 2 pages (including figures and tables) and should not exceed 700 words. The abstract should be sent electronically to Mr Hussam Khartabil and Ms Alina Constantin, the Scientific Secretaries of the event (see contact details below), not later than **28 February 2025.** Authors will be notified of the acceptance of their proposed presentations by **31 March 2025**.

In addition to the registration already submitted through the InTouch+ platform, participants should submit the abstract, together with the Form for Submission of a Paper (Form B), to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) or organisation for onward transmission to the IAEA not later than **28 February 2025.** 

### **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), 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: <u>www.iaea.org/events</u>.

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 to allow for timely registration. Participants will need to present an official photo identification document 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.

### **IAEA Contacts**

#### **Scientific Secretary:**

#### Mr Hussam Khartabil

Division of Nuclear Power Department of Nuclear Energy International Atomic Energy Agency Tel.: +43 1 2600 26932 Email: <u>H.Khartabil@iaea.org</u>

#### Administrative Secretary:

Ms Tin Ling Loi Division of Nuclear Power Department of Nuclear Energy International Atomic Energy Agency Tel.: +43 1 2600 22792 Email: <u>T.Loi@iaea.org</u>

#### **Co-Scientific Secretary:**

Ms Alina Constantin Division of Nuclear Power Department of Nuclear Energy International Atomic Energy Agency Tel.: +43 1 2600 22822 Email: <u>A.Constantin@iaea.org</u>

#### Mailing address & fax:

International Atomic Energy Agency Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA

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:

www.iaea.org/events/EVT2306611

Enclosure: Form for Submission of a Paper (Form B)



# Form for Submission of a Paper

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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: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretaries h.khartabil@iaea.org and a.constantin@iaea.org, and to the Administrative Secretary T.Loi@iaea.org.

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: 28 February 2025

Title of the paper:			
One sentence description of your paper:			
Family name(s) and first name(s) of all author(s) (same as	Scientific establishment(s) in which the work has been carried out	City/Country	
in passport(s):			
1.			
2.			
3.			

Family name(s) and first name(s) of author presenting the paper (same as in passport):	Mr/Ms:		
Mailing address (including postcode):			
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