



Atoms for Peace and Development

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energía Atómica

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In reply please refer to: **EVT1803626**

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The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the **IAEA INPRO School on Methodology, Tools and Analysis for Enhanced Nuclear Energy Sustainability** hosted by the Government of Thailand (hereinafter referred to as "event") to be held virtually via Cisco WebEx from **22 to 26 November 2021**.

The INPRO School aims to support capacity building and national human resource development in the nuclear energy sector. In the course of the INPRO School, the IAEA and international experts will share their insights and experience to familiarize the participants with the INPRO concepts, methodology, tools and services that INPRO offers to the Member States.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Member States are invited to designate one or more participants to represent the Government at this event. Member States are strongly encouraged to identify suitable women participants.

Designations should be submitted to the IAEA through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than **1 November 2021** using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Copies should be sent by email to the Scientific Secretary of the event, Mr Maxim Gladyshev, Division of Nuclear Power, Department of Nuclear Energy, (Email: M.Gladyshev@iaea.org and to the Administrative Secretary, Ms Stefania Emmanouilidou (Email: S.Emmanouilidou@iaea.org). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, as appropriate, once the official designations have been received.

Should Governments wish, in addition, to appoint one or more observers to assist and advise the designated participants, they are kindly requested to inform the IAEA of the names and contact details of any such observers by the above date.

The IAEA takes no responsibility for, and the provider of the virtual meeting services has represented and warranted that the Services shall not contain, and that no end user shall receive from the software used to hold the virtual meeting, any virus, worm, trap door, back door, timer, clock, counter or other limiting routine, instruction or design, or other malicious, illicit or similar unrequested code, including surveillance software or routines which may, or is designed to, permit access by any person, or on its own, to erase, or otherwise harm or modify any data or any system, server, facility or other infrastructure of any end user (collectively, a "Disabling Code").

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to renew to the IAEA's Member States the assurances of its highest consideration.



2021-09-10

Enclosures: Information Sheet

Participation Form (Form A)



IAEA

International Atomic Energy Agency
Atoms for Peace and Development

IAEA INPRO School
on
Methodology, Tools and Analysis for Enhanced
Nuclear Energy Sustainability

Hosted by the
Government of Thailand

through the
Thailand Institute of Nuclear Technology

Virtual Event

22–26 November 2021

Ref. No.: EVT1803626

Information Sheet

Introduction

The International Atomic Energy Agency (IAEA) assists Member States in capacity building related to long-range and strategic planning for nuclear energy programmes in view of the long-term commitment involved, with obligations that extend well beyond 100 years. The International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO) was established in 2000 with the goal of ensuring a sustainable nuclear energy supply to help meet 21st century global energy needs. INPRO's activities are centred on the key concepts of global nuclear energy sustainability and the development of long-range nuclear energy strategies, so that nuclear energy is and remains available to meet national energy needs.

INPRO is part of the integrated services provided by the IAEA to Member States considering initial development or expansion of their nuclear energy programmes. INPRO performs nuclear energy evolution scenario modelling and comparative evaluation of nuclear energy system (NES) options to understand key issues of transition to future NESs with enhanced sustainability.

The IAEA has developed, under the aegis of INPRO, a methodology for assessing NES sustainability. The INPRO methodology covers all areas relevant to NES sustainability, all reactor types and fuel cycle facilities, all facilities of an NES, and all phases of an NES from cradle to grave.

INPRO performs modelling and analysis of innovative and evolutionary nuclear energy scenarios, and comparative evaluation of NES and options/scenario as well as road mapping to understand key issues of transition to future NESs with enhanced sustainability. The scenario analysis and decision support frameworks together with the evaluation tools developed in INPRO have proven to be extremely useful for weighing the possible national choices for the scope and extent of national nuclear energy programmes and the needed collaboration with other countries to enhance the sustainability of NES.

Objectives

The INPRO School aims to support capacity building and national human resource development in the nuclear energy sector. In the course of the INPRO School, the IAEA and international experts will share their insights and experience to familiarize the participants with the INPRO concepts, methodology, tools and services that INPRO offers to the Member States.

The national experts can enhance their skills in data analysis, modelling of NESs, developing NES options/scenarios, analysis of results and multifaceted evaluation of alternatives. Equipped with analysis tools and competence in systematic analysis, the experts will be able to contribute more effectively to the national decisions on planning and development of nuclear energy in the country.

The specific objectives of the event are to:

- familiarize the participants with the INPRO concepts and methodology for nuclear energy system sustainability assessment in different areas, such as: economics, infrastructure, waste management, environment, proliferation resistance, reactors and fuel cycle safety; and
- provide an overview of the INPRO tools, including:
 - Nuclear Energy Systems Assessment Economics Support Tool (NEST) that allows preliminary assessment of specific economic parameters and financial figures of merit (e.g., levelized unit of electricity cost, internal rate of return, return of investment, net present value, total investment) for various reactor technologies at plant level;
 - MESSAGE-NES tool – to model and evaluate nuclear energy deployment scenarios with varying assumptions about the potential role of innovative technologies;
 - KIND Evaluation Tool for comparative evaluation and ranking of nuclear energy system/ scenario options; and
 - ROADMAPS Excel Tool for road mapping towards enhanced nuclear energy sustainability.

Target Audience

The event is open to participants from the Asian Member States that are either embarking on a new nuclear power programme or expanding an existing one, as well as for the INPRO Members from Asia.

The event is targeted at experts working in nuclear energy departments and at electric utilities, energy ministries and/or research and development institutions, including young lecturers and postgraduates from the technical universities. Designated participants are expected to have a sound knowledge and understanding of energy and nuclear power systems.

Working Language(s)

English.

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 **1 November 2021**. 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.

IAEA Contacts

Scientific Secretary:

Mr Maxim Gladyshev

Division of Nuclear Power

Department of Nuclear Energy

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Administrative Secretary:

Ms Stefania Emmanouilidou

Division of Nuclear Power

Department of Nuclear Energy

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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 Secretary.

Thailand Institute of Nuclear Technology

Administration:

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Event Web Page

Please visit the following IAEA web page regularly for new information regarding this event:

<https://www.iaea.org/events/EVT1803626>

Participation Form

IAEA INPRO School on Methodology, Tools and Analysis for Enhanced Nuclear Energy Sustainability hosted by the Government of Thailand

Virtual Event

22–26 November 2021

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 Secretary M.Gladyshev@iaea.org and to the Administrative Secretary S.Emmanouilidou@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: 01 November 2021

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms
Institution:		
Full address:		
Tel. (Fax):		
Email:		
Nationality:	Representing following Member State/non-Member State/entity or invited organization:	
If/as applicable: Do you intend to submit a paper? Yes <input type="checkbox"/> No <input type="checkbox"/> Would you prefer to present your paper as a poster? Yes <input type="checkbox"/> No <input type="checkbox"/> Title:		

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. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.