



Interregional Training Course on Establishing a National Position for New Nuclear Power Programmes

Hosted by

The Government of the Russian Federation

through the

State Atomic Energy Corporation 'Rosatom'

Saint Petersburg, Russian Federation

20 to 24 June 2022

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Information Sheet

Purpose

The purpose of the event is to train participants on the IAEA's Milestones Approach and the roles and responsibilities of Nuclear Energy Implementing Organizations (NEPIO), and other relevant organizations involved in the coordination among national stakeholders to acquire the necessary tools and information for evaluating the existing and necessary nuclear infrastructures, conduct the relevant studies, develop credible reports and addressing key technical and issues of public concern.

Working Language(s)

The working language of the event will be English.

Deadline for Nominations

Nominations received after 18 May 2022 will not be considered.

Project Background

Many countries around the world are interested in introducing nuclear power to their country because they don't have sufficient natural energy resources to respond to the steadily increasing energy demand. Some of the countries have already made the decision to introduce nuclear power, while other countries have not yet done so and do not have the necessary experience, knowledge, and human resources to do so.

Embarking on a new nuclear power programme is a major undertaking that requires careful planning, preparation and investment. The development and implementation of the appropriate infrastructure to support the successful introduction of nuclear power is an important issue for Member States of the IAEA. As described in the IAEA developed Milestones in the Development of a National Infrastructure for Nuclear Power (IAEA Nuclear Energy Series No. NG-G-3.1 (Rev. 1), Vienna, 2015, a national position is central to the successful implementation of a nuclear power programme.

A decision to embark on a nuclear power programme should be based upon a well-defined and knowledgeable national position, founded, among other considerations, on sound energy planning and clear understanding of the economics and costs associated with building nuclear plants and the necessary nuclear infrastructure.

These Member States require comprehensive and credible information on nuclear power (cost/benefit, energy security, environmental issues etc.) to support their decision-making on whether to introduce nuclear power to the country. In addition, Member States may also benefit from good examples in other countries, including nuclear power countries. This includes a good understanding of the several complex and interrelated activities with long duration that are necessary in introducing a nuclear power programme.

The Agency issued guidelines and other sensitization materials to help Member States understand the requirements, pre-requisites, and other legal, financial and managerial obligations which are associated with the decision to embark on a feasibility study of a nuclear power programme

To be in the position to make a “knowledgeable decision” about whether to introduce a nuclear power programme, a Member State may undertake the development of a pre-feasibility study (PFS), which may study a variety of issues, including, inter alia:

- Results of the relevant energy planning studies;
- A macro-economic study on the impact of introducing a nuclear power programme;
Considerations of nuclear safety, including the recognition of the non-zero possibility of a severe accident;
An initial analysis of the domestic and international legal requirements and agreements required to proceed;
- A preliminary evaluation of the suitable sites capable of hosting a nuclear power plant;
- An estimation of the government funding necessary to support the development of the appropriate infrastructure, especially regulatory oversight;
- An initial strategy for the development of the necessary human resources;
- An acknowledgement of the responsibilities related to decommissioning, management of spent fuel and nuclear waste and environmental remediation; and
- An evaluation of public opinion and considerations related to stakeholder involvement.

The results of this analysis are then compiled into a comprehensive report that evaluates the country's infrastructure across 19 specific issues. After completion, this report is provided to the Government to inform its officials about whether to proceed with the introduction of nuclear power, and if so, defines future actions that are required.

Scope and Nature

This training course is planned for five working days and will include a combination of classroom lectures and interactive exercises.

The event is also intended to help Member States develop a more focused understanding of the requirements, pre-requisites, and other legal, financial, and managerial obligations which are associated with establishing a national position to support the decision to embark on a nuclear power programme based on the IAEA's Milestones Approach.

The training course will be conducted as a series of presentations by IAEA staff and international experts. The programme will also include discussions, case studies, peer-to-peer exchange of good practices, and working group sessions on related topical issues

References:

The following IAEA publications provide relevant information to Member States that are embarking on the use of nuclear power for the first time and building their national position:

- Milestones in the Development of a National Infrastructure for Nuclear Power (IAEA Nuclear Energy Series No. NG-G-3.1 (Rev. 1), IAEA, Vienna, 2015),
- Responsibilities and Functions of a Nuclear Energy Programme Implementing Organization (IAEA Nuclear Energy Series No. NG-T-3.6 (Rev. 1), IAEA, Vienna, 2019);
- Building a National Position for a New Nuclear Power Programme (IAEA Nuclear Energy Series No. NG-T-3.14, IAEA, Vienna, 2016) and
- Managing the Financial Risks Associated with the Financing of New Nuclear Power Plant Projects (IAEA Nuclear Energy Series No. NG-T-4.6, IAEA, Vienna, 2017)
- Basic Infrastructure for a Nuclear Power Project”, IAEA TECDOC 1513
- Managing the First Nuclear Power Project”, IAEA TECDOC 1555
- IAEA Nuclear Energy Series No. NG-T-3.1, “Initiating Nuclear Power Programmes: Responsibilities of Owners and Operators”
- IAEA Nuclear Energy Series No. NG-T-3.2, Rev.1 “Evaluation of the Status of National Nuclear Infrastructure Development”
- IAEA Nuclear Energy Series No. NG-T-3.3, “Preparation of a Feasibility Study for New Nuclear Power Projects”
- IAEA Nuclear Energy Series, No. NG-T-3.7, “Managing Siting Activities for Nuclear Power Plants”
- IAEA Nuclear Energy Series, No. NG-T-3.10, “Workforce Planning for New Nuclear Power Programmes”
- IAEA Nuclear Energy Series No. NG-T-3.14, “Building a National Position for a New Nuclear Power Programme”
- IAEA Nuclear Energy Series, No. NG-G-2.1, “Management of Human Resources in the Field of Nuclear Energy”

Expected outputs

The expected outputs of the training course are improved knowledge and understanding of fundamentals of nuclear economics, to help embarking and expanding countries build a national position, covering the following areas:

- Broader understanding of the IAEA Milestones approach and all 19 nuclear infrastructure issues, including the role of the NEPIO and relevant organization;
- Roles and functions of the NEPIO in developing a national position as defined in the IAEA Milestones Approach;
- Improved knowledge about the requirements, pre-requisites, and other legal, financial and managerial obligations which are associated with the decision to embark on a nuclear power programme;
- Improved understanding of the typical contents of a comprehensive report required to make a knowledgeable decision about embarking on a nuclear power;
- Improved knowledge of the challenges and lessons learned in establishing a and sustaining a national position to embark on nuclear power programme; and
- Enhanced networking opportunities among participants

The training course will provide participants the opportunity to be involved in roundtable sessions and interactive exercises to discuss common challenges and lessons learned. It is expected to foster enhanced networking between Member States embarking on new nuclear power programmes.

Participation

The event is open to 20 participants from the following Member States participating in the INT/2/021:

Algeria, Argentina, Armenia, Brazil, Bulgaria, Czech Republic, El Salvador, Estonia, Ethiopia, Hungary, Indonesia, Iran, Kazakhstan, Lithuania, Mexico, Morocco, Niger, Pakistan, Philippines, Romania, Senegal, Slovakia, South Africa, Sri Lanka, Sudan, Thailand, Tunisia, Uganda, Zambia.

Participants' Qualification and Experience

The event is open to participants from Member States that are actively considering, planning or implementing a nuclear power programme for the first time and from Member States considering or expanding their nuclear power capacity. **Prospective participants should be from government departments or NEPIOs in direct contact with decision makers in Government** who are looking for tools and knowledge to build a compelling case for their nuclear power programmes.

Candidates are requested to include a summary of how this training will provide direct benefit to their current or future job position in their application.

Individuals who participated in this course or a similar course in the past three years should not apply.

Participants are encouraged to complete the following IAEA E-Learning Module before joining the course:

- **Building a National Position**
https://nucleus.iaea.org/sites/connect-members/cbh/publicpages/E_Learning_Modules/15/Default.htm

Application Procedure

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

1. Access the InTouch+ home page (<https://intouchplus.iaea.org>) 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 (<https://websso.iaea.org/IM/UserRegistrationPage.aspx>) 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. Search for the relevant technical cooperation event (EVT2201725) 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 [InTouch+ Help page](#). Any issues or queries related to InTouch+ can be addressed to InTouchPlus.Contact-Point@iaea.org.

Should online application submission not be possible, candidates may download the nomination form for the training course from the [IAEA website](#).

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.

Training on Basic Security in the Field (BSITF)

In order to comply with UN system-wide security measures, it is required that all training course participants complete the online security awareness training BSAFE (which replaces BSITF and ASITF), prior to traveling to locations where UN security phases are in effect. The aim of these course is to educate participants on how best to avoid or minimize potential dangers and threats, and to demonstrate what individuals can do if they find themselves in insecure situations. The course is available online (<https://training.dss.un.org/course/category/6>).

Once an individual has completed the training, he/she must go back to the main training page to receive the certificate. If the button to get the certificate is not immediately visible, please refresh the page. BSAFE is maintained by UNDSS; in case of problems with the system, please contact UNDSS through the "Contact Us" page on the training website (<https://dss.un.org/dssweb/contactus.aspx>).

This certificate is compulsory for any IAEA-supported activity and should be submitted, along with the Nomination Form, through the competent authority in your country (NLO). Copies of the certificate should be kept by the candidate for his/her records as the BSAFE certificate does not expire.

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.

NOTE: The event will be hosted by the Russian Federation, therefore nominated participants who require a visa to enter the Russian Federation should submit the necessary application to the nearest diplomatic or consular representative of Russian Federation as soon as possible.

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.

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