



Interregional Training Course on Economic Aspects and Funding of a New Nuclear Power Programme

Hosted by

The Government of France

through

Électricité de France (EDF)

Paris, Dunkerque and Gravelines, France

10 to 14 October 2022

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Information Sheet

Purpose

The purpose of the event is to train participants from embarking and expanding countries an overview of the costs and benefits of a nuclear power programme to help them build a national position. This session will provide an opportunity to simulate the effect of various parameters on the competitiveness of such programme through interactive exercises.

Working Language

The working language of the event will be English.

Deadline for Nominations

Nominations received after **9 September 2022** will not be considered.

Project Background

Developing a nuclear power programme is a major undertaking requiring careful planning and preparation. 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.

Establishment of the national position provides the foundation for the future development and implementation of the nuclear power programme. Most importantly, a national position provides a credible answer to the question of why nuclear power is being chosen, while considering the results of long-term energy planning, national climate plans and national priorities, such as energy security, pollution mitigation, reduction of greenhouse gases emissions, and industrial and economic development. At the beginning of the process of building a national position, the NEPIO should prepare a case with sound arguments as input to the national decision process.

Scope and Nature

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

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)

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:

- Roles and functions of the Government and the NEPIO in developing a national position as defined in the IAEA Milestones Approach;
- Macroeconomics of a nuclear power programme: energy mix and complementarity of energy sources, relative competitiveness of energy sources, security of supply and externalities;
- The cost and economics of developing the necessary nuclear infrastructure for a nuclear power project, including the owner/operator preparation cost associated with training, development costs, construction oversight and licenses and permits;
- Impact on nuclear power plant (NPP) economics: siting criteria, construction schedule and management, standardisation and series effects, procurement and supply chain;
- NPP financing: economics of NPP, financing and structuring mechanisms, public financing and guarantees, financing of nuclear project and innovation and sustainable finance;
- NPP operation and decommissioning: NPP performance, competitiveness and sustainability of nuclear fuel and nuclear waste and decommissioning.

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

The event includes a study tour near a nuclear power plant. This study tour will focus on the effect of the plant on its surrounding and present an opportunity to talk to local officials, chamber of commerce, industrial partners, universities in the local area of the nuclear facility.

Participation

The training course is open to 25 participants from embarking and expanding countries:

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

Participants' Qualifications 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 in particular 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 (EVT2201719) 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.

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

Mr Nikita Butakov
Division for Europe
Department of Technical Cooperation
International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA
AUSTRIA
Tel.: +43 1 2600 21058
Fax: +43 1 26007
Email: N.Butakov@iaea.org