



# **Interregional Workshop on the Fundamentals of Regulatory Inspections of Nuclear Power Plant during Construction and Operation**

**Hosted by**

International Atomic Energy Agency  
and The Republic of Austria

**through the**

Energieversorgung Niederösterreich (EVN) AG,  
Nuclear Power Plant Zwentendorf

Vienna And Zwentendorf, Austria

**5 to 15 May 2025**

**Ref. No.:** ME-INT2024-EVT2406894

## **Information Sheet**

### **Purpose**

The purpose of the event is to discuss and familiarize the participants with the fundamentals of regulatory inspections of nuclear power plants focusing on hands-on inspection methods.

### **Working Language**

The working language of the event will be **English**.

# Deadline for Nominations

Nominations received after **28 February 2025** will not be considered.

## Project Background

As a low carbon source of energy, nuclear power is expected to play an increasing role in the energy mix of many countries around the world — for energy security and sustainable development, as well as for addressing environmental concerns. With more countries starting the operation of their first nuclear power plants (NPPs), as well as significant expansion in some countries, total global nuclear capacity is expected to grow despite the expected shutdown of several nuclear power plants in the coming years, with new technologies, including small modular reactors (SMRs) also expected to contribute in this regard. A nuclear power programme is a major undertaking requiring careful planning, preparation and investment in time, institutions and human resources. Nuclear power requires establishing a sustainable national infrastructure that provides governmental, legal, regulatory, managerial, technological, human resource, industrial and stakeholder support for the nuclear power programme throughout its life cycle. The INT2024 project aims to support participating Member States in creating an enabling environment to facilitate the safe, secure and sustainable introduction or expansion of nuclear power. It is intended to address the common issues identified in many of those Member States. It builds on the lessons learned from three previous four-year interregional projects in this field of activity (INT2013, INT2018 and INT2021) with adaptations to match the needs of the Member States.

## Scope and Nature

This workshop is specifically intended for staff of nuclear regulatory bodies. The event is planned for nine working days and will include a combination of class room workshop, a visit to Nuclear Power Plant Zwentendorf and interactive exercises. Following topics will be covered during the workshop:

- basic knowledge of the IAEA Safety Standards
- Fundamentals of inspection (Preparation, conduct, evaluation and reporting)
- An overview of the basic information required for inspections
- How to perform general plant inspections

## Expected Outputs

The workshop is planned for nine working days and will include a combination of classroom workshop, a visit to Nuclear Power Plant Zwentendorf and interactive exercises. Following topics will be covered during the workshop:

- Basic knowledge of the IAEA Safety Standards
  - Brief introduction to IAEA activities in nuclear regulatory area, an overview of the standards that are applicable to regulatory inspections, highlights of applying specific requirements such as unannounced inspections and unfettered access to the facilities and activities of the NPP

- Fundamentals of inspection
  - Preparation (gathering of information, prepare an inspection plan and schedule using risk insights, operating experience and other relevant information as discussed in the inspection procedure)
  - Conduct (field techniques using direct observation, indirect observation, performance based, interviewing skills, role and conduct of inspector) Evaluation (determine extent of condition and root cause – if appropriate, safety significance of findings) Reporting (what does it take to communicate findings)
  - Reporting (what does it take to communicate findings)
- An overview of the basic information required for inspections
  - Plant familiarization; Review the preliminary/final safety analysis, plant drawings, technical specifications; Overview of operating and maintenance procedures; Industrial safety; Radiological protection and controls; housekeeping and fire protection standards; Security etc.
- How to perform general plant inspections
  - Fire protection; Housekeeping; Radiological protection; Foreign material exclusion; Scaffolding over safety systems; Flood barriers; Valve position, Indicator lights, locking devices, improper pipe supports, labelling errors, thread engagement, temporary modifications, material damage etc.

## **Participation**

The event is open to 20 participants from the Member States participating in the INT2024 project which need assistance to enhance the number and knowledge of staff involved in launching or expanding nuclear power programmes:

Argentina, Armenia, Bangladesh, Brazil, Bulgaria, Czech Republic, Egypt, Estonia, Ghana, Hungary, Iran, Jordan, Kazakhstan, Kenya, Lithuania, Mexico, Nigeria, Pakistan, Poland, Romania, Saudi Arabia, Slovakia, South Africa, Türkiye, Uzbekistan

## **Participants' Qualifications and Experience**

The participants for the event should represent the regulatory body and have a basic understanding of the IAEA Safety Standards relating to the inspection and enforcement of nuclear power plants. Participants should meet the following qualifications:

- Engineering or science degree
- No or limited inspection experience
- Basic power reactor knowledge
- Limited risk assessment and deterministic knowledge of NPPs
- A member of a regulatory body

# 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. Download and complete the [Designation of Beneficiary and Emergency Contact Form](#), and upload to InTouch+ ('Profile' tab under the personal section) specifying the document name. If already provided, kindly discard this step; and
  - c. Search for the relevant technical cooperation event (EVT2406894) 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.

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](mailto:InTouchPlus.Contact-Point@iaea.org).

Should online application submission not be possible, candidates may download the nomination form for the meeting 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 AX Travel Management, or a travel allowance, 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.

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