IAEA
International Atomic Energy Agency
*Atoms for Peace and Development*

# Regional Workshop on Industry-Academia-Government Collaboration for Capacity Building in Nuclear Education and Training

**Hosted by**

The Government of Cyprus

**through the**

Frederick University

Larnaca, Cyprus

**30 June to 4 July 2025**

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# Information Sheet

## Purpose

The purpose of the event is to discuss and share experience on various strategies and approaches to enhance Industry-Academia-Government (IAG) collaboration for national capacity building to foster a sustainable skilled and knowledgeable nuclear workforce.

## Working Language(s)

The working language(s) of the event will be English.

## Deadline for Nominations

Nominations received after **14 April 2025** will not be considered.

# Project Background

Providing high-quality nuclear education and training in some developing and industrialized countries is challenged by limited university resources and capabilities. Ensuring relevant education for nuclear professionals requires early government and industry investment in academic infrastructure and available competencies, fostering IAG collaboration throughout the life cycle of national nuclear programmes.

Thus, the Technical Cooperation project RER0049, "*Enhancing the Capabilities of Educational Institutions for the Sustainable use of Nuclear Technologies"* aims to enhance the capacity and quality of educational institutions for the sustainable, safe, and secure use of nuclear technologies in Europe and Central Asia.

The project will facilitate the sharing of information and exchange of knowledge and expertise between countries with well advanced educational programmes and those that need further assistance to optimize and enhance their education programmes. The project offers high impact opportunities such as the establishment and strengthening of nuclear education programmes, resource optimization and development of partnerships.

The capacity building topics are based on identified gaps and areas for improvement in educational programmes in nuclear science and technology in different Member States and action plans to strengthen the capacities of nuclear and radiation educational and training providers.

Based on experience gained from the previous TC project and initiatives the following activities will be promoted: i) provision of events for lecturers to enhance their instructional delivery and lesson planning skills, ii) identification of new or to be improved training materials and practical experimental exercises to enhance the learning, iii) expert missions to facilitate the transfer of best practices and assist MS in developing establishing their national E&T strategies or educational organizations to strengthen their knowledge management processes, iv) Scientific Visits (SVs) to share experience, particularly for universities developing new nuclear programmes, as well as, v) workshops to provide a forum for exchange on best practices and effective initiatives to shape the national strategies and outreach initiatives in Member States.

The overall objectives of the regional RER0049 project are as follows:

i. Gather information to provide a broad overview of Member States practices on their capacity building of the nuclear workforce of which nuclear education is a vital part, and outreach initiatives for nuclear education and training - both at the university and national levels - aimed at building and maintaining a skilled workforce in the nuclear sector.

ii. Provide a platform for exchanging MSs experiences on effective strategies and enable the identification of further needs, common interests and collaboration opportunities to enhance current programmes or to establish, develop and launch new initiatives, such as IAG supported centres of excellence, and programme materials.

iii. Disseminate good practices and facilitate the continuous improvement of outreach initiatives through the sharing of experiences, programme materials and lessons learned from their implementation.

# Scope and Nature

The purpose and scope of a technical workshop on industry-academia-government cooperation and the use of specialized centres of excellence for nuclear education and training would be multifaceted, aiming to bridge gaps, enhance collaboration, and improve the quality and relevance of nuclear education and training programs.

The specific objectives of the workshop are as follows:

- Provide a broad overview of practices on IAG approaches to bridge the skill gaps in the nuclear sector by tailoring education, training, and professional development programs to meet industry needs.
- Provide a platform for exchanging MSs experiences on effective and impactful IAG approaches and models to **attract, educate, recruit, develop and retain**, to ensure that the workforce is well-prepared to meet the demands of the nuclear industry.
- Disseminate good practices and facilitate the continuous improvement of IAG collaboration initiatives and use of specialized centres of excellence for E&T through the sharing of experiences and lessons learned from their implementation.
- Enable the identification of further needs, common interests and improvement opportunities to enhance current programmes or to establish, develop and launch new initiatives and programme materials.

# Expected Outputs:

Throughout the Regional Workshop, the participants will share information on key initiatives that, when implemented strategically and in coordination at national level, can significantly enhance capacity building in nuclear education and training, fostering a skilled and knowledgeable workforce for the nuclear sector.

It is expected that every participating country will provide presentation(s) reflecting on the industry-academia-government-driven approaches for the nuclear sector that are meant to:

- Ensure the sustainability of educational pipelines for future demand and the supply of highly qualified nuclear professionals;
- Strengthen the interactions and collaboration of universities with government and industry partners, specialized centres of excellence, national training centres or science hubs to make nuclear E&T offers better respond to nuclear industry needs;
- Deploy effective programmes to attract, educate, train and retain students into nuclear-related career pathways.

In particular, information related but not limited to the following activities on the **industry-academia-government collaboration** will be welcomed:

— **Approaches, strategies** and **government-enabled/ funded schemes** to sustain nuclear education and training and ensure the development of skills for the nuclear sector.

— **Formal partnerships** between academic institutions and industry players to bridge the gap between academic knowledge and practical skills, industrial chairs and joint research projects and industry-sponsored educational and practical training programs (such as scholarships, paid internships, co-ops, apprenticeships) that provide students with real-world experience.

— **Establishment and use of specialized centres of excellence for nuclear education and training**: national centres of excellence or institutes with state-of-the-art facilities with a focus on the various aspects of nuclear S&T and safety; collaboration with experienced professionals from the nuclear industry to participate in teaching; partnership/agreements for the shared use of facilities and resources between academia and industry to support specialized training and research; Fellowships and research opportunities for educators to enhance their expertise;

— **Enhanced Collaboration:** to identify areas for collaborative research projects that address industry challenges and promote technological advancements; participate in knowledge exchange programs; encourage joint publications, conferences, and knowledge-sharing platforms.

- **Curriculum modernization**: developments or plans to update curricula to reflect the latest developments in nuclear S&T, such as technology advances, digital and simulation-based learning tools;
- **Recognition incentives (credits)** for **working professionals** to further position the various nuclear courses for continuous professional development recognized by industry; development of **E-learning and online resources** to reach a wider audience, such as the development of part-time programmes and remote access to courses, webinars and educational platforms.
- **Awareness and outreach campaigns:** to raise awareness of the importance of nuclear S&T and its many contributions to energy, healthcare, environment, etc.; to attract students in pursuing nuclear-related degrees, promote nuclear education and highlight career pathways in the nuclear sector.

The specific outcomes objectives of the workshop are as follows:

- Practical examples from MS of effective and impactful IAG collaboration approaches;
- A set of key challenges and recommendations for improving academia-industry cooperation;
- Best practices and lessons learned from the development and use of specialized centres of excellence in nuclear education and training'
- Enhanced understanding of industry needs and how academic institutions can meet these needs;

Strengthened partnerships and networks among stakeholders.

# Participation

The regional meeting is open to participants from Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Georgia, Greece, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Montenegro, Poland, Portugal, North Macedonia, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Tajikistan, Turkey, Ukraine, and Uzbekistan.

Each Member State can nominate up to three relevant candidates from relevant government bodies (e.g., Ministry of Education, Ministry of Energy), academic institutions with nuclear education programmes, and/or industry-driven centres of excellence, with experience in nuclear education, capacity building programmes and workforce development.

# Participants' Qualifications and Experience

Nominated candidates should be the representatives of institutions from Member States participating in TC Project RER0049. These institutions might include universities delivering nuclear E&T programmes, industry- or government-driven specialized centres of excellence and research institutions, national educational networks with contributing industry partners, relevant government bodies. The representatives need to have experience in managing or overseeing the strategy and/or execution of industry-academia-government collaboration initiatives, such as:

- **Academic Partners**: faculty members and/or researchers that lead academic or industry chairs, collaborate with industry to provide academic rigor and access to cutting-edge research, and conduct industry-sponsored research and leverage research and innovation budgets with national and provincial funding programs.
- **Program Directors and Managers** who oversee the execution of education and learning programmes in collaboration with universities; responsible to ensure that the programmes align with the organization's needs and standards.
- **Subject Matter Experts** (SMEs): Experienced professionals that contribute practical insights and real-world experience. They often participate as guest lecturers, mentors, and advisors, bring in-depth knowledge and expertise in specific areas of the nuclear sector, design and deliver training content, lead research projects, and provide guidance on best practices and industry standards.

**Government Representatives**: involved in or supporting national capacity-building efforts for nuclear education and training; they might provide funding, policy guidance and oversee strategic programmes/evaluations to nuclear skills development to ensure a long-term supply of qualified professionals for the nuclear sector.

# 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 (EVT2501248) 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.

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.

## 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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