



Regional Workshop on Nuclear and Radiation Education and Training

Hosted by

The Government of Portugal*

through the

Faculty of Sciences of the University of Lisbon

Lisbon, Portugal*

4-7 December 2023

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Information Sheet

Purpose

The purpose of the event is to discuss and share experience on various aspects and approaches to enhance capacity building in nuclear education and training.

The development will be based on identified gaps in educational programmes in different Member States and action plans to strengthen the capacities of nuclear and radiation educational and training providers.

Existing education materials will be reviewed to ensure that they meet national industry demands for education and training. This shall ensure the best practices that can bring greater efficiency and reduce the cost of education and training implementation. This event will also contribute to the improvement of the existing educational and training programmes and the establishment of new educational and training programmes.

Working Language(s)

The working language of the event will be English.

() Please note that the event is subject to the acceptance of the Host Government Agreement.*

Deadline for Nominations

Nominations **received after 30 October 2023** will not be considered.

Project Background

Education and training are key factors to the sustainability of the nuclear infrastructure at national and regional levels.

The challenges of providing high-quality education and training in some developing and industrialized countries are primarily associated with limitations on the resources and capabilities of universities in providing the required scope and quality. Adequate attention and resources must be devoted from the outset to the provision of academic competencies and quality educational programmes through cooperation between universities and industry, to ensure the provision of relevant educational and training for nuclear professionals.

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.

To do so the project aims to: 1) identify the gaps in nuclear-related educational programmes and training needs of university educators and prepare an action plan ; 2) identify and assess the available nuclear-related educational and training programmes in universities with a view of harmonizing materials, 3) develop and implement Train the Trainers (TTT)-style courses to enhance the instructional delivery and lessons planning skills of university educators and/or teaching instructors engaged in establishing and delivering nuclear-related courses and programmes and, 4) evaluate the training material and feedback to finalize the TTT course.

Based on experience gained from the previous TC project and initiatives the following activities will be promoted: i) provision of TTT 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.

A lack of national strategies for the long-term sustainability of educational pipelines for nuclear professionals, together with a lack of coordinated outreach initiatives to increase the number of enrolments into nuclear-related programmes at universities, were among the common gaps identified by the Member States.

This workshop is being organized to identify practical solutions and allow for effective experience exchange among the MSs to address these gaps.

Scope and Nature

The objectives of the Regional Workshop 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 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.

Expected Outputs:

Throughout the Regional Workshop, the participants will share information on key initiatives that, when implemented strategically and in coordination with industry and government support, 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 a presentation(s) reflecting on the government-driven national strategy(ies) for education and training for the nuclear sector or, in the absence of a national strategy, to provide information on key initiatives and outreach programmes at universities for collaboration on nuclear education, training, research and knowledge management (undertaken with various national and international stakeholders and partners) 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 and training organizations with government and industries to make nuclear educational and training offers better respond to nuclear industry needs;
- deploy effective outreach and awareness campaigns to promote and increase the student enrolment into nuclear education programmes at universities.

In particular, information related but not limited to the following activities will be provided:

- **National strategies and government-enabled/ funded schemes** to sustain nuclear education and training and ensure the development of skills for the nuclear sector.
- **Awareness campaigns** to raise awareness of the importance of nuclear S&T and its many contributions to energy, healthcare, environment, etc.;
- **Outreach programmes to secondary schools** to attract students in pursuing nuclear-related degrees, promote nuclear education and highlight career pathways in the nuclear sector;

- **Industry-academia collaboration:** formal partnerships between universities and nuclear industries to bridge the gap between academic knowledge and practical skills, industrial chairs and joint research projects and industry-sponsored educational programs.
- **Use of specialized centres 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.
- **National and international collaboration:** to share resources and expertise in nuclear education and training; participation in knowledge exchange programs and joint research initiatives.
- **Fellowships and research opportunities for educators** to enhance their expertise;
- **Scholarships and internships for students:** scholarships, stipends and paid internships to attract students to nuclear education programs; collaboration with industry organizations to offer practical training opportunities.
- **Recognition incentives (credits)** in addition to the formal accreditation and certification: to further position the various nuclear courses for continuous professional development recognized by industry.
- **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.
- **Curriculum modernization:** developments or plans to update curricula to reflect the latest developments in nuclear S&T and incorporate digital and simulation-based learning tools.

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, Türkiye, Ukraine, and Uzbekistan.

Each Member State can nominate up to two candidates, ideally one from the government body /relevant ministry and one from an academic institution, with direct involvement and experience in establishing and/or managing educational & training strategies and outreach programmes.

Participants' Qualifications and Experience

Nominated candidates should be the representatives of the counterpart institutions or/and Project Counterparts designated for the TC Project RER0049 - such as universities, government bodies (e.g, Ministry of Education, Ministry of Energy, etc) and/or educational networks - having responsibilities for establishing and/or managing:

- national strategy(ies) /plans for nuclear education and training and strategic approach to nuclear skills needed to secure the long-term supply of qualified professionals for the nuclear sector;
- strategic initiatives and programmes for competence and human resources development for nuclear education and training;
- outreach programmes and awareness campaigns to attract, educate, train and retain students into nuclear-related career pathways.

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 (**EVT2300763**) 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 and submit their applications to their National Authorities. The nomination forms once fully approved can be submitted by e-mail in a PDF format through the official channels via the IAEA Official E-Mail (Official.Mail@iaea.org) with copy to Ms Alic (E.Alic@iaea.org) and Ms Urazgaliyeva (A.Urazgaliyeva@iaea.org).

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 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 event, 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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