

# Interregional Training Course on Safety and Impact Assessment for Decommissioning Projects

#### Hosted by

The Government of Brazil

#### through the

Eletronuclear - Eletrobras Termonuclear S.A.

Angra dos Reis, Brazil

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#### **Information Sheet**

# **Purpose**

The purpose of the event is to train the participants in safety assessment for the decommissioning of nuclear facilities including the application of a graded approach to a range of potential facilities and activities; and the implementation of safety measures.

### **Working Language(s)**

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

#### **Deadline for Nominations**

Nominations received after **08 July 2022** will not be considered.

#### **Background**

The growing number of nuclear facilities to undergo decommissioning will require the corresponding number of human resources to cope with these situations. The capacity building efforts by the IAEA include the project INT2020, which was set up to provide enhanced and innovative training mechanisms in the scope of Decommissioning and Environmental Remediation, building upon experience accumulated with similar initiatives in the past.

Building competence in Decommissioning and Environmental Remediation is challenging, mainly due to the diversity of professional backgrounds that potential participants may have. The subjects are truly multidisciplinary. Professionals with technical backgrounds may not have the necessary skills in project management -related aspects, whilst those professionals in managerial positions may lack basic understanding regarding technical disciplines that support decommissioning decisions. Because of these, IAEA training events on Decommissioning and Environmental Remediation, have often been implemented at a general ("good for all") level, i.e., at a raising awareness level.

Comprehensive training, covering a wide range of aspects relevant to decommissioning and environmental remediation is being brought to implementation, with the aim of improving the qualification of technical personnel, decision makers and planners alike. An emphasis is given to enhancing practical skills and the project is open to all Member States, but focus is on MSs with a clear need to proceed with the implementation of Decommissioning and Environmental Remediation or MSs facing difficulties in moving ahead with already established projects.

This training activity focuses on the safety assessments necessary to develop, document and hand in to the regulatory authorities for decommissioning of nuclear facilities.

# **Expected Outputs**

The training will support licensees, regulatory bodies and policy makers with the safe implementation of decommissioning projects, by establishing and enhancing the capacity of participants related to the Safety Assessments addressing the decommissioning of all types of facilities that produce, posses, use or store radioactive materials. Among the expected outputs the most important are:

- Increased awareness of the importance of timely arrangements for the safe decommissioning of nuclear facilities at a national level;
- Enhanced competence of participants, attained by the comprehensive set of lectures, practical moments, exercises and technical evaluations in the subject of Safety Assessment for decommissioning, as well as the Experts' experiences in nuclear and non-nuclear decommissioning and remediation projects.
- Practical insights useful for the planning and implementing of decommissioning activities taking into account the safety of workers and members of the public, in terms of both radiological and non-radiological hazards.

#### **Participation**

The training course is open to a maximum of 30 participants from the following countries:

Algeria, Angola, Argentina, Armenia, Azerbaijan, Bangladesh, Belarus, Brazil, Bulgaria, Chile, China, Croatia, Cuba, Czech Republic, Egypt, Estonia, Georgia, Greece, Hungary, Indonesia, Iran, Islamic Republic of, Iraq, Jamaica, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Latvia, Libya, Lithuania, Malawi, Malaysia, Mexico, Mongolia, Morocco, Mozambique, Namibia, Niger, North Macedonia, Pakistan, Peru, Philippines, Poland, Republic of Moldova, Romania, Russian Federation, Saudi Arabia, Serbia, Slovakia, Slovenia, South Africa, Tajikistan, Thailand, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Republic of Tanzania, Uzbekistan, Venezuela, Viet Nam, Zambia.

# **Scope and Nature**

The training addresses the application of the safety assessment methodology throughout the planning and implementation of decommissioning actions, including any deferred dismantling period after finalization of operations and up to the release of the site from regulatory control. In regard to the type of facilities in the scope of the training, nuclear and non-nuclear will be discussed, which includes nuclear power plants, research reactors, other facilities in the nuclear fuel cycle, radioactive waste storage facilities, relevant medical, industrial, research and development facilities, and facilities from former military or defence programmes that have been transferred permanently to and managed exclusively within civilian programs.

The safety assessment covers the evaluation of radiological consequences for workers, the public and the environment of planned actions and of potential accidents during decommissioning considering factors such as the changing radiological conditions, radiological and non-radiological hazards and associated risks during the decommissioning of the facility. This training will cover aspects related to the role of safety assessment to support decommissioning, the application of the graded approach and comprehensive safety assessment process for decommissioning of a facility.

# Participants' Qualifications and Experience

The training is targeted at national organizations engaged with the planning, implementation, or regulatory supervision of decommissioning of all types of facilities that give rise to radiation risks. It is aimed at working-level professional staff in technical and/or managerial position, who have basic knowledge in the fundamentals of radiation protection, the safety assessment framework, nuclear and radiation safety, as well as industrial safety. For the most part, it is assumed that course participants would come from a scientific, engineering, or technical background.

Particularly, the training week will be the last step of a preparatory journey that will enable to level out the participant's knowledge. First, the participants will take a set of e-Learning modules. At the end of each module the candidate will need to satisfactorily go through a quiz. The candidates who successfully complete this step can be nominated as participants of the training week.

After that stage, the meeting participants will need to attend a webinar, in which the training activity will introduced. In the webinar one of the lecturers will provide an overall perspective of the subjects to cover in the training week and participants will be able to pose questions.

At the end of the webinar, an assignment will be distributed to participants. They will be bringing to the

first training day oral presentations that briefly discuss the possible solutions to the assignment. Discussions on these solutions will be part of the training effort during the week and the base for group work with practical exercises. Also, during the week, daily technical effectiveness evaluation quizzes will be distributed to be completed by participants a way to assess the learning process.

# **Application Procedure**

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

- 1. Access the InTouch+ home page (<a href="https://intouchplus.iaea.org">https://intouchplus.iaea.org</a>) 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 (<a href="https://websso.iaea.org/IM/UserRegistrationPage.aspx">https://websso.iaea.org/IM/UserRegistrationPage.aspx</a>) 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 (**EVT2202809**) 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 <u>InTouch+ Help page</u>. Any issues or queries related to InTouch+ can be addressed to <u>InTouchPlus.Contact-Point@iaea.org</u>.

Should online application submission not be possible, candidates may download the nomination form for the training course from the <u>IAEA website</u>.

**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 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**

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