



IAEA

International Atomic Energy Agency

Atoms for Peace and Development

**International Conference on Nuclear
Decommissioning: Addressing the Past and
Ensuring the Future**

IAEA Headquarters

Vienna, Austria

15–19 May 2023

Organized by the

International Atomic Energy Agency (IAEA)

Announcement and Call for Papers

A. Background

Decommissioning is the final stage in the lifecycle of any nuclear and radiological facility. Sustainability and circular economy principles demand that it be implemented safely, in a cost effective and environmentally sensitive manner and taking into account the future uses of the site.

There are valuable lessons to be learned from completed and ongoing decommissioning projects, covering a wide variety of facilities (educational and research facilities, fuel cycle facilities, research reactors and nuclear power plants), including decommissioning of facilities which experienced nuclear or radiological incidents and accidents.

The growing decommissioning demand worldwide will benefit from already completed and ongoing projects, but the increasing number of facilities to be decommissioned concurrently in the coming decades raises new challenges in terms of the infrastructure, resources and expertise needed to support their decommissioning.

B. Purpose and Objectives

The purpose of the event is to discuss achievements, challenges and lessons learned in the decommissioning of nuclear facilities, highlighting current priority needs and sharing information on strategies and approaches that enhance safe, secure and cost-effective implementation of programmes. The event will aim to raise awareness of the importance of addressing decommissioning as part of a sustainable future, supporting optimal use of the resources needed for implementation, enabling further development of sites, and providing relevant knowledge and inputs for new facilities under design or construction.

C. Themes and Topics

The following topics will be addressed during the conference:

Track 1- Infrastructure and frameworks for effective and efficient decommissioning

This track will consider national policies and strategies, legal, regulatory and institutional frameworks (including decision making processes), financing mechanisms, integrated waste management and transportation systems and specific education and training infrastructure that need to be in place to enable and support the implementation of decommissioning programmes. Decommissioning is currently being implemented in many countries, and therefore wide experience already exists concerning the necessary infrastructure and frameworks to support these programmes.

Keynote topics may include:

- Establishing national frameworks for decommissioning
- Establishing an integrated waste management and transportation system to support decommissioning
- Creating an integrated approach to competence building, including policies and strategies for research and development, education and training

Track 2 - Planning and preparing for decommissioning

This track will consider the planning and preparatory activities to be undertaken prior to commencement of decommissioning. Issues to be addressed will include: organizational approaches to conducting decommissioning as well as emerging contracting models such as licence transfer to specialist decommissioning organizations, cost estimation, human resource planning, procurement processes, assessment of facility conditions (including initial characterization surveys) and safety assessment of proposed decommissioning actions, radioactive waste and materials management needs, available technologies for decommissioning implementation and associated research and development needs, licensing procedures and communication plans. The session will also cover forward planning by regulatory bodies in preparation for oversight of decommissioning implementation, evaluating staffing needs including the required competences, and procedures for oversight of implementation.

Keynote topics may include:

- Planning for decommissioning during a facility's lifecycle
- Application of the graded approach to decommissioning
- Transition from operation to decommissioning and efficient preparation of decommissioning activities
- Cost estimation for decommissioning including consideration of uncertainties within and beyond the defined project scope
- Addressing uncertainties in scenario planning due to insufficient information (e.g., as regards inventory and facility condition), including the implications of potential major changes to the external environment (out-of-scope risks)
- Stakeholder involvement including timely communication between licensee and regulatory body for building confidence and obtaining social acceptance for decommissioning projects and site reuse.

Track 3 - Implementing decommissioning projects

This track will consider current good practice in the implementation of decommissioning projects, providing opportunities for sharing experiences in discussing technical, regulatory or other challenges, including those gained from dealing with unexpected situations during decommissioning. Good practices in project management will be discussed, including relationships with the supply chain and management of project uncertainties and risks. Technology-specific decommissioning challenges (e.g., for sodium-cooled fast reactors and for graphite-moderated reactors) will be considered. Experiences from decommissioning projects being implemented in the aftermath of incidents or accidents will also be addressed, including consideration of relevant lessons learned and innovations developed to deal with such situations and that may be beneficial to other decommissioning projects.

Keynote topics may include:

- Project management approaches (oversight of contractors, project risk management, key performance indicators to track and steer progress etc.)
- Technical and regulatory challenges and issues for decommissioning implementation (including management of decommissioning waste)
- Systems applied to ensure continuous improvement
- Use of latest technologies, including those developed to implement decommissioning under incident/accident-impacted conditions and now having wider applicability.

Track 4 - Completing decommissioning projects

The track will consider the process of defining the decommissioning end state and the subsequent demonstration of its achievement, including determination of the physical, radiological, and other relevant conditions of the site and remaining structures at the end of decommissioning. The methods and approaches required to demonstrate compliance with relevant end state objectives and criteria will be discussed, including those to reach the agreed end state, radiological surveys and reporting of the final radiological condition and associated regulatory activities. For the case of site release with restrictions on future uses, the institutional measures and controls to be implemented after completion of decommissioning will be considered. The decision-making process related to end state determination, including involvement of stakeholders and considerations of the intended reuse (e.g. general, industrial, nuclear) will be discussed.

Keynote topics may include:

- Regulatory framework, site release criteria and procedures to make sites available for new uses, including scenarios of staged release or partial release with ongoing nuclear use of the remaining site (e.g. on multifacility sites)
- Procedures to demonstrate achievement of the agreed end state (including final survey and records for retention)
- Stakeholder involvement in end the state definition and site release decision-making
- End states for large nuclear sites with legacy facilities
- Final project reporting

Track 5 – Perspectives on enhancing decommissioning effectiveness and efficiency

This track will consider innovations, including ongoing and planned research and development programmes and application of good practices and technologies from other industries, which would enable future and ongoing decommissioning projects to be implemented in a more sustainable manner. Lessons learned from ongoing projects suggest opportunities for a more effective and efficient decommissioning in the future, including decommissioning by design approach. Innovations, both technical and organizational, could contribute to achieving this objective. The management of assets, decommissioning of materials and waste in the context of circular economy principles, will also be discussed, including application of the waste hierarchy. Measures that may promote greater resilience in the supply chain and improved dialogue with stakeholders will be considered.

Keynote topics may include:

- Improved knowledge management systems to capture lessons learned and facilitate their use in decommissioning projects
- Development of new technologies and techniques, e.g. decontamination and dismantling technologies
- Application of digitalization, robotics and related experiences from other industries
- Facilitating international cooperation and information exchange in decommissioning projects, including harmonization of practices and associated standards
- Decommissioning and waste management considerations at the design stage of facilities, including the new types of nuclear facilities (e.g. SMRs, fusion facilities)

D. Structure

The conference will consist of an opening plenary session, topic-specific technical sessions, discussion panels, and a closing plenary session to highlight the main conclusions of the conference.

The conference will include presentations from invited international experts, selected oral presentations, panel discussions, poster presentations, side-events and exhibitions. The detailed programme will be made available on the conference web page in advance of the conference.

E. Expected Outcomes

It is expected that the conference supports Member States in making sustained progress in decommissioning activities and where possible enabling the reuse of sites through supportive policies and strategies and the use of effective and efficient methodologies and technologies.

Based on knowledge and lessons learnt disseminated at the Conference, Member States are expected to proactively design and implement actions to bring efficiency in decommissioning and minimize environmental impact.

F. Target Audience

The conference will be of interest to those involved in establishing national frameworks, planning, implementation and oversight of decommissioning projects, including both small and major radiological and nuclear facilities. Participants are expected to include policy makers, regulators, implementers, technical support organizations, waste management organizations, organizations which represent local community interests, industry representatives, research and academic institutions and international organizations with an interest in decommissioning.

G. Call for Papers

Contributions on the topics listed in Section C are welcome as oral or poster presentations. All submissions, apart from invited papers, must present original work, which has not been published elsewhere.

G.1. Submission of Abstracts

Abstracts (approximately 150 to 200 words on one printed A4 page, may contain any charts, graphs, figures and references) should give enough information on the content of the proposed paper to enable the Programme Committee to evaluate it. Anyone wishing to present at the conference must submit an abstract in electronic format using the conference's file submission system ([IAEA-INDICO](#)), which is accessible from the conference web page (see Section Q). The abstract can be submitted through this system from **29 March 2022** until **31 October 2022**. Specifications for the layout will be available on IAEA-INDICO. The system for electronic submission of abstracts, IAEA-INDICO, is the sole

mechanism for submission of contributed abstracts. Authors are encouraged to submit abstracts as early as possible. The IAEA will not accept submissions via email.

In addition, authors must register online using the InTouch+ platform (see Section H). The online registration together with the auto-generated Participation Form (Form A) and Form for Submission of a Paper (Form B) must reach the IAEA no later than **31 October 2022**.

IMPORTANT: The Programme Committee will consider uploaded abstracts only if these two forms have been received by the IAEA through the established official channels (see Section H).

G.2. Acceptance of Abstracts

The Secretariat reserves the right to exclude abstracts that do not comply with its technical or scientific quality standards and that do not apply to one of the topics listed in Section C.

Authors will be informed by **20 December 2022** as to whether their submission has been accepted, either orally or as a poster, for presentation at the conference. Accepted abstracts will also be reproduced in an unedited electronic compilation of Abstracts which will be made available to all registered participants of the conference.

Authors will be asked to provide an extended abstract (3 to 5 pages) by **31 January 2023**. Longer manuscripts will only be accepted at the discretion of the Secretariat and only in exceptional cases. Guidelines and a template for the preparation and submission of the extended abstract will be available on IAEA-INDICO.

G.3 Proceedings

Following the conference, the IAEA will publish a summary report. The proceedings will be made available to read online.

H. Participation and Registration

All persons wishing to participate in the event must be designated by an IAEA Member State or should be a member of an organization that has been invited to attend.

Registration through the InTouch+ platform:

1. Access the InTouch+ platform (<https://intouchplus.iaea.org>):

- Persons with an existing NUCLEUS account can [sign in here](#) with their username and password;
- Persons without an existing NUCLEUS account can [register here](#).

2. Once signed in, prospective participants can use the InTouch+ platform to:

- Complete or update their personal details under ‘Basic Profile’ (if no financial support is requested) or under ‘Complete Profile’ (if financial support is requested) and upload the relevant supporting documents;
- Search for the relevant event (**EVT2102336**) under the ‘My Eligible Events’ tab;
- Select the Member State or invited organization they want to represent from the drop-down menu entitled ‘Designating authority’ (if an invited organization is not listed, please contact Conference.Contact-Point@iaea.org);

- If applicable, indicate whether a paper is being submitted and complete the relevant information;
- If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
- Based on the data input, the InTouch+ platform will automatically generate Participation Form (Form A), Form for Submission of a Paper (Form B) and/or Grant Application Form (Form C);
- Submit their application.

Once submitted through the InTouch+ platform, the application together with the auto-generated form(s) will be transmitted automatically to the required authority for approval. If approved, the application together with the form(s) will automatically be sent to the IAEA through the online platform.

NOTE: Should prospective participants wish to submit a paper or request financial support, the application needs to be submitted by the specified deadlines (see section O).

For additional information on how to apply for an event, please refer to the [InTouch+ Help](#) page. Any other issues or queries related to InTouch+ can be sent to InTouchPlus.Contact-Point@iaea.org.

If it is not possible to submit the application through the InTouch+ platform, prospective participants are requested to contact the IAEA's Conference Services Section via email: Conference.Contact-Point@iaea.org.

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency's Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

I. Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the conference. The IAEA has, however, limited funds at its disposal to help cover the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the conference.

If participants wish to apply for a grant, they should submit applications to the IAEA using the InTouch+ platform through their competent national authority (see Section H). Participants should ensure that applications for grants are:

1. Submitted by **31 October 2022**;
2. Accompanied by Grant Application Form (Form C); and
3. Accompanied by Participation Form (Form A).

Applications that do not comply with the above conditions cannot be considered.

Approved grants will be issued in the form of a lump sum payment that usually covers **only part of the cost of attendance**.

J. Distribution of Documents

A preliminary and final programme will be made available on the conference web page (see Section Q) prior to the start of the conference. The electronic compilation of abstracts will be accessible free of charge to participants registered for the conference.

K. Exhibitions

A limited amount of space will be available for commercial vendors' displays/exhibits during the conference. Interested parties should contact the Scientific Secretariat by email Decom2023@iaea.org by **31 October 2022**.

L. Working Language

The working language of the conference will be English. All communications must be sent to the IAEA in English.

M. Venue and Accommodation

The conference will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

Participants must make their own travel and accommodation arrangements. Hotels offering a reduced rate for participants are listed on <https://www.iaea.org/events>. Please note that the IAEA is not in a position to assist participants with hotel bookings, nor can the IAEA assume responsibility for paying fees for cancellations, re-bookings and no-shows.

N. Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as early as three months but not later than four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

For more information, please see the Austria Visa Information document available on <https://www.iaea.org/events>.

O. Key Deadlines and Dates

Submission of abstracts through IAEA-INDICO	31 October 2022
Submission of Form B (together with Form A) through the InTouch+ platform	31 October 2022
Submission of Form C (together with Form A) through the InTouch+ platform	31 October 2022
Notification of acceptance of abstracts for oral or poster presentation	20 December 2022
Electronic submission of extended abstracts through IAEA-INDICO	31 January 2023
Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform	No deadline

P. Conference Secretariat

General Postal Address and Contact Details of the IAEA:

International Atomic Energy Agency
 Vienna International Centre
 PO Box 100
 1400 VIENNA
 AUSTRIA
 Tel.: +43 1 2600
 Fax: +43 1 2600 2007
 Email: Official.Mail@iaea.org

Scientific Secretaries of the Conference:

Ms Olena Mykolaichuk
 Division of Nuclear Fuel Cycle and Waste Technology
 Department of Nuclear Energy
 Tel.: +43 1 2600 26910

Mr Vladan Ljubenov
 Division of Radiation, Transport and Waste Safety
 Department of Nuclear Safety and Security
 Tel.: +43 1 2600 22553

Email: Decom2023@iaea.org

Administration and Organization:

Mr Tom Danaher

Conference Services Section
Division of Conference and Document Services
Department of Management
IAEA-CN-312; EVT2102336
Tel.: +43 1 2600 21317
Email: Conference.Contact-Point@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on administrative matters to the IAEA's Conference Services Section.

Q. Conference Web Page

Please visit the IAEA conference [web page](#) regularly for new information regarding this conference.