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IAEA

Atoms for Peace
and Development

International Conference on Topical Issues in Nuclear Installation Safety: Learning from the Past to Accelerate the Future

IAEA Headquarters
Vienna, Austria

29 June–3 July 2026
Organized by the
International Atomic Energy Agency (IAEA)

Announcement and Call for Papers

A. Background

The IAEA has been organizing the International Conference on Topical Issues in Nuclear Installation Safety (TIC) since 1998. These conferences serve as a prominent platform to discuss and address current practices and challenges in nuclear installation safety, fostering collaboration and knowledge sharing among nuclear safety regulators, plant designers and operators, technical support organizations, and other stakeholders from Member States and international organizations.

These conferences have evolved over the years to focus on the most pressing issues in nuclear installation safety. Topics have ranged from continuous safety improvement and ensuring the safety of existing nuclear installations to the safety of advanced nuclear power plants (NPPs).

More recently, the emphasis has been on the safety of advanced reactor designs, including small modular reactors (SMRs) and next-generation NPPs. TIC2022 specifically focused on strengthening the safety of evolutionary and innovative reactor designs, aligning with current trends and the growing interest of Member States in deploying advanced reactors.

Recommendations made at prior conferences have provided the IAEA with valuable insights on activities to be undertaken to further strengthen global nuclear safety, which have also helped to shape the IAEA's work to ensure that it remains at the forefront of promoting and enhancing nuclear safety standards worldwide. Therefore, it is now the right time to ensure that we consider and build upon the lessons learned from past events and from past and recent NPP projects to enable the safe deployment of future NPPs. By leveraging these insights, we can enhance the safety and reliability of new nuclear installations, ensuring that they meet the highest standards of safety and public acceptance.

The upcoming TIC conference, titled **"International Conference on Topical Issues in Nuclear Installation Safety: Learning from the Past to Accelerate the Future"**, will take place in Vienna, Austria, from 29 June to 3 July 2026. This conference aims to build on the lessons learned from past experiences to drive future advancements in nuclear installation safety for both operating and new types of designs.

B. Purpose and Objectives

The purpose of the Conference is to provide a global platform for nuclear safety experts to exchange insights on key topics related to nuclear installation design safety, safety assessment, siting, construction, operation, and regulation. The conference will offer an opportunity to reflect on past and recent nuclear projects in order to enhance efficiency in future projects, while maintaining the highest levels of safety.

The Conference aims to provide a comprehensive forum for nuclear safety stakeholders from various generations of nuclear projects. This event will facilitate the sharing of knowledge and experiences, and the identification of best practices to advance the field. The Conference seeks to raise awareness of how past successes and lessons learned in safety can inform modern nuclear developments, making future projects more effective, efficient, and safe. Thus, TIC2026 will be of interest to nuclear safety regulators, plant designers and operators, technical support organizations, and other stakeholders from Member States and international organizations, fostering international collaboration and the exchange of experiences.

TIC2026 will also provide the IAEA with valuable insights for its activities related to the safety of nuclear installations, informing the next generation of IAEA Safety Standards, ensuring pragmatism and suitability for advanced nuclear technologies. Additionally, the outcomes of the conference will help to shape future IAEA efforts to assist Member States by focusing on capacity-building activities, strengthening advisory and peer-review services, and enhancing international cooperation in nuclear

installation safety.

C. Themes and Topics

The main theme of the Conference is to bring lessons learned from past experiences to drive future advancements in nuclear installation safety, which implies covering the wide range of nuclear safety topics related to site evaluation, design safety and safety assessment, construction, manufacturing and installation, commissioning and operation, and regulation.

The proposed extended abstracts and discussions during the Conference are expected to be related to the following topics:

Topic 1. Making the most of past experience

- Effective use of safety knowledge and operating experience from early non-water-cooled reactor prototypes, test facilities, and operating nuclear installations.
- Safety lessons from first-of-a-kind reactors and recent licensing experiences for new generation reactors and SMR designs, including land-based and for maritime use.
- Learning from experience when coordinating safety, security, and safeguards in the design of new reactors.
- Learning from the non-nuclear industries.
- Safety lessons learned from complex nuclear projects (e.g., construction, supply chains, manufacturing, replacement of large components, operational readiness, HTO (human-technology-organization)).
- Experience from extensive disruptions (e.g., pandemic, grid collapse) and the impact on, and management of, nuclear safety.
- Experience learned from past life extensions for future life extensions (long-term operation) and for consideration in new designs.

Topic 2. Driving safety forward and reassessing safety concepts

- Achieving the highest level of safety that can reasonably be achieved, without unduly limiting the utilisation of the installation: judging ‘reasonable practicability’, risk acceptance criteria, reducing uncertainties, maintaining sufficient safety margins, use of the graded approach in practice.
- Evolving regulatory frameworks in adapting safety concepts to emerging technologies. Learning from the application of prescriptive / rule-based regulatory frameworks for the regulation of advanced reactor designs.
- The role of leadership in fostering a robust safety culture for the successful implementation of safety practices, and to enable future projects.
- Focusing research on innovative technologies to enable their safe deployment.
- Learning from the implementation of inherent and passive safety features.
- Severe accident phenomena and analysis in innovative reactors: identifying reasonably practicable improvements.
- The future role of human performance in ensuring safe operations of advanced nuclear installations.
- Building and maintaining human capacity and capability for new nuclear projects.
- The evolving knowledge of internal hazards, external hazards, and their combinations, and their application to the design and siting of innovative nuclear installations, including transportable nuclear power plants.
- Safety considerations of non-electrical applications of nuclear reactors.
- The role of the supply chain in ensuring safety, and vendor oversight challenges (including when using commercial-off-the-shelf (COTS) components).
- The next generation of safety standards, codes, and guidance.

Topic 3. Using innovative technologies to enhance safety

- Considerations in the use of artificial intelligence (AI) to support nuclear installation safety.
- Use of AI in the regulatory decision-making process.
- Safety aspects related to advanced manufacturing techniques in nuclear energy applications.
- Implementation of new technology in the lifecycle of nuclear installations – safety implications (e.g., innovative instrumentation and control (I&C)).
- Regulatory readiness to evaluate and license innovative technologies (including evolving safety requirements).
- Digital twins and advanced simulation techniques for safety (e.g., safety analyses, operator training).
- Advances in the use of robotics for safety, and safety implications of the use of robotics, including regulatory perspectives.
- Advanced systemic safety assessment methods.
- Use of AI to enhance operational experience feedback.
- Expectations for experimental underpinning of innovative designs and analysis techniques including use of prototypes in safety demonstration and licensing.

Topic 4. Taking international cooperation to the next level

- International organizations working together in nuclear safety.
- Opportunities and challenges in international information sharing and collaboration.
- Learning from international cooperation: enhancing regulatory collaboration and working towards harmonization of regulatory approaches.
- Learning from international cooperation: enhancing industry collaboration and working towards harmonization of industry approaches.
- Learnings from international benchmarking exercises, peer reviews, and collaborative research programmes.
- International partnerships to support embarking countries.
- Advancing multinational reactor design evaluations and international cooperation in regulatory assessment of nuclear installations design.
- Internationally driven capacity and capability building: nuclear safety academies, schools and other initiatives to train the next generation of nuclear safety experts.

D. Structure

The opening session will include welcome addresses by representatives from the IAEA followed by a keynote presentation on the conference's overall theme. The conference will have both plenary and parallel topical sessions. Plenary sessions are aimed at addressing general aspects related to the conference theme and serve as panel discussions. Topical sessions will cover topics outlined in Section C. The topic of each session will be introduced by a Chairperson, followed by oral presentations that will be selected based on extended abstracts submitted to the Conference Secretariat. Each session will comprise a common discussion. Finally, during the concluding session, the Chairpersons of the topical sessions will summarize their sessions and the Conference President will consolidate the Conference findings, conclusions and recommendations on the way forward.

E. Expected Outcomes

The Conference is expected to benefit multiple stakeholder organizations in the IAEA Member States considering that the interchange of experiences will allow participants to:

- Gain valuable insights from past nuclear safety practices, events and projects;
- Enhance their understanding of current safety concepts and methodologies;
- Explore innovative technologies that can improve safety;
- Strengthen international cooperation and collaboration in nuclear safety.

By sharing knowledge and experiences, participants will be better equipped to address the challenges of nuclear installation safety and drive future advancements in the field for both operating and new types of designs.

It is expected that the Conference will also provide valuable recommendations for IAEA activities on nuclear installation safety. In particular, the feedback from the conference will allow the IAEA to compile insights to inform:

- Ongoing and future updates of relevant IAEA Safety Standards;
- Improvements to IAEA's peer review and advisory services;
- Enhancement in IAEA support to Member States.

F. Target Audience

Participation in the Conference is solicited from nuclear safety regulators, nuclear safety professionals from plant designers and operators, technical support organizations, and other stakeholders from Member States and international organizations.

The Conference foresees the participation of the invited speakers to provide keynote presentations and/or take part in the panel discussions.

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

Abtracts (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 until **17 October 2025**. 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 electronically submit the following two forms to their appropriate governmental authority using the InTouch+ platform (see Section H) for transmission to the IAEA. These forms must be received by the IAEA no later than **17 October 2025**:

- Participation Form (Form A)

- Form for Submission of a Paper (Form B)

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 after **1 December 2025** 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.

G.3 Submission of Extended Abstracts

Authors of accepted abstracts will be requested to submit an extended abstract in Word format, of no more than 3 pages in length. A compilation of extended abstracts (in electronic format) will be made available to participants via the Conference App.

Extended abstracts must also be submitted through the IAEA-INDICO file submission system in Word format. Submitting the extended abstract in the indicated electronic format is mandatory. Specifications for the layout and electronic format of the contributed extended abstracts and for the preparation of posters will be made available on IAEA-INDICO.

The IAEA reserves the right to exclude extended abstracts that do not comply with its quality standards and those that do not apply to one of the topics outlined in Section C above and those that do not meet the expectations based on the information in the abstract.

The deadline for electronic submission of the extended abstracts as Word files is **6 February 2026**. The IAEA will not accept extended abstracts submitted after the deadline.

The IAEA will notify authors of its completed review process of the extended abstracts after **3 April 2026**. The deadline for revised extended abstracts to be submitted through IAEA-INDICO is **1 May 2026**.

IMPORTANT: The system for electronic submission of extended abstracts, IAEA-INDICO, is the sole mechanism for submission of contributed extended abstracts. Authors are encouraged to submit extended abstracts as early as possible. The IAEA will not accept submissions via email.

G.4 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 member of an organization that has been invited to attend. The list of IAEA Member States and invited organizations is available on the event web page (see Section Q).

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 (**EVT2501010**) 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);
   - Submit their application.

Once submitted through the InTouch+ platform, the application will be transmitted automatically to the required authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority). If approved, the application will automatically be sent to the IAEA.

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.

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 **12 December 2025**;
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 at tic2026@iaea.org by **30 November 2025.**

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	**17 October 2025**
Submission of Form B (together with Form A) through the InTouch+ platform	**17 October 2025**
Notification of acceptance of abstracts for oral or poster presentation	**after 1 December 2025**
Submission of Form C (together with Form A) through the InTouch+ platform	**12 December 2025**
Electronic submission of extended abstracts through IAEA-INDICO	**6 February 2026**
Notification of review of extended abstracts	**after 3 April 2026**
Deadline for submission of revised extended abstracts submitted through IAEA-INDICO	**1 May 2026**
Submission of Form A only (no paper submission, no grant request) through the InTouch+ platform	**23 June 2026**

P. Conference Secretariat

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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 website regularly for new information regarding this conference.