

# International Conference on Effective Nuclear and Radiation Regulatory Systems: Working Together to Enhance Cooperation

The Hague, Netherlands 4–7 November 2019

Organized by the

**International Atomic Energy Agency (IAEA)** 

Hosted by the

**Government of the Netherlands** 

In cooperation with the

**European Commission/Joint Research Centre** 

**Announcement and Call for Papers** 

# A. Background

This International Conference is being organized by the International Atomic Energy Agency (IAEA) and is the fifth in a series of conferences on effective nuclear and radiation regulatory systems. The four preceding conferences were held in Vienna, Austria, in 2016, Ottawa, Canada, in 2013, Cape Town, South Africa, in 2009, and Moscow, Russian Federation, in 2006. Building on the conclusions and deliberations of these events, the conference to be held in November 2019 will review issues of importance to the global regulatory community focusing, in particular, on the importance of the regulators in ensuring a high standard of safety and security.

# **B.** Objectives and Expected Outcomes

The objective of the conference is to share regulatory experiences related to improving the effectiveness of nuclear and radiation regulatory systems, taking into account the outcomes of the past conferences in this series, as well as the Seventh Review Meeting of the Contracting Parties to the Convention on Nuclear Safety, the Sixth Review Meeting of the Contracting Parties to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, the open-ended meetings of legal and technical experts on implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and its supplementary Guidance, works performed by the Commission on Safety Standards, and related activities. Furthermore, the conference addresses the international framework for the security of nuclear and other radioactive material. Ultimately, the main focus of the conference is how to work together to address cross-cutting regulatory areas.

The expected outcomes of the conference and subsequent actions are:

- Enhanced international cooperation to support embarking countries;
- Strengthened regulatory interfaces between nuclear and radiation safety and nuclear security;
- Improved regulatory effectiveness through the application of a graded approach and the use of regulatory experience;
- Improved anticipation and management of cross-cutting regulatory areas considering regulatory lessons learned from other industries; and
- Identified strategies and actions for the future including topics for consideration by governments and regulatory bodies, which includes interfacing with technical support organizations and international organizations.

# C. Topics and Special Panel

The following topical issues and special panel have been identified as subjects for the conference sessions.

#### **Topical Issue No. 1: Regulating Nuclear Installations**

Regulatory acceptance of innovative and emerging reactor technologies and systems, as well as supply

chain management continue to be of interest to Member States. Many regulatory bodies also deal with topics such as life extension, the end of commercial operation, and decommissioning and remediation of legacy sites.

Topics for discussion include:

- a. Experience with innovative and/or emerging reactor technologies;
- b. Supply chain control, including Counterfeit, Suspect, Fraudulent Items and related issues;
- c. Ensuring safety and security as facilities age and/or prepare for long term operation; and
- d. Dismantling and decommissioning activities, storage/disposal facilities, and remediation of legacy sites.

## **Topical Issue No. 2: Regulating Radiation Sources and Medical Facilities**

Many Member States continue the establishment of a sustainable regulatory infrastructure to ensure the safety and security of radiation sources and radioactive waste with the aid of technical support. This work is particularly evident in the regulation of emerging technologies in industrial and medical applications.

Furthermore, medical exposure is by far the most common type of exposure to man-made radiation sources. It is estimated that the number of medical procedures using ionizing radiation has more than doubled over the past two decades.

This session also addresses regulating radiation sources and exposure, as well as their impact on patients, workers, and the public.

Topics for discussion include:

- a. Establishing regulatory infrastructure for radiation safety;
- b. Regulating medical applications of radiation:
  - Patient and/or worker protection; and
  - Interaction between multiple regulators, agencies, etc.;
- c. Regulating other radiation applications (e.g. food irradiation and industrial applications);
- d. Security of radioactive materials;
- e. Management of disused sources and decommissioning of radiation facilities; and
- f. Regulating exposure to radon.

## **Topical Issue No. 3: Cross-Cutting Regulatory Areas**

Cross-cutting areas exist that affect the regulation of both nuclear installations and radiation facilities and activities. These areas can be handled thematically and cooperatively by specialists from all applicable fields.

In addition, lessons can be learned internationally, as well as from other industries, to improve the effectiveness of regulatory bodies.

Topics for discussion include:

- a. Building capacity and capability
  - Human resource development;

- Information and tools (e.g. research and development for safety assessments and decision making);
- Education and training;
- Knowledge management; and
- Knowledge networks;
- b. The safety-security interface;
- c. Capturing and using regulatory experience to improve effectiveness, including introducing technologies already in use in other countries;
- d. Public communication, involvement, participation, and awareness; and
- e. Regulatory lessons learned from other industries:
  - High hazard industries (e.g. oil and gas and chemical);
  - Transport regulation (e.g. civil aviation, marine, rail and space/aeronautics); and
  - Forum for regulatory experience exchange with other industries, bodies, and/or policy organs.

## Topical Issue No. 4: Leadership and Management for Safety and Security

Part 2 of the General Safety Requirements, *Leadership and Management for Safety* (IAEA Safety Standards Series No. GSR Part 2), emphasizes that leadership for safety, an integrated management system, and a systemic approach (i.e. an approach relating to the system as a whole in which the interactions between technical, human and organizational factors are duly considered) are essential for adequate safety and for fostering a strong safety culture. Likewise, the Code of Conduct on the Safety and Security of Radioactive Sources recognizes the importance of fostering a safety culture and security culture in all organizations and among all individuals engaged in the regulatory control or management of radioactive sources.

This session considers the safety culture and security culture within regulatory bodies and the concept of building institutional structures to ensure nuclear and radiation safety. It also examines the regulatory oversight of programmes established to strengthen human performance to achieve a high level of safety and security.

Topics for discussion include:

- a. Organizational culture for safety and security;
- b. National approaches to institutional strength in depth and the systemic approach;
- c. Human, organizational, and technological factors;
- d. Integrated management systems for regulatory functions; and
- e. Prioritization of regulatory functions using the graded approach.

## **Topical Issue No. 5: Strengthening International Cooperation**

International cooperation is an important part of the global nuclear and radiation safety and nuclear security framework. This session will address the need to strengthen regulatory networks, technical assistance, technical and topical cooperation, and IAEA peer reviews including the dissemination of results to maximize the benefits for Member States and effectively support embarking countries.

This session also addresses emerging issues related to multinational activities and their impact on national responsibility for nuclear safety and security.

Topics for discussion include:

- a. IAEA peer reviews and advisory services;
- b. The International Regulatory Network;
- c. Supporting embarking countries; and
- d. Regional cooperation.

#### Special panel session on Emergency Preparedness and Response

Following accidents at Chernobyl and the Fukushima Daiichi nuclear power plant, close attention has been paid to emergency preparedness and response. This panel will discuss arrangements being proposed or already implemented by regulatory bodies to strengthen emergency preparedness and response.

The panel will also focus on emergency preparedness and response for transnational emergencies, as well as public communication in nuclear and radiological emergencies, including the application of the International Nuclear and Radiological Event Scale (INES).

## D. Target Audience

The conference is directed at a broad range of experts in the area of nuclear and radiation safety and nuclear security regulation, bringing together the world's regulators responsible for the areas of nuclear and radiation safety and nuclear security.

# E. Working Language

The working language of the conference will be English.

# F. Programme Structure

The conference will consist of an opening plenary, a number of technical sessions, panel discussions, and a closing session.

The **opening plenary** will consist of opening addresses followed by a keynote panel discussion to highlight and prioritize regulatory policy and technical matters in nuclear and radiation safety and nuclear security.

The **topical sessions** will address the topical issues listed in Section C. After the discussions in the technical sessions, conclusions and recommendations will be drawn up.

Each session will consist of:

• Opening of the session by the Chairperson(s);

- Presentations to cover the topical issues specified; and
- A period of time for answers to posed questions.

**Panel discussions** will address the items resulting from various technical session and keynote panel presentations and will focus on actions needed to enhance the global nuclear and radiation safety and nuclear security framework. Some contributed papers (see Section F) may be selected, if considered to significantly contribute to the topics of the sessions, to become part of the panel discussions. These discussions will bring into focus the essence of the various sessions and will be the cornerstone of the conference's activities; it will also provide strong input for the Conference's closing session.

In the **closing session**, summaries of the sessions according to the topical issues listed in Section C will be provided. The President of the Conference will present the summary and conclusions of the conference, including visions and strategies for the future, as well as issues for consideration by governments, regulatory bodies, and international organizations.

# G. Synopses, Papers and Proceedings

Concise papers on topics falling within the scope of the conference (see Section C) may be submitted as contributions to the conference. All papers, apart from invited papers, must present original work and must not have been published elsewhere.

Authors of accepted papers are expected to present the substance of their papers as a presentation during a technical session or in the form of posters, which will be exhibited in a Poster Area. It is expected that at a least one author of each poster will attend the conference in order to be available to discuss the poster.

#### G.1. Submission of Synopses

Anyone wishing to present a paper at the conference must submit a synopsis of not more than **two pages** (**800 words**) in electronic format through the conference's web browser-based file submission system (IAEA-INDICO). Paper copies cannot be accepted.

Instructions on how to upload the synopsis to IAEA-INDICO will be available on the conference web page (see Section O). The synopses must be submitted through this system by **28 May 2019**. No other form of submission will be accepted.

In addition, authors must electronically submit the following two forms to their appropriate governmental authority (see section G) for transmission to the IAEA. These forms must be received by the IAEA no later than 28 May 2019.

- o Participation Form (Form A)
- o Form for Submission of a Paper (Form B)

IMPORTANT: The electronically received synopses will be considered by the Programme Committee only if above two forms have been received by the IAEA through the established official channels (see Section G).

## **G.2.** Acceptance of Synopses

Authors will be notified by email by **31 July 2019** as to whether, on the basis of the synopses uploaded to IAEA-INDICO, their papers have been accepted for submission of a contributed paper as well as for either an oral or poster presentation during the conference.

## G.3. Submission of Contributed Papers

Authors of accepted synopses will be requested to submit a contributed paper not exceeding **seven pages in length**. A Book of Contributed Papers (in electronic form) will be made available to participants at registration.

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

Contributed papers must also be submitted through the IAEA-INDICO file submission system. Specifications for the layout and electronic format of the contributed papers and for the preparation of posters will be available on the conference web page.

The deadline for electronic submission of the contributed papers as PDF files is **30 August 2019**. The IAEA will not accept papers submitted after the deadline, and any subsequent submission by email will not be accepted either.

IMPORTANT: The system for electronic submission of papers, IAEA-INDICO, is the sole mechanism for submission of contributed papers. Authors are encouraged to submit papers as early as possible.

## **G.4.** Conference Proceedings

The proceedings will be published by the IAEA as soon as possible after the Conference on a CD-ROM.

# H. Participation and Registration

All persons wishing to participate in the conference must be designated by an IAEA Member State or be members of organizations that have been invited to attend. The list of invited organizations can be requested from the Conference Secretariat (see Section N).

In order to be designated by an IAEA Member State, participants are requested to send the following forms (as applicable) to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority):

- Participation Form (Form A): participation only; no deadline if only Form A is submitted;
- Form for Submission of a Paper (Form B): participants submitting a paper through INDICO
  must send the completed and signed Form B together with Form A to their competent national
  authority for transmission to the IAEA (Official.Mail@iaea.org) by the given deadline; and
- Grant Application Form (Form C): participants requesting financial support from the IAEA, must complete Form C and send it together with Form A (and Form B, if applicable) to the competent national authority for transmission to the IAEA (Official.Mail@iaea.org) by the given deadline. Form C must be stamped and signed by the competent national authority.

Participants who are members of an organization invited to attend are requested to send the above form(s) through their organization to the IAEA (Official.Mail@iaea.org).

In addition, participants are requested to pre-register online through the conference website <a href="https://www.iaea.org/events/conference-on-effective-regulatory-systems-2019">https://www.iaea.org/events/conference-on-effective-regulatory-systems-2019</a>.

Participants who register in accordance with the above procedure will receive from the IAEA further information approximately three months before the opening of the conference.

# 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 meet 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 Governments wish to apply for a grant on behalf of one of their participants, they should address specific requests to the IAEA to this effect. Governments should ensure that applications for grants are:

- 1. Submitted by **28 May 2019**;
- 2. Accompanied by a duly completed and Grant Application Form (Form C) signed and stamped by the Ministry of Foreign Affairs or the National Atomic Energy Authority; and
- 3. Accompanied by a completed 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 programme will be made available on the conference web page (see Section O) before the start of the conference. The final programme and the Book of Contributed Papers (in electronic form) will be available free of charge upon registration at the conference.

#### K. Venue and Accommodation

The conference will be held at the New Babylon Meeting Center in The Hague, Netherlands.

Information on accommodation and other relevant matters will be available on the conference web page (see Section O) as soon as possible.

#### L. Visas

Designated participants who require a visa to enter the Netherlands should submit the necessary application to the nearest diplomatic or consular representative of the Netherlands at least four weeks before they travel to the Netherlands. Since the Netherlands is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where the Netherlands has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing the Netherlands in the country in question.

## M. Key Deadlines

Electronic submission of synopses through INDICO (including submission of Forms A and B through a competent national authority)	28 May 2019
Submission of grant application (Forms A and C through a competent national authority)	28 May 2019
Notification of acceptance of synopses	31 July 2019
Electronic submission of the contribution paper through INDICO	30 August 2019
Registration only (no paper submission, no grant request)	No deadline

#### N. Conference Secretariat

#### General postal address and contact details of the IAEA:

International Atomic Energy Agency Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA

Ref. IAEA-CN-270 Tel.: +43 1 2600 0 Fax: +43 1 2600 7

Email: Official.Mail@iaea.org

#### **Scientific Secretariat:**

#### Mr Shahid Mallick

Section Head, Programme and Strategy Coordination Section Office of Safety and Security Coordination

Tel: +43 1 2600 25673 Fax: +43 1 2600 7

Email: S.Mallick@iaea.org

#### Email address for submission of extended synopses and contributed papers:

RegCon2019@iaea.org

#### Administration and organization:

#### Ms Martina Khaelss

Conference Services Section
Division of Conference and Document Services
IAEA-CN-270

Tel.: +43 1 2600 21315 Email: M.Khaelss@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretariat, and correspondence on administrative matters to the Conference Services Section.

# O. Conference Web Page

The IAEA web page for the conference is as follows: <a href="https://www.iaea.org/events/conference-on-effective-regulatory-systems-2019">https://www.iaea.org/events/conference-on-effective-regulatory-systems-2019</a>.

It will be updated regularly with new information, and participants are encouraged to check it on a regular basis.