

International Conference on Physical Protection of Nuclear Material and Nuclear Facilities

IAEA Headquarters Vienna, Austria

13–17 November 2017

Announcement and Call for Papers

A. Background

Physical protection against unauthorized removal of nuclear material during use, storage and transport and against the sabotage of nuclear material and nuclear facilities during use, storage and transport has long been a matter of national and international concern and cooperation. In the light of this concern and in keeping with the tenets of the Convention on the Physical Protection of Nuclear Material (CPPNM), the International Atomic Energy Agency (IAEA) has facilitated the development and publication of international consensus recommendations. First published in 1975 under the title *The Physical Protection of Nuclear Material and Nuclear Facilities*, IAEA document INFCIRC/225 is intended to assist Member States in implementing a comprehensive physical protection regime, including any obligations and commitments they might have with respect to international instruments on nuclear security.

The latest version, INFCIRC/225/Rev.5, was published in January 2011 as *Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Revision 5)* (IAEA Nuclear Security Series No. 13). This fifth revision included a significant number of concepts not covered in previous versions and also expanded on previously

included concepts. It was also designed to address the current threat environment more effectively, to ensure greater consistency with the CPPNM and its Amendment, as well as with United Nations Security Council resolution 1540, and to provide clearer physical protection guidance to States seeking to establish new peaceful nuclear power programmes.

The Amendment to the CPPNM entered into force on 8 May 2016, expanding the Convention to cover the protection of nuclear facilities and nuclear material in domestic use, storage and transport. In support of the provisions of the CPPNM and its Amendment, the IAEA has established a comprehensive programme to assist Member States in developing and implementing their nuclear security regimes, especially regarding physical protection of nuclear material in facilities and during its transport. In particular, the IAEA has actively worked on the dissemination of the recommendations contained in INFCIRC/225/Rev.5 through expert missions, workshops and training courses. The IAEA also provides advice on how to implement international obligations and take into account IAEA guidance (specifically that contained in INFCIRC/225/Rev.5) through the International Physical Protection Advisory Service (IPPAS). The aim is to bring the Member States to a common understanding in regulating, implementing and sustaining physical protection regimes. Member States have expressed an interest in discussing their physical protection measures based on INFCIRC/225/Rev.5 and comparing their national regulatory frameworks with the recommendations contained in the document, and they are ready to share their experiences with the implementation of INFCIRC/225/Rev.5.

Therefore, an international conference will be conducted during the week of 13 to 17 November 2017 in order to provide a forum for Member States to share their experiences, difficulties, lessons learned and good practices adopted during the implementation of INFCIRC/225/Rev.5. Valuable input is also expected from Member States that are Contracting Parties to the CPPMN and its Amendment regarding the technical aspects of meeting their obligations deriving from these instruments.

B. Purpose and Objectives

The purpose of the conference is to foster the exchange, among competent authorities, facility operators, shippers and carriers, and technical support organizations, of information, practices and experiences related to the physical protection of nuclear material and facilities, including nuclear material in transport.

The conference will provide a forum to:

- Promote universalization of the CPPNM and its Amendment and enhance international understanding of IAEA document INFCIRC/225/Rev.5;
- Share experiences with the development of physical protection regulatory frameworks and requirements for nuclear facilities and nuclear material, including during transport;
- Exchange information on the use of a threat-based, risk-informed approach for the protection of nuclear material in use, storage and transport, and for nuclear facilities;
- Exchange information on how to address evolving threats;
- Exchange information and experiences regarding the planning, establishment, maintenance and sustainment of physical protection measures and systems, including computer protection;

- Exchange information on methodologies and techniques to assess the effectiveness of physical protection measures and systems;
- Discuss common technical proposals for the purpose of upgrading the physical protection of nuclear material and facilities;
- Discuss the interface between nuclear material accountancy and control, on the one hand, and the physical protection of nuclear material in use, storage and transport, on the other;
- Share experiences related to how safety interfaces with security;
- Share experiences related to the assessment and enhancement of nuclear security culture;
- Discuss planning and preparedness for, and response to, nuclear security events at nuclear facilities and during the transport of nuclear material (contingency plans);
- Share the experience gained as a result of IPPAS missions and highlight the role of this service in enhancing the physical protection of nuclear material in use, storage and transport and of nuclear facilities worldwide; and
- Facilitate cooperation among all stakeholders at the national or international levels, as applicable.

The conference will not discuss any sensitive nuclear security information.

C. Format and Topics

The conference programme will consist of an opening plenary session, a general plenary session, technical sessions, a poster session (to include interactive content presentations), optional panel sessions and a closing plenary session. The opening plenary session will include welcoming addresses by representatives of the IAEA, cooperating organizations and other relevant organizations. The general plenary session will continue with a combination of invited keynote presentations and submitted papers addressing the main themes and topics of the conference. Each technical session will include presentations delivered by participants which will have been selected on the basis of the synopses submitted. The conference will also include poster sessions, and sufficient time will be provided for discussion and interaction with colleagues. The final plenary session on the last day of the conference will be dedicated to conclusions and recommendations.

Consistent with the objectives set out above, the overall themes for the conference will be:

- Universalization of the CPPNM and its Amendment;
- International cooperation to strengthen the physical protection of nuclear material in use, storage and transport and of nuclear facilities;
- Legislative and regulatory framework for the physical protection of nuclear material in use, storage and transport and of nuclear facilities;
- Developing and sustaining a physical protection regime for nuclear material in use, storage and transport and for nuclear facilities;

• Protection against unauthorized removal of nuclear material during use, storage and transport and sabotage of nuclear material and nuclear facilities.

While the final determination of the number and scope of the technical sessions will be based on the nature and number of synopses received, it is anticipated that the technical sessions may deal with subjects as diverse as the following:

- Physical protection regime
- IPPAS missions
- International and regional cooperation
- Sustaining security/physical protection regimes
- Nuclear Security Training and Support Centres; centres of excellence
- International transport (transit and trans-shipment)
- Development of physical protection regulatory requirements
- Performance based and prescriptive approach
- Trustworthiness programme
- Regulatory oversight
- On-site and off-site response forces
- Security during transport
- Physical protection measures and systems
- Computer security
- Assessment/inspection methodologies and techniques (both operator and regulator approaches)
- Safety–security interface
- Nuclear material accountancy and control
- Technical and technological proposals for detection and delay
- Capacity building
- Physical protection training and qualification
- Security plan
- Physical protection drills and exercises
- Physical protection of other radioactive material stored together with nuclear material
- Physical protection awareness programme
- Nuclear security culture
- Design basis threat alternative threat statement

- Insider threats
- Use of a threat-based, risk-informed approach
- Graded approach
- Defence in depth
- Quality management
- Contingency planning (for security events)
- Interface between contingency and emergency plans
- Protection of sensitive information; transparency of public information

D. Target Audience

- 1. The conference is aimed at high-level staff, technical and legal experts and those involved in managing physical protection in agencies and organizations working in all areas related to the physical protection of nuclear material and facilities, including nuclear material in transportation.
- 2. In addition to officials from governments and regulatory bodies, the conference is intended to attract industry and civil society representatives, including from non-governmental organizations and academic institutions. The IAEA welcomes and encourages the participation of women, early career professionals and individuals from developing countries.

E. Synopses, Poster Presentations and Proceedings

All papers submitted — other than invited keynote papers — must present original work and should not have been published elsewhere.

Persons who wish to present a paper at the conference — either orally or in the form of a poster — must submit a synopsis of between 400 and 800 words on one of the topics listed under Section C. The synopsis should give enough information on the contents of the proposed paper to enable the Programme Committee to evaluate it. Including too many introductory and general matters should be avoided. The accepted synopses will be reproduced in the electronic *Book of Extended Synopses*, which will be distributed to all participants at the conference.

E.1 Submission of Synopses

Persons who wish to present a paper or poster at the conference must send it **in electronic format** (no paper copies) directly to the IAEA. Instructions on how to upload the synopses to the conference's web browser-based file submission system (IAEA-INDICO) will be available on the conference web page (see Section O) as of **9 February 2017**. The synopses **must** be submitted through this system by **15 May 2017**. No other form of submission will be accepted.

In addition, authors must submit the following two forms to their appropriate governmental authority (see Section F) for transmission to the IAEA. These forms must be received by the IAEA no later than 15 May 2017.

- Participation Form (Form A); and
- Form for Submission of a Paper (Form B).

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

E.2 Acceptance of Synopses for Oral, Interactive Content Presentation (ICP) or Poster Presentation

Given the number of synopses anticipated and the need to provide ample time for discussion, the number of papers that can be accepted for oral presentation is limited. Authors who prefer to present their papers as posters are requested to indicate this preference on Form A.

Authors will be notified by **31 July 2017** as to whether their papers have been accepted.

E.3 Submission of Full Papers

Only authors of papers selected for oral presentation are requested to submit a full paper. Full papers must be submitted through the IAEA-INDICO file submission system. Specifications for the layout and electronic format of the full papers will be made available on IAEA-INDICO. The deadline for electronic submission of the full papers as both PDF and Word files is **29 September 2017**.

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

E.4 Conference Proceedings

The proceedings containing summaries of the plenary and technical sessions as well as full papers presented at the conference will be published by the IAEA as soon as possible after the conference. Copies of the proceedings can be ordered, at a special discounted price, during or after the conference.

F. Participation and Registration

All persons wishing to participate in the conference are requested to register online in advance through the conference web page (see Section O). In addition they must send a completed Participation Form (Form A) and, if applicable, the Form for Submission of a Paper (Form B) and the Grant Application Form (Form C), as soon as possible, to the competent national authority (e.g., the Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for subsequent transmission to the IAEA via email: Official.Mail@iaea.org.

A participant will be accepted only if the Participation Form (Form A) is transmitted through the competent national authority of a Member State of the IAEA or by an organization invited to participate.

Participants whose official designations have been received by the IAEA will receive further information on the conference approximately three months before the start of the conference. This information will also be made available on the conference web page (see Section O).

G. Expenditures and Grants

No registration fee will be 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. Such assistance may be offered upon specific request to normally one participant per country provided that, in the IAEA's view, the participant on whose behalf assistance is requested will make an important contribution to the conference.

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

- 1. Submitted by **15 May 2017**;
- 2. Accompanied by a completed and signed Grant Application Form (Form C); 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**.

H. Distribution of Documents

A preliminary programme will be posted on the IAEA conference web page (see Section O) as soon as possible. The final programme and the electronic *Book of Extended Synopses* will be available free of charge upon registration at the conference.

I. Exhibitions

A limited amount of space will be available for commercial vendors' displays/exhibits during the conference. Interested parties should contact the Scientific Secretary (see Section N) by email at: PhysicalProtection2017@iaea.org by 30 June 2017.

J. Working Language

The working language of the conference will be English.

K. Conference Venue and Accommodation

The conference will be held at the IAEA's Headquarters in Vienna, Austria. Participants must make their own travel and accommodation arrangements. Hotels which are offering a reduced rate for conference participants will be listed on the conference web page (see Section O). Please note that the IAEA is not in a position to assist participants with hotel bookings, nor can the IAEA assume responsibility for paying cancellation fees or for re-bookings and no shows.

Detailed information on accommodation and other relevant matters will be made available on the conference web page as soon as possible.

L. Visas

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least eight weeks before they travel to Austria. Designated participants will be required to submit a letter of invitation in support of their visa application.

M. Key Deadlines and Dates

Electronic submission of synopsis via INDICO (See Section E.1.), including submission of:

Forms A and B through the official channels 15 May 2017

Grant application, including submission of

Forms A and C through the official channels 15 May 2017

Notification of acceptance of synopsis 31 July 2017

Submission of full papers (10 pages maximum) 29 September 2017

Registration only (no paper submission, no grant request)

Open until the start of the

conference

N. Conference Secretariat

General contact details of the Conference Secretariat:

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary of the conference and correspondence on administrative matters to the IAEA Conference Services Section.

O. Conference Web Page

Please visit the following web page regularly for new information regarding this conference: http://www-pub.iaea.org/iaeameetings/50819/International-Conference-on-Physical-Protection-of-Nuclear-Material-and-Nuclear-Facilities