



**International Conference on Radiation
Protection in Medicine
“Setting the Scene for the Next Decade”**

3–7 December 2012

Bonn, Germany

Organized by the

International Atomic Energy Agency (IAEA)

Co-sponsored by the

World Health Organization (WHO)

Hosted by the

Government of Germany

through the

Federal Ministry for the Environment,
Nature Conservation and Nuclear Safety

Announcement and Call for Papers

A. Introduction

The health benefits accruing to mankind from the medical use of ionizing radiation, such as X-rays, or from radioactive substances are well recognized. Many countries are nevertheless still lacking access to essential radiation-based health services. However, on the whole the exposure of the global population to ionizing radiation is rising rapidly, nearly exclusively due to medical uses of radiation.

In 1999, the IAEA General Conference requested the Secretariat to organize an international conference on radiation protection of patients. This conference was held in March 2001 in Malaga, Spain, and triggered an international action plan that is guiding international efforts in patient protection. While the Malaga conference provided very broad international input on the status of radiation protection of patients at the time, and allowed accurate prediction of future trends, recent years have witnessed significant increases in medical radiation uses, as well as developments in radiation protection that need to be taken into account. For the first time in history, several countries are experiencing population doses from medical uses of radiation that exceed those from natural background radiation and have fully eclipsed those from other artificial sources.

Ionizing radiation in medicine involves the deliberate and direct exposure of humans. There is a strong and continuing need to protect patients from unnecessary and unintended exposure, and also to protect medical staff, in particular, from the high doses incurred.

Unnecessary exposure of patients can arise from medical procedures that are not justified for a specified objective, from the application of procedures to individuals whose condition does not warrant such intervention, and from medical exposures that are not appropriately optimized for the situation in which they are being used. There is growing evidence that many medical procedures involving ionizing radiation are being performed with insufficient justification and optimization, which means that a substantial proportion of the effective dose per capita from medical exposures is quite unnecessary exposure. This represents a significant risk for the global population which could be avoided if appropriate measures were taken.

Unintended exposure of patients and medical staff can arise from unsafe design or inappropriate use of medical technology. There have been a number of reports in recent years of accidents in several countries involving the use of ionizing radiation in medicine that caused either an over- or underdose to a large number of patients. Inadequate programmes for staff training and/or quality assurance are important factors contributing to such events.

The number of occupationally exposed workers is much higher in medicine than in any other professional field. Individual occupational exposure also varies widely among those involved in medical care. There are certain procedures which can result in medical staff being exposed to substantial radiation doses, and therefore the education of medical professionals in radiation protection issues is of continuing importance.

Recent years have also seen an increased recognition of the importance of communication with patients and patient organizations on medical radiation protection, as reflected in the International Conference on Modern Radiotherapy hosted by the French Nuclear Safety Authority (ASN) in Versailles, France, in 2009, as well as of the value of openly sharing knowledge on untoward events involving medical radiation sources, as has been done by the United States Nuclear Regulatory Commission (NRC) through event notification reports.

With these issues in mind, and considering current trends and developments, the conference aims to focus efforts in this area for the next decade and to maximize the positive impact of future international work in radiation protection in medicine.

B. Objectives of the Conference

The conference will deal with aspects of radiation protection related to the use of ionizing radiation and radioactive substances in medicine.

The conference will have the following objectives, in particular:

- to indicate gaps in current approaches to radiation protection in medicine;
- to identify tools for improving radiation protection in medicine;
- to review advances, challenges and opportunities in the field of radiation protection in medicine;
- to assess the impact of the International Action Plan for the Radiation Protection of Patients, in order to prepare new international recommendations, taking into account newer developments.

C. List of Topics

The IAEA welcomes high quality contributions on all aspects of radiation protection in medicine. Both academic and practice-based papers that come under the umbrella of the following proposed subjects for the topical sessions and round table discussions are welcome:

- Diagnostic imaging and optimization;
- Diagnostic imaging and justification;
- Radiation protection of patients in interventional procedures;
- Occupational radiation protection of medical workers;
- Protecting patients, carers and comforters and the public in nuclear medicine;
- Patient protection in radiotherapy;
- Radiation protection of patients in other medical modalities;
- Medical issues related to radiation accidents;
- Safety education and training;
- Patients' viewpoint on safety and protection;
- Issues around radiological health screening;

- Radiation protection of children and pregnant women;
- Manufacturers' role in protecting patients;
- Topics for future research and development.

D. Programme Structure

The **opening session** will include welcome addresses by representatives of the Host Government and the IAEA as well as the WHO as co-sponsor of the conference. This session will be further complemented by a keynote presentation on the importance and unique aspects of radiation protection in medicine.

The opening session will be followed by a **briefing session** involving international organizations that have collaborated with the IAEA on the Steering Panel of the International Action Plan for the Radiation Protection of Patients.

A series of **eight topical sessions** will cover selected areas of radiation protection in medicine. The topic of each session will be introduced by a chairperson, followed by three invited presentations and a summary of the session-related contributed papers presented by a rapporteur. Each topical session will conclude with a plenary discussion.

Four round table discussions will be dedicated to identifying recommendations for future actions. After an introduction of the topic by the chairperson, brief statements will be delivered by the panel members. A summary of the relevant contributed papers by a rapporteur will then be followed by a plenary discussion involving the audience.

Finally, during the **concluding session**, the chairpersons of the topical sessions and round table discussions will deliver their summaries and the Conference President will present the conference findings, conclusions and recommendations on the way forward.

E. Contributed Papers and Posters

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

These papers will not be presented orally, but will be summarized by a rapporteur (as indicated in Section D) and **distributed in a compiled electronic format free of charge to all participants upon registration**. Questions relating to the contributed papers can be raised at the appropriate topical session or round table discussions.

Authors of contributed papers may, if they so wish, present the substance of their papers in the form of **posters, which will be exhibited in a Poster Area**. It is expected that at least one author of each poster will attend the conference in order to be available to discuss the poster.

E.1. Submission of contributed papers

The contributed papers should not exceed four A4 pages in length and must be submitted in English. Key elements to be included are a brief introduction, methods, results, discussions, and conclusions. Each contributed paper must be preceded by an abstract not exceeding 200 words. Authors should state to which of the above topics (see Section C) their contribution relates.

Authors should use the “IAEA Proceedings Paper” template in MS Word (user instructions are available on the conference website). Guidelines for the preparation of a contributed paper and subsequent poster are given in the “IAEA Guidelines for Authors on the Preparation of Manuscripts for Proceedings” and the “IAEA Guidelines for the Preparation and Presentation of a Poster”, which are available on the conference website.

The contributed papers should be submitted to the following email address: radprom2012.papers@iaea.org

Contributed papers — if accepted — will be compiled in an electronic format and reproduced in **unedited form as submitted**. The original must therefore be submitted electronically in compliance with the specified format. In addition to the electronic submission, a copy of the contributed paper(s) must also be submitted through the competent official authorities (see Section F). The paper should be sent together with a completed and signed Form for Submission of a Paper (Form B) and Participation Form (Form A), to reach the IAEA **not later than ~~15 May 2012~~ 30 June 2012 (deadline extended)**.

E.2. Acceptance of contributed papers

Papers and supporting documents (Forms A and B) must be received by the above deadline and through the appropriate official channels in order to be considered. Final acceptance will occur after they have been reviewed by the committee. Furthermore, the Conference Secretariat reserves the right to exclude papers that do not comply with its quality standards and/or do not apply to one of the topics in Section C.

Papers that are not sent through the official channels and papers arriving after the deadline will not be considered.

Authors will be informed by **~~15 August 2012~~ 31 August 2012** whether their papers have been accepted as a paper for the conference.

E.3. Conference proceedings

The proceedings containing the welcome addresses, the opening talks, invited presentations, the rapporteurs' reports, the chairpersons' summaries, the conference conclusions, and the records of the discussions will be published by the IAEA as soon as possible after the conference. The proceedings can be ordered, at a special discounted price, during the conference.

F. Registration

All persons wishing to participate in the conference are requested to register online in advance (see Section O). In addition, they must send a completed Participation Form (Form A), the Form for Submission of a Paper (Form B) (if applicable), and the Grant Application Form (Form C) (if applicable) as soon as possible to the competent official authority for subsequent transmission to the IAEA.

A participant will be accepted only if the Participation Form is submitted to the IAEA through one of the **competent official authorities**. These authorities include:

- Ministry of Foreign Affairs;
- National Atomic Energy Authority;
- Ministry of Health;
- Invited organizations.

Participants whose official designations have been received by the IAEA will receive further information on the conference at least three months before the start of the conference. This information will also be available on the conference website.

G. Expenditures/Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of designated participants to the conference. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of selected specialists from Member States eligible to receive technical assistance under the IAEA's technical cooperation programme. Such assistance may be offered, upon specific request, provided that in the IAEA's view a participant will make an important contribution to the conference. In general, not more than one grant will be awarded to any one country.

Support may also be provided through existing WHO projects and initiatives.

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 2012~~ **30 June 2012** (*deadline extended*);
2. Accompanied by a duly completed and signed Grant Application Form (Form C);
3. Accompanied by a completed Participation Form (Form A);
4. Accompanied by a completed Form for Submission of a Paper (Form B) (if applicable)

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 website as soon as possible. The final programme and the electronic compendium of contributed papers will be available free of charge upon registration at the conference.

I. Exhibitions

Limited exhibition space will be available for displays/exhibits by commercial vendors during the conference. Interested parties should contact:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
Division RS II 2 — General and Fundamental Aspects of Radiological Protection
PO Box 12 06 29
D-53048 BONN
GERMANY
Email: RSII2@bmu.bund.de

J. Working Language

The working language of the conference will be English.

K. Conference Venue and Accommodation

Conference Venue:
World Conference Center Bonn (WCCB)
Platz der Vereinten Nationen 2
53113 BONN
GERMANY
www.worldccbonn.com

Detailed information on accommodation and other administrative matters will be sent directly to all designated participants approximately three months before the conference. This information will also be made available on the conference website.

L. Visas

Designated participants who require a visa to enter Germany should submit the necessary application to the nearest diplomatic or consular representative of Germany as soon as possible. Please note that Germany is a Schengen State and therefore persons who require a visa will have to apply for a Schengen visa. In States where Germany has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Germany in the country in question.

M. Key Deadlines and Dates

Submission of Form B and contributed paper (max. four pages):	15 May 2012	30 June 2012
Submission of Form C:	15 May 2012	30 June 2012
Notification of acceptance of contributed paper:		15 August 2012

N. Conference Secretariat

General postal address of the IAEA Secretariat:

International Atomic Energy Agency
Vienna International Centre, PO Box 100
A-1400 VIENNA
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Email: official.mail@iaea.org

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Ms Martina Khaelss

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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.

O. Conference website

Please visit the IAEA conference website regularly for new information regarding this conference:

<http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=41578>