



International Conference on Occupational Radiation Protection: Enhancing the Protection of Workers — Gaps, Challenges and Developments

**IAEA Headquarters
Vienna, Austria**

1–5 December 2014

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Organized by the

International Atomic Energy Agency (IAEA)

Co-sponsored by the

International Labour Organization (ILO)

In cooperation with the

European Commission (EC)

International Society of Radiology (ISR)

International Commission on Radiological
Protection (ICRP)

International Society of Radiographers and
Radiological Technologists (ISRRT)

International Committee for
Non-Destructive Testing (ICNDT)

International Trade Union Confederation
(ITUC)

International Mining and Minerals
Association (IMMA)

Nuclear Energy Agency (OECD/NEA)

International Organisation of Employers
(IOE)

Pan American Health Organization
(PAHO)

International Radiation Protection
Association (IRPA)

United Nations Scientific Committee on
the Effects of Atomic Radiation
(UNSCEAR)

International Organization for
Standardization (ISO)

World Health Organization (WHO)

Announcement and Call for Papers

A. Introduction

The first such conference on this topic, the **International Conference on Occupational Radiation Protection: Protecting Workers Against Exposure to Ionizing Radiation**, was held in Geneva, Switzerland, from 26 to 30 August 2002. It was hosted by the Government of Switzerland and organized by the International Atomic Energy Agency (IAEA), and was convened jointly with the International Labour Organization (ILO). The conference was co-sponsored by the European Commission (EC) and held in cooperation with the World Health Organization (WHO), the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (OECD/NEA), the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) and other international organizations.

The second international conference on this topic will be held at the IAEA's Headquarters in Vienna, Austria, from 1 to 5 December 2014. The conference will be organized by the IAEA and co-sponsored by the ILO, in cooperation with several other international organizations.

The recommendations and conclusions from the first conference resulted in an international action plan on occupational radiation protection that has been accelerating and guiding international efforts in improving occupational radiation protection worldwide. While the Geneva conference provided very broad international input on the status of occupational radiation protection at the time, much work remains to be done and specific challenges exist in the areas of medicine, naturally occurring radioactive material (NORM), and the nuclear industry in general. In addition, new developments in recent years have brought with them additional challenges that need to be addressed by the international community.

The number of occupationally exposed workers in medicine has been increasing rapidly over the years, and individual occupational exposure varies widely among those involved in medical care. There are certain medical procedures that might give substantial doses to medical staff, and the education of medical professionals in radiation protection issues is a continuing problem.

Radiation protection in industries involving exposure due to NORM needs to be strengthened in terms of identifying the activities that give rise to radiation exposure and the application of a graded regulatory approach to control the exposure. The increase in the dose coefficient for radon may have important implications for the regulation of NORM industries.

The recent boom in the construction of nuclear power plants (NPPs) in some countries and the introduction of novel designs of nuclear reactors have given rise to some new issues related to radiation protection during the design phase and related to source term control during the operation of NPPs. On the other hand, as many nuclear reactors come to the end of their operating life, decommissioning activities are expected to increase significantly and this may result in additional challenges. Furthermore, the increasing specialization and the greater mobility of workers in many industries, including the nuclear industry, have brought additional challenges with regard to the monitoring and recording of individual radiation doses.

The publication of the revised International Basic Safety Standards as IAEA General Safety Requirements Part 3 presents regulators, operators and workers with new challenges in implementing the occupational radiation protection requirements in relation to different exposure situations. A particularly important issue to be addressed relates to the reduction of the dose limit for the lens of the eye.

The Fukushima Daiichi nuclear accident has highlighted various challenges in terms of approaches, measures and actions for radiation protection of workers in emergency situations. For example, better monitoring programmes, in particular for those workers receiving high doses and those subject to internal exposures, are necessary to reduce uncertainties in exposure assessment. Health surveillance for emergency workers exposed to high doses also needs further consideration.

Exposure of aircrew to cosmic radiation, radon at the workplace other than mines and protection of pregnant women against radiation continue to be of concern to the affected workers and to some of the national regulatory bodies. Radiation protection of itinerant workers requires further attention to address issues and challenges associated with a skilful workforce moving from one place to another.

Recent years have also seen an increased recognition of the importance of networks and information systems in occupational radiation protection. The existing networks provide good examples of how radiation protection can be optimized. The enhancement of occupational radiation protection through the use of currently available networks needs to be continually developed, strengthened and actively promoted.

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

B. Objectives

The conference has the following objectives:

- To exchange information and experience in the field of occupational radiation protection;
- To review advances, challenges and opportunities since the first conference on this topic;
- To identify areas for future improvement; and
- To formulate conclusions and recommendations.

C. Target Audience

The conference offers an opportunity to stakeholders involved in the implementation, management and/or development of occupational radiation protection policies to share and discuss experiences. Participants at the conference will include representatives of regulatory bodies, workers and employers involved in the use of radiation sources and in the operation of installations containing or handling radioactive materials, radiation protection experts, researchers, persons responsible for occupational monitoring services, and manufacturers of radiation emitting apparatus and other radiation sources. Representatives of workers' and employers' organizations, emergency workers/emergency response organisations as well as other interested parties would also find this conference of interest.

D. Working Language

The working language of the conference will be English.

E. Structure

The **opening session** will include welcome addresses by representatives from the IAEA, the Conference President, the ILO as co-sponsor of the conference, and representatives of cooperating organizations. The session will be further complemented by a keynote presentation on the importance and unique aspects of occupational radiation protection.

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

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

Poster sessions will be included in the programme for viewing and to encourage discussion.

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 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.

During the conference, a commercial exhibition will allow vendors to present their recent experience and developments in occupational radiation protection.

F. Topics

The IAEA welcomes high quality contributions on all aspects of occupational radiation protection. Both academic and practice-based papers under the umbrella of the following subjects of the topical sessions and round table discussions will be welcomed:

1. Radiation risks and radiation health effects at the workplace
2. Changes to international recommendations and standards on occupational radiation protection and the challenges in their practical implementation
3. Dose assessment and management of occupational radiation exposures
4. Occupational radiation protection in medicine

5. Occupational radiation protection at workplaces involving exposure to natural radiation sources, including NORM and cosmic radiation
6. Occupational radiation protection at workplaces involving exposure to radon
7. Occupational radiation protection in industrial, research and educational facilities
8. Occupational radiation protection in nuclear reactors/fuel cycle facilities
9. Occupational radiation protection in emergency and existing (post-accident) exposure situations
10. Radiation protection of workers for special cases (itinerant workers, pregnant workers, miners, lens of the eye dose monitoring)
11. Operational experience/lessons learned in relation to occupational radiation protection
12. Education and training in occupational radiation protection
13. Health surveillance; probability of causation of occupational harm attributable to radiation exposure; compensation
14. Occupational radiation protection networks
15. Management systems
16. Safety culture

G. Participation and Registration

All persons wishing to participate in the conference are requested to **register online in advance**. In addition, they must send a completed

- Participation Form (Form A)
- Form for Submission of a Paper (Form B), (if applicable)
- Grant Application Form (Form C), (if applicable)

as soon as possible to the competent official authority:

- Ministry of Foreign Affairs or
- National Atomic Energy Authority

or to one of the organizations invited to participate for subsequent transmission to the IAEA (Official.Mail@iaea.org).

A participant will be accepted only if the Participation Form is transmitted through the competent official 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 at least three months before the start of the conference. This information will also be made available on the conference web page (see Section O below).

H. Contributed Papers and Posters

Concise papers on issues falling within the scope of the conference (see Section F above) 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 E) 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 are encouraged to 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 during the poster sessions.

H.1. Submission of Contributed Papers

Authors should use the IAEA's Contributed Paper Template in Microsoft Word available from the conference web page (see Section O below).

Authors should state to which of the above topics (see Section F) their contribution relates.

The paper must be submitted in English.

The paper should not exceed four A4 pages in length and must

- be preceded by an abstract not exceeding 200 words and
- include
 - a brief introduction
 - methods
 - results
 - discussions
 - conclusions

Further guidelines for the preparation of a contributed paper and subsequent poster are available on the conference web page:

- IAEA Guidelines for Authors on the Preparation of Contributed Papers
- IAEA Guidelines for the Preparation of a Poster

The contributed papers should be submitted to: orpconf2014@iaea.org by **15 June 2014** **30 June 2014**.

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, authors must 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 **15 June 2014****30 June 2014**:

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

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

H.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 Programme Committee. Furthermore, the Secretariat reserves the right to exclude papers that do not comply with its quality standards and do not apply to one of the topics in Section F.

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 September 2014** whether their papers have been accepted as a paper for the conference.

H.3. Conference Proceedings

The proceedings containing the welcome addresses, keynote presentation, 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.

H.4. Distribution of Documents

A preliminary programme will be posted on the IAEA web page for the conference 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. 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. 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 June 2014** **30 June 2014**;
2. Accompanied by a duly 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**.

J. Venue and Accommodation

The conference will be held at the IAEA's Headquarters in Vienna, Austria. Detailed information on accommodation and other relevant matters will be sent directly to all designated participants approximately three months before the opening of the conference. This information will also be made available on the conference web page (see Section O below) as soon as possible.

K. Visas

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as soon as possible. Please note that Austria is a Schengen State and therefore persons who require 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.

L. Key Deadlines and Dates

Submission of Form B and contributed paper (max. four pages):	15 30 June 2014
Submission of Form C:	15 30 June 2014
Notification of acceptance of contributed paper:	15 September 2014

M. Exhibits

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: orpconf2014@iaea.org before **30 June 2014**.

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 Secretaries and correspondence on administrative matters to the IAEA Conference Services Section.

O. Conference Web Page

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

<http://www-pub.iaea.org/iaeameetings/46139/orpconf2014>