



**International Conference on the
Protection of the Environment
from the Effects of Ionizing Radiation**

**6–10 October 2003
Stockholm, Sweden**

Organized by the
International Atomic Energy Agency (IAEA)

in co-operation with the
United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR)
the European Commission (EC) and
the International Union of Radioecology (IUR)

Hosted by the
Government of Sweden
through the
Swedish Radiation Protection Authority (SSI)

ANNOUNCEMENT AND CALL FOR PAPERS

1. BACKGROUND

At present, the assessment and management of radionuclides entering or present in the environment is generally based on human health considerations alone. For example, the scope of the International Basic Safety Standards, which establish the basic requirements for radiation protection, *'is limited to the protection of human beings only; it is considered that standards of protection that are adequate for this purpose will also ensure that no other species is threatened as a population, even if individuals of the species may be harmed'*. The current recommendations of the International Commission on Radiological Protection (ICRP), include a similar statement: *"the standard of environmental control needed to protect man to the degree currently thought desirable will ensure that other species are not put at risk..."*

In recent years, there has been an increasing awareness of the vulnerability of the environment and of the need to protect it against the effects of industrial pollutants. This trend is reflected in new and developing international policies for environmental protection, starting with the Rio Declaration of 1992, and in critical reviews of the current approach for assessing and controlling the impact of radionuclides in the environment in several international fora. Policies and approaches that specifically address impacts on non-human species are now being developed by a number of international, national and regional organizations.

The International Atomic Energy Agency (IAEA) has had a programme of work on the assessment of the effects of ionizing radiation on non-human species since the 1970s. Initially this work was largely focused on the marine environment and in the context of the London Convention 1972, in particular. However, following on from the commitments in the Rio Declaration, the principle: *"Radioactive waste shall be managed in such a way as to provide an acceptable level of protection of the environment"* was included in the IAEA *Safety Fundamentals for Radioactive Waste*, which were published in 1995. This principle has also effectively been incorporated in the Joint Convention on the Safety of Spent Nuclear Fuel Management and on the Safety of Radioactive Waste Management, which came into force in June 2001.

Furthermore, recent IAEA work in this area has been concentrated on the development of supporting guidance on the ethics and principles underlying environmental protection, as described in IAEA-TECDOC-1270, *Ethical Considerations in Protecting the Environment from the Effects of Ionizing Radiation* (2002). Guidance on assessment procedures is currently under development. The IAEA has also facilitated information exchange by holding a series of international meetings, since 2000, leading up to this International Conference.

Other international organizations are also involved in this work. The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) published a Scientific Annex on *Effects of Radiation on the Environment*, in 1996. The current UNSCEAR programme includes identification of appropriate biological endpoints for use in environmental assessments and a review of evidence for impacts at specific sites. In May 2000, the ICRP established a Task Group on Environmental Protection to develop a protection policy and to suggest a framework for environmental radiation protection. This group is expected to publish a report of its work during 2003, which may have an impact on the revised recommendations of the ICRP that are being developed now. The International Union of Radioecology (IUR) has also concluded that a framework for protection of non-human species was urgently required, in order to structure existing knowledge and to direct future scientific research towards this goal.

The Conference will provide a very timely opportunity to discuss the work of these and other international organizations, and the work underway in a number of Member States. In particular, this Conference will coincide with the termination of the FASSET (Framework for Assessment of Environmental Impact) project, supported by the European Commission and involving 15 organisations in seven European countries. Another EC project, EPIC (Environmental Protection from Ionising Contamination in the Arctic) is also due to deliver its final report at that time.

2. THE CONFERENCE AND ITS OBJECTIVE

The primary objective of this Conference is to foster information exchange, with the aim of promoting the development of a coherent international policy on the protection of the environment from effects attributable to ionizing radiation. This Conference is one in a series of meetings organized by, or held in co-operation with, the IAEA on this subject. It will include a review of recent developments in this area, and consideration of their implications for future work at national and international levels.

3. SCOPE OF THE CONFERENCE

The Conference will address key questions related to the development of a system for the protection of the environment from the effects of ionizing radiation, including:

- Taking into account the issues discussed in the introduction to this announcement, and recognizing the work already in progress to develop systems for environmental protection, how should an international policy for the protection of non-human species from the effects of ionizing radiation be developed?
- How can the principles of environmental protection, implicit in international environmental legal instruments, be incorporated into an approach for environmental radiation protection?
- IAEA-TECDOC-1091 (1999) concluded that '*the extent of knowledge on the effects of radiation on organisms is ...sufficient to move forward*'. It is recognized that data gaps still exist, but which should receive most urgent attention in order to support the development of a system for the protection of the environment from the effects of ionizing radiation?
- Is there a consensus on the applicability of methods and data for environmental radiation protection? If not, what are the major areas of disagreement? Is it possible to resolve these conflicts and how should this be achieved?
- Does ICRP Task Group Report provide an appropriate way forward?
- What form will criteria for radiation protection of the environment take? To what extent will it be possible to derive international values, and who should be responsible for such developments?
- What experience can be provided by on-going international research projects and what are the priorities for future research and other work that will contribute to the development of an international system of protection for man and biota?

4. PROGRAMME STRUCTURE

The *opening session* will include welcoming addresses by representatives of the host Government, an opening address by the IAEA and statements by the co-operating organizations, and a keynote address by the President of the Conference.

A *background session* will give background information on:

- The current situation and social and political drivers for change;
- The status of policy development work on the environmental radiation protection by a number of organizations, including the ICRP and the IAEA.
- Reviews of relevant recent scientific developments, notably the results of the EC FASSET and EPIC research programmes, and their implications for future developments.

This will be followed by a number of *topical sessions* that will cover selected subjects related to environmental radiation protection. One or more keynote speaker(s) will address each topical session, to introduce the subject of the session, a Rapporteur will then summarize the relevant contributed papers. The presentations will be followed by a general discussion.

A number of *round table* sessions will address controversial issues and seek recommendations for possible future actions.

The respective Chairpersons will summarise the topical and round table session discussions at appropriate times during the Conference.

The Conference will end with a *concluding session* at which the overall results and conclusions of all topical and round table sessions will be summarised by the President of the Conference.

5. AUDIENCE

The Conference is aimed at professionals from a broad spectrum of disciplines including radiological protection, radioactive waste management, radioecology and radiological assessment. Government officials, including senior policy makers, persons from regulatory bodies and their technical experts, persons responsible for the assessment and management of releases of radioactive materials to the environment or for environmental restoration, would all benefit from attending the Conference.

6. PARTICIPATION

Anyone wishing to participate in the Conference must send a completed Participation Form (**Form A**) through one of the competent official authorities (see Section 9) for subsequent transmission to the IAEA. A participant will be accepted only if the Participation Form is transmitted to the IAEA by one of the official channels. Details on the logistics of the Conference will be sent to all designated participants approximately three months before the Conference.

7. CONTRIBUTED PAPERS AND POSTERS

Concise papers on issues falling within the following topics may be submitted as contributions to the Conference:

- **Existing environmental protection approaches:**
 - Case studies related to existing approaches for the assessment and management of the effects of ionizing radiation on biota;
 - Approaches adopted for non-radioactive pollutants
- **Development of an international assessment framework;**
 - Ethics,
 - Principles,
 - Endpoints
- **The scientific basis for environmental radiation assessment:**
 - Biological Effects:
 - The application of data on the effects of ionizing radiation on sub-individual, individual, population and higher levels of ecological organization;
 - Environmental Transfers and Uptakes
 - Dose assessment
- **Development of management approaches:**
 - Establishment of standards and criteria
 - Compliance issues.

These papers will not be presented orally, but will be summarized by a Rapporteur (as indicated in Section 4 above) and included in a Book of Contributed Papers to be distributed free of charge to all participants upon registration. Authors of contributed papers may present the substance of their paper(s) in the form of a **Poster**, which will be exhibited in the Poster Area.

The **contributed papers** must not exceed **four pages in length** and must be submitted in English. Each contributed paper must be preceded by an abstract, not exceeding 300 words. Authors should state to which of the above technical topic their contribution relates. Authors are urged to make use of the IAEA's Proceedings Paper Template in Word 2000 and its user instructions available on the Conference webpage (Section 16). Guidelines for the preparation of a contributed paper are given in the attached "IAEA Guidelines for Authors on the Preparation of Manuscripts for Proceedings" and the "IAEA Guidelines for the Preparation of a Poster".

The contributed papers should be submitted to the following Email address:

stockholm2003.papers@iaea.org

or sent on diskette to the Scientific Secretariat (see Section 15). The diskette label should identify the paper, the proposed session topic and the software application used (the use of Microsoft Word is encouraged). To permit selection and review, the electronic version of the contributed paper must be received by the Scientific Secretariat not later than **18 April 2003**.

In addition to the electronic submission, a copy of the contributed paper(s) must also be submitted through one of the competent official authorities (see Section 9) together with a completed Form for Submission of a paper (**Form B**) and the Participation Form (**Form A**) to reach the IAEA not later than **2 May 2003**.

Only papers that have been received by the above deadline(s) and through the appropriate official channels will be considered for inclusion in the Book of Contributed Papers after a peer review process. 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 7 above.

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

Authors will be informed by **10 June 2003** whether their papers have been accepted for inclusion in the Book of Contributed Papers and, as appropriate, for presentation as a poster.

8. EXPENDITURES/GRANTS

No registration fee is charged to participants.

As a general rule, the IAEA does not pay for participants' travel and living expenses. However, limited funds are available to help meet the cost of attendance of selected specialists mainly from developing countries with low economic resources. Generally, not more than one travel grant may be awarded to any one country. To apply for a travel grant, please send the Grant Application **Form C** – typewritten or clearly printed through your appropriate government authority (see Section 9) together with the Participation Form and if relevant, the Paper Submission Form to reach the IAEA at the latest by **2 May 2003**. Incomplete or late applications will not be considered. The grants will be lump sums usually covering **only part of the cost** of attendance.

9. CHANNELS OF COMMUNICATION

The Participation Form (Form A), the Paper Submission Form (Form B) and, if applicable, the Grant Application Form (Form C) must be sent through one of the competent official authorities (Ministry of Foreign Affairs or national atomic energy authority) for subsequent transmission to the IAEA. Subsequent communications concerning technical matters should be sent to the Scientific Secretary and communications on administrative/logistical matters to the Conference Organizer (see Section 15).

10. DISTRIBUTION OF DOCUMENTS AND PROCEEDINGS

A preliminary programme of the Conference will be sent by airmail to all officially designated participants well in advance of the meeting and will also be available on the Conference website (see Section 16).

The final Programme and a Book of Contributed Papers containing all papers accepted by the Programme Committee will be available free of charge upon registration at the Conference.

The Proceedings of the Conference to be published by the IAEA, will contain the welcoming addresses, the opening address by the President of the Conference, the keynote presentations, the Rapporteurs' reports, the other invited speakers papers, the Chairpersons' summaries, the Conference conclusions presented by the President of the Conference on the last day of the Conference, and the records of the discussions. The contributed papers will be included as a CD ROM. The Proceedings can be ordered, at a discount price, during the Conference.

11. VENUE, DATES AND WORKING LANGUAGE

The Conference will take place at the City Conference Centre "Norra Latin" from 6-10 October 2003.

The working language of the Conference will be English. All communications must be sent to the Agency in English.

12. ACCOMMODATION

Detailed information on accommodation and other administrative details will be sent to all officially designated participants approximately three months before the meeting. It will also be available on the Conference website.

13. VISA

Designated participants who require a visa to enter Sweden should submit the necessary application to the nearest diplomatic or consular representative of Sweden as soon as possible. Please note that the procedure could take up to three weeks.

14. KEY DATES

Deadline for receipt of electronic version of contributed papers	18 April 2003
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Deadline for receipt of paper submission forms (Form B) and copy of contributed paper through official channels	2 May 2003
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Deadline for receipt of grant application forms (Form C) (if applicable) through official channels	2 May 2003
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N.B.: Forms B and/or Form C must be sent through official channels together with Form A.

15. CONTACT INFORMATION

The following persons may be contacted for further information or assistance:

(a) Scientific issues – Scientific Secretariat (IAEA)

Ms. C. Robinson

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(b) Administrative issues – Conference Organizer (IAEA)

Ms. H. Schmid

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International Atomic Energy Agency
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16. CONFERENCE WEBPAGE

Please visit the IAEA Conference webpage regularly for any new and/or updated information regarding this Conference under:

<http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=109>