











# **International Conference on the Safety of Transport of Radioactive Material**

7-11 July 2003 Vienna, Austria

Organized by the International Atomic Energy Agency (IAEA)

Co-sponsored by the International Civil Aviation Organization (ICAO) International Maritime Organization (IMO) Universal Postal Union (UPU)

and in co-operation with the International Air Transport Association (IATA) International Organization for Standardization (ISO)

ANNOUNCEMENT AND CALL FOR PAPERS

## 1. BACKGROUND

Radioactive material has been transported for decades within and between countries as the use of radioactive material to benefit mankind has expanded. The transport can involve many types of materials (radionuclides and radiation sources for applications in agriculture, energy production, industry, and medicine) and all modes of transport (road, rail, sea and waterways, and air).

Among the organizations in the United Nations system, the International Atomic Energy Agency (IAEA) has the statutory function to establish or adopt standards of safety for protection of health against exposure to ionizing radiation. As a result, in 1959 the United Nations Economic and Social Council requested that the IAEA be entrusted with the drafting of recommendations on the transport of radioactive substances. Within its statutory mandate and pursuant to this request, in 1961, the IAEA issued *Regulations for the Safe Transport of Radioactive Material* (the *IAEA Transport Regulations*). The Transport Regulations were periodically reviewed and, as appropriate, have been amended or revised. Moreover, several guides and technical documents supporting the Transport Regulations were issued by the IAEA over time. The latest version of the Transport Regulations was issued in 2000 by the IAEA as Publication TS-R-1 (ST-1, Revised).

The IAEA Transport Regulations serve as the basis for the "Model Regulations" of the United Nations Economic and Social Council's Committee of Experts on the Transport of Dangerous Goods, which in turn serve as the basis for the international modal regulatory documents issued by the International Civil Aviation Organization (ICAO) for air transport, the International Maritime Organization (IMO) for sea transport, the United Nations Economic Commission for Europe (UNECE) for road, rail and inland waterway transport in Europe, and the Universal Postal Union (UPU) for transport by post. The Member States of these modal transport-related organizations are generally bound to regulate according to the requirements, and therefore with the IAEA Transport Regulations. For example, Member States must comply with the ICAO's Technical Instructions for the Safe Transport of Dangerous Goods for air transport of these materials according to the Chicago Convention. There are similar binding requirements for IMO, UNECE and UPU Member States.

In addition, the IAEA is entrusted by its Statute to provide for the application of its standards at the request of States. The IAEA discharges this statutory function through a number of mechanisms including providing training materials and training programmes, and rendering independent peer-review appraisal services to determine the status of compliance with its standards.

These services were established pursuant to a resolution of the General Conference (GC(42)/RES/13), which requested the IAEA to provide for application of the Transport Regulations by, inter alia, making available a service for carrying out, at the request of any State, an appraisal of the implementation of the Transport Regulations by that State. To satisfy that request by its Member States, the IAEA established in 1999 a service known as the Transport Safety Appraisal Service. As a number of issues were being raised amongst the IAEA's Member States which are addressed by a number of resolutions of the IAEA General Conference, notably Resolutions GC(42)/RES/13, GC(43)/RES/11, GC(44)/RES/17 and GC(45)/RES/10, in July 2001, it was announced (GOV/2001/30-GC(45)/13) that the Secretariat was planning to convene a Conference on the Safety of Transport of Radioactive Material in 2003.

## 2. THE CONFERENCE AND ITS OBJECTIVE

The objective of the Conference is to foster the exchange of information on issues related to the safety of transport of radioactive material by providing an opportunity for representatives from sponsoring international organizations and their Member States and from other co-operating and participating organizations to discuss critical issues relating to the safety of transport of radioactive material by all modes and to formulate recommendations, as appropriate, regarding further international co-operation in this area.

# 3. AUDIENCE

The Conference is directed to a broad spectrum of professionals dealing with the safety of transport of radioactive material – including, inter alia, regulators, package designers and manufacturers, consignors, carriers, consignees, radiological protection officers, and emergency responders.

## 4. PROGRAMME STRUCTURE

At a meeting of the Technical Programme Committee that was convened in March 2002, representatives of 16 Member States and two international organizations agreed on the Programme of the Conference as follows:

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

Two *background briefing sessions* will summarize the status of the global situation with regard to the safety of transport of radioactive material and will include presentations by representatives of international organizations.

An *explanatory topical session* will then cover the issue of liability in the transport of radioactive material. The topic will be introduced by an invited speaker, and the relevant contributed papers will be summarized by the Rapporteur of the session, whose presentation will be followed by a general discussion. Subsequently, an explanatory topical session summary will be prepared by the Chairperson of the session.

A series of *technical topical sessions* and *panel discussion sessions* will then cover selected topics relating to various specific issues on the safety of transport of radioactive material. Each technical topical session will be addressed by two invited speakers and moderated by a Chairperson. One of the invited speakers (a Rapporteur) will introduce the topic of the session and summarize the messages of contributed papers, and the other invited speaker will provide an independent expert opinion. These two presentations will be followed by a general discussion. Subsequently, each Chairperson will prepare a summary of his/her session.

One panel discussion session on each of three days will provide the opportunity for round-table discussions by a panel of technical experts. Each panel discussion session will be moderated by a Chairperson and have four experts, one of whom will introduce the topic of the session and summarize the messages of contributed papers, while the other panel members will provide brief statements on the topic of the session. The presentations by the panel members will be followed by a general discussion amongst the panel members, addressing questions submitted in writing from the conference participants.

Finally, there will be a *closing session* at which the explanatory, technical topical session and panel discussion session Chairpersons will present their summaries and the President of the Conference will present the Conference findings, conclusions and recommendations

In addition, in the evenings prior to days where *technical topical sessions* and *panel discussions* are to be held, *poster paper sessions* will be held offering the opportunity for authors contributing papers to personally discuss the contents of their papers with Conference participants.

## 5. SCOPE OF THE BACKGROUND BRIEFING SESSIONS

The following topics have been identified by the Technical Programme Committee as the subjects to be covered in the background briefing sessions:

- History and Status of the IAEA Transport Regulation Development
- Experience in adoption of the IAEA Transport Regulations at the international level
- Implementation of the IAEA Transport Regulations and other related requirements at the modal level
- Experience in application of the IAEA Transport Regulations
- Summary of actions (present and future) on security in transport of radioactive material (including actions at the IAEA)

## 6. SCOPE OF THE TOPICAL SESSIONS

The following topics have been identified by the Technical Programme Committee as the subjects to be covered in the explanatory topical, technical topical and panel discussion sessions:

# **Explanatory Topical Session**:

• Liability in the Transport of Radioactive Material

# **Technical Topical Sessions:**

- The effectiveness of the IAEA Transport Regulations
  - o effectiveness of the review/revision/adoption
  - o review process and cycle
  - o coordination and harmonization with international modal organizations
  - o application and implementation at the international and Member State level
  - o effectiveness of implementation by Member States experience and methods
  - o communications on regulations to the regulated and the public
- Effectiveness of the Regulatory Process at the Member State level
  - Appraisal of compliance with the Transport Regulations, including Transport Safety Appraisal Service
  - o training, education and information sharing
  - o knowledge preservation
  - o package certification and revalidation of certificates
- Adequacy of Safety Requirements
  - o experience
  - o trends in safety
  - o effectiveness of requirements
  - o performance indicators
  - o consequences of non-compliance

- Effectiveness of Radiation Protection in Transport
  - o radiation protection programme requirements of the IAEA Transport Regulations
  - o application of the radiation protection programme requirements in transport
  - o guidance on application of radiation protection programmes
  - o adequacy of or need for strengthening the regulatory radiation protection requirement
  - o risk assessments, environmental impact assessments, etc.
- Packaging and Transport of Nuclear Fuel Cycle Material
  - o uranium ores and concentrates
  - o uranium hexafluoride
  - o fresh and irradiated fuel
  - o high level waste
  - o modal equipment (vehicles, ships, etc.)
- Packaging and Transport of non Nuclear Fuel Cycle radioactive material
  - o low activity sources
  - o radiopharmaceuticals
  - o industrial sources
  - o consumer products/commodities
- Packaging and Transport of "Non-standard radioactive materials"
  - orphan sources
  - o contaminated products
  - o naturally occurring radioactive material
  - o use of "special arrangement"
- Compliance assurance and Quality assurance
  - o IAEA guidance and activities
  - o advances in ISO standards
  - o roles of competent authorities
  - o effectiveness of and experience with experience with QA and CA programmes
- Emergency Preparedness and Response
  - o IAEA guidance, applicable conventions
  - o emergency response guides (e.g. IMO EmS)
  - o roles of competent authorities
  - o experience with application of emergency response plans
  - o assessment of regulatory criteria

## **Panel Discussion Sessions**

- Identifying areas for potential improvement of the regulatory regime
  - o Enhancing Worldwide Coverage
  - Compliance with regulations throughout the world by State, region, mode (air, sea, road, rail and inland waterway) and category of materials (e.g. proper shipping name)
  - Technical cooperation
- Assessment of Regulatory Criteria
  - o Complying with IAEA Regulatory Test requirements
  - o Designs
  - o Guides, codes and standards
  - Comparison of test standards with Accident Environments marine, air, and land modes of transport
  - o Research (CRPs, etc.)
  - Contamination of packages and conveyances
- Communication with the public and between governments

- o effectiveness of regulations
- o INES (incident and accident information for communicating to the media)
- o notification (transparency vis-à-vis security)
- o user-friendly instruments for enhancing communication
- o results of CRPs (including TECDOCs and reports by individual participants)
- o shipping experience reports
- o post shipment reports

## 7. 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 10) 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

## 8. CONTRIBUTED PAPERS AND POSTERS

Concise papers on issues falling within the scope of the Topical and Panel Discussion Sessions (see Section 6 above) may be submitted as contributions to the Conference. 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, if they so wish, 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 technical session topic their contribution relates (see Section 6). 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 17). 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:

# Trans.Conference@iaea.org

or sent on diskette to the Scientific Secretariat (see Section 16). 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 <u>1 February</u> 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 10) together with a completed Form for Submission of a paper (Form B) and the Participation Form (From A) to reach the IAEA not later than <u>1 March 2003</u>.

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 6 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 <u>28 March 2003</u> whether their papers have been accepted for inclusion in the Book of Contributed Papers and, as appropriate, for presentation as a poster.

# 9. 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 10) together with the Participation Form and if relevant, the Paper Submission Form to reach the IAEA at the latest by <u>1 March 2003</u>. Incomplete or late applications will not be considered. The grants will be lump sums usually covering **only part of the cost** of attendance.

# 10. 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 16).

## 11. 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 17).

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.

# 12. VENUE, DATES AND WORKING LANGUAGE

The Conference will take place at the Austria Centre, Vienna, Austria from 7 to 11 July 2003. Registration will start in the afternoon of Sunday, 6 July 2003 and the Opening Session will start at 10.00 hours on Monday, 7 July 2003. The Conference will conclude at noon on Friday 11 July 2003.

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

#### 13. 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.

# 14. VISA

Designated participants who require a visa (Schengen 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 the procedure could take up to three weeks.

# 15. KEY DATES

Deadline for receipt of electronic version of contributed papers 1 February 2003

Deadline for receipt of paper submission forms (Form B) and copy of contributed paper through official channels 1 March 2003

Deadline for receipt of grant application forms
(Form C) (if applicable) through official channels

1 March 2003

# 16. CONTACT INFORMATION

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

# (a) Scientific issues – Scientific Secretariat (IAEA)

## Mr. R. Pope

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# (b) Administrative issues – Conference Organizer (IAEA)

# Ms. H. Schmid

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General mail for IAEA: <u>official.mail@iaea.org</u>)

## 17. 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=101