MEASURES TO STRENGTHEN INTERNATIONAL CO-OPERATION IN NUCLEAR, RADIATION AND WASTE SAFETY

SAFETY OF TRANSPORT OF RADIOACTIVE MATERIALS

ESTABLISHING AND MAINTAINING THE REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL

1. Pursuant to the statutory function of the Agency as an organization authorized to establish “standards of safety for protection of health”, in September 1996 the Board of Governors approved the current edition of the Agency’s Regulations for the Safe Transport of Radioactive Material (the Transport Regulations). In doing so, it - inter alia - authorized the Director General “to promulgate the revised Regulations as part of the Agency’s safety standards” and recommended to all international organizations which engage or expect to engage in the transport of radioactive material “that they adopt the revised Regulations or use them, as far as practicable, as the basis for the formulation of regulations and in connected regulatory activities.”

2. As part of the process of maintaining the Transport Regulations, the Secretariat - on the recommendation of the Agency’s Transport Safety Standards Advisory Committee (TRANSSAC) - has introduced a new procedure for revising the Transport Regulations. With the new procedure, a review of the Transport Regulations will be carried out every two years and, if TRANSSAC concludes that there is need for a revision of the Transport Regulations, a

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1 See paras 91 and 92 of GOV/OR.901. The current (1996) edition of the Transport Regulations was issued by the Agency as publication No. ST-1 in the IAEA Safety Standards Series.

2 The Transport Regulations are not binding on the Member States of the Agency. When they are adopted by another international organization, however, they may become binding on the States which are members of that organization.
revised version will be prepared and issued.\textsuperscript{3} With this schedule, the Agency will be in step with the two-year regulation revision schedules of the United Nations Committee of Experts on the Transport of Dangerous Goods, the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO) and the Inland Transport Committee of the United Nations Economic Commission for Europe (UN/ECE).

3. The new procedure was initiated by a note verbale dated 21 March 2000 (J1.30 Circ.) which was sent to the ministries of foreign affairs of all Member States and to the relevant international organizations and in which the Secretariat requested proposals for changes to the 1996 edition of the Transport Regulations. The deadline for the submission of proposals to the Secretariat was 22 May 2000. About 200 proposals have been received by the Secretariat, which is making them available on the Agency transport safety web page to all Member States and relevant international organizations for comment.

4. A “revision panel” will meet from 4 to 8 September 2000 in order to examine the proposals in the light of comments received from Member States and the relevant international organizations. The results of the examination will be submitted to TRANSSAC for consideration at a meeting to be held in February 2001. The Secretariat envisages that, on the basis of the recommendations made by TRANSSAC, a further “revision panel” will produce final draft revised Transport Regulations for consideration by TRANSSAC and that, after TRANSSAC endorsement, these will be submitted to the Commission on Safety Standards\textsuperscript{4} and subsequently to the Board for approval in September 2002.

PROVIDING FOR THE APPLICATION OF THE TRANSPORT REGULATIONS

Background

5. Pursuant to the statutory function of the Agency as an organization authorized to “establish or adopt … standards of safety for protection of health and minimization of danger of life and property … and to provide for the application of these standards”, the Secretariat is providing for the application of the Transport Regulations.

6. In September 1997, the Diplomatic Conference convened to adopt the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management adopted a “Resolution Relating to Transboundary Movement of Radioactive Waste and Spent Fuel” in which it - inter alia - urged all States parties to the Joint Convention to take the Transport Regulations into full consideration in the formulation and implementation of their national laws and regulations.

7. Towards the end of 1997, the Secretariat conducted a survey with a view to determining how many Member States had legally binding regulations applicable to the domestic and international (import and export) transport of radioactive material. Of the 65 Member States which responded to the Secretariat’s questionnaire, 52 stated that they had such regulations applicable to domestic transport (in all cases based on the Transport Regulations) and 51 stated that they had such regulations for international transport (in 50 cases based on the

\textsuperscript{3} TRANSSAC has already concluded that the current (1996) edition of the Transport Regulations needs to be revised, and it is expected that a revised version will be issued in 2003.

\textsuperscript{4} Formerly called “Advisory Commission on Safety Standards”.
Transport Regulations). Of the 31 Member States with operational nuclear power reactors at that time, 30 responded to the questionnaire, including the world’s ten largest nuclear power-producing countries. All of the nuclear power-producing Member States which responded to the questionnaire stated that they had binding regulations governing both domestic and international transport which were based on the Transport Regulations.

8. In September 1998, in resolution GC(42)/RES/13, the General Conference - inter alia - stated that “compliance with regulations which take account of the Agency’s Transport Regulations is providing a high level of safety during the transport of radioactive materials”, invited States shipping radioactive materials “to provide, as appropriate, assurances to potentially affected States upon their request that their national regulations take into account the Agency’s Transport Regulations ...”, requested the Secretariat “to keep the Transport Regulations under review in consultation, and where appropriate in collaboration, with the competent organs of the United Nations and with the specialized organizations concerned” and “to provide for application of the Transport Regulations by - inter alia - providing a service, within existing resources, for carrying out, at the request of any State, an appraisal of the implementation of the Transport Regulations by that State” and requested the Director General to submit to it in 1999 a report which would - inter alia - indicate “the global status of implementation of the Transport Regulations”.

9. In a letter dated 10 December 1998, the Director General informed all States about the General Conference’s request regarding the provision of a service for carrying out, at the request of any State, an appraisal of the implementation of the Transport Regulations by that State, and during 1999 the Secretariat established a Transport Safety Appraisal Service (TranSAS). The first TranSAS mission - to Slovenia - took place in June/July 1999.

10. In October 1999, in resolution GC(43)/RES/11, the General Conference - inter alia - noted with satisfaction that the Secretariat had established TranSAS, encouraged Member States “to make use where appropriate of the Transport Safety Appraisal Service with a view to achieving the highest possible levels of safety during the transport of radioactive materials” and requested the Director General to report to it in the year 2000 on the implementation of that resolution.

11. The Secretariat was invited to participate during June 2000 in a public hearing on the transport of radioactive material within the European Union held by the European Parliament’s Committee on Regional Policy, Transport and Tourism. Answers to questions were provided by the Secretariat in advance, and two Secretariat staff members participated in the hearing on 21 June 2000. The Secretariat will make the rapporteur’s report on the hearing available to Member States on request when it receives it.
Implementation of the Transport Regulations by States

12. The Secretariat has been informed by 115 Member States that they have national competent authorities responsible for radioactive materials transport.\(^5\)

13. In February 2000, pursuant to the request made by the General Conference for a report which would - inter alia - indicate the global status of implementation of the Transport Regulations, the Secretariat initiated a survey concerning implementation of the Transport Regulations by Member States. In a questionnaire sent to the ministries of foreign affairs of all Member States under cover of a note verbale dated 2 February 2000 (J1.30 Circ), each Member State was asked, inter alia,

- whether it had national regulatory documents for controlling the domestic/international transport of radioactive material;
- whether its national regulatory documents were directly based on the Transport Regulations;
- which edition of the Transport Regulations was used as the direct basis for its national regulatory documents;
- how the Transport Regulations were enforced if its national regulatory documents were not directly based on them;
- how its national regulatory documents differed from the Transport Regulations if they did differ from them.

14. The Secretariat received 72 completed questionnaires. Although the response rate (55\%) was higher than that for the 1997 survey mentioned in paragraph 7 above, the non-response rate (45\%) was surprisingly high given the emphasis placed by the General Conference on transport safety in the past two years. However, all 30 Member States with nuclear power reactors in operation at present returned completed questionnaires.

15. Of the 72 Member States which returned completed questionnaires, 63 stated that they had national regulatory documents for controlling the domestic transport of radioactive material and 61 stated that they had such documents for controlling its international transport. The situation regarding those 72 Member States and the Transport Regulations is summarized in the following table:

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\(^5\) The national competent authorities reported to the Secretariat are listed in document IAEA NCAL-31, “National Competent Authorities responsible for Approvals and Authorizations in respect of the Transport of Radioactive Material”, List No. 31, 2000 edition, IAEA (February 2000). The latest list of national competent authorities will, pursuant to a recommendation made by TRANSSAC, also be made available on the Agency transport safety web page, with a view to facilitating communications between States, consignors, carriers and others regarding radioactive material transport.
<table>
<thead>
<tr>
<th>Number of Member States regulating to:</th>
<th>Domestic transport</th>
<th>International transport</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1996 edition (ST-1)</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>- 1985 edition (Safety Series No.6)</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>- earlier editions of Safety Series No. 6</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Number of Member States NOT regulating to any edition</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
<td><strong>72</strong></td>
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16. Most of the Member States which returned completed questionnaires appear to have national regulatory documents which fall into one of the following categories:

(a) regulatory documents based completely - verbatim or by reference - on the Transport Regulations;

(b) regulatory documents based largely on the Transport Regulations;

(c) regulatory documents requiring compliance with regulations which have been promulgated by other international organizations (for example, ICAO and IMO) and are based on the Transport Regulations;

(d) other regulatory documents unique to individual Member States.

A few of them appear to have national regulatory documents which fall into more than one of these four categories.

17. In the case of each Member State which returned a completed questionnaire, the Secretariat intends to send to that State’s national competent authority responsible for radioactive material transport its interpretation of the replies received, with a request that the national competent authority check the accuracy of the interpretation and allow the resulting information about the State to be made available on the Agency transport safety web page. The Secretariat hopes that by making the results of the survey available in this way it will help States shipping radioactive materials to respond to the General Conference’s 1998 invitation “to provide, as appropriate, assurances to potentially affected States upon their request that their national regulations take into account the Agency’s Transport Regulations”. The Secretariat would welcome inputs from Member States which have not already provided information in response to the survey.

**Implementation of the Transport Regulations by international organizations**

18. As stated in paragraph 9 of document GC(43)/9 (issued in August 1999), “In December 1998, the United Nations Committee of Experts on the Transport of Dangerous Goods approved complete integration of the requirements of the Transport Regulations into the United Nations Recommendations on the Transport of Dangerous Goods, also known as “the Model Regulations”, which serve as a basis for the dangerous goods transport regulations
of States and other international organizations. The International Civil Aviation Organization (for air transport), the International Maritime Organization (for marine transport) and a number of other international organizations (for road and rail transport) have been interacting with the United Nations Committee of Experts in the preparation of amendments to their requirements for the transport of dangerous goods in order to make those requirements consistent with the Model Regulations in time for the amendments to go into effect on 1 January 2001.”

19. The situation which developed after August 1999 was as follows: the amendments to the requirements of ICAO were to go into effect on 1 January 2001, with no transition period; the amendments to the requirements of IMO were also to go into effect on 1 January 2001, but with a transition period of one year; and the amendments to the requirements of the Inland Transport Committee of UN/ECE - which issues regulations for road and rail transport within Europe - were not to go into effect until 1 July 2001, with a transition period of 18 months. That situation - with different dates for the entry into effect of amendments and with differences as regards transition periods - had the potential for causing operational and safety problems at the air/sea/rail/road interface for competent authorities, consignors and carriers.

20. Following a co-ordination meeting in March 2000 convened by the Agency’s Secretariat and attended by representatives also of ICAO, IMO and UN/ECE and a meeting of TRANSSAC in May 2000, the situation is now as follows: the amendments to ICAO’s requirements are not to go into effect until 1 July 2001, but still with no transition period; the amendments to IMO’s requirements are still to go into effect on 1 January 2001, and still with a transition period of one year; and the amendments to the requirements of UN/ECE’s Inland Transport Committee are still to go into effect on 1 July 2001, but with a transition period of only six months. It is considered that, as a result of these Secretariat-fostered changes, the potential for operational and safety interface problems has been significantly reduced.

21. The Secretariat intends to provide to all Member States, on the aforementioned Agency transport safety web page, up-to-date information on the status of adoption and implementation of the latest edition of the Transport Regulations by the relevant international organizations.

22. To ensure that the operational and safety interface problems during the transition to the latest edition of the Transport Regulations are minimized, the Secretariat intends to continue working closely with the relevant international organizations, to continue convening inter-agency co-ordination meetings and to organize transport safety training for key personnel in Member States.

The Transport Safety Appraisal Service (TranSAS)

23. In December 1999, the Secretariat convened a meeting of consultants to fine-tune the TranSAS procedures and guidelines in the light of the lessons learned from the June/July 1999 TranSAS mission to Slovenia mentioned in paragraph 9 above.

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6 A transition period is a period during which either amended requirements or unamended requirements may apply.
24. In May 2000, the Secretariat received a request for a TransSAS mission from Brazil. Initial steps are being taken to meet the request. It is expected that the mission will take place this year.

25. In the survey relating to implementation of the Transport Regulations by Member States (see paragraphs 13-16 above), States were asked whether they were aware of the TranSAS service. Of the 72 Member States which returned completed questionnaires, only 45 stated that they were aware of it.

26. The Secretariat intends to transmit to all States’ national competent authorities responsible for radioactive material transport a brochure outlining TranSAS. Also, the brochure and a document setting forth the TranSAS procedures and guidelines will be made available to Member States’ delegations on request.