

## COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS AND ON THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

Sub-Committee of Experts on the Transport of Dangerous Goods

Thirty-fourth Session  
Geneva, 1-9 December 2008  
Item 8 of the provisional agenda

### HARMONIZATION WITH THE INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA) REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL

#### The 2009 IAEA review process in relation to the UN biennium

#### Note by the International Atomic Energy Agency

1. The IAEA Transport Safety Standards Committee has carried out a review of current issues and decided (in its 2007 review) that no update was required at that time. As a result there will be no change to the Class 7 requirements during the 2009-2010 UN biennium.
2. Several significant issues were identified, however, and these are currently under development (ST/SG/AC10/C.3/2008/99 reports preliminary work in this area).
3. It is intended to initiate a review of the IAEA Regulations for the Safe Transport of Radioactive Material (TS-R-1) along with its associated advisory material (TS-G-1.1), starting in March 2009.
4. Information is presented in the Annex to this paper which sets out the process and times which will be applied in the next IAEA review to allow the Sub-Committee to understand when the input can be made to the IAEA process.
5. It should be noted that the IAEA has published a guide on security in transport, which the Sub-Committee may wish to consider in its upcoming work programme.
6. The Sub-Committee may also wish to note that the 2009 Edition of TS-R-1 has been approved and drafts in all six languages have been passed to the UN secretariat to aid harmonisation in all languages. In addition TS-G-1.1 has been updated and publication of TS-G-1.4 and TS-G-1.5 is imminent. A new version of the schedules numbered TS-G-1.6 is nearing completion and should be published toward the end of 2009.

### Annex

1. The 2009 Review is the precursor to a potential revision in the 2011-2012 UN biennium.
2. The IAEA review concentrates on “issues” with the Regulations, and in particular those important to safety. Set criteria will be used in assessing the issues (using some questions that will help guide the assessment). There will be one of two outcomes of this process and the decision will be made at the October 2009 meeting of TRANSSC, and verified later by the meeting of the CSS.
3. Outcome 1: TS-R-1 should be revised.
  - (a) A Revision process will be initiated, concentrating on the issues identified and suitable for incorporation into TS-R-1. A preliminary schedule identifies major events as:
    - (i) Drafting of the revised version will take place approximately July-Oct 2010 inclusive, culminating in a TRANSSC meeting.
    - (ii) Public review of the draft revision will take place June-Sept 2011. This will also revisit the issue list.
    - (iii) Technical drafting should be complete by April 2012
    - (iv) Formal approval should take place in September 2012.
4. Outcome 2: TS-R-1 should not be revised.
  - (a) There will be no changes to the Class 7 requirements in the 2011-2012 UN biennium.
5. During the 2007 review there were several issues identified and accepted that were not safety significant, or were not sufficiently developed to be input into TS-R-1. The Table at the end of this paper gives a list of these and their current status in November 2008. In effect the TRANSSC decision not to revise in the 2009-2010 biennium has resulted in the ability to commit time to a more in depth study of these specific issues. It is expected that most of these will feature in the next revision of TS-R-1.
6. A key feature of the updated IAEA process is the concept of greater integration with the UN on development of text. The July 2009 UN meeting can inform TRANSSC of issues it considers important. If a revision is to take place then draft text will be available for from the IAEA for the July 2011 UN meeting. Similarly there will be an attempt to hold TRANSSC meetings in the period between Working Papers being made available for the UN meetings and the actual UN meeting. This will allow the opportunity for TRANSSC to review any generic text changes that are applicable to all classes and pass comment to the UNSCETDG.

Criteria to Identify Proposed Changes Necessitating a New Edition of TS-R-1

1. The following principles shall be used in evaluating proposed changes to the regulations stemming from the review cycle:

- Optimisation
- Efficiency / practicality / regulatory stability
- Compliance with dose limits
- Socio-economic considerations
- Harmonisation
- Clarification

2. A detailed review of each change is necessary to determine its safety importance. If a significant safety change to TS-R-1 is needed to maintain and assure the safety of transport, then the change is deemed to be “sufficiently important for safety to necessitate publication as soon as possible”.

Examples of changes that may warrant a revision are:

- Consistency with other safety standards (e.g. IAEA Basic Safety Standards and UN Recommendations on the transport of dangerous goods)
- New package and/or material type classification
- Modified test requirements
- Operational events / controls
- Changes in scope to any part of TS-R-1 (e.g. definitions, A1/A2 values, transport controls)
- New requirements that invalidate designs /certificates

Questions to guide the determination if proposed changes to TS-R-1 are sufficiently important to safety to necessitate publication of a new edition of TS-R-1

1. Is the change or set of changes needed to maintain and assure safety?
2. Is the change or set of changes sufficiently important for safety to necessitate, publication as soon as possible?
3. Does the change or set of changes have a substantial impact on the scope of TS-R-1?
4. Will the change or set of changes result in a significant change to existing transport activities or invalidate existing designs or certificates?
5. Does the change or set of changes affect the established radiation protection system or the radiological basis of TS-R-1?
6. Would the change or set of changes result in a reduction, or potential reduction, in overall dose?
7. Is the change or the set of changes related to new package type or material considerations?
8. Is the change or set of changes a result of improvements in testing or analysis capabilities, or from operational experience?
9. If delay in implementation of the set of changes will result in inconsistencies with other international standards, will the existing levels of safety be maintained and assured?
10. What is the risk to safety if we delay publication?

Subsidiary Questions used to gain evidence in support of the main questions

1. Does the proposed change result in any change to the dose to workers?
  - 1.1. If yes does the dose increase or decrease?
  - 1.2. If increased is there a net benefit in terms of reduction to the dose to the public in routine, normal or accident conditions of transport?
    - 1.2.1. If yes are worker dose limits still complied with?
  - 1.3. If it decreases is there a consequent increase in the dose to the public?
    - 1.3.1. If yes are public dose limits still complied with?
2. Recognizing that any change to the regulations places a cost burden on the Member States and other stakeholders:
  - 2.1. Are the expected impacts of the change well understood?
  - 2.2. Will there be a financial benefit to either the Member States or other stakeholders?
3. Are the criteria used to demonstrate that the safety benefits outweigh the costs acceptable to TRANSSC?
4. Does the proposal raised by one Member State have a significant detrimental effect on another Member State or other stakeholders?
5. If the change is implemented will TS-R-1 be consistent with other international standards?
6. Will the proposed change provide for increased safety of transport in routine, normal or accident conditions?
7. Will the proposed change affect the risk of an incident or accident?
  - 7.1. If yes is the resultant change acceptable in terms of dose and/or cost.
8. Will the proposed change affect the consequences (dose/environmental harm/disruption to the transport infrastructure) of an incident or accident?
9. Will the proposed change achieve the existing objectives with reduced effort?
10. Does the proposed change have a broad impact on the Radioactive Materials Transport (RMT) community?

TRANSSC 16 Recommendations	Topic of issues	Original proposal reference (see WP05 of TRANSSC 15 <sup>th</sup> )	Organizer of the meeting / lead country of Correspondence group	Meeting venue and date Status
CM1	Fissile Exception	USA/07/10, SPAIN/07/01	UK,	United Kingdom, April 2008. Text is almost ready for the Regulations and advisory material
CM2	Package test	Fr 07/21,Fr07/20, WNTI 07/19, FR 07/24, WNTI 07/17, WNTI 07/18, FR 07/18, FR 07/19	IAEA,	8-12 Sept. 2008 Vienna, Report subject to review by TRANSSC
CM3	Review the results of the report of the CRP on air accident severity	CA/07/03, UK/07/03, USA/07/07	UK,	To be arranged after publication of report
CG1	Small quantities of UF6	FRANCE/07/08, UNECE/07/01, WNTI/07/7	Germany	Solution proposed, Agreement of the whole group is under way
CG2	Transitional arrangements	FR 07/29	France	May not be needed
CG3	Shipments of large components	USA07/11	U.S.A	No information
TM1	UF6 subsidiary risk, exclusive use provisions, addressing limited quantities	WNTI/07/10, UNECE 07/01,UK 07/08, UK07/06, USA/07/05, US/07/16, Czech/07/01, Czech/07/02, USA/07/03, USA/07/14, USA/07/15	IAEA	1-5 September 2008, Vienna Report subject to review by TRANSSC
TM2	Surface contamination	UK/07/01	IAEA	10-14 Nov. 2008, Japan Report not available.