



**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-eighth session**

Geneva, 29 November–7 December 2010

Item 8 of the provisional agenda

Cooperation with the International Atomic Energy Agency (IAEA)**Establishment of a Joint group****Transmitted by International Atomic Energy Agency (IAEA)¹**

1. During its June 2010 session, the Sub-Committee agreed to consider the creation of a Joint Group of the Sub-Committee and the IAEA to deal with the interface between radioactive material and other dangerous goods (see ST/SG/AC.10/C.3/74, paras 99-100).
2. The IAEA secretariat has analysed the issues and developed a work programme which will be completed in the next biennium. It is envisioned that the process will result in a continuing collaborative effort by the IAEA and the Sub-Committee to maintain harmonization of future amendments to the IAEA Regulations for the Safe Transport of Radioactive Material (TS-R-1) and the United Nations Model Regulations on the Transport of Dangerous Goods (Orange Book).
3. To facilitate the production of these outputs, a Joint Group involving the secretariat of the United Nations Economic Commission for Europe (UNECE), the secretariat of the IAEA, the Sub-Committee and the IAEA Transport Safety Standards Committee (TRANSSC) is necessary to complete the work. TRANSSC and the Sub-Committee are the entities to approve the outputs of the Joint Group.

¹ In accordance with the programme of work of the Sub-Committee for 2009-2010 approved by the Committee at its fourth session (refer to ST/SG/AC.10/C.3/68, para. 118 (f) and ST/SG/AC.10/36, para. 14).

4. In conjunction with this the following work will be performed by IAEA:
 - (a) To check whether requirements of TS-R-1 (categories A and C as defined in the annex to this document) are properly reflected in the (initially, due to availability) 16th and 17th revised editions of the Orange Book and provide feedback to SCETDG through TRANSSC if deemed necessary for correction.
 - (b) To make proposals to SCETDG for updating the Orange Book (18th revised edition) in the light of amendments to TS-R-1 expected to be published in the next version of TS-R-1.
 - (c) To consider amendments to provisions of Category D in the 16th and 17th revised editions of the Orange Book and either:
 - (i) update of the next version of TS-R-1; or
 - (ii) provide feedback to SCETDG if these cause problems in the case of radioactive material.
 - (d) To study whether the application of requirements of Category B cause problems when radioactive material poses subsidiary hazards, and provide feedback to SCETDG.
5. In conjunction it is envisaged that the SCETDG will perform the following work:
 - (a) Inform IAEA of all new amendments to the Orange Book;
 - (b) Consider proposals coming from IAEA; and
 - (c) Discuss more substantial problems relating to radioactive material possessing other hazards, on the basis of any implementation problems that are communicated by IAEA,
6. This document is being presented to both TRANSSC and the Sub-Committee for consideration in parallel.
7. Based on the proposed terms of reference described in the annex, TRANSSC and the Sub-Committee are requested to approve the creation of a joint group based on the attached terms of reference and the above work plan.

Annex

Review of Class 7 requirements in the UN Model Regulations (Orange Book) to harmonize IAEA-UN Regulations.

Terms of reference for Joint Group

Background

1. The International Atomic Energy Agency (IAEA) is entrusted by the United Nations Economic and Social Council (ECOSOC) with drafting of recommendations on the transport of radioactive material, on the understanding that the recommendations would be consistent with the principles adopted by the ECOSOC Sub-Committee of Experts on the Transport of Dangerous Goods (SCETDG) and would be formulated in consultation with the United Nations and the relevant specialized agencies.
2. This has led to continuing co-operation between the SCETDG, the IAEA, the relevant specialized agencies (e.g. the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO)) and various other United Nations bodies. The IAEA and the SCETDG have agreed that the provisions of the IAEA Regulations for the Safe Transport of Radioactive Material (TS-R-1) should be integrated in the Model Regulations annexed to the UN Recommendations on the Transport of Dangerous Goods (Orange Book). Consequently, the IAEA Regulations are both a stand-alone document and part of the UN Model Regulations.
3. The IAEA requirements were incorporated into the 11th revised edition of the Orange Book (1999), rather than being referenced. In 2006, a large work of harmonization has been initiated related to the definitions proposed by the expert from the United Kingdom and discussed both by the SCETDG and the IAEA Transport Safety Standards Committee (TRANSSC). This work (document ST/SG/AC.10/C.3/2005/19), from which a number of proposals was identified, was based on the TS-R-1 document. In this same time frame, the IAEA initiated some changes to TS-R-1 to improve harmonization with the Orange Book.

Cross links between Class 7 requirements and the requirements of other dangerous goods.

4. There are 4 categories of requirements identified in the UN Orange Book:
 - **Category A: Requirement for class 7 based on IAEA text without modification;** These requirements are elaborated by IAEA, as such *in extenso* incorporated in the related part of the Orange Book without change (except numbering);
 - **Category B: Requirement for classes other than class 7;** these requirements are elaborated by SCETDG and IAEA is not involved;
 - **Category C: Requirement for class 7 based on IAEA text modified or created to fit the Orange Book format;** Ex: Special provisions (SP290), Instruction T5 for UN2913 in Table of Chapter 3.2. These requirements are elaborated by SCETDG. There is no formal process for involving IAEA in the modification of the text. IAEA has an interest in the modification.

- **Category D: Requirement applicable to all classes (including class 7);** ex: definitions (tank, package ...), provisions on labelling or marking, use of salvage packagings (4.1.1.17). These requirements are elaborated by SCETDG. They may directly affect the carriage of radioactive material, but (in most cases) are not currently reviewed by IAEA, nor are they incorporated in TS-R-1.

Need for harmonisation

5. There is a strong imperative to harmonize the requirements issued by the IAEA in the Regulations for the Safe Transport of Radioactive Material and the ones produced by SCETDG in the UN Orange Book. There are provisions in the Orange Book which are not included in TS-R-1, where there could be benefits of incorporating them (for example the provisions related to samples). Conversely there are provisions which have always been in the Orange Book which have de-facto been applied to Class 7 when TS-R-1 was incorporated into the Orange Book, where it may not be appropriate.

6. It is important that Member States are involved in any process which amends either TS-R-1 or the Orange Book, and approve any amendment. The process for this includes activities in the forum of IAEA and the United Nations Economic and Social Council. This joint group is established to perform essential linking tasks within this process. The group will either clarify the scope of requirements (Class 7 **and/or** other classes), then forward them for review and approval by both the relevant bodies, TRANSSEC and SCETDG.

7. The appropriate development and approval bodies are:

<i>Category A</i>	<i>Category B</i>	<i>Category C</i>	<i>Category D</i>	
Developed at IAEA	Developed at UN	Developed at IAEA	Developed at UN	Unusually developed by IAEA (extension of category A to other classes)
		Integrated at UN	Integrated at IAEA	Integrated at UN
IAEA approval	UN approval	IAEA approval	UN approval	IAEA approval
		UN approval	IAEA approval	UN approval

Work to be carried out

8. The tasks to be performed by the working group are the following:
- (a) To perform a strategic overview of Category C and D requirements. An initial overview will be carried out by TRANSSEC and supplied to group;
 - (b) To clarify the requirements of the Orange Book as Category A, B, C or D;
 - (c) To validate the review of all requirements of TS-R-1 20XX edition. Identifying which **can** be Category A, which **can** be Category D and which **must** be Category C. The initial review will be provided by TRANSSEC with IAEA Secretariat support;

- (d) To consider all remaining Category C requirements (not identified directly from TS-R-1 requirements and existing in the 17th revised edition of the Orange Book);
- (e) To consider in detail the Category D requirements (in the Orange Book) on the basis of the strategic overview proposing either complete adoption of the Orange Book for Category D provisions in TS-R-1 (identical text), or the exclusion of class 7 from specific Orange Book requirements (changing to Category B).
- (f) To continue the work of (b)-(e) for proposed amendments for future editions.

Additional output

9. The product of the Joint Group will be to develop and pilot test a process to achieve harmonization of the international transport requirements in TS-R-1 and the Orange Book. The Group will present a status report at each session of the Sub-Committee of Experts on the Transport of Dangerous Goods and each meeting of the Transport Safety Standards Committee on the status, conclusions and recommendations resulting from completion of the above listed work to be done.

10. The final report of the Joint Group on the developed process and results of the pilot test will be addressed both to TRANSSC and to SCETDG for consideration.

Membership of the Group

11. The Joint Group is composed of experts in the transport of radioactive material and experts in the transport of other dangerous goods. The initial members of the Joint Group will include the following:

- SCETDG Chair;
- TRANSSC Chair;
- UNECE (secretariat for SCEDTG);
- IAEA secretariat for TRANSSC;
- at least one TRANSSC member;
- at least one SCETDG member;
- modal body representatives as appropriate.

Resources

12. The Joint Group will be supported by the UNECE secretariat (secretariat for the SCETDG) and the IAEA secretariat. The group will be co-chaired by the SCEDTG and IAEA.

13. Meetings of the Joint Group will be scheduled as necessary, with a goal to use electronic communications extensively and to meet on the margins of other meetings to minimize travel and facilitate logistics.
