## 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

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# GLOBAL HARMONIZATION OF TRANSPORT OF DANGEROUS GOODS REGULATIONS WITH THE UN MODEL REGULATIONS

Implementation of the 15<sup>th</sup> revised edition of the UN Recommendations on the Transport of Dangerous Goods

## Note by the secretariat

- 1. The Sub-Committee may wish to consider the following issues which were raised by the International Maritime Organization (IMO) Editorial and Technical Group (E/T Group) and by the UNECE/OTIF <u>Ad Hoc</u> Working Group on the Harmonization of RID/ADR/ADN with the UN Recommendations on the Transport of Dangerous Goods when considering the texts adopted by the Committee at its December 2006 session (ST/SG/AC.10/34 and Adds 1-2) for adaptation of the IMDG Code, RID, ADR and ADN.
- 2. Detailed information on the outcome of the discussions may be found in:

IMO document:DSC 12/3UNECE document:ECE/TRANS/WP.15/AC.1/2007/30 and Add.1

Some of the issues raised would need immediate action so that IMO (DSC12) and the RID/ADR/ADN Joint Meeting may take appropriate decisions next September.

# Definition of small containers (1.2.1)

3. The Committee introduced the notion of small freight containers in the definition of freight containers in section 1.2.1. This definition results from the process of UN/IAEA harmonization and is based on the definition of small freight containers which may be found in paragraph 223 of the IAEA Regulations for the Safe Transport of Radioactive Material, and which reads as follows:

"A small freight container is that which has either any overall outer dimension less than 1.5 m, or an internal volume of not more than  $3 \text{ m}^3$ ."

4. This IAEA definition implies that any small container with any overall outer dimension less than 1.5m, whatever its volume is (e.g. a metal box) could be considered as a small freight

container provided that it would meet the definition of freight container in the UN Recommendations. This could nevertheless lead to problems in practice since some packagings or IBCs could, through this definition, be assimilated to freight containers.

- 5. Attention is also drawn to the fact that, currently, according to ISO 830:1981, and according to RID, ADR and ADN, a small freight container has a minimum internal volume of  $1m^3$ .
- 6. For RID, ADR and ADN, it was agreed to maintain this minimum internal volume of  $1m^3$  in the definition of small freight containers, and to apply the new IAEA definition to small freight containers intended for the carriage of radioactive material only.
- 7. The Sub-Committee may wish to discuss this definition of small containers in cooperation with IAEA.

## Provisions which apply/do not apply to excepted packages of radioactive material

8. Paragraph 1.5.1.5.1 contains a list of provisions which apply to excepted packages, while paragraph 1.5.1.5.2 contains a list of provisions which do not apply. However, the sum of provisions which apply and of those which do not apply does not cover the entire list of provisions of the Model Regulations, and as a result, there are some uncertainties as regards the status of provisions which are not listed either in 1.5.1.5.1 or 1.5.1.5.2, and as regards the status of certain class 7 provisions which appear in Part 7 of the IMDG Code, RID, ADR or ADN, which are mode specific and are not part of the Model Regulations. This is an issue to be clarified with both the Sub-Committee and the IAEA.

In addition, the reference to 2.7.4.1 in 1.5.1.5.2 should be replaced by a reference to 2.7.2.3.3.1, but it seems that only the first sentence of 2.7.2.3.3.1 would not apply to excepted packages. In that case, the IMO E/T Group proposed to split 2.7.2.3.3.1 into three paragraphs (a), (b) and (c), one for each sentence.

## Classification of infectious substances (animal material)

- 9. Part 2 of the Model Regulations is intended to contain the relevant provisions for classification of the various substances and articles. In the case of animals infected with division 6.2 pathogens, indications are given in 2.6.3.6.2, but only for animals contaminated with pathogens of Category A.
- 10. According to the new provisions introduced in the 15<sup>th</sup> revised edition, animal material affected by pathogens of category B may be classified under UN No. 3373, therefore this should be reflected in sub-section 2.6.3.6. The Sub-Committee may wish to consider the addition of the following sentence to 2.6.3.6.2:

"Animal material affected by pathogens of Category B other than those which would be assigned to Category A if they were in cultures shall be assigned to UN No. 3373."

## Special provision 335 (applicable to UN Nos. 3077 and 3082)

11. The IMO E/T Group noticed that environmentally hazardous liquids or solids may belong to Classes 1 to 8, and therefore this special provision 335 should be amended to specify that it

applies only to mixtures of non-dangerous goods and of environmentally hazardous liquids or solids assigned to UN Nos. 3082 or 3077.

- 12. Both the IMO E/T Group and the RID/ADR/ADN <u>Ad Hoc</u> Working Group noted that the text of special provision 335 was confusing as regards the way of treating mixtures of solids and liquids when free liquid is visible at the time of loading or at the time of the packaging or the transport unit is closed. Both groups concluded that in such a case the mixture should be classified under UN No. 3082, but this would imply that the mixture would have to be repacked in packagings for liquids once it has been packed in packagings for solids, and that transport in bulk packagings would no longer be allowed once the mixture has been loaded in bulk packagings.
- 13. For RID/ADR/ADN, it was proposed to add a new RID/ADR/ADN specific provision 654 which would read as follows:
  - Mixtures of solids which are not subject to the requirements of RID/ADR/ADN and "654 environmentally hazardous liquids shall be classified as UN 3082 if free liquid is visible at the time the mixture is loaded or at the time the packaging/wagon/vehicle/container is closed.".
- 14. The IMO E/T Group also raised the question of how to deal with mixtures where no free liquid is visible at the time of loading but where liquefaction can occur during transport.
- 15. The Sub-Committee may wish to discuss these issues, which may also concern carriage under special provisions 216, 217 or 218.

## Special provisions 328/339 (Fuel cell cartridge)

16. The last sentence of special provision 328 which applies generally to all fuel cell cartridges entries (UN Nos. 3476, 3477, 3478 and 3479) applies only to fuel cell cartridges containing hydrogen in metal hydride (UN No.3479), and appears also in special provision 339 which applies specifically to UN No.3479. Therefore this last sentence of special provision 328 should be deleted.

## <u>Chapter 3.5 – Excepted quantities</u>

- 17. The Sub-Committee is invited to clarify the interpretation of the table of quantities in 3.5.1.2 as regards the use of units. As currently drafted, this table does not indicate in which case grammes or millilitres apply, and as a consequence, the consignor may choose any unit whatever the physical form of the substance is.
- 18. In addition, for the outer packaging, the term "maximum quantity per outer packaging" could be interpreted in different ways (combined gross mass of inner packagings, combined net mass/net volume of inner packagings), and there is no indication how to deal with mixed packing of solids and liquids.
- 19. In section 3.5.4, the IMO E/T Group considered that Figure 3.5.1 should appear under 3.5.4.1, while the RID/ADR/ADN <u>Ad Hoc</u> Working Group felt that it should appear under 3.5.4.2.

UN/SCETDG/31/INF.18 page 4

20. With respect to 3.5.6, the IMO E/T Group noted that this provision was inconsistent with SOLAS regulation VII/5 and MARPOL Annex III, regulation 4 (which require the indication of the correct technical name, class number etc. for all dangerous goods in the documentation) and with comments made by the DSC Sub-Committee.

Chapter 4.1 NOTE under 4.1.1

21. The IMO E/T Group noted that LP02 should be added to P201 and P202 in the list of "applicable" packing instructions indicating when the general provisions of section 4.1.1 apply for Class 2, since LP02 applies to waste aerosols.

Chapter 5.2 Marking

22. The IMO E/T Group felt that a new 5.2.1.8 should be added to section 5.2.1 in order to refer to the Excepted Quantity mark of Chapter 3.5.

# Labelling

23. The IMO E/T Group felt that paragraphs 5.2.2.2.1.3 and 5.2.2.2.1.4 are unclear because 5.2.2.2.1.3 does not specify when using the class number or the division number in the bottom corner, and it does not appear clearly from the combination of the two paragraphs that, except for divisions 1.4, 1.5 and 1.6, the three elements (class number, division number and compatibility Group letter) have to appear in the bottom half of the label. Therefore it is suggested to modify the two paragraphs to read:

"5.2.2.2.1.3 With the exception of labels for divisions 1.4, 1.5 and 1.6 of Class 1, the upper half of the label shall contain the pictorial symbol and the lower half shall contain the class or division number 1, 2, 3, 4, 5.1, 5.2, 6, 7, 8 or 9 as appropriate. The label may include such text as the UN number, or words describing the hazard class (e.g. "flammable") in accordance with 5.2.2.2.1.5 provided that the text does not obscure or detract from the other required label elements.

5.2.2.1.4 In addition, except for divisions 1.4, 1.5 and 1.6, labels for Class 1 shall show in the lower half, above the class number, the division number and the Compatibility Group letter for the substance or article. Labels for divisions 1.4, 1.5 and 1.6 shall show in the upper half the division number, and in the lower half the class number and the Compatibility Group letter. For division 1.4, ... (remainder unchanged)."

# Chapter 5.3

- 24. Both the IMO E/T Group and the RID/ADR/ADN Ad Hoc Working Group noted that the amendment to 5.2.2.2.1.1 should have included a corresponding amendment to 5.3.1.2.1 (a), which should read as follows:
  - "(a) Be not less than 250 mm by 250 mm, with a line running 12.5 mm inside the edge and parallel with it. In the upper half, the line shall have the same colour as the symbol and in the lower half it shall have the same colour as the figure in the bottom corner."