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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PROPOSALS OF AMENDMENTS TO THE RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Model Regulations on the Transport of Dangerous Goods

Excepted quantities

Transmitted by the expert from the United Kingdom

Introduction

1. The expert from the United Kingdom very much wishes to see a resolution of the issue of introducing the concept of the transport of dangerous goods in excepted quantities to the Model Regulations since this will suitably address an outstanding issue on difficulties encountered by industry at intermodal interfaces and improving multi-modal harmonization. Since the last session of the Sub-Committee both the United Kingdom and the decretariat have submitted formal papers for consideration during this session and the Working Group of ICAO's Dangerous Goods Panel has considered the implications for the Technical Instructions of the adoption of text in the Modal Regulations. This paper is submitted in order to correct an error in the United Kingdom's formal document ST/SG/AC.10/C.3/2006/92, to comment on some issues raised by the Secretariat in document ST/SG/AC.10/C.3/2006/103 – in some cases proposing solutions – and to propose amendments to the texts adopted by the Sub-Committee as a result of discussion by ICAO.

Correction to paper 2006/92

2. Document ST/SG/AC.10/C.3/2006/92 suggested that UN 1845 Carbon Dioxide, Solid (Dry Ice) should be a substance acceptable for transport in excepted quantities as this would align with the decision of ICAO to include this substance in excepted quantities for the 2007-2008 edition of the TIs. In fact this is not the case and the TIs specifically exclude carbon dioxide, solid from the scope of dangerous goods in excepted quantities.

Comments on paper 2006/103

- 3. In document ST/SG/AC.10/C.3/2006/103 the Secretariat make a number of comments and suggestions, largely of an editorial nature. The expert from the United Kingdom would make the following comments in the order raised by the Secretariat.
- 4. Assignment of excepted quantity codes for substances of Division 5.2 The expert from the United Kingdom agrees that the word 'None' should appear against all 5.2 entries for excepted quantities.

However, whilst agreeing that reference to Special Provision is needed, it is believed that this should appear only against the entry for UN 3316 rather than against all Division 5.2 entries. In order to avoid unnecessary reference back to other entries, it is suggested that either the following is added to existing SP 251 (that has the effect of making SP 251 very long) or adding a new Special Provision xxx, assigned to UN 3316, with the same following wording:

'Chemical kits and first aid kits containing dangerous goods in inner packagings which do not exceed the quantity limits for excepted quantities applicable to individual substances as specified in the Dangerous Goods List may be transported in accordance with Chapter 3.5. Division 5.1 substances not individually authorized as excepted quantities in the Dangerous Goods List are authorized in such kits in accordance with Code E2 for Division 5.1 PG II substances and Code E1 for Division 5.1 PG III substances (see 3.5.1.2).'

- 5. Assignment of excepted quantity codes for substances of Class 2 The United Kingdom supports the proposal to include the proposed wording in paragraph 3.5.1.2 after the Table.
- 6. Assignment of excepted quantity codes for substances without Packing Groups In some cases the entries identified by the Secretariat as requiring assignment of "NONE" is correct because those entries are articles, which are outside the scope of transport as excepted quantities (UN 3363 for example). For other substances, the United Kingdom agrees with the Secretariat proposal. By adopting the approach at paragraph 4 above, the need for the amendment to Special Provision 251 either becomes redundant or could replace the proposal for a new Special Provision all together.
- 7. Column 7: Heading and explanatory text the United Kingdom understands the Secretariat's difficulty in presenting information in column 7. This device was considered by both the United Kingdom and the Working Group as the least disruptive to the current lay-out of the UN Model Regulations Dangerous Goods List. We have considered this issue further, and with the help of the experts from Canada and the United States, have concluded that it would be possible to insert a new column for excepted quantities by hyphenating a few of the words in the column headers and also by slightly condensing a few of the rows. Subdividing columns in this way has been used successfully in ADR for some time. An example of the proposed page layout is shown at Annex A and the United Kingdom proposes that this layout be adopted. As a further refinement, if agreeing such an amendment, the Sub-Committee might wish to consider a further user-friendly refinement, based on the model adopted by RID/ADR whereby reference to the parent texts are indicated at the head of each column in the Dangerous Goods List. This is illustrated at Annex B.
- 8. Assignment of a code for goods not permitted to be transported as excepted quantities it is not clear to the United Kingdom why the secretariat wishes to replace the word "NONE", which is the convention used for dangerous goods in limited quantities, with the code "E0". This was discussed by the Working Group during the last session and it was decided to follow the limited quantities precedent. The United Kingdom sees no reason to change that decision.
- 9. References to column 7 of the Dangerous Goods List the United Kingdom agrees that it will be necessary to amend references to Column 7 in reference to limited quantities. By adopting the layout proposed in paragraph 7 above this should be easily achieved by amending the reference from 'Column 7' to "Column 7a".
- 10. 3.5.1.2, headings of the columns in the table the United Kingdom agrees with the secretariat proposal to amend the headings.
- 11. Marking of packages (3.5.1.5) the United Kingdom has carefully considered the points made by the Secretariat. Whilst the proposals made in paragraphs 17 and 19 on the use of asterisks are based on the precedents elsewhere in the Model Regulations, the United Kingdom believes that the mark is shown in the text of the Model Regulations and would be more user friendly retained in the current

format. Whilst recognizing the issue raised by the Secretariat in paragraph 20, the United Kingdom does not believe that this will be a significant difficulty in practice. In respect of paragraph 18, the solution to this problem, if indeed it is a problem, might be to replace the proposed wording in the mark with "Class and/or Division Number(s)". This ought to make either configuration identified by the Secretariat acceptable to any mode. The United Kingdom believes that the use of a symbol rather than wording (Secretariat paragraph 16) is a far more significant issue. The use of wording in the original proposal was adopted because it was the closest to the existing model in air transport, whereby ICAO recommends and air transport operators mandate the use of English for all wording issues. The United Kingdom did itself propose the use of a symbol, but the Sub-Committee and the Working Group could not agree on a suitable model. The United Kingdom would wish to propose the symbol below to replace the wording "DANGEROUS GOODS IN EXCEPTED QUANTITIES" inside the red hatched mark. The symbol could appear in either red or black (but see paragraph 15 below). A consolidated amended mark for figure 3.5.1 appears below.

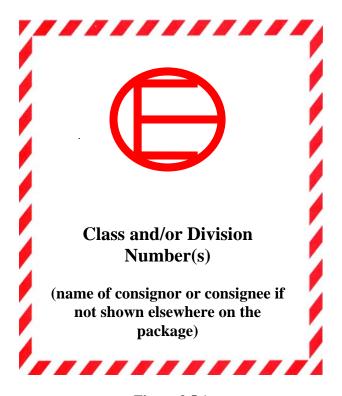


Figure 3.5.1

- 12. 3.5.1.6 as a general principle the United Kingdom would prefer to see definitions used in the Model Regulations appear in 1.2.1. If it is necessary to modify a definition for a particular purpose then that could be done in the appropriate section of the Model Regulations. The intent of the original United Kingdom proposal was that the term 'transport unit' should mirror that found in section of the Model Regulations
- 13. 3.5.1.7 the United Kingdom does not believe that there is any confusion in the text as adopted in 3.5.1.7 as it does not call for a transport document as prescribed in 5.4.1. If some other kind of document is available, it is that document that shall include a statement as set out.
- 14. Cross references to paragraphs related to Class 7 the United Kingdom agrees with the proposed Secretariat amendments.

Discussions in the Working Group of ICAO's Dangerous Goods Panel

- 15. At its meeting held in Beijing from 30 October to 3 November, the Working Group of the Panel reviewed the text on dangerous goods in excepted quantities as adopted by the UN Sub-Committee. The Working Group indicated that it expected to be able to align the text of the Technical Instructions with that of the Model Regulations. The Working Group did, however, indicate that for the proposed mark in Figure 3.5.1 it might wish to maintain the current industry practice in air transport that the hatching must be red and not red or black as proposed by UN. This is principally because the similar mark used now in air transport is relatively well-known. The United Kingdom could agree to amend the UN requirement accordingly. If this were done it would seem appropriate to require the symbol proposed in paragraph 11 above to also be shown in red only.
- 16. The Working Group also raised the issue of how quantity limitations for dangerous goods of different Classes and assigned different EQ Codes packaged together should be addressed. It is proposed by the expert of the United Kingdom that the quantity limitations of the most restricted Class of dangerous goods in excepted quantities should always be applied. To that end, the following amendment to Chapter 3.5 is proposed:

After the table in 3.5.1.2 add "Where dangerous goods in excepted quantities are packaged together and are assigned to more than one Code the total quantity per outer packaging shall be limited to that of the most restrictive Code."

Annex a

UN No.	Name and description	Class or division	Subsi- diary risk	UN packing group	Special provi- sions	Limited and Excepted Quantity Provisions		Packagings and IBCs		Portable tanks and bulk containers	
						Limited Quantities	Excepted Quantities	Packing instruct -ion	Special packing pro- visions	Instruc -tions	Special provisions
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
3393	ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER - REACTIVE	4.2	4.3	I	274	NONE	E0	P404	PP86	T21	TP7 TP33
3394	ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC, WATER- REACTIVE	4.2	4.3	I	274	NONE	E1	P400	PP86	T21	TP2 TP7
3395	ORGANOMETALLIC SUBSTANCE, SOLID, WATER- REACTIVE	4.3		I	274	NONE	E2	P403		Т9	TP7 TP33
		4.3		II	274	500 g	E3	P410 IBC04		Т3	TP33
		4.3		III	223 274	1 kg	E3	P410 IBC06		T1	TP33
3396	ORGANOMETALLIC SUBSTANCE, SOLID, WATER -REACTIVE, FLAMMABLE	4.3	4.1	I	274	NONE	E3	P403		Т9	TP7 TP33
		4.3	4.1	II	274	500 g	E3	P410 IBC04		Т3	TP33
		4.3	4.1	III	223 274	1 kg	E3	P410 IBC06		T1	TP33
3397	ORGANOMETALLIC SUBSTANCE, SOLID, WATER- REACTIVE, SELF-	4.3	4.2	I	274	NONE	E3	P403		Т9	TP7 TP33
	HEATING	4.3	4.2	II	274	500 g	E3	P410 IBC04		Т3	TP33
		4.3	4.2	III	223 274	1 kg	E3	P410 IBC06		T1	TP33
3398	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER -REACTIVE	4.3		I	274	NONE	E3	P402		T13	TP2 TP7
		4.3		II	274	500 ml	E3	P001 IBC01		Т7	TP2 TP7
		4.3		III	223 274	1 L	E3	P001 IBC02		Т7	TP2 TP7
3399	ORGANOMETALLIC SUBSTANCE, LIQUID, WATER -REACTIVE,	4.3	3	I	274	NONE	E3	P402		T13	TP2 TP7
	FLAMMABLE	4.3	3	II	274	500 ml	E3	P001 IBC01		Т7	TP2 TP7
		4.3	3	III	223 274	1 L	E3	P001 IBC02		Т7	TP2 TP7
3400	ORGANOMETALLIC SUBSTANCE, SOLID, SELF-HEATING	4.2		II	274	500 g	E3	P410 IBC06		Т3	TP33
		4.2		III	223 274	1 kg	E3	P002 IBC08		T1	TP33
	ALKALI METAL AMALGAM, SOLID	4.3		I	182	NONE	E3	P403		Т9	TP7 TP33
	ALKALINE EARTH METAL AMALGAM, SOLID	4.3		I	183	NONE	E3	P403		Т9	TP7 TP33
3403	POTASSIUM METAL ALLOYS, SOLID	4.3		I		NONE	E3	P403		Т9	TP7 TP33
3404	POTASSIUM SODIUM ALLOYS, SOLID	4.3		I		NONE	E3	P403		Т9	TP7 TP33
3405	BARIUM CHLORATE SOLUTION	5.1	6.1	II		1 L	E3	P504 IBC02		T4	TP1
		5.1	6.1	III	223	5 L	E3	P001 IBC02		T4	TP1
3406	BARIUM PERCHLORATE SOLUTION	5.1	6.1	II		1 L	E3	P504 IBC02		T4	TP1
		5.1	6.1	III	223	5 L	E3	P001 IBC02		T4	TP1

Annex B

UN No.	Name and description	Class or division	Subsidiary risk	UN packing group	Special provi- sions	Limited and Excepted Quantity Provisions		Packagings and IBCs		Portable tanks and bulk containers	
						Limited Quantities	Excepted Quantities	Packing instruct- ion	Special packing pro- visions	Instruc -tions	Special provisions
	3.1.2	2.0	2.0	2.0.1.3	3.3	3.4	3.5	4.1.4	4.1.4.	4.2.5 4.3.2	4.2.5
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
3393	ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER - REACTIVE	4.2	4.3	I	274	NONE	E0	P404	PP86	T21	TP7 TP33
3394	ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC, WATER- REACTIVE	4.2	4.3	I	274	NONE	E1	P400	PP86	T21	TP2 TP7