DANGEROUS GOODS PANEL (DGP) MEETING OF THE WORKING GROUP OF THE WHOLE

The Hague, 3 to 7 November 2008

Agenda Item 2: Development of recommendations for amendments to the *Technical Instructions* for the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in the 2011/2012 Edition

Agenda Item 2.3: Part 3 — Dangerous Goods List, Special Provisions and Limited and Excepted Quantities

LIMITED QUANTITIES

(Presented by the Secretary)

SUMMARY

This paper requests comments from DGP-WG for submission to the UN Sub-Committee of Experts on the Transport of Dangerous Goods on proposed revisions to the text in Chapter 3.4 of the UN Model Regulations.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

- 1.1 At the Thirty-third Session of the UN Sub-Committee of Experts on the Transport of Dangerous Goods, the issue of limited quantities was discussed under Agenda item 5 Limited quantities (multimodal harmonization). Text developed at working group meetings was adopted (see Appendix A) based on a working paper submitted by the expert from France (see Appendix B) and information papers submitted by the International Air Transport Association (IATA), and the International Association of the Soap, Detergent and Maintenance Products Industry (AISE) and the European Council of the Paint, Printing Ink and Artists Colours Industry (CEPE) (see Appendix C and D).
- 1.2 The Sub-committee was informed that the DGP-WG/08 meeting provided the first opportunity for the panel to review this text. It was noted that the conclusions, and proposals if developed, would be submitted to the Sub-Committee at the Thirty-fourth Session.

2. **ACTION BY THE DGP-WG**

2.1 The DGP-WG is invited to:

- a) review the text in Chapter 3.4 of the UN Model Regulations as presented in Appendix D to this working paper, noting in particular the third sentence of paragraph 3.4.8 and the proposed minimum size requirements contained in the square brackets; and
- b) provide the Secretary with comments for submission to the UN Sub-Committee of Experts on the Transport of Dangerous Goods.

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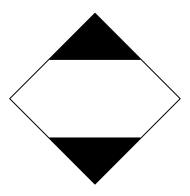
APPENDIX A

EXTRACT FROM CHAPTER 3.4 OF THE UN MODEL REGULATIONS

Chapter 3.4

- 3.4.7 Delete.
- 3.4.8 and 3.4.9 Amend to read as follows:
- "3.4.8 Packages containing dangerous goods in limited quantities need not be marked with the proper shipping name or UN number of the contents, but shall bear the marking shown in Figure 3.4.1 below. The marking shall be readily visible, legible and able to withstand open weather exposure without a substantial reduction in effectiveness. Additional information as required by the ICAO's Technical Instructions for the Safe Transport of Dangerous Goods by Air may appear in the centre portion of the marking provided that the package conforms to the requirements of the ICAO's Technical Instructions.

Figure 3.4.1



Marking for packages containing limited quantities

Top and bottom portions and line must be black, centre area white or suitable contrasting background. Minimum dimensions: 100 mm x 100 mm. Minimum width of line forming diamond: 2 mm.

[If the size of the package so requires, the dimension may be reduced, to be not less than 50 mm x 50 mm provided the marking remains clearly visible.]

3.4.9 The documentation provisions of 5.4.1 need not apply to dangerous goods packed in limited quantities. However, mode specific requirements for documentation for dangerous goods packed in limited quantities may be applicable for sea and air transport and in these cases, the words "limited quantity" or "LTD QTY" [may] be included after the description of the dangerous goods packed in limited quantities (see 5.4.1.5.2)."

APPENDIX B

WORKING PAPER PRESENTED BY FRANCE AT THE THIRTY THIRD SESSION OF THE SUB-COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

UNITED NATIONS

ST



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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-third session Geneva, 30 June-9 July (a.m.) 2008 Item 5 of the provisional agenda

LIMITED QUANTITIES (MULTIMODAL HARMONIZATION)

Transport of dangerous goods in limited quantities

Transmitted by the expert from France¹

Background

¹ In accordance with the programme of work of the Sub-Committee for 2007-2008 approved by the Committee at its third session (refer to ST/SG/AC.10/C.3/60 para. 100 and ST/SG/AC.10/C.3/34, para. 14)

- 1. At its 31st session, the Sub-Committee considered the issue of a harmonized marking for the transport of limited quantities of consumer goods. It was recognized that national and international regulatory systems had varying approaches, in particular with respect to the interpretation of 3.4.9 which states "limited quantities of dangerous goods for personal or household use, that are packaged and distributed in a form intended or suitable for sale through retail agencies, may furthermore be exempted from marking of the UN number on the packaging and from the requirements for a dangerous goods transport document." During several informal working group meetings, the issue was discussed extensively and it was agreed that a harmonized marking for international transport of such goods would be desirable. Such a marking could be incorporated within national and international regulations to facilitate the transport of such goods on a worldwide level.
- 2. The informal working group produced a report outlining a recommended way forward which was circulated to both the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) for review and comment. At its 32nd session, the informal working group met again and reviewed the feedback received. The Sub-Committee's report noted that the feedback was generally favorable (see ST/SG/AC.10/C.3/64, section V). A few issues were discussed in detail, for example, the representatives of ICAO and IMO identified marking and documentation provisions that are considered necessary by their respective regulatory bodies. It was agreed however that a harmonized marking recognized by all modes would facilitate international transport and help to eliminate problems with reshipments at destination (i.e. shipments made in accordance with the US CFR 49 or the European ADR).
- 3. The intent of this paper is to propose a revised marking which could serve as a basis for harmonization of existing national and international regulatory systems. It is suggested that with the adoption of a harmonized marking, the provisions of Chapter 3.4 could be significantly revised. In line with the recommendations made by the working group and in view of the feedback received from the modal authorities, this working document proposes to:
 - (a) Establish a single marking that would be applied to all limited quantities;
 - (b) Allow flexibility for the various modes in determining documentation requirements;
 - (c) Eliminate the reference to "household goods" in Chapter 3.4.

However the possibility to add additional information as stated in the proposed new 3.4.7 would give the flexibility to keep special provisions adapted to the air mode where for instance "ID8000" could be added as it was suggested during the meetings of the working group for limited quantities falling under the ICAO "consumer commodities".

This needs not to appear in the model rules but room is given to ICAO to make its own decision.

This extra additional marking would then be accepted by all other modes.

4. A first draft of this proposal has been circulated as agreed during the 32^{nd} session of the sub-committee. Some comments have pointed out the need to clarify the «additional information» in 3.4.7. To take care of this it is proposed to add some clarification text at the end of 3.4.7, showing that this addition is limited to some precise cases. The example of ICAO ID 8000 consumer commodities is given. To be clearly identified the text added to the initial proposal.

Proposals

5. The proposals are contained in the three annexes to this document:

Annex 1 contains the minimal changes needed with "track changes";

Annex 2 contains the modified paragraphs in Chapter 3.4 as they would appear;

Annex 3 contains a second option as it appears that the layout of the paragraphs could be rationalized by merging the provisions concerning segregation in and outside the package, and the provision concerning labelling and marking.

Annex 1

Chapter 3.4

DANGEROUS GOODS PACKED IN LIMITED QUANTITIES

Proposal with track changes

- 3.4.1 to 3.4.6 *(unchanged)*
- 3.4.7 In addition to the provisions for documentation in 5.4.1, the words "limited quantity" or "LTD QTY" shall be included within the description of the consignment (see 5.4.1.5.2).
- 3.4.78 Packages containing dangerous goods in limited quantities need not be marked with the proper shipping name of the contents, but shall be <u>durably and legibly</u> marked with the <u>the marking shown in Figure 1</u> below. The marking must be readily visible. Additional information relative to the nature of the goods may appear in the center portion of the marking. [when it is needed to identify certain groups of goods, for mode specific reasons (e.g. « ID 8000 consummer commodity » in the ICAO technical instructions)]. UN number of the contents (preceded by the letters "UN") placed within a diamond. The width of the line forming the diamond shall be at least 2 mm; the number shall be at least 6 mm high. Where more than one substance is included in the package and the substances are assigned to different UN numbers, then the diamond shall be large enough to include each relevant UN number.

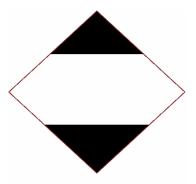


Figure 1 – Marking for packages containing limited quantities. Top and bottom portions must be black, center area white or suitable contrasting background. Minimum dimensions: 100 mm x 100 mm.

Minimum width of line forming diamond: 2 mm.

3.4.89 Limited quantities of dangerous goods for personal or household use, that are packaged and distributed in a form intended or suitable for sale through retail agencies, may furthermore be exempted from marking of the UN number on the packaging and from the requirements for a dangerous goods transport document. Other than for air or sea transport, the documentation provisions of 5.4.1 need not apply to limited quantities of dangerous goods. When a transport document is required, in addition to the

provisions for documentation in 5.4.1, the words "limited quantity" or "LTD QTY" shall be included within the description of the consignment (see 5.4.1.5.2).

Annex 2

Chapter 3.4

DANGEROUS GOODS PACKED IN LIMITED QUANTITIES

Proposed new text

- 3.4.1 to 3.4.4 *(unchanged)*
- 3.4.5 Different dangerous goods packed in limited quantities may be placed in the same outer packaging provided they will not interact dangerously in the event of leakage. *(unchanged)*
- 3.4.6 Packages of dangerous goods transported according to this Chapter need not be labeled. Any segregation provisions for dangerous goods need not apply within a vehicle or freight container. *(unchanged)*
- 3.4.7 Packages containing dangerous goods in limited quantities need not be marked with the proper shipping name of the contents, but shall be durably and legibly marked with the the marking shown in Figure 1 below. The marking must be readily visible. Additional information relative to the nature of the goods may appear in the center portion of the marking, [when it is needed to identify certain groups of goods, for mode specific reasons (e.g. «ID 8000 consumer commodity» in the ICAO technical instructions)].

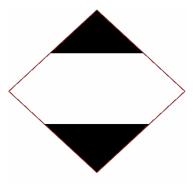


Figure 1 – Marking for packages containing limited quantities. Top and bottom portions must be black, center area white or suitable contrasting background. Minimum dimensions: 100 mm x 100 mm.

Minimum width of line forming diamond: 2 mm.

3.4.8 Other than for air or sea transport, the documentation provisions of 5.4.1 need not apply to limited quantities of dangerous goods. When a transport document is required, in addition to the provisions for documentation in 5.4.1, the words "limited quantity" or "LTD QTY" shall be included within the description of the consignment (see 5.4.1.5.2).

Annex 3

Chapter 3.4

DANGEROUS GOODS PACKED IN LIMITED QUANTITIES

Option 2: same contents as in annexes 1 and 2 with a different paragraph layout

3.4.1 to 3.4.4. *(unchanged)*

- 3.4.5 Different dangerous goods packed in limited quantities may be placed in the same outer packaging provided they will not interact dangerously in the event of leakage. Any segregation provisions for dangerous goods need not apply within a vehicle or freight container.
- 3.4.6 Packages containing dangerous goods in limited quantities need not be labeled. and marked with the proper shipping name of the contents, but shall be durably and legibly marked with the marking shown in Figure 1 below. The marking must be readily visible. Additional information relative to the nature of the goods may appear in the center portion of the marking, [when it is needed to identify certain groups of goods, for mode specific reasons (e.g. « ID 8000 consumer commodity » in the ICAO technical instructions)].

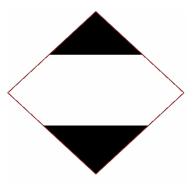


Figure 1 – Marking for packages containing limited quantities. Top and bottom portions must be black, center area white or suitable contrasting background. Minimum dimensions: 100 mm x 100 mm.

Minimum width of line forming diamond: 2 mm.

3.4.7 Other than for air or sea transport, the documentation provisions of 5.4.1 need not apply to limited quantities of dangerous goods. When a transport document is required, in addition to the provisions for documentation in 5.4.1, the words "limited quantity" or "LTD QTY" shall be included within the description of the consignment (see 5.4.1.5.2).

APPENDIX C

WORKING PAPER PRESENTED BY AISE AND CEPE AT THE THIRTY THIRD SESSION OF THE SUB-COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

UN/SCETDG/33/INF.9

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-third session Geneva, 30 June-9 July (a.m) 2008 Item 5 of the provisional agenda

LIMITED QUANTITIES (MULTIMODAL HARMONIZATION)

Transport of dangerous goods in limited quantities

Comments on ST/SG/AC.10/C.3/2008/17

<u>Transmitted by the International Association of the Soap, Detergent and Maintenance Products</u>
<u>Industry (AISE) and the European Council of the Paint, Printing Ink and Artists Colours</u>
Industry (CEPE)

1.1.1

Introduction

- 1. AISE and CEPE welcome the proposals from the Government of France to create a harmonised approach to the transport of dangerous goods in limited quantities set out in ST/SG/AC.10/C.3/2008/17.
- 2. However, we have some concerns about certain of the details in the proposals and propose some further changes.

Discussion

3. During the working party discussions which led to the French proposal, it was agreed that the only modal differences that should remain would be those generated by the technical constraints of air transport (e.g. internal air pressure in packages) and an indication that these special requirements are being met. The text in ST/SG/AC.10/C.3/2008/17 is too widely drawn and could allow other modal differences to be introduced.

- 4. We therefore believe that the new text should make it clear that the centre portion of the mark can only be used for indications relating to special technical requirements of air transport.
- 5. Although the mark would normally be 100mm x 100mm, provision should be made, as now, for a reduced size for application on smaller packages that cannot accommodate the full size.
- 6. There is no colour specified for the current limited quantities diamond mark with UN number(s). Although normally marks are printed in black, there are occasions when suppliers use a dark colour to match that used on the rest of the pack to save on two-colour printing. It would be helpful if the new design of mark could similarly be printed in a dark colour on a contrasting background.
- 7. AISE and CEPE therefore propose three amendments to the text shown in 3.4.7.of Annex 2 of ST/SG/AC.10/C.3/2008/17.

Proposal

- 8. 3.4.7 to be amended as follows:
 - 3.4.7 Packages containing dangerous goods in limited quantities need not be marked with the proper shipping name of the contents, but shall be durably and legibly marked with the marking shown in Figure 1 below. The marking must be readily visible. Additional information relative only to the technical suitability of the packaging for transport by air (e.g. a numeric code or a pictorial symbol of an aeroplane as set out in the ICAO Technical Instructions) nature of the goods may appear in the center portion of the marking, [when it is needed to identify certain groups of goods, for mode specific reasons (e.g. «ID 8000 consumer commodity» in the ICAO technical instructions)].

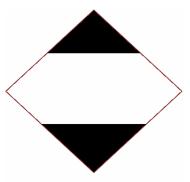


Figure 1 – Marking for packages containing limited quantities. Top and bottom portions must be black <u>or a dark colour</u>, center area white or suitable contrasting background. Dimensions: 100 mm x 100 mm. <u>If the size of the pack so requires</u>, the dimension may be reduced, provided the marking remains clearly <u>visible</u>. Minimum width of line forming diamond: 2 mm.

APPENDIX D

WORKING PAPER PRESENTED BY IATA AT THE THIRTY THIRD SESSION OF THE SUB-COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

UN/SCETDG/33/INF.14

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-third session Geneva, 30 June-9 July (a.m) 2008 Item 4 of the provisional agenda

LIMITED QUANTITIES (MULTIMODAL HARMONIZATION)

Transport of dangerous goods in limited quantities

Comments on ST/SG/AC.10/C.3/2008/17

<u>Transmitted by the International Air Transport Association (IATA)</u>

- 1. In ST/SG/AC.10/C.3/2008/17 the Expert from France proposes amendments to the provisions applicable to the transport of dangerous goods in limited quantities to harmonise the requirements, at least for surface transport. IATA supports the amendments proposed by the Expert from France, but notes that there is nothing in the proposal that would recognise dangerous goods packed in accordance with the ICAO limited quantity provisions as being acceptable for surface transport.
- 2. It was identified in discussions on limited quantities at previous sessions of the Subcommittee that the limited quantity provisions for the air mode are different from those in the Model Regulations. The ICAO Technical Instructions requires that packages containing dangerous goods in limited quantities must be marked with the proper shipping name and UN number for the dangerous goods contained in the package, the package must bear all applicable hazard labels and in addition the outside of the package must be marked the words "limited quantity" or "LTD OTY".
- 3. Notwithstanding these additional requirements, the ICAO Technical Instructions only permits dangerous goods in limited quantities that are permitted according to Column 7a of the Dangerous Goods

List in Chapter 3.2 of the Model Regulations. In addition the quantity of dangerous goods permitted in an inner packaging and in a single package for air transport is generally far less than that permitted by the Model Regulations.

- 4. However, because the packages have hazard labels there is often confusion when these packages move from air transport into surface transport where the expectation is that packages with hazard labels should also bear the UN specification packaging markings.
- 5. It is therefore proposed that in the revision to the limited quantity provisions in the Model Regulations there should be specific recognition of the differences for air transport.

Proposal

- 6. Add a new paragraph 3.4.9 to Annex 1 and Annex 2 in ST/SG/AC.10/C.3/2008/17 as follows:
- "3.4.9 Packages prepared according to the limited quantity provisions for air transport may bear the marks and labels required by 5.2.1.1 and 5.2.2. In addition such packages may be marked with the words "limited quantity" or "LTD QTY".