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INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods (Seventy-third session, Geneva, 4-8 November 2002)

SAFETY IN ROAD TUNNELS

SETTING OUT THE QUESTION: INTRODUCTION OF THE OECD GROUPINGS <u>Transmitted by the Government of Austria</u>

| SUMMARY | | | | |
|---------------------|--|--|--|--|
| Executive summary: | The proposal intends to implement the recommendations on dangerous goods groupings in the OECD/PIARC study on carriage of dangerous goods through road tunnels and in the final report of the Ad hoc Multidisciplinary Group of Experts on Safety in Tunnels (AC.7). | | | |
| Action to be taken: | Insertion of the OECD table of groupings in 1.9.3 of ADR. | | | |
| Related documents: | TRANS/WP.15/170, para. 67, TRANS AC.7/9. | | | |

Introduction

At the seventy-second session of WP. 15, the Austrian delegate volunteered to make a proposal in order to introduce the groupings of dangerous goods with regard to their safe carriage through road tunnels. This proposal implements the recommendations on dangerous goods groupings in the OECD/PIARC study on carriage of dangerous goods through road tunnels and in the final report of the

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Ad hoc Multidisciplinary Group of Experts on Safety in Tunnels (AC.7). Measure N° 1.07 (a) recommended in the final report of that group under C.1 reads as follows:

"(It is recommended) to include the five dangerous goods cargo groupings proposed by OECD and PIARC in the appropriate UN and/or UNECE legal instruments so that their use becomes compulsory for tunnel regulations regarding dangerous goods".

Since the original table in the OECD study is based on ADR 1999, its content needed adaptation to ADR 2001. With this, some logical changes were made, for example with regard to aerosols and to Class 3 desensitized explosives where what would have been just UN 3064 and UN 1204 have been extended to include all liquid desensitized explosives of classification code D.

Proposal1. Existing section 1.9.4 becomes section 1.9.5.2. Insert after 1.9.3 a new section 1.9.4, which reads as follows:

"1.9.4 Where, in accordance with 1.9.3 (a), additional provisions concerning carriage of dangerous goods through road tunnels are applied, reference shall be made to the groupings of dangerous goods loadings as contained in the following table:

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| C) | Groupings (see NOTES 1 and 2) | | | | | |
|-------|-------------------------------|--|--|---|--|--|
| Class | Α | В | С | D | E | |
| 1 | All | Below ADR subsection 1.1.3.6 threshold only | Below ADR subsection 1.1.3.6 threshold only | Below ADR subsection 1.1.3.6 threshold only | Below ADR subsection 1.1.3.6 threshold only | |
| 2 | All | A, O, T, TC, TO, TOC gases in tanks, cylinders and aerosols C, CO and FC gases in aerosols F, TF and TFC gases in cylinders and aerosols only | A, O and F gases in cylinders and aerosols only | A, O and F gases in cylinders and aerosols only | Below ADR subsection 1.1.3.6 threshold only | |
| 3 | All | All except D | All except D and except F1 in tanks | All except D and F1 | Below ADR subsection 1.1.3.6 threshold only | |
| 4.1 | All | All except D and except UN 3221, 3222, 3231 and 3232 | All except D and except UN 3221, 3222, 3231 and 3232 | All PG II and III substances except D and SR | Below ADR subsection 1.1.3.6 threshold only | |
| 4.2 | All | All substances in packages and all PG II and III substances in tanks | All substances in packages and all PG II and III substances in tanks | All substances in packages and all PG II and III substances in tanks | Below ADR subsection 1.1.3.6 threshold only | |
| 4.3 | All | All substances in packages and all PG II and III substances in tanks | All substances in packages and all PG II and III substances in tanks | All substances in packages and all PG II and III substances in tanks | Below ADR subsection 1.1.3.6 threshold only | |
| 5.1 | All | All substances in packages and all PG II and III substances in tanks | All substances in packages and all PG II and III substances in tanks | All substances in packages and all PG II and III substances in tanks | Below ADR subsection 1.1.3.6 threshold only | |
| 5.2 | All | All except UN 3101, UN 3102; UN 3111 and UN 3112 | All except UN 3101, UN 3102; UN 3111 and UN 3112 | Below ADR subsection 1.1.3.6 threshold only | Below ADR subsection 1.1.3.6 threshold only | |
| 6.1 | All | All except TF | All except TF and except PG I in tanks | All except TF and except PG I in tanks | Below ADR subsection 1.1.3.6 threshold only | |
| 6.2 | All | All except risk group 4 | All except risk group 4 | All except UN 2814 and UN 2900 | Below ADR subsection 1.1.3.6 threshold only | |
| 7 | All | All | All except UN 2977 and UN 2978 | All except UN 2977 and UN 2978 | Below ADR subsection 1.1.3.6 threshold only | |
| 8 | All | All | All substances in packages and all PG II and III substances in tanks | All substances in packages and all PG II and III substances in tanks | Below ADR subsection 1.1.3.6 threshold only | |
| 9 | All | All | All | All except M3 in tanks | Below ADR subsection 1.1.3.6 threshold only | |

Groupings of dangerous goods loadings to be used in additional provisions according to 1.9.3 (a) concerning tunnels

NOTES

- A All dangerous goods permitted to be transported by ADR
- B All dangerous goods except those with very large explosion hazard
- C All dangerous goods except those with very large explosion, large release of toxic gas or liquid or risk of cold BLEVE hazard
- D All dangerous goods except those with very large explosion, large release of toxic gas or liquid or risk of cold BLEVE or large fire hazard

^{1.} These groupings are based on the recommendations contained in the OECD / PIARC study on transport of dangerous goods through road tunnels and have the following meaning:

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E No dangerous goods above ADR subsection 1.1.3.6 threshold.2. Elements used to determine the groupings are the class and the classification code, packing group (PG) or UN number respectively."

Justification

| Safety | The proposal is based on the results of the OECD study in which the safety situation in tunnels was thoroughly investigated and a comprehensive analysis of the risk of carriage of dangerous goods through tunnels was undertaken. |
|----------------|---|
| Feasibility | Using the proposed table leads to better harmonization of the existing provisions. |
| Enforceability | The proposed table is based on elements which all figure in the table of chapter 3.2 A of ADR so that enforcement should not create problems. |