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Consolidated Resolution on Road Signs and Signals

Road signs concerning the carriage of dangerous goods

Note by the secretariat

- 1. Following the entry into force on 1 January 2011 of new provisions of the European Agreement concerning the international carriage of dangerous goods by road (ADR) (Annex A, paragraphs 3.4.13 to 3.4.15), requiring the marking of certain vehicles carrying dangerous goods packed in limited quantities, the Working Party on the Transport of Dangerous Goods (WP.15) adopted at its ninetieth session (Geneva, 3-5 May 2011 a draft amendment to section 1.9.5 of Annex A of ADR that would prohibit, as from 1 July 2013, the passage of such vehicles through road tunnels of Category E.
- 2. Currently, the tunnel restrictions apply only to transport units that are required to bear orange-coloured plates according to section 5.3.2 of Annex A of ADR, and these plates are not required for transport units carrying dangerous goods packed in limited quantities. Moreover, no dangerous goods transport documentation is required for the carriage of dangerous goods packed in limited quantities. Therefore, in the absence of a special marking and of documentation, it would have been difficult to enforce tunnel restriction provisions relating to carriage of dangerous goods packed in limited quantities. The new marking makes this possible.
- 3. However, the implementation of such new restrictions is also subject to the availability of appropriate road signs and signals. Consequently, WP.15 proposed draft consequential amendments to the WP.1 Consolidated Resolution on Road Signs and Signals (R.E.2) and requested the secretariat to submit them to WP.1 on its behalf (see ECE/TRANS/WP.1/2011/8 and ECE/TRANS/WP.15/210, paras. 51-52 and annex III).
- 4. It should also be noted these new ADR provisions should enter into force on 1 January 2013. Therefore, the proposed new interpretation should apply as from 1 January 2013.

- 5. On the basis of the above developments, the secretariat has prepared, in annex I, a consolidated list of amendments to paragraph 1.11 of R.E.2 which the Working Party may wish to consider and adopt to ensure consistency with ADR.
- 6. For reference purposes, the ADR text applicable to the marking of transport units carrying dangerous goods packed in limited quantities (in force since 1 January 2011) (paras. 3.4.13 to 3.4.15), as well as the draft amended sub-section 1.9.5.3 of ADR are also presented in annex II.

Annex I

Proposal of amendments to the Consolidated Resolution on Road Signs and Signals (R.E.2) (document ECE/TRANS/WP.1/119/Rev.2)

Paragraph 1.11 (a):

At the end of the first paragraph, add "or, for tunnels, under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR".

- In (i) (Sign C,3^h with an additional panel bearing letter B), replace ", for which the orange-coloured plate marking according to 5.3.2 of Annex A of ADR is required" with "under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR".
- In (ii) (Sign C,3^h with an additional panel bearing letter C), replace "for which the orange-coloured plate marking according to 5.3.2 of Annex A of ADR is required" with "under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR".
- In (iii) (Sign C,3^h with an additional panel bearing letter D), replace ", for which the orange-coloured plate marking according to 5.3.2 of Annex A of ADR is required" with "under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR".
- In (iv) (Sign C,3^h with an additional panel bearing letter E), replace "for which the orange-coloured plate marking according to 5.3.2 of Annex A of ADR is required" with "under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR".

Paragraph 1.11 (b):

At the end of the first paragraph, add "or, for tunnels, under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR".

Paragraph 1.11 (c):

At the end of the first paragraph, add "or, for mandatory directions related to prohibitions in tunnels, under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR".

Consolidated text of paragraph 1.11 including the proposed amendments (amendments shown in bold underlined)

- 1.11 The use and meaning of signs for vehicles carrying dangerous goods¹
- (a) Sign C, 3^h "NO ENTRY FOR VEHICLES CARRYING DANGEROUS GOODS FOR WHICH SPECIAL SIGN PLATING IS PRESCRIBED" described in the 1968 Convention on Road Signs and Signals should be used without an additional panel to prohibit the entry of all vehicles defined in Article 1 (a) of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) carrying dangerous goods defined in Article 1 (b) of ADR for which orange-coloured plates according to section 5.3.2 of Annex A of ADR for marking of vehicles are required on the vehicles or, for tunnels, under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR.

See the Annex of the document ECE/TRANS/WP.1/104

For prohibitions related to specific dangerous goods, prohibitions restricted to certain periods (e.g. peak hours) or those restricted to transit, the sign should be used with an additional panel specifying the prohibition.

In tunnels, as from 1 July 2007, and no later than 1 January 2010, prohibitions should be indicated by using this sign with an additional panel bearing a capital letter representing the category to which the tunnel is assigned according to 1.9.5.2.2 of Annex A of ADR, as follows:

- (i) Sign C. 3^h with an additional panel bearing letter B: Tunnel category B^* ; No entry for vehicles carrying dangerous goods presenting a very large explosion risk according to 1.9.5.2 of Annex A of ADR and <u>under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR</u>;
- (ii) Sign C. 3^h with an additional panel bearing letter C: Tunnel category C*; No entry for vehicles carrying dangerous goods presenting a very large or large explosion risk or a risk of large toxic release according to 1.9.5.2 of Annex A of ADR and under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR;
- (iii) Sign C, 3^h with an additional panel bearing letter D: Tunnel category \mathbf{D}^* ; No entry for vehicles carrying dangerous goods presenting a very large or large explosion risk, or a risk of large toxic release or a large fire risk according to 1.9.5.2 of Annex A of ADR and under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR;
- (iv) <u>Sign C, 3^h</u> with an additional panel: bearing letter E: Tunnel category **E***; No entry for vehicles carrying any type of dangerous goods <u>under the conditions for carriage</u> <u>which are specified in 1.9.5.3.6 of Annex A of ADR</u>, except those which are not subject to any tunnel restriction according to 1.9.5.2 of Annex A of ADR.
- (b) <u>Sign C, 3^m</u> "NO ENTRY FOR VEHICLES CARRYING MORE THAN A CERTAIN QUANTITY OF EXPLOSIVES OR READILY INFLAMMABLE SUBSTANCES" described in the 1971 European Agreement supplementing the 1968 Convention on Road Signs and Signals should be used to prohibit the entry of vehicles defined in Article 1 (a) of ADR, carrying dangerous goods of Class 1, of Class 2 classified as flammable, of Class 3, except those of Packing Group III, of Class 4.1 classified as self-reactive, and of Class 5.2 of ADR, provided that orange-coloured plates on the vehicle according to 5.3.2 of Annex A of ADR are required for the carriage of the relevant goods **or, for tunnels, under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR**.

As from 1 January 2010, this sign shall not be used for indicating prohibitions in tunnels.

(c) <u>Signs D, 10^a, D, 10^b and D, 10^c</u> "DIRECTIONS IN WHICH VEHICLES CARRYING DANGEROUS GOODS SHALL PROCEED" described in the 1968 Convention on Road Signs and Signals should be used without an additional panel to indicate a mandatory direction for all vehicles defined in Article 1 (a) of ADR carrying dangerous goods defined in Article 1 (b) of ADR for which orange-coloured plates according to section 5.3.2 of Annex A of ADR are required on the vehicle <u>or, for mandatory directions related to prohibitions in tunnels, under the conditions for carriage which are specified in 1.9.5.3.6 of Annex A of ADR.</u>

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For the purposes of restrictions the passage of vehicles carrying dangerous goods through road tunnel according to 1.9.5 of Annex A of ADR, tunnels should be classified in tunnel category A, B, C, D or E. No prohibition is applicable when the tunnel is classified in tunnel category A.

For mandatory directions related to specific dangerous goods, or during certain periods (e.g. peak hours), or for transit, the sign should be used with an additional panel specifying the obligation in the same manner as prohibitions are specified when sign C, 3^h is used.

Annex II

Paragraphs 3.4.13 (as corrected in accordance with ECE/TRANS/WP.15/208, annex II) to 3.4.15 of ADR

- "3.4.13 (a) Transport units with a maximum mass exceeding 12 tonnes carrying packages with dangerous goods in limited quantities shall be marked in accordance with 3.4.15 at the front and at the rear except when orange-coloured plate marking is already displayed in accordance with 5.3.2.
- (b) Containers carrying packages with dangerous goods in limited quantities, on transport units with a maximum mass exceeding 12 tonnes, shall be marked in accordance with 3.4.15 on all four sides except when placards are already affixed in accordance with 5.3.1.

The carrying transport unit need not be marked, except when the marking affixed to the containers is not visible from outside this carrying transport unit. In this latter case, the same marking shall be affixed at the front and at the rear of the transport unit.

- 3.4.14 Markings specified in 3.4.13 may be dispensed with, if the total gross mass of the packages containing dangerous goods packed in limited quantities carried does not exceed 8 tonnes per transport unit.
- 3.4.15 The marking shall be that required in 3.4.7, except that the minimum dimensions shall be $250 \text{ mm} \times 250 \text{ mm}$."

Sub-section 1.9.5.3 of ADR amended in accordance with ECE/TRANS/WP.15/210; annex II (amendments shown in bold underlined)

"1.9.5.3 Provisions for road signs and notification of restrictions

- 1.9.5.3.1 Contracting Parties shall indicate tunnel prohibitions and alternative routes by means of signs and signals.
- 1.9.5.3.2 For this purpose, they may use signs C, 3h and D, 10a, 10b and 10c and signals according to the Vienna Convention on Road Signs and Signals (Vienna, 1968) and the European Agreement supplementing the Convention on Road Signs and Signals (Geneva, 1971) as interpreted by the Resolution on Road Signs and Signals (R.E.2) of the UNECE Inland Transport Committee Principal Working Party on Road Transport, as amended.
- 1.9.5.3.3 In order to facilitate international understanding of signs, the system of signs and signals prescribed in the Vienna Convention is based on the use of shapes, and colours characteristic of each class of signs and wherever possible, on the use of graphic symbols rather than inscriptions. Where Contracting Parties consider it necessary to modify the signs and symbols prescribed, the modifications made shall not alter their essential characteristics. Where Contracting Parties do not apply the Vienna Convention, the prescribed signs and symbols may be modified, provided that the modifications made shall not alter their essential intent.
- 1.9.5.3.4 Traffic signs and signals intended to prohibit access of vehicles carrying dangerous goods to road tunnels shall be affixed at a place where the choice of alternative routes is possible.

1.9.5.3.5 When access to tunnels is restricted or alternative routes are prescribed, the signs shall be displayed with additional panels as follows:

No sign: no restriction

Sign with additional panel bearing the letter B: applies to vehicles carrying dangerous goods not allowed in tunnels of category B;

Sign with additional panel bearing the letter C: applies to vehicles carrying dangerous goods not allowed in tunnels of category C;

Sign with additional panel bearing the letter D: applies to vehicles carrying dangerous goods not allowed in tunnels of category D;

Sign with additional panel bearing the letter E: applies to vehicles carrying dangerous goods not allowed in tunnels of category E.

1.9.5.3.6 Tunnel restrictions shall apply to transport units for which an orange-coloured plate marking in accordance with 5.3.2 is required and, for tunnels of category E, they shall apply also to transport units for which a marking in accordance with 3.4.13 is required or carrying containers for which a marking in accordance with 3.4.13 is required.

Tunnel restrictions shall not apply when dangerous goods are carried in accordance with 1.1.3, except when vehicles carrying such goods are marked in accordance with 3.4.13 as defined in 3.4.14.

- 1.9.5.3.7 Restrictions shall be published officially and made publicly available. Contracting Parties shall notify the secretariat of UNECE of such restrictions and the secretariat shall make this information publicly available on its website.
- 1.9.5.3.8 When Contracting Parties apply specific operating measures designed to reduce the risks and related to some or all vehicles using tunnels, such as declaration before entering or passage in convoys escorted by accompanying vehicles, such operating measures shall be published officially and made publicly available."

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