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ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport
of Dangerous Goods
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agenda item 6)

SAFETY IN ROAD TUNNELS

Explanations and comments to TRANS/WP.15/2004/12

Transmitted by the Government of Switzerland

SUMMARY

Executive summary: Switzerland submits further explanations and proposals to document TRANS/WP.15/2004/12 regarding enforcement for exempted carriages.

Action to be taken: Submit professionals to the display of orange plates, documentation and training courses in accordance with chapter 1.3.
Submit private individuals only in respect of the maximum allowed quantities in accordance with 8.6.2.

Related documents: TRANS/WP.15/2004/12
AC.7/9, -/Add.1 and -/Corr.1, TRANS/WP.15/2003/21, INF.15, INF.18
and INF.24 from the May 2003 meeting, INF.48 from the October 2003
RID/ADR/ADN Joint Meeting.

1. Introduction

Aware of the difficulties that some of the proposals made in document TRANS/WP.15/2004/12 by Switzerland, we bring the following additional suggestions for the consideration of the Working Party.

Proposal 6 of TRANS/WP.15/2004/12 - Enforcement of the tunnel rules for exempted transports

Exemptions mentioned in 8.6.1.1 and 8.6.1.3

In proposal 6 in document TRANS/WP.15/2004/12 Switzerland submits some kinds of exempted goods and transports with the obligation to respect the limits of quantities defined in proposal 3 (section 8.6.2) and with the obligation to carry a transport document. The exemptions mentioned under 8.6.1.1 should be carried displaying an orange-coloured plate marking, having a transport document and done by trained persons only.

In document TRANS/WP.15/2004/12, the French wording “citerne transportable” in 8.6.1.3 has been wrongly translated to “portable tanks”. Instead of “portable tanks”, it should appear “transportable tanks”.

The kinds of transports concerned are all made by professionals. It is not considered that it is impossible for undertaken to carry an orange plate and a transport document with the adequate information which permit to guarantee the safety of the tunnels.

In proposal 9 about the requirement concerning training drivers, Switzerland submits all drivers carrying dangerous goods through regulated tunnels to a training course in accordance with 8.2.2 ADR. The reason for that is also explained in document TRANS/W.15/2004/12. However, if this proposal would not be accepted by the Working Party, aware of the supplementary costs of such a training and considering that the undertaken are all in the obligation to perform already training of their persons employed to some training course, it is proposed to submit the drivers who carry dangerous goods according to the exemptions mentioned in 8.6.1.1 and 8.6.1.3 to the obligation to be trained according to chapter 1.3 ADR only. Furthermore, this should not be a problem in the near future. As already proposed in the Recommendations of the Ad hoc Multidisciplinary Group of Experts on Safety in Tunnels (TRANS/AC.7/9/Corr.1) in the measure 1.02 regarding the driving tests for all categories of vehicles, specific questions concerning the correct behaviour in a tunnel should be included in those tests so that the instruction on this matter cannot be a big problem in the near future for undertakings.

Summarized are the obligations of the transports carried by professionals according to the exemptions mentioned in 8.6.1.1 and 8.6.1.3 to the following:

- They are submitted to the rules of chapter 1.9 and of table 8.6.3;
- The transport units shall display two orange plate markings according to 5.3.2;
- The drivers shall be trained specially for the crossing of tunnels with dangerous goods according to Chapter 1.3.

- The carriage through the tunnels of dangerous goods shall be accompanied by a transport document according to 5.4.1.1 and include the relevant terms of 5.4.1.1.4 and 5.4.1.1.5.

Exemptions mentioned in 8.6.1.4

In its proposal, Switzerland also submits the transport according to 1.1.3.1 to the obligation to display orange plates (proposal 8) and to follow a special training course (proposal 9) as well as to respect the limits in quantities mentioned in 8.6.2. Although this makes the enforcement more difficult, it has not seemed realistic to submit the transport of private individuals to the obligation to produce a transport document. Between the exemptions mentioned in 1.1.3.1, some of them concern carriages made by private individuals, namely 1.1.3.1. (a). It is, in fact, our intention to make aware all drivers, professionals and private ones, of the special risks they can meet when crossing a tunnel with dangerous goods. The special case of private persons must, however, be taken apart. Switzerland wants of course to submit them to the respect of the limits in the quantities mentioned in the table 8.6.2. When carrying dangerous goods, nobody is allowed to cross a regulated tunnel over these limits without making some supplementary safety considerations. The best way to gain this supplementary safety awareness for tunnels is through an appropriate training and the use of some warning signals which are the orange plates. If the proposal as made in document TRANS/WP.15/2004/12 would not be accepted by the Working Group, the following compromise solution is proposed which maintains the obligation made to private individuals to follow the relevant provisions of tunnels:

The private individuals mentioned in 1.1.3.1 a) ADR are only submitted to respect the limits and rules in quantities mentioned in 8.6.2, the table 8.6.3 and to follow the rules defined in chapter 1.9.

The exemptions of 1.1.3.1 paragraphs (b), (c) and (d) which are transports carried by professionals are submitted in addition to:

- The transport units shall display two orange plate markings according to 5.3.2;
- The drivers shall be trained specially for the crossing of tunnels with dangerous goods according to Chapter 1.3;
- A transport document according to 5.4.1.1 and including the relevant terms of 5.4.1.1.4 and 5.1.1.5 should accompany the carriage.

Consequential amendments

In order to take account of what precedes, the following consequential amendments should be taken:

Proposals

Section 1.1.3

Rewrite the first sentence as follows: "With the exception of the provisions in 1.9 and 8.6, the provisions laid down in ADR do not apply to:"

Paragraph 1.1.3.6.2

After “– Chapter 5.3” add “(except section 5.3.2 for the transport in regulated tunnels according to chapter 8.6)”

Section 3.3.1

After the introductory sentence add the following sentence: “The exemptions do not apply for the special provisions listed in section 8.6.1. In that case the relevant rules prescribed in the section 8.6.1 shall apply.”

Section 3.4.3 and 3.4.4

In sections 3.4.3 and 3.4.4 after the text “..., the provisions of other Chapters of ADR,” insert the following text “,except those of chapter 8.6,”

Sub-section 8.2.1.10 in the proposal 9 of our document TRANS/WP.15/2004/12

As explained previously, if Switzerland’s original proposal would not be followed by the Working Party, it is suggested to submit the drivers to the training according to chapter 1.3 instead of section 8.2.2.

“8.2.1.10 Training for drivers travelling through regulated tunnels

Regardless of the maximum mass of the vehicle, drivers of vehicles carrying dangerous goods through regulated tunnels shall take a training course in accordance with chapter 1.3.”

Proposal 3 of TRANS/WP.15/2004/12- New table to be used instead of 1.1.3.6 as reference table for the limits of quantities allowed to cross the regulated tunnels.

In order to facilitate the use of the proposed table, Switzerland had introduced a well known mathematical formula used for the mixed packages of limited quantities for the air transport. The apparent complexity of this mathematical formula should not be the reason why the principle of the new table of maximum quantities for tunnels should not be introduced. The proposed formula can easily be replaced by the following text in 8.6.2.3 as follows:

First, the quantities can be defined appearing on the top of table 8.6.2 as “types of loadings“. So, there are the following types of loadings:

a for 0 kg

b for 20

c for 50

d for 100

e for 300

f for 1000 and

U for unlimited.

Introducing this on the top of the table as follows allows to describe the calculation rules in 8.6.2.3 in another way:

8.6.2.2 Table of maximum total quantities per transport units in tunnels

Table 8.6.2 below should be used in conjunction with table 8.6.3. It gives the maximum total quantities permitted per transport unit for passage through the road tunnels listed in table 8.6.3. It enables the permissible loads to be evaluated in terms of the cargo grouping permitted in a tunnel as defined in table 8.6.3.

(a) PG III

F3: UN Nos. 1325, 3175, 3270, 1345, 1309, 1313, 1314, 1318, 1330, 1338, 1346, 1350, 1869, 2001, 2687, 2714, 2715, 2858, 2878, 2989, 3089, 3178, 3181, 3182.

In the above table, “maximum total quantity per transport unit” means:

- for articles, gross mass in kilograms (for article of Class 1, net mass in kg of the explosive substance);
- for solids, liquefied gases, refrigerated liquefied gases and dissolved gases, net mass in kilograms;
- for liquids and compressed gases, nominal capacity of receptacles (see definition in 1.2.1) in l;
- for articles other than those of Class 1 gross mass of the articles.

8.6.2.3 Where dangerous goods of different transport types of loadings are carried in the same transport unit, the sum of

- the quantity of substances and articles of transport type of loading f multiplied by "1000" divided by "300",
- the quantity of substances and articles of transport type of loading e multiplied by "1000" divided by "150";
- the quantity of substances and articles of transport type of loading c multiplied by "10", and
- the quantity of substances and articles of transport type of loading b multiplied by "20", and
- the quantity of substances and articles of transport type of loading a multiplied by "50", and
- the quantity of substances and articles of transport type of loading g shall not exceed "1 000".

Final remarks

If the Working Party would accept not to refer to the table of 1.1.3.6 in the tunnel regulations and to allow that exceptions to the basic grouping in tunnels are possible, this would bring a great simplification of the rules for tunnels (no need for special tables limiting the quantities, simplification of the marking rules of vehicles). This simplification would be an improvement of the safety in tunnels. In that case, Switzerland could abandon its proposal 1 in TRANS/WP.15/2004/12 of a supplementary table in 8.6.3 about limitations in quantities for tunnels.
