

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

104th session

Geneva, 15-17 May 2018

Item 8 of the provisional agenda:

Any other business

8 May 2018

Marking of transport units and containers loaded with limited quantities

Transmitted by the Government of the Switzerland

Summary

Executive summary:	Transport units and containers containing limited quantities together with fully regulated dangerous goods do not have to bear the mark for limited quantities. This does not necessarily reflect the actual hazard and might in fact be misleading in case of an accident or for tunnel restrictions in tunnels E.
Action to be taken:	Amend sub-section 3.4.13 (b) in ADR
Related documents:	OTIF/RID/CE/GTP/2017/9 (Sweden)

Background

1. At the session of the RID-ADR-AND of March 2018, Sweden submitted a document (ECE/TRANS/WP.15/AC.1/2018/14) concerning marking of wagons containing limited quantities. During the discussion the Swiss delegation underlined that the example 5 under point 3 reveals a problem in conjunction with the necessary prohibitions of passage laid down in the ADR under 1.9.5.3.6.

Introduction

2. Sweden was of the opinion that there is a problem with the placarding and marking of wagons and containers containing both limited quantities and other dangerous goods. According to sub-sections 3.4.13 (a) and (b), a transport unit or container may display the required placards for the fully regulated goods only. This means that a unit that is more or less full with limited quantities, but also contains some fully regulated dangerous goods, may only display the hazard for the fully regulated goods. This does not necessarily reflect the actual hazard.

3. A few examples extracted from the Swedish document of the differences of transport units/containers containing dangerous goods are shown below.

To illustrate our concern, we can compare two of the examples in the table:

- In example 1, a transport unit/container is loaded with 28 000 litres of ethanol in limited quantity. This transport unit/container shall be displayed with the LQ-mark.
- In example 2, we have a transport unit/container with the same content as described above, i.e. 28 000 litres of ethanol in limited quantity. However, in this case 60 kg of an environmentally hazardous solid is loaded into the same transport unit/container. Consequently, this transport unit/container may be displayed with label number 9 only. In our view, this does not reflect the real hazard of the load.

Container or wagon		
	Content	Placarding/markings
1	28 000 litres UN 1170 Ethanol, 3, III in 5600 plastic jerricans á 5 litres (LQ)	LQ 
2	60 kg UN 3077 Environmentally hazardous substance, solid, n.o.s., 9, III in a drum and 28000 litres UN 1170 Ethanol, 3, III in 5600 plastic jerricans á 5 litres (LQ)	No 9 

4. In example 2, as prescribed in 5.3.1 and according to the second paragraph in 3.4.13 (b) the mark to be displayed is the No 9. In addition, following the second paragraph in 3.4.13 (b) the carrying transport unit need not to be marked. As a consequence no marking LQ will appear on the carrying transport unit. Even if a marking with Mark No 9 is required on the container, the tunnel restrictions in tunnels E of 1.9.5.3.6 don't apply in that case because the mark No 9 comes only from UN 3077 and this environmentally hazardous substances has a mark '(-)' in column (15) of Table A of Chapter 3.2. Entries having this mark '(-)' are not subject to tunnel restrictions according to first sentence in 1.9.5.3.6.

5. On the contrary, in example 1, where no environmentally hazardous substances is present, the container will display the mark LQ and the transport unit is subject to tunnel restrictions in tunnels E according to last sentence of the first paragraph in 1.9.5.3.6.

6. We don't believe that the passage in tunnels of quantities above 8 tonnes of packages in limited quantities should depend on the presence or not of small amounts of fully regulated environmentally hazardous substances which in addition are exempted in tunnels as it is the case of UN 3077 or 3082.

7. For the above mentioned reasons we propose to amend the provisions for the marking of limited quantities in order to always require the LQ mark for carriage above 8 tonnes. Even though the type of hazard is not shown by the LQ mark, it will make the rescue services aware of that the container is loaded with dangerous goods that consists of a number of different hazards and will allow apply the tunnel restrictions in tunnel E in a more coherent way.

Proposals

8. Amend 3.4.13 (b) in ADR as follows (changes underlined):

“Containers carrying dangerous goods packed 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 the container contains other dangerous goods for which placarding in accordance with 5.3.1 is required. In this latter case, the container may display the required placards only, or both the placards in accordance with 5.3.1 and the marks in accordance with 3.4.15.

The carrying transport unit need not be marked according to 5.3.1, except when these marks affixed to the containers are not visible from outside this carrying transport unit. In this latter case, the same marks shall be affixed at the front and at the rear of the transport unit.”

Justification

9. The proposed change implies that only marks according to 5.3.1 can benefit from the exemption regarding the marking the transport unit. LQ mark will always be on the transport unit independently of the presence of mark No 9. The emergency services would benefit from a more accurate display of the potential hazards and the tunnel restrictions for tunnels of category E will be applicable independently of the presence of fully regulated dangerous goods.
