Economic Commission for Europe
Inland Transport Committee
Working Party on the Transport of Dangerous Goods
Joint Meeting of the RID Committee of Experts and the
Working Party on the Transport of Dangerous Goods
Bern, 12–16 March 2018
Item 5 (b) of the provisional agenda

Proposals for amendments to RID/ADR/ADN:
new proposals

Marking of wagons and containers loaded with limited quantities

Transmitted by the Government of the Sweden*

Summary

Executive summary: Wagons 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.

Action to be taken: Amend sub-sections 3.4.13 (a) and (b) in RID and sub-section 3.4.13 (b) in ADR.

Related documents: OTIF/RID/CE/GTP/2017/9 (Sweden)
Final report of the 8th session of the RID Committee of Experts’ standing working group (Utrecht, 20 – 24 November 2017)

Background

1. At the 8th session of the RID standing working group, Sweden submitted a document (2017/9) concerning marking of wagons containing limited quantities. However, the working

* In accordance with the draft programme of work of the Inland Transport Committee for 2018-2019, (ECE/TRANS/WP.15/237, annex V, (9.2)).
group was of the view that also containers should be considered and that, therefore, the question should be dealt with by the Joint Meeting.

**Introduction**

2. Sweden is 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 RID sub-sections 3.4.13 (a) and (b), a wagon or container may display the required placards for the fully regulated goods only. According to sub-section 3.4.13 (b) in ADR, the same way of marking a container is possible for road transport. 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 of the separation of wagons/containers containing dangerous goods are shown below.

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

- In example 2, a wagon/container is loaded with 28 000 litres of ethanol in limited quantity. This wagon/container shall be displayed with the LQ-mark.
- In example 5, we have a wagon/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 wagon/container. Consequently, this wagon/container may be displayed with label number 9 only. In our view, this does not reflect the real hazard of the load.

<table>
<thead>
<tr>
<th>Container or wagon</th>
<th>Content</th>
<th>Placarding/marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50 litres of UN 1170 Ethanol, 3, III in 5 plastic jerricans á 10 litres</td>
<td>Label no 3</td>
</tr>
<tr>
<td>2</td>
<td>28 000 litres UN 1170 Ethanol, 3, III in 5600 plastic jerricans á 5 litres (LQ)</td>
<td>LQ</td>
</tr>
<tr>
<td>3</td>
<td>7 500 litres UN 1170 Ethanol, 3, III in 1500 plastic jerricans á 5 litres (LQ)</td>
<td>Not required</td>
</tr>
<tr>
<td>4</td>
<td>Piggyback with 1250 litres UN 1170 Ethanol, 3, III in 50 plastic jerricans á 25 litres</td>
<td>Orange colored plates</td>
</tr>
<tr>
<td>5</td>
<td>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)</td>
<td>No 9</td>
</tr>
</tbody>
</table>

4. As shown in the table, it is the provisions for the fully regulated goods that take precedence and determines what kind of information that should be displayed on the wagon, and not necessarily the actual, and more relevant, hazard. This poses a problem. The risk for
people and the environment of e.g. a drum with 60 kg of class 9, as in the example above, cannot be so crucial that it takes precedence in terms of how to display the hazard on a wagon or a container.

5. For the above mentioned reasons, we propose to amend the provisions for the marking of limited quantities 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 wagon/container is loaded with dangerous goods that consists of a number of different hazards.

Proposals

6. Amend 3.4.13 (a) in RID as follows (changes underlined or stricken through):

"Wagons carrying dangerous goods packed in limited quantities shall be marked in accordance with 3.4.15 on both sides, except when the wagon contains other dangerous goods for which placarding in accordance with 5.3.1 is required. In this latter case, the wagon may shall display the required placards only, or both the placards in accordance with 5.3.1 and the marks in accordance with 3.4.15."

7. Amend 3.4.13 (b) in RID as follows (changes underlined or stricken through):

“Large containers carrying dangerous goods packed in limited quantities shall be marked in accordance with 3.4.15 on all four sides except when the large container contains other dangerous goods for which placarding in accordance with 5.3.1 is required. In this latter case, the large 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.

If the marks affixed to the large containers are not visible from outside the carrying wagon, the same marks shall also be affixed to both sides of the wagon.”

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

“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 shall 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, except when the 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 emergency services would benefit from a more accurate display of the potential hazards.