



**Economic and Social  
Council**

Distr.  
GENERAL

ECE/TRANS/WP.15/AC.1/2007/8  
27 December 2006

Original: ENGLISH

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**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, 26-30 March 2007  
Item 5 of the provisional agenda

PROPOSALS OF AMENDMENTS TO RID/ADR/ADN \*/

Tanks divided by partitions or surge plates, intended for liquefied gases

Transmitted by the Government of the Netherlands

SUMMARY

Executive summary: To clarify whether the current text of 4.3.2.2.4 of RID/ADR, whether it is applicable to tanks intended for the carriage of liquefied gases.

Action to be taken: To amend the current text of 4.3.2.2.4 of RID/ADR.

Relevant documents: None.

**Introduction**

1. To limit the effects of liquid surge, a tank (shell) is to be divided in sections of not more than 7500 litres of capacity by partitions or surge plates or are not to be filled less than 80% or more than 20% (see paragraph 4.3.2.2.4 of ADR/RID). In the footnote to paragraph 4.3.2.2.4 an exemption is given for “liquids” with a defined high viscosity.

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\*/ Circulated by the Intergovernmental Organization for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2007/8.

2. In practice it is not clear for the user whether the current text applies to tanks carrying liquefied gases. A liquefied gas in a tank creates the same effects as “normal” liquid substances.

### **Proposal**

3. It is proposed to amend the text of paragraph 4.3.2.2.4 to read as follows (new text is indicated in **bold**):

“Where shells intended for the carriage of liquids<sup>3</sup> **or liquefied gases – except for UN 1963 helium, refrigerated, liquid and UN 1966 hydrogen, refrigerated, liquid** - are not divided by partitions or surge plates into sections of not more than 7 500 litres capacity, they shall be filled to not less than 80% or not more than 20% of their capacity.”

<sup>3</sup> *Under this provision, substances whose kinematic viscosity at 20 °C is below 2 680 mm<sup>2</sup>/s shall be deemed to be liquids.*

### **Justification**

4. Tanks intended for gases, liquefied under pressure, and for gases, liquefied by low temperature, have been fitted with surge plates for many decades.

5. The standards for the design and construction of LPG tanks (EN 12493), vacuum and non vacuum insulated tanks (respectively EN 13530-2 and EN 14398-1) contain provisions for surge plates too.

6. For the purpose of userfriendliness, the current text should be made clearer.

7. Because of their low specific gravity, the requirement is not to be deemed necessary for the liquefied refrigerated gases helium and hydrogen.

*Safety:* Not impaired.

*Feasibility:* In practice the current text is already applied to liquefied gases, so no problems are to be expected

*Enforceability:* By clarifying paragraph 4.3.2.2.4 enforceability will be improved.

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