Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

Ninety-sixth session Geneva, 6–9 May 2014 Item 6 (a) of the provisional agenda Proposals for amendments to Annexes A and B of ADR: construction and approval of vehicles 28 April 2014

Comments on ECE/TRANS/WP.15/2014/2 - Use of Liquefied Natural Gas as fuel for vehicles carrying dangerous goods

Transmitted by the Government of Romania

Introduction

- 1. After analysing the amendments proposed by the Netherlands in their document ECE/TRANS/WP.15/2014/2 Use of Liquefied Natural Gas as fuel for vehicles carrying dangerous goods, Romania has some comments and proposals that could be considered by the WP.15.
- 2. These amendments contain provisions only for the fuel tanks for LNG of ADR vehicles. For the specific components for LNG and their installation on vehicles, there are no provisions in the proposed amendments to the ADR. Romania considers that:
- the possibility of using components which are not approved and
- the absence of the requirements for their installation on the vehicle could pose a serious risk due to the low level of safety.
- 3. In order to eliminate this risk, Romania proposes to introduce in subsection 9.2.4.4. requirements for the specific components for LNG and their installation on vehicles, by making mandatory the approval of these components and their installation according ECE Regulation No. 110. In this case, it is not necessary to have specific requirements in subsection 9.2.4.3 for the LNG fuel tank (which is a LNG component) because the requirements for LNG components are introduced in 9.2.4.4.
- 4. In order to establish in a clearer manner what type of fuel is permitted to be used for ADR vehicles, Romania considers that it is better to introduce these provisions in 9.2.4.4. to this aim.
- 5. Bearing in mind points 3 and 4, Romania proposes to delete points c) and d) of the proposal 1 made by the Netherlands and to amend the proposal 2. Proposal 3 from the Dutch document remains unchanged.
- 6. We also suggest the insertion of two new footnotes as reference, taking into account that two new ECE Regulations will be introduced.



Proposal

7. Amend subsection 9.2.4.3 to read (new text in *italic* and underlined, deleted text stricken through):

9.2.4.3 Fuel tanks

The fuel tanks supplying the engine of the vehicle shall meet the following requirements:

- (a) In the event of any leakage <u>in the normal operating conditions of the vehicle</u>, the fuel shall <u>not come</u> drain to the ground without coming into contact with hot parts of the vehicle or of the load;
- (b) Fuel tanks for liquid fuels shall comply with ECE Regulation No. 34⁶.

Fuel tanks containing petrol shall be equipped with an effective flame trap at the filler opening or with a closure enabling the opening to be kept hermetically sealed.

8. Amend subsection 9.2.4.4 (new text underlined) to read:

9.2.4.4*Engine*

The engine propelling the vehicle shall be so equipped and situated to avoid any danger to the load through heating or ignition. The fuel used for the engine shall not be liquefied petroleum gas (LPG) or compressed natural gas (CNG). The use of liquefied natural gas (LNG) as fuel shall be permitted only if the specific components for LNG are approved according ECE Regulation No. 110⁷ and their installation on the vehicle complies with the technical requirements of ECE Regulation No.110⁷. In the case of EX/II and EX/III vehicles the engine shall be of compression-ignition construction using only fuels with a flashpoint above 55 °C.

- 9. Insert two new footnotes 6 and 7 to read as follows:
- "6 ECE Regulation No. 34 (Uniform provisions concerning the approval of vehicles with regard to the prevention of fire risks).
- ⁷ ECE Regulation No. 110 (Uniform provisions concerning the approval of:
- I. Specific components of motor vehicles using compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system;
- II. Vehicles with regard to the installation of specific components of an approved type for the use of compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system.) "
- 10. Consequential amendment: Renumber the existing footnotes 6 and 7 and the following footnotes accordingly.

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