

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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Item 6(b) of the provisional agenda

**Proposals for amendments to Annexes A and B of ADR:
miscellaneous proposals**

Revised texts regarding the use of Liquefied Natural Gas (LNG), Compressed Natural Gas (CNG) and Liquefied Petroleum Gas (LPG) as fuel for vehicles carrying dangerous goods – upper capacity limits

Comments on 2016/7 and INF.16 – Draft proposal to amend 1.1.3.2 (a)

Transmitted by the Government of Germany

Proposal 1

1.1.3.2 (a)

8. Subsection 1.1.3.2 (a) could be amended as follows (new text underlined):

“1.1.3.2 Exemptions related to the carriage of gases

The provisions laid down in ADR do not apply to the carriage of:

- "(a) Gases contained in the fuel tanks or cylinders of a vehicle, performing a transport operation and destined for its propulsion or for the operation of any of its equipment used or intended for use during carriage (e.g. refrigerating equipment).

The gases may be carried in fixed fuel tanks or cylinders, directly connected to the vehicle's engine and/or auxiliary equipment or transportable pressure receptacles, which comply with the pertinent legal provisions.

The total capacity of the fuel tanks or cylinders for a transport unit, including those allowed in accordance with 1.1.3.3 (a), shall not exceed the amount of energy (MJ) or mass (kg) corresponding to 54 000 MJ energy-equivalent.

NOTE: The value of 54 000 MJ energy-equivalent corresponds to the fuel limit of 1.1.3.3 (a) (1500 litres). For the energy content of fuels see the following Table:

<u>Fuel</u>	<u>Energy content</u>
<u>Diesel</u>	<u>36 MJ/litre</u>
<u>Petrol</u>	<u>32 MJ/litre</u>
<u>Natural Gas/Biogas</u>	<u>35 MJ/Nm³</u>
<u>Liquefied Petroleum Gas (LPG)</u>	<u>24 MJ/litre</u>
<u>Ethanol</u>	<u>21 MJ/litre</u>
<u>Biodiesel</u>	<u>33 MJ/litre</u>
<u>Emulsion fuel</u>	<u>32 MJ/litre</u>
<u>Hydrogen</u>	<u>11 MJ/Nm³</u>

The total capacity shall not exceed:

- 1 080 kg for LNG and CNG
- 2 250 litres for LPG

Consequential amendment 1.1.3.3 (a)

Add a NOTE:

NOTE: The total capacity of the tanks or cylinders, including gaseous fuels, shall not exceed 54 000 MJ energy-equivalent (see NOTE in 1.1.3.2 (a))."