

---

## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on the Transport of Dangerous Goods

Ninety-sixth session

9 April 2014

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**

### **Comment on ECE/TRANS/WP.15/2014/2 – Use of Liquefied Natural Gas as fuel for vehicles carrying dangerous goods**

#### **Transmitted by the Government of Germany**

1. Germany shares the view of the dutch delegation, that the use of LNG as fuel for vehicles carrying dangerous goods is an important component in a broad european LNG-Strategy. Therefore we thank the Government of the Netherlands coming up with this issue in WP.15.
2. However, the german delegation is of the opinion, that beyond this proposal there are some additional aspects which need more consideration before adopting any amendments to the ADR.
3. The revised ECE-Regulation No. 110, which covers also LNG as propulsion for the vehicle engines, will come in to force not before July 2015. It must be clear, that no vehicle according to ADR can be equipped with an LNG-engine before the commencement of this revision to Regulation No. 110.
4. With reference to 6.7.4.1 and 6.7.4.2 ADR and in view of the many hours and days a transport on road takes, there are examinations necessary about the holding time of LNG fuel tanks (2 to 5 days) and the consequences, if the determined holding time of the fuel tank is exceeded. See: LNG als Alternativkraftstoff für den Antrieb von Schiffen und schweren Nutzfahrzeugen“, R. Wuster et al., München/Ottobrunn, Heidelberg, Berlin, 6. March 2014, Page 43, [www.mks-dialog.de](http://www.mks-dialog.de) (only in German).
5. With regard to this Germany is of the opinion, that for the justification of any amendment a scientific HAZARD IDENTIFICATION STUDY is necessary. We see a need to analyse and examine the interaction between LNG, which will be set free after the end of the determined holding time or by an accident or incident, and the dangerous goods carried. The hazards as well as the challenges for the emergency response forces seem to be very different from these caused by common liquefied fuels. An example for such a Study might be taken from the comparable problem in the context of ADN and the use of LNG as fuel for the propulsion of vessels carrying dangerous goods, i.e. Document INF. 2/Rev.1 of the 23rd session of the ADN Safety Committee in August 2013\* (provided by the dutch delegation, too). The new provision in 9.2.4.3 (c) ADR seems not be appropriate, because it allocates the validation only to the vehicle constructors.

---

\* Available on the UNECE website.

6. The now proposed amendments do only apply for vehicles getting a certificate of approval. They would not apply for vehicles carrying dangerous goods in packages, although there is also an interaction between LNG and these goods in the case of an incident or accident. Additions to parts 9.4, 9.5 and 9.6 ADR might be necessary.

7. Unfortunately the workshop on LNG and CNG, planned for October 2013 had to be cancelled. All the above mentioned points should be discussed in a new workshop or, because of the good experience made with Part 9 of ADR, in an Informal Working group with the mandate to draft a revised proposal.

---