



Economic and Social Council

Distr.: General
18 July 2014

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on General Safety Provisions

107th session

Geneva, 30 September–3 October 2014

Item 9 of the provisional agenda

Regulation No. 110 (CNG/LNG vehicles)

Proposal for amendments to Regulation No. 110 (CNG/LNG vehicles)

Submitted by the expert from Belgium *

The text reproduced below was prepared by the expert from Belgium to clarify the provisions for the periodic inspection of pressure relief valves. The modifications to the current text of Regulation No. 110 are marked in bold for new characters.

* In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Annex 3B, paragraph 2.1.3., amend to read:

"2.1.3. Periodic qualification

Recommendations for periodic requalification by visual inspection or testing during the service life shall be provided by the tank manufacturer on the basis of use under service conditions specified herein. Each tank shall be visually inspected at least every 120 months after the date of its entry into service on the vehicle (vehicle registration), and at the time of any reinstallation, for external damage and deterioration, including under the support straps. **The periodic inspection verifying the correct operation of pressure relief valves shall not exceed five years.** The visual inspection shall be performed by a Technical Service designated or recognized by the Type Approval Authority, in accordance with the manufacturer's specifications: tanks without label containing mandatory information, or with labels containing mandatory information that are illegible in any way shall be removed from service. If the tank can be positively identified by manufacturer and serial number, a replacement label may be applied, allowing the tank to remain in service."

II. Justification

1. References are not given in Regulation No. 110 for the periodic inspection verifying the correct operation of the pressure relief valves.
2. In the framework of the international Agreement on the transport of Dangerous goods by Road (ADR), experience with the periodic requalification of cryogenic cylinders over the last decades has shown that pressure relief valves need to be checked every five years (EN 1251-3) based on safety assessments and supported by the gas industry. The tanks of liquefied natural gas (LNG) are built according to the same construction standards (e.g. EN 1251-2) and spend their entire life in the open air exposed to all weather conditions, a lot of vibrations, salt and dust. It justifies at least a similar attention to the pressure relief valve and, therefore, Belgium experts propose to apply the same frequency in Regulations as that in the ADR.