Proposal for amendments to Regulation No. 67 (LPG vehicles)

Submitted by the expert from the Netherlands *

The text reproduced below was prepared by the expert from the Netherlands. It proposes an amendment to UN Regulation No. 67 on Liquefied Petroleum Gas (LPG) vehicles to allow Class 0 hoses with couplings using sealing technologies other than those with a 45° cone. The modifications to the current text of UN Regulation No. 67 are marked in bold characters.

* In accordance with the programme of work of the Inland Transport Committee for 2014–2018 (ECE/TRANS/240, para. 105 and ECE/TRANS/2014/26, 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

Paragraph 17.7.1., amend to read:

"17.7.1. Gas tubes shall be made of:

(a) Seamless material: either copper or stainless steel or steel with corrosion-resistant coating; or

(b) Other material: complying with the applicable test according to Annex 15, Table 1."

II. Justification

1. The proposal aims at adapting the provisions of the UN Regulation to the technical progress. Currently, non-seamless double and single wall tubes are already known in brake and fuel tubing applications and allow the whole variety of end forms and coupling techniques. Due to their usage, they have to withstand high pressure and a high resistance for pressure pulses. UN Regulation No. 67 should be amended to allow this well-known technology, as long as the tube can withstand the applicable tests according to Annex 15, Table 1.

2. More flexibility in the Regulation would comprise a rapid commercialization process of LPG. Pre-qualification testing made by General Motors (United States of America) showed positive results.

3. The technical rational behind this proposal was already presented during the previous session of the Working Party on General Safety Provisions on the basis of informal document GRSG-109-14, pages 11-21.