Proposal for amendments to the draft 02 series of amendments to Regulation No. 67 – LPG vehicles

The text reproduced below was prepared by OICA proposing modifications to the ageing test of UN Regulation No. 67 as a counter proposal to document ECE/TRANS/WP.29/GRSG/2017/16 from Germany. Modifications to the original text are marked in bold for new characters and strikethrough for deleted characters.

I. Proposal

Paragraph 17.1.6, insert new paragraph 17.1.6.1., to read:

- "17.1.6. The LPG system shall be installed so that it has the best possible protection against damage, such as damage due to moving vehicle components, collision, grit or due to the loading or unloading of the vehicle or the shifting of those loads.
- 17.1.6.1. Notwithstanding the provisions of paragraph 17.1.6., sufficient access to the LPG-container and its accessories, when located outside the vehicle, shall be ensured for visual (periodical) inspection, without the necessity of disassembling any components or part of protective housing."

Insert new paragraphs 22.6. to 22.12., to read:

- "22.6. As from the official date of entry into force of the 02 series of amendments, no Contracting Party applying this UN Regulation shall refuse to grant or refuse to accept UN type-approvals under this UN Regulation as amended by the 02 series of amendments.
- 22.7. As from 1 September 2019, Contracting Parties applying this UN Regulation shall not be obliged to accept UN type-approvals to the preceding series of amendments, first issued after 1 September [2019].
- 22.8. Until 1 September 2020, Contracting Parties applying this UN Regulation shall accept UN type-approvals to the preceding series of amendments, first issued before 1 September [2019].
- 22.9. As from 1 September 2020, Contracting Parties applying this UN Regulation shall not be obliged to accept type-approvals issued to the preceding series of amendments to this Regulation.
- 22.10. Notwithstanding paragraph 22.9., Contracting Parties applying the UN Regulation shall continue to accept UN type-approvals of the equipment/parts issued according to the preceding series of amendments to the UN Regulation.
- 22.11. Notwithstanding paragraph 22.9., Contracting Parties applying the UN Regulation shall continue to accept UN type-approvals issued according to the preceding series of amendments to the UN Regulation, for the vehicles/vehicle systems which are not affected by the changes introduced by the 02 series of amendments.
- 22.12. Contracting Parties applying this UN Regulation shall not refuse to grant UN type-approvals according to any preceding series of amendments to this UN Regulation or extensions thereof."

Annex 15, paragraphs 11.1. and 11.2., amend to read:

"11.1. A synthetic ...

Resistance to n-pentane according to ISO 1817 with the following conditions:

(a) medium: n-pentane

(b) temperature: [23] °C (tolerance acc.to ISO 1817)

(c) immersion period: [350] hours

11.2. Requirements:

Maximum change in volume [20] per cent

After storage in air with a temperature of [40]°C for a period of [48] hours the mass compared to the original value may not decrease more than [5] per cent."

II. Justifications

Paragraph 17.1.6.1:

The constraint of having visual access without the necessity of disassembling any components or part of protective housing is not justified in the case where the container is located inside the vehicle, out of reach of most typical aggressions that cause corrosion. This implantation case did not bring back field issue, it should be encouraged and not bear additional constraints.

Paragraphs 22.6. to 22.12.:

As the proposal introduces new requirements transitional provisions are needed. The proposed transitional provisions will just allow for the current production the time to demonstrate its reliability.

A full technology ban could need a full redesign, and so longer transitional provisions, associated with a reduced volume of available LPG-equipped vehicle production and thus a reduced range and attractiveness for LPG powered products.

Annex 15, paragraph 11.:

At GRSG 112th Germany raised with documents GRSG-112-31 a concern about the possible impact of the ageing of material in contact with LPG.

It has been understood that the testing procedure that existed since at least Revision 2 of UN Regulation No. 67 (2006) was no longer considered as sufficient as a rubber hose complying with the Regulation was at the root of the problem.

In order to keep the Regulation in line with the performance oriented guidelines of WP29 and to improve the situation as quickly as possible, OICA and CLEPA propose a review of this testing procedure rather than a complete ban that includes technologies that were not involved in the incident. Some current production vehicles may already use good quality non-metallic material, allowing an optimized tank capacity that cannot be achieved with a metallic hose, and they have no field concern.