## Proposal for Supplement 3 to the 03 and for Supplement 2 to the 04 Series of Amendments UN Regulation No. 67 (LPG vehicles)

## Submitted by the experts of Liquid Gas Europe

The text reproduced below was prepared by the expert from Liquid Gas Europe. The modifications to the current text of the regulation are marked in bold characters and strikethrough for deleted characters.

## I. Proposal

Paragraphs 6.17.2.1. and 6.17.2.2., amend to read:

- "6.17.2.1. The electrical connections inside the boot and passengers compartment shall comply with at least the minimum protection degree class IP 40 according to IEC Standard 60529-1989+A1:1999+A2:2013 or IP40 according to ISO20653:2013.
- 6.17.2.2. All other electrical connections shall comply with at least the minimum protection degree class IP 54 according to IEC Standard 60529-1989+A1:1999+A2:2013 or IP5K4 according to ISO20653:2013.
- Paragraph 6.17.10.8. introduced by ECE/TRANS/WP.29/2019/94 (as amended by paragraph 70 of the report ECE/TRANS/WP.29/1149), renumber as paragraph 6.17.10.9
- "6.17.10.89. For vehicles of category M1, the filling unit shall not be located below the body of the vehicle and shall respect the height provisions of paragraph 17.4.5."

## II. Justification

Modifications to UNECE Regulation no. 67 consist of 2 parts.

The first aims to align the requirements of IP protection grades to latest IEC standard and recognise ISO 20653 as a valid alternative, which is more appropriate and focused on automotive applications.

In addition, all IP classes with protection grades higher than those specified by the regulation can be accepted to comply the requirements, including the following grades not automatically recognised by IEC and ISO standards:

- Water protection grade 7: temporary immersion
- Water protection grade 8: continuos immersion
- Water protection grade 9K: water during high-pressure/steam-jet cleaning

Automotive connectors are usually certified according to one of the abobe mentioned grades and have better performances than grade 4 which is ensuring the protection to splash water only.

The last part aims to correct the overlapping of the same paragraph number 6.17.10.8 introduced by ECE/TRANS/WP.29/2019/94 (as amended by paragraph 70 of the report ECE/TRANS/WP.29/1149) and by ECE/TRANS/WP.29/2021/20. The solution proposed renumbers the first as par. 6.17.10.9.