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Item 4.7.5 of the provisional agenda

1958 Agreement:

Consideration of draft amendments

to existing Regulations submitted by GRSG

Proposal for Supplement 1 to the 02 series of amendments to Regulation No. 110 (CNG and LNG vehicles)

Submitted by the Working Party on General Safety Provisions*

The text reproduced below was adopted by the Working Party on General Safety Provisions (GRSG) at its 112th session (ECE/TRANS/WP.29/GRSG/91, paras. 29-30). It is mainly based on ECE/TRANS/WP.29/GRSG/2017/4 as reproduced in paragraph 29 of the report and on ECE/TRANS/WP.29/GRSG/2017/9 as amended by paragraph 30 of the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration at their November 2017 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2016–2017 (ECE/TRANS/254, para. 159 and ECE/TRANS/2016/28/Add.1, cluster 3.1), 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.

Paragraph 4.16.1., amend to read:

"4.16.1. "Manual valve": as defined in paragraph 4.22. that is rigidly fixed to the cylinder or tank."

Paragraph 4.16.3., amend to read:

"4.16.3. "Excess flow valve": as defined in paragraph 4.21."

Paragraph 4.22., amend to read:

"4.22. "Manual valve" means a valve which is operated manually."

Paragraph 7.1., correct "paragraphs 8.12. to 8.21." to read "paragraphs 8.12. to 8.22."

Paragraphs 18.1.7.1. and 18.1.7.2., amend to read:

"18.1.7.1. Notwithstanding the provisions of paragraph 18.1.7., vehicles may be fitted with a heating system to heat the passenger compartment and/or the load area or a refrigeration system to cool the cargo compartment which is connected to the CNG and/or LNG system.

18.1.7.2. The heating or refrigeration system referred to in paragraph 18.1.7.1. shall be permitted if, in the view of the Technical Services responsible for conducting type approval, the heating or refrigeration system is adequately protected and the required operation of the normal CNG and/or LNG system is not affected."

Paragraph 18.5.1.3., amend to read:

"18.5.1.3. Notwithstanding the provisions of paragraph 18.5.1.2.:

(a) The automatic cylinder valve may stay in an open position during commanded stop phases; and

(b) In the case where a fire alarm system is installed in the autonomous CNG and/or LNG heater compartment, the automatic valve(s) may be opened by an CNG/LNG electronic control unit to permit the warming of the engine. Any defect or failure of the system shall cause the automatic valve of the cylinder supplying the heating system to close; and

(c) In the case where a fire alarm system is installed in the refrigeration system compartment of the cargo compartment, the automatic valve(s) may be opened by an CNG/LNG electronic control unit to permit the cooling of the cargo compartment. Any defect or failure of the system shall cause the automatic valve of the cylinder supplying the refrigeration system to close."

Annex 1A

Items 1.2.4.5.15. to 1.2.4.5.15.3., amend to read (footnote¹ remains unchanged):

"1.2.4.5.15. Connection to CNG/LNG system for heating system: yes/no¹
or connection to CNG/LNG system for refrigeration system: yes/no¹

1.2.4.5.15.1. Make(s) of the heating system:

1.2.4.5.15.2. Type(s) of the heating system:

1.2.4.5.15.3. Description and drawings of installation of the heating system:"

Insert new items 1.2.4.5.15.4 to 1.2.4.5.15.6., to read:

"1.2.4.5.15.4. Make(s) of the refrigeration system:

1.2.4.5.15.5. Type(s) of the refrigeration system:

1.2.4.5.15.6. Description and drawings of the installation of the refrigeration system:"

Annex 1B

Items 1.2.4.5.15. to 1.2.4.5.15.3., amend to read (footnote ² remains unchanged):

"1.2.4.5.15. Connection to CNG/LNG system for heating system: yes/no²
or connection to CNG/LNG system for refrigeration system: yes/no²

1.2.4.5.15.1. Make(s) of the heating system:

1.2.4.5.15.2. Type(s) of the heating system:

1.2.4.5.15.3. Description and drawings of installation of the heating system:"

Insert new items 1.2.4.5.15.4. to 1.2.4.5.15.6., to read:

"1.2.4.5.15.4. Make(s) of the refrigeration system:

1.2.4.5.15.5. Type(s) of the refrigeration system:

1.2.4.5.15.6. Description and drawings of the installation of the refrigeration system:"

Annex 4A, paragraph 4.2.4., correct "of Class 1 and Class 2" to read "of Class 2".

Annex 4B, paragraph 1.6.2.2., amend to read:

"1.6.2.2. The interface type for the hose coupling shall be:

- (a) Sealing cone of swivel-nut type of the type with a half vertical angle of 45°; or
- (b) Other couplings complying with the tests described in paragraph 1.7., as well as the tests mentioned in Annexes 5A and 5B.

In the case of an interface type using a soft seal body (e.g. O-ring), the type of material chosen shall be tested in accordance with Annexes 5D, 5F and 5G.

Couplings shall have complementary counterparts."

Annex 4H, paragraph 2.2., correct "than 5 seconds" to read "than 2 seconds".

Annex 4J

Paragraph 2.2., shall be deleted.

Paragraph 3.1.6., correct "shall be not be" to read "shall not be".

