

## **Economic and Social Council**

Distr.: General 17 December 2013

Original: English

### **Economic Commission for Europe**

**Inland Transport Committee** 

#### **World Forum for Harmonization of Vehicle Regulations**

162<sup>nd</sup> session
Geneva, 11-14 March 2014
Item 4.8.6 of the provisional agenda
1958 Agreement – Consideration of draft amendments to existing Regulations submitted by GRSG

# Proposal for Supplement 2 to the 01 series of amendments to Regulation No. 110 (CNG/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 105<sup>th</sup> session (ECE/TRANS/WP.29/GRSG/84, paras. 37 and 38). It is based on ECE/TRANS/WP.29/GRSG/2013/25, and on ECE/TRANS/WP.29/GRSG/2013/26 as reproduced in Annex III to 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.

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.



Part I, insert a new paragraph 6.1.1., to read:

- "6.1.1. In addition to provisions of paragraph 6.1., one of the following additional marks shall be used for automatic cylinder valve which comply with paragraph 2.2.4. of Annex 4A:
  - (a) "H1"
  - (b) "H2"
  - (c) "H3" "

Part I, insert a new paragraph 4.77., to read:

"4.77. "Commanded stop phase" defines the period of time during which the combustion engine is switched off automatically for fuel saving and is allowed to start again automatically."

Part II, paragraph 18.5.1., amend to read:

"18.5.1. Automatic cylinder valve"

Part II, insert new paragraphs 18.5.1.3. and 18.5.1.4., to read:

- "18.5.1.3. Notwithstanding the provisions of paragraph 18.5.1.2., the automatic cylinder valve may stay in an open position during commanded stop phases.
- 18.5.1.4. If the automatic cylinder valve is closed during commanded stop phases, the valve shall comply with paragraph 2.2.4. of Annex 4A."

Part II, insert new paragraphs 18.6.1.3. and 18.6.1.4., to read:

- "18.6.1.3. Notwithstanding the provisions of paragraph 18.6.1.2., the automatic valve may stay in an open position during commanded stop phases.
- 18.6.1.4. If the automatic valve is closed during commanded stop phases, the valve shall comply with paragraph 2.2.4. of Annex 4A."

Part II, paragraph 18.11.2., amend to read:

"18.11.2. Vehicles with more than one fuel system shall have a fuel selection system which shall prevent both a flow of gaseous fuel into the petrol or diesel tank and a flow of petrol or diesel into the gaseous fuel tank, even in the case of a fault of the fuel selection system."

Part II, insert a new paragraph 18.11.3., to read:

"18.11.3. The measures shall be demonstrated during the type approval."

Part II, paragraph 18.11.3. (former), renumber as paragraph 18.11.4.

Annex 4A, insert new paragraph 2.2.4., to read:

- "2.2.4. If the automatic valve is closed during commanded stop phases, the valve shall be submitted to the following numbers of operations during test according paragraph 2.2.3. above:
  - (a) 200,000 cycles (mark "H1") if the engine shuts off automatically when the vehicle comes to a halt;
  - (b) 500,000 cycles (mark "H2") if, in addition to (a), the engine also shuts off automatically when the vehicle drives with the electric motor only;
  - (c) 1,000,000 cycles (mark "H3") if, in addition to (a) or (b), the engine also shuts off automatically when the accelerator pedal is released.

Notwithstanding the above-mentioned provisions, the valve complying with (b) shall be deemed to satisfy (a), and the valve complying with (c) shall be deemed to satisfy (a) and (b)."

Annex 4A, paragraph 2.2.4. (former), renumber as paragraph 2.2.5.

Annex 4H, paragraph 2.1., amend to read:

"2.1. The electronic control ... valve in case of a switch off of the engine or a broken fuel supply pipe or ..."

Annex 4H, insert a new paragraph 2.1.1., to read:

"2.1.1. Notwithstanding the provisions of paragraph 2.1., the automatic valve may stay in an open position during commanded stop phases."

Annex 4H, paragraph 2.2., amend to read:

"2.2. The switch-off delay of ..."