



# Economic and Social Council

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## Economic Commission for Europe

### Inland Transport Committee

### World Forum for Harmonization of Vehicle Regulations

#### 190th session

Geneva, 20-22 June 2023

Item 4.6.7 of the provisional agenda

#### 1958 Agreement:

**Consideration of draft amendments to existing UN Regulations  
submitted by GRSP**

## **Proposal for Supplement 5 to the original version of UN Regulation No. 134 (Hydrogen and Fuel Cells Vehicles)**

### **Submitted by the Working Party on Passive Safety \***

The text reproduced below was adopted by the Working Party on Passive Safety (GRSP) at its seventy-second session (ECE/TRANS/WP.29/GRSP/72, para. 32). It is based on ECE/TRANS/WP.29/GRSP/2022/15 not amended. 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 June 2023 sessions.

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\* In accordance with the programme of work of the Inland Transport Committee for 2023 as outlined in proposed programme budget for 2023 (A/77/6 (Sect. 20), table 20.6), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

*Annex 5,*

*Paragraphs 4.4. and 4.5., amend to read:*

- "4.4. The exhaust hydrogen concentration is continuously measured during the following steps:
- (a) The power system is shut down;
  - (b) Upon completion of the shut-down process, the power system is immediately started;
  - (c) After completion of the start-up process as defined by the manufacturer, the power system is turned off and measurement continues until the power system shut-down procedure is completed.
- 4.5. The measurement device shall:
- (a) Have a measurement response-time ( $t_0 - t_{90}$ ) of less than two seconds, where  $t_0$  is the moment of hydrogen concentration switching, and  $t_{90}$  is the time when 90 per cent of the final indication is reached.
  - (b) Have a resolution time of less than 300 milliseconds (sampling rate of  $>3.33$  Hz)."
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