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World Forum for Harmonization of Vehicle Regulations

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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.

* 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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