29 February 2024

Agreement

Concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations*

(Revision 3, including the amendments which entered into force on 14 September 2017)

Addendum 133 – UN Regulation No. 134

Amendment 6

Supplement 5 to the original series of amendments – Date of entry into force 5 January 2024

Uniform provisions concerning the approval of motor vehicles and their components with regard to the safety-related performance of Hydrogen-Fuelled Vehicles (HFCV)

This document is meant purely as documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2023/52.

UNITED NATIONS

* Former titles of the Agreement:
Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958 (original version);
Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, done at Geneva on 5 October 1995 (Revision 2).

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)."