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Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

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Item 4.7.6 of the provisional agenda
1958 Agreement:
Consideration of draft amendments to existing
UN Regulations submitted by GRVA

Proposal for a Supplement 6 to the original version of UN Regulation No. 140 (Electronic Stability Control (ESC) Systems)

Submitted by the Working Party on Automated/Autonomous and Connected Vehicles^{*}

The text reproduced below was adopted by the Working Party on Automated/Autonomous and Connected Vehicles (GRVA) at its seventeenth session (see ECE/TRANS/WP.29/GRVA/17, para. 94) and is based on ECE/TRANS/WP.29/GRVA/2023/23. 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 March 2024 sessions.

^{*} In accordance with the programme of work of the Inland Transport Committee for 2024 as outlined in proposed programme budget for 2024 (A/78/6 (Sect. 20), table 20.5), 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.



Paragraph 9.9.4., amend to read:

"9.9.4. The steering amplitude of the final run in each series is the greater of 6.5 A or 270 degrees, provided the calculated magnitude of 6.5 A is less than or equal to 300 degrees. If any 0.5 A increment, up to 6.5 A, is greater than 300 degrees, the steering amplitude of the final run shall be 300 degrees.

If the above calculated steering amplitude of the final run is greater than the maximum operable steering wheel angle determined by design of the steering system, the final angle amplitude for the series test shall be greater than 98 per cent of the maximum operable angle.

If tyre saturation occurs before the above calculated magnitude angle, then the amplitude at which it occurs may be used as the final steering amplitude, but only if this angle is greater than or equal to 6.5 A.

Tyre saturation shall be considered to have occurred when all of the following parameters have reached their peak value (i.e. these parameters have not increased between two successive increments of 0.5 A):

- (a) Peak lateral acceleration (see paragraph 9.11.3.)
- (b) Second peak yaw rate (see paragraph 9.11.8.)
- (c) Lateral displacement 1.07 seconds after BOS (see paragraph 9.11.9.)

It is not required for the peak values to occur in the same test run."