



Economic and Social Council

Distr.: General
22 November 2022

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Noise and Tyres

Seventy-seventh session

Geneva, 7–10 February 2023

Item 5 (d) of the provisional agenda

Tyres: UN Regulation No. 109 (Retreaded tyres for commercial vehicles and their trailers)

Proposal for amendments to UN Regulation No. 109

Submitted by the expert from France*

The text reproduced below was prepared by the expert from France. This document takes into account ECE/TRANS/WP.29/2021/8. The modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

* 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.



I. Proposal

Annex 7,

Paragraph 1.3., amend to read:

"1.3. "Traction test" means a series of a specified number of spin-traction test runs according to ASTM standard **F1805-20** ~~F1805-06~~ of the same tyre repeated within a short time frame."

Paragraph 2., amend to read:

"2. The test procedure of ASTM standard **F1805-20** ~~F1805-06~~ shall be used to assess snow performance through **the traction performance index (TPI)** ~~spin traction values~~ on medium **pack** ~~packed~~ snow (The snow compaction index measured with CTI penetrometer 1/ shall be between 70 and 80)."

Paragraph 2.1., amend to read:

"2.1. The test course surface shall be composed of a medium **pack** ~~packed~~ snow surface, as characterized in table A2.1 of ASTM standard **F1805-20** ~~F1805-06~~."

Paragraph 2.2., amend to read:

"2.2. The tyre load for testing shall be as per option 2 in paragraph 11.9.2 of ASTM standard **F1805-20** ~~F1805-06~~. **When the SRTT16 is used as reference tyre, it shall be tested with a load of 531 kg at an inflation pressure of 240 kPa (cold).**"

Insert a new paragraph 2.3., to read:

"2.3. **The snow grip index (SG) of a candidate tyre T_n shall be computed as follows:**

$$SG(T_n) = f \cdot \frac{TPI}{100}$$

where $f = 0.987$ when using SRTT16 as reference tyre per ASTM F1805-20, and TPI denotes the traction performance index as defined in ASTM F1805-20."

II. Justification

This amendment to UN Regulation No. 109 is required in order to ensure that the test procedures for retreaded tyres are aligned with the text adopted by the World Forum for Harmonization of Vehicle Regulations (WP.29) in ECE/TRANS/WP.29/2021/8 for UN Regulation No. 117.
