

**Economic and Social Council**

Distr.: General
4 December 2024

Original: English

Economic Commission for Europe**Inland Transport Committee****World Forum for Harmonization of Vehicle Regulations****Working Party on Noise and Tyres****Eighty-first session**

Geneva, 18-21 February 2025

Item 6 (e) of the provisional agenda

Tyres: UN Regulation No. 117 (Tyre Rolling Resistance, Rolling Noise and Wet Grip)

**Proposal for Supplement 17 to the 02 series of amendments
to UN Regulation No. 117****Submitted by the experts from the European Tyre and Rim Technical
Organisation***

The text reproduced below was prepared by the experts from the European Tyre and Rim Technical Organisation (ETRTO). The modifications to the existing text of the UN 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 2025 as outlined in proposed programme budget for 2025 (A/79/6 (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

Paragraph 2.11. and footnote 2, amend to read:

"2.11. "Reinforced tyre" or "extra load tyre" of class C1 means a tyre structure designed to carry more load at a higher inflation pressure than the load carried by the corresponding standard version tyre at the standard inflation pressure as specified in ISO 4000-1:2021**2024**.²

² Class C1 tyres correspond to "passenger car tyres" in ISO 4000-1:2021**2024**."

Paragraph 2.16.1., amend to read:

"2.16.1. "Principal grooves" means the wide ~~circumferential~~ grooves positioned in the central ~~zone-part~~ of the tyre tread, ~~which, in the case of passenger and light truck (commercial) tyres, have the treadwear indicators located in the base~~ **which covers about three-quarters of the width of the tread surface.**"

Add a new paragraph 2.16.2., to read:

"2.16.2. "Tread groove" means the space between two adjacent ribs or blocks in the tread pattern."

Subparagraph 2.18.(b), amend to read:

"2.18. ...
(b) F2493 – ~~2324~~ for the size P225/60R16 and referred to as "SRTT16";
..."

Paragraph 6.7., amend to read:

"6.7. In order to be classified as a 'professional off-road tyre', a **special use** tyre shall ~~have fulfil all of the following characteristics~~ **additional requirement:**

- (a) For **classes** C1 and C2 tyres, **the maximum speed category shall be less than or equal to 160 km/h (speed category symbol Q).**
 - (i) ~~A tread depth ≥ 11 mm;~~
 - (ii) ~~A void to fill ratio ≥ 35 per cent;~~
 - (iii) ~~A maximum speed rating of $\leq Q$.~~
- (b) For **class** C3 tyres, **the maximum speed category shall be less than or equal to 110 km/h (speed category symbol K).**
 - (i) ~~A tread depth ≥ 16 mm;~~
 - (ii) ~~A void to fill ratio ≥ 35 per cent;~~
 - (iii) ~~A maximum speed rating of $\leq K$.~~

Paragraph 12.23., amend to read:

"12.23. As from the 1 September 2028, Contracting Parties applying this Regulation shall not be obliged to accept type approval issued according to Supplement 16 to the 02 series of amendments to this Regulation, **first issued after 31 August 2028**, if the track characteristics for measuring wet adhesion of tyre in new state are not established using the following reference tyres:

Tyre class	Reference tyres
C2	SRTT16C
C3	SRTT19.5 siped or SRTT22.5 siped

"

Annex 6, subparagraph 2.2. (a), amend to read:

- "2.2. ...
 (a) For class C1 tyres, the width of the rim shall be as defined in ISO 4000-1:2024,
 ..."

Annex 6 – Appendix 1, Paragraph 2.1., amend to read:

- "2.1. Width
 For passenger car tyre rims (class C1 tyres), the test rim width shall be the same as the measuring rim determined in ISO 4000-1:2024, clause 6.2.2.
 ..."

Annex 8,

Paragraph 2.1.3.1., amend to read:

- "2.1.3.1. Standard Reference Test Tyre
 For the evaluation of the ice performance of class C1 tyres, the Standard Reference Test Tyre SRTT16 shall be used. The reference tyre shall not be older than 30 months starting from the production week and shall be stored in accordance with ASTM F2493 – 2324."

Paragraph 2.1.3.2.1., amend to read:

- "2.1.3.2.1. Fit each test tyres on an approved rim pursuant to ISO 4000-1:2024 using conventional mounting methods. Subject to the foregoing, the rim width code shall not differ more than 0.5 from the measuring rim. If a commercialized rim is not available for the test vehicle, it will be acceptable to use a rim whose rim width code differs by 1.0 from the measuring rim width code. Ensure proper bead seating by the use of a suitable lubricant. Excessive use of lubricant should be avoided to prevent slipping of the tyre on the wheel rim."

Annex 9, paragraph 2.1.3., amend to read:

- "2.1.3. "Groove" means **tread groove** ~~the space between two adjacent ribs or blocks in the tread pattern.~~"

II. Justification

1. The year reference to the latest international standard specification ASTM F2493-24 is updated.
2. The reference to the latest International Standard ISO 4000-1:2024 (published in March 2024) is updated.
3. The definitions of tread groove and principal grooves are aligned to the ones proposed in UN Regulations Nos. 30 and 54.
4. Editorial revision is proposed to simplify the wording of the requirements for professional off-road tyres.
5. The transitional provision in paragraph 12.23. is amended to correctly specify that it applies to type approvals "first issued after 31 August 2028" (and it is consistent with the transitional provisions in paragraphs 12.18. and 12.22.).