

Proposal to replace document GRBP/2026/10 (Proposal for the 01 series of amendments to UN Regulation No. 172)

The changes compared to document GRBP/2026/10 are marked in **bold** for added text and **strike through** for deleted text, all in red (or blue, Rev. 1) font.

I. Proposal

Paragraph 2.2., amend to read:

- "2.2. **"Supplier of the tread used for retreading process"** means the person or body who is responsible to the Type Approval Authority for all aspects of the type-approval under this Regulation and for ensuring the conformity of production **of the supplied tread.**"

Paragraph 6.2., amend to read:

- "6.2. In order to be classified as a "traction tyre", a tyre retreaded either with a pre-cured tread or by using mould cure process is required to meet **at least one of** the below reported conditions **of paragraph 6.2.1. or 6.2.2.**
- 6.2.1.** The tyre shall have a tread pattern with minimum two circumferential ribs, each containing a minimum of 30 block-like elements, separated by grooves and/or sipe elements the depth of which has to be minimum of one half of the tread depth. The use of an alternative option of a physical test will only apply at a later stage following a further amendment to the Regulation including a reference to an appropriate test methods and limit values."

Insert the new paragraphs 6.2.2., 6.2.2.1., 6.2.2.2. and 6.2.2.3. to read:

- "6.2.2. The tyre shall have a total number (n_{TE}) of traction elements of its tread pattern is equal to or greater than a limit that is calculated based on the deformation potential (P_{def}) of its tread pattern pursuant to paragraph 6.2.2.3.**

- 6.2.2.1. Calculation of the deformation potential of the tread pattern**

The "deformation potential" (P_{def}) is calculated as follows:

$$P_{def} = R_{void} \cdot d_{tr}^3$$

where:

R_{void} is a dimensionless figure between 0 and 1 representing the void to fill ratio of the tread pattern according to the definition in paragraph 2.16.;

d_{tr} is the maximum of the tread depths as defined in paragraph 2.14. of this Regulation expressed in millimetres.

The deformation potential P_{def} is expressed in mm³.

- 6.2.2.2. Calculation of the number of traction elements**

"Traction elements" (TE) are elements of the tread pattern which are completely separated from each other by grooves and/or sipes, on all their edges, at tread surface.

The total number n_{TE} of traction elements is calculated as follows

$$n_{TE} = \frac{1}{2} \cdot (n_{TE,50} + n_{TE,70})$$

where:

$n_{TE,50}$ is the number of traction elements separated by grooves/sipes with a depth equal to or greater than 50% of the maximum tread depth;

$n_{TE,70}$ is the number of traction elements separated by grooves/sipes with a depth equal to or greater than 70% of the maximum tread depth.

For the avoidance of doubt, each traction element counted within $n_{TE,70}$ is also counted within $n_{TE,50}$.

6.2.2.3. In order to be classified as a traction tyre, the total number of traction elements in the tread pattern of a tyre shall, depending on tyre class and, for class C3 tyres, nominal rim diameter, fulfil the respective condition:

For class C2 tyres:
$$n_{TE} \geq -\frac{2}{25 \text{ mm}^3} \cdot P_{\text{def}} + 100$$

For class C3 tyres with nominal rim diameter code less than 20:

$$n_{TE} \geq -\frac{1}{10 \text{ mm}^3} \cdot P_{\text{def}} + 200$$

For class C3 tyres with nominal rim diameter code equal to or greater than 20:

If $P_{\text{def}} < 1400 \text{ mm}^3$:
$$n_{TE} \geq -\frac{17}{70 \text{ mm}^3} \cdot P_{\text{def}} + 400$$

If $P_{\text{def}} \geq 1400 \text{ mm}^3$:
$$n_{TE} \geq -\frac{1}{10 \text{ mm}^3} \cdot P_{\text{def}} + 200 "$$

Paragraph 6.4., insert a new subparagraph (a) to read:

- " (a) For class C1 tyres:
- (i) a tread depth ≥ 11 mm and
 - (ii) a void-to-fill ratio ≥ 35 per cent and
 - (iii) a speed category less than or equal to 160 km/h (speed category symbol Q)."

Paragraph 6.4., former subparagraphs (a) and (b), renumber as (b) and (c), respectively:

- " (b) For class C2 tyres, the maximum speed category shall be less than or equal to 160 km/h (speed category symbol Q).
- (c) For class C3 tyres, the maximum speed category shall be less than or equal to 110 km/h (speed category symbol K)."

Paragraph 8., replace "Appendix 1" by "Schedule 1":

"8. Conformity of production

The conformity of production procedures shall comply with those set out in the Agreement, ~~Appendix 1~~ **Schedule 1** (E/ECE/324-E/ECE/TRANS/505/Rev.3), with the following requirements:"

Insert a new paragraph 12.1. to read:

- "12.1. As from the official date of entry into force of the 01 series of amendments, no Contracting Party applying this Regulation shall refuse to grant or refuse to accept type approvals under this Regulation as amended by the 01 series of amendments."

Paragraph 12.1. (former), renumber as paragraph 12.2. and amend to read:

- "12.2. As from 1 September 2030, Contracting Parties applying this Regulation shall not **be obliged to** grant type approvals **issued according to the 01 series of amendments to this Regulation**, based on snow performance tests as described in Annex 7 to UN Regulation No. 117 using one of the two equivalent Standard Reference Test Tyres SRTT19.5 and SRTT22.5 as reference tyre."

Paragraph 12.2. (former), renumber as paragraph 12.3. and amend to read:

"12.3.2- As from 1 September 2030, Contracting Parties applying this Regulation shall not be obliged to accept type approvals **issued according to the 01 series of amendments to this Regulation**, first issued after 31 August 2030, , based on snow performance tests as described in Annex 7 to UN Regulation No. 117 using one of the two equivalent Standard Reference Test Tyres SRTT19.5 and SRTT22.5 as reference tyre."

Paragraph 12.3. (former), renumber as paragraph 12.4 and amend to read:

"12.4.3- Notwithstanding paragraphs ~~12.4~~ **12.2. and 12.3**, Contracting Parties applying this Regulation shall continue **to accept existing type approval and** to grant extensions to existing type approvals of class C3 tyres according **to the 01 series of amendments** to this Regulation, first ~~granted~~ **issued** before 1 September 2030, based on snow performance test described in Annex 7 to ~~this~~ **UN Regulation No. 117** using either SRTT19.5 or SRTT22.5 as reference tyre. In case a new test has to be performed on a different representative tyre size for an extension to be granted after 1 September 2030, the SRTT19.5 siped and SRTT22.5 siped shall be used."

Insert new paragraphs 12.5., 12.6., 12.7. to read:

"12.5. As from 1 September 2028, Contracting Parties applying this Regulation shall not ~~grant~~ **be obliged to accept** type approvals issued according to the 01 series of amendments to this Regulation, first issued after 1 September 2028, ~~if, in the case of that~~ **tyres of classes C2 and C3 classified as traction tyre, do not comply with the requirements for traction tyre classification set out in paragraph 6.2.2. are not complied with.**

12.6. Until 31 August 2032, Contracting Parties applying this Regulation shall accept type approvals and grant extension to type approvals issued according to the 01 series of amendments to this Regulation, first issued before 1 September 2028, ~~if, in the case of that~~ **tyres of classes C2 and C3 classified as traction tyre, do not comply with the requirements for traction tyre classification set out in paragraph 6.2.2. are not complied with.**

12.7. As from 1 September 2032, Contracting Parties applying this Regulation shall not be obliged to accept type approvals issued according to the 01 series of amendments to this Regulation ~~if, in the case of that~~ **tyres of classes C2 and C3 classified as traction tyre, do not comply with the requirements for traction tyre classification set out in paragraph 6.2.2. are not complied with.**"

Annex 1, amend to read:

"Communication

(maximum format: A4 (210 x 297 mm))



Issued by: Name of administration:

.....
.....
.....

concerning: 2/ APPROVAL GRANTED
APPROVAL EXTENDED
APPROVAL REFUSED
APPROVAL WITHDRAWN
PRODUCTION DEFINITELY DISCONTINUED

of a type of retreaded tyre with regard to "snow performance" and/or classification as traction tyre pursuant to UN Regulation No. 172.

Approval No.:

~~Extension No.:~~

1. Tread supplier's name and address:
2. If applicable, name and address of retreading production unit:
3. If applicable, name and address of tread supplier's representative:.....
4. Summarized description as defined in appendix 1 ^{2/} or appendix 2 ^{2/} to Annex 1 of this Regulation:
 - 4.1. Brand name(s)/trademark(s) ^{3/}:.....
 - 4.2. Trade description(s)/Commercial name(s) ^{3/}:.....
 - 4.3. Class of tyres:
 - 4.4. Structure of tyres:
 - 4.5. Category of use of tyres:
 - 4.6. Tyre for use in severe snow conditions: Yes/No ^{2/}
 - 4.7. Tyres classified as Traction tyre: Yes/No ^{2/}
 - 4.8. Information in relation to the range of tyres as defined in paragraph 2. of Appendix 1 ^{2/} and/or Appendix 2 ^{2/} to Annex 1 of this Regulation:
 - 4.9. Retreaded tyres with the major features of the tread technically identical to a new tyre type approved according to UN Regulation No. 117 (Yes/No) ^{2/}
 - 4.10. Retreaded tyres produced by using mould cure process and pre-cured tread with the major features of the tread technically identical (Yes/No) ^{2/}
5. Technical service and, where applicable, test laboratory approved for purposes of approval or verification of conformity tests:
6. Snow performance level of the representative tyre size, as per item 7. of the test report in the appendix 2 or 3, as applicable, to Annex 7 of the UN Regulation No. 117: (Snow grip index) using the brake on snow method ^{2/} or spin traction method ^{2/} or acceleration method ^{2/}.
7. Date of report issued by that service:
8. Number of report issued by that service:.....
9. Reason(s) of extension (if applicable):.....
10. Any remarks:
11. Place:
12. Date:
13. Signature
14. Annexed to this communication is a list of documents in the approval file, including the information document as defined in Appendix 1 ^{2/} or Appendix 2 ^{2/} to Annex 1 of this Regulation, deposited at the Approval Authority which has considered this approval and which can be obtained upon request.

^{1/} Distinguishing number of the country which has granted/extended/refused/withdrawn an approval (see approval provisions in the Regulation).

^{2/} Delete that which does not apply.

^{3/} A list of brand name(s)/trademark(s) or Trade description(s)/ Commercial name(s) may be annexed to this communication."

II. Justification

1. The definition of “supplier of the tread used for the retreading process” has been amended to clarify that he is responsible to assure the conformity of production of the supplied tread with respect to the performance and/or classification of the type of retreaded tyre approved under this Regulation.
 2. To ensure consistency between retreaded tyres and new tyres, the requirements for the classification as “traction tyre” has been aligned to the ones given in the regulation No. 117.
 3. Transitional provisions have been introduced to ensure that the switch from the requirements given in paragraph 6.2.1. to the ones given in the paragraph 6.2.2. will be required with the same rules and with a timeline equivalent to the one implemented in UN Regulation No. 117. This change is necessary and urgent in order to:
 - Minimize the amount of type approvals pursuant the original version of regulation No. 172 to be then updated to the 01 series of amendments,
 - Minimize number of moulds to be modified due to the change in the series of amendments,
 - Avoid the situation where retreaded tyres would be classified as “traction tyre” whereas new tyres would not be classified as “traction tyre” and vice versa even if they have the same tread pattern.
 4. To be noted that this is also advisable in view of a possible future labelling of retreaded tyres with respect to fuel efficiency and other parameters currently under evaluation by the European Commission. Specifically, among the labelled performances there will be also the external tyre noise which is based on the minimum requirements set in UN Regulation No. 117 where allowances are given to tyres classified as “traction tyres”.
 5. The requirements for the classification of special use tyres of class C1 as “professional off-road tyre” were erroneously cancelled by the amendments of the paragraph 6.4. made by Supplement 1 to the original version of UN Regulation No. 172. The proposed amendment confirms such requirements also for the 01 series of amendments to Regulation No. 172 and aligns the wording of item (c) to the one used in paragraph 6.3.2. of UN Regulation No. 30.
 6. The first paragraph of section 8 refers to Appendix 1 of the 1958 Agreement. However, the Conformity of production procedures are contained in Schedule 1 of that Agreement.
 7. The transitional provisions, introduced with supplement 1 to the original version of this regulation to assure a smooth transition to the new standard reference test tyres (SRTTs) 19.5 and 22.5 siped without premature disposal of current SRTTs 19.5 and 22.5, have been amended to refer to the new series of amendments.
 8. Based on Revision 3 of the 1958 Agreement, the extension number is already included in the approval number.
 9. It is proposed to amend the paragraph 12.1. (former), renumbered as 12.2., by considering that is up to the Contracting Parties deciding whether grant or not the type approvals.
 10. Amendment to paragraph 12.3. (former), renumbered as 12.4., has been tuned by considering the acceptance of existing type approvals in addition to grant their extension. Consequently, the reference to paragraphs 12.2. has been added. Furthermore, the Annex 7 has been correctly referred to UN Regulation No. 117.
 11. The text of the proposed paragraph 12.5. has been simplified for sake of clarity.
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