Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations
Working Party on Noise and Tyres
Seventy-first session
Geneva, 28–31 January 2020
Item 5 (c) 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 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 2020 as outlined in proposed programme budget for 2020 (A/74/6 (part V sect. 20) para 20.37), 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 10,

Paragraph 3.2.1., amend to read:

"3.2.1. For every candidate tyre and the standard reference tyre, ABS-braking test runs shall be repeated a minimum of 6 times.

The zones where ABS-braking is fully applied shall not overlap.

When a new set of tyres is tested, the runs are performed after shifting aside the vehicle trajectory in order not to brake on the tracks of the previous tyre.

When it is no longer possible not to overlap full ABS-braking zones, the test course shall be re-groomed.

Required sequence:
6 repeats SRTT, then shift aside to test next tyre on fresh surface;
6 repeats Candidate 1, then shift aside;
6 repeats Candidate 2, then shift aside;
6 repeats SRTT, then shift aside."

Paragraph 4.9.2., amend to read:

"4.9.2. Principle of the approach

The principle lies upon the use of a control tyre and 2 different vehicles for the assessment of a candidate tyre in comparison with a reference tyre.

One vehicle can fit the reference tyre and the control tyre, the other the control tyre and the candidate tyre. All conditions are in conformity with paragraph 4.7. above.

The first assessment is a comparison between the control tyre and the reference tyre. The result (Snow grip index 1) is the relative efficiency of the control tyre compared to the reference tyre.

The second assessment is a comparison between the candidate tyre and the control tyre. The result (Snow grip index 2) is the relative efficiency of the candidate tyre compared to the control tyre.

The second assessment is done on the same track as the first one. The air temperature must be in the range of ±5 °C of the temperature of the first assessment. The control tyre set is the same set as the set used for the first assessment.

The snow grip performance index of the candidate tyre compared to the reference tyre is deduced by multiplying the relative efficiencies calculated above:

\[ \text{Snow Grip Index} = \text{SG1} \times \text{SG2} \]"
II. Justification

1. In document ECE/TRANS/WP.29/GRRF/2016/40 the sign “…” indicating that the sentence is continued, was omitted at the end of the amended paragraph 3.2.1. Therefore, the rest of the paragraph was removed. This amendment is aimed to reintroduce it.

2. In document ECE/TRANS/WP.29/GRRF/2016/40 the sign “…” was added after the amended sentence to highlight that the sentence is continued but, unfortunately, in document ECE/TRANS/WP.29/2017/9 the sign “…” was removed and the rest of the paragraph 4.9.2. was removed. This amendment is aimed to reintroduce it.