

## **Economic and Social Council**

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### **Economic Commission for Europe**

**Inland Transport Committee** 

**World Forum for Harmonization of Vehicle Regulations** 

Working Party on Noise and Tyres

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Item 5 (d) of the provisional agenda

Tyres: Regulation No. 117 (Tyre rolling resistance, rolling noise and wet grip)

# Proposal for a Supplement to the 02 series of amendments to UN Regulation No. 117

#### Submitted by the experts from Japan\*

The text reproduced below was prepared by the experts from Japan with the aim to amend UN Regulation No. 117. The modifications to the existing text of the Regulation are marked in bold for new or strikethrough for deleted characters.

GE.19-19441(E)





<sup>\*</sup> 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 3, paragraph 2.5.1., amend to read:

#### "2.5.1. General

Four identical tyres shall be fitted on the test vehicle. In the case of tyres with a load capacity index in excess of 121 and without any dual fitting indication, two of these tyres of the same type and range shall be fitted to the rear axle of the test vehicle; the front axle shall be fitted with tyres of size suitable for the axle load and planed down to the minimum depth in order to minimize the influence of tyre/road contact noise while maintaining a sufficient level of safety.

In the case of tyres with a load capacity index lower or equal to 121, with section width is wider than 200mm, aspect ratio is lower than 55, rim diameter code is lower than 15 and without any dual fitting indication, two of these tyres of the same type and range shall be fitted to the rear axle of the test vehicle; the front axle shall be fitted with tyres of size suitable for the axle load and planed down to the minimum depth in order to minimize the influence of tyre/road contact noise while maintaining a sufficient level of safety.

Winter tyres that in certain Contracting Parties may be equipped with studs intended to enhance friction shall be tested without this equipment. Tyres with special fitting requirements shall be tested in accordance with these requirements (e.g. rotation direction). The tyres shall have full tread depth before being run-in.

Tyres are to be tested on rims permitted by the tyre manufacturer."

#### II. Justification

- 1. In Japan, there are a few unique light truck vehicles which are equipped with a unique size of C2 tyre for the rear axle in order to reduce the height of rear deck. The size designation of those rear tyres is with the section width wider than 200 mm, the aspect ratio lower than 55, the rim diameter code lower than 15 and without any dual fitting indication, i.e. the front size 175/75R15 LT and the rear size 235/50R14 LT or the front size 175/75R15 LT and the rear size 265/50R14 LT.
- 2. Due to this unique size designation, there is no test vehicle which can fit such a unique size on all positions in order to carry out the tyre rolling sound measurement specified in Annex 3.
- 3. The amendment to Annex 3, paragraph 2.5.1. is proposed to make feasible carrying out the rolling sound measurement for this unique rear size, similar to the provision already allowed for tyres with the load index in excess of 121 and without any dual fitting indication (e.g. C3 wide base single tyre which replaces duals).

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