Proposal for a new supplement to the 01 series of amendments to UN Regulation No. 101 (CO2 emission/fuel consumption)

Submitted by the expert from the International Organization of Motor Vehicle Manufacturers*

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA). This document aims at amending one error found in the formulas used for the calculation of a NEDC road load values from those determined according to UN GTR No. 15 (WLTP) and one wrong cross reference in the 01 series of amendments to UN Regulation No.101. 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 2021 as outlined in proposed programme budget for 2021 (A/75/6 (Sect.20), para 20.51), 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 7b – Appendix 2 paragraph 2.1., amend to read:

“2.1. WLTP Road Load calculation of the vehicle

The WLTP Road Load of the vehicle shall be determined according to UN GTR No. 15 Annex 4 or in case the vehicle is part of an interpolation family, according to Annex 7 point 3.2.3.2.2. “Road Load calculation for an individual vehicle” considering as input parameters of the individual vehicle:

(a) The Test Mass of the vehicle\(^1\), fitted with its standard equipment\(^1\);

(b) The RRC value of the applicable tyre energy class according to Table A4/2 of UN GTR No. 15 Annex 4 or, if the tyres on the front and rear axles belong to different energy efficiency classes, the weighted mean using the equation in paragraph 3.2.3.2.2.2.3. of Annex 7 to UN GTR No. 15.\(\text{Annex 47}\);

(c) The aerodynamic drag of the vehicle fitted with its standard equipment\(^1\).

Annex 7 – Appendix 2 paragraph 2.2.4.(a) (iv), amend to read:

“(iv) Effect of different tyre tread depth:

\[ F_{\text{on}} = F_{\text{on}}^3 \times TTD \]

Where the factors \(TTD\) in the formula are as defined in point 2.2.2.”

II. Justification


2. When copying the methodology from EU regulation, a ‘.’ was wrongly introduced instead of a ‘-’ in the formula.

3. This correction has been review by EU Joint Research Center which is at the origin of the methodology.

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\(^1\) As defined in UN GTR No. 15