

21 March 2022

Agreement

Concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations*

(Revision 3, including the amendments which entered into force on 14 September 2017)

Addendum 100 – UN Regulation No. 101

Revision 3 - Amendment 9

Supplement 10 to the 01 series of amendments – Date of entry into force: 7 January 2022

Uniform provisions concerning the approval of passenger cars powered by an internal combustion engine only, or powered by a hybrid electric power train with regard to the measurement of the emission of carbon dioxide and fuel consumption and/or the measurement of electric energy consumption and electric range, and of categories M₁ and N₁ vehicles powered by an electric power train only with regard to the measurement of electric energy consumption and electric range

This document is meant purely as documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2021/71.



UNITED NATIONS

* Former titles of the Agreement:

Agreement concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958 (original version); Agreement concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, done at Geneva on 5 October 1995 (Revision 2).

Annex 7 – Appendix 2

Paragraph 1., amend to read:

"1. Introduction

The purpose of this appendix is to provide the road load power calculation method that may be used, at the choice of manufacturer, when the vehicle road load has been determined according to WLTP procedures as defined in UN GTR No. 15."

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 3.2.3.2.2.3. of Annex 7 to UN GTR No. 15;
- (c) The aerodynamic drag of the vehicle fitted with its standard equipment.¹"

Paragraph 2.2.4. subparagraph (a) (iv), amend to read:

"(iv) Effect of different tyre tread depth:

$$F_{0n} = F_{0n}^3 - TTD$$

Where the factors *TTD* in the formula are as defined in point 2.2.2

¹ As defined in UN GTR No. 15