

2 February 2021

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 93 – UN Regulation No. 94

Revision 3 - Amendment 2

Supplement 2 to the 03 series of amendments – Date of entry into force: 3 January 2021

Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants in the event of a frontal collision

This document is meant purely as a documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2020/54.



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).



Paragraph 1, amend to read:

"1. Scope

This Regulation applies to vehicles of category M₁¹ of a total permissible mass not exceeding 3,500 kg and to vehicles of category N₁ of a total permissible mass not exceeding 2,500 kg; other vehicles may be approved at the request of the manufacturer."

Insert new paragraphs 2.36. and 2.37., to read:

"2.36. "Displacement system" means a device by which the seat or one of its parts can be displaced and/or rotated, without a fixed intermediate position, to permit easy access of occupants to and from the space behind the seat concerned.

2.37. "Ladder frame" means a chassis composed of two longitudinal rails transversally connected by crossbeams and where the cabin, made of panels, is connected to such rails."

Paragraph 5.2.5.1., amend to read:

"5.2.5.1. To open at least one door per row of seats. Where there is no such door, it shall be possible to allow the evacuation of all the occupants by activating the displacement system of seats, if necessary. This is not applicable to convertibles where the top can be easily opened to allow the evacuation of the occupants.

This shall be assessed for all configurations or worst-case configuration for the number of doors on each side of the vehicle and for both left-hand drive and right-hand drive vehicles, when applicable."

Insert new paragraphs 5.3. to 5.3.2., to read:

"5.3. Specific provisions

5.3.1. Vehicles of category M₁ of a total permissible mass exceeding 2,500 kg that are based on vehicle types of category N₁ of a total permissible mass exceeding 2,500 kg are deemed to meet the requirements of paragraph 5. where the requirements of UN Regulation No. 137 are fully complied with and at least one of the following conditions is met:

- (a) The acute angle alpha (α), measured between a horizontal plane passing through the centre of the front axle and an angular transverse plane passing through the centre of the front axle and the R-point of the driver's seat (see Figure 4 below), is more than 22°;
- (b) Or the ratio between the distance from the driver's R-point to the centre of the rear axle (L101-L114) and the centre of the front axle and the driver's R-point (L114) is more than 1.30 (see Figure 4 below).

This shall be verified by the Technical Service and subject to the decision of the Type Approval Authority, as well as stated under point 8.2. on the approval communication of Annex 1.

5.3.2. Vehicles of category N₁ of a total permissible mass exceeding 2,250 kg but not exceeding 2,500 kg are deemed to meet the requirements of paragraph 5, where their structural basis is a ladder frame and the requirements of UN Regulation No. 137 are fully complied with and at least one of the following conditions is met:

- (a) The acute angle alpha (α), measured between a horizontal plane passing through the centre of the front axle and an angular transverse plane

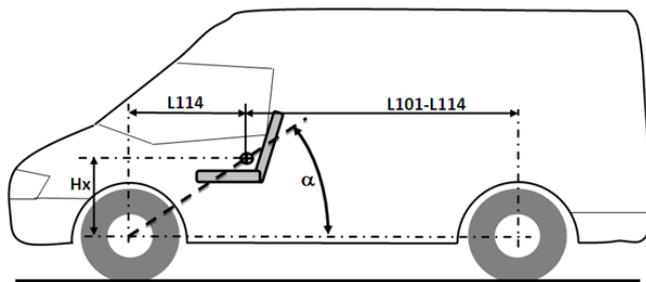
¹ As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.6, para. 2. – www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html

passing through the centre of the front axle and the R-point of the driver's seat (see Figure 4 below), is more than 22°;

- (b) Or the ratio between the distance from the driver's R-point to the centre of the rear axle (L101-L114) and the centre of the front axle and the driver's R-point (L114) is more than 1.30 (see Figure 4 below).

This shall be verified by the Technical Service and subject to the decision of the Type Approval Authority, as well as stated under point 8.2. on the approval communication of Annex 1.

Figure 4



"

Annex 1

Item 8, amend to read:

"8. Mass of the Vehicle

8.1. Mass of vehicle submitted for testing:

Front axle:

Rear axle:

Total:

8.2. Where paragraph 5.3.1. or 5.3.2. applies:

Total permissible mass.....

Proof of compliance with UN Regulation 137 (i.e. type approval number or test report): "
