

**Comment on document:** ECE/TRANS/WP.29/GRSG/2015/17 - Proposal for the 03 series of amendments to Regulation No. 58 (Rear underrun protection)

(Addition to existing text of ECE/TRANS/WP.29/GRSG/2015/17 is shown in bold italic text and deletion in double strikethrough and highlighting all modifications)

1. **Insert a new paragraph 16.1., to read:**

**"16.1. For vehicles of the categories N<sub>2</sub> *and M3* with a gross vehicle weight exceeding 8 t, N<sub>3</sub>, O<sub>3</sub> and O<sub>4</sub>, the ground clearance with respect to the underside of the protective device, even when the vehicle is unladen, shall not exceed:**

- (a) 450 mm for motor vehicles and trailers with hydropneumatic, hydraulic or pneumatic suspension or a device for automatic leveling according to load. In any case, a departure angle up to 8° according to ISO 612:1978 with a maximum ground clearance of 550 mm shall be deemed to satisfy the requirements.**
- (b) 500 mm or a departure angle according to ISO 612:1978 of 8°, whichever is less, for vehicles other than those in (a) above. In any case, a departure angle up to 8° according to ISO 612:1978 with a maximum ground clearance of 550 mm shall be deemed to satisfy the requirements.**

**This requirement applies over the entire width of the motor vehicle or trailer and shall be such that the height above the ground of the points of application of the test forces applied to the device according to Part I of this Regulation and recorded in the type approval communication form (Annex 1, item 7) does not exceed the values in the paragraphs (a) and (b) above, increased by half the minimum section height required for the cross member of the RUPD.**

**The height requirement for the application of the test forces shall be adjusted to the adjusted ground clearance due to the provisions for the departure angle specified above."**

2. **Paragraph 16.4., amend to read:**

**"16.4. For vehicles of categories M, N<sub>1</sub>, N<sub>2</sub> with a GWV not exceeding 8 t, O<sub>1</sub> and O<sub>2</sub>, the device shall be so fitted that the horizontal distance between the rear of the **cross-member of the** device and the **most rearward point at the** rear extremity of the vehicle, including any platform lift ~~system mechanism~~, does not exceed 400 mm diminished by the **largest** recorded **plastic and elastic** deformation ..... communication form. In measuring this distance, any part of the vehicle which is more than 2 m above the ground ~~when the vehicle is unladen~~ **for every loading condition of the vehicle** shall be excluded.**

**For vehicles of categories N<sub>2</sub> *and M3* with a gross vehicle weight exceeding 8 t and N<sub>3</sub>, the same requirement as above applies; however, for vehicles of these categories, the horizontal distance shall not exceed 300 mm measured at the point of the maximum section height of the cross-member according to paragraph 7.1. before the test forces are applied.**

For vehicles of categories O<sub>3</sub> and O<sub>4</sub>, without any platform lift system and not being designed as a tipping-trailer, the maximum horizontal distances are reduced to 200 mm before the test forces have been applied and 300 mm diminished by the largest recorded deformation (paragraph 7.3. of Part I) measured at any of the points where the test forces have been applied (Annex 1, item 8).

In any case nonstructural protrusions such as tail lamps and those of less than 50 mm of size in any direction, such as rubber bumpers, resilient buffers, hinges and latches shall be excluded from the determination of the most rearward point at the rear extremity.

Before the application of the test forces, the maximum allowed horizontal distance of a single, a segmented or an inclined cross-member of a RUPD is 100 mm between the rear of the cross-member measured at the most forward point and the rear of the cross-member measured at the most rearward point, measured in the longitudinal plane of the vehicle."

3. Paragraph 25.1., amend to read:

"25.1. For vehicles of the categories N<sub>2</sub> **and M3** with a gross vehicle weight exceeding 8 t, N<sub>3</sub>, O<sub>3</sub> and O<sub>4</sub>, the ground clearance with respect to the underside of the RUP, even when the vehicle is unladen, ~~must not exceed 550 mm over its entire width~~ shall not exceed:

(a) 450 mm for motor vehicles and trailers with hydropneumatic, hydraulic or pneumatic suspension or a device for automatic leveling according to load. In any case a departure angle up to 8° according to ISO 612:1978 with a maximum ground clearance of 550 mm shall be deemed to satisfy the requirements.

(b) 500 mm or a departure angle according to ISO 612:1978 of 8°, whichever is less, for vehicles other than those in (a) above. In any case a departure angle up to 8° according to ISO 612:1978 with a maximum ground clearance of 550 mm shall be deemed to satisfy the requirements.

This requirement applies over the entire width of the motor vehicle or trailer and shall be such that the height above the ground of the points of application of the test forces applied to the device according to Part I of this Regulation and recorded in the type approval communication form (Annex 1, item 7) does not exceed the values in subparagraphs (a) and (b) above, increased by half the minimum section height required for the cross member of the RUPD.

The height requirement for the application of the test forces shall be adjusted to the adjusted ground clearance due to the provisions for the departure angle specified above."

4. Paragraph 25.5., amend to read:

"25.5. ~~The section height of the RUP must not be less than 100 mm.~~ The cross- member shall have a section height of at least 120 mm. The lateral extremities of the cross-member shall not bend ..... than 2.5 mm.

For vehicles of the categories M, N<sub>1</sub>, N<sub>2</sub> with a GWV not exceeding ~~7.5 t~~ **8.0 t**, O<sub>1</sub>, O<sub>2</sub>, vehicles of category G and vehicles fitted with a platform lift, the cross-member shall have a section height of at least 100 mm.

5. Annex 7, amend to read:

"Annex 7

**Requirements for different vehicle categories**

| Vehicle category or type of vehicle   | Geometry referred to in paragraph |                                  |  | Test force referred to in paragraph(s): |
|---|-----------------------------------|----------------------------------|--|---|
|   | Section height                    | Ground clearance before the test | Horizontal distance between the rear of the RUPD and the rear of the vehicle |   |
| M, N <sub>1</sub> , N <sub>2</sub> with a GVW* < 8 t, O <sub>1</sub> , O <sub>2</sub> , G | 2.3./2.4./7.1./25.5.              | 2.3./2.4./16.2./25.2.            | 2.3./2.4./16.4./25.3.  | 2.3./ 2.4./ A5/3.1.1. to 3.1.2.         |
| N <sub>2</sub> with a GVW > 8 t, N <sub>3</sub>   | 7.1. or 25.5.                     | 16.1./16.2. or 25.1./25.2.       | 16.4. or 25.3.   | A5/3.1.1. to 3.1.2.                     |
| O <sub>3</sub> , O <sub>4</sub>   | 7.1. or 25.5.                     | 16.1./16.2. or 25.1./25.2.       | 16.4. or 25.3.   | A5/3.1.1. to 3.1.2.                     |
| Specific Vehicles (see Annex 6)   | 7.1. or 25.5.                     | 16.1./16.2. or 25.1./25.2.       | 16.4. or 25.3.   | A5/3.1.3.                               |

**Note:** A reference such as A5/3.1.1. in the table indicates the annex (Annex 5) and paragraph (3.1.1.) of that annex, where the relevant vehicle or requirement is described and specified. A reference such as 2.3. in the table indicates paragraph (2.3.) of this Regulation, where the relevant requirement is specified.

\* GVW means Gross Vehicle Weight."

**Justifications:**

1. For Sr. Nos. 1 to 3 of this document : Since M3 category vehicles have maximum mass exceeding 5 tonnes and hence their can be M3 exceeding 8 tonnes, this may be inadvertently missed out
2. For Sr. Nos. 4 of this document : Since all clauses proposed are categorizing vehicles linked with 8 tonnes, same logic can be used at proposal for clause No. 25.5.
3. For Sr. Nos. 5 of this document: Typographical mistake.

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