Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations

179th session
Geneva, 12-14 November 2019
Item 4.7.5 of the provisional agenda
1958 Agreement:
Consideration of draft amendments to existing
UN Regulations submitted by GRSG

Proposal for Supplement 1 to the 03 series of amendments to
UN Regulation No. 58 (Rear underrun protection)

Submitted by the experts from the Working Party on General Safety*

The text reproduced below was adopted by the Working Party on General Safety
(GRSG) at its 116th session (ECE/TRANS/WP.29/GRSG/95, para. 69). It is based on
Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee
(AC.1) for consideration at their November 2019 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2018–2019
(ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, Cluster 3.1), the World Forum will
develop, harmonize and update UN regulations to enhance the performance of vehicles. The present
document is submitted in conformity with that mandate.
Supplement 1 to the 03 series of amendments to UN Regulation No. 58 (Rear underrun protection)

Paragraph 2.4., amend to read:

“2.4. Any vehicle of category G will be deemed to satisfy the condition for the ground clearance set out in this Regulation, if the departure angle (ISO 612:1978) does not exceed:

(a) 10° for vehicles of categories M_1G and N_1G;
(b) 20° for vehicles of categories M_2G and N_2G; and
(c) 25° for vehicles of categories M_3G and N_3G;

over a width which is not shorter than that of the rear axle by more than 100 mm on either side (excluding any bulging of the tyres close to the ground).

Where there is more than one rear axle, the width to be considered is that of the widest. The requirements of subparagraphs (a) to (c) of this paragraph shall be satisfied at least on a line:

(a) At a distance of not more than 450 mm from the rear extremity of the vehicle;
(b) That may have interruptions summing up in not more than 200 mm.”

PART II. Approval of a vehicle with regard to the installation of an RUPD of an approved type

Paragraph 16.1., amend to read:

“16.1. For vehicles of the categories N_2 with a maximum mass exceeding 8 t, N_3, O_3 and O_4, 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 levelling 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 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.”

PART III. Approval of a vehicle with regard to its rear underrun protection (RUP)

Paragraph 25.1., amend to read:

“25.1. For vehicles of the categories N_2 with a maximum mass exceeding 8 t, N_3, O_3 and O_4, the ground clearance with respect to the underside of the RUP, 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 levelling 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 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."

Annex 7, table, amend to read:

<table>
<thead>
<tr>
<th>Vehicle category or type of vehicle</th>
<th>Geometry referred to in paragraph</th>
<th>Ground clearance before the test</th>
<th>Horizontal distance between the rear of the RUPD and the rear of the vehicle</th>
<th>Test force referred to in paragraph(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>M, MG, N1, NiG, N2 with a MaxM* &lt; 8 t, NiG with a MaxM* &lt; 8 t, O1, O2</td>
<td>2.3/ 7.1/25.5.</td>
<td>16.2/25.2.</td>
<td>2.3/ /16.4/25.3.</td>
<td>2.3/ /A5/3.1.1. to 3.1.2.</td>
</tr>
<tr>
<td>N2 with a MaxM* &gt; 8 t, NiG with a MaxM* &gt; 8 t, N1, N2G</td>
<td>7.1 or 25.5.</td>
<td>16.1 or 25.1.</td>
<td>16.4 or 25.3.</td>
<td>2.4/ /A5/3.1.1. to 3.1.2.</td>
</tr>
<tr>
<td>O3, O4</td>
<td>7.1 or 25.5.</td>
<td>16.1/16.2 or 25.1/25.2</td>
<td>16.4 or 25.3.</td>
<td>7.1 or 25.5.</td>
</tr>
<tr>
<td>Specific vehicles (see Annex 6)</td>
<td>7.1 or 25.5.</td>
<td>16.1/16.2 or 25.1/25.2</td>
<td>16.4 or 25.3.</td>
<td>7.1 or 25.5.</td>
</tr>
</tbody>
</table>

* MaxM means maximum mass.

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."