|  |  |  |  |
| --- | --- | --- | --- |
|  | United Nations | ECE/TRANS/WP.29/GRSP/2024/6 | |
| _unlogo | **Economic and Social Council** | | Distr.: General  18 March 2024  Original: English |

**Economic Commission for Europe**

Inland Transport Committee

**World Forum for Harmonization of Vehicle Regulations**

**Working Party on Passive Safety**

**Seventy-fifth session**

Geneva, 27–31 May 2024

Item 7 of the provisional agenda

**UN Regulation No. 16 (Safety-belts)**

Proposal for Supplement 1 to the [10] Series of Amendments of UN Regulation No. 16 (Safety-belts)

Submitted by the expert from Germany [[1]](#footnote-2)\*, [[2]](#footnote-3)\*\*

The text reproduced below was prepared by the expert from Germany, to clarify, how to perform the buckle-opening test under paragraph 7.8. of UN Regulation No. 16. It is based on GRSP-74-31 distributed at the seventy-fourth session of the Working Party on Passive Safety (GRSP)(see ECE/TRANS/WP.29/GRSP/74 paragraph 18) The modifications to the existing text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

**I. Proposal**

*Paragraph 7.8.2.,* amend to read:

"7.8.2. The belt assembly shall be removed from the test trolley without the buckle being opened.

**In case of a two-point lap belt A**~~a~~ load shall be applied **to each side of** the buckle by direct traction via the straps tied to it, so that ~~all~~ **each of the two** ~~the~~ straps are subjected to ~~the~~**a** force of ~~ daN~~ **30** daN. ~~(It is understood that n is the number of straps linked to the buckle when it is in a locked position.)~~

**In case of a three-point belt, the upper and lower strap of the diagonal belt part shall be clamped together, so that the two straps together are subjected to the force of 30 daN.**

**S-type belts shall be tested depending on its geometry analogously to the above-mentioned procedures, with forces, agreed between the manufacturer and the technical service simulating a similar load on the buckle**. **An additional crotch strap shall be not taken into account for this test.**

In the case where the buckle is connected to a rigid part, the load shall be applied at the same angle as the one formed by the buckle and the rigid end during the dynamic test. A load shall be applied at a speed of 400 ± 20 mm/min to the geometric centre of the buckle-release button along a fixed axis running parallel to the initial direction of motion of the button. During the application of the force needed to open the buckle, the buckle shall be held by a rigid support. The load quoted above shall not exceed the limit indicated in paragraph 6.2.2.5. above. The point of contact of the test equipment shall be spherical in form with a radius of 2.5 mm ± 0.1 mm. It shall have a polished metal surface."

II. Justification

This proposal aims to clarify, how to perform the buckle-opening test, simulating the load caused by 60 kg body, described under paragraph 7.8. of the UN Regulation,

1. \* This document was scheduled for publication after the standard publication date owing to circumstances beyond the submitter's control. [↑](#footnote-ref-2)
2. \*\* In accordance with the programme of work of the Inland Transport Committee for 2024 as outlined in proposed programme budget for 2024 (A/78/6 (Sect. 20), table 20.5), 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. [↑](#footnote-ref-3)