

Economic and Social Council

Distr.: General 2 March 2011

Original: English English and French only

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Passive Safety

Forty-ninth session Geneva, 16–20 May 2011 Item 9 of the provisional agenda Regulation No. 14 (Safety-belt anchorages)

Proposal for Supplement 3 to the 07 series of amendments

Submitted by the experts from Belgium and Germany*

The text reproduced below was prepared by the experts from Belgium and Germany to introduce requirements for side-facing seats into vehicles of category M_3 (Class II, III and B). It supersedes ECE/TRANS/WP.29/GRSP/2010/33 and it is also based on two documents without a symbol (GRSP-48-02 and GRSP-48-35) distributed during the forty-eighth session of the Working Party on Passive Safety (GRSP). The modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

^{*} In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

Paragraph 1., amend to read:

"1. SCOPE

This Regulation applies to:

- (a) Vehicles of categories M and N ¹ with regard to their anchorages for safety-belts intended for adult occupants of forward-facing or rearward-facing or side-facing seats.
- (b) Vehicles of category M₁ ...provisions of this Regulation."

Insert new paragraphs 2.6.2. to 2.6.4., to read:

- "2.6.2. "Forward-facing seat" means a seat which can be used while the vehicle is in motion and which faces towards the front of the vehicle in such a manner that the vertical plane of symmetry of the seat forms an angle of less than $+10^{\circ}$ or -10° with the vertical plane of symmetry of the vehicle.
- 2.6.3. "Rearward-facing seat" means a seat which can be used while the vehicle is in motion and which faces towards the rear of the vehicle in such a manner that the vertical plane of symmetry of the seat forms an angle of less than $+10^{\circ}$ or -10° with the vertical plane of symmetry of the vehicle.
- 2.6.4. "Side-facing seat" means a seat which can be used while the vehicle is in motion and which faces towards the side of the vehicle in such a manner that the vertical plane of symmetry of the seat forms an angle of $90^{\circ} (\pm 10^{\circ})$ with the vertical plane of symmetry of the vehicle."

Paragraph 5.1.5., amend to read:

"5.1.5. The angles α_1 and α_2 are respectively the angles between a horizontal plane **through the point H**₁ and planes perpendicular to the median **vertical** longitudinal plane of the vehicle **seat** and passing through the point H₁- and the points L₁ and L₂."

Paragraph 5.3.2., amend to read:

"5.3.2. The minimum number of safety-belt anchorages for each forward, and rearward and side-facing directed seating position shall be those specified in Annex 6."

Paragraph 5.4.2.5., amend to read:

"5.4.2.5. The distance between the two vertical planes parallel to the median **vertical** longitudinal plane of the vehicle seat and each passing through a different one of the two effective lower belt anchorages L_1 and L_2 of the same safetybelt shall not be less than 350 mm. In the case of any central seating positions in rear rows of seats of vehicles of category M_1 and N_1 , the above-mentioned distance shall be not less than 240 mm, provided that it is not possible to exchange the centre rear seat with any of the other seats of the vehicle. The median longitudinal plane of the seat shall pass between points L_1 and L_2 and shall be at least 120 mm from these points."

Paragraph 6.3.2., amend to read:

"6.3.2. The tractive force shall be applied in a direction corresponding to the seating position at an angle of 10 degrees \pm 5° above the horizontal, in a plane parallel to the median longitudinal plane of the vehicle.

A preload of 10 per cent with a tolerance of \pm 30 per cent of the target load shall be applied; the load shall be increased to 100 per cent of the relevant target load."

Insert new paragraphs 6.4.7. to 6.4.8.3., to read:

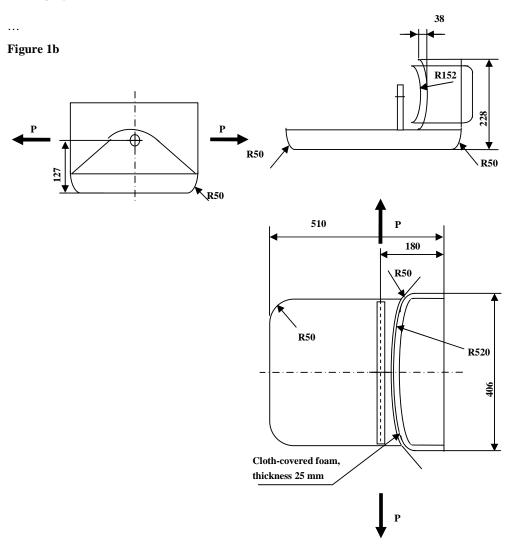
- "6.4.7. Test in the case of side-facing seats
- 6.4.7.1. The anchorage points shall be tested according to the forces prescribed in paragraph 6.4.3. for M_3 vehicles.
- 6.4.7.2. The test load shall be directed forward in relation to the vehicle, corresponding to the procedure prescribed in paragraph 6.3. In the case that side-facing seats are grouped together on a basic structure, the safety-belt anchorage points of each seating position in the group shall be tested separately. In addition the basic structure has to be tested as described in paragraph 6.4.8.
- 6.4.7.3. Traction device adapted for the test of side-facing seats is shown in Annex 5, figure 1b.
- 6.4.8. Test of the basic structure of side-facing seats
- 6.4.8.1. The basic structure of a side-facing seat or a group of side-facing seats shall be tested according to the forces as prescribed in paragraph 6.4.3. for M_3 vehicles.
- 6.4.8.2. The test load shall be directed forward in relation to the vehicle, corresponding to the procedure prescribed in paragraph 6.3. In the case that side-facing seats are grouped together the basic structure shall be tested simultaneously for each seating position in the group.
- 6.4.8.3. The point of application of the forces prescribed in paragraphs 6.4.3. and 6.4.4. shall be as close as possible to the H-Point and on the line defined by a horizontal plane and a vertical transverse plane through the relevant H-Point of each seating position."

Insert new paragraphs 14.17. to 14.18., to read:

- "14.17. As from the official date of entry into force of Supplement 2 to the 07 series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approvals under this Regulation as amended by Supplement 1 to the 07 series of amendments.
- 14.18. Approvals of the vehicle categories which are not affected by Supplement 2 to the 07 series of amendments shall remain valid and Contracting Parties applying the Regulation shall continue to accept them."

Annex 5, insert a new figure 1b, to read:

"Annex 5



..."

Annex 6, the table, amend to read:

"Annex 6

• • •

Vehicle	Forward facing seating positions				Rear ward facing	Side facing
Category	Outboard		Centre			
	Front	Other	Front	Other		
\mathbf{M}_1	3	3	3	3	2	
$M_2 \le 3.5$ tonnes	3	3	3	3	2	
M_3 -& $M_2 > 3.5$ tonnes	3 ⊕	3 or 2 ╬	3 or 2 #	3 or 2 ╬	2	
M_3	3 ⊕	3 or 2 ╬	3 or 2 ╬	3 or 2 ╬	2	2
N_1	3	3 or 2 Ø	3 or 2 *	2	2	
N ₂ & N ₃	3	2	3 or 2 *	2	2	

..."

II. Justification

- 1. This proposal introduces the necessary requirements to take into account the installation of side-facing seats under certain conditions.
- 2. As it introduces specific requirements only in addition to those already known and only for certain categories of vehicles, an amendment seems unnecessary.