

## **Economic and Social Council**

Distr.: General 27 February 2018

Original: English

## **Economic Commission for Europe**

**Inland Transport Committee** 

**World Forum for Harmonization of Vehicle Regulations** 

**Working Party on Passive Safety** 

Sixty-third session Geneva, 14-18 May 2018 Item 10 of the provisional agenda UN Regulation No. 17 (Strength of seats)

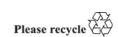
# Proposal for the 09 series of amendments to UN Regulation No. 17 (Strength of seats)

## Submitted by the expert from Germany\*

The text reproduced below was prepared by the expert from Germany. It aims to clarify that safety-belts and components thereof should continue to function after the load retention test. It supersedes ECE/TRANS/WP.29/GRSP/2017/25 and informal document GRSP-62-37 distributed during the sixty-second session of the Working Party on General Safety (GRSP) (ECE/TRANS/WP.29/GRSP/62, para. 17). It based on informal document GRSP-61-19-Rev.1 distributed during the sixty-first session of GRSP (ECE/TRANS/WP.29/GRSP/61, para. 22). The modifications to the existing text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

GE.18-02906(E)







In accordance with the programme of work of the Inland Transport Committee for 2014–2018 (ECE/TRANS/240, para. 105 and ECE/TRANS/2014/26, programme activity 02.4), 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.

## Proposal

Paragraph 4.2., amend to read:

"4.2. An approval number shall be assigned to each type approved. Its first two digits (at present 09, corresponding to the 09 series of amendments) ..."

Paragraph 5.16.1. and 5.16.2., amend to read:

#### "5.16.1. Seat-backs

Seat-backs and/or head restraints located such that they constitute the forward boundary of the luggage compartment, all seats being in place and in the normal position of use as indicated by the manufacturer, shall have sufficient strength to protect the occupants from displaced luggage in a frontal impact. This requirement is deemed to be met if, during and after the test described in Annex 9, the seat-backs remain in position, and the locking mechanisms remain in place. However, the deformation of the seat-backs and their fastenings during the test is permitted, provided that the forward contour of the parts of the tested seat-back and/or head restraints, that are harder than 50 Shore A, does not move forward of a transverse vertical plane which passes through:

However, the deformation of the seat-backs and their fastenings during the test is permitted, provided that the forward contour of the parts of the tested seat-back and/or head restraints, that are harder than 50 Shore A, does not move forward of a transverse vertical plane which passes through:

- (a) A point of 150 mm forward of the R point of the seat in question, for the parts of the head restraint;
- (b) A point of 100 mm forward of the R point of the seat in question, for parts of the seat-back;

excluding the rebound phases of the test blocks.

For integrated head restraints, the limit between the head restraint and the seat-back is defined by the plane perpendicular to the reference line 540 mm from the R point.

All measurements shall be taken in the longitudinal median plane of the corresponding seat or seating position for each seating position constituting the forward boundary of the luggage compartment.

During the test described in Annex 9, the test blocks shall remain behind the seat-back(s) in question. In case of damage to a seat belt retractor, it shall be verified that the retractor is locked already or that it can be locked by a manual pull out of the strap.

#### 5.16.2. Partitioning systems

At the request of the vehicle manufacturer, the test described in Annex 9 may be carried out with the partitioning systems in place, if these systems are fitted as standard equipment for the particular type of vehicle.

Partitioning systems, netting wire mesh located above the seat-backs in their normal position of use, shall be tested according to paragraph 2.2. of Annex 9.

This requirement is deemed to be met if, during the test, the partitioning systems remain in position. However, the deformation of the partitioning systems during the test is permitted, provided that the forward contour of the partitioning (including parts of the tested seat-back(s) and/or head restraint(s) that are harder than 50 Shore A does not move forward of a transverse vertical plane which passes through:

- (a) A point of 150 mm forward of the R point of the seat in question, for parts of the head restraint;
- (b) A point of 100 mm forward of the R point of the seat in question, for parts of the seat-back and part of the partitioning system others than the head restraint.

For integrated head restraint, the limit between the head restraint and the seat-back is the one defined in paragraph 5.16.1.

All measurements shall be taken in the longitudinal median plane of the corresponding seat or seating position for each seating position constituting the forward boundary of the luggage compartment.

After the test, no sharp or rough edges likely to increase the danger or severity of injuries of the occupants shall be present. In case of damage to a seat belt retractor, it shall be verified that the retractor is locked already or that it can be locked by a manual pull out of the strap."

Paragraph 7, amend to read:

## "7. Conformity of production

The conformity of production procedures shall comply with those set out in the Agreement, Appendix 2 (Schedule 1 E/ECE/TRANS/505/Rev.3), with the following requirements:"

Insert new paragraphs 13.12. to 13.12.5., to read:

- "13.12. As from the official date of entry into force of the 09 series of amendments, no Contracting Party applying this UN Regulation shall refuse to grant or refuse to accept UN type approvals under this UN Regulation as amended by the 09 series of amendments.
- 13.12.1. As from 1 September 2020, Contracting Parties applying this UN Regulation shall not be obliged to accept UN type approvals to the preceding series of amendments that were first issued on or after 1 September 2020.
- 13.12.2. Until 1 September 2022, Contracting Parties applying this UN Regulation shall accept UN type-approvals to the preceding series of amendments that were first issued before 1 September 2020.
- 13.12.3. As from 1 September 2022, Contracting Parties applying this Regulation shall not be obliged to accept type-approvals issued to the preceding series of amendments to this Regulation.
- 13.12.4. Notwithstanding paragraph 13.12.3., Contracting Parties applying the UN Regulation shall continue to accept UN type-approvals to the

preceding series of amendments to the UN Regulation, for vehicles which are not affected by the changes introduced by the 09 series of amendments.

13.12.5. Contracting Parties applying this UN Regulation shall not refuse to grant UN type-approvals according to any preceding series of amendments to this UN Regulation or extensions thereof."

Annex 2, amend to read:

"Model A

...



a = 8 mm min.

The above approval mark ... approval number 092439. The first two digits of the approval number indicate that the Regulation already contained the 09 series of ...

#### Model B

...

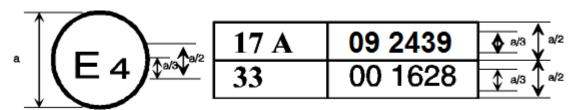


a = 8 mm min.

The above approval mark ... approval number 092439. The first two digits of the approval number indicate that the Regulation already contained the 09 series of amendments at the time of approval.

### Model C

. . .



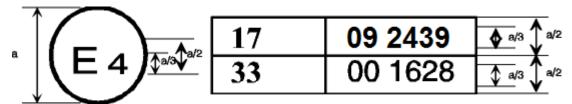
a = 8 mm min.

. . .

The approval numbers indicate that  $\dots$  included the 09 series of amendments but Regulation No. 33 was still in its original form.  $\dots$ 

Model D

. . .



a = 8 mm min.

The above approval mark  $\dots$  included the 09 series of amendments but Regulation No. 33 was still in its original form."

Annex 9, insert new paragraph 2.1.1.7., to read:

"2.1.1.7. All seating positions of the seat row under test shall be fitted with all components of its safety belt that are part of the seat back."

## II. Justification

Tests according to Annex 9 of UN Regulation No. 17 have shown damage to components like the retractor of the safety belt of the seat row under test. Due to the damages, the correct function of seat belts can be affected and cause danger to the occupants sitting on these seats. The proposed amendments maintain the locking function of safety belt retractor after the test.