

# **Economic and Social Council**

Distr.: General 28 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 14 of the provisional agenda UN Regulation No. 80 (Strength of seats and their anchorages (buses))

## **Proposal for the 04 series of amendments to UN Regulation No. 80 (Strength of seats and their anchorages (buses))**

#### Submitted by the expert from Germany\*

The text reproduced below has been prepared by the expert from Germany to amend the requirements concerning seats and seat anchorages. It is based on informal document GRSP-62-12 distributed during the sixty-second session of the Working Party on General Safety (GRSP) (ECE/TRANS/WP.29/GRSP/62, para. 51). The modifications to the current text of the Regulation and to the proposal are marked in bold for new or strikethrough for deleted characters.

<sup>\*</sup> 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.





#### I. Proposal

Contents, amend to read:

"...

Appendices

... 5

Static test requirements and procedure reserved.....

..."

Text of the UN Regulation,

Paragraph 4.3., amend to read:

"4.3. An approval number shall be assigned to each type approved. Its first two digits (at present 03 04, corresponding to the 03 04 series of amendments) ..."

Paragraph 5.1., amend to read:

"5.1. Each type of forward-facing seat shall be subject to the test requirements of either Appendix 1 (dynamic test) or Appendices 5 and, if applicable, Appendix 1 in combination with Annex 6 (static test) at the request of the manufacturer."

Insert new paragraphs 7.1.3. to 7.1.3.2., to read:

- "7.1.3. The torque to attach the seat anchorages in order to meet the requirements of Appendix 1 shall be specified by the vehicle manufacturer. This requirement does not apply to interlocking seat fixations and seat fixations with a defined force application.
- 7.1.3.1. If applicable, the torque to attach the seat anchorages specified by the vehicle manufacturer shall be shown on a pictogram fixed to the seat.
- 7.1.3.2. The procedure to attach the seat, and if applicable the torque to attach the seat shall be mentioned in the owner's manual of the vehicle. "

Paragraphs 7.3. to 7.3.2.2., shall be deleted

Paragraphs 7.4. to 7.4.4., renumber as paragraphs 7.3. to 7.3.4.

Insert new paragraphs 12.10. to 12.14., to read:

- "12.10. As from the official date of entry into force of the 04 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 04 series of amendments.
- 12.11. As from 1 September [2019], Contracting Parties applying this UN Regulation shall not be obliged to accept UN type-approvals to the preceding series of amendments, first issued after 1 September [2019].
- 12.12. Until 1 September [2020], Contracting Parties applying this UN Regulation shall accept UN type-approvals to the preceding series of amendments, first issued before 1 September 20[19].

- 12.13. As from 1 September [2020], Contracting Parties applying this UN Regulation shall not be obliged to accept type-approvals issued to the preceding series of amendments to this Regulation.
- 12.14. 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."

Appendix 1,

Paragraph 1.1.1.1., amend to read:

"1.1.1.1 This requirement shall be considered satisfied if the forward movement of any part of the trunk and the head of the manikin does not pass beyond the transversal vertical plane situated at <del>1.6 m</del> **1.2 m** from the R point of the auxiliary seat;"

Paragraph 1.1.3.1.2., amend to read:

"1.1.3.1.2. The seat remains firmly held, even if one or more anchorages are partly detached, and all the locking systems remain locked during the whole duration of the test<del>;</del>.

This requirement shall be considered satisfied if no part of the anchorage of the seat has moved more than 100 mm in the direction of the test;"

Paragraphs 2.1. and 2.1.1., amend to read:

"2.1. The seat to be tested shall be mounted:

2.1.1. Either on a testing platform representative of the body of a vehicle."

Paragraphs 2.1.2. and 2.2., shall be deleted

Paragraphs 2.3. to 2.7., renumber as paragraphs 2.2. to 2.6.

Paragraphs 3.1., amend to read:

- "3.1. Test 1
- 3.1.1. The testing platform shall be mounted on a trolley. If applicable, the seats shall be attached to the testing platform with the torque specified by the manufacturer."

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:"

Appendix 5, delete all paragraphs and reserve the Appendix for future amendments

Annex 1,

*Item 5.1.*, amend to read:

"5.1. Brief description of the seat type, its attachment fittings and its adjustment, displacement and locking systems including the minimum distance between fitting points **and if applicable, the torque for the seat fixation:.....**"

Items 5.7. and 5.8., shall be deleted

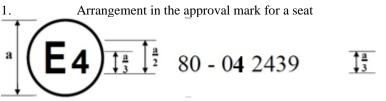
Annex 2, item 5.1., amend to read:

"5.1. Brief description of the vehicle type according to its anchorages and minimum value of the distance between the anchorages **and if applicable**, **the torque for the seat fixation:**"

Annex 3, amend to read:

#### "Annex 3

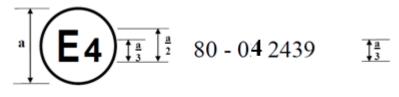
#### Arrangements of approval mark



The above approval mark affixed to a seat shows that the seat type concerned has, with regard to the strength of the seats, the test being carried out in accordance with paragraph 2 of Annex 4, been approved in the Netherlands (E4) under number 042439. The approval number indicates that the approval was granted in accordance with the requirements of Regulation No. 80 as amended by the 034 series of amendments.

2.

Arrangement in the approval mark for a vehicle type



a = 8 mm min

The above approval mark, affixed to a vehicle, shows that this type of vehicle has been approved in the Netherlands (E4) under number 042439 with regard to the strength of the anchorages on the vehicle. The approval number indicates that the approval was granted in accordance with the requirements of Regulation No. 80 as amended by the 034 series of amendments."

#### **II.** Justification

1. Comparative tests have shown that seat anchorages tested statically according to Appendix 5 do not reach the same level of safety as if tested dynamically according to Annex 1 and can't therefore be seen as equivalent. Consequently Appendix 5 shall be omitted in order to provide a higher level of safety for the passengers of buses and coaches. The results of the mentioned tests are described in detail, see informal document GRSP-62-35.

2. In addition to the deletion of Appendix 5, the description of the dynamic test according to the Appendix 1 has been improved by reducing the forward movement of the

head of the manikin to 1.2 m and herewith align the requirements with those of UN Regulation No. 14.

3. Further, the movement of the seat anchorages has been limited to 100 mm to ensure a minimum residual space for the passenger between the seats.

4. To ensure that the seat fixations are reliably fastened after relocation it seems sensible to provide the necessary information directly on the seat and in the owner's manual.