



**Economic and Social  
Council**

Distr.  
GENERAL

ECE/TRANS/WP.29/GRSP/2009/18  
23 September 2009

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-sixth session  
Geneva, 8-11 December 2009  
Item 20(b) of the provisional agenda

OTHER BUSINESS

Regulation No. 80  
(Strength of seats and their anchorages (buses))

Proposal for the 02 series of amendments to Regulation No. 80

Submitted by the expert from the European Commission \*/

The text reproduced below was prepared by the expert from the European Commission in order to prohibit the installation of side-facing seats in certain categories of vehicles and to align Regulation No. 80 with Regulation No. 17 where an overlap exists for certain vehicles of category M<sub>2</sub>. It is based on a document without symbol (informal document No. GRSP-45-05) distributed during the forty-fifth session of the Working Party on Passive Safety (GRSP). The modifications to the existing text of Regulation No. 80 are marked in bold.

---

\*/ In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance performance of vehicles with respect to passive safety. The present document is submitted in conformity with that mandate.

A. PROPOSAL

Paragraph 1.1., amend to read:

"1.1. ....

**(c) It does not apply to rearward-facing seats or to any head restraint fitted to these seats."**

Insert new paragraphs 1.4. to 1.6., to read:

**"1.4. The installation of side-facing seats shall be prohibited in vehicles of categories M<sub>2</sub> (of class III or B) and M<sub>3</sub> (of class III or B).**

**1.5. At the request of the manufacturer and in agreement with the technical service as well as the contracting party's administration (i.e. the type approval authority) an approval may be granted for vehicles of category M<sub>3</sub> (of class III or B) of a technically permissible maximum laden mass exceeding 10 tonnes with side-facing seats on condition that these side-facing seats are grouped together at the rear of the vehicle to form an integrated saloon of up to 10 seats. Such side-facing seats shall be fitted with, at least, a head restraint and a two-point belt with retractor type-approved in accordance with Regulation No. 16. Further, the anchorages for their safety belts shall comply with dimensional and strength requirements based on those as laid down in Regulation No. 14. However it shall be taken into account that the seat is side-facing instead of forward-facing, and test and inspections shall not be waived on that basis. The communication document (Annex 2) shall bear the remark stating that side-facing seats have been permitted according to this paragraph. Such approvals shall not be granted anymore as from 1 November 2014 or as from the date of adoption of uniform test provisions for side-facing seats (i.e. this Regulation) as well as provisions for such seats regarding safety-belt anchorages (i.e. Regulation No. 14) and vehicles equipped with safety-belts (i.e. Regulation No. 16), whichever date is earlier."**

**1.6. Paragraph 1.4 shall not apply to ambulances or to vehicles intended for use by the armed services, civil defence, fire services and forces responsible for maintaining public order."**

Paragraph 2.5., amend to read:

"2.5. ... more adult persons. **Depending on its orientation, a seat is defined as follows:"**

Insert new paragraphs 2.5.1. to 2.5.3., to read:

**"2.5.1. "Forward-facing seat" means a seat which can be used whilst 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  $+10^{\circ} - 10^{\circ}$  with the vertical plane of symmetry of the vehicle.

2.5.2. "**Rearward-facing seat**" means a seat which can be used whilst 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  $+10^{\circ} - 10^{\circ}$  with the vertical plane of symmetry of the vehicle.

2.5.3. "**Side-facing seat**" means a seat which, with regard to its alignment with the vertical plane of symmetry of the vehicle, does not meet either of the definitions given in paragraphs 2.5.1. or 2.5.2. above."

Paragraph 4.3., amend to read:

"4.3. ...first two digits (at present **02**, corresponding to the **02** series of amendments) shall indicate..."

Insert a new paragraph 5.5., to read:

"5.5. A head restraint shall be mounted on every outboard front seat in every vehicle of category  $M_2$  with a maximum mass not exceeding 3 500 kg. This head restraint shall comply with the requirements of Regulation No. 25, as amended by the **03** series of amendments."

Paragraphs 12.1. to 12.3., amend to read:

"12.1. As from the official date of entry into force of the **02** series of amendments, no Contracting Party applying this Regulation shall refuse to grant ECE approvals under this Regulation as amended by the **02** series of amendments.

12.2. As from 1 November 2012 Contracting Parties applying this Regulation shall grant ECE approvals only if the requirements of this Regulation, as amended by the **02** series of amendments, are satisfied.

12.3. As from 1 November 2014, approvals to this Regulation shall cease to be valid, except in the case of vehicle types which comply with the requirements of this Regulation as amended by the **02** series of amendments."

Insert new paragraphs 12.4. and 12.5., to read:

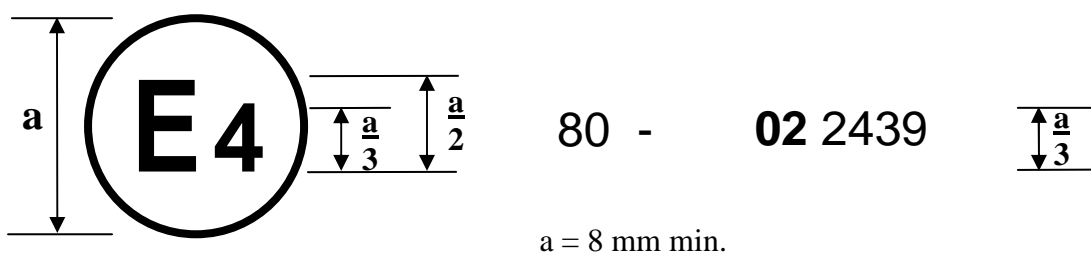
"12.4. As from 1 November 2014, Contracting Parties applying this Regulation may refuse first national or regional registration (first entry into service) of a vehicle which does not meet the requirements of the **02** series of amendments to this Regulation.

**12.5. As from 1 November 2014 or as from the date of adoption of uniform test provisions for side-facing seats (i.e. this Regulation) as well as provisions for such seats regarding safety-belt anchorages (i.e. Regulation No. 14) and vehicles equipped with safety-belts (i.e. Regulation No. 16), whichever date is earlier, approvals under paragraph 1.5 of this Regulation shall cease to be valid."**

Annex 3, paragraphs 1. and 2., amend to read:

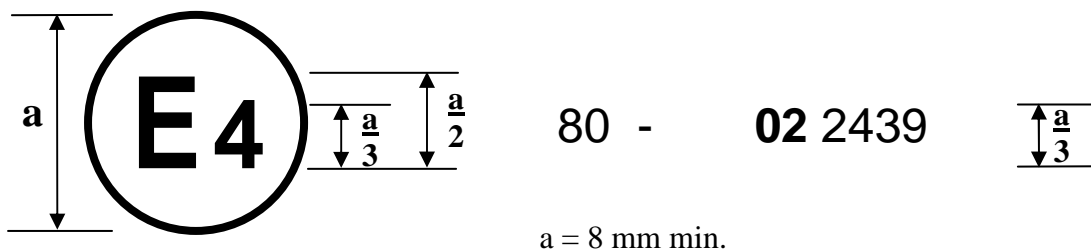
"ARRANGEMENTS OF APPROVAL MARKS

1. Arrangements in the approval mark for a seat



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 022439. The approval number indicates that the approval was granted in accordance with the requirements of Regulation No. 80 as amended by the 02 series of amendments.

2. Arrangements in the approval mark for a vehicle type



The above approval mark, affixed to a vehicle, shows that this type of vehicle has been approved in the Netherlands (E4) under number 022439 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 02 series of amendments."

B. JUSTIFICATION

At present the requirements for headrests on front outboard seats in vehicles of category M<sub>2</sub> are different between Regulations Nos. 80 and 17 and should be brought in line with that of the latter.

In addition, research has shown that it might not be always possible to provide side-facing seats with safety belts ensuring the same level of safety to occupants of front-facing seats. For safety reasons, it is therefore necessary to review the fitting of side-facing seats in certain categories of vehicles. Ongoing research related to side-facing seats in large busses has shown preliminary favourable results and in anticipation an exemption thereto should be permissible under clearly defined conditions. These conditions currently exist in the European Union (EU) as laid down in EC Directive 2005/39/EC and at present there is no indication of deterioration of occupant safety performance related to those vehicles that are currently equipped with side-facing seats configured according to the specifications as laid down in the EC Directive.

The category M<sub>3</sub> (of class III or B) is restricted in terms of the installation of side-facing seats on conditional grounds related to the absence of uniform test provisions for these seats as well as provisions regarding safety-belt anchorages (i.e. Regulation No. 14) and vehicles equipped with safety-belts (i.e. Regulation No. 16) for such seats. If these provisions become available, it shall subsequently be permissible according to the rules which are laid down at that time.

The exemption as stated is currently in effect within the EU whereas the ban on side-facing seats in certain categories of vehicles and certain classes of busses is newly introduced. This means that the exemption by itself does not entail a degradation of the rules in force today.

The European Commission intends to cooperate with the expert from Germany in order to ensure a swift adaptation of Regulation Nos. 14 and 16 taking into account the uniform provisions for side-facing seats in certain categories of vehicles.

-----