

**Economic and Social Council**Distr.: General
24 September 2020

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations**Working Party on Passive Safety****Sixty-eighth session**

Geneva, 7-11 December 2020

Item 7 of the provisional agenda

UN Regulation No. 17 (Strength of seats)**Proposal for Supplement 1 to the 10 series of amendments to
UN Regulation No. 17 (Strength of seats)****Submitted by the expert from the International Organization of Motor
Vehicle Manufacturers ***

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA) aiming to modify ECE/TRANS/WP.29/2020/106, adopted at the sixty-seventh session of the Working Party on Passive Safety (GRSP) (see ECE/TRANS/WP.29/GRSP/67, para. 12), in order to clarify the test procedure for the height of head restraints in the case of vehicles having a low roof construction. It is based on GRSP-67-28 distributed at the sixty-sixth session of GRSP (see ECE/TRANS/WP.29/GRSP/67, para. 13). The modifications to the current text of the UN Regulation, including ECE/TRANS/WP.29/2020/106, are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2020 as outlined in proposed programme budget for 2020 (A/74/6 (part V sect. 20) para 20.37), 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

Paragraph 5.6.2.3., amend to read:

"5.6.2.3. Exception

If the interior surface of the vehicle roofline, including the headliner, physically prevents a head restraint, located in the front designated seating position, from attaining the height required by paragraph 5.6.2.1. or 5.6.2.2. of this Regulation as applicable, the gap between the head restraint and the interior surface of the roofline, including the headliner, when measured in accordance with Annex 10. paragraph 2.3.3.1., shall not exceed 50 mm when the head restraint adjusted to its highest position intended for occupant use.

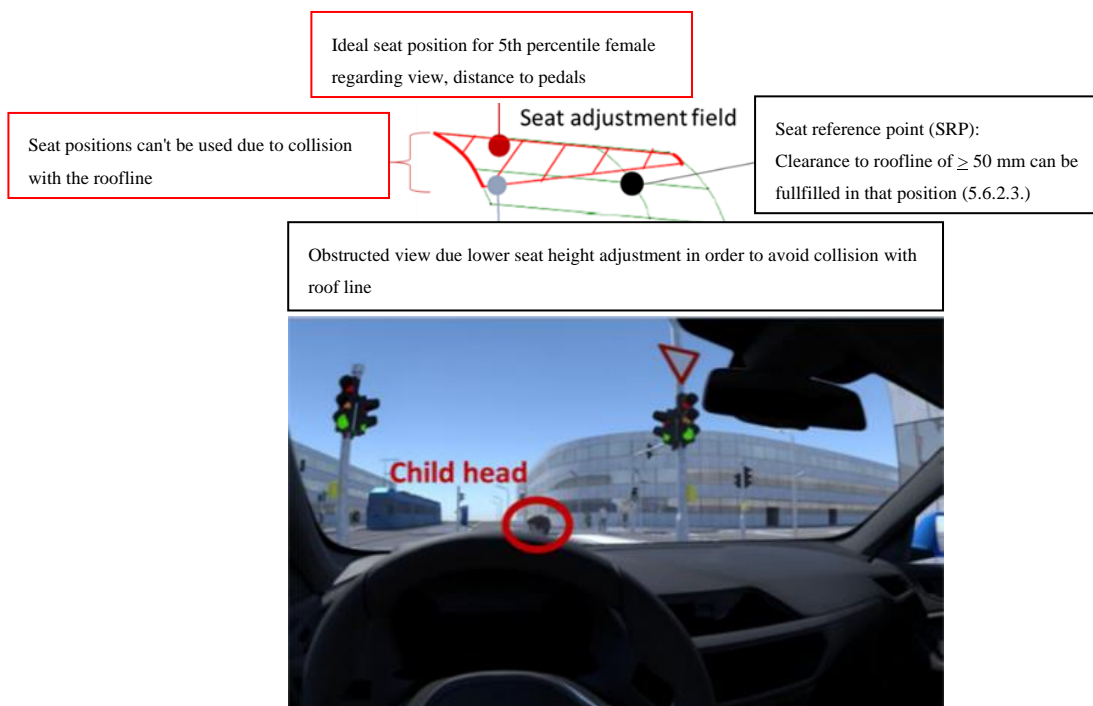
In the case of seats fitted with integrated head restraints that cannot be adjusted in height, if the height required by paragraphs 5.6.2.1. or 5.6.2.2. would result in the head restraint interfering with the roofline in at least one seat adjustment intended for normal occupant use, then the required height needs not be met, provided the clearance in this/these seat adjustment(s) does not exceed [10] mm. If this leads to a gap of more than 50 mm when measured in accordance with Annex 10, paragraph 2.3.3.1., then the head restraint shall conform to the applicable requirements of paragraph 5.6.1.1.2.

However, in no instance shall the height of a head restraint located in a front designated seating position be less than 700 mm when the head restraint is adjusted to its lowest position intended for occupant use."

II. Justification

1. In the current proposal to transpose UN GTR No. 7 Phase 2 into UN Regulation No. 17, the exception rule for low roof vehicles considers only the design position (based on R-point).

2. It is assumed that smaller people (e.g. 5th percentile woman) will use the highest seat adjustment position with a more upright backrest on the driver seating position. In some vehicles with specific rooflines and seats fitted with integrated not height adjustable head restraints this can lead to a contact with the roof.



3. Furthermore, a collision with the roof may have an impact to the easy-entry function for 2-doors vehicles with more than one seat row and to the curtain airbag deployments.
 4. For these reasons, OICA suggests that in case of low roofline and seats fitted with integrated not height adjustable head restraints the exception rule shall be applied if there is at least one seat position affected.
 5. The concept of the OICA proposal for such vehicles with non-adjustable integrated head restraints is as follows:
 - (a) Check (e.g. on drawing) if there is any seat adjustment whereby the required height would result in an interference between the head restraint and the roof. This (or these) seat adjustment(s) are not necessarily the same as the one foreseen in Annex 10, paragraph 2.3.3.1.
 - (b) If there would be such interference, then it is allowed that the required height is not met in order to safeguard a clearance of maximum [10] mm between the head restraint and the roof in this (or these) seat adjustment(s)
 - (c) When measured according to Annex 10, paragraph 2.3.3.1., the gap needs then to be ≤ 50 mm. If however the gap > 50 mm, then the head restraint shall meet the applicable requirements of paragraph 5.6.1.1.2. (which entail the Biomechanical Rear Impact Dummy dynamic requirements), except of course those that are not applicable to these head restraints.
-