Proposal for Supplement 2 to the 04 series of amendments to Regulation No. 25 (Head restraints)

Submitted by the expert from the Netherlands*

The text reproduced below was prepared by the expert from the Netherlands, to limit the scope of the UN Regulation to a restricted number of vehicle categories. This proposal is linked to draft amendments to UN Regulation No. 16 on the energy dissipation of seats and amendments allowing a further forward displacement of the restrained occupants. These are due to new safety-belts equipped with lower load limiter devices. Accordingly, it is proposed to change the scope of UN Regulations Nos. 17 and 25. The modifications to the current text of UN Regulation No. 25 are marked in bold for new or strikethrough for deleted characters.

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* In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, 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 1.1. footnote 1, amend to read:

"1.1. This Regulation applies to head-restraint devices conforming to one of the types defined in paragraph 2.2. below."

\footnote{1 The head restraints which conform to the provisions of Regulation No. 17 are not required to conform to the provisions of this Regulation. [Seats of category M2 vehicles with a maximum mass exceeding 3,500 kg and of category M3 vehicles type approved according to Regulation No. 80 are not required to conform to the provisions of this Regulation.]

Insert new paragraphs 1.1.3. to 1.1.5., to read:

"1.1.3. A head restraint shall be mounted on every outboard front seat in every vehicle of category M2 with a maximum mass not exceeding 3.5 tons and of category N1, and the head restraint and its seat back shall be approved according this Regulation.

1.1.4. Seat backs with head restraints intended to be mounted on other positions in the abovementioned categories of vehicles and/or intended to be mounted in categories N2 and N3, may also be approved according this Regulation.

1.1.5. At the request of the manufacturer, head restraints and seat backs approved to Regulation No. 17 in its latest series of amendments are deemed to meet Regulation No. 25.”

II. Justification

1. The provisions of UN Regulation No. 16 (paragraph 6.4.1.4.1.) only allow contact of the chest of the dummy driver with the steering assembly, provided that this contact fulfills certain energy dissipation test requirements and contact does not occur at a speed higher than 24 km/h.

2. To cope with the updated provisions of UN Regulation No. 16 which allow more forward displacement of occupants, UN Regulation No. 17 will be updated to provide requirements on improved energy dissipation criteria for those areas of the rear of seats and its head restraints where impact of the head of the rear occupant will occur.

3. However, historically UN Regulation No. 25 offered an alternative routing for approval of seat backs only if fitted with head restraints. Therefore, following the needed update of UN Regulation No. 17 on energy dissipation requirements, it is hereby proposed to amend the scope of UN Regulation No. 25 (not updated with on energy dissipation) to cover only vehicle categories M2 < 3.5 tons and N1 (was already mandatory) and mention explicitly N2 and N3 vehicle categories where the UN Regulation may be applied optionally.