# Proposal for amendments of Regulation No. 17 (Strength of seats)

### Submitted by the expert from Germany

The text reproduced below was prepared by the expert from Germany. It introduces amendments to Regulation No. 17 (Strength of seats). The modifications to the existing text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

# I. Proposal

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 [and the components of the safety belts shall still being in function]. 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- and not lead to a damage of a component of the safety belts of the seat row tested that could cause a safety risk for the occupants sitting on that seats.

## 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. [and all components of the safety belt shall still being in function.]

#### 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.

# II. Justification

Tests according to Annex 9 of Regulation No. 17 have shown damages of 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 influenced and cause danger for occupants sitting on these seats. The proposed amendments clarify that there shall be now damages of the components of the safety belt after the test.