Informal Document No. GRSP-42-29, rev. 1 (42nd GRSP, 11-14 December 2007, agenda item 3(a))

Transmitted by the Expert from the United States of America

PROPOSAL FOR DRAFT AMENDMENTS TO DRAFT GLOBAL TECHNICAL REGULATION (GTR) ON HEAD RESTRAINTS

A. PROPOSAL

Amendment to Part B., TEXT OF REGULATION

- (1) Amend paragraphs 4.3.1., 4.4.1., and 5.1.5.1.1. to read as follows:
- 4.3.1 The head restraint shall conform to paragraphs 5.1.1. through 5.1.4., 5.1.5.3., 5.2., 5.4., and 5.5. of this regulation.
- 4.4.1 The head restraint shall conform to paragraphs 5.1.2. through 5.1.4., 5.1.5.3., 5.2., 5.4., and 5.5. of this regulation.
- 5.1.5.1.1. Head restraints on the front outboard designated seating positions shall meet the backset requirements of paragraphs 5.1.5.2. In addition, the provisions of paragraph 5.1.5.3 shall apply to head restraints with an adjustable backset.
- (2) Delete paragraphs 5.1.5.3 through 5.1.5.3.2.3.

5.1.5.3 Displacement and Backset retention

- 5.1.5.3.1 In the case of head restraints with an adjustable backset, the head restraint shall conform to the displacement and backset retention requirements of paragraph 5.1.5.3.2 below; however, based on the determination of each Contracting Party or regional economic integration organization, the manufacturer may be allowed to apply the displacement requirements of paragraph 5.2.3.2. as an alternative.
- 5.1.5.3.2 When the head restraint is tested in any position of backset adjustment in accordance with Annex 6. the head form shall:
- 5.1.5.3.2.1.Not be displaced more than 25 mm during the application of the initial reference moment of 37 Nm;

- 5.1.5.3.2.2.Not be displaced more than 102 mm perpendicularly and rearward of the displaced extended torso line during the application of a 373 Nm moment about the R point; and
- 5.1.5.3.2.3.Return to within 13 mm of its initial reference position after the following sequence occurs: application of a 373 Nm moment about the R point; reduction of the moment to 0 Nm; and by re application of the initial reference load 37 Nm.
- (3) Amend paragraphs 5.2.3. through 5.2.3.2 by replacing them with paragraphs 5.2.3. through

5.2.3 Displacement

- 5.2.3.1. All head restraints shall conform to the displacement requirements of paragraph 5.2.3.2 below. However, for head restraints with an adjustable backset, paragraph 5.1.5.3.1 shall apply.
- 5.2.3.2. When the head restraint is tested in the rearmost (relative to the seat) position of horizontal adjustment (if provided) in accordance with Annex 6, the head form shall not be displaced more than 102 mm perpendicularly and rearward of the displaced extended torso line during the application of a 373 Nm moment about the R point.
- 5.2.3. Displacement and backset retention
- 5.2.3.1. General Specifications.
- 5.2.3.1.1. In the case of head restraints with an adjustable backset, the head restraint shall conform to the displacement and backset retention requirements of paragraph 5.2.3.2.; however, based on the determination of each Contracting Party or regional economic integration organization, the manufacturer may be allowed to apply the displacement requirements of paragraph 5.2.3.3. as an alternative.
- 5.2.3.1.2. All other head restraints shall conform to the displacement requirements of paragraph 5.2.3.3.
- 5.2.3.2. Displacement and backset retention.
- 5.2.3.2.1. When the head restraint is tested in any position of backset adjustment in accordance with Annex 6, the head form shall:
- 5.2.3.2.1.1.Not be displaced more than 25 mm during the application of the initial reference moment of 37 Nm;

- 5.2.3.2.1.2.Not be displaced more than 102 mm perpendicularly and rearward of the displaced extended torso line during the application of a 373 Nm moment about the R-point; and
- 5.2.3.2.1.3.Return to within 13 mm of its initial reference position after the following sequence occurs: application of a 373 Nm moment about the R-point; reduction of the moment to 0 Nm; and by re-application of the initial reference load 37 Nm.
- 5.2.3.3. Displacement.
- 5.2.3.3.1. When the head restraint is tested in the rearmost (relative to the seat) position of horizontal adjustment (if provided) in accordance with Annex 6, the head form shall not be displaced more than 102 mm perpendicularly and rearward of the displaced extended torso line during the application of a 373 Nm moment about the R-point.
- (4) Amend paragraph 1 of Annex 6 as follows:

1. PURPOSE

Demonstrate compliance with the displacement requirements of paragraph 5.2.3. 5.2.3.3. of this regulation with paragraph 2. of this Annex.

Demonstrate compliance with the displacement and backset retention requirements of paragraph 5.1.5.3. 5.2.3.2. of this regulation with paragraph 3. of this Annex.

Demonstrate compliance with the strength requirements of paragraph 5.2.4 of this regulation with paragraph 4. of this Annex.

B. JUSTIFICATION

Concerns were raised that the current language created a circular loop and might cause confusion. These proposed changes essentially return the draft gtr text to May 2007 version. Existing requirements in 5.1.5.3. and 5.2.3. are combined in a new 5.2.3. Paragraphs 4.3.1., 4.4.1., and 5.1.5.1.1. are changed to remove references in 5.1.5.3., and this section is now deleted. Changes are made to Annex 1 to correct the cross references.