Proposal for Supplement 1 to the draft new Regulation on child restraint systems

Submitted by the expert from Japan*

The text reproduced below was prepared by the expert from Japan amending a condition for lateral impact test of the draft new UN Regulation on child restraint systems (ECE/TRANS/WP.29/2012/53). It is based on a document without a symbol (GRSP-51-41) distributed during the fifty-first session of the Working Party on Passive Safety (GRSP) (see ECE/TRANS/WP.29/GRSP/51, para. 40). The modifications to the text of ECE/TRANS/WP.29/2012/53 are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, 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 7.1.3.1.3.4., amend to read:

"7.1.3.1.3.4. The test rig shall reproduce a relative velocity between the door panel and the test bench in compliance with Annex 7 Appendix 3. The maximum intrusion depth of the door panel is defined in Annex 6 Appendix 3. The relative velocity between the door panel and the test bench shall not be affected by contact with the CRS and shall remain within the corridor defined in Annex 7, appendix 3. In a test where the door is stationary at time t₀, the door shall be fixed and the dummy’s ground velocity at t₀ shall be between [6.375 m/s] and [7.25 m/s]. In a test where the door is moving at t₀, the door’s ground velocity shall remain within the corridor defined in Annex 7, Appendix 3 at least until its intrusion reaches its maximum, and the dummy shall be stationary at t₀."

Annex 7,
Appendix 3, the figure, shall be deleted
Appendix 3, insert a new figure, to read:

![Graph showing velocity over time]

II. Justification

In the draft new UN Regulation (ECE/TRANS/WP.29/2012/53), a relative velocity between door and seat is defined as the only test condition for lateral impact testing. Such test condition, however, would generate various situations where tests with different stringency levels are possible. For this reason, the new test conditions should be added so
that only a single test situation will be generated and the stringency level will be the same in deceleration and acceleration sled tests.