PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 44
(Child restraint systems)

Transmitted by the Expert from Sweden

Note: The text reproduced below was prepared by the expert from Sweden in order to introduce a clear definition of the floor pan in the test trolley. It is based on the text of a document distributed without a symbol (informal document No. 24) during the twenty-sixth session of GRSP (TRANS/WP.29/GRSG/26, para. 52.)

Note: This document is distributed to the Experts on General Safety Provisions only.
A. INTRODUCTION

The introduction of two-point ISOFIX child restraint systems will likely be complemented with either top-tether or a supporting leg, in order to qualify for universal approval.

With this proposal a clear definition of the floor pan in the test trolley is introduced in ECE Regulation No. 44 in order to sufficiently test and enable the use of a supporting leg in conjunction with the ISOFIX child restraint systems.

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B. PROPOSAL

Annex 6,

Insert new paragraphs 1.2. to 1.2.6., to read:

"1.2. Trolley floor pan

1.2.1. The floor pan of the test trolley shall be constructed of a flat sheet of metal of uniform thickness and material, which is designed to withstand a surface pressure of 3 kN per square centimetre without permanent deformation occurring.

1.2.2. It shall withstand a vertical point load of 5 kN without permanent deformation occurring.

1.2.3. It shall be rigidly bolted or seam welded to the corresponding trolley structure.

1.2.4. It shall have a surface irregularity not exceeding Ra 6.3.

1.2.5. A beam of metal L-profile shall be fitted transversely to the trolley floor pan 700 mm ahead of line Cr in order to act as a rest for the supporting leg and simulate the front seat rear structure. The flat surface of the L-profile shall be facing the child restraint system. (See figure 2 to this annex.)

The L-profile beam shall have a length of 500 mm ± 0.5 mm, width of 40 m ± 0.5 mm, height of 40 mm ± 0.5 mm, and a minimum thickness of 5 mm.

The L-profile beam shall be rigidly welded or bolted to the trolley floor pan. If bolts are used, this shall be done with at least 3 M10 bolts.

1.2.6. The floor pan shall not be designed to transfer any significant loads from the child restraint system anchorage."

Insert a new figure 2, as follows:

"Figure 2
L-profile beam location"

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C. JUSTIFICATION

This definition will set a clear and legible standard for the design of the trolley floor pan, which will enable manufacturers, test facilities and certification authorities to use the same parameters in the process of designing, testing and certification of child restraint systems.

The floor pan will improve the trolley since it will more accurately simulate an actual vehicle structure.