Transmitted by the expert from France

Informal document **GRSP-51-36**
(51st GRSP, 20 – 25 May 2012,
agenda item 14)

Regulation No. 44 (Child Restraint Systems)

Proposal for Supplement 6 to the 04 series of amendments

Submitted by the expert from France*

The text reproduced below was prepared by the expert from France to prevent users, or siblings from unintentionally disengaging ISOFIX child restraint systems from their anchor points. It is based on formal document ECE/TRANS/WP.29/GRSP/2012/5 (see ECE/TRANS/WP.29/GRSP/50, para. 28). The modifications to the text of the original document are marked in bold or cross out.

* 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

Insert a new paragraph 7.2.7., to read:

"7.2.7. ISOFIX attachment shall have a locking mechanism which complies with the requirements a or b as follows:

(a) Release of the locking mechanism **of the complete seat,** requires 2 consecutive actions, the first of which should be maintained while the second is carried out; or

(b) The release force of locking mechanism ~~**A complete seat** ISOFIX attachment mechanism, which has not been previously subjected to a load, shall be used for a no load opening test. The force needed to open the ISOFIX attachment when it is not under load~~ shall be ~~in the range of~~ at least ~~40N~~ **50N** in the tests prescribed in paragraph 8.2.9. below."

*Insert new paragraphs 8.2.9. to **8.2.9.4.***, to read:

~~"8.2.9. ISOFIX attachment opening test under zero load~~

"8.2.9. The complete seat, or the component with ISOFIX attachment (e.g. ISOFIX base) if it has a release button, is attached rigidly to a test rig in such a way that ISOFIX connectors are vertically aligned as shown in Figure 4a. A 6 mm diameter bar, 350 mm long, shall be attached to the ISOFIX connectors. A mass of 5 kg shall be attached to the extremities of the bar.

8.2.9.1. ~~**The Isofix attachment mechanism shall be locked and be free of load.**~~ An **opening force** ~~load~~ shall be applied ~~at a speed of 400 ± 20 mm/min~~ to the release button or handle along a fixed axis running parallel to the initial direction of motion of the button/handle; the geometric centre applies to that part of the surface of the ISOFIX attachment to which the release pressure is to be applied. The ISOFIX attachment shall be secured against a rigid ISOFIX anchor during the application of the opening force.

8.2.9.2. The ISOFIX attachment opening force shall be applied, using a dynamometer or similar device in**,** the normal manner and direction as indicated in the Manufacturers user manual. The contact end shall be a polished metal hemisphere with radius 2.5 ± 0.1 mm for a release button or a polished metal hook with a radius of 25 mm.

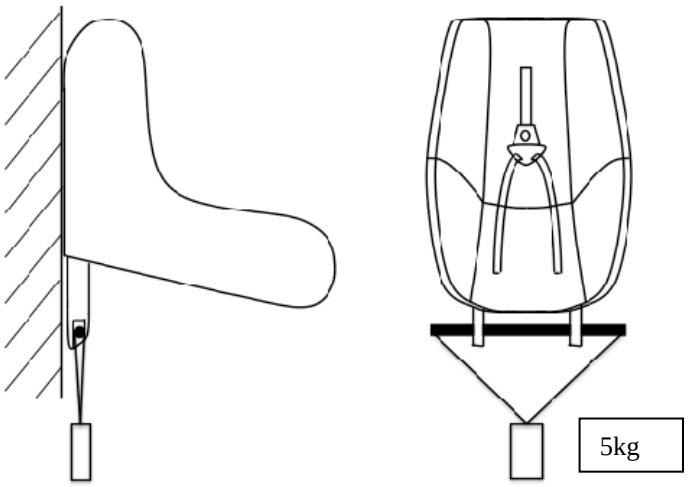
8.2.9.3 If the design of the child restraint does not allow to apply the procedure described in 8 2 9 1 and 8 2 9 2, a similar procedure can be used.

8.2.9.4. The ISOFIX attachment opening force shall be measured and any failure noted. **The value of the force shall be noted when one of the connectors will disengage**

8.2.9.4. ~~An ISOFIX attachment assembly which has not previously been subjected to a load shall be mounted and positioned under a "no load" condition.~~ **The test shall be done on a new seat as well as after 2000 cycles according to paragraph 7.2.6.** "

~~8.2.9.5. The ISOFIX attachment opening force shall be measured."~~

Figure 4a



II. Justification

1. In the current text of UN Regulation No. 44, there are no requirements preventing users, or siblings from unintentionally disengaging ISOFIX child restraint systems from their anchor points.

2. The current proposal is in line with requirements of TR13387 General and Safety Guidelines for Child Care Articles defining the necessity of two separate actions to release a locking mechanism and EN716-1 2008 Standard about Children's cot and folding cot for domestic use which define a minimum force level to prevent a Child from operating a release mechanism.