

## **Japan's Position on Proposed Adoption of ISOFIX Systems into ECE Regulations**

Transmitted by the Expert from Japan

### 1. Concerning TRANS/WP29/GRSP/2001/16 rev1

**6.3.1** - In addition to the specification of dimensions, an upper limit needs to be set on mass or weight (for example, no more than 15 kg). Furthermore, it is necessary to stipulate that those child restraint systems belonging to weight groups 2 or 3 and using ISOFIX anchorages must satisfy the definition of a partial restraint system set forth in ECE R44, paragraph 2.1.3.1.

Japan proposes: insert new paragraphs 6.3.1.1 as follows.

"6.3.1 .1.Mass

The mass of an ISOFIX child restraint system of universal category and of mass group 0, 0+ 1 and 1+ shall not exceed 15 kg."

Justification - If the child restraint system is too heavy, the anchorages may break down. ISO 13216-1 assumes child restraint systems for children of up to 22 kg in weight. If a child is heavier than 22 kg (mass groups 2 and 3), the child must be partially supported by the seat belt. Since this mass limit has been adopted into the Draft Revision of ECE R14, paragraph 5.2.2.6, it should also be reflected in ECE R44.

$$\begin{aligned} & \{ \text{Child mass (22kg)} + \text{CRS mass (15kg)} \} \times 20G \text{ (vehicle deceleration)} \\ & = 7.25\text{kN} \\ & < 8\text{kN (anchorage strength standard of ECE R14)} \end{aligned}$$

### **6.3.2.**

Japan proposes: to add minimum dimensional specification for the ISO-FIX attachment, so as to be receptive to the ISOFIX automatic child restraint system detection. (See attached – “ISO/DIS 13216-1 French proposal for the ad hoc group in tolerances”)

Justification - ISO is reportedly studying an optimal opening shape for CRF connectors. If this shape is deemed to increase convenience for vehicle users, it will be worth adopting.

**6.3.2.3** - In reference to "... there is a clear indication that all ISOFIX attachments are fully latched",

Japan proposes: this phrase be amended as follows.

"... there is a clear indication that each of the ISOFIX attachments is completely latched with the corresponding anchorage".

Justification - By providing each attachment with an independent indication of complete latching, users will become capable of confirming the complete latching of the attachments and the anchorages.

France's proposed paragraph may prohibit the many existing ISOFIX child restraint systems in which an indication (latching sound) is generated when the attachment of only one side has been latched.

In the case of the existing ISOFIX child restraint systems in which the base section equipped with the attachments and the shell section of the child restraint system are separate from each other, two different sets of indications are currently provided to the attachments for the ISOFIX anchorages and to the attachments for the base section.

These existing structures have proved their effective safety, and should be permitted to continue existing in the market. Similarly, although there is currently a structure in which the indication of the base section becomes concealed when the base section is latched with the shell section, this structure has also proved its safety and should be allowed to exist in the market.

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