

Proposal for amendments to Draft new Regulation on uniform provisions concerning the approval of enhanced Child Restraint Systems used onboard of motor vehicles

I. Proposal

On paragraph 1, amend to read:

This Regulation applies (in its Phase 1) to Integral Universal ISOFIX Child Restraint Systems (**i**-Size) **and Integral “Specific vehicle Isofix” Child Restraint systems** for child occupants of power driven vehicles.

On paragraph 2.7, amend to read:

"Specific vehicle ISOFIX or ‘built in’" is an indication for the system of connecting a **category of** Child Restraint System **connecting** to specific vehicle types. All vehicle anchorages are to be approved according to Regulation No. 14. It is also an indication for Child Restraint Systems including dashboard as a vehicle contact zone.

On paragraph 2.54, amend to read:

"ISOFIX position" means a location which allows for the installation of:

- (a) either an universal ISOFIX Child Restraint System as defined in Regulation No. 44;
- (b) or a “specific vehicle or a “built in” ISOFIX” Child Restraint System as defined in Regulation No. 44 **or in this Regulation**
- (c) or **i**-Size Child Restraint System in specific ISOFIX seating positions specified by vehicle manufacturer according to Regulation 16.

Insert new paragraph 3.2.2 to read

- 3.2.2. The applicant shall indicate the kind of application:**
- a. Application for a **i**-Size Integral Universal ISOFIX child restraint systems, or
 - b. Application for a “Specific vehicle ISOFIX” child restraint systems

Insert new paragraph 3.2.3 to read

- 3.2.3. For CRS tested on the test trolley in a vehicle body shell in conformity with paragraph 7.1.3.2. or in a complete vehicle in conformity with paragraph 7.1.3.2., the applicant needs to submit documentation (drawings and/or pictures) regarding the car or the ISOFIX seating position and the relevant car environment for which the manufacturer likes to obtain a “Specific vehicle ISOFIX” approval.**

- 3.2.6. In case of a “Specific vehicle ISOFIX” application when tests are performed in a vehicle body shell, a body of the vehicle, including adult seats and the relevant parts of the car environment shall be available.**

Insert new paragraph 4.8 to read

- 4.8. The “Specific vehicle ISOFIX” child restraint system must have a permanently attached label, visible to someone installing the child restraint system in the car, containing the following information:**

THIS IS A "SPECIFIC VEHICLE ISOFIX" CHILD RESTRAINT SYSTEM



On paragraph 5.4.2.1., amend to read

- 5.4.2.1. The word(s) "~~Integral~~ **Ⓢ**-Size" or [~~integral~~ **Specific vehicle ISOFIX**"] depending on the category of Child Restraint System;

On paragraph 6.1.1., amend to read

- 6.1.1. The use of Child Restraint Systems in the **Ⓢ**-Size category is permitted in **Ⓢ**-Size ready vehicles, if the Child Restraint Systems are fitted in conformity with the vehicle manufacturer's instructions.
The use of Child Restraint Systems in the ~~Integral~~ **"Specific vehicle ISOFIX"** category is permitted in all ISOFIX positions and also in the luggage area, if the restraints are fitted in conformity with the vehicle manufacturer's instructions.

On paragraph 6.1.2.2., amend to read

- 6.1.2.2. For "~~Integral~~ **Specific vehicle ISOFIX**" category: this shall be by means the ISOFIX attachments designed by the manufacturer of the Restraint System as specified in this regulation, secured to ISOFIX anchorage system as designed by the vehicle manufacturer as specified in ECE Regulations No. 14.

On paragraph 6, Table 1, amend to read

Table 1

Possible configurations for type approval

| | <i>Orientation</i> | <i>Category</i> | |
|-----------------|----------------------------|--------------------|--------------------------------------|
| | | Ⓢ -Size CRS | "Specific Vehicle ISOFIX" CRS |
| | Lateral facing (Carry-cot) | A | A |
| INTEGRAL | Rearward facing | A | A |
| | Forward facing | A | A |

Renumber item (c) of paragraph 6.3.2.2. in item (d)

On paragraph 6.3.2.3; amend to read

- 6.3.2.3. **Mass**
The mass of an integral ISOFIX Child Restraint System (**Ⓢ**-Size Child Restraint System included) combined with the mass of the largest child intended to use the Child Restraint System shall not exceed 33kg. **This mass is also applicable for "Specific vehicle ISOFIX" Child Restraint Systems.**

On paragraph 6.6.4.1.2., amend to read

- 6.6.4.1.2. Child Restraint Systems of the ~~Integral~~ **"Specific vehicle ISOFIX"** category shall be tested with each vehicle model for which the Child Restraint System is intended. The Technical Service responsible for conducting the test may reduce the number of vehicle models tested if they do not differ greatly in the aspects listed in paragraph 6.6.4.1.2.3. The Child Restraint System may be tested in one of the following ways:

On paragraph 6.6.4.1.2.1., amend to read

- 6.6.4.1.2.1. **Rearward facing child restraint systems (ISO/R3), Child Restraint System in conformity with paragraphs 2.5 and 6.3. of this regulation and which fit in an envelope defined in R16 annex 17 appendix 2, on the test trolley by means of the test bench prescribed in Annex 6 and in conformity with paragraph 7.1.3.1. or in a vehicle body shell in conformity with paragraph 7.1.3.2.**

On paragraph 6.6.4.1.2.2., amend to read

- 6.6.4.1.2.2. **Forward facing child restraint systems (ISO/F2 and ISO/F3), For Child Restraint System which are not in conformity with paragraphs 2.5 and 6.3 of this regulation (for example CRS using no anti-rotation device or using additional anchorages) or do not fit in any envelope defined in R16 annex 17 appendix 2 on the test trolley in a vehicle body shell in conformity with paragraph 7.1.3.2. or in a complete vehicle in conformity with paragraph 7.1.3.3.**

On paragraph 6.6.4.1.4., amend to read

- 6.6.4.1.4. If an ~~Integral~~ **"Specific vehicle ISOFIX"** Child Restraint System is installed in the area behind the rearmost forward facing adult seat positions (for example, the luggage area), one test with the largest dummy/dummies, as allowed by the Child Restraint System, on a complete vehicle as prescribed in paragraph 7.1.3.3.3. shall be performed. The other tests, including the conformity of production, may be done as prescribed in paragraph 7.1.3.3.2., at the request of the manufacturer.

On paragraph 6.6.4.4.2., amend to read

- 6.6.4.4.2. Child restraint systems of the "~~Ⓢ~~-Size **Specific vehicle ISOFIX"** ~~of the category forward facing child restraint systems (ISO/F2 and ISO/F3)~~—when tested in a complete vehicle or a vehicle body shell, the head shall not come into contact with any part of the vehicle. However, if there is contact, the head impact criterion HIC and the Head Acceleration 3ms shall be used as assessment criteria. In tests with complete vehicles it shall be possible to remove the manikins from the child restraint system without the use of tools after the test.

Insert new items on paragraph 7.1.3. to read

- 7.1.3. Dynamic testing for frontal, rear and lateral impact
- (a) **Frontal impact tests shall be performed on "Ⓢ-Size" (Integral Universal ISOFIX Child Restraint Systems) and "Specific vehicle ISOFIX" child restraint systems.**
- (b) **Rear impact test shall be performed on Ⓢ-Size and "Specific Vehicle ISOFIX" Rearward facing Child Restraint Systems**
- (c) **Lateral impact test are performed only on the test bench for Ⓢ-Size" Integral Universal ISOFIX Child Restraint Systems and "Specific vehicle ISOFIX" child restraint systems**
- 7.1.3.1 Testing using the trolley and test bench
....

On paragraph 7.1.3.6.3., item (c), amend to read

- (c) In the case of "~~Integral~~ **Specific vehicle ISOFIX"** category, the support leg shall be adjusted as specified by the child restraint system manufacturer.

On paragraph 14.2.2., amend to read

- 14.2.2. for "~~Size~~ ⁺Specific vehicle ISOFIX" category Child Restraint Systems information on the applicable vehicle shall be clearly visible at the point of sale without removing the child restraint from its packing;

II. Justification

Current draft new regulation on uniform provisions concerning the approval of enhanced Child Restraint Systems used onboard of motor vehicles described tests and criteria to assess Isize products.

Isize products will be Integral Universal ISOFIX Child Restraint Systems able to fit in F2X or R2 envelope defined in regulation 16 annex 17 appendix 2.

Child Restraint systems, equipped with two lower attachments as defined in 2.11.2 and an anti-rotation device as defined in 2.12, whatever the R16 envelope they fit, could be subjected to dynamic tests as specified in 7.1.3.1.

For Child Restraint Systems, not fitting any R16 envelope, or not using an anti-rotation device or using additional anchorages, must be subjected to dynamic tests in a complete vehicle tested or on the test trolley in a vehicle body shell