Proposal for the 08 series of amendments to Regulation No. 14 (Safety-belt anchorages)

Submitted by the expert from the International Organization of Motor Vehicle Manufacturers *

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA). The proposal aims at removing all ISOFIX requirements from Regulation No. 14 and transferring them into a separate new Regulation (ECE/TRANS/WP.29/GRSP/2017/7), as explained in the justification. The modifications to the current text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2016–2017 (ECE/TRANS/254, para. 159 and ECE/TRANS/2016/28/Add.1, cluster 3.1), 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

Title, amend to read:

"Uniform provisions concerning the approval of vehicles with regard to safety-belt anchorages, ISOFIX anchorages systems, and ISOFIX top tether anchorages"

List of annexes, delete annexes 9 and 10

Text of the Regulation,

Paragraph 1., amend to read:

"1. Scope

This Regulation applies to:

(a) Vehicles of categories M and N with regard to their anchorages for safety-belts intended for adult occupants of forward-facing or rearward-facing or side-facing seats;

(b) Vehicles of category M with regard to their ISOFIX anchorages systems and their ISOFIX top tether anchorages intended for child restraint systems. Other categories of vehicles fitted with ISOFIX anchorages have also to comply with the provisions of this Regulation.

(c) Vehicles of any category with regard to their i-Size seating positions, if any are defined by the vehicle manufacturer."

Paragraph 2.2., amend to read:

"2.2. "Vehicle type" means a category of power-driven vehicles, which do not differ in such essential respects as the dimensions, lines and materials of components of the vehicle structure or seat structure to which the safety-belt anchorages and the ISOFIX anchorages systems and ISOFIX top tether anchorages if any are attached and, if the anchorages strength is tested according to the dynamic test, as well as the vehicle floor strength when tested according to the static test in case of i-Size seating positions, the characteristics of any component of the restraint system, especially the load limiter function, having an influence on the forces applying to the safety-belt anchorages."

Paragraphs 2.16. to 2.32., shall be deleted.

Paragraphs 3.1. to 3.3., amend to read:

"3. Application for approval

3.1. The application for approval of a vehicle type with regard to the belt anchorages, the ISOFIX anchorages systems and the ISOFIX top tether anchorages and i-Size seating positions, if any shall be submitted by the vehicle manufacturer or by his duly accredited representative.

3.2. It shall be accompanied by the under mentioned documents in triplicate and by the following particulars:

1 As defined in the Consolidated resolution on the Construction of vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.4, para.2.
3.2.1. Drawings of the general vehicle structure on an appropriate scale, showing the positions of the belt anchorages, of the effective belt anchorages (where appropriate), of the ISOFIX anchorages systems, of ISOFIX top tether anchorages if any and in case of i-Size seating positions, the vehicle floor contact surface and detailed drawings of the belt anchorages, of the ISOFIX anchorages systems if any, of the ISOFIX top tether anchorage if any, and of the points to which they are attached and in case of i-Size seating positions, the vehicle floor contact surface."

3.2.2. A specification of the materials used which may affect the strength of the belt anchorages, of the ISOFIX anchorages systems and ISOFIX top tether anchorages if any and in case of i-Size seating positions, the vehicle floor contact surface;

3.2.3. A technical description of the belt anchorages, of the ISOFIX anchorages systems and ISOFIX top tether anchorages if any;

3.2.4. In the case of belt anchorages, of the ISOFIX anchorages systems and of ISOFIX top tether anchorages if any affixed to the seat structure:

3.2.4.1. Detailed description of the vehicle type with regard to the design of the seats, of the seat anchorages and of their adjustment and locking systems;

3.2.4.2. Drawings, on an appropriate scale and in sufficient detail, of the seats, of their anchorage to the vehicle, and of their adjustment and locking systems.

3.2.5. Evidence that the safety-belt or the restraint system used in the anchorages approval test complies with Regulation No. 16, in the case where the car manufacturer chooses the alternative dynamic strength test.

3.3. At the option of the manufacturer, a vehicle representative of the vehicle type to be approved or the parts of the vehicle considered essential for the belt anchorages test, for the ISOFIX anchorages systems and for ISOFIX top tether anchorages test if any and in case of i-Size seating positions, the vehicle floor contact surface test, by the technical service conducting approval tests shall be submitted to the service.

Paragraph 4.2., amend to read:

"4.2. An approval number shall be assigned to each type approved. Its first two digits (at present 07 08, corresponding to the 07 08 series of amendments) shall indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party may not assign the same number to another vehicle type as defined in paragraph 2.2. above."

Paragraphs 5.2.2. to 5.2.5.3., shall be deleted.

Paragraph 5.3., amend to read:

"5.3. Minimum number of belt and ISOFIX anchorages to be provided"

Paragraphs 5.3.8. to 5.3.8.10., shall be delete.

Paragraph 5.3.9., renumber as paragraph 5.3.8.

Paragraphs 6.2. and 6.2.1., amend to read:

"6.2. Securing the vehicle for seat belt anchorages tests and for ISOFIX anchorages tests"
6.2.1. The method used to secure the vehicle during the test shall not be such as to strengthen the seat belt anchorages or the ISOFIX anchorages and their anchorage area or to lessen the normal deformation of the structure."

Paragraphs 6.6. to 6.6.5.1., shall be deleted.

Paragraph 9.1., amend to read:

"9.1. Every vehicle bearing an approval mark as prescribed under this Regulation shall conform to the vehicle type approved with regard to details affecting the characteristics of the safety-belt anchorages and the ISOFIX anchorages system and ISOFIX top tether anchorage."

Paragraph 10.1., amend to read:

"10.1. The approval granted in respect of a vehicle type pursuant to this Regulation may be withdrawn if the requirement laid down in paragraph 9.1. above is not complied with or if its safety-belt anchorages or the ISOFIX anchorages system and ISOFIX top tether anchorage failed to pass the checks prescribed in paragraph 9. above."

Paragraph 12., amend to read:

"12. Production definitively discontinued

If the holder of the approval completely ceases to manufacture a type of safety-belt anchorages or a type of ISOFIX anchorages system and ISOFIX top tether anchorage approved in accordance with this Regulation, he shall so inform the authority which granted the approval. Upon receiving the relevant communication that authority shall inform thereof the other Contracting Parties to the 1958 Agreement, which apply this Regulation by means of a communication form conforming to the model in Annex 1 to this Regulation."

Insert new paragraphs 14.20 to 14.22., to read:

"14.20. As from the official date of entry into force of the 08 series of amendments, no Contracting Party applying this Regulation shall refuse to grant approvals or refuse to accept type-approvals under this Regulation as amended by the 08 series of amendments.

14.21. Contracting Parties applying this Regulation shall not refuse to grant extensions of type approvals for existing types on the basis of the provisions valid at the time of the original approval.

14.22. Contracting Parties that apply this Regulation after the date of entry into force of the 08 series of amendments are not obliged to accept type-approvals granted in accordance with any of the preceding series of amendments to this Regulation."

Annex 1, amend to read:

"Communication

(Maximum format: …

....

of a vehicle type with regard to safety-belt anchorages and ISOFIX anchorages systems and ISOFIX top tether anchorage and ISOFIX anchorages systems and 1 Size seating positions if any pursuant to Regulation No. 14
..."

Annex 1,
Item 7, shall be deleted.
Item 8 to 20, renumber as item 7 to 19.
Item 20 (former), renumber as item 19 and amend to read:

"19. The following documents, filed with the Type Approval Authority which has granted approval and available on request are annexed to this communication:

Drawings, diagrams and plans of the belt anchorages, ISOFIX anchorages systems, of the top tether anchorages if any, vehicle floor contact surface of i-Size seating positions if any, and of the vehicle structure;

Photographs of the belt anchorages, of the ISOFIX anchorages systems, of the top tether if any, vehicle floor contact surface of i-Size seating positions if any, and of the vehicle structure;

Drawings, diagrams and plans of the seats, of their anchorage on the vehicle, of the adjustment and displacement systems of the seats and of their parts and of their locking devices;

Photographs of the seats, of their anchorage, of the adjustment and displacement systems of the seats and of their parts, and of their locking devices."

Annex 2, amend to read:

"Arrangements of the approval mark

Model A
(see paragraph 4.4. of this Regulation)

\[\text{Arrangements of the approval mark} \]

The above approval mark affixed to a vehicle shows that the vehicle type concerned has, with regard to safety-belt anchorages, been approved in the Netherlands (E 4), pursuant to Regulation No. 14, under the number 02439 082439. The first two digits of the approval number indicate that Regulation No. 14 already included the 02 08 series of amendments when the approval was given.
Model B
(see paragraph 4.5. of this Regulation)

The above approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in the Netherlands (E 4) pursuant to Regulations Nos. 14 and 24*. (In the case of the latter Regulation the corrected absorption co-efficient is 1.30 m⁻¹). The approval numbers indicate that on the dates on which these approvals were granted, Regulation No. 14 included the 02 08 series of amendments and Regulation No. 24 was in its 03 series of amendments.

* The second number is given merely as an example.

Annexes 9 and 10, shall be deleted.

II. Justification

1. During the development of the International Whole Vehicle Type Approval (IWVTA) and of draft UN Regulation No. 0, it became clear that, while the Australian requirements (ADR) for adult safety belt anchorages are identical to those of UN Regulation No. 14, the ADR requirements for Child Restraint Systems anchorages differ substantially. As a consequence, Australia currently cannot accept UN Regulation No. 14 to be included in UN Regulation No. 0/IWVTA.

2. In informal document GRSP-58-13, the expert from Australia therefore listed the revisions needed to UN Regulation No. 14 in order to align the UN Regulation with the Australian ADR.

3. As indicated in GRSP-58-13, Australia also referred to an alternative solution (recognised as being "the simplest option"), namely to separate the ISOFIX anchorages from UN Regulation No. 14 and to transfer them from UN Regulation No. 14 to a new separate UN Regulation. By doing so, UN Regulation No. 14 would only address the adult safety belt anchorages and could be included in Annex 4 of UN Regulation No. 0. Conversely, the new UN Regulation on ISOFIX anchorages would not be included in Annex 4 of UN Regulation No. 0.

4. As noted in GRSP-58-13, the solution of "splitting" would allow Australia to apply the amended UN Regulation No. 14, while maintaining its own child restraint systems requirements. The Working Party on Brakes and Running Gear (GRRF) already performed similar work for the Electronic Stability Control (ESC), Brake Assist and Tyre Pressure Monitoring Systems (TPMS) with the understanding that the splitting of UN Regulation No. 13H would be without technical changes to the existing requirements in order to ensure a smooth administrative transition.

5. The attached document therefore aims at removing all ISOFIX anchorages issues from UN Regulation No. 14, such that the UN Regulation would only address adult safety-belt anchorages. The ISOFIX anchorage requirements would be transferred to a separate new UN Regulation, as proposed in the parallel OICA proposal (ECE/TRANS/WP.29/GRSP/2017/8).
6. OICA also wishes to stress the following points to highlight the proposed approach of developing [08] series of amendments to UN Regulation No. 14:

7. Any Contracting Party to the 1958 Agreement has the possibility to apply a UN Regulation as from a certain version only and refuse approvals granted to the previous series. In this particular case, Contracting Parties (e.g. Australia) can accede to Regulation No. 14, 08 series of amendments but refuse UN Regulation No. 14, 07 series of amendments (or previous) approvals and keep their own requirements for CRS anchorages, thereby refusing the ISOFIX anchorages currently contained in UN Regulation No. 14, 07 series of amendments.

8. All Contracting Parties to the 1958 Agreement will have the choice to apply or not the new UN Regulation on ISOFIX anchorages. OICA understands that Australia would not apply the new UN Regulation on ISOFIX anchorages:

9. Other Contracting Parties to the 1958 Agreement will have choice to apply:
   (a) UN Regulation No. 14, 07 series of amendments, as is the case today;
   (b) UN Regulation No. 14, 08 series of amendments and the new UN Regulation on ISOFIX: the splitting into UN Regulation No. 14, 08 series of amendments and the new UN Regulation does not entail any technical changes compared to Regulation No. 14, 07 series of amendments and a simple administrative act will be sufficient.