Proposed amendments to document ECE/TRANS/WP.29/2010/120 (ISOFIX anchorages)

The text reproduced below was prepared by the experts from Japan and from Germany regarding ISOFIX anchorages. It amends document ECE/TRANS/WP.29/2010/120 and supersedes document ECE/TRANS/WP.29/GRSP/48-32.

The modifications to the current text of the regulation are marked in **bold** characters or marked as strikethrough.

A. PROPOSAL

<u>Paragraph 5.3.8.3.</u>, amend to read (Paragraph 5.3.8.3 of current version of regulation 14 remains unchanged with this proposal):

- "5.3.8.3. Notwithstanding paragraph 5.3.8.1. at least one of the two ISOFIX positions systems shall be installed at the second seat row. This does not apply to vehicles of category M_1 -with:
 - (a) Not more than two passenger doors and
 - (b) A rear designated seating position for which interference with transmission and/or suspension components prevents the installation of ISOFIX anchorages according to the requirements of paragraph 5.2.3 and
 - (c) Having a Power to mass ratio index (PMR) exceeding 140 according to the definitions within Regulation No. 51, and
 - (d) Having an engine developing a maximum power greater than 200 kW. Such a vehicle needs to have only one ISOFIX anchorage system at a front passenger designated seating position [combined with an airbag deactivation device.

Insert new paragraph 5.3.8.4.:

- "5.3.8.4. Notwithstanding paragraph 5.3.8.1. vehicles of category M1 need to have only one ISOFIX position system for vehicles with:
 - (a) Not more than two passenger doors and
 - (b) A rear designated seating position for which interference with transmission and/or suspension components prevents the installation of ISOFIX anchorages according to the requirements of paragraph 5.2.3 and
 - (c) Having a Power to mass ratio index (PMR) exceeding 140 according to the definitions within Regulation No. 51, and with the definition of the Power Mass Ratio (PMR):

PMR = $(Pn / m_t) * 1000 \text{ kg/kW}$ where:

- Pn: maximum (rated) engine power expressed in $kW^{\underline{1}}$
- m_{ro}: mass of a vehicle in running order expressed in kg
- $m_t = m_{ro}$ (for vehicles of category M_1)

and

(d) Having an engine developing a maximum (rated) engine power greater than 200 $\rm kW^{\underline{1}}.$

Such a vehicle needs to have only one ISOFIX anchorages system and an ISOFIX top tether anchorage at a front passenger designated seating position [combined with an airbag deactivation device (if that seating position is fitted with an airbag) and a caution label indicating that there is no ISOFIX position system available at the second seat row."

Insert footnote:

1/ (Rated) engine power means the engine power expressed in kW (ECE) and measured by the ECE method pursuant to Regulation No. 85.

Renumber former paragraphs 5.3.8.4. to 5.3.8.6. accordingly.

B. JUSTIFICATION

The current proposal provides a precise wording on the requirements on the installation of a complete ISOFIX system at the front passenger seat to avoid interpretation on the definitions of an ISOFIX anchorage system and an ISOFIX system. The expressions used are in line with the definitions provided in Regulation 14.

By putting the requirement in a new paragraph, any potential misinterpretation on the number of required ISOFIX positions in vehicles of category M1, fulfilling the new paragraph 5.3.8.4 a) to e), is avoided.

To have the information available for the customer, the vehicle manufacturer shall indicate the non-installation of an ISOFIX system at the second seat row by a caution label.

The definition of the PMR (Power Mass Ratio) is taken from Regulation 51 and inserted in the subparagraph item c). It was already presented to GRSP in document ECE/TRANS/WP29/GRSP/46-16.

For the maximum (rated) engine power a footnote was inserted referencing to the Regulation No. 85.