Transmitted by the experts of OICA

Informal document GRBP-70-06

(70th GRBP, 11-13 September 2019,

 agenda item 4)

Proposal for Amendment to GRBP/2019/13

on Supplement 6 to the 03 series of amendments of UN Regulation N°51

The proposed amendments are marked in bold for new or strikethrough for deleted characters.

I. Proposal

*Main Body, paragraph 2.24. Table of symbols (Excerpt), amend to read*

**"**2.24. Table of Symbols

 …

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| gear ratio i | — | Annex 3 | 3.1.2.1.4.1. | **~~first of two gear ratios for use in the vehicle test~~****gear ratio which provides an acceleration within the 5 per cent tolerance of the reference acceleration awot\_ref or greater than the reference acceleration awot\_ref** |
| gear ratio i+1 | — | Annex 3 | 3.1.2.1.4.1. | second of two gear ratios, with an **~~engine speed~~ acceleration** lower than gear ratio i |
| **gear ratio i+2, i+3, …** | **—** | **Annex 3** | **3.1.2.1.4.1.** | **gear ratios selectable for the pass-by test of Annex 3, if gear ratio i and gear ratio i+1 exceed an acceleration of 2.0 m/s²** |
| k | — | Annex 3 | 3.1.2.1.4.1. | gear ratio weighting factor; value to be reported and used for calculations to the second decimal place |

…”

*Annex 3, paragraph 3.1.2.1.1.,* amend to read:

**"**3.1.2.1.1. Power to mass ratio index (PMR)

 PMR is defined as follows:

 PMR = (Pn / mro) \* 1000 kg/kW, where Pn is measured in kW and mro is measured in kg **and ~~determined~~** **defined** according to **~~paragraph 2.2.1. of this Annex~~** **paragraph 2.4 of the main body**.

 If two or more sources of propulsive power operate at the conditions of test specified in paragraph 3.1.2.1 of Annex 3 to this Regulation, the total engine net power, Pn, shall be the arithmetic sum of parallel propulsive engines on the vehicle. Applicable parallel propulsive engines are those power sources which provide forward motion to the vehicle in combination at the conditions of test specified in paragraph 3.1.2.1. of Annex 3 to this Regulation. Specified power for non-combustion engines shall be the power stated by the manufacturer.

 The PMR with no dimension is used for the calculation of acceleration."

II. Justification

2.24.: gear ratio i+1 has per definition an acceleration and not an engine speed lower than gear ratio i.

Missing symbols coming with supplement 3, have been added.

3.1.2.1.1.: The actual wording causes ambiguities as it is not clear, what is intended with the reference to paragraph 2.2.1. of Annex 3. It is proposed to make reference to paragraph 2.4, the definition of the mass in running order mro.

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