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Item 4 of the provisional agenda

MOTORCYCLE BRAKING

Proposal for amendments to global technical regulation No. 3

Submitted by the expert from Canada *

The text reproduced below was prepared by the expert from Canada to correct global technical regulation No. 3 on motorcycle brake systems. It is based on informal document GRRF-66-15. The modifications to the existing text of the regulation are marked in bold characters.

* In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance performance of vehicles. The present document is submitted in conformity with that mandate.

A. PROPOSAL

Paragraph 3.3.1., amend to read:

"3.3.1. MFDD (Mean fully developed deceleration):

Calculation of MFDD:

$$d_m = \frac{V_b^2 - V_e^2}{25.92 \cdot (S_e - S_b)} \quad \text{m/s}^2$$

Where:

- d_m = mean fully developed deceleration
- V_b = vehicle speed at 0.8 V_1 in km/h
- V_e = vehicle speed at 0.1 V_1 in km/h
- S_b = distance travelled between V_1 and V_b in metres
- S_e = distance travelled between V_1 and V_e in metres"
- V_1 = **vehicle speed when rider actuates the control"**

Paragraph 4.1.1.3., amend to read:

"4.1.1.3. Measurement of PBC:

The PBC is measured as specified in national or regional legislation using either:

- (a) The American Society for Testing and Materials (ASTM) E1136 – **93 (Reapproved 2003)** standard reference test tyre, in accordance with ASTM Method E1337-90 (**Reapproved 2002**), at a speed of 40 mph ~~without water delivery~~; or
- (b) ..."

B. JUSTIFICATION

Paragraph 3.3.1.

The value of V_1 was inadvertently omitted in the original text. This proposal is aimed at clarifying the provisions of gtr No. 3, by re-establishing the value of V_1 . This is consistent with the current text of Regulation No. 78.

Paragraph 4.1.1.3.

This proposal is aimed at clarifying the provisions of gtr No. 3. Currently, paragraph 4.1.1.3.(a) requires that the peak braking coefficient (PBC) be evaluated utilizing ASTM Method E1337-90, at a speed of 40 mph "without water delivery". However, the motorcycle brake performance requirements may be assessed on dry or wet road surfaces. As would be expected, the test surface PBC must be evaluated for the surface on which the testing is conducted, whether dry or wet. We are therefore proposing to remove the phrase "without water delivery" to avoid this ambiguity. Furthermore, specific dates are added to the referenced ASTM documents to assure the use of the proper versions.
