Proposed amendments to Global Technical Regulation No. 3 on Motorcycle Brake Systems

A. PROPOSAL

Paragraph 3.3.1., amend to read (new text in bold)"

"3.3.1. MFDD (Mean fully developed deceleration):

Calculation of MFDD:

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

Where:
- \( d_m \) = mean fully developed deceleration
- \( V_1 \) = vehicle speed when rider actuates the control
- \( V_b \) = 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"

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 standard reference test tyre, in accordance with ASTM Method E1337-90, 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 from 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 UNECE 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 remove this ambiguity.