Proposal for Supplement 3 to the 04 series of amendments to Regulation No. 41 (Noise emissions of motorcycles)

Submitted by the Working Party on Noise*

The text reproduced below was adopted by the Working Party on Noise (GRB) at its sixty-first session (ECE/TRANS/WP.29/GRB/59, paras. 6 and 17). It is based on ECE/TRANS/WP.29/GRB/2015/2 and Corr.1 and Annex VIII to ECE/TRANS/WP.29/GRB/59. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration.

* In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, programme activity 02.4), 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.
Paragraph 2.13., amend to read:

“2.13. …

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Units</th>
<th>Explanation</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>min(^{-1})</td>
<td>engine speed</td>
<td>…</td>
</tr>
</tbody>
</table>

The following indices are used for engine speeds "n" and vehicle speeds "v" to indicate the location or rather time of the measurement:

…”

Paragraph 12.3., amend to read:

"12.3. Contracting Parties applying this Regulation shall not refuse to grant extensions of approval in accordance with the preceding series of amendments to this Regulation which shall be conducted on the test site of Annex 4 or ISO10844:2014."

Insert new paragraphs 12.8. and 12.9., to read:

"12.8. As from the official date of entry into force of Supplement 3 to the 04 series of amendments, no Contracting Party applying this Regulation shall refuse to grant or refuse to accept type approval according to Supplement 3 to 04 series of amendments to this Regulation.

12.9. As from 60 months after the date of entry into force of Supplement 3 to the 04 series of amendments to this Regulation, Contracting Parties applying this Regulation shall grant type approvals only if the vehicles type to be approved meets the requirements of this Regulation as amended by Supplement 3 to the 04 series of amendments to this Regulation."

Annex 1,

*Item 20.*, to be deleted.

*Items 21. to 29.*, renumber as 20. to 28., respectively.

Annex 3,

Paragraph 1.1.2., amend to read:

"1.1.2. Instrumentation for speed measurements

The rotational speed of the engine shall be measured with an instrument meeting specification limits of at least \( \pm 2 \) percent or better at the engine speeds required for the measurements being performed. In case that there are other measurements correlated with the engine speeds, the calculated value may be used (e.g. calculation from the vehicle speed measurement).

…”"
Paragraph 1.2.1., amend to read:

"1.2.1. Test site

The test site shall consist of a central acceleration section surrounded by a substantially level test area. The acceleration section shall be level; its surface shall be dry and so designed that rolling noise remains low.

On the test site the variations in the free sound field between the sound source at the centre of the acceleration section and the microphone shall be maintained to within 1 dB(A). This condition will be deemed to be met if there are no large objects which reflect sound, such as fences, rocks, bridges or buildings, within 50 m of the centre of the acceleration section. The road surface covering of the test site shall conform to the requirements of Annex 4 or to ISO10844:2014.

The microphone shall not be obstructed in any way which could affect the sound field, and no person may stand between the microphone and the sound source. The observer carrying out the measurements shall take up position so as not to affect the readings of the measuring instrument."

Annex 4.

After the title, insert the reference to a new footnote 1 and a new footnote 1, to read:

"1. The specifications for the test site reproduced in this Annex are valid until the end of the period indicated in paragraph 12.9."

Paragraph 1., the reference to footnote 1 and footnote 1, renumber as footnote 2.

Paragraph 2.2., the reference to footnote 2 and footnote 2, renumber as footnote 3.

Annex 7, paragraph 3.2.3., amend to read:

"3.2.3. Data processing and reporting

The requirements of paragraph 1.4. of Annex 3 shall be applied.

In addition the engine speed values at AA’, BB’, and PP’ in units of min-1 shall be mathematically rounded to the nearest integer for further calculations. For a given test condition the three individual engine speeds shall be averaged arithmetically.

The final sound pressure levels for the full throttle acceleration shall not exceed the limits specified in paragraph 2.6. above."