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**Economic Commission for Europe**

Inland Transport Committee

**World Forum for Harmonization of Vehicle Regulations**

**Working Party on Noise and Tyres**

**Seventy-seventh session**

Geneva, 7–10 February 2023

Item 2 of the provisional agenda

**UN Regulation No. 41 (Noise emissions of motorcycles)**

 **Proposal for Supplement 2 to the 05 series of amendments to UN Regulation No. 41**

 **Submitted by the experts from the International Motorcycle Manufacturers Association[[1]](#footnote-2)\***

The text reproduced below was prepared by the expert from the International Motorcycle Manufacturers Association (IMMA), in order to complete the additional sound emission provisions’ table of the communication form in the 05 series of amendments to UN Regulation No. 41 to avoid oversight in data collection and entries. The modifications to the Regulation are marked in bold for new or strikethrough for deleted characters.

 **I. Proposal**

*Annex 1,* *Item 18,* amend to read:

"18. Additional sound emission provisions:

| *18.1.* | *RD-ASEP operating conditions* | *Reference Point**(i)* | *Reference Point**(ii)* | *additional operating condition 1* | *additional operating condition 2* | *additional operating condition 3* |
| --- | --- | --- | --- | --- | --- | --- |
| ***gear i******i= 1 to n (number of gears)*** |
| 18.1.1. | Selected gear number |  |  |  |  |  |
| **1.8.1.2.** | **Approach condition to line AA’ (acceleration, deceleration or constant speed)** | **n.a.** | **n.a.** |  |  |  |
| **1.8.1.3.** | **Throttle control position (%)** | **n.a.** | **n.a.** |  |  |  |
| ~~18.1.2.~~**18.1.4.** | Vehicle speeds | - | - | - | - | - |
| ~~18.1.2.1.~~**18.1.4.1.** | Vehicle speed at the beginning of the period of acceleration (average of 3 runs) (km/h) |  |  | n.a. | n.a. | n.a. |
| ~~18.1.2.2.~~**18.1.4.2.** | Pre-acceleration length (m) |  |  | n.a. | n.a. | n.a. |
| ~~18.1.2.3.~~**18.1.4.3.** | Vehicle speed vAA’ (average of 3 runs for Reference Point (i) and (ii)) (km/h) |  |  |  |  |  |
| ~~18.1.2.4.~~**18.1.4.4.** | Vehicle speed vPP’ (average of 3 runs for Reference Points (i) and (ii)) (km/h) |  |  |  |  |  |
| ~~18.1.2.5.~~**18.1.4.5.** | Vehicle speed vBB’ (average of 3 runs for Reference Points (i) and (ii)) (km/h) |  |  |  |  |  |
| ~~18.1.3.~~**18.1.5.** | Engine speeds | - | - | - | - | - |
| ~~18.1.3.1.~~**18.1.5.1.** | Engine speed nAA’ (average of 3 runs for Reference Points (i) and (ii)) (min-1) |  |  |  |  |  |
| ~~18.1.3.2.~~**18.1.5.2.** | Engine speed nPP’ (average of 3 runs for Reference Points (i) and (ii)) (min-1) |  |  |  |  |  |
| ~~18.1.3.3.~~**18.1.5.3.** | Engine speed nBB’ (average of 3 runs for Reference Points (i) and (ii)) (min-1) |  |  |  |  |  |
| ~~18.1.4.~~**18.1.6.** | Wide open throttle test result Lwot for Reference Points (i) and (ii) (dB(A)) |  |  | n.a. | n.a. | n.a. |
| ~~18.1.5.~~**18.1.7.** | max. sound pressure level LASEP of the additional operating conditions | n.a. | n.a. |  |  |  |
| ~~18.1.6.~~**18.1.8.** | RD-ASEP limit’ |  |  |  |  |  |

Footnote: The columns for the additional operating conditions 1, 2 and 3 in the table above, need to be repeated for each gear that needs to be tested."

 **II. Justification**

1. Two additional parameters have been inserted to complete the table in item 18 of Annex 1 to the 05 series of UN Regulation No. 41, specifying the test conditions and assuring a complete communication form. These additional items will provide the necessary placeholders to document all operating conditions to conduct the additional sound emission provisions (ASEP) test as specified in the Regulation. It is also clarified that this does not apply to the reference points (i) and (ii).

2. An additional footnote has been added to clarify that the entries for each additional operation condition need to be repeated for each gear that needs to be tested.

3. The below justification gives the detailed references to the specific additions in the table.

4. Paragraph 3.6. of the main text requires the test report (from the Technical Service conducting the type approval test) to include amongst others the approach condition to line AA’ (acceleration, deceleration or constant speed) and the prescribed throttle control position (in per cent of the throttle control opening) between lines AA’ and BB’, for tests according to Annex 7, paragraph 3.3.

5. Paragraph 6.3.4. of the main text requires the real driving additional sound emission provisions (RD-ASEP) test results to be entered in the test report and on a form conforming to the model in Annex 1 to this Regulation.

6. A field to indicate the approach condition and the prescribed throttle control position is not available in Annex 1, Item 18, hence there is a need for this correction.

7. Fields to indicate values of the three additional operating conditions in Annex 1, Item 18, per gear, as per indication of paragraph 3.1. of Annex 7, are not available, hence there is a need for this correction.

1. \* In accordance with the programme of work of the Inland Transport Committee for 2023 as outlined in proposed programme budget for 2023 (A/77/6 (Sect. 20), table 20.6), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate. [↑](#footnote-ref-2)