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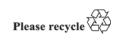
UN Regulation No. 41 (Noise emissions of motorcycles)

Proposal for Supplement 3 to the 05 series of amendments to UN Regulation No. 41

Submitted by the experts from the International Organization of Standardization and the International Motorcycle Manufacturers Association*

The text reproduced below was prepared by the experts from the International Motorcycle Manufacturers Association (IMMA) and the International Organization of Standardization (ISO) with the aim to allow using the state-of-the-art test track from the latest standard ISO 10844:2021. The amendment is based on informal document GRBP-77-02 which was presented at the seventy-seventh session of Working Party on Noise and Tyres (GRBP) and supported by Contracting Parties. The modifications to the current text of the 05 series of amendments to UN Regulation No. 41 are marked in bold for new or strikethrough for deleted characters.

^{*} 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.





I. Proposal

Paragraph 12.7., amend to read:

"12.7. Contracting Parties applying this Regulation may grant type approvals according to any preceding series of amendments to this Regulation. However, the The road surface covering of the test site may conform to ISO10844:2014 or ISO10844:2021 when granting type approval according to the 03 series of amendments to this Regulation or extensions thereof."

Paragraph 12.8., amend to read:

"12.8. Contracting Parties applying this Regulation shall continue to grant extensions of existing approvals to any preceding series of amendments to this Regulation. However, the The road surface covering of the test site may conform to ISO10844:2014 or ISO10844:2021 when granting type approval according to the 03 series of amendments to this Regulation or extensions thereof."

Annex 3, 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 ISO10844:2014 or ISO10844:2021.

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 6, footnote a, delete:

For motor cycles tested in second gear only in Annex 3, the limit value is increased by 1 dB(A) until the date in paragraph 12.7. Data for affected vehicles shall be studied, and discussions shall be made in case of further extension. "

II. Justification

- 1. This formal document introduces amendments to the 05 series of amendments to UN Regulation No.41, to allow using the latest state-of-the-art ISO 10844 test track.
- 2. ISO has updated the ISO 10844 standard to reduce track-to-track variability caused by different interpretations and implementations of the technical requirements. The tyre/road contribution to the overall sound performance of a motorcycle is lower compared to cars.
- 3. The improvements from the ISO 10844:2014 to the 2021 version would not result in the need for updating the surface for L-category test tracks, as updating the ISO 10844 reference would have a negligible impact on the measurement procedure and measurement results.
- 4. If, however, the ISO reference in the L-category noise UN Regulations would be updated without maintaining the current ISO 10844:2014 as an option, IMMA sees a potential risk of tracks to need re-certification, thus creating an administrative burden with no practical benefit.

- 5. If later on the tracks would need re-surfacing anyway (e.g. due to wear), then these can be built and certified according to ISO10844:2021. Because of the above, IMMA would like to allow certification with the tracks complying to either ISO10844:2014 or ISO10844:2021.
- 6. This proposal takes the opportunity to introduce additional corrections in the 05 series of amendments to UN Regulation No. 41 as specified below.
- 7. With the introduction of the 05 series of amendments the transitional provisions were re-written and footnote a of Annex 6 became obsolete.
- 8. The transitional provisions of the 05 series of amendments contained references to the 03 series of amendments which is not suitable. The purpose of this reference was to allow the use of the old Annex 4 test track surface, which is no longer relevant.

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