<u>Informal document</u> **GRB-63-03** (63rd GRB, 16-18 February 2016, agenda item 9)









Amendment proposals for Regulations Nos. 9, 63 and 92

On behalf of the European Commission

Overview

- 1. Editorial amendments,
- 2. Amendments in paragraph 2, Definitions,
- 3. Amendments in paragraph 6, Specifications,
- 4. Amendments in annex 3,
- 5. Additional sound emission provisions.

Editorial Amendments

- The term "noise" was replaced by "sound" except for background noise.
- The words "moped", "motorcycle" etc. were replaced by "L_x category vehicle", x being 1, 2, 4 or 5 whatever is appropriate.
- Whenever the word "speed" is used throughout the regulations, it is specified whether it is engine speed or vehicle speed.

Amendments in paragraph 2, Definitions

- Rated maximum net power and rated engine speed was added, where missing.
- "Number and ratio of gears" was replaced by "Drive train, in particular the number and ratios of the gears of the transmission and the final ratio", which is more precise.
- Reference mass and test mass were added.
- Maximum vehicle speed was added, where missing.

Amendments in paragraph 6, Specifications

- Paragraph 6.3 "Additional prescriptions related to tamperability and manually adjustable multi-mode exhaust or silencing systems" was restructured and complemented as follows:
 - 6.3 Additional requirements,
 - 6.3.1 Tampering protection provisions,
 - 6.3.2 Manually adjustable multi-mode exhaust or silencing systems,
 - 6.3.3 Prohibition of defeat devices

A new paragraph 6.3.4 "Additional sound emission provisions" was added, as in UN R51-03 or R41-04.

Amendments in paragraph 6, Specifications

- Furthermore, the following sub-paragraphs were added, from UN R41-04:
- On testing cases
 - 6.3.5 If the vehicle has user selectable software programs or modes which affect the sound emission of the vehicle, all these modes shall be in compliance with the requirements in paragraph 6.3.4 above. Testing shall be based on the worst case scenario.

Amendments in paragraph 6, Specifications

- Manufacturer's declaration and tests by the responsible authority
- 6.3.6 In the application for type approval or for modification or extension of a type approval the manufacturer shall provide a statement in accordance with Annex 6 that the vehicle type to be approved complies with the requirements of paragraphs 6.3.3. and 6.3.4. of this Regulation.
- 6.3.7 The responsible authority may carry out any test prescribed in this Regulation.

- Paragraph 2 of annex 3 "Conditions of measurement" was restructured and amended as follows:
 - 2.1. Test site, weather conditions and background noise correction.

With respect to the test track surface the transition from ISO 10844:1994 (annex 5) to ISO 10844:2014 was introduced.

2.2. Condition of the vehicle.

- Paragraph 3.1 of annex 3 "Methods of testing" was restructured and amended as follows:
 - 3.1. Measurement of the sound emission of the vehicle in motion
 - 3.1.1. Test arrangement and microphone positions
 - 3.1.2 Acceleration test execution, approach vehicle speed and gear use
- ➤ The two following amendments are proposed according to ECE R 41-04
 - 3.1.3 Sound level determination
 - 3.1.4 Calculation of the final test result

The method in R 41-04, taken over in 3.1.4., is more appropriate than the one in the current versions of UN R9 and R63, where the individual measurement results are reduced by 1 dB and rounded to the nearest integer and then the arithmetic average is calculated as the final result.

- A new paragraph 4 was added in annex 3 in accordance with R 41-04 as follows:
 - 4. Sound from the vehicle in motion (data reported to facilitate in motion testing of the vehicle in use).
- This annex is intended to provide all necessary information for roadside in-use compliance tests with the vehicle in motion.
- Such tests are more effective than the stationary tests.

New Annexes

- ➤ A new annex dedicated to a Statement of Compliance with the Additional Sound Emission Provisions was added in Regulations 9, 63 and 92.
- A new annex dedicated to ASEP requirements was added in Regulation 9, referenced also through paragraph 6.3.4.