Amendment proposals for Regulation 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 transitional provisions,
5. Amendments in annex 1,
6. Amendments in annex 3,
Editorial Amendments
UN Regulation Nos 9, 63 and 92

- 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
UN Regulation Nos 9, 63 and 92

- 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.
- NORESS acronym used for the non-original replacement exhaust silencing system (UN R92 only)
Amendments in paragraph 6, Specifications UN Regulation Nos 9 and 63

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
Amendments in paragraph 6, Specifications UN Regulation No 9

- Paragraph 6.2.1.1, under "Methods of measurement" was complemented as follows:
  - concerning a vehicle that has user selectable software programs or modes which affect the sound emission of the vehicle: worst case scenario;
  - concerning the hybrid electric vehicles, the highest of the following test results:

    • Condition A: max charge state of batteries or most electric hybrid mode, if more than one 'hybrid mode'
    • Condition B: max charge state of batteries or most fuel consuming hybrid mode, if more than one 'hybrid mode'
Amendments in Transitional provisions
UN Regulation Nos 9 and 63

➢ Two paragraphs added to provide for a transitional period of 5 years till the full application of the proposed supplements to these UN Regulations
Amendments in Annex 1
UN Regulation Nos 9 and 63

- More detailed data for the engine (incl. electric motor, if applicable) and transmission

- Reference data for in use compliance
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.
Amendments in Annex 3
UN Regulation Nos 9 and 63

- Paragraph 3 of annex 3 “Methods of measurement” / “Methods of testing” was restructured and amended:
  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 determination 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.

Added to paragraph 5: Approval marking requirements of original silencers containing fibrous absorbing materials.
A new annex 4 dedicated to the sound limits for the different vehicle categories was added in Regulation 9 in order to align it to the other Regulations.
Drafting amendment
UN Regulation Nos 9 and 63

Drafting amendment to be done:

- in R9: paragraph 3.1.2.2.3 in Annex 3, the ref to the definition of maximum vehicle speed has to be corrected to 2.10 instead of 2.8

- in R63: paragraph 3.1.2.2 in Annex 3, the ref to the definition of maximum vehicle speed has to be corrected to 2.12 instead of 2.8
Amendments in paragraph 6
UN Regulation No 92

- Additional requirements, paragraph 6.3

6.3.1 Tampering protection provisions

6.3.2 Multi-mode NORESS

6.3.3 Prohibition of defeat devices

6.3.4 ASEP for L-category vehicles approved in accordance with UN R41-04
Amendments in Annex 1
UN Regulation No 92

➢ Two communication forms
  - One for NORESS of vehicles approved in accordance with UN R41-04
  - One for NORESS of vehicles approved in accordance with UN R9 or 63
to differentiate testing conditions and ASEP
Conditioning methods for fibrous absorbent materials used in NORESS in accordance with the UN Regulation under which the vehicle of NORESS installation is approved
New Annex 4
UN Regulation No 92

- Statement of Compliance with ASEP of NORESS installed on vehicles approved in accordance with UN R41-04