Possible amendments to the Consolidated Resolution on the Construction of Vehicles

I. Issue

1. The Consolidated Resolution on the Construction of Vehicles (R.E.3) contains the following paragraphs regarding the noise emitted by vehicles in use:

"8.8.2. Noise emitted by vehicles in use
8.8.2.1. To facilitate the prevention of sound pollution by vehicles in use through the introduction of simple checks, the use of the following sound-level measuring methods is recommended:

8.8.2.1.1. For four-wheeled vehicles, the method described in Regulation No. 51, Annex 3, paragraph 3.2. (Measurement of noise emitted by stationary vehicles, in proximity to the exhaust).
8.8.2.1.2. For motor cycles, the method described in Regulation No. 41, Annex 3, paragraph 3.2. (Measurement of noise emitted by stationary motor cycles, in proximity to the exhaust).
8.8.2.1.3. For mopeds, the method described in Regulation No. 63, Annex 3, paragraph 3.2. (Measurement of noise emitted by stationary mopeds, in proximity to the exhaust).
8.8.2.2. In view of the tolerances of measuring instruments, the disturbances that may occur at the time of measurement and the scatter of measurements for vehicles of the same type, it will be necessary to allow for a margin of 5 dB(A) in comparison with the corresponding value recorded at the time of the type approval.
8.8.2.3. The last-mentioned value, and also the initial constant running speed of the engine, shall be entered in the registration documents of each new vehicle, or on the manufacturer’s plate in the case of vehicles for which registration is not required.
8.8.2.4. Checks on vehicles brought into use prior to the introduction of this method shall be carried out in accordance with the procedures previously in force.
8.8.2.5. A visual inspection of the exhaust system and a check of its marking shall also be carried out where possible."

2. To take into account the possible instrumental and measurement errors, paragraph 8.8.2.2. allows for a margin of 5 dB(A) compared to the corresponding value recorded at the time of the type approval. This figure, however, substantially exceeds the respective margins of 1 or 3 dB(A) set out in Regulations No. 51, 41 and 63, as pointed out below.

3. According to paragraph 3.1.3 of Regulation 51, "to allow for lack of precision in the measuring instrument the figures read from it during measurement shall each be reduced by 1 dB(A)". The same margin is stipulated in paragraph 4.1. of Annex 7 "Checks on conformity of production".
4. According to paragraph 8.2 of Regulation 41, "sound levels measured … shall not exceed by more than 3.0 dB(A) the values measured and processed at the time of type approval".

5. Finally, according to paragraph 8.2. of Regulation 63,"… Production shall be deemed to conform to the requirements of this Regulation if the level measured by the method described in paragraph 3.1. of Annex 3 to this Regulation does not exceed by more than 3 dB(A) the value measured during type approval…".

II. Considerations by GRB

6. The Working Party may wish to consider the above issue and express its opinion whether the figure of 5 dB(A) from paragraph 8.8.2.2. of the Consolidated Resolution on the Construction of Vehicles (R.E.3) should be reduced to correspond to the provisions of Regulations 51, 41 and 63.

III. Additional proposal

7. In paragraph 8.8.2.1.2., the secretariat also proposes to correct the reference to Annex 3 of Regulation 41 as follows:

8.8.2.1.2. For motor cycles, the method described in Regulation No. 41, Annex 3, paragraph 2 3-2. (Measurement of noise emitted by stationary motor cycles, in proximity to the exhaust).