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Working Party on Noise (GRB)

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PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 59

(Replacement silencing systems)

Transmitted by the expert from the Russian Federation

<u>Note</u>: The text below was prepared by the expert from the Russian Federation, following the invitation by GRB at its thirty-fourth session (TRANS/WP.29/GRB/32, paras. 34-36).

Note: This document is distributed to the Experts on Noise only.

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The title of the Regulation, amend to read:

"Uniform provisions concerning the approval of non-original replacement exhaust silencing systems (RESS) for motor vehicles"

Paragraph 1., amend to read:

"1. SCOPE

This Regulation contains provisions relating to the approval of non-original RESS or components thereof to be fitted as replacements parts to one or more specific types of motor vehicles in categories M and N. $^*/$

*/ In conformity with the definitions given in Annex 7 to the Consolidated Resolution on the Construction of Vehicles (R.E.3) (document TRANS/WP.29/78/Rev.1/Amend.2)."

Paragraphs 2.1. to 2.3., amend to read:

- "2.1. "Exhaust silencing system" means a complete set of components necessary for reducing the noise produced by flow of exhaust gases from a vehicle's internal combustion engine.
- 2.2. "Exhaust silencing system component" means one of the various components, which together form the exhaust silencing system (e.g. silencer, resonator, expansion chamber, outlet pipe, catalytic converter, pipes)
- 2.3. "Non-original RESS of different types" means exhaust silencing systems which differ significantly in such respects as:
- 2.3.1. that their components"

Insert new paragraphs 2.4. and 2.5., to read:

- "Non-original RESS or components of this system" means a system of a type different from that fitted to the vehicle on approval or extension of approval or any part of the exhaust silencing system defined in paragraphs 2.1. and 2.2. above, intended for use on a vehicle other than a part of the type fitted to the vehicle when submitted for type approval pursuant to Regulation No. 51; it may be used only as a replacement exhaust silencing system
- 2.5. "Approval of non-original RESS or component(s) thereof" means the approval of the whole or a part of a silencing system adaptable to one or several specified types of motor vehicle, as regards the limitation of their noise level."

Paragraph 3.1., amend to read:

"3.1. The application for approval of a non-original RESS or components thereof shall be submitted by its manufacturer or by his duly accredited representative."

Paragraphs 3.2.2. and 3.2.3., amend to read:

"3.2.2. A description of the complete RESS indicating the relative position of each its components, together with instructions for their

assembly and mounting on a vehicle;

3.2.3. Detailed drawings of each RESS component, to enable an easy location and identification, and specification of the materials used. These drawings shall also indicate the location for the mandatory affixing of the approval number."

Paragraph 3.3.2., amend to read:

"3.3.2. A sample of the original silencing system with which the vehicle was equipped when submitted for type approval;"

Paragraphs 3.3.3.1., 3.3.3.2. and 3.3.4., amend to read:

- "3.3.3.1. The sound level, measured as specified by ECE Regulation No. 51 as amended at the time of approval of that vehicle type:
- 3.3.3.1.1. for vehicle in motion it shall not exceed by more than 1 dB(A) the limit value applicable to the category of vehicle concerned at the time of approval of that vehicle type; it shall not exceed by more than 3 dB(A) the sound level indicated in the approval form of that vehicle type;
- 3.3.3.1.2. when the vehicle is stationary, the sound level shall not exceed by more than 3 dB(A) the reference value indicated in the approval form of that vehicle type.
- 3.3.2. If a vehicle is not conforming to the type for which the approval was granted pursuant to the requirements of Regulation No. 51, the sound level shall not exceed by more than 1 dB(A) the limit value applicable at the time when it was introduced on the road for the first time (as specified by ECE Regulation No. 51, as amended at the time of the vehicle first introduction on the road).
- 3.3.4. A separate engine, of the same type as that of the motor vehicles for which the RESS is submitted for approval (if the technical service responsible for conducting the tests considers it necessary)."

Insert new paragraph 3.4., to read: 1/

"3.4 The competent authority shall verify the existence of satisfactory arrangements for ensuring effective control of the conformity of production before type approval is granted."

Note by the secretariat: Following the decision of WP.29 at its one-hundred-and-ninth session, this paragraph should not be introduced, because it is contained in paragraph 1.1. of appendix 2 to the 1958 Agreement (TRANS/WP.29/504, paras. 15 and 17). In line with the same decision of WP.29, the Conformity of Production provisions are correctly proposed to be amended (see paras. 9. to 9.5. below).

Đaragraphs 4.1. to 4.1.2., amend to read:

- "4.1 Each component of the RESS, excluding tubes and mounting accessories, shall bear:
- 4.1.1. The trade name or mark of the manufacturer of the RESS of its components;
- 4.1.2. The identification number given by the manufacturer in accordance with Standard ISO 4100-80;"

Insert new paragraph 4.1.3., to read:

"4.1.3. The approval mark."

Paragraph 4.2., amend to read:

"4.2. These markings shall be clearly legible and indelible and also visible in the position at which the RESS is fitted."

Insert new paragraphs 4.3. to 4.5.3., to read:

- "4.3. A component may carry several approval numbers if it has been approved as a component of several RESS.
- 4.4. The RESS shall be supplied in a packaging or carry a label both providing the following particulars:
- 4.4.1. The trade name or mark of the manufacturer of the RESS and its components;
- 4.4.2. The address of the manufacturer or his representative;
- 4.4.3. A list of motor vehicle models for which the RESS is intended.
- 4.5. The manufacturer shall provide:
- 4.5.1. Instructions explaining in detail the correct method of mounting the RESS on the vehicle;
- 4.5.2. Instructions for handling the RESS;
- 4.5.3. A list of components with the numbers of the corresponding parts, excluding retainers."

Paragraph 5.1., amend to read:

"5.1. If the RESS or component thereof submitted for approval under this Regulation meets the requirements of paragraph 6 below, approval for that type shall be granted."

Paragraph 6.1.1., amend to read:

"6.1.1 The silencer must be designed, constructed and capable of being mounted so that:" $\underline{2}/$

 $[\]underline{2}$ / Note by the secretariat: A "silencer" is not defined (see paras. 2.1. to 2.5. above).

Insert new paragraphs 6.1.1.1. to 6.1.1.7., to read:

- "6.1.1.1. The motor vehicle complies with the requirements of this Regulation under normal conditions of use, and in particular regardless of any vibrations to which it may be subjected;
- 6.1.1.2. It displays reasonable resistance to the corrosion phenomenon to which it is exposed, with due regard to the normal conditions of use of the motor vehicle;
- 6.1.1.3. The ground clearance provided by the silencer originally fitted, is not reduced;
- 6.1.1.4. Unduly high temperatures do not exist at the surface;
- 6.1.1.5. Its edges are not sharp or jagged;
- 6.1.1.6. Adequate clearance of spring parts and other vehicle components (i.e. fuel system, hydraulic brae system components) is provided;
- 6.1.1.7. It is tamper-resistant in a way that is compatible with clearly defined maintenance and installation requirements."

Paragraphs 9. to 9.4.5., replace by the following text:

"9. CONFORMITY OF PRODUCTION

The conformity of production procedures shall comply with those set out in the Agreement, Appendix 2 (E/ECE/324-E/ECE/TRANS/505/Rev.2), with the following requirements:

- 9.1. The RESS approved to this Regulation shall be so manufactured as to conform to the type approved by meeting the requirements set out in paragraph 6. above.
- 9.2. The holder of the approval shall ensure that for each type of RESS at least the tests prescribed in paragraph 6. of this Regulation are carried out.
- 9.3. The authority which has granted type approval may at any time verify the conformity control methods applied in each production facility. The normal frequency of these verifications shall be once every two years.
- 9.4. The production is considered to conform to the requirements of this Regulation, if the provisions of Regulation No. 51, corresponding to the vehicle type, are complied with, and if the sound level measured by the method described in the given Regulation during the test in motion does not exceed by more than 3 dB(A) the sound level measured during the type approval, and does not exceed by more than 1 dB(A) the limits prescribed in Regulation No. 51 applicable."
