ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Noise (GRB)
(Thirty-fifth session, 13 and 14 September 2001, agenda item 2.2.)

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 59
(Replacement silencing systems)

Transmitted by the Expert from the Russian Federation

Note: The text reproduced below was prepared by the expert from the Russian Federation and distributed without a symbol (informal document No. 5) during the thirty-fourth session of GRB (TRANS/WP.29/GRB/32, paras. 28-33).

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

Paragraph 1., amend to read:

"1. Scope

This Regulation contains provisions relating to the approval of silencing systems or components thereof to be fitted to one or more given types of motor vehicles in categories M and N as replacement parts."

Paragraph 5.4 1., footnote 1/, amend to read:

"1/ 1 for Germany, 2 for France, 3 for Italy, 4 for Netherlands, 5 for Sweden, 6 for Belgium, 7 for Hungary, 8 for the Czech Republic, 9 for Spain, 10 for Yugoslavia, 11 for the United Kingdom, 12 for Austria, 13 for Luxembourg, 14 for Switzerland, 15 (vacant), 16 for Norway, 17 for Finland, 18 for Denmark, 19 for Romania, 20 for Poland, 21 for Portugal, 22 for the Russian Federation, 23 for Greece, 24 for Ireland, 25 for Croatia, 26 for Slovenia, 27 for Slovakia, 28 for Belarus, 29 for Estonia, 30 (vacant), 31 for Bosnia and Herzegovina, 32 for Latvia, 33 (vacant), 34 for Bulgaria, 35-36 (vacant), 37 for Turkey, 38-39 (vacant), 40 for The former Yugoslav Republic of Macedonia, 41 (vacant), 42 for the European Community (Approvals are granted by its Member States using their respective ECE symbol), 43 for Japan, 44 (vacant), 45 for Australia, 46 for Ukraine and 47 for South Africa. Subsequent numbers shall be assigned to other countries in the chronological order in which they ratify or accede to the Agreement Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions, and the numbers thus assigned shall be communicated by the Secretary-General of the United Nations to the Contracting Parties to the Agreement."

Paragraph 3.3.3., amend to read:

"....to Regulation No. 51 (in edition in force at the date when the concerned vehicle was submitted for type approval)....."

Paragraph 6.2., amend to read:

"6.2. Specifications regarding noise levels

6.2.1. The acoustic efficiency of the replacement silencing systems or components of said system shall be verified by means of the methods described in paragraphs 3.1. and 3.2. of annex 3 to Regulation No. 51 (the edition in force at the date when the concerned vehicle was submitted for type approval). When the replacement silencing system or components thereof is mounted on the vehicle described in paragraph 3.3.3. above:

6.2.1.1. The noise level obtained for running vehicle shall not exceed the noise value measured on the vehicle concerned when submitted for type approval, or the noise values measured or the vehicle referred to in paragraph 6.2.1. above, when this is fitted with an exhaust silencing system corresponding to the type fitted to the vehicle when submitted for type approval;"
6.2.1.2. The noise level obtained for stationary vehicle shall not exceed the noise value measured on the vehicle concerned when submitted for type approval, or the noise values measured on the vehicle referred to in paragraph 6.2.1. above, when this is fitted with an exhaust silencing system corresponding to the type fitted to the vehicle when submitted for type approval."

*     *     *

B. JUSTIFICATION

Re. para. 1.: Since the replacement silencing systems may be manufactured as replacement parts for vehicle categories other than M1 and N1, for the purpose of certification the scope of this Regulation shall cover all M and N category vehicles.

Re. para. 5.4.1., footnote 1/: Correction is necessary due to appearance of the new countries, Parties to the 1958 Agreement.

Re. para. 3.3.3.: Regulation No. 51, as the other Regulations, is corrected from time to time in terms of modification of the test procedures or strengthening the requirements. Therefore, it is expedient to require compliance with the provisions that were in force at the date of submitting of the concerned vehicle with the original silencing system for the type approval.

Re. para. 6.2.: The text proposed for this paragraph allows a more flexible approach to the evaluation of the test results obtained as required by the application practice.

For example:

<table>
<thead>
<tr>
<th>Measurement results</th>
<th>Running vehicle</th>
<th>Stationary vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>When the vehicle submitted for type approval</td>
<td>75 dB(A)</td>
<td>84 dB(A)</td>
</tr>
<tr>
<td>When the vehicle fitted with an exhaust silencing system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>corresponding to the type fitted to the vehicle when</td>
<td></td>
<td></td>
</tr>
<tr>
<td>submitted for type approval</td>
<td>76 dB(A)</td>
<td>81 dB(A)</td>
</tr>
<tr>
<td>When the vehicle fitted with a replacement exhaust</td>
<td></td>
<td></td>
</tr>
<tr>
<td>silencing system</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>76 dB(A)</td>
<td>83 dB(A)</td>
</tr>
</tbody>
</table>

Thus, the results obtained for the replacement silencing system for the stationary vehicle are better than those when the vehicle submitted for type approval and worse for the running vehicle. At the same time the results obtained for the replacement silencing system are worse than those of the vehicle fitted with an exhaust silencing system corresponding to the type fitted to the vehicle when submitted for type approval. What would be the summary evaluation in this case?

The proposed provisions allow a more correct evaluation of the results obtained.