

Proposal for further amendments to the proposal for the 03 series of amendments to Regulation No. 51 (Noise of M and N categories of vehicles) as consolidated in document GRB/2012/08

With document GRB/2012/08 OICA has put forward a text proposal for the 03 series of amendments to Regulation No. 51, which intends to consolidate the discussions in GRB up to the 55th session. The text reproduced below contains proposals for further improvements of the R51.03 proposal in order to incorporate the latest stage of relevant ISO standards and to simplify the communication. Modifications to the text proposal in document GRB/2012/08 are marked in bold characters for new or as strikethrough for deleted text.

I. Proposal 1 (Test track)

Annex 1, paragraph 8.4.1., amend to read:

8.4.1. Test site (surface characteristics **checked to be in accordance with ISO 10844:2011**):.

8.4.1.1 Date of last check:.....

8.4.1.2 Number of test report:.....

Annex 3, paragraph 2.1., amend to read:

"2.1. Test Site [†] and ambient conditions

The surface of the test track and the dimensions of the test site shall be in accordance with ISO 10844:2011.

The test site shall be substantially level. ...

...

...in order to calculate the test results the appropriate correction must be subtracted from the readings on the noise-level meter, as in the following table:

<i>Difference between ambient noise and noise to be measured dB(A)</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>
Correction dB(A)	0.5	0.4	0.3	0.2	0.1	0.0

[†]~~In conformity with Annex 8 to this Regulation."~~

Annex 8, shall be deleted

Annexes 9 and 10, renumber as Annexes 8 and 9

II. Proposal 2 (Communication)

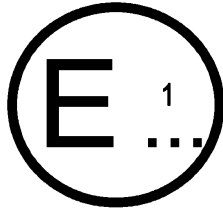
Annex 1, amend to read:

Annex 1

Communication

(maximum format: A4 (210 x 297 mm))

issued by: Name of administration:



.....
.....
.....

concerning:² APPROVAL GRANTED
APPROVAL EXTENDED
APPROVAL REFUSED
APPROVAL WITHDRAWN
PRODUCTION DEFINITELY DISCONTINUED

of a vehicle type with regard to the noise emission pursuant to Regulation No. 51, **03 series of amendments**

Approval No. Extension No.

Reason for extension:.....

1 ~~Trade name or mark of the vehicle~~.....

2 ~~Vehicle type~~.....

2.1 ~~Maximum permissible mass including semi-trailer (where applicable)~~....

3 ~~Manufacturer's name and address~~

4 ~~If applicable, name and address of manufacturer's representative~~.....

Section I Vehicle and manufacturer

1. **Make (trade name of manufacturer):**

2. **Type:**

2.1. **Commercial name(s) (if available):**

3. **Means of identification of type if marked on the vehicle**³

3.1. **Location of that marking:**

4. **Category of vehicle**⁴

4.1. **Maximum permissible mass including semi-trailer (where applicable)**

¹ Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).
² Delete what does not apply
³ If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by this information document, such characters shall be represented in the documentation by the symbol '?' (e.g. ABC??123??).
⁴ As defined in Annex 7 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), (document TRANS/WP.29/78/Rev.1/Amend.2 as last amended by Amend.4).

5. Name and address of manufacturer:
6. Name(s) and address(es) of assembly plant(s):
7. If applicable, name and address of manufacturer's representative:

Section II Approval

- 1 The following documents, bearing the approval number shown above, are annexed to this communication:
 Drawings, diagrams and plans of the engine and of the noise reduction system;
 Photographs of the engine and of the noise reduction system;
 List of components, duly identified constituting the noise reduction system.
2. Vehicle submitted for approval on:
3. Position of approval mark on the vehicle
4. Technical service responsible for carrying out the tests:
5. Date of test report:
6. Number of test report:
7. Place:
8. Date:
9. Signature:

Section III Summary of test report

- ~~5.~~ 1 Engine:
 - ~~5.1.~~ 1.1 Manufacturer:
 - ~~5.2.~~ 1.2 Type:
 - ~~5.3.~~ 1.3 Model:
 - ~~5.4.~~ 1.4 Rated maximum power (ECE): kW at rev/min.
 - ~~5.5.~~ 1.5 Kind of engine: e.g. positive-ignition, compression ignition, etc.⁵
 - ~~5.6.~~ 1.6 Cycles: two stroke or four-stroke (if applicable)
 - ~~5.7.~~ 1.7 Cylinder capacity (if applicable)
- ~~6.~~ 2 Transmission: non-automatic gearbox/automatic gearbox²
- ~~6.1.~~ 2.1 Number of gears
- 7.3 Equipment:
 - ~~7.1.~~ 3.1 Exhaust silencer:
 - ~~7.1.1.~~ 3.1.1 Manufacturer or authorized representative (if any)
 - ~~7.1.2.~~ 3.1.2 Model:
 - ~~7.1.3.~~ 3.1.3 Type: in accordance with drawing No.:
 - ~~7.2.~~ 3.2 Intake silencer:
 - ~~7.2.1.~~ 3.2.1 Manufacturer or authorized representative (if any)

⁵ If a non-conventional engine is used, this should be stated.

7.2.2. 3.2.2 Model:

7.2.3. 3.2.3 Type: in accordance with drawing No.:

7.3. Tyre size (by axle):

8. Measurements:

8.1. Sound level of moving vehicle:

<i>Measurement results</i>			
	Left hand side dB(A) ⁶	Right hand side dB(A) ⁶	Position of gear lever
First measurement			
Second measurement			
Third measurement			
Fourth measurement			
Test result: dB (A)			

8.2. Sound level of stationary vehicle:

..... Position and orientation of microphone (according to diagrams in appendix of annex 3)

<i>Measurement results</i>		
	dB(A)	Engine speed
First measurement		
Second measurement		
Third measurement		
Test result: dB (A)		

8.3. Sound level of compressed air noise:

<i>Measurement results</i>		
	Left hand side dB(A) ⁶	Right hand side dB(A) ⁶
First measurement		
Second measurement		
Third measurement		
Fourth measurement		
Test result: dB (A)		

8.4. Ambient conditions

8.4.1. Test site (surface characteristics):

8.4.2. Temperatures (in °C):

⁶ The measurement values are given with the 1 dB(A) deduction in accordance with the provisions of paragraph 6.2.2.1.

- 4.7. Ambient conditions
- 4.7.1. Test site (surface characteristics checked to be in accordance with ISO 10844:2011):
- 4.7.1.1 Date of last check:.....
- 4.7.1.2 Number of test report:.....
- 4.7.2. Temperatures (in °C):
- 4.7.2.1. Temperature of ambient air:
- 4.7.2.2. Temperature of test track surface:
- 4.7.3. Atmospheric pressure (kPa):.....
- 4.7.4. Humidity (percent):.....
- 4.7.5. Wind speed (km/h):
- 4.7.6. Wind direction:
- 4.7.7. Background noise (dB(A)):.....
9. ~~Vehicle submitted for approval on:~~
10. ~~Technical Service responsible for type approval tests:~~
~~.....~~
11. ~~Date of test report issued by that service:~~
12. ~~Number of test report issued by that service:~~
13. ~~Type approval in respect of sound levels is hereby granted/extended/refused/withdrawn²~~
14. ~~Position of approval mark on the vehicle~~
15. ~~Place:~~
16. ~~Date:~~
17. ~~Signature:~~
18. ~~The following documents, bearing the approval number shown above, are annexed to this communication:~~
- ~~..... Drawings, diagrams and plans of the engine and of the noise reduction system;~~
- ~~..... Photographs of the engine and of the noise reduction system;~~
- ~~..... List of components, duly identified constituting the noise reduction system.~~
- 19 5 Remarks:.....
.....
.....]

Attachments:

1. Information package.
2. Test report.

Annex 3, amend to read:

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- 2.2.2. The tyres to be used for the test shall be representative for the axle and shall be selected by the vehicle manufacturer and recorded in ~~Annex 9~~ **the communication form (see annex 1)**.
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- 3.1.2.1.2.1.
- Pre-acceleration may be used. The point of depressing the accelerator before line AA' shall be reported in ~~the vehicle and test data (see annex 9)~~ **the communication form (see annex 1)**.
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- 3.1.2.1.5.
- The point of fully depressing the accelerator shall be reported in ~~the vehicle and test data (annex 9)~~ **the communication form (see annex 1)**.
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- 3.2.1.
- The measurement results shall be entered into ~~the test report referred to in Annex 9~~ **the communication form (see annex 1)**.
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Annex 9, shall be deleted

Annex 10, renumber as Annex 9

III. Justification

The measuring equipment, including the noise test track, should meet the latest technical requirements. In 2011, ISO Standard 10844:1994 was updated to ISO 10844:2011 to significantly reduce the site to site variation due to test track influence. Therefore the requirements on the noise test track should refer to ISO 10844:2011.

The communication form (Annex 1) and vehicle and test data sheet (Annex 9) should be merged and doublings and superfluous items should be removed, because measurement method A has been deleted and succeeded by method B. The communication form has been split in 3 sections to give more clarity and to bring it more in line with the format of the communication form in more recent Regulations like R83.06.