Informal Document No. **GRB-51-17** (51<sup>st</sup> GRB, 15 to 17 February 2010, agenda item 4c)

## Regulation 51 Noise of vehicles having at least four wheels

Additional Sound Emissions Provisions (ASEP)

<u>Proposal for amendments to</u> GRBIG-ASEP-16-003 (ECE-TRANS-WP29-GRB-50-inf01e)

The text reproduced below was prepared by the expert from the United Kingdom to introduce clarification in the document GRBIG-ASEP-16-003.

Text deleted is shown by strikethrough and new text in **bold** font

## A PROPOSAL

- 2. Definitions
- 2.19 A "defeat device" is a strategy or design feature that [artificially][purposely] reduces the sound emission within the test [conditions][boundaries] in this regulation and which [does not prevent sound emission increasing outside those [conditions][boundaries] ][permits sound emission to increase outside those [conditions][boundaries] ] [is not operational during typical on-read conditions]

## Replace by:

A "defeat device" means a device which measures, senses or responds to operating variables for the purpose of activating, modulating, delaying or deactivating the operation of any component or function of the noise control system such that the effectiveness of the control system is reduced under conditions encountered during the normal use unless the use of such a device is substantially included in the noise test certification procedure;

Add:

- 2.20 An "irrational control strategy" means any strategy or measure that, when the vehicle is operated under normal conditions of use, reduces the effectiveness of the noise control system to a level below that expected in the applicable noise test procedures:
- 6.2.3.1 No defeat devices shall be permitted.

[The vehicle manufacturer shall not intentionally alter, adjust, or introduce any mechanical, electrical, thermal, or other device or procedure solely for the purpose of fulfilling the noise emission

requirements as specified in this regulation and as determined by the test procedure of Annex 3 but which will not be operational [during typical on-road operation] [over the speed range of the vehicle]. These measures are commonly referred to as "cycle detection".]

Replace by:

The use of any defeat device or irrational control strategy is prohibited

## **B** JUSTIFICATION

The text of paper GRBIG-ASEP-16-003 resulted from discussion within the ASEP Informal Group that took place between 8 and 10 December 2009. That paper was a development of the paper ECE-TRANS-WP29-GRB-50-inf01e.

The text proposed by the United Kingdom is based on that found in Annex I, paragraph 2.8c and 2.8d and Annex III paragraph 4.1.1 of DIRECTIVE 97/68/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery.

The United Kingdom believes that the text proposed here adds clarity to the definition of "defeat device", and adds a further definition of "irrational control strategy" to cover, amongst other issues, any form of cycle detection or manipulation of the engine management system during a type-approval test.

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