

**Draft proposal for changes to the text of
TRANS/WP.29/GRB/2005/2/Rev.2 (R51.03)
In order to incorporate the Additional Sound Emissions Provisions
Issued by the chairman d.d. 21-5-2007**

Text marked in blue bold has been changed since the last discussions

~~Text crossed out has been removed~~

Main body

6.2.3. Additional sound emission provisions

The additional sound emission provisions apply to vehicles of categories M1 and N1 only.

They are preventive requirements intended to also cover driving conditions of the vehicle in real traffic, which can be environmentally relevant concerning their sound emission and which differs from those during type approval, described in Annex 3.

The manufacturer shall explain to the satisfaction of the technical service that the requirements of 6.2.3.1 to 6.2.3.4. are met.

6.2.3.1. 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. These measures are commonly referred to as "cycle detection".

6.2.3.2. The sound emission of the vehicle under normal driving conditions different from the conditions of the type approval test in Annex 3 shall not differ considerably from what can be expected from the type approval test result for this specific vehicle with regard to technical practicability.

6.2.3.3. Any control device, function, system or measure that could affect the noise reducing capabilities of the exhaust silencing system, the intake silencing system and the engine enclosure* may be installed, provided that one of the following conditions is fulfilled

6.2.3.3.1. The vehicle is tested conform the procedure in Annex 10. Deviating from Annex 10 par XX, boundary conditions which limit the valid acceleration and engine speed will not apply. The boundary condition which limits the valid vehicle speed is still applicable. Notwithstanding these different boundary

conditions, the vehicle shall meet the requirements of Annex 10 with respect to the noise emission.

6.2.3.3.2. The manufacturer proves to the satisfaction of the technical service that the control device, function, system or measure changes the noise emission of the vehicle to a level which is lower or equal compared to the situation as tested in Annex 3

*** This behavior is commonly referred to as "non-linear noise control strategy".
Examples of such devices are:**

-flaps in the exhaust system that control the open connection to certain segments of the exhaust system

-controllable shutter in front of the radiator that is part of the engine encapsulation

6.2.3.4. Notwithstanding the requirements in 6.2.3.1. to 6.2.3.3., the vehicle shall meet the requirements of Annex 10.