

Submitted by the expert from the European Commission

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Proposals for amendments to Regulation No. 63

This informal document was prepared by the expert from the European Commission to complement the document ECE/TRANS/WP.29/2017/4. It contains additional amendments related to powered cycles. The amendments are on the Scope and on Annexes 3 and 4.

I Proposal

The scope is amended to read:

1. Scope

This Regulation applies to vehicles of category L₁¹ with regard to sound emission. Pure electric vehicles, including vehicles with auxiliary electric propulsion, are not in the scope of this Regulation.

Justification: pure electric vehicles are excluded, due to low level of sound emissions, which a priori should satisfy the sound emission level limits set out in this Regulation.

¹ As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.4, para. 2 - www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html

The following subparagraph is added to the end of paragraph 2.2.1 in Annex 3:

" In the case of compressed air engines, the normal operating conditions, which do not fall under the above mentioned ones in this paragraph, shall be agreed between the manufacturer and the type-approval authority and shall be annexed to the manufacturer's application for type-approval in accordance with this Regulation. "

Justification: including the compressed air engine conditions for the sound level measurement

The first subparagraph of paragraph 3.1.2.1 in Annex 3 is amended to read:

The vehicle shall approach line AA' at an initial steady speed as specified below. When the front of the vehicle reaches line AA' the throttle accelerator control shall be fully opened as quickly as practically possible and kept in that position until the rear of the vehicle reaches line BB'; the throttle accelerator control shall then be returned as quickly as possible to the idle position.

Justification: The more general term of "accelerator control" introduced to cover engines without "throttle" as well (e.g. compressed air engines).

The first subparagraph of paragraph 3.2.3.2 in Annex 3 is amended to read:

Before the measurements are started, the engine of the vehicle shall be brought to its normal operating temperature, if it is an internal combustion engine, or to its normal operating condition, if it is a compressed air engine. If the vehicle is equipped with automatic fans, no adjustment shall be made to them during the measurement of the sound level.

Justification: introduction of operating condition to cover compressed air engines.

The first subparagraph of paragraph 3.2.3.3.2 in Annex 3 is amended to read:

" The engine speed shall be gradually increased from idle to the target engine speed and held constant within a tolerance band of ± 5 per cent. Then the throttle accelerator control shall be rapidly released and the engine speed shall be returned to idle. The sound pressure level shall be measured during a period consisting of constant engine speed of at least 1 s and throughout the entire deceleration period. The maximum sound level meter reading shall be taken as the test value. "

Justification: The more general term of "accelerator control" introduced to cover engines without "throttle" as well (e.g. compressed air engines).

Indent (b) of paragraph 4.2 in Annex 3 is amended to read:

"(b) The vehicle speed $v_{AA'}$ in km/h at the beginning of the maximum speed or full throttle acceleration test with the accelerator control fully engaged in gear (i); and"

Justification: The more general term of “accelerator control” introduced to cover engines without “throttle” as well (e.g. compressed air engines).

Paragraph 5.1.4.2.6 in Annex 3 is amended to read:

The power indicated by the dynamometer shall be 50 per cent of the power with the accelerator control fully engaged, full-throttle measured at 75 per cent of the rated engine speed as defined in paragraph 2.7 of this Regulation.

Justification: The more general term of “accelerator control” introduced to cover engines without “throttle” as well (e.g. compressed air engines).

Annex 4

Maximum sound level limits (new vehicles)

<i>Maximum design speed in km/h</i>	<i>Maximum sound level values in dB(A)</i>
≤ 25	66
> 25	71
cycles designed to pedal equipped with an auxiliary propulsion, other than electrical, with the primary aim to aid pedalling and output of auxiliary propulsion is cut off at a vehicle speed ≤ 25 km/h	63

Justification: Introduction of sound emission level limits for powered cycles.