Submitted by the expert from OICA

Informal document **GRB-67-09**
(67th GRB, 24-26 January 2018,
agenda item 7)

# Proposal for Supplement 2 to the 01 series of amendments to Regulation No. 138

## Submitted by the experts of OICA

The text reproduced below was prepared by the experts of OICA to update and revise the 01 series of amendments to Regulation No. 138.

The proposed amendments are marked in bold for new or strikethrough for deleted characters.

# I. Proposal

*Paragraph 6.2.,* amend to read:

"6.2. Acoustics characteristics

The sound emitted by the vehicle type submitted for approval shall be measured by the methods described in Annex 3 to this Regulation. ~~**The speed range for operation is the range of greater than 0 km/h up to and inclusive 20 km/h.**~~

**The specifications of this Regulation are applicable for the speed range of greater than 0 km/h up to and inclusive 20 km/h. Operation of an AVAS is permitted at vehicle speeds outside the specification range.**

If the vehicle that is not equipped with an AVAS fulfils the overall levels as specified in Table 2 below with a margin of +3 dB(A), the specification for one-third octave bands and the frequency shift do not apply."

*Paragraphs 6.2.6.,* amend to read:

"6.2.6. Pause function

Any pause function as defined in paragraph 2.7. shall be prohibited.

~~**6.2.6.1. The function shall be located so that it is operable by the driver in a normal seating position.**~~

~~**6.2.6.2. In the case when the pause function is activated, the suspension of AVAS has to be clearly indicated to the driver.**~~

~~**6.2.6.3. The AVAS shall be reactivated when the vehicle is started upon each vehicle turn-off.**~~

~~**6.2.6.4. Owner's manual information**~~

~~**If a pause function is installed, the manufacturer shall provide the owner with information (e.g. in the owner's manual) on its effect:**~~

~~**"The pause function of the Acoustic Vehicle Alerting System (AVAS) shall not be used unless for an obvious lack of necessity to emit sound for alert in the surrounding area and that it is certain that there are no pedestrians within the short distance."**~~"

*Annex 3, paragraph 2.2.*, amend to read:

"2.2. Meteorological conditions

**2.2.1 For outdoor facilities**

Metrological conditions are specified to provide a range of normal operating temperatures and to prevent abnormal readings due to extreme environmental conditions.

**The meteorological instrumentation shall deliver data representative for the test site and shall be positioned adjacent to the test area at a height representative of the height of the measuring microphone.**

A value representative of temperature, **wind speed,** relative humidity, and barometric pressure shall be recorded during the measurement interval.

~~**The meteorological instrumentation shall deliver data representative for the test site and shall be positioned adjacent to the test area at a height representative of the height of the measuring microphone.**~~

The measurements shall be made when the ambient air temperature is within the range from 5 °C to 40 °C.

The ambient temperature may of necessity be restricted to a narrower temperature range such that all key vehicle functionalities that can reduce vehicle noise emissions (e.g. start/stop, hybrid propulsion, battery propulsion, fuel-cell stack operation) are enabled according to manufacturer's specifications.

The tests shall not be carried out if the wind speed, including gusts, at microphone height exceeds 5 m/s, during the measurement interval.

**2.2.2 For indoor facilities**

**Metrological conditions are specified to provide a range of normal operating temperatures and to prevent abnormal readings due to extreme environmental conditions.**

**The meteorological instrumentation shall deliver data representative for the test site and values of temperature, relative humidity, and barometric pressure shall be recorded during the measurement interval.**

**The measurements shall be made when the ambient air temperature is within the range from 5 °C to 40 °C.**

**The ambient temperature may of necessity be restricted to a narrower temperature range such that all key vehicle functionalities that can reduce vehicle noise emissions (e.g. start/stop, hybrid propulsion, battery propulsion, fuel-cell stack operation) are enabled according to manufacturer's specifications.**"

# II. Justification

6.2. The current text created ambiguities in the application. The original intention was to have specification for the vehicle for the speed range mentioned in paragraph 6.2.

Outside this area, an AVAS may operate. This was especially made to enable harmonized components for other market, e.g. the USA where the specification are up to a speed range to 30 km/h.

The maximum sound is then covered by UN R51.03 where sound enhancement systems are addressed under ASEP with Supplement 3 to UN R51.03

The proposed text clarifies the original intention.

6.2.6. Series 01 to UN R138 introduced a prohibition to the pause function operated by the driver. Unintentionally, the subparagraphs to 6.2.6. were forgotten to be deleted.

OICA proposes to delete these paragraphs. They make no sense any more and cause confusion.

A3 2.2. The current wording mandates a weather station in an indoor facility. It is not necessary to mandate a weather station as the room is controlled with regard to the ambient conditions. Wind noise is covered by the background noise.

Therefore the paragraph 2.2. was split into two parts, one for outdoor and one for indoor. The outdoor paragraph was amended for better understanding.

_____