



Brussels, 26.6.2017  
C(2017) 4296 final

**COMMISSION DELEGATED REGULATION (EU) .../...**

**of 26.6.2017**

**amending Regulation (EU) No 540/2014 of the European Parliament and of the Council  
as regards the Acoustic Vehicle Alerting System requirements for vehicle EU-type  
approval**

(Text with EEA relevance)

## **EXPLANATORY MEMORANDUM**

### **1. CONTEXT OF THE DELEGATED ACT**

Hybrid electric and pure electric vehicles, also called Quiet Road Transport Vehicles (QRTV), emit sound of substantially reduced level, compared to vehicles with internal combustion engine, thus resulting in environmental benefits. However, that reduction has removed an important source of audible signal that warns vulnerable road users, typically visually impaired persons or cyclists, of the vehicle approach, presence or departure.

Type-approval requirements with regard to sound emissions applying to vehicles of categories M and N are set out in Regulation (EU) No 540/2014<sup>1</sup>. In this Regulation minimum sound emission requirements are also laid down for the installation of Acoustic Vehicle Alerting System (AVAS) on QRTV, aiming at the warning of vulnerable road users for their safety towards the presence of such vehicles.

It is now necessary to detail and thus improve the AVAS requirements in Regulation (EU) No 540/2014 by taking into account the work at UNECE level, which resulted recently to the UN Regulation No 138 on the approval of QRTV. At the same time, the Commission shall fulfil the legislative obligation of detailing the AVAS requirements, as this is stated in Article 8 of Regulation (EU) No 540/2014.

This act aims at amending Annex VIII of Regulation (EU) No 540/2014 with AVAS technical requirements and test procedures, by referring to UN Regulation No 138.

### **2. CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT**

In the preparation of this act, the Commission carried out appropriate consultations at expert level comprising the relevant industrial stakeholders, social partners and Member State experts.

This act has been subject to a public consultation through the Better Regulation Portal from 3 April 2017 to 1 May 2017; comments received have been duly considered.

### **3. LEGAL ELEMENTS OF THE DELEGATED ACT**

#### **(a) Legal basis**

The legal basis of this delegated act is Regulation (EU) No 540/2014 of the European Parliament and of the Council of 16 April 2014 on the sound level of motor vehicles and of replacement silencing systems, and amending Directive 2007/46/EC and repealing Directive 70/157/EEC.

#### **(b) Choice of instruments**

A regulation is the appropriate instrument to amend Regulation (EU) No 540/2014.

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<sup>1</sup> Regulation (EU) No 540/2014 of the European Parliament and of the Council of 16 April 2014 on the sound level of motor vehicles and of replacement silencing systems, and amending Directive 2007/46/EC and repealing Directive 70/157/EEC (OJ L 158, 27.5.2014, p. 131)

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 540/2014 of the European Parliament and of the Council of 16 April 2014 on the sound level of motor vehicles and of replacement silencing systems, and amending Directive 2007/46/EC and repealing Directive 70/157/EEC<sup>2</sup>, and in particular the second paragraph of Article 8 and Article 9 thereof,

Whereas:

- (1) Regulation (EU) No 540/2014 lays down requirements for the EU type-approval of all new vehicles of categories M (vehicles used for the carriage of passengers) and N (vehicles used for the carriage of goods) with regard to their sound level. That Regulation also lays down measures concerning the Acoustic Vehicle Alerting System (AVAS) for hybrid electric and pure electric vehicles, aiming at the warning of vulnerable road users.
- (2) Following the adoption, at the 168th session of the World Forum for Harmonization of Vehicle Regulations of the United Nations Economic Commission for Europe (UNECE), which took place on 8 – 11 March 2016, of UN Regulation 138 on the approval of quiet road transport vehicles, Annex VIII to Regulation (EU) No 540/2014 should be reviewed in order to improve the accuracy of the AVAS requirements on type and volume of emitted sound, the sound generation method, the pause switch and stationary sound.
- (3) The information document pursuant to Annex I to Directive 2007/46/EC of the European Parliament and of the Council<sup>3</sup> relating to EU type-approval of a vehicle with respect to the permissible sound level and the addendum to the EU type-approval certificate should be reviewed to reflect the detailed requirements on AVAS.
- (4) In addition, to allow for the approval of hybrid electric and pure electric vehicles which are equipped with AVAS, it is appropriate to introduce testing requirements on the AVAS sound emission minimum levels in forward and reverse motion as well as on the emitted sound frequency shift.
- (5) Regulation (EU) No 540/2014 should therefore be amended accordingly.

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<sup>2</sup> OJ L 158, 27.5.2014, p. 131.

<sup>3</sup> Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles (Framework Directive) (OJ L 263, 9.10.2007, p. 1).

- (6) Given that Regulation (EU) No 540/2014 has become applicable on 1 July 2016 and that it cannot be fully applied without the amendments to Annex VIII included in this act, this Regulation should enter into force as soon as possible,

HAS ADOPTED THIS REGULATION:

*Article 1*

**Amendments to Regulation (EU) No 540/2014**

Regulation (EU) No 540/2014 is amended as follows:

(1) Annex I is amended as follows:

(a) in Appendix 1, the following point 12.8 is added:

"12.8. AVAS

12.8.1. Approval number of a type of vehicle with regard to its sound emission pursuant to UNECE Regulation No. 138 <sup>(1)</sup>

or

12.8.2. Complete reference to the test results of AVAS sound emission levels, measured in accordance with Regulation (EU) No 540/2014 <sup>(1)</sup> ";

(b) in Appendix 2, the Addendum is amended as follows:

(i) point 3 is replaced by the following:

"3. AVAS fitted: yes / no <sup>(1)</sup>";

(ii) the following point 4 is added:

"4.

Remarks.....".

(2) Annex VIII is replaced by the text in the Annex to this Regulation.

*Article 2*

**Entry into force**

This Regulation shall enter into force on the third day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 26.6.2017

*For the Commission*  
*The President*  
*Jean-Claude JUNCKER*