Commission Delegated Regulation (EU) 2017/79 of 12 September 2016 establishing detailed technical requirements and test procedures for the EC type-approval of motor vehicles with respect to their 112-based eCall in-vehicles systems, of 112-based eCall in-vehicle separate technical units and components and supplementing and amending Regulation (EU) 2015/758 of the European Parliament and of the Council with regard to the exemptions and applicable standards (Text with EEA relevance)

COMMISSION DELEGATED REGULATION (EU) 2017/79

of 12 September 2016

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(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2015/758 of the European Parliament and of the Council of 29 April 2015 concerning type-approval requirements for the deployment of the eCall in-vehicle system based on the 112 service and amending Directive 2007/46/EC[(1)], and in particular Article 2(2), Article 5(8) and (9) and Article 6(12) thereof,

Whereas:

(1) Regulation (EU) 2015/758 lays down a general obligation for new types of vehicles of categories M_1 and N_1 to be equipped with 112-based eCall in-vehicle systems as of 31 March 2018.

(2) It is necessary to set out the detailed technical requirements and test procedures for the approval of motor vehicles with respect to their 112-based eCall in-vehicle systems. The test procedures also allow for testing and approval of 112-based eCall in-vehicle separate technical units ('STUs') and components intended for fitment in motor vehicles or for integration in 112-based eCall in-vehicle systems.

(3) Tests should be carried out by technical services in their capacity as foreseen in Directive 2007/46/EC of the European Parliament and of the Council[(2)] that establishes the general framework for the EC type-approval of motor vehicles and defines the roles and responsibilities of all the actors involved at different stages of the approval process.

(4) Tests and requirements should be designed in such a way that duplicated testing is avoided. In addition, some flexibility is required regarding special purpose vehicles that are built in multiple stages in accordance with Directive 2007/46/EC as they are exempted from the frontal and lateral collision requirements under UNECE Regulations 94 and 95. For that reason, the approval granted at a previous stage of the process to

the base vehicle with respect to the 112-based eCall in-vehicle system should remain valid, unless the system or its sensors were modified after the approval.

(5) There are cases where certain classes of vehicles cannot for technical reasons be fitted with an appropriate eCall triggering mechanism and should be exempted from the requirements of Regulation (EU) 2015/758. Following an assessment of the costs and benefits carried out by the Commission and taking into account the relevant safety and technical aspects, those classes of vehicles are identified and included in a list established in Annex IX.

(6) The 112-based eCall in-vehicle system needs to remain functional after a severe accident. An automatic eCall is most beneficial in a high-severity collision where the risk of occupants of the vehicle being incapacitated and not able to call for assistance without an eCall system is highest. The 112-based eCall in-vehicle systems, components and STUs should therefore be tested to verify their sustained functionality after being subjected to inertial loads similar to those that may occur during a severe vehicle crash.

(7) The post-crash functioning and automatic triggering of the 112-based eCall in-vehicle system should also be ensured at vehicle level. A full-scale impact test procedure should therefore be set out to verify that the vehicle is constructed in such a way that its 112-based eCall in-vehicle system survives a frontal and side collision in its original mounting situation and configuration.

(8) The core functionality of a 112-based eCall in-vehicle system is not only to notify the Public Safety Answering Point ('PSAP') of an accident, but also to establish a voice connection between occupants of the vehicle and a PSAP operator. The audio equipment of the 112-based eCall in-vehicle system should therefore be tested after the full-scale crash tests to guarantee that it does not suffer loudness reduction or distortions that make voice communication impossible.

(9) Where a 112-based eCall in-vehicle system is approved for use in conjunction with a system providing third party services ('TPS system'), it should be ensured that only one of those systems is active at a time and that the 112-based eCall in-vehicle system is triggered automatically when the TPS system does not function. The manufacturer of vehicles fitted with 112-based eCall in-vehicle system and TPS system should explain the fall-back procedure built-in the TPS system and describe the principles of the changeover mechanism between the TPS system and the 112-based eCall in-vehicle system.

(10) To ensure the provision of accurate and reliable position information, the 112-based eCall in-vehicle system should be able to use the positioning services provided by the Galileo and the EGNOS systems.

(11) The 112-based eCall in-vehicle system should warn the occupants of a vehicle in the event the system is unable to execute an emergency call. A procedure should therefore be set out for the verification of the self-testing of the system and of its compliance with the malfunction indication requirements.

(12) Manufacturers should ensure that the 112-based eCall in-vehicle systems are not traceable and not subject to any constant tracking. For that purpose, a test procedure

should be set out to verify that the 112-based eCall in-vehicle system is not available for communication with the PSAP before the eCall is triggered.

(13) Any data processed through the 112-based eCall in-vehicle system must be adequate, relevant and proportionate to the purposes for which those data are collected and processed. To that end, appropriate procedures should be laid down to verify that the data in the internal memory of the system are automatically and continuously removed and are not retained longer than necessary for the purpose of handling the emergency call.

(14) The versions of the applicable standards on which the requirements for eCall are based should be updated.

(15) Vehicle manufacturers should be given sufficient time to adapt to the technical requirements for the approval of 112-based eCall in-vehicle systems. The Member States should also be given sufficient time to deploy on their territory the PSAP infrastructure required for the proper receipt and handling of emergency calls. For that reason, the date of application of this Regulation should be the same as the date of compulsory application of the 112-based eCall in-vehicle systems in accordance with Regulation (EU) 2015/758,

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter

This Regulation establishes detailed technical requirements and test procedures for the EC type-approval of the vehicles referred to in Article 2 of Regulation (EU) 2015/758 in respect of their 112-based eCall in-vehicle systems and of 112-based eCall in-vehicle separate technical units (‘STUs’) and components.

Article 2

Classes of vehicles exempted from the requirement to be equipped with a 112-based eCall in-vehicle system

The classes of vehicles which for technical reasons cannot be fitted with an appropriate eCall triggering mechanism and for that reason are exempted from the requirement to be equipped with a 112-based eCall in-vehicle system are listed in Annex IX.

Article 3

Multi-stage approval of special purpose vehicles

In case of multi-stage type-approval of the special purpose vehicles defined in points 5.1 and 5.5 of part A of Annex II to Directive 2007/46/EC, the type-approval granted at a previous stage in respect of the installation of a 112-based eCall in-vehicle system in the (base) vehicle shall remain valid, provided that the 112-based eCall in-vehicle system and the relevant sensors are not modified.

Changes to legislation: *There are currently no known outstanding effects for the Commission Delegated Regulation (EU) 2017/79. (See end of Document for details)*

Article 4

Definitions

For the purposes of this Regulation the following definitions shall apply:

(1) ‘vehicle type with regard to the installation of a 112-based eCall in-vehicle system’ means motor vehicles that do not differ in such essential respects as the characteristics of the integration within the vehicle as well as the functionality and capability of essential hardware deploying an in-vehicle emergency call.

(2) ‘type of 112-based eCall in-vehicle STU’ means a combination of specific hardware which does not differ in such essential respects as the characteristics, functionality and capability of deploying an in-vehicle emergency call when installed in a motor vehicle.

(3) ‘type of 112-based eCall in-vehicle system component’ means specific hardware which does not differ in such essential respects as the characteristics, functionality and capability of facilitating the deployment of an in-vehicle emergency call when integrated in a 112-based eCall in-vehicle STU or 112-based eCall in-vehicle system.

(4) ‘representative arrangement of parts’ means all parts required by the 112-based eCall in-vehicle system to successfully populate and transmit in an in-vehicle emergency call the minimum set of data referred to in the standard EN 15722:2015 ‘Intelligent transport systems — eSafety — eCall minimum set of data’ (‘MSD’) including the control module, the power source, the mobile network communication module, the Global Navigation Satellite System receiver and the external Global Navigation Satellite System antenna and their connectors and wiring;

(5) ‘control module’ means a component of the e-Call in-vehicle system designed to ensure the combined functioning of all modules, components and features of the system;

(6) ‘power source’ means the component that supplies power to the 112-based e-Call in-vehicle system, including a back-up source if fitted, which feeds the system after the test referred to in point 2.3 of Annex I;

(7) ‘eCall log file’ means any record generated at the moment of an automatic or manual eCall activation which is stored within the internal memory of the 112-based eCall in-vehicle system and consists only of the MSD;

(8) ‘Global Navigation Satellite System’ (‘GNSS’) means an infrastructure composed of a constellation of satellites and a network of ground stations, which provides accurate timing and geolocation information to users having an appropriate receiver;

(9) ‘Satellite-Based Augmentation System’ (‘SBAS’) means a regional navigation satellite system for monitoring and correcting signals emitted by existing global satellite navigation systems, giving the users better performance in terms of accuracy and integrity;

(10) ‘cold start mode’ means the condition of a GNSS receiver when position, velocity, time, almanac and ephemeris data are not stored in the receiver and therefore the navigation solution is to be calculated by means of a full sky search;

(11) ‘up-to-date location’ means the last known vehicle position determined at the latest moment possible before generation of the MSD.

Article 5

Requirements and test procedures for EC type-approval of motor vehicles with regard to the installation of 112-based eCall in-vehicle systems

1 EC type-approval of a vehicle with regard to the installation of a 112-based eCall in-vehicle system shall be subject to the vehicle and its system passing the tests laid down in Annexes I to VIII and complying with the relevant requirements laid down in those Annexes.

2 Where the motor vehicle is fitted with a type of 112-based eCall in-vehicle STU that has been type-approved in accordance with Article 7, the vehicle and its system shall have to pass the tests laid down in Annexes II, III and V and to comply with all relevant requirements laid down in those Annexes.

3 Where the 112-based eCall in-vehicle system of the motor vehicle comprises one or more components that have been type-approved in accordance with Article 6, the motor vehicle and its system shall have to pass the tests laid down in Annexes I to VIII and to comply with all relevant requirements laid down in those Annexes. The assessment of whether the system complies with those requirements may however partly be based on the results of the tests referred to in Article 6(3).

Article 6

Requirements and test procedures for EC type-approval of 112-based eCall in-vehicle system components

1 EC type-approval of a 112-based eCall in-vehicle system component shall be subject to the component passing the tests laid down in Annex I and complying with the relevant requirements in that Annex.

2 For the purposes of paragraph 1, only the verification procedure for components laid down in point 2.8 of Annex I shall apply after the individual parts are subjected to the test referred to in point 2.3 of this Annex.

3 Upon request of the manufacturer, a component may additionally be tested by the technical service for compliance with the requirements set out in Annexes IV, VI and VII that are relevant to the functionalities of the component. Compliance with those requirements shall be indicated on the type-approval certificate issued in accordance with Article 3(3) of Commission Implementing Regulation (EU) 2017/78[(3)].

Article 7

Requirements and test procedures for EC type-approval of 112-based eCall in-vehicle STUs

1 EC type-approval of a 112-based eCall in-vehicle STU shall be subject to the STU passing the tests laid down in Annexes I, IV, VI, VII and VIII and complying with the relevant requirements laid down in those Annexes.

2 Where the 112-based eCall in-vehicle STU comprises one or more components that have been type-approved in accordance with Article 6, the STU shall have to pass the tests laid down in Annexes I, IV, VI, VII and VIII and to comply with all relevant requirements laid down