



2025/1871

28.10.2025

COMMISSION DELEGATED REGULATION (EU) 2025/1871

of 23 July 2025

amending Regulation (EU) 2015/758 of the European Parliament and of the Council as regards the standards relating to eCall and amending Delegated Regulation (EU) 2017/79 as regards the technical requirements and test procedures for approval of motor vehicles equipped with 112-based eCall in-vehicle systems

(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 5(8) and (9) and Article 6(12) thereof,

Whereas:

- (1) Regulation (EU) 2015/758 requires all new types of vehicles of categories M₁ and N₁ to be equipped with a 112-based eCall in-vehicle system.
- (2) The Commission's Communication on a Sustainable and Smart Mobility Strategy ⁽²⁾ identifies the need to adapt the eCall legal framework to new telecommunication technologies.
- (3) Regulation (EU) 2015/758 contains a list of European standards and technical specifications, which the technical requirements for the approval of eCall systems and vehicles equipped with such systems are based on.
- (4) The European Committee for Standardisation (CEN) has adopted new standards EN 17184:2024 and EN 17240:2024 succeeding respectively the technical specifications CEN/TS 17184:2022 and CEN/TS 17240:2018. In addition, the new version of the standard EN 16072:2025 contains relevant changes for eCall. Accordingly, the references to the respective technical specifications and standards in Article 5(8) of Regulation (EU) 2015/758 should be updated.
- (5) Commission Delegated Regulation (EU) 2017/79 ⁽³⁾ establishes detailed technical requirements and test procedures for the approval of the 112-based eCall in-vehicle systems and motor vehicles equipped with such systems. Those technical requirements and test procedures should be revised to ensure technologic neutrality and to allow technology agnostic implementation of the test methods.
- (6) In order to ensure the effectiveness of the eCall in-vehicle system self-test, it is necessary to provide that the failure modes should be tested separately.

⁽¹⁾ OJ L 123, 19.5.2015, p. 77, ELI: <http://data.europa.eu/eli/reg/2015/758/oj>.

⁽²⁾ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 'Sustainable and Smart Mobility Strategy – putting European transport on track for the future', COM(2020) 789 final of 9.12.2020.

⁽³⁾ 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 (OJ L 12, 17.1.2017, p. 44, ELI: http://data.europa.eu/eli/reg_del/2017/79/oj).

- (7) In order to ensure the readiness of the eCall in-vehicle system for the periodic roadworthiness tests in accordance with Directive 2014/45/EU of the European Parliament and of the Council ⁽⁴⁾, it is necessary to provide the specific technical requirements to be met at type-approval to facilitate the roadworthiness testing throughout the lifecycle of the motor vehicles.
- (8) To ensure that the verification of the lack of traceability of the eCall in-vehicle is performed without ambiguity it is necessary to specify the expected behaviour after the eCall is emitted.
- (9) In order to ensure that the structure of the test procedures is consistent throughout the Annexes to Delegated Regulation (EU) 2017/79, those annexes should clearly distinguish between the test conditions, the test methods and the assessment.
- (10) It is necessary to set out provisions allowing for the extension of approvals granted before 1 January 2027 to 112-based eCall in-vehicle systems operating over circuit-switched communication networks to ensure that they continue to serve the purpose after the transition to packet-switched communication technology.
- (11) In order to make sure that the 112-based eCall in-vehicle system remains operational in case the main power supply of the vehicle is disconnected, it is necessary to provide test procedures for the back-up power supply (if fitted) and the secondary vehicle power supply, which might be used after a road accident with the vehicle.
- (12) Therefore, Regulation (EU) 2015/758 and Delegated Regulation (EU) 2017/79 should be amended accordingly.
- (13) In order to provide Member States, national authorities and manufacturers with sufficient lead time to implement the changes, the mandatory application of the standards EN 17184:2024 and EN 17240:2024 should be deferred to 1 January 2027. In addition, it is necessary to set out transitional provisions for the implementation of the new requirements regarding the back-up power supply and the secondary vehicle power supply of the 112-based eCall in-vehicle system and regarding the readiness for periodic roadworthiness tests of new types of vehicles with such systems,

HAS ADOPTED THIS REGULATION:

Article 1

Amendments to Regulation (EU) 2015/758

In Article 5(8), second subparagraph of Regulation (EU) 2015/758, points (a) to (c) are amended as follows:

- (1) in point (a), 'EN 16072:2022' is replaced by 'EN 16072:2025'.
- (2) in point (b), 'CEN/TS 17184:2022' is replaced by 'EN 17184:2024'.
- (3) in point (c), 'CEN/TS 17240:2018' is replaced by 'EN 17240:2024'.

Article 2

Amendments to Delegated Regulation (EU) 2017/79

Delegated Regulation (EU) 2017/79 is amended as follows:

- (1) in Article 4, the following point (12) is added:
 - (12) "test eCall" means an eCall for testing purposes, which can be clearly distinguished from a real eCall or which does not reach the Public Safety answering Point ("PSAP").;

⁽⁴⁾ Directive 2014/45/EU of the European Parliament and of the Council of 3 April 2014 on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive 2009/40/EC (OJ L 127, 29.4.2014, p. 51, ELI: <http://data.europa.eu/eli/dir/2014/45/oj>).

(2) in Article 5, the following paragraph (4) is added:

‘4. For the purpose of extending the EC type-approval granted in accordance with paragraph (1) before 1 January 2027, the technical service may exempt 112-based eCall in-vehicle system from full-scale impact test as specified in Annex II and from the subsequent audio equipment test as specified in Annex III. The changes of the modified 112-based eCall in-vehicle system as compared to the originally approved system shall be documented and explained by the manufacturer to the technical service and the type-approval authority:

- (a) Where the communication part is modified without impacting other components of the 112-based eCall in-vehicle system and a vehicle crash-test is conducted for other purposes, the 112-based eCall in-vehicle system shall be included and the full-scale impact test as specified in Annex II and the subsequent audio equipment test as specified in Annex III shall be conducted.
- (b) Where the modification of the communication part of a 112-based eCall in-vehicle system has an impact on its other parts, the full-scale impact test as specified in Annex II and the subsequent audio equipment test as specified in Annex III shall be conducted.’;

(3) in Article 7, paragraph (1), is replaced by the following:

‘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. In case the STU is fitted with a back-up power source, it shall comply with the requirements and be subject to the test procedure laid down in Annex X.’;

- (4) Annex I is amended in accordance with Annex I to this Regulation;
- (5) Annex II is amended in accordance with Annex II to this Regulation;
- (6) Annex III is amended in accordance with Annex III to this Regulation;
- (7) Annex IV is amended in accordance with Annex IV to this Regulation;
- (8) Annex VII is amended in accordance with Annex V to this Regulation;
- (9) Annex VIII is amended in accordance with Annex VI to this Regulation;
- (10) Annex VII to this Regulation is added as Annex X.

Article 3

Transitional provisions

1. With effect from 1 January 2026, national authorities shall refuse to grant new type approvals or extensions for existing approvals for vehicles, systems, components or separate technical units, where those do not comply with the technical specifications set out in CEN/TS 17184:2022 and CEN/TS 17240:2018 or with the standards EN 17184:2024 and EN 17240:2024, if a manufacturer so requests.

2. With effect from 1 January 2027, national authorities shall refuse to grant new type approvals for vehicles, systems, components or separate technical units, where those do not comply with the standards EN 17184:2024 and EN 17240:2024.

3. With effect from 1 January 2027, in the case of new vehicles approved after 31 March 2018 in accordance with Regulation (EU) 2015/758 which do not comply with the technical specifications set out in CEN/TS 17184:2022 and CEN/TS 17240:2018 or with the standards EN 17184:2024 and EN 17240:2024, national authorities shall consider the certificates of conformity to be no longer valid for the purposes of Article 48(1) of Regulation (EU) 2018/858.

4. With effect from 1 January 2028, in the case of new vehicles approved after 31 March 2018 in accordance with Regulation (EU) 2015/758 which do not comply with the standards EN 17184:2024 and EN 17240:2024, national authorities shall consider the certificates of conformity to be no longer valid for the purposes of Article 48(1) of Regulation (EU) 2018/858.

5. With effect from 1 January 2028, national authorities shall refuse to grant new type approvals for vehicles, systems or separate technical units, where those do not comply with the technical requirements to enable periodic roadworthiness tests in accordance with Annex VII to Delegated Regulation (EU) 2017/79 as amended by this Regulation.

6. With effect from 1 January 2027, national authorities shall refuse to grant new type approvals for vehicles, systems or separate technical units, where those do not comply with the requirements for the performance of the back-up power supply in accordance with Annex X to Delegated Regulation (EU) 2017/79.

Article 4

Entry into force and application

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

Article 1(2) and (3) shall apply from 1 January 2027.

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

Done at Brussels, 23 July 2025.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX I

Annex I to Delegated Regulation (EU) 2017/79 is amended as follows:

- (1) point 1.1.4. is replaced by the following:

‘1.1.4. Position determination: The eCall system or representative arrangement shall be able to determine accurately the up-to-date vehicle location, including two recent vehicle locations before the generation of the data for the MSD.’;
- (2) in point 2.2.4., the following sentence is added:

‘Any such agreement shall be documented in the test report.’;
- (3) point 2.4.2. is replaced by the following:

‘2.4.2. The performance requirements shall be verified by performing a test eCall using the power source subjected to the high-severity deceleration.’;
- (4) in point 2.4.3. the introductory phrase is replaced by the following:

‘2.4.3. Before performing the test eCall, ensure that:’;
- (5) point 2.4.3.(c) is replaced by the following:

‘(c) one of the connection procedures defined in point 2.7, as agreed between the technical service and the manufacturer, shall be applied for any test eCall.’;
- (6) point 2.4.4. is replaced by the following:

‘2.4.4. Perform a test eCall by applying a trigger according to the instructions of the manufacturer.’;
- (7) point 2.4.5.(c) is replaced by the following:

‘(c) Verify that the MSD contained an accurate, up-to-date location. This shall be verified in accordance with the Positioning Test Procedure as specified in point 2.5 by a test record showing that the deviation between IVS location and true location, d_{IVS} , is less than 150 metres and the confidence bit transmitted to the PSAP test point indicates ‘position can be trusted’.

(d) Verify that the MSD contained the two recent locations before the generation of the data for the MSD. This shall be verified by a record of the PSAP test point showing that it received the ‘recentVehicleLocationN1’ and ‘recentVehicleLocationN2’.’;
- (8) point 2.4.6. is replaced by the following:

‘2.4.6. Clear down the test eCall using the appropriate PSAP test point command (e.g. hang up).’;
- (9) points 2.7.1.1. and 2.7.1.2. are replaced by the following:

‘2.7.1.1. It shall be ensured that an emergency call emitted by the 112-based system will be performed over-the-air via a non-public (i.e. simulated) mobile network and routed to the dedicated PSAP test point.

2.7.1.2. The dedicated PSAP test point during the test procedures shall be a PSAP simulator under the control of the technical service, compliant with the applicable EN standards and certified in accordance with EN 16454 and EN 17240. It shall be equipped with an audio interface to allow voice communication tests.’;
- (10) points 2.7.2.1., 2.7.2.2. and 2.7.2.3. are replaced by the following:

‘2.7.2.1. It shall be ensured that a regular call to a long number is emitted by the 112-based eCall in-vehicle system (instead of an emergency call) and is performed over-the-air via a public mobile network and routed to the dedicated PSAP test point.

In case where this procedure is technically not possible, an emergency call emitted by the 112-based eCall in-vehicle system via a public mobile network in packet-switched domain can be used instead, if agreed by the manufacturer or technical service with the genuine PSAP or if a technical solution has been set up to route the eCall to a dedicated PSAP test point.

- 2.7.2.2. The dedicated PSAP test point during the test procedures shall be a PSAP simulator under the control of the technical service, compliant with the applicable EN standards and certified in accordance with EN 16454 and EN 17240. It shall be equipped with an audio interface to allow voice communication tests.
 - 2.7.2.3. If applicable, it shall be ensured that a regular call emitted by the TPS system will be performed over-the-air via a public mobile network and routed to the TPSP test point.;
- (11) points 2.7.3.1., 2.7.3.2. and 2.7.3.3. are replaced by the following:
- ‘2.7.3.1. It shall be ensured that an emergency call emitted by the 112-based system will only be performed via a wired connection with a dedicated network simulator (bypassing any mobile network antenna) and routed to the dedicated PSAP test point.
 - 2.7.3.2. The dedicated PSAP test point during the test procedures shall be a PSAP simulator under the control of the technical service, compliant with the applicable EN standards and certified in accordance with EN 16454 and EN 17240. It shall be equipped with an audio interface to allow voice communication tests.
 - 2.7.3.3. If applicable, it shall be ensured that a regular call emitted by the TPS system will be performed via a wired connection with a dedicated network simulator (bypassing any mobile network antenna) and routed to the dedicated TPSP test point.;
- (12) point 2.8.1. is replaced by the following:
‘These procedures shall apply for the purposes of type-approval of a 112-based eCall in-vehicle system component in accordance with Article 6 of this Regulation.’;
- (13) point 2.8.2.2. is replaced by the following:
‘2.8.2.2. The performance requirements shall be verified by performing a test eCall according to paragraphs 2.4.3 to 2.4.6.’;
- (14) points 2.8.2.3, 2.8.2.4, 2.8.2.5 and 2.8.2.6 are deleted.
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ANNEX II

Annex II to Delegated Regulation (EU) 2017/79 is amended as follows:

(1) point 1.1.6. is replaced by the following:

‘1.1.6. Position determination: The eCall system shall be able to determine accurately the up-to-date vehicle location, including two recent vehicle locations before the generation of the data for the MSD.’;

(2) in point 2.3.3., point (c) is replaced by the following:

‘(c) one of the connection procedures defined in point 2.7 of Annex I, as agreed between the technical service and the manufacturer, will be applied for any test eCall.’;

(3) point 2.4 is replaced by the following:

‘2.4. **Power-Supply Test procedure**

The test procedure described in points 2.4.1 to 2.4.6. shall apply where Annex X is applicable and any of the following conditions is met:

- (a) the eCall STU was not subject of the test laid down in Annex X,
- (b) the eCall STU was subject of the test laid down in Annex X but the back-up power supply in the vehicle is shared with other devices.

2.4.1. If the automatic eCall was terminated, trigger a manual test eCall.

2.4.2. Read out any text for at least 5 minutes at the PSAP test point. Alternatively, the test method referred to in point 2.6.2. of Annex III can be performed at this step if the duration of 5 minutes is not exceeded.

2.4.3. Clear down the eCall using the appropriate PSAP test point command (e.g. hang up).

2.4.4. Wait for 56 minutes after the call was ended.

2.4.5. Initiate a call from the PSAP test point to the eCall in-vehicle system.

2.4.6. If the call is automatically accepted, read out any text for at least 5 minutes at the PSAP test point, otherwise the test is finished.’;

(4) point 2.7. is deleted;

(5) point 3 is added:

‘3. **Verification procedure**

3.1. Verification of the Minimum Set of Data (MSD)

3.1.1. Verify each of the following items in at least one of the test eCalls:

- (a) Verify that an eCall was triggered automatically by the full-scale impact event. This shall be verified by a record of the PSAP test point showing that it received an eCall following the impact event and that the MSD control indicator was set to ‘automatically initiated eCall’.
- (b) Verify that the eCall status indicator indicated an eCall sequence following the automatic or manual trigger. This shall be verified by a record showing that an indication sequence was performed on all sensory channels specified in the manufacturer’s documentation (visual and/or audible).
- (c) Verify that an MSD was received by the PSAP test point. This shall be verified by a record of the PSAP test point showing that an MSD emitted from the vehicle following the automatic trigger was received and successfully decoded.

- (d) Verify that the MSD contained accurate vehicle-specific data. This shall be verified by a record of the dedicated PSAP test point showing that the information transmitted in the fields regarding vehicle type, vehicle identification number (VIN) and vehicle propulsion storage type does not deviate from the information specified in the type-approval application.
 - (e) Verify that the MSD contained an accurate, up-to-date location. This shall be verified in accordance with the Positioning Test Procedure as defined in point 2.5 of Annex I by a test record showing that the deviation between IVS location and true location, d_{IVS} , is less than 150 metres and the confidence bit transmitted to the PSAP test point indicates 'position can be trusted'. If no GNSS signals are available at the impact test location, the vehicle can be moved to an appropriate location before performing the test eCall.
 - (f) Verify that the MSD contained the two recent locations before the generation of the data for the MSD. This shall be verified by a record of the PSAP test point showing that it received the 'recentVehicleLocationN1' and 'recentVehicleLocationN2'.
 - (g) Verify that the MSD contained an up-to-date timestamp. This shall be verified by a test record showing that the timestamp contained in the MSD received by the PSAP test point does not deviate from the exact recorded time of the trigger activation by more than 60 seconds.
- 3.2. If the automatic test eCall could not be performed successfully due to vehicle-external factors, it shall be permissible to verify the automatic trigger following the impact via the internal record transaction function of the in-vehicle system. This register shall be capable to store received trigger signals in non-volatile memory. The test engineer shall have access to the data stored in the in-vehicle system and shall verify that no record of automatic trigger signal is stored before the impact event and that a record of an automatic trigger signal is stored after the impact event.
- 3.3. If the test eCall was performed with the vehicle connected to an off-vehicle power supply (in cases where the impact test was carried out with the standard vehicle power supply not installed), verify that the on-board electrical system feeding the eCall in-vehicle system remained intact. This shall be verified by a record of a test engineer confirming a successful check of the integrity of the on-board electrical system including the dummy in-vehicle power source (visual inspection for mechanical damage to either the power source's mounting bracket or its structure) and the connections via its terminals.
- 3.4. Verification of Power-Supply test
- 3.4.1. The requirement is determined to have been passed if the eCall in-vehicle system is capable to communicate for the required period, as specified in point 2 of Annex X. Otherwise, the test is determined to have been failed.'
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ANNEX III

Annex III to Delegated Regulation (EU) 2017/79 is amended as follows:

- (1) point 1.1.2. is deleted;
- (2) point 2.1. is replaced by the following:

‘2.1. Purpose of the audio equipment crash resistance test procedure
The purpose of this test is to verify that loudspeaker(s) and microphone(s) are successfully connected and that the audio equipment remained functional after the vehicle has been subjected to the frontal impact or the side impact test.’
- (3) point 2.3.1. is replaced by the following:

‘2.3.1. The sustained functionality of the audio equipment shall be verified by performing a test eCall after the impact test and using the voice communication channel between the vehicle and the PSAP test point.’;
- (4) points 2.5. and 2.5.1. are replaced by the following:

‘2.5. Test conditions

2.5.1. Before performing the test eCall, ensure that:

 - (a) one of the connection procedures specified in point 2.7 of Annex I, as agreed between technical service and manufacturer, will be applied for any test eCall;
 - (b) the dedicated PSAP test point is available to receive an eCall emitted by the 112-based eCall in-vehicle system or the eCall in-vehicle system is registered so that a call can be started from the PSAP test point;
 - (c) a false eCall to a genuine PSAP cannot be made over the live network;
 - (d) if applicable, the TPS system is deactivated or will automatically switch to the 112-based system;
 - (e) the vehicle ignition or master control switch is activated;
 - (f) an external power supply source can be used, in case where power capacity (main and back-up) is no longer available following the test procedure set out in Annex II.’;
- (5) points 2.6. and 2.6.1. are replaced by the following:

‘2.6. Test method

2.6.1. Perform a test eCall by applying a manual trigger via the in-vehicle HMI and wait until the loudspeaker(s) and microphone(s) are connected and ready for voice communication or perform a call from the PSAP test point to the eCall in-vehicle system.’;
- (6) points 2.6.3. and 2.6.4. are replaced by the following:

‘2.6.3. Clear down the test eCall using the appropriate PSAP test point command (e.g. hang up).

2.6.4. If the requirements cannot be fulfilled due to impairments introduced by the PSAP test point or the transmission medium, the test eCall may be repeated, if required in an adapted test setup.’;
- (7) in the Appendix, point 3.1. (c) is replaced by the following:

‘(c) Zij kunnen de besluiten nemen.
De meeste mensen hadden het wel door.’.

ANNEX IV

Annex IV to Delegated Regulation (EU) 2017/79 is amended as follows:

- (1) in point 1, the following point 1.1.1. is inserted after point 1.1.:
 - '1.1.1. In case of an optional TPS eCall system, the TPS eCall related tests set out in section 9.8 of standard EN 16454:2023 remain applicable for the Declaration of Conformity of eCall in-vehicle system after 31 December 2025.';
- (2) point 2.3. is replaced by the following:
 - '2.3. The deactivation of the 112-based system while the TPS system is active, shall be verified by performing a manually triggered test eCall.';
- (3) points 2.3.1. to 2.3.4. are replaced by the following:
 - '2.3.1. Before performing the test eCall, ensure:
 - (a) that one of the connection procedures specified in point 2.7 of Annex I, as agreed between the technical service and the manufacturer, will be applied for any test eCall;
 - (b) that the dedicated PSAP test point is available to receive an eCall emitted by the 112-based system;
 - (c) that the TPSP test point is available to receive an eCall emitted by the TPS system;
 - (d) that a false eCall to a genuine PSAP cannot be made over the live network; and
 - (e) that the vehicle ignition or master control switch is activated.
 - 2.3.2. Perform a test eCall by applying a manual trigger of the TPS system.
 - 2.3.3. Verify that:
 - (a) an eCall was established with the TPSP test point by a successful voice connection to the TPSP test point;
 - (b) data was received properly at the TPSP test point including at least the MSD; and
 - (c) no eCall was attempted or established with the PSAP test point by a record of the PSAP test point showing that it did not receive an eCall.
 - 2.3.4. Clear down the eCall using the appropriate TPSP test point command (e.g. hang up).';
- (4) point 2.4. is replaced by the following:
 - '2.4. The fall-back procedure and activation of the 112-based system, in the event that the TPS system does not function, shall be verified by performing a manually triggered test eCall.';
- (5) points 2.4.1. to 2.4.5. are replaced by the following:
 - '2.4.1. Modify the TPS system to simulate a failure, selected at the discretion of the technical service that shall result in a fall-back procedure based on the documentation provided by the manufacturer. Such selection shall be documented in the test report.
 - 2.4.2. Before performing the test eCall, ensure that:
 - (a) one of the connection procedures defined in point 2.7 of Annex I, as agreed between the technical service and the manufacturer, will be applied for any test eCall;
 - (b) the dedicated PSAP test point is available to receive an eCall emitted by the 112-based system;
 - (c) a false eCall to a genuine PSAP cannot be made over the live network; and
 - (d) the vehicle ignition or master control switch is activated.

- 2.4.3. Perform a test eCall by applying a manual trigger of the TPS system.
 - 2.4.4. Verify that:
 - (a) an eCall was established with the PSAP test point by a successful voice connection to the PSAP test point; and
 - (b) an MSD was received by the PSAP test point. That shall be verified by a record of the PSAP test point showing that an MSD emitted from the eCall system following the trigger was received and successfully decoded.
 - 2.4.5. Clear down the test eCall using the appropriate PSAP test point command (e.g. hang up).;
 - (6) point 2.5. is deleted.
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ANNEX V

Annex VII to Delegated Regulation (EU) 2017/79 is amended as follows:

- (1) point 1.3.1. is replaced by the following:

‘1.3.1. The manufacturer shall provide the technical service and the type-approval authority with documentation in accordance with the Table, which shall contain for each item the technical principle applied to monitor the item.’;

- (2) in the Table, the third row (the second item) is replaced by the following:

‘Mobile network antenna is connected’	
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- (3) in the Table, the fifth row (the fourth item) is replaced by the following:

‘GNSS antenna is connected’	
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- (4) point 2.1.1. is replaced by the following:

‘2.1.1. The following test shall be performed, separately for each of the items listed in the Table, on the vehicle with an eCall in-vehicle system installed in accordance with Article 5, on the STU in accordance with Article 7 or on the component, that is made part of a complete system for the purpose of the test, in accordance with Article 6.’;

- (5) point 2.1.2. is replaced by the following:

‘2.1.2. Simulate a malfunction of the eCall system by introducing a critical failure monitored by the self-test function according to the technical documentation provided by the manufacturer. The manufacturer shall provide a list of the checks and a description of how to trigger them.’;

- (6) in point 2.1.5., the following sentence is added:

‘For the failures which cannot be simulated or injected by the technical service, the manufacturers shall provide a documentation describing the test procedure and the test results to the technical service.’;

- (7) point 3.1. is replaced by the following:

‘3.1. When the manufacturer submits an application for revision or extension of an existing type-approval for the purpose of including an alternative GNSS antenna, electronic control unit, mobile network antenna and/or power source components, no retesting of 112-based eCall in-vehicle system components shall be required for the purpose of fulfilling the requirements of this Annex, provided that those type-approved components possess at least the same functional features and that they are covered by this Annex in accordance with Article 6(3).’;

- (8) the following point 4 is added:

‘4. Technical requirements to enable periodic roadworthiness tests

4.1. Purpose

The purpose shall be to verify the following features of the eCall system:

- (a) its correct operational status, by visual observation of the failure warning signal status following the activation of the vehicle master control switch and any bulb check. Where the failure warning signal is only displayed in a common space (the area on which two or more information functions or symbols may be displayed, but not simultaneously), it must be checked first that the common space is functional prior to the failure warning signal status check;

- (b) the correct accuracy of the Minimum Set of Data (by generating and reading current MSD), the correct function and condition of the eCall components and the backup-battery (if applicable), by the use of an electronic vehicle interface;
- (c) the software integrity, by external verification of version information, hash values and system configurations against reference data;
- (d) the correct functionality of the voice communication, by performing an audio echo and speaker test using the vehicle interface.

4.2. **Requirements**

- 4.2.1. The 112-based eCall in-vehicle system shall be able to provide the information to perform the methods of testing specified in Section 3, point 7.13, of Annex I to Directive 2014/45/EU using the electronic vehicle interface.
- 4.2.2. The manufacturer shall make available the technical information, which shall contain the instructions for reading out the information or performing the checks related to each item specified in Section 3, point 7.13, of Annex I to Directive 2014/45/EU.

4.3. **Test procedure**

- 4.3.1. It shall be verified that the information related to each item specified in Section 3, point 7.13 of Annex I to Directive 2014/45/EU, can be read out from the eCall system using the electronic vehicle interface according to the instructions of the manufacturer.
 - 4.3.2. It shall be verified that an echo and speaker test can be performed to check the correct functionality of the voice communication via the vehicle interface.’
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ANNEX VI

Annex VIII to Delegated Regulation (EU) 2017/79 is amended as follows:

(1) Part I is amended as follows:

(a) point 2.1. is replaced by the following:

‘2.1. The 112-based eCall in-vehicle system or STU is not available for communication with the PSAP or at least does not automatically respond if the PSAP initiates the communication after expiry of the eCall timer T9 (1 hour).’;

(b) point 2.2. is deleted;

(c) in section 3, the title is replaced by the following:

‘3. **Test conditions**’;

(d) points 3.2. and 3.2.1. are deleted;

(e) point 3.2.2. is replaced by the following:

‘3.2. Before performing the test, ensure that:

- (a) one of the connection procedures specified in point 2.7 of Annex I, as agreed between the technical service and the manufacturer, will be applied for any test eCall;
- (b) the dedicated PSAP test point is available to receive an eCall emitted by the 112-based system;
- (c) the vehicle ignition or master control switch is activated;
- (d) any TPS or added-value service system is disabled.’;

(f) points 3.2.3. and 3.2.4. are deleted;

(g) in section 4, the title is replaced by the following:

‘4. **Test method**’;

(h) points 4.1. and 4.2. are replaced by the following:

‘4.1. Perform a test eCall by applying a manual trigger of the system.

4.2. Verify that a call was established with the PSAP test point by a record of the PSAP test point showing that it received a call or by a successful voice connection to the PSAP test point.’;

(i) in section 4, the following points 4.3., 4.4. and 4.5. are added:

‘4.3. Clear down the eCall using the appropriate PSAP test point command (e.g. hang up).

4.4. Leave the 112-based eCall IVS switched on and wait for at least 63 min (1 hour + 5 % margin according to EN 16454 and EN 17240).

4.5. Via the PSAP test point, attempt to connect to the 112-based eCall IVS.’;

(j) the following section 5 is added:

‘5. **Assessment**

5.1. The requirement is determined to have been passed if the 112-based eCall in-vehicle system is neither available for communication with the PSAP nor automatically responds to the call when the PSAP test point attempts to connect after expiry of the eCall timer T9 (1 hour).

5.2. The establishment of connection with the 112-based eCall IVS or the automatic answering to the call when the PSAP test point initiates the communication constitute a failure.’;

(2) Part II is amended as follows:

(a) in section 3, the following point 3.3. is added:

‘3.3. Before performing the test, ensure that:

- (a) one of the connection procedures defined in point 2.7 of Annex I, as agreed between the technical service and the manufacturer, will be applied for any test eCall;
- (b) the dedicated PSAP test point is available to receive an eCall emitted by the 112-based system;
- (c) the vehicle ignition or master control switch is activated; and
- (d) any TPS or added-value service system is disabled.’;

(b) in section 4, points 4.1. and 4.2. are replaced with the following:

‘4.1. Perform an eCall by applying a manual trigger of the system.

4.2. Verify that a call was established with the PSAP test point by a record of the PSAP test point showing that it received a call or by a successful voice connection to the PSAP test point.’;

(c) in section 4, the following points 4.3. and 4.4. are added:

‘4.3. Clear down the eCall using the appropriate PSAP test point command (e.g. hang up).

4.4. 13 hours after an eCall has been placed, the technical service tester shall be facilitated with access to where the eCall log files are stored in the IVS. This will involve the potential to download from the IVS any log files so that they can be viewed by the tester.’;

(3) Part III is amended as follows:

(a) point 3.1 is replaced by the following:

‘3.1. The technical service shall be facilitated to have access to the part of the system where the vehicle location data are stored in the IVS internal memory.’;

(b) in section 3, the following point 3.3. is added:

‘3.3. Before performing the test, ensure that:

- (a) one of the connection procedures defined in point 2.7 of Annex I, as agreed between the technical service and the manufacturer, will be applied for any test eCall;
- (b) the dedicated PSAP test point is available to receive an eCall emitted by the 112-based system;
- (c) the vehicle ignition or master control switch is activated; and
- (d) any TPS or added-value service system is disabled.’;

(c) point 4.1. is replaced by the following:

‘4.1. Perform an eCall by applying a manual trigger of the system.’;

(d) in section 4, the following points 4.2., 4.3 and 4.4. are added:

‘4.2. Verify that a call was established with the PSAP test point by a record of the PSAP test point showing that it received a call or by a successful voice connection to the PSAP test point.

4.3. Clear down the eCall using the appropriate PSAP test point command (e.g. hang up).

4.4. The technical service tester shall be facilitated with access to where the vehicle location data are stored in the IVS internal memory. This will involve the potential to download from the IVS any stored locations so that they can be viewed by the tester.’;

(4) Part IV is amended as follows:

(a) in section 3, the title is replaced by the following:

'3. Test conditions';

(b) point 3.2 is replaced by the following:

'3.2. The TPS system shall be disabled for the duration of the eCall.';

(c) point 3.2.1. is replaced by the following:

'3.2.1. Before performing the test, ensure that:

- (a) one of the connection procedures defined in point 2.7 of Annex I, as agreed between the technical service and the manufacturer, will be applied for any test eCall;
- (b) the dedicated PSAP test point is available to receive an eCall emitted by the 112-based system;
- (c) the vehicle ignition or master control switch is activated; and
- (d) any TPS or added-value service system is disabled.';

(d) point 3.4 is deleted;

(e) the following sections 4 and 5 are added:

'4. Test method

- 4.1. Perform a test eCall by applying a manual trigger of the system.
- 4.2. Verify that a call was established with the PSAP test point by a record of the PSAP test point showing that it received a call or by a successful voice connection to the PSAP test point.
- 4.3. Clear down the eCall using the appropriate PSAP test point command (e.g. hang up).
- 4.4. If the call attempt of the 112-based system fails during the test, the test procedure may be repeated.
- 4.5. The technical service tester shall be facilitated with access to where the eCall log files are stored in the IVS. This will involve the potential to download from the IVS any log files so that they can be viewed by the tester.
- 4.6. The lack of a log file in the TPS system shall be verified via access to the part of the system where eCall log files are stored.

5. Assessment

- 5.1. The requirement is determined to have been passed if no log files are present in the TPS system in-vehicle system memory.
- 5.2. The presence of a log file in the TPS system pertaining to an eCall that has occurred via the 112-based system constitutes a failure.'

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ANNEX VII

In Delegated Regulation (EU) 2017/79, the following Annex X is added:

‘ANNEX X

Test procedure for the verification of the performance of the back-up power supply**1. Purpose**

The purpose of this test is to make sure that the eCall in-vehicle system or eCall STU is capable to communicate for the period specified in point 2.

2. Requirements

The eCall system or eCall STU shall be operable for a period of at least 5 minutes in voice communication mode followed by 60 minutes in call-back mode (idle mode, registered in the network) followed by another period of at least 5 minutes in voice communication mode.

3. Test conditions

The following verification test shall be performed on an eCall STU that has been subjected to the high-severity deceleration test according to Annex I.

If the eCall STU does not include the microphone(s) and speaker(s) for the eCall system, then representative microphone(s) and speaker(s) shall be added to the test setup in order to execute the test from this Annex.

3.1. Test method

3.1.1. Perform an eCall by applying a manual trigger of the system.

3.1.2. Verify that a call was established with the PSAP test point by a record of the PSAP test point showing that it received the call or by a successful voice connection to the PSAP test point.

3.1.3. Disconnect the main power source.

3.1.4. Read out any text for at least 5 minutes at the PSAP test point.

3.1.5. Clear down the eCall using the appropriate PSAP test point command (e.g. hang up).

3.1.6. Wait for 56 minutes after the call was ended.

3.1.7. Initiate a call from the PSAP test point to the eCall in-vehicle system.

3.1.8. If the call is automatically accepted, read out any text for at least 5 minutes at the PSAP test point, otherwise the test is finished.

3.2. Assessment

3.2.1. The requirement is determined to have been passed if the eCall STU is capable to communicate for the required period, as specified in point 2.

3.2.2. The incapacity of the 112-based eCall in-vehicle system to communicate for the period referred to in point 2 constitutes a failure.’.