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<tr>
<th>Action</th>
<th>Article</th>
<th>UN text</th>
<th>Status after 5-6 Dec. GRSG meeting</th>
<th>CLEPA proposal/position</th>
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<tr>
<td>6.1</td>
<td></td>
<td>The effectiveness of AECD shall not be adversely affected by magnetic or electrical fields. This requirement shall be met by ensuring compliance with Regulation No. 10:</td>
<td>The effectiveness of AECD shall not be adversely affected by magnetic or electrical fields. This requirement shall be met by ensuring compliance with Regulation No. 10:</td>
<td>CLEPA: EMC compatibility should follow the existing standards</td>
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<td></td>
<td>(a)</td>
<td>(a) 03 series of amendments for vehicles that do not have a rechargeable energy storage system (traction battery) that can be charged from an external source;</td>
<td>[6.1.1. AECD shall be designed, constructed and installed in such a way that the vehicle when equipped shall continue to comply with the relevant technical requirements, especially with regard to electromagnetic compatibility (EMC).]</td>
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<tr>
<td></td>
<td>(b)</td>
<td>(b) 04 series of amendments for vehicles fitted with a rechargeable energy storage system (traction battery) that can be charged from an external source.</td>
<td>[6.1.2. Vehicles which are equipped with AECD shall comply with the relevant technical requirements, especially with regard to electromagnetic compatibility (EMC).]</td>
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<td>1 6.2</td>
<td></td>
<td>The AECD shall be climate resistant. This requirement shall be deemed to be met if the AECD has withstood all tests prescribed in annex 6.</td>
<td>The AECD shall be climate resistant. This requirement shall be demonstrated by compliance with the performance requirements of Annex 6 / REFERENCE / copy/paste of paragraph 6.4. of R116</td>
<td>CLEPA: -40 degC could create issues for battery usage and charging. We recommends to limit the call back period for temperatures below -20 degC</td>
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<tr>
<td>2 6.3</td>
<td></td>
<td>The AECD shall be resistant to mechanical impact. This requirement shall be deemed to be met if the AECD has withstood all tests prescribed in annex 7.</td>
<td>The AECD shall be resistant to mechanical impact. This requirement shall be demonstrated by compliance with the performance requirements of Annex 7 / REFERENCE / copy/paste of paragraph XX of Standard YYY</td>
<td>CLEPA: The requirements should be equivalent to international or Russian standards</td>
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### 3.6.4.
The AECD shall remain operational after the dynamic testing in accordance with the appendix to annex 9 of Regulation No. 17. Details of the test procedure are given in annex 8.

The AECD shall remain operational after frontal impact. This shall be demonstrated by compliance with the performance requirements of Annex 8 of Regulation No. 17. Details of the test procedure are referenced in Annex 9.

### 4.6.5
The AECD shall ensure reception and processing of standard precision navigation signals. This requirement is deemed to be met if the AECD has withstood all tests prescribed in annex 8.

The AECD shall be capable of proper reception and processing of standard precision global positioning signals. This shall be deemed to be fulfilled if the Global Navigation Signal System Receiver is compliant with CEP95.

**CLEPA:** To have a meaningful system, AECS must be able to sustain certain level of shock. E94 E95 test conditions is a possible reference.

### 5.6.6
The AECD shall allow communications on mobile telephone communications networks using GSM-900, GSM-1800, UMTS-900 and UMTS-2000 standards. The implementation of requirements for the communication module is confirmed by compliance with 3GPP TS 51.010-1 standard and following ETSI standards: ETSI TS 126 267, ETSI TS 126 268, ETSI TS 126 269. In addition, the AECD shall comply with the following requirements:

The AECD shall be capable of communication on mobile telephone communication networks. This shall be demonstrated by compliance with 3GPP TS 51.010-1 standard and following ETSI standards: ETSI TS 126 267-DATE (eCall Data Transfer - General Description), ETSI TS 126 268-DATE (eCall Data Transfer - Conformance testing), ETSI TS 126 269-DATE (eCall Data Transfer - Characterisation Report). In addition, the AECD shall comply with the following requirements:

**CLEPA:** CEP95 defines the precision of positioning. GPS and GLONASS and Galileo standards and chipsets (soon for Galileo) are available and sufficient. Moreover, the positioning can be made more accurate with map matching and additional devices in the vehicle.

**CLEPA:** The requirements should be regional or national.
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<th>Section</th>
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<tr>
<td>6.6.1</td>
<td>The AECD shall be fitted with a non-removable personal multiprofile universal SIM card that functions on mobile telephone networks using the above-mentioned standards. It shall have the capacity to upload information that is stored on the non-removable personal multiprofile universal SIM card on mobile telephone networks using the above-mentioned standards. [Other requirements to be regulated nationally]</td>
<td>The AECD shall be fitted with a non-removable personal SIM card that functions on mobile telephone networks using the standards mentioned in Annex XXX1. It shall have the capacity to upload information that is stored on the non-removable personal SIM card on mobile telephone networks using the standards mentioned in Annex XXX1. [Other requirements to be regulated nationally]</td>
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<td>6.6.2</td>
<td>If it is not possible to transmit information using the voice modem for 20 seconds after the start of data transmission, the AECD stops using the voice modem and transmits the information by means of text messages (SMS). There shall be provision for the information to be transmitted a second time using the voice modem, working through the established voice connection, and by means of SMS. If it is not possible to transmit information using mobile telephone networks, the information not transmitted shall be stored in an energy-independent memory and transmitted when possible.</td>
<td>When fitted with full duplex voice connection capability, the AECD shall stop data transmission via in-band modem not later than [20] seconds after having started the demand, if no duplex voice communication can be established. We think this section should be removed (redundant with §6.6.5).</td>
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<td>6.6.3</td>
<td>CLEPA: The new article need to be explained and discussed.</td>
<td>CLEPA: Stay with the new Russia proposal (AECS-03-04) for 6.6.2. CLEPA: (Comment) Overall this is one approach to integrate in the main regulation key regional or national requirements. But it has the danger of becoming somewhat too specific.</td>
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The AECD shall stop data transmission via in-band modem not later than [20] seconds after having started the demand, if in-band MSD transmission failed, and enable voice connection with PSAP. For Russia, in addition, the AECD shall immediately send MSD via SMS if in-band MSD transmission failed.

According to EN16062/EN16072 standards:
- the transmission of MSD via in-band modem involves different timers on AECD side: T5=2s, then T7=20s then T6=5s
- the AECD must stop transmission via in-band modem, and enable voice speech communication, if one of these 3 timers expires. That is why we think that this requirement should be reworded, as the 20s timer refers only partially to MSD transmission protocol.

Proposal of rewording:
"The AECD shall stop data transmission via in-band modem not later than [20] seconds after having started the demand, if in-band MSD transmission failed, and enable voice connection with PSAP, if in-band MSD transmission failed according high level application protocol defined in EN 16062/16072 standards. For Russia, in addition, the AECD shall immediately send MSD via SMS if in-band MSD transmission failed.

If the connection was interrupted before the AECD has successfully completed MSD transmission, while 20 sec since the demand have not elapsed, the AECD shall re-establish the call and initiate MSD retransmission by in-band modem.

Same remark as above, we think that the reference to "20 sec" should be removed.

Proposal of rewording:
"If the connection was interrupted before the AECD has successfully completed MSD transmission, while 20 sec since the demand have not elapsed, the AECD shall re-establish the call and initiate MSD retransmission by in-band modem.

If the connection was interrupted after the AECD has successfully completed MSD transmission, or after the 20 sec since the demand have elapsed, the AECD shall re-establish the telephone connection but shall not initiate the retransmission of MSD by in-band modem.

Same remark as above, we think that the reference to "20 sec" should be removed.

Proposal of rewording:
"If the connection was interrupted after the AECD has successfully completed MSD transmission, or after the 20 sec since the demand have elapsed, the AECD shall re-establish the telephone connection but shall not initiate the retransmission of MSD by in-band modem.

In case it was not possible to establish voice connection and/or send MSD using mobile communication networks listed in section 6.6, he AECD shall store the MSD in non-volatile memory and attempt re-transmission when network service is available.

In case it was not possible to establish voice connection and/or send MSD using mobile communication networks listed in section 6.6, he AECD shall store the MSD in non-volatile memory and attempt re-transmission when network service is available.

Proposal of addition (equal to European Parliament proposal):
Whenever, a private emergency solution is installed compliant with CEN 16102 standard on emergency services or other relevant regional or national standards, the driver has the free choice to use it to send the MSD to PSAP.