

Proposal of supplement to Regulation No. 10 (Electromagnetic compatibility)

The text reproduced below was prepared by the experts from FRANCE with the aim to introduce in the Regulation No. 10 issues raised by experts of others groups working on Regulations referring to Regulation No. 10.

I. Proposal

Paragraph 2.12., amend to read:

2.12. "Immunity related functions" are:

- (a) Functions related to the direct control of the vehicle:
 - (i) By degradation or change in: e.g. engine, gear, brake, suspension, active steering, speed limitation devices;
 - (ii) By affecting drivers position: e.g. seat or steering wheel positioning;
 - (iii) By affecting driver's visibility: e.g. dipped beam, windscreen wiper, **indirect vision systems, blind spot systems**
- (b) Functions related to driver, passenger and other road user protection:
 - (i) E.g. airbag and safety restraint systems, **emergency calling systems**

II. Justification

1. As an example, the AECS Regulation No. [144] refers to requirements of EMC Regulation through paragraphs 7.2, 17.2 and 35.2 with the following wording :

"The effectiveness of AECC/AECS/AECD shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by compliance with the technical requirements and transitional provisions of Regulation No. 10, 04 series of amendments or any later series of amendments."

The wording on "effectiveness" is very generic, and doesn't refer to specific requirements of UNECE n°10.

The AECS system is considered as a safety system and should so be tested both in emission and also in immunity, to ensure that the system is operational before / during / after exposition. This is the reason why it is proposed to clarify Regulation No. 10 adding the AECS in the paragraph 2.12 (b) (i)

2. In the same approach, the Regulation No. 46 related to CMS refers to requirements of EMC Regulation through paragraphs 6.2.1.3. with the following wording :

“The effectiveness of the CMS of Classes I to IV shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by compliance with the technical requirements and transitional provisions of Regulation No. 10, 04 series of amendments or any later series of amendments.”

The CMS of classes I to IV are considered as safety systems and should so be tested both in emission and also in immunity, to ensure that the system is operational before / during / after exposition. This is the reason why it is proposed to clarify Regulation No. 10 adding the CMS in the paragraph 2.12 (a) (iii)

3. In the same way, the drafted Regulation No. [XXX] related to Blind Spot Information Systems BSIS, which are also considered as safety systems, refers to requirements of EMC Regulation through paragraphs 5.2. with the following wording :

“The effectiveness of the BSIS shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by compliance with the technical requirements and transitional provisions of UN Regulation No. 10, 04 series of amendments or any later series of amendments.”
