OICA positions on EMC related topics
Contribution of OICA EMC experts to TF EMC

1. TROLLEY BUSES

Document:
- GRE/2014/41 (Belgium) Proposal for amendments to Regulation No. 10
- GRE-73-20 (Russian Federation) Comments on GRE/2014/41
- GRE-74-12 (Russian Federation) Proposals for amendments to Regulation No. 10

OICA position:
- Recommendation from OICA EMC experts is that the trolley bus industry should consider the following:
  - Either refer to both Regulation No. 10 and IEC 62236-3-1 through an amendment of Regulation No. 107. The reference to Regulation No. 10 is for trolleybuses in bus mode and the reference to IEC 62236-3-1 is for trolleybuses in trolley mode
  - or to amend Regulation No. 10 to include applicability for trolleybuses (but this will mean stringent requirements for bus mode)

2. DEVICES FOR INDIRECT VISION

Document:
- GRE/2015/35 (GRSG) Proposal for Supplements to the 04 and 05 series of amendments to Regulation No. 10

Conclusion:
- OICA EMC experts support the proposal GRE/2015/35

3. PROPOSAL FROM CHINA

Document:
- GRE/2015/36 (China) Proposal for a Supplement to the 05 series of amendments to Regulation No. 10

OICA position:
- **Modification to paragraph 1.3 (a):**
  - OICA EMC experts do not support the proposal from China to modify this paragraph. *Justification: this topic is already covered by present wording of 1.3 (c) in Regulation No. 10*
- **Paragraph 7.4.2.1 and 7.4.2.2:**
  - OICA EMC experts do not support the proposal from China and have a counter-proposal: "
    - the value of Pst shall not be greater than 1.0;
    - the value of Plt shall not be greater than 0.65;
    - the value of d(t) during a voltage change shall not exceed 3.3 per cent for more than 500 ms;
    - the relative steady-state voltage change, dc, shall not exceed 3.3 per cent;
    - the maximum relative voltage change dmax, shall not exceed 6 per cent."
  *Justification: Vehicles in charging mode can be considered as “switched manually”, therefore the 6 per cent value for dmax is the applicable one.*
**Annex 4, Appendix 1, Figure 1:**
- OICA EMC experts do not support the proposal from China to delete Annex 4, appendix 1, figure 1. Justification: it is an additional possibility for L-category vehicles with different requirements for test site than those defined in CISPR 12. Therefore the figure shall be kept in Regulation No. 10

**Annex 6 paragraph 4.1:**
- OICA EMC experts do not support the proposal from China to add a table of frequency steps. Justification: The table for frequency steps is already defined in ISO 11451-1 3rd edition 2005 and Amd1: 2008 which is referred in R10.04 and R10.05. Furthermore vehicle manufacturers may choose to perform the test with more frequency steps.

**Annex 6 paragraph 5.1.2:**
- OICA EMC experts do not support the whole Chinese proposal and have a counter-proposal: “For TLS one field probe at the vehicle reference point shall be used. For antennas four field probes at the vehicle reference line shall be used.”
- No support on the Chinese proposal to delete the sentence on TLS. Justification: TLS is used by some vehicle manufacturers mainly in the [20 – 30]MHz frequency range
- No support of the Chinese proposal to make distinctions between vehicle categories. Justification: ISO standard 11451-2 defines the use of 4 field probes method calibration in the [20 or 30 MHz and 2 GHz] frequency band whatever the vehicle category (L, M, N, O)

4. **ACCIDENT EMERGENCY CALL SYSTEM (AECS)**

**Document:**
- Discussion paper (NL) - AECD vs R10

**OICA position:**
- “Does R10.04 (and any later version) fully cover the EMC aspects for AECD components to be fitted to vehicles and for vehicles with these systems installed/integrated?”
  - OICA EMC experts consider that when going through R10.05, paragraph 3.2.1 “Applicability of this Regulation to ESA”, it is clear that AECD falls into the scope of R10.05
- “In case not, what amendments can be proposed to Regulation No. 10?”
  - Does not apply because answer to previous question
- “Are specific EMC provisions necessary within the Regulation on AECS?”
  - General requirements of Regulation No. 10 are adequate and sufficient