

Submitted by TF EMC

Informal document **GRE-77-21**
(77th GRE, 4-7 April 2017,
agenda item 7 (b))

**Task Force
on Electro-magnetic Compatibility
(TF EMC)**

Status report of TF to GRE-77
Tuesday, 4. April 2017

TF EMC Status Report

- TF EMC had its 5th meeting on Monday, 20th March 2017.
- Document available on the UNECE TF workspace.
- TF EMC will report on:
 - Current development of R10.05
 - Drafting roadmap for the new supplement to R10.05
 - Future development of R10 based on OICA ideas
- TF EMC will ask for approval of two special modifications.

TF EMC Status Report – R10.05 Current Development (Proposals from China, Italy, France, Spain and OICA)

- 60 modification proposals were discussed
 - **51 modifications were incorporated** in the informal working draft supplement of R10.05.
 - 4 of the proposals will be on the roadmap for a R10-06 version.
 - 3 topics have to be finalized with the CPs until July 2017, including TPs
 - 2 proposals were not accepted due to contradiction to international standards

The image displays four tables, each representing a different set of modification proposals. The tables are color-coded to indicate their status: green for accepted, red for not accepted, and yellow for pending. The first table shows a high percentage of green cells, indicating that most proposals were accepted. The second table shows a mix of green and red cells. The third table shows a mix of green, red, and yellow cells. The fourth table shows a mix of green and yellow cells.

TF EMC Status Report – R10.05 Development Details

(Modification overview)

Focus of the work on the current version of the R10:

- correction of technical and editorial errors, especially for the REESS test setups to be in line with CISPR and ISO standards; additionally to the last report, all figures for Annex 11, 12, 14, 15 and 16 were updated
- Correction of inconsistencies – developed by the implementation of REESS ESA contents in R10.05

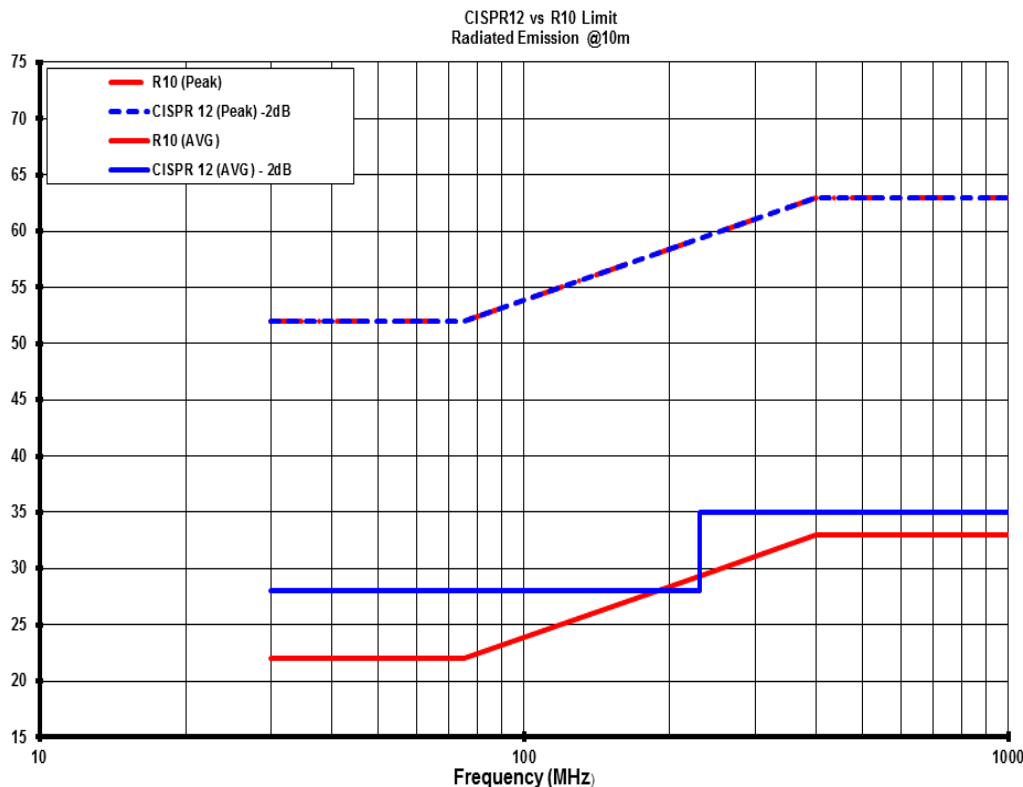
Two major changes were identified by the TF EMC to be reported and asked to be accepted by the GRE:

- Change of the R10.05 narrow band limit to be consistent with CISPR 12
- Elimination of clause 3.1.9

TF EMC Status Report – R10.05 Development Details

(Change of the R10-05 narrow band limit consistent with CISPR 12)

- It has been precised that in order to get a R10-05 vehicle narrowband emission limit consistent with the CISPR 12 vehicle narrowband limit, the **new R10.05 limit should** be the CISPR12-limit minus 2dB to take into consideration this 2dB more stringent requirement as defined in CISPR 12 for type approval.



For information:
This figure shows also the consistence between the R10-05 and CISPR12 broadband peak limits.

The proposal for new R10-05 narrowband limit is shown in blue, in comparison to the present R10-05 narrowband limit in red.

TF EMC Status Report – R10.05 Development Details

(Elimination of clause 3.1.9)

3. Application for approval

3.1. Approval of a vehicle type

3.1.1. The application for approval of a vehicle type, with regard to its electromagnetic compatibility, shall be submitted by the vehicle manufacturer.

~~3.1.9. Vehicle type approval shall be applied for both REESS and coupling system for charging the REESS as they are considered as electrical/electronic systems.~~

2.7. "Electrical/electronic system" means (an) electrical and/or electronic device(s) or set(s) of devices together with any associated electrical connections which form part of a vehicle but which are not intended to be type approved separately from the vehicle.

2.8. "Electrical/electronic sub-assembly" (ESA) means an electrical and/or electronic device or set(s) of devices intended to be part of a vehicle, together with any associated electrical connections and wiring, which performs one or more specialized functions. An ESA may be approved at the request of a manufacturer or his authorized representative as either a "component" or a "separate technical unit (STU)".

Justification

clause 3.1.9. of R10.05 might be interpreted not allowing to perform ESA type approval on REESS equipment, because it refers to E/E-Systems.

In fact this clause 3.1.9 has been added in R10.04 because there was NO description of REESS equipment ESA-test in R10.04.

When R10.05 has been issued to include specific REESS-equipment ESA test, this clause 3.1.9 should have been deleted, because it was in contradiction with the fact to have all this specific REESS equipment REESS ESA test available.

TF EMC Status Report – Drafting Roadmap

- Preparation of a **new Supplement to R10.05** (no major technical changes).
- Distribution of the current draft (under finalization) to TF EMC in the course of January 17. ✓
- Review of the document and further discussion within TF EMC until end of March. ✓
- Propose **an informal document for GRE-77** (4-7 April 2017), as draft Supplement 2 to R10.05 -> available on UN-Serverspace ✓
- Adoption of the working document at GRE-78 in October 2017.

TF EMC Status Report – Future Development of R10 (OICA ideas)

- Like proposed at GRE-76,
a **roadmap for the further development
of ECE R10-06** is under preparation by OICA