Regulation 13:

Paragraph 5.1.1.4. amend to read:

- 5.1.1.4. The effectiveness of the braking systems, including the electric control line, shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by fulfilling the technical requirements and transitional provisions of compliance with Regulation 10, 02 series of amendments by applying:
 - the 03 series of amendments for vehicles without a coupling system for charging the RESS (traction batteries).
 - the 04 series of amendments for vehicles with a coupling system for charging the RESS (traction batteries).

Annex 13, paragraph 4.4 amend to read

4.4 The operation of the anti-lock system shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by compliance with Regulation No. 10, 02 series of amendments as required by paragraph 5.1.1.4 of the Regulation.

Annex 19, Appendix 7, paragraph 3.7.1. amend to read:

3.7.1. Documentation demonstrating compliance with Regulation No. 10 including the 02 series of amendments as required by paragraph 5.1.1.4 of the Regulation.

Regulation 13H:

Paragraph 5.1.1.4. amend to read:

- 5.1.1.4. The effectiveness of the braking equipment shall not be adversely affected by magnetic or electrical fields. (This shall be demonstrated by **fulfilling the technical requirements and transitional provisions of empliance with** Regulation No. 10, 02 series of amendments.) by applying:
 - the 03 series of amendments for vehicles without a coupling system for charging the RESS (traction batteries).
 - the 04 series of amendments for vehicles with a coupling system for charging the RESS (traction batteries).

Annex 6, paragraph 4.3 amend to read:

Delete paragraph 4.3, including its footnote and renumber subsequent paragraphs and footnotes

4.3. The operation of the anti-lock system must shall not be adversely affected by magnetic or electrical fields ^{4/2}. (This shall be demonstrated by compliance with Regulation No. 10, 02 series of amendments as required by paragraph 5.1.1.4 of the Regulation).

Delete Footnote 4 and its reference in paragraph 4.3, renumber subsequent Footnotes.

Regulation 79:

Paragraph 5.1.5. amend to read:

- 5.1.5. The effectiveness of the steering equipment, including the electrical control lines, shall not be adversely affected by magnetic or electric fields. Conformity with This shall be demonstrated by fulfilling the technical requirements and transitional provisions of Regulation No. 10, to the amendment in force at the time of Type Approval shall be demonstrated by applying:
 - the 03 series of amendments for vehicles without a coupling system for charging the RESS (traction batteries).
 - the 04 series of amendments for vehicles with a coupling system for charging the RESS (traction batteries).

Regulation 89:

Paragraph 5.2.2. of Part I amend to read:

- 5.2.2. The ASLF shall operate satisfactorily in its electromagnetic environment and conform to the technical prescriptions The effectiveness of the ASLF, shall not be adversely affected by magnetic or electric fields. This shall be demonstrated by fulfilling the technical requirements and transitional provisions of Regulation No. 10 to the latest level of amendments in force at the time of type approval by applying:
 - the 03 series of amendments for vehicles without a coupling system for charging the RESS (traction batteries).
 - the 04 series of amendments for vehicles with a coupling system for charging the RESS (traction batteries).

Paragraph 21.2.2. of Part III amend to read:

- 21.2.2. The effectiveness of the speed limitation function shall not be adversely affected by magnetic or electric fields. This shall be demonstrated by fulfilling the technical requirements and transitional provisions operate satisfactorily in its electromagnetic environment, in accordance with prescriptions of Regulation No. 10 to the latest level of amendments in force at the time of type approval by applying:
 - the 03 series of amendments for vehicles without a coupling system for charging the RESS (traction batteries).
 - the 04 series of amendments for vehicles with a coupling system for charging the RESS (traction batteries).

LDWS Regulation – see document ECE/TRANS/WP.29/2011/78

Paragraph 5.1.2. amend to read:

5.1.2. The effectiveness of the LDWS shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by **fulfilling the technical requirements** and transitional provisions of compliance with Regulation No. 10, 03 Series of Amendments by applying:

- the 03 series of amendments for vehicles without a coupling system for charging the RESS (traction batteries).
- the 04 series of amendments for vehicles with a coupling system for charging the RESS (traction batteries).

AEBS Regulation – see document ECE/TRANS/WP.29/2011/92

Paragraph 5.1.2. amend to read:

- 5.1.2. The effectiveness of the AEBS shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by **fulfilling the technical requirements** and transitional provisions of compliance with Regulation No. 10, 03 Series of Amendments by applying:
 - the 03 series of amendments for vehicles without a coupling system for charging the RESS (traction batteries).
 - the 04 series of amendments for vehicles with a coupling system for charging the RESS (traction batteries).

Justification:

During the 68th session of GRRF Japan introduced document ECE/TRANS/WP.29/GRRF/2010/21 which proposed that references to Regulation 10 within Regulations 13 and 13H should be dynamic. This topic was discussed at some length within GRRF but no consensus could be reached and as a result the topic was referred to WP.29 to obtain guidance. Following discussion WP.29 decided that any reference to another Regulation with a given Regulation should be considered on a case by case basis and decided by the respective Working Group.

In addition to the above the GRRF Chairman recommended that in future the reference to Regulation 10 with respect to EMC should only refer to the "technical requirements" of that Regulation as Contracting Parties who are signatories to Regulations 13 or 13H may not be a signatory to Regulation 10.

Based on the above two points industry has produced the above text as a proposal to amend various Regulations the content of which is controlled by GRRF.

This proposal takes into consideration the following:

- Only the technical requirements of Regulation 10 are now referenced.
- Previously compliance with Regulation 10 would automatically include any transitional provisions. However by now only referring to the "technical requirements" it could be concluded that transitional provisions are not technical requirements in which case as soon as a change to Regulation 10 was introduced it would immediately become effective when applying Regulation 13 or 13H. To remove any interpretation problems it is therefore essential to also make reference to any transition provisions that may apply.

- From an industry prospective it is considered essential that any reference to Regulation 10 within another Regulation be specified as a static reference. The reason for this is that should Regulation 10 be amended, irrespective of whether that amendment had an impact on the EMC performance requirements it would then be automatically applied via the referencing Regulation. As a result industry could be faced with having to amend EMC approvals and reports unnecessarily which is both costly and time consuming for no benefit.
- With the introduction of the 04 Series of amendments to Regulation 10 different EMC performance requirements apply depending on the specification of the vehicle to be approved. Vehicles which include a socket which is used to connect to an external power supply for charging of the RESS (traction batteries in electric driven vehicles) shall apply the 04 Series of Amendments. In the case of vehicles which to not have this functionality the 03 Series of Amendments shall continue to be applied.
- GRRF has responsibility for a number existing Regulations (R13, R13H, R79 and R89) and two new Regulations (LDWS & AEBS), all of which include a Regulation 10 reference. However the text used in each Regulation/proposed Regulation is not consistent as there is a mix of static and dynamic references. This proposal seeks to utilise the same reference in each Regulation/new Regulation to ensure consistency.