

Economic and Social Council

Distr.: General 9 August 2023

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Eighty-nineth session Geneva, 24-27 October 2023 Item 8 of the provisional agenda UN Regulation No. 10 (Electromagnetic Compatibility)

Proposal for a corrigendum to 06 series of amendments to UN Regulation No. 10 (Electromagnetic compatibility)

Submitted by the experts from by the Informal Working Group on Electromagnetic Compatibility*

The text reproduced below was prepared by the experts from the Informal Working Group on Electromagnetic Compatibility (IWG EMC), with the aim to correct wrong references and add a missing text. The proposed modifications to the current text of the UN Regulation are marked in bold for new or strikethrough for deleted characters.

^{*} In accordance with the programme of work of the Inland Transport Committee for 2023 as outlined in proposed programme budget for 2023 (A/77/6 (Sect. 20), table 20.6), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.



I. Proposal

Annex 1, Model A, amend to read:

Model A

(See paragraph 5.2. of this Regulation)

a
$$(E4)^{\frac{1}{2}a/3}$$
 10 R - 06 2439 $1a/3$

a = 6 mm **min**

The above approval mark affixed to a vehicle or ESA shows that the vehicle type concerned has, with regard to electromagnetic compatibility, been approved in the Netherlands (E 4) pursuant to Regulation No. 10 under approval No. 065 2439. The approval number indicates that the approval was granted according to the requirements of Regulation No. 10 as amended by the 06 series of amendments."

Annex 4,

Paragraph 2.3.3., amend to read:

"2.3.3. Power charging harness

The power charging harness shall be placed in a straight line between the AMN(s) and the vehicle charging plug and shall be routed perpendicularly to the vehicle longitudinal axis (see Figure 3fa and Figure 3ec). The projected harness length from the side of the AMN(s) to the side of the vehicle shall be 0,8 (+0,2/-0) m as shown in Figure 3db and Figure 3ed.

For a longer harness the extraneous length shall be "Z-folded" in a less than 0,5 m width approximately around the middle of the AMN to vehicle distance. If it is impractical to do so because of harness bulk or stiffness, or because the testing is being done at a user's installation, the disposition of the excess harness shall be precisely noted in the test report.

The charging harness at the vehicle side shall hang vertically at a distance of 100 (+200 / -0) mm from the vehicle body.

The whole harness shall be placed on a non-conductive, low relative permittivity (dielectric-constant) material ($\epsilon r \le 1,4$), at (100 ± 25) mm above the ground plane (ALSE) or floor (OTS)."

Paragraph 2.4.4., amend to read:

"2.4.4. Power charging / local/private communication harness

The power charging local/private communication harness shall be laid out in a straight line between the AMN(s) / DC-charging-AN(s) / AAN(s) and the vehicle charging socket and shall be routed perpendicularly to the vehicle's longitudinal axis (see Figure 3fe and Figure 3g). The projected harness length from the side of the AMN(s) to the side of the vehicle shall be 0,8 (+0,2 / -0) m as shown in Figure 3f and Figure 3h.

For a longer harness the extraneous length shall be "Z-folded" in less than 0,5 m width. If it is impractical to do so because of harness bulk or stiffness, or because the testing is being done at a user installation, the disposition of the excess harness shall be precisely noted in the test report.

The power charging local/private communication harness at vehicle side shall hang vertically at a distance of 100 (+200 / -0) mm from the vehicle body.

The whole harness shall be placed on a non-conductive, low relative permittivity (dielectric-constant) material ($\varepsilon r \le 1,4$), at (100 ± 25) mm above the ground plane (ALSE) or floor (OTS)."

Annex 6,

Paragraph 2.3.3., amend to read:

"2.3.3. Power charging harness

The power charging harness shall be placed in a straight line between the AMN(s) and the vehicle charging plug and shall be routed perpendicularly to the vehicle longitudinal axis (see Figure **3f4a** and Figure **3e4c**). The projected harness length from the side of the AMN(s) to the side of the vehicle shall be 0,8 (+0,2/-0) m as shown in Figure **3f4b** and Figure **3e4d**.

For a longer harness the extraneous length shall be "Z-folded" in a less than 0,5 m width approximately around the middle of the AMN to vehicle distance. If it is impractical to do so because of harness bulk or stiffness, or because the testing is being done at a user's installation, the disposition of the excess harness shall be precisely noted in the test report.

The charging harness at the vehicle side shall hang vertically at a distance of 100 (+200 / -0) mm from the vehicle body.

The whole harness shall be placed on a non-conductive, low relative permittivity (dielectric-constant) material ($\varepsilon r \le 1,4$), at (100 ± 25) mm above the ground plane (ALSE) or floor (OTS)."

Paragraph 2.4.4., amend to read:

"2.4.4. Power charging / local/private communication harness

The power charging local/private communication harness shall be laid out in a straight line between the AMN(s) / DC-charging-AN(s) / AAN(s) and the vehicle charging socket and shall be routed perpendicularly to the vehicle's longitudinal axis (see Figure 3f4e and Figure 3g4g). The projected harness length from the side of the AMN(s) to the side of the vehicle shall be 0,8 (+0,2/-0) m as shown in Figure 4f and Figure 4h.

For a longer harness the extraneous length shall be "Z-folded" in less than 0,5 m width. If it is impractical to do so because of harness bulk or stiffness, or because the testing is being done at a user installation, the disposition of the excess harness shall be precisely noted in the test report.

The power charging local/private communication harness at vehicle side shall hang vertically at a distance of 100 (+200 / -0) mm from the vehicle body.

The whole harness shall be placed on a non-conductive, low relative permittivity (dielectric-constant) material ($\varepsilon r \le 1,4$), at (100 ± 25) mm above the ground plane (ALSE) or floor (OTS)."

II. Justification

1. In Annex 1, for the first example of markings, a 'min' is missing after 'a = 6 mm'as in Model B. The approval number is also corrected in the text.

2. In Annexes 4 and 6, paragraphs 2.3.3. and 2.4.4., references to figures are incorrect and need to be modified. The missing text at the end of the second indent in paragraph 2.4.4. should be reintroduced as well.