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**Economic Commission for Europe**

Inland Transport Committee

**World Forum for Harmonization of Vehicle Regulations**

**Working Party on Lighting and Light-Signalling**

**Eighty-fifth session**

Geneva, 26–29 October 2021

Item 7 (a) of the provisional agenda

**Other UN Regulations:**

**UN Regulation No. 10 (Electromagnetic compatibility)**

Proposal for Supplement 2 to the 06 series of amendments to UN Regulation No. 10

Submitted by the expert from the Czech Republic with support of the Task Force on Electromagnetic Compatibility[[1]](#footnote-2)\*

The text reproduced below was prepared by the expert from the Czech Republic with support of the Task Force on Electromagnetic Compatibility. It aims to clarify the reference point determination in paragraph 3.3. for categories L6 and L7 vehicles and to correct Figure 1 in Annex 4, Appendix 1. The modifications to the existing text of the UN Regulation are marked in bold.

I. Proposal

*Annex 4 - Appendix 1, Figure 1,* amend to read:

"Figure 1

Clear horizontal surface free of electromagnetic reflection delimitation

of the surface defined by an ellipse

Vehicle axis positioned on   
normal from antenna midpoint

Vehicle under test

Centre of 30 m radius   
(20m for 3 m measurements)  
clear area at midpoint   
between reference antenna   
and nearest part of the  
vehicle body

Reference antenna

15 m min radius  
(10 m for 3 m measurements)

Permitted region for

measuring equipment

(in hut or vehicle)

10,0 m ± 0,2 m  
**(3,00 m ± 0,05 m   
for 3 measurements)**

*Annex 6, paragraph 3.3.4.,* amend to read:

"3.3.4. Either at 1.0 ± 0.2 m behind the vertical centreline of the vehicle's front **wheel(s)** (point C in Figure 1 of Appendix 1 to this annex) in the case of three-wheeled **or four-wheeled** vehicles.

Or at 0.2 ± 0.2 m behind the vertical centreline of the vehicle's front wheel (point D in Figure 2 of Appendix 1 to this annex) in the case of two-wheeled vehicles."

II. Justification

1. In Figure 1 of Annex 4, Appendix 1, the alternative 3 m antenna distance is missing. Standard CISPR 12 prescribes the alternative 3 m antenna distance in the note below the similar figure: "*The 10,0 m ± 0,2 m dimension may be changed to 3,00 m ± 0,05 m in accordance with 5.2.3.2 and 5.2.3.4."* The proposal formally corrects Figure 1.

2. Paragraph 3.3. of Annex 6 prescribes the reference point for category L vehicles for immunity of vehicles to electromagnetic radiation, but paragraph 3.3.4. specifies the reference point for two and three-wheeled vehicles only. The reference point for categories L6 and L7 defined in paragraphs 2.1.6. and 2.1.7. of the Consolidated Resolution on the Construction of Vehicles (R.E.3) is not covered, and the test setup is not clear. Categories L2 and L5 vehicles can have two front wheels. By analogy, the same test setup is proposed for categories L6 and L7 vehicles.

3. As a reference, Figure 1 in Annex 6, Appendix 1, which covers three-wheeled vehicles, is reproduced below.

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1. \* In accordance with the programme of work of the Inland Transport Committee for 2021 as outlined in proposed programme budget for 2021 (A/75/6 (Sect.20), para 20.51), 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. [↑](#footnote-ref-2)