Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations


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Item 5 of the provisional agenda
Regulation No. 46 (Devices for indirect vision)

Proposal for Supplement 5 to the 04 series of amendments to Regulation No. 46 (Devices for indirect vision)

Submitted by the expert from Germany*

The text reproduced below was prepared by the expert from Germany to clarify the magnification factors of Camera-Monitor Systems (CMS). It is based on informal document GRSG-111-27 distributed during the 111th session of the Working Party on General Safety Provisions (GRSG) (see report ECE/TRANS/WP.29/GRSG/90, para. 21). The modifications to the current text of UN Regulation No. 46 are marked in bold characters for new and strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2016–2017 (ECE/TRANS/254, para. 159 and ECE/TRANS/2016/28/Add.1, cluster 3.1), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
I. Proposal

Paragraph 16.1.3.1., amend to read:

"16.1.3.1. Magnification factor

The minimum and the average magnification factors of the CMS, in both horizontal and vertical directions shall not be lower than the minimum average magnification factors indicated below.

The minimum magnification factor shall not be less than:

(a) for Class I: 0.31;
(b) for Class II (driver's side): 0.26;
(c) for Class III (driver's side): 0.29;
(d) for Class IV (driver's side): 0.054;
(e) for Class II (passenger's side): 0.13;
(f) for Class III (passenger's side): 0.19;
(g) for Class IV (passenger's side): 0.016.

The average magnification factor shall not be less than:

(h) for Class I: 0.33;
(i) for Class II (driver's side): 0.31;
(j) for Class III (driver's side): 0.31;
(k) for Class IV (driver's side): 0.091;
(l) for Class II (passenger's side): 0.16;
(m) for Class III (passenger's side): 0.20;
(n) for Class IV (passenger's side): 0.046."

II. Justification

The wording "minimum average" is wrong and, furthermore, superfluous in the sentence.

There is no "minimum average magnification factor" in UN Regulation No. 46, only a "minimum magnification factor" and an "average magnification factor". Both factors are specified in the subsequent text of paragraph 16.1.3.1.