Proposal for Supplement [16] to the 06 series of amendments to UN Regulation No. 48 and for Supplement [02] to the 07 series of amendments to UN Regulation No. 48

Submitted by the expert from the International Automotive Lighting and Light Signalling Expert Group (GTB)*

The text reproduced below was prepared by the expert from GTB with the aim of clarify the determination of the apparent surface. The modifications to the existing text of the Regulation are marked in bold for new or strikethrough for deleted characters.

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* 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.
I. Proposal

Paragraph 3.2.5., amend to read:

“3.2.5. A statement of the method used for the definition of the apparent surface (see paragraph 2.10.4.).

The method used to determine the apparent surface shall be declared for each lamp, as defined in paragraph 2.5., and recorded in item 10.2. of Annex 1.”

Annex 1, item 10.2., amend to read:

“10.2. Method used for the definition of the apparent surface:

(a) Boundary of the illuminating surface\(^2\) used for the following lamp(s):

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…………………………………………………………………………………
…………………………………………………………………………………

or

(b) Light-emitting surface\(^2\) used for the following lamp(s):

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…………………………………………………………………………………
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II. Justification

1. For the determination of the apparent surface currently two proven methods exist. They are defined in UN Regulation No. 48 as either “light emitting surface” or “illuminating surface”. Both methods may be a basis for the apparent surface and for both of them substantial reasons exist why they correspond with reality.

2. For lighting and light-signaling devices with a clear lens without any additional optics the light emitting surface is the best choice, for the determination of the apparent surface of textured (with optics) outer lenses the illuminating surface is more adequate.

3. Currently, in UN Regulation No. 48, it is unclear if the method used for the determination of the apparent surface may be differently used for different functions. Annex 1 appears to only declare method (a) or (b) without reference to different functions or devices. The proposed amendment to item 10.2. of Annex 1 intends to clarify this.

4. Consequently, an additional sentence to para. 3.2.5. is proposed to allow the vehicle manufacturer or his duly accredited representative to determine the method used for the apparent surface separately for each function.

5. The common understanding is that the term “lamp” is used with the meaning of “lamp (function)”. Nevertheless, it was not deemed to be necessary to amend the existing definition of “lamp” in UN Regulation No. 48.