Economic Commission for Europe
Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

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Item 4 (b) of the provisional agenda

Simplification of lighting and light-signalling UN Regulations:
UN Regulation No. 148 (Light-signalling devices)

Revised proposal to correct and clarify the text of UN Regulation No. 148

Submitted by the Informal Working Group on Simplification of Lighting and Light-Signalling Regulations*

The text reproduced below was prepared by the Informal Working Group on Simplification of Lighting and Light-Signalling Regulations (IWG SLR) with the aim to insert missing text and to correct errors inadvertently introduced in the new UN Regulation No. 148. The modifications to the existing text of UN Regulation No. 148 are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2020 as outlined in proposed programme budget for 2020 (A/74/6 (part V sect. 20) para 20.37), 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 4.6.1., amend to read:

“4.6.1. Failure of a single lamp containing more than one light source

4.6.1.1. In a single lamp containing more than one light source, a group of light sources, wired so that the failure of any one of them causes all of them to stop emitting light, shall be considered to be one light source.

4.6.1.2. In case of failure of any one light source in a single lamp containing more than one light source, at least one of the following provisions shall apply:

(a) The light intensity complies with the minimum intensity required in the pertinent table of standard light distribution in space as shown in Annex 3 and when all light sources are illuminated the maximum intensities shall not be exceeded; or

(b) A signal for activation of a tell-tale indicating failure, as indicated in paragraphs 6.4.8., 6.7.8., 6.9.8., 6.10.8., 6.11.8., 6.12.8., 6.13.8. and 6.18.8. of UN Regulation No. 48, is produced, provided that the luminous intensity in the axis of reference is at least 50 per cent of the minimum intensity required. In this case a note in the communication form states that the lamp is only for use on a vehicle fitted with a tell-tale indicating failure.

4.6.1.3. The requirements of paragraph 4.6.1.2. do not apply to daytime running lamps that shall comply with the requirements of paragraph 5.4.4.

However, the requirements of paragraph 4.6.1.1. are still applicable.

4.6.1.4. The requirements of paragraph 4.6.1.2. do not apply to direction indicator lamps. Direction indicator lamps of category 1, 1a, 1b, 2a and 2b, 11, 11a, 11b, 11c and 12 that shall comply with the requirements of paragraph 5.6.3.

However, the requirements of paragraph 4.6.1.1. are still applicable.

4.6.1.5. The requirements of paragraph 4.6.1.2. do not apply to registration plate lamps.

However, the requirements of paragraph 4.6.1.1. are still applicable.

4.6.1.6. The requirements of paragraph 4.6.1.2. (b) do not apply to stop- and position lamps for vehicles of category L.

However, the requirements of paragraph 4.6.1.1. and paragraph 4.6.1.2. (a) are still applicable.”

Annex 3, paragraph 1.2., amend to read:

“1.2. Within the field of light distribution schematically shown as a grid, the light pattern should be substantially uniform, i.e. the light intensity in each direction of a part of the field formed by the grid lines shall meet at least the lowest minimum value being shown on the grid lines surrounding the questioned direction as a percentage.

However, in the case of reversing lamps, if visual examination of a lamp appears to reveal substantial local variations of intensity, a check shall be made to ensure that no intensity measured between two of the directions of measurement referred to above is below 50 per cent of the lower minimum intensity of the two prescribed for these directions of measurement.”
II. Justification

1. The added text “However, …” in the paragraphs 4.6.1.3. to 4.6.1.6. does not change the content/requirements of the regulation. It is purely meant to clarify the requirements of failure provisions in the 4 exemptions as set forth in the paragraphs 4.6.1.3. to 4.6.1.6.

2. Even though in these cases the requirements of paragraph 4.6.1.2. are (partially) exempted, the requirements of paragraph 4.6.1.1. are still applicable and it was considered that such a clarification would be useful.

3. In addition to the clarifications provided in the paragraphs 4.6.1.3. to 4.6.1.6., paragraph 4.6.1.4. is also updated to correctly reflect the existing text of UN Regulations on light-signalling. With Supplement 17 to the original series of amendments to UN Regulation No. 50, direction indicator lamps of categories 11 and 12 are no longer required to fulfill any n-1 failure requirements as stated in paragraph 7.5.1. of UN Regulation No. 50.

4. The updated text of Annex 3, paragraph 1.2., restores an extra requirement for reversing lamps that is missing in the original text of UN Regulation No. 148. This additional paragraph is taken from UN Regulation No. 23, Annex 3, paragraph 2.2.