

Economic and Social Council

Distr.: General 6 August 2012

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Sixty-eighth session Geneva, 16–18 October 2012 Item 14 of the provisional agenda Regulation No. 87 (Daytime running lamps)

Proposal for Supplement 17 to Regulation No. 87 (Daytime running lamps)

Submitted by the expert from the Working Party "Brussels 1952"*

The text reproduced below was prepared by the expert from the Working Party "Brussels 1952" (GTB) amending the requirements on light-source failures. The modifications to the existing text of the 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 2010–2014 (ECE/TRANS/208, para. 106, ECE/TRANS/2010/8, programme activity 02.4), 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 7.4., amend to read:

"7.4. In the case of a lamp containing more than one light source the lamp shall comply with the minimum intensity required when any one light source has failed and when all light sources are illuminated the maximum intensity shall not be exceeded.

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.

- 7.4. Light source failure
- 7.4.1. In the case of a single lamp containing more than one light source and when all light sources are illuminated, the lamp shall comply with the minimum intensity required and the maximum intensity shall not be exceeded.
- 7.4.2. In case of failure of any one light source in a single lamp containing more than one light source, one of the following provisions shall apply:
 - (a) The light intensity at the points of standard light distribution defined in Annex 3 shall be at least 80 per cent of the minimum intensity required, or
 - (b) The light intensity in the axis of reference shall be at least 50 per cent of the minimum intensity required, provided that a note in the communication form states that the lamp is only for use on a vehicle fitted with an operating tell-tale.
- 7.4.3. 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."

II. Justification

1. At the sixty-fifth session of the Working Party on Lighting and light-Signalling (GRE), a proposal from GTB to delete paragraph 7.4. from UN Regulation No. 87 (ECE/TRANS/WP.29/GRE/2011/16) was not accepted and GTB was invited to consider a revised approach based upon the comments received.

2. Daytime running lamps are activated during the entire period of daylight operation of the vehicle. In a large number of cases, they are equipped with two or more LED light sources and this solution offers long lifetime and excellent visibility. However, as explained in ECE/TRANS/WP.29/GRE/2011/16, the substance of paragraph 7.4. ("n-1 rule") prevents cost-efficient solutions in current and future designs for such daytime running lamps.

3. A revised version of paragraph 7.4. has been prepared taking into account the concerns noted at the sixty-fifth GRE session. This intends to ensure that a certain residual intensity of the lamp is maintained after one light source has failed. The proposed amendment will encourage automobile manufacturers to fit multi-LED devices as daytime running lamps and this will contribute to road safety.