Proposal for Supplement 21 to Regulation No. 23 (Reversing lamps)

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 the GTB to update the provisions relating to failure of light sources when an operating tell-tale is installed. 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 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, 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 6.1.5., amend to read:

"6.1.5. In the case of a single 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 intensities 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. Light source failure:

6.1.5.1. 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.

6.1.5.2. In the 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 shall comply with the minimum intensity required in the axis of reference or

(b) The light intensity in the axis of reference shall be at least 50 per cent of the minimum intensity required, provided that the communication form states that the lamp is only for use on a vehicle fitted with an operating tell-tale which indicates the failure of any one of these light sources."

Annex 1, item 9., amend to read:

"9. Concise description:

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Geometrical conditions of installation and relating variations; if any: ......................

For a type of manoeuvring lamp pursuant to Regulation No. 23, paragraph 6.2.2.

Maximum mounting height:.................................................................

Only for use in a vehicle fitted with an operating tell-tale to indicate light source failure: yes/no3................................................................."

II. Justification

1. This proposal concerns lamps equipped with several light sources and fitted with an operating tell-tale that indicates the failure of any one of these light sources. The current provisions for the failure of one light source (the “N-1” requirement) are difficult to apply as a complete photometric check for all possible combinations of light source failure is required.

2. The revised text follows the approach of supplement 17 to Regulation No. 87 and removes the requirement to check the complete photometric requirement, in case of failure of any light source, when the lamp is fitted on the vehicle with an operating tell-tale.