

Economic and Social Council

Distr.: General 9 August 2018

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling Eightieth session Geneva, 23-26 October 2018 Item 4 of the provisional agenda Simplification of lighting and light-signalling Regulations

> Proposal to introduce requirements for the use of light emitting diode substitute light sources in the new UN Regulation on Light-Signalling Devices

Submitted by the Task Force on Substitutes and Retrofits (TF SR)*

The text reproduced below was prepared by the Task Force on Substitutes/Retrofits (TF S/R) as a revision of the original proposal prepared by the expert from the International Automotive Lighting and Light Signalling Expert Group (GTB) that introduces requirements for light emitting diode (LED) substitute light sources into the draft new UN Regulation on Light-Signalling Devices (LSD). This text was already presented to the Working Party on Lighting and Light-Signalling (GRE) at its seventy-seventh session as informal document GRE-77-15 and adopted in principle, pending a formal examination of GRE in conjunction with the final text of the new draft Regulation. This text was then presented as document ECE/TRANS/WP.29/GRE/2017/14, corrected by GRE-78-04. The content of the document ECE/TRANS/WP.29/GRE/2018/2 as well as the comments made during the seventy-eighth and seventy-ninth sessions of GRE have been taken into account. The modifications to the text of the new draft UN Regulation are marked in bold for new or strikethrough for deleted characters.

GE.18-13152(E)







In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, cluster 3.1), 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 2.2., amend to read:

"2.2. "Lamps of different types" means

. . . .

A change of the colour of the light source or the colour of any filter does not constitute a change of type.

The use of LED substitute light source(s) does not constitute a change of type. However paragraph 4.7.7. applies."

Paragraph 3.1.2.2., amend to read:

- "3.1.2.2. A brief technical description stating in particular, with the exception of lamps with non-replaceable light sources:
 - (a) The category or categories of filament light source(s) prescribed; this filament light source category shall be one of those contained in Regulation No. 37;
 - (b) The category or categories of LED light source(s) prescribed; this LED light source category shall be one of those contained in Regulation No. 128;
 - (c) The light source module specific identification code;
 - (d) In the case where, at the discretion of the applicant, the lamp also has to be approved with the LED substitute light source(s) according to Regulation No. 128, this shall be specified in the description;
 - (e) In the case of a category S3 or S4 stop lamp, which is intended to be mounted inside the vehicle, the technical description shall contain the specification of the optical properties (transmission, colour, inclination, etc.) of the rear window(s)."

Paragraph 3.3.4.1.1., amend to read:

"3.3.4.1.1. In any case the approval marking or the Unique Identifier **as well as the category or categories of LED substitute light source(s) prescribed, if any,** shall be visible when the lamp is fitted on the vehicle or when a movable part such as the hood or boot lid or a door is opened."

Paragraph 3.3.4.3., amend to read:

- "3.3.4.3. With the exception of lamps with non-replaceable light sources, bear a clearly legible and indelible marking indicating:
 - (a) The category or categories of light source(s) prescribed; in the case where the lamp has been approved for LED substitute light source(s), also the category or categories of the LED substitute light source(s); and/or
 - (b) The light source module specific identification code."

Insert a new paragraph 3.5.4., to read:

"3.5.4. Testing with LED substitute light sources is exempted from conformity of production control."

Paragraph 4.3.1.4., amend to read:

"4.3.1.4. The light source(s) holder shall conform to the characteristics given in IEC Publication 60061. The holder data sheet relevant to the category of light source(s) used prescribed applies.

Alternatively, where a category of LED substitute light source(s) is also prescribed, the holder data sheet relevant to the category of LED substitute light source(s) applies."

Insert a new paragraph 4.7.7., to read:

"4.7.7. In the case where the lamp, at the discretion of the applicant, also has to be approved with LED substitute light source(s), all measurements, photometric and colorimetric, shall be repeated using the LED substitute light source(s) prescribed."

Annex 1, item 9.2., amend to read:

"9.2 By light signalling function and category:

For mounting either outside or inside or both²

Colour of light emitted: red/white/amber/colourless²

Number, category or categories and kind of light source(s): \underline{y}

Voltage and wattage:

...." "<u>3</u>/

Indicate LED substitute light source(s) explicitly, if any. "

II. Justification

- 1. This proposal was originally developed and submitted by GTB to the seventy-seventh and seventy-eighth sessions of GRE and could only be considered after the proposal for a new UN Regulation on Light-Signalling Devices (LSD) had been presented. That proposal has been considered by the Task Force Substitutes and Retrofits (TF SR). As a result, amendments are proposed by TF SR. Comments from the preceding meetings of GRE have been taken into account.
- 2. The proposal includes the following modifications:
- editorial corrections were made due to document GRE/2018/02;
- the marking of the lamp that has been approved for installation of the LED substitute light source(s) shall be visible;
- the use of the holder of the LED substitute light source, accepting also its filament light source counterpart, is required if an LED substitute light source is prescribed.