Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations
Working Party on Lighting and Light-Signalling
Eighty-second session
Geneva, 22-25 October 2019
Item 5 of the provisional agenda
UN Regulations Nos. 37 (Filament lamps), 99 (Gas discharge light sources), 128 (Light emitting diodes light sources) and the Consolidated Resolution on the common specification of light source categories

Proposal for Supplement [1] to UN Regulation No. [149] on Road Illumination 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 SR) with the aim to introduce requirements for light emitting diode (LED) substitute light sources into the new UN Regulation No. [149] on Road Illumination Devices (RID). The text is based upon ECE/TRANS/29/2018/158/Rev.1. The modifications to the text of the new draft UN 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 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 2.2.8., amend to read:

"2.2.8. The category of light source(s) used and/or the LED module specific identification code(s); the use of LED substitute light source(s) does not constitute a change of type, however, paragraph 4.6.9. applies;"

Paragraph 3.1.3., amend to read:

"3.1.3. A brief technical description stating in particular:

(a) In the case of lamps with replaceable light sources, the category or categories of light source(s) prescribed; this light source category(s) shall be one of those contained in UN Regulations Nos. 37, 99 or 128;

(b) In the case of lamps with replaceable light source modules, the light source module specific identification code;

(c) The make and type of supply and operating device(s), if any and if not being part of an installation unit;

(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) If the device (lamp) is equipped with an adjustable reflector, the mounting position(s) of the lamp in relation to the ground and the longitudinal median plane of the vehicle;"

Paragraph 3.3.1.4., amend to read:

"3.3.1.4. The UI or the approval mark with the additional symbols, shall be clearly legible and indelible. It may be placed on an inner or outer part (transparent or not) of the lamp which cannot be separated from the transparent part of the lamp emitting the light. In any case the marking 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 3.3.2.6.2., amend to read:

"3.3.2.6.2. In the case of lamps with replaceable light source(s) or with replaceable light source modules, a marking indicating:

(a) The category or categories of light source(s) prescribed for headlamps of Classes AS, BS, CS, DS, ES and cornering lamps; in the case where lamps have 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; and/or

(c) The rated voltage(s), the rated wattage(s) and specific identification code of LED module(s) for headlamps, front fog lamps and AFS;"

Paragraph 3.3.2.6.7.2.1., amend to read:

"3.3.2.6.7.2.1. In the case of light source(s), their category(ies); in the case where the lamp has been approved for the use of LED substitute light source(s) in the additional lighting unit(s), also the category or
categories of the LED substitute light source(s); and/or

In the case of LED module(s), the rated voltage and rated wattage and the specific identification code(s) of the LED module(s).”

Insert a new paragraph 3.5.8., to read:

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

Paragraph 4.5.2.2., amend to read:

4.5.2.2. In case of replaceable light source(s),

(a) The design of the lamp shall be such that the light source(s) can be fixed in no other position but the correct one;

(b) 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 4.6.9., to read:

"4.6.9. 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 9.1.2., amend to read:

"9.1.2. Number, category and kind of light source(s):

Lamp approved for LED substitute light source(s): yes/no²

If yes, category of LED substitute light source(s)”

Annex 1, item 9.2.4., amend to read:

“9.2.4. Number, category and kind of light source(s):

Lamp approved for LED substitute light source(s): yes/no²

If yes, category of LED substitute light source(s)”

Annex 1, item 9.3.2., amend to read:

“9.3.2. Number, category and kind of light source(s):

Lamp approved for LED substitute light source(s): yes/no²

If yes, category of LED substitute light source(s)”

Annex 1, item 9.4.2., amend to read:

“9.4.2. Number, category and kind of light source(s), if any:

Lamp approved for LED substitute light source(s): yes/no²

If yes, category of LED substitute light source(s)”

Annex 1, item 9.5.2., amend to read:

“9.5.2. Number, category and kind of light source(s):
Lamp approved for LED substitute light source(s): yes/no

If yes, category of LED substitute light source(s)

Annex I, item 9.6.1., amend to read:

“9.6.1. Number, category and kind of light source(s): 12

Lamp approved for LED substitute light source(s): yes/no

If yes, category of LED substitute light source(s)"

II. Justification

This proposal aims to introduce requirements for the use of LED substitute light sources into the new UN Regulation No. [149] on Road Illumination Devices (RID), following the adoption of such requirements for the new UN Regulation No. [148] on Light-Signalling Devices (LSD) (ECE/TRANS/WP.29/GRE/2018/42, as amended by Annex III to ECE/TRANS/WP.29/GRE/80).