Proposal for Supplement 16 to Regulation No. 4 (Illumination of rear-registration plates)

Submitted by the Working Party on Lighting and Light-Signalling*

The text reproduced below was adopted by the Working Party on Lighting and Light-Signalling (GRE) at its sixty-seventh session to introduce into the Regulation provisions for replaceable light-emitting diode (LED) light sources and to correct and harmonize the provisions concerning approval markings. It is based on ECE/TRANS/WP.29/GRE/2011/6, not amended and ECE/TRANS/WP.29/GRE/2012/9, as amended by Annex II to the report (see ECE/TRANS/WP.29/GRE/67, paras. 25 and 29). It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration.

* 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.
Paragraph 1.3., amend to read:

"1.3. "Rear registration plate lamps of different types" means…

…

(b) The characteristics of the optical system, (levels of intensity, light distribution angles, category of light source, light source module, etc.);"

Paragraph 1.4., amend to read:

"1.4. References made … for type approval.

References made in this Regulation to standard (étalon) LED light source(s) and to Regulation No. XXX shall refer to Regulation No. XXX and its series of amendments in force at the time of application for type approval."

Paragraph 2, amend to read:

"2. Application for approval

…

(b) A brief technical description stating in particular, with the exception of lamps with non-replaceable light sources:

(i) The category or categories … approval.; and/or

(ii) The category or categories of LED light source(s) prescribed; this LED light source category shall be one of those contained in Regulation No. XXX and its series of amendments in force at the time of application for type approval.; and/or

(iii) The light source module specific identification code; ²

(c) …"

Paragraph 3.4., amend to read:

"3.4. with the exception of lamps with non-replaceable light sources it must bear a clearly legible and indelible marking indicating:

(a) The category or categories of light source(s) prescribed; and/or

(b) The light source module specific identification code."

Paragraph 5.2., amend to read:

"5.2. All measurements shall be made with the standard uncoloured or coloured light source of the category prescribed by the manufacturer, supplied with the voltage:

(a) In the case of filament lamp(s), that is necessary to produce the reference luminous flux required for that category of filament lamp;

(b) In the case of LED light source(s) of 6.75 V, 13.5 V or 28.0 V; the luminous flux value produced shall be corrected. The correction factor is the ratio between the objective luminous flux and the value of the luminous flux found at the voltage applied.

All measurements on the devices with non-replaceable light sources shall be made at 6.75 V, 13.5 V or 28.0 V respectively."
Paragraphs 5.6. to 5.6.3., amend to read:

"5.6. In the case of replaceable light source(s):

5.6.1. Any category or categories of light source(s) approved according to Regulation No. 37 and/or Regulation No. XXX may be used, provided that no restriction on the use is made in Regulation No. 37 and its series of amendments in force at the time of application for type approval or in Regulation No. XXX and its series of amendments in force at the time of application for type approval.

5.6.2. The design of the device shall be such that the light source can not be fixed in any other position but the correct one.

5.6.3. The light source holder shall conform to the characteristics given in IEC Publication 60061. The holder data sheet relevant to the category of light source used, applies."

Annex 1, Figure 1, amend to read:

"Annex 1

Arrangement of approval marks

Figure 1
(Marking for single lamps)

Model A

Annex 2, item 9., amend to read:

“9. Concise description: 3

... Number and category (ies) of light source(s): .................

..."
Annex 5, paragraph 1.2., amend to read:

"1.2. For replaceable light sources:

When equipped with light sources at 6.75 V, 13.5 V or 28.0 V, the luminance values produced shall be corrected. For filament lamps the correction factor is the ratio between the reference luminous flux and the mean value of the luminous flux found at the voltage applied (6.75 V, 13.5 V or 28.0 V).

For LED light sources the correction factor is the ratio between the objective luminous flux and the mean value of the luminous flux found at the voltage applied (6.75 V, 13.5 V or 28.0 V).

The actual luminous fluxes of each light source used shall not deviate more than ± 5 per cent from the mean value. Alternatively and in case of filament lamps only a standard filament lamp may be used in turn, in each of the individual positions, operated at its reference flux, the individual measurements in each position being added together."

Annex 6,

Paragraph 1.2., amend to read:

"1.2. With respect to … chosen at random and equipped with a standard light source, or…respectively:"

Paragraph 1.2.3., amend to read:

"1.2.3. If, in the … standard light source."

Annex 7,

Paragraph 1.2., amend to read:

"1.2. With respect to …chosen at random and equipped with a standard light source, or when the lamps are equipped with non-replaceable …"

Paragraph 1.2.3., amend to read:

"1.2.3. If, in the case of a … another standard light source."