Proposal for Supplement 16 to Regulation No. 50 (Position, stop, direction indicator lamps for mopeds and motorcycles)

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 the use of light-emitting diode (LED) light sources according to the draft Regulation (Regulation No. XXX: ECE/TRANS/WP.29/2010/44 and Corr.1) and amending the inward visibility angle of front position lamps in UN Regulation No. 50. It is based on ECE/TRANS/WP.29/GRE/2011/11, not amended, and GRE-67-14 as reproduced in Annex VII to the report, (see ECE/TRANS/WP.29/GRE/67, paras. 25 and 56). 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 2.2., amend to read:

"2.2. *Front position lamps, rear position lamps, stop lamps, direction indicator lamps and rear-registration-plate illuminating devices of different types* means lamps which differ, in each said category, in such essential respects as:

(a) The trade name or mark;

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

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

Paragraph 2.4., amend to read:

"2.4. 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 3.2.2., amend to read:

"3.2.2. a brief … light sources:

(a) The category …; and/or

(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. XXX and its series of amendments in force at the time of application for type approval; and/or

(c) the light source module specific identification code."

Paragraph 4.1.2., amend to read:

"4.1.2. with the …indicating:

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

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

Paragraphs 6.4. to 6.4.3., amend to read:

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

6.4.1. 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.

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

6.4.3. 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."
Paragraphs 8.1. to 8.1.4., amend to read:

"8.1. All measurements, photometric and colorimetric shall be carried out with an uncoloured or coloured standard light source of the category prescribed for the device, supplied with the voltage:

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

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

(c) In the case of lamps with non-replaceable light sources: 6.75 V and 13.5 V respectively.

(d) In the case of a system that uses an electronic light source control gear being part of the lamp applying at the input terminals of the lamp the voltage declared by the manufacturer or, if not indicated, 6.75 V, 13.5 V or 28.0 V, respectively.

(e) In the case of a system that uses an electronic light source control gear not being part of the lamp, the voltage declared by the manufacturer shall be applied to the input terminals of the lamp."

Paragraph 10.1., amend to read:

"10.1. Every device...the light emitted (measured with a standard light source as referred to in paragraph 8. above)...."
Annex 1, amend to read:

"Annex 1

Minimum horizontal (h) and minimum vertical (v) angles for spatial light distribution

...  
Front position lamps (for a pair of lamps)

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V = +15 \text{ degrees} / -10 \text{ degrees}
\]

Annex 2,
Item 9, amend to read:

"9. ...

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

..."

Footnote 3, amend to read:

"3 With regard to lighting...

..."

In this case, ...where applicable:

(a) Number and category of light source(s);

...

Annex 4, paragraph 3.2., amend to read:

"3.2 For replaceable light sources:

When equipped with light sources at 6.75 V or 13.5 V, the luminous intensity 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 or 13.5 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 or 13.5 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 …."

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