Proposal for Supplement 21 to the 02 series of amendments to Regulation No. 7 (Position, stop and end-outline lamps)

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 and to correct and harmonize the provisions concerning approval markings. It is based on ECE/TRANS/WP.29/GRE/2011/8, as amended by para. 25 of the report and ECE/TRANS/WP.29/GRE/2012/9, not amended (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 1.6., amend to read:

"1.6. "Front and rear position lamps, stop-lamps and end-outline marker lamps of different type" means …

…

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

(c) The system used to reduce illumination at night - in the case of stop-lamps with two levels of intensity.

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

Paragraph 1.7., amend to read:

"1.7. 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 2.2.2., amend to read:

"2.2.2. 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.

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 3.2., amend to read:

"3.2. With the … indicating:

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

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

Paragraphs 5.9. to 5.9.3., amend to read:

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

5.9.1. 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.

5.9.2. The design of the device shall be such that the light source can be fixed in no other position but the correct one."
5.9.3. 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.

Paragraph 6.3., amend to read:

"6.3. The intensities shall be measured with the light source(s) continuously …"

Paragraph 7.1.1., amend to read:

"7.1.1. In case of a … standard light source of the category prescribed for the device, 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."

Annex 3, paragraph 1., amend to read:

"Annex 3

Examples of arrangements of the approval marks

1. Front position lamp

The device bearing the approval mark shown above is a front position lamp approved in the Netherlands (E4), under approval number 221 pursuant to Regulation No. 7.

The number mentioned close to the symbol "A" indicates that approval was granted in accordance with the requirements of Regulation No. 7 as amended by the 02 series of amendments. The horizontal arrow indicates the side on which the required photometric specifications are met up to an angle of 80° H. The vertical arrow starting from a horizontal segment and directed downwards indicates a permissible mounting height of equal to or less than 750 mm from the ground for this device."
Annex 4, paragraph 3.2., amend to read:

"3.2. For replaceable light source(s):

When equipped with light source(s) at 6.75 V, 13.5 V or 28.0 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, 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 ….”

Annex 5, paragraph 1.2.2., amend to read:

"1.2.2. If, in the case …another standard light source.”

Annex 6, paragraph 1.2.2., amend to read:

"1.2.2. If, in the case …another standard light source.”