

Proposal of amendments to Regulation No. 87

A. PROPOSAL

The modifications to Regulation No. 87 are marked in **bold** characters.

Paragraph 2.3., amend to read:

- "2.3. "Daytime running lamps of different type" means lamps which differ in such essential respects as:
- the trade name or mark;
 - the characteristics of the optical system, (levels of intensity, light distribution angles, category of filament lamp, light source module, **variable intensity control, if any**, etc.);
- A change of the colour of the filament lamp or the colour of any filter does not constitute a change of type."

Paragraph 3.1., amend to read:

- "3.1. The application for approval shall be submitted by the holder of the trade name or mark or by his duly accredited representative. **It shall specify whether the device produces steady luminous intensity or whether the device produces variable luminous intensity.**

At the choice of"

Paragraph 3.2.2., amend to read:

Paragraph 3.2.2., amend to read:

- "3.2.2. a brief technical description stating, in particular, with the exception of lamps with non-replaceable light sources:
- the category or categories of filament lamp(s) prescribed; this filament lamp category shall be one of those contained in Regulation No. 37; and/or
 - the light source module specific identification code; **and/or**
 - **for a daytime running lamp of category RL3, a concise description of the variable intensity control. "**

Paragraph 3.2.3., amend to read:

- "3.2.3. two samples. **For daytime running lamp of category RL3, the application shall also be accompanied by the variable intensity control or a generator providing the same signal(s).**"

Paragraph 4.3., amend to read:

"4.3. in the case of lamps with an electronic light source control gear **or a variable intensity control** and/or non-replaceable light sources and/or light source module(s), bear the marking of the rated voltage or range of voltage and rated maximum wattage."

Paragraph 4.7., amend to read:

4.7. An electronic light source control gear **or a variable intensity control** being part of the lamp but not included into the lamp body shall bear the name of the manufacturer and its identification number."

Paragraph 5.2.2., amend to read:

"5.2.2. the additional symbol "RL" **followed by the figure "1" when the device produces low steady luminous intensity, by the figure "2" when the device produces high steady luminous intensity, and by the figure "3" when the device produces variable luminous intensity.**"

Paragraph 6.4., amend to read:

"6.4. Daytime running lamps, which are reciprocally incorporated with another function, using a common light source, and designed to operate permanently with an electronic light source control gear **or a variable intensity control** to regulate the intensity of the light emitted, are permitted."

Insert a new paragraph 6.5., to read:

"6.5. **In case of failure of the variable intensity control regulating the variable luminous intensity of a daytime running lamp of category RL3 emitting more than the maximum value of category RL2, requirements of steady luminous intensity of category RL2 shall be fulfilled automatically.**"

Paragraph 7.1., amend to read:

7.1. The intensity of the light emitted by each lamp shall not be less than [400] cd in the axis of reference **for a device with low or high steady luminous intensity (RL1 and RL2), and than [200] cd for a device with variable luminous intensity (RL3).**"

Paragraph 7.2.2., amend to read:

"7.2.2. **in any direction the lamp is visible not exceed [600] cd for a device with low steady luminous intensity (RL1), not exceed [1,200] cd for a device with high steady luminous intensity (RL2), and not exceed [3,200] cd for a device with variable luminous intensity (RL3).**"

Insert a new paragraph 7.4., to read:

"7.4. **The variable intensity control shall not generate signals which cause luminous intensities:**

7.4.1. **outside the range specified in paragraphs 7.1. to 7.3. above; and**

7.4.2. **outside the range specified under standard conditions 4.**

4/ See item (3) in the conclusions of the study transmitted by the expert from Japan "Study on the Effects of the Daytime Running Lights of Four-wheeled Vehicles on Their Discernability (and on the Impairment of Conspicuity of Motorcycles) - Report No. 2" (Informal document No. GRE-53-8 - 53rd GRE, 4-8 October 2004, agenda item 7.) as follows :

- "
- DRL switched to about 200 cd under sky illuminance up to 2,000 lx.
 - DRL switched to about 400 cd under sky illuminance between 2,000 and 5,000 lx.
 - DRL switched to 400-800 cd under sky illuminance between 5,000 and 10,000 lx.
(In fine weather conditions, passing beams as DRL are less conspicuous than the vehicle while the vehicle itself is sufficiently discernible.)
 - DRL switched to 800-1,600 cd under sky illuminance between 10,000 and 20,000 lx.
(In fine weather conditions, passing beams as DRL are less conspicuous than the vehicle while the vehicle itself is sufficiently discernible.)
 - DRL switched to 1,600-3,200 cd under a sky illuminance of about 50,000 lx.
(The vehicle itself is sufficiently discernible. DRL exceeding a 6,400 cd luminous intensity are outside of the acceptable obtrusiveness range.)
 - DRL switched to 1,600-3,200 cd at a sky illuminance of about 100,000 lx." "

Paragraph 7.4. (former), renumber as paragraph 7.5.

Paragraph 9., amend to read:

"9. COLOUR OF LIGHT

... within the limits of the trichromatic co-ordinates prescribed in Annex 4 to this Regulation.

These requirements shall also apply within the range of variable luminous intensity produced by a daytime running lamp of category RL3. "

Paragraphs 10. to 10.3., amend to read, footnote 3/ renumber as footnote 5/:

"10. TEST PROCEDURE

10.1. All measurements, photometric and colorimetric, shall be made with a colourless standard filament lamp of the category prescribed for the device, the supply voltage being so regulated as to produce the reference luminous flux required for that category of lamp, when not supplied by an electronic light source control gear **or a variable intensity control.**

10.2. In the case of a system that uses an electronic light source control gear **or a variable intensity control** being part of the lamp 5/, all measurements, photometric and colorimetric, shall be made applying at the input terminals of the lamp a voltage of 6.75 V, 13.5 V or 28.0 V respectively.

10.3. In the case of a system that uses an electronic light source control gear **or a variable intensity control** not being part of the lamp the voltage declared by the manufacturer shall be applied to the input terminals of the lamp. The test laboratory shall require from the manufacturer the light source control gear **or a variable intensity control** needed to supply the light source and the applicable functions.
The voltage to be applied to the lamp shall be noted in the communication form in Annex 1 of this Regulation."

Annex 1, item 9., amend to read:

"9.

...

Application of an electronic light source control gear / **variable intensity control**:

(a) being part of the lamp: yes/no 2/

(b) being not part of the lamp: yes/no 2/

Input voltage supplied by an electronic light source control gear / **variable intensity control**:

Electronic light source control gear / **variable intensity control** manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body):.....

Variable luminous intensity: yes/no 2/"

Annex 2 :

Figure 1, amend the marking "RL" to read "RL1", and amend the text to read :

"The daytime running lamp **of category RL1** bearing the approval mark..."

Figure 2, amend the marking "RL" to read "**RL2**", and amend the text to read :

"...A daytime running lamp of category RL2 approved in accordance with Regulation No. 87 in its original form; ..."

Figure 3, amend the marking "RL" to read "**RL3**", and amend the text to read :

"...a daytime running lamp **of category RL3** approved in accordance with Regulation No. 87 in its original form; ..."

"... the same daytime running lamp **of category RL3** as above;..."

Annex 5,

Paragraph 1.2., amend to read:

"1.2. With respect to photometric performances, the conformity of mass-produced lamps shall not be contested if, when testing photometric performances of any lamp chosen at random **according to paragraph 10. of this Regulation, respectively**: "

Paragraph 1.3., amend to read:

"1.3. The chromaticity coordinates shall be complied **when tested under conditions of paragraph 10. of this Regulation.**"

Annex 6,

Paragraph 1.2., amend to read:

"1.2. With respect to photometric performances, the conformity of mass-produced lamps shall not be contested if, when testing photometric performances of any lamp chosen at random **according to paragraph 10. of this Regulation, respectively**: "

Paragraph 1.3., amend to read:

"1.3. The chromaticity coordinates shall be complied with **when tested under conditions of paragraph 10. of this Regulation.**"

B. JUSTIFICATION

This proposal is motivated by:

- the apparent necessity for some Contracting Parties or some non governmental associations to re-discuss the minimum and maximum figures of the intensity of the light emitted by each lamp in the axis of reference, despite the general agreement of GRE-56 in favour of the new range 400-1200 cd without additional provisions :
 - o glaring concern produced by dedicated day-time running lamp at night-time conditions, which could justify a mandatory installation of a light-sensor, or better, which could justify a revision of these figures ? (see E/ECE/TRANS/WP29/2007/20/Rev.1, Informal document No. GRE-58-02, Informal document No. GRE-58-08).
 - o conspicuity concern between dedicated day-time running lamp and direction indicator lamp, which could justify stringent provisions regarding distances , or better, which could justify a revision of these figures ? (see E/ECE/TRANS/WP29/GRE/2007/21).
 - o "loss of motorcycle conspicuity in some circumstances", which could justify also a revision of these figures ? (see E/ECE/TRANS/WP29/GRE/2007/38).
- the opportunity to propose a new variable category of day-time running lamps, referring to recent amendments adopted to Regulation No. 6 (Supplement 15 to the 01 series of amendments), Regulation No. 7 (Supplement 12 to the 02 series of amendments) and Regulation No. 38 (Supplement 12 to the original version of the Regulation), as an attempt towards Japan to propose what could be acceptable as day-time running lamps, and which eventually could help Japan to adopt Regulation No. 87.
