Proposal for Supplement 9 to the 04 series of amendments to Regulation No. 19 (Front fog 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 seventy-sixth session (ECE/TRANS/WP.29/GRE/76, paras. 10 and 15). It is based on ECE/TRANS/WP.29/2013/75, ECE/TRANS/WP.29/GRE/2013/55/Rev.1, ECE/TRANS/WP.29/GRE/2014/3, ECE/TRANS/WP.29/GRE/2016/14, Annex IV to ECE/TRANS/WP.29/GRE/75 and ECE/TRANS/WP.29/GRE/2016/32. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration at their March 2017 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2016–2017 (ECE/TRANS/254, para. 159 and ECE/TRANS/2016/28/Add.1, cluster 3.1), 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.
Supplement 9 to the 04 series of amendments to Regulation No. 19 (Front fog lamps)

**Paragraph 1.4.1., amend to read:**

"1.4.1. The trade name or mark:

(a) Lamps bearing the same trade name or mark but produced by different manufacturers shall be considered as being of different types;

(b) Lamps produced by the same manufacturer differing only by the trade name or mark shall be considered as being of the same type."

**Insert a new paragraph 2.2.6. to read:**

"2.2.6. In the case of a type of lamp differing only by the trade name or mark from a type that has already been approved it shall be sufficient to submit:

2.2.6.1. A declaration by the lamp manufacturer that the type submitted is identical (except in the trade name or mark) with and has been produced by the same manufacturer as the type already approved, the latter being identified by its approval code;

2.2.6.2. Two samples bearing the new trade name or mark or equivalent documentation."

**Paragraph 3.1., amend to read:**

"3.1. Front fog lamps which are submitted for approval shall clearly, legibly and indelibly bear:

(a) The trade name or mark …"

**Paragraph 5., amend to read:**

"5. **General specifications**

The requirements contained in sections 5. "General specifications" and 6. "Individual specifications" and in the Annexes referenced in the said sections of Regulations Nos. 48, 53 or 86, and their series of amendments in force at the time of application for the lamp type approval shall apply to this Regulation.

The requirements pertinent to each lamp and to the category/ies of vehicle on which the lamp is intended to be installed shall be applied, where its verification at the moment of lamp type approval is feasible.

5.1. …"

**Paragraph 10.1., amend to read:**

"10.1. Front fog lamps shall be so manufactured as to conform to the type approved under this Regulation.

The compliance with the requirements set forth in paragraphs 6. and 7. above shall be verified as follows:

10.1.1. The minimum requirements for Conformity of Production (CoP) control procedures set forth in Annex 7 to this Regulation shall be complied with.

10.1.2. The minimum requirements for sampling by an inspector set forth in Annex 8 to this Regulation shall be complied with."
Annex 1,

Item 10.4., shall be deleted.

Items 10.5. to 10.10., renumber as items 10.4. to 10.9.

Item 10.4. (new), amend to read:

"10.4. LED module specific identification code: ............................................"

Annex 5,

Paragraph 1.2.1.1., subparagraph (e), amend to read;

"1.2.1.1. …

(e) An appropriate quantity of distilled water with a conductivity of ≤ 1 mS/m.

…”

Paragraph 1.2.1.1.2., amend to read:

“1.2.1.1.2. For front fog lamp with the outside lens in plastic material:

The mixture of water and polluting agent to be applied to the front fog lamp shall be composed of:

(a) 9 parts by weight of silica sand with a particle size of 0-100 µm,
(b) 1 part by weight of vegetal carbon dust produced from beech wood with a particle size of 0-100 µm,
(c) 0.2 part by weight of NaCMC⁴,
(d) 5 parts by weight of sodium chloride (pure at 99 per cent),
(e) 13 parts by weight of distilled water with a conductivity of ≤ 1 mS/m,
(f) 2 ± 1 drops of surfactant.⁵

The mixture shall not be more than 14 days old."

Paragraph 2.2.2., amend to read:

“2.2.2. However, if this value is more than 2 mrad but not more than 3 mrad (2 mrad < Δr ≤ 3 mrad) a further sample of a front fog lamp mounted on a test fixture representative of the correct installation on the vehicle shall be tested as described in paragraph 2.1. above after being subjected three consecutive times to the cycle as described below, in order to stabilise the position of the mechanical parts of the front fog lamp:

(a) Operation of the front fog lamp for one hour (the voltage shall be adjusted as specified in paragraph 1.1.2. of this annex).
(b) One hour period with the lamp switched off."

Paragraph 2.2.3., amend to read:

“2.2.3. After these three cycles, the front fog lamp type shall be considered as acceptable if the absolute values Δr measured according to paragraph 2.1. above on this further sample meet the requirements in paragraph 2.2.1. above.”

Annex 8,

Paragraphs 2. to 6. amend to read:
“2. First sampling

In the first sampling four front fog lamps are selected at random. The first sample of two is marked A, the second sample of two is marked B.

2.1. The conformity of mass-produced front fog lamps shall not be contested if the deviation of any specimen of samples A and B (all four lamps) is not more than 20 per cent.

In the case, that the deviation of both lamps of sample A is not more than 0 per cent, the measurement can be closed.

2.2. The conformity of mass-produced front fog lamps shall be contested if the deviation of at least one specimen of samples A or B is more than 20 per cent.

The manufacturer shall be requested to bring his production in line with the requirements (alignment) and a repeated sampling according to paragraph 3 below shall be carried out within two months' time after the notification. The samples A and B shall be retained by the Technical Service until the entire CoP process is finished.

3. First repeated sampling

A sample of four lamps is selected at random from stock manufactured after alignment.

The first sample of two is marked C, the second sample of two is marked D.

3.1. The conformity of mass-produced front fog lamps shall not be contested if the deviation of any specimen of samples C and D (all four lamps) is not more than 20 per cent.

In the case, that the deviation of both lamps of sample C is not more than 0 per cent, the measurement can be closed.

3.2. The conformity of mass-produced front fog lamps shall be contested if the deviation of at least

3.2.1. One specimen of samples C or D is more than 20 per cent but the deviation of all specimen of these samples is not more than 30 per cent.

The manufacturer shall be requested again to bring his production in line with the requirements (alignment).

A second repeated sampling according to paragraph 4 below shall be carried out within two months' time after the notification. The samples C and D shall be retained by the Technical Service until the entire COP process is finished.

3.2.2. One specimen of samples C and D is more than 30 per cent.

In this case the approval shall be withdrawn and paragraph 5 below shall be applied.

4. Second repeated sampling

A sample of four lamps is selected at random from stock manufactured after alignment.

The first sample of two is marked E, the second sample of two is marked F.
4.1. The conformity of mass-produced front fog lamps shall not be contested if the deviation of any specimen of samples E and F (all four lamps) is not more than 20 per cent.

In the case, that the deviation of both lamps of sample E is not more than 0 per cent, the measurement can be closed.

4.2. The conformity of mass-produced front fog lamps shall be contested if the deviation of at least one specimen of samples E or F is more than 20 per cent.

In this case the approval shall be withdrawn and paragraph 5 below shall be applied.

5. Approval withdrawn
Approval shall be withdrawn according to paragraph 11. of this Regulation.

6. Change of the vertical position of the cut-off line
With respect to the verification of the change in vertical positions of the cut-off line under the influence of heat, the following procedure shall be applied:

One of the front fog lamps of sample A after sampling procedure in paragraph 2. of this Annex shall be tested according to the procedure described in paragraph 2.1. of Annex 4 after being subjected three consecutive times to the cycle described in paragraph 2.2.2. of Annex 4.

The front fog lamp shall be considered as acceptable if $\Delta r$ does not exceed 3.0 mrad.

If this value exceeds 3.0 mrad but is not more than 4.0 mrad, the second front fog lamp of sample A shall be subjected to the test after which the mean of the absolute values recorded in both samples shall not exceed 3.0 mrad.

However, if this value of 3.0 mrad on sample A is not complied with, the two front fog lamps of sample B shall be subjected to the same procedure and the value of $\Delta r$ for each of them shall not exceed 3.0 mrad.”

*Figure 1*, shall be deleted.

*Annex 12,*

*The title,* amend to read:

**"Requirements in case of use of LED module(s)"**

*Paragraphs 1.1., 1.2. and 1.3.,* amend to read:

"1.1. Each LED module sample submitted shall conform to the relevant specifications of this Regulation when tested with the electronic light source control-gear(s) supplied, if any.

1.2. LED modules shall be so designed as to be, and to remain in good working order when in normal use. They shall moreover exhibit no fault in design or manufacture.

1.3. LED modules shall be tamperproof."

*Paragraph 2.2. and its subparagraphs,* amend to read:

"2.2. In case of LED modules:
2.2.1. The LED(s) on the LED module shall be equipped with suitable fixation elements.

2.2.2. The fixation elements shall be strong and firmly secured to the light source(s) and the LED module.

Paragraphs 3.1.3. to 3.1.3.2., amend to read:

"3.1.3. LED module operating conditions

3.1.3.1. All samples shall be tested under the conditions as specified in paragraph 6.4.1.4. of this Regulation.

3.1.3.2. If not specified differently in this annex, LED modules shall be tested inside the front fog lamp as submitted by the manufacturer."

Paragraph 3.1.5., delete.

Paragraphs 3.2.1. and 3.2.2., amend to read:

"3.2.1. LED modules shall be aged.

3.2.2. The tests below shall be carried out after ageing with the LED module(s) supplied by the submitted electronic light source control-gear at test voltage."

Paragraph 4.5.1., amend to read:

"4.5.1. Red content

In addition to measurements as described in paragraph 7. of part A or B to this Regulation, the minimum red content of the light of a LED module shall be such that:

…"

Paragraph 4.6., amend to read:

"4.6. UV-radiation

The UV-radiation of the LED module shall be such that:

…"