22 June 2015

## **Agreement**

Concerning the Adoption of Uniform Technical Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these Prescriptions\*

(Revision 2, including the amendments which entered into force on 16 October 1995)

Addendum 97 - Regulation No. 98

**Revision 3 - Amendment 4** 

Supplement 5 to the 01 series of amendments – Date of entry into force: 15 June 2015

Uniform provisions concerning the approval of motor vehicle headlamps equipped with gas-discharge light sources

This document is meant purely as documentation tool. The authentic and legal binding text is: ECE/TRANS/WP.29/2013/90/Rev.1.



## **UNITED NATIONS**

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<sup>\*</sup> Former title of the Agreement: Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958.

Table of Contents,

List of annexes, amend the content to read:

"1 Communication concerning the approval or extension or refusal or withdrawal of approval or production definitively discontinued of a type of headlamp pursuant to Regulation No. 98

,

Text of the Regulation,

Amend "Scope" to read:

## " Scope<sup>1</sup>

This Regulation applies to headlamps utilizing gas-discharge light sources, for vehicles of categories, M and N and L<sub>3</sub>."

Paragraph 2.1.6., shall be deleted.

Paragraph 2.1.7., renumber as paragraph 2.1.6. and amend to read:

"2.1.6. The category of light source as listed in Regulations Nos. 37 or 99 and their 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 technical ...

(b) A drawing with dimensions and the basic electrical and photometric values and the objective luminous flux."

Paragraph 2.2.3.1., amend to read:

"2.2.3.1. For approval of a headlamp, two samples of each type of headlamp, one sample intended for the installation on the left side of the vehicle and one sample intended for the installation of the right side of the vehicle, with standard gas-discharge light source and one ballast of each type to be used, where applicable."

Paragraph 2.3., shall be deleted.

Paragraph 2.4., renumber as paragraph 2.3. and amend to read:

"2.3. The materials making up the lens shall be accompanied by the test report of the characteristics of these materials and coatings if they have already been tested."

Paragraph 3.1., amend to read:

"3.1. Headlamps submitted for approval shall bear legibly and indelibly the trade name or mark of the applicant."

Paragraph 3.5., shall be deleted.

Paragraphs 3.6. to 3.7.2., renumber as paragraphs 3.5. to 3.6.2.

Paragraph 4.2.2.8., shall be deleted.

Paragraph 4.2.5., amend to read:

"4.2.5. The marks and symbols referred to in paragraphs 4.2.1. to 4.2.3. above shall be clearly legible and be indelible. They may be placed on an inner or outer part (transparent or not) of the headlamp, which cannot be separated from the transparent part of the headlamp emitting the light."

Paragraph 4.3.2.2.2., amend to read:

"4.3.2.2.2. Or in a group, in such a way that each of the grouped, combined or reciprocally incorporated lamps may be clearly identified (see possible examples in Annex 2, Figures 10, 11, 12)."

Paragraph 4.3.2.5., amend to read:

"4.3.2.5. Annex 2, Figures 10, 11, 12 of this Regulation give examples of arrangements of approval marks for grouped, combined or reciprocally incorporated lamps with all the above-mentioned additional symbols."

Paragraph 4.3.3.1., amend to read:

"4.3.3.1. In addition, where the same lens is used, the latter may bear the different approval marks relating to the different types of headlamps or units of lamps, provided that the main body of the headlamp, ..."

Paragraph 4.3.3.2., amend to read:

"4.3.3.2. Annex 2, Figure 10 of this Regulation gives examples of arrangements of approval marks relating to the above case."

Paragraph 4.3.4., shall be deleted.

Paragraphs 5.8. to 5.8.4., amend to read:

- "5.8. Light sources
- 5.8.1. The gas-discharge light source(s) used in gas-discharge headlamps shall be replaceable and approved according to Regulation No. 99 and its series of amendments in force at the time of application for type approval.
- 5.8.2. In the case that one or more (additional) filament light sources are used in the gas-discharge headlamp, these filament light sources shall be replaceable and approved according to Regulation No. 37 and its series of amendments in force at the time of application for type approval, 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.
- 5.8.3. The design of the device shall be such that the light source(s) can be fixed in no other position but the correct one.
- 5.8.4. The lamp holder shall conform to the dimensional characteristics as given on the data sheet of IEC Publication 60061, relevant to the category of light source(s) used. The light source(s) shall fit easily into the headlamp."

Paragraphs 5.9. to 5.9.3., shall be deleted.

Paragraphs 5.10. to 5.13., renumber as paragraphs 5.9. to 5.12.

Paragraph 6.1.1., amend to read:

"6.1.1. Headlamps shall be so made that with suitable gas-discharge light source they give adequate illuminance without dazzle when emitting the passing-beam and good illumination when emitting the driving-beam."

Paragraph 6.1.3., amend to read:

"6.1.3. The headlamp shall be deemed satisfactory if the photometric requirements set in the present paragraph 6. are met with one light source, which has been aged during at least 15 cycles, in accordance with Annex 4, paragraph 4. of Regulation No. 99.

It shall be a standard (étalon) light-source approved according to Regulation No. 99 and its luminous flux may differ from the objective luminous flux specified in Regulation No. 99. In this case, the luminous intensities shall be corrected accordingly."

Annex 1,

The title, amend to read:

## "Communication concerning the approval or extension or refusal or withdrawal of approval or production definitively discontinued of a type of headlamp pursuant to Regulation No. 98"

Annex 9,

Paragraph 4., amend to read:

4. 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 headlamps of sample A after sampling procedure in Figure 1 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 headlamp shall be considered as acceptable if  $\Delta r$  does not exceed 1.5 mrad upwards and does not exceed 2.5 mrad downwards.

If this value exceeds 1.5 mrad but is not more than 2.0 mrad upwards or exceeds 2.5 mrad but is not more than 3.0 mrad downwards, the second headlamp of sample A shall be subjected to the test after which the mean of the absolute values recorded in both samples shall not exceed 1.5 mrad upwards and shall not exceed 2.5 mrad downwards.

However, if this value of 1.5 mrad upwards and 2.5 mrad downwards on sample A is not complied with, the two headlamps of sample B shall be subjected to the same procedure and the value of  $\Delta r$  for each of them shall not exceed 1.5 mrad upwards and shall not exceed 2.5 mrad downwards."

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