



Economic and Social Council

Distr.: General

7 August 2013

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Seventieth session

Geneva, 21–23 October 2013

Item 8 of the provisional agenda

Regulation No. 112 (Headlamps emitting an asymmetrical passing beam)

Proposal for Supplement 5 to the 01 series of amendments to Regulation No. 112 (Headlamps emitting an asymmetrical passing beam)

Submitted by the expert from Germany*

The text reproduced below was prepared by the expert from Germany, to amend document ECE/TRANS/WP.29/GRE/2013/18 on fitting the structure of UN Regulation No. 48 (Installation of lighting and light-signalling devices) with the text of UN Regulation No. 112 (Headlamps emitting an asymmetrical passing beam) and establishing limits for minimum and maximum voltages values.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and 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.

I. Proposal

Paragraph 5.3.1.3., amend to read:

"5.3.1.3. A means of controlling the voltage at the terminals of the device, within the limits as defined in Regulation No. 48, may, for convenience, be located within the body of the headlamp. However, for the purposes of type approval of the passing and/ or driving beam according to the provisions of this Regulation, such means of voltage control shall ~~not~~ be considered to be part of the headlamp ~~and shall be disconnected during the testing to verify performance according to the requirements of this Regulation.~~ **The manufacturer shall specify the input and output voltage for the conditions under which the passing and/ or driving beam according to the provisions of this Regulation shall be approved."**

Insert a new paragraph 5.3.1.4., to read:

"**5.3.1.3.1. In the case of use of a filament lamp corresponding to UN Regulation No. 37 in conjunction with an electronic light source control gear, measurements with this electronic light source control gear shall be carried out to verify that the requirements in paragraphs 5. to 8. of this Regulation are met under the following conditions:**

(a) **The voltage to the electronic light source control gear shall be 6.3 V (6 Volt-Systems), 13.2 V (12 Volt-Systems), or 28.0 V (24 Volt-Systems), respectively;**

(b) **The effective voltage (root-mean-square, r.m.s.), determined over a sufficient length of time to measure the correct value at the terminals of the filament light source when the electronic light source control gear is in constant voltage operating condition shall be not less than 6.0 V (6 Volt-Systems), 12.0 V (12 Volt-Systems) or 24.0 V (24 Volt-Systems) and not larger than specified in paragraph 5.27.2. of Regulation 48;**

(c) **The test laboratory shall require from the manufacturer this electronic light source control gear (special power supply), if needed, to supply the light sources.**

The means of controlling the voltage and the voltage conditions to the terminals of the filament light source shall be noted in item 9. of the communication form in Annex 1."

II. Justification

1. This proposal takes into account all comments which were received during sixty-ninth session of GRE.
 2. With regard to the original document ECE/TRANS/WP.29/GRE/2013/18e, the following changes are made to:
 - (a) Paragraph 5.9.2. in UN Regulation No. 48 will be kept unchanged because the last sentence:

" ... provided that any variation in the photometric characteristics is in compliance with the technical provisions for the lamp concerned."

and by the fact that constant voltage operating conditions are required for specified conditions;
 - (b) The main content of paragraph 5.27.4 in UN Regulation No. 48 will be copied to the relevant part in UN Regulation No. 112 in such a way that it fits to the structure of UN Regulation 112;
 - (c) In the proposal to UN Regulation No. 112, the Paragraph 5.3.1.3. is amended to avoid the problem with the wording "**to stabilized**".
 - (d) The proposed paragraph 5.3.1.4. in the original proposal is deleted;
 - (e) A new paragraph 5.3.1.3.1. is inserted, which incorporates the relevant content from the paragraph 5.27.4 in UN Regulation No. 48;
 - (f) In addition to this, the text is simplified and generalized in a logical way with regard to the specifications and the necessary tests;
 - (g) Contradictions in text are removed;
 - (h) The application of the paragraph 5.3.1.3.1. is related to the use of filament lamps only (anything else makes no sense!);
 - (i) Limits for minimum and maximum voltage are specified;
 - (j) All necessary information shall be stated in the communication form.
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