Proposal for Supplement 6 to the 01 series of amendments to Regulation No. 112 (Headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or light-emitting diode (led) modules)

Submitted by the experts from Germany*

The text reproduced below was prepared by the expert from Germany with the support of the expert from The Netherlands, to introduce requirements to avoid intentional non approved (voltage) variation of the principal passing beam, using halogen light sources and to harmonize it with the operating voltage requirements in UN Regulation No. 48. The modifications to the existing text of the Regulation are marked in bold for new or strikethrough for deleted characters.

* 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., amend to read:

"5.3. The headlamp shall be equipped with:

5.3.1. Either filament lamp(s) approved according to Regulation No. 37:

5.3.1.1. Any filament lamp covered by Regulation No. 37 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.

5.3.1.2. The design of the device shall be such that the filament lamp can be fixed in no other position but the correct one. 6/

5.3.1.3. The filament lamp holder shall conform to the characteristics given in IEC Publication 60061. The holder data sheet relevant to the category of filament lamp used, applies.

5.3.1.4. An means of controlling the voltage electronic light source control gear 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 electronic light source control gear 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 of such an electronic light source control gear for the conditions under which the passing and/or driving beam, according to the provisions of this Regulation, is to be approved.

5.3.1.4.1. In the case such an electronic light source control gear is used, measurements shall be carried out to verify that the requirements in paragraphs 5. to 8. to this Regulation are met under the following conditions:

(a) Both at the minimum and at the maximum voltage to the voltage control as specified by the manufacturer;

(b) The voltage at the terminals of the filament light source 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 6.75V (6 Volt-Systems), 13.5V (12 Volt-Systems) or 28.V (24 Volt-Systems).

The use of such an electronic light source control gear shall be noted in item 9. of the communication form in Annex 1.

5.3.2. and/or LED module(s):…"

Annex 1

Item 9., amend to read:

…Number and specific identification code(s) of electronic light source control gear(s)

Electronic light source control gear located within the body of the headlamp: yes/no 2/

Total objective luminous flux as described in paragraph 5.9. exceeds 2,000 lumen: yes/no/does not apply2…”
II. Justification

1. This proposal takes into account all comments which were received during the sixty-ninth session of GRE.

2. With regard to the original document ECE/TRANS/WP.29/GRE/2013/18, the following changes are made:

   (a) Paragraph 5.27 in UN Regulation No. 48 is kept unchanged. The main content of the new paragraph 5.27.4 in UN Regulation No. 48 in the original proposal was copied to the relevant part in UN Regulation No. 112 in such a way that it fits to the structure of UN Regulation No. 112;

   (b) The proposed paragraph 5.3.1.4. in the former proposal is deleted;

   (c) A new paragraph 5.3.1.4.1. is inserted, which incorporates the relevant content from the paragraph 5.27.4 in UN Regulation No. 48 and it is only related to the use of filament lamps only (as anything else makes no sense!);

   (d) In addition to this, the text is simplified and generalized in a logical way with regard to the specifications and the necessary tests;

   (e) Contradictions in text are removed;

   (f) Limits for minimum and maximum voltage are specified;

   (g) All necessary information shall be stated in the communication form.