

ECE GRE Informal Group on Operating Voltage (OVIG)

Status Report on the work of the Informal Group on Operating Voltage (OVIG)

(Status: 25 February 2008)

Since the 58th GRE session OVIG has held two full meetings and a Drafting Group meeting:

- Second meeting on 12 November 2007 in Frankfurt (GRE-OVIG-2007-9):

At this meeting data from periodical technical inspections regarding lamp failure were presented. The Group also discussed the problem of defining “normal conditions of use” for voltage measurement. It was not possible to draw any firm conclusions from the various comments and presentations submitted at the meeting.

- Third meeting on 22 January 2008 in Frankfurt (GRE-OVIG-2008-4):

The meeting addressed different existing vehicle electric systems and their consequences for voltage levels at the light source terminals:

- System with electronic voltage control
- Conventional system without voltage control
- Lighting devices with electronic control gear as part of the device

The meeting also considered tentative proposals from OICA for amendments to Regulation No. 48 which would refer to the luminous flux of the installed device. In view of the diverging comments to these proposals the group decided to establish a drafting group to prepare a revised text.

- Drafting Group meeting on 25 February 2008 in Paris:

The meeting considered and agreed on proposed amendments to Regulation No. 48; the new requirements would

- be restricted to headlamps, position lamps and stop lamps
- be based on the vehicle in steady state motion representative of the type or category of vehicle
- oblige the manufacturer to demonstrate to the Technical Service that conditions regarding voltages have been met for the respective supply system of the vehicle

The informal group will review this proposal at its fourth meeting and will probably be in a position to submit a consolidated text for amendments to Regulation No. 48 at the 60th GRE session.

Status report for possible amendments to Regulation No. 48

In the OVIG meeting of 22nd January an idea, which might be a solution, was proposed and a small Drafting Group had a meeting in Paris on the 25th February 2008. At this meeting of this Drafting Group a text was developed, which is neither finally discussed in a full OVIG meeting nor finally accepted by the OVIG.

This will be done after GRE 59.

This text comprises the following paragraphs:

- a) *For the correct implementation into the Regulation 48 and to clarify for which devices these proposed requirements shall be apply, the following paragraph should be inserted:*

Insert a new paragraph 3.2.7., to read:

“3.2.7. a description of the electrical connections for the devices indicated in paragraphs 2.7.9, 2.7,10, 2.7.12, 2.7.14 and 2.7.15 above, including, if applicable, information on a special power supply/electronic light source control gear, or variable intensity control.”

- b) *By the fact, that it seems to be not possible to find a common test procedure applicable for the smallest MI up to the biggest N the discussion in OVIG the following way to solve the problem became apparent:*

Insert new paragraphs 5.27. and 5.28., to read:

“5.27. The applicant shall demonstrate to the Technical Service responsible for type approval testing that the electrical connections to the devices indicated in 2.7.9, 2.7,10, 2.7.12, 2.7.14 and 2.7.15 above comply, when the vehicle is in motion in a steady state representative for the relevant category/and/or type of vehicle as specified by the applicant, with the following provisions:

- c) *In this case the following possibilities must be regarded:*

- 1) *In the case that the vehicle is equipped with an electronic light source control gear the following paragraph is proposed:*

5.27.1. The voltage supplied at the terminals of devices which, according to their type approval documentation, have been tested by the application of a special power supply/electronic light source control gear, or in a secondary operating mode or at a voltage requested by the applicant, shall not exceed the voltage specified for the relevant devices or functions as they have been approved.

2) *In the case that the electronic light source control gear is part of the approved lamp and the luminous intensity of the function is independent from the vehicle voltage the following paragraph is proposed:*

5.28. The provisions of paragraph 5.27 above shall not apply to devices which include an electronic light source control gear or a variable intensity control being part of the device."

3) *In the case that the vehicle has no electronic voltage control (classic vehicle network system) the following paragraph is proposed; the values in the square brackets are proposals for the moment, which are not yet discussed. This will be done after GRE:*

5.28.1. In all cases of electrical connections not covered by paragraphs 5.27.1 or 5.28, the voltage at the terminals of the device(s) or function(s) shall not exceed [6.9] V (6 Volt-Systems), [13.9] V (12 Volt-Systems) or [28.5] V (24 Volt-Systems)."

These proposals are the results of the Drafting Group in Paris and on the base of this text the discussion will be continued in a full OVIG meeting to be arranged after GRE 59.