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Working Party on Lighting and Light-Signalling (GRE)
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agenda item 7.3.)

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 7

(Position, stop and end-outline marker lamps)

Transmitted by the Expert from Germany

Note: The text reproduced below was prepared by the expert from Germany, in order to allow the signalling of an emergency braking by stop-lamps complying with Regulation No. 7 (TRANS/WP.29/GRE/47, paras. 9 and 10). This proposal is a revised version of document TRANS/WP.29/GRE/2002/21. The modifications are shown in **bold** characters.

Note: This document is distributed to the Experts on Lighting and Light-Signalling only.

A. PROPOSAL:

Paragraph 1.3., amend to read:

"1.3. "Stop-lamp" means the lamp used to indicate to other road-users to the rear of the vehicle that its driver is applying the service brake.

The stop-lamps may be activated by the application of a retarder or a similar device;

The stop-lamp may be used as an intensified/emergency brake display, to indicate intensified/emergency braking to other road users."

Insert new paragraph 2.2.4., to read:

"2.2.4. In the case of a stop-lamp used to indicate intensified braking with a variable level of intensity and/or a variable illuminated surface, an arrangement diagram and a specification of the characteristics of the system and the signal conditions and the illuminated surface."

Paragraph 2.2.4. (former), renumber as paragraph 2.2.5.

Insert new paragraphs 5.5. and 5.6., to read:

"5.5. Stop-lamps of categories S1, S2 and/or S3, when used to indicate intensified braking, may vary in luminous intensity and/or may have a variable illuminated surface, within the limits for the luminous intensity prescribed in paragraphs 6 to 8 of this Regulation.

5.6. In either of the above described cases, a note shall be made in the communication documents and also the input (signal) conditions shall be noted in item 9 of the communication form, conforming to the model in annex 2 to this Regulation."

Paragraph 7.4., amend to read:

"7.4. The vertical and horizontal outlines of the apparent surface of a light-signalling device shall be determined and measured under all possible conditions in relation to the centre of reference."

Annex 2, item 9., amend to read (footnotes 2/ and 3/ not modified):

"9. Concise description: 3/

By category of lamp:

Colour of light emitted: red / selective yellow / white 2/

Number and category of filament lamp(s):

Special supply voltage: Volts

Application of additional supply system: yes/no 2/

If used, specification of additional supply system:

Switched power supply:

Duty cycle: peak to peak voltage: and/or effective
voltage: Volts

Stop-lamp dedicated to indicate intensified braking: yes/no 2/

Remarks: "

* * *

B. JUSTIFICATION:

The display of an intensified/emergency braking improves safety. Traffic flow can be improved and rear-end collisions can be avoided due to an improved reaction of the following drivers.

Such a display could be realised by:

- flashing stop lamps,
- and/or by an increase in light emitting surface,
- and/or by an increase in luminous intensity.

Flashing stop lamps reduce the reaction time of the following drivers especially when distracted.

The other two signal arrangements give the "intuitive" impression of approaching the vehicle ahead.

In order to ensure that the intensified/emergency brake display is only activated in severe braking situations, that it is actuated immediately, and also to avoid misuse, the proposal for the amendments to Regulation No. 48 proposes to define the automatic activation and deactivation and the conditions for such activation.

The proposed amendments to Regulation No. 7 are related to the case of an increase in luminous intensity, e.g. by different voltages to the input terminals or an increase in light emitting surface, e.g. by activation of additional light sources.

This proposal is intended to clarify the situation; it permits the light source to operate in different ways for functions other than daytime/night time use, and it describes clearly the test procedure in case of a system with one or more (levels) of intensities.

The proposed amendments apply only to lighting devices whose functions are within the scope of Regulation No. 7.
