

Proposal for ~~[Supplement 12 to the 04 series of amendments, Supplement 5 to the 05 series of amendments,]~~ Supplement 3 to the 06 series of amendments to Regulations No. 48 (Installation of lighting and light-signalling devices)

The text reproduced below was prepared by the experts from ~~the Netherlands and the United Kingdom, as an informal document, in response to the proposal (document ECE/TRANS/WP.29/GRE/2013/14) from the experts from France and Germany~~ to implement direction indicator lamps with spatial variation of the intensity into UN Regulation No. 48. The modifications to the existing text of the Regulation are marked in bold for new or strikethrough for deleted characters.

I. Proposal

Insert a new paragraph 2.10.1., to read:

"2.10.1. **Horizontal orientation of a direction indicator means the ratio of the length of path of the movement in horizontal direction to that in vertical direction on the apparent surface. It should not exceed the value of [10:610:4]."**

Insert a new paragraph 5.9.3., to read:

"5.9.3. **The photometric characteristics of direction indicator lamps of the categories 1, 1a, 1b, 2a or 2b may change the luminous intensity during a flash inside the maximum apparent surface and if it is noted in the communication form of the direction indicator lamp (Regulation No. 6).**

In this case:

- (a) **the variation propagates in a horizontal orientation outwards only, until all light sources of the lamp are switched on;**
- (b) **the variation shall not exceed [200160] ms;**
- (c) **once lit a light source shall remain lit until all light sources of the lamp ~~shall be are~~ switched off simultaneously at the end of the flash.**

The variation ~~[of direction indicator lamps of the categories 2a or 2b]~~ is prohibited if the ~~[hazard warning or]~~ emergency stop signal is activated."

Paragraph 6.5.8., amend to read:

"6.5.8. Tell-tale Operating

If it is entirely ... to paragraph ~~6.4.2.-6.2.2.~~ of Regulation No. 6 or another suitable way¹³"

II. Justification

1. The proposal to propagate the flashing of the direction indicator light in the direction of turning can improve safety and avoid misinterpretation. **Therefore it is not allowed to use such propagating flashing for the hazard warning signal or for the emergency stop signal.**
2. The on time of a flash of the turning signal durates has a max of 500 ms and starts with the rise time followed by a period of max intensity of the flash. The duration of the variation is equivalent to the rise time and limited to [200160] ms **(see for background information Informal document GRE-68-36, page 6).** Anyway it shall not be longer than the heating of tungsten filament.
3. The proposal is clearly linked to UN Regulation No. 6 which is necessary with regard to the handling of the Regulation and the application to after marked products.
4. The requirements should allow only solution with a focus on safety and avoid distractive design. **It also will only be allowed on vehicles using the latest state of the art technology, therefore this permission is proposed only as a supplement to the most recent series of amendments of UN Regulation No. 48 (see also the ongoing discussions under agenda item "Direction for future GRE work").**
5. A misleading reference in paragraph 6.5.8. regarding UN Regulation No. 6 was corrected.