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Item 11 of the provisional agenda

REGULATION No. 65
(Special warning lamps)

Proposal for Supplement 7 to Regulation No. 65

Submitted by the expert from the Working Party "Brussels 1952" ∗/

The text reproduced below was prepared by the expert from the Working Party "Brussels 1952" (GTB) in order to clarify the requirements for special warning lamps in line with technical progress and to introduce some corrections. The modifications to the existing text of the Regulation are marked in bold or strikethrough characters.

GE.10-

A.   PROPOSAL

Insert a new paragraph 5.2.1., to read:

"**5.2.1.   The special warning lamp shall be powered directly from the voltage supply
            network of the vehicle.**"

Annex 5,

Paragraph 6., amend to read:

"6.   If the emitted light of a special warning lamp consists of groups of several flashes, the
          time distance Δt between the immediately following flashes must be very short.

          If the peak to peak distance Δt is less or equal to 0.04 s, then the pulses in between are
          evaluated as one flash. If this distance Δt is longer only the flash with the highest
          effective intensity is valid. Moreover, the distance is limited depending on the ratio
          between the **effective** intensities of the flashes within a group (I_L= max. **effective**
          intensity of the highest peak, I_L = max. **effective** intensity of the lowest peak) as
          follows:

          in case

$$\frac{I_H}{I_L} > 10 \text{ then } \Delta_t (s) < \frac{1}{3f}$$

          in case $$1 < \frac{I_H}{I_L} < 10 \text{ then } \Delta_t (s) < \frac{1}{f(5.5 - 0.25)\frac{I_H}{I_L}}$$ "

Insert a new paragraph 7.3.2., to read:

"**7.3.2.   In the case of a special warning lamp device of Category X which comprises of
            more than one separate unit, the geometrical arrangement(s) as installed on the
            vehicle, is(are) acceptable when the partial light distribution of each single
            separate unit is overlapping with each adjacent partial light distribution inside
            the horizontal and vertical angular range specified for the Category X.**"

B.   JUSTIFICATION

According to the current Regulation No. 65, it is not forbidden to power a special warning lamp
from a battery supply. However, due to the critical situations in which these special warning

lamps are operated, the use of a battery supply should not be permitted for safety reasons. The new paragraph 5.2.1. has been introduced to remove this ambiguity.

Paragraph 6 of Annex 5 describes the requirements for special warning lamps, where the signal consists of groups of several flashes. At the time when this formula was introduced it had only been possible to achieve this with flash lamps producing very short flashes. Consequently, to simplify the measurements with regard to the measuring equipment, the formula was simplified and the relevant intensities were set to the peak intensities. With the use of new light sources such as light emitting diodes (LEDs), the application of the simplified formula is no longer appropriate and, consequently, the measured intensity must be the effective intensity and the relevant text has to be amended accordingly.

Additionally, in the English and the Russian versions of Annex 5, Paragraph 6, there is an error that requires correction. The formulae must be corrected following the French version, which is correct.

Paragraph 7.3.2. has been added to allow the equivalent possibility for the for special warning lamps of the category X to that existing in paragraph 7.2.1. for the category T.

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