Proposal for Supplement [11] to the original version of UN Regulation No. 65 (Special warning lamps)

Submitted by the expert from the International Automotive Lighting and Light Signalling Expert Group (GTB)*

The text reproduced below was prepared by the expert from the International Automotive Lighting and Light Signalling Expert Group (GTB) with the aim to correct some long-standing editorial errors that might create confusion as well as to clarify the definition of the "on" time for a group of flashes. This proposal is based on ECE/TRANS/WP.29/GRE/2019/17 and includes the Polish proposal in informal document GRE-82-09. The modifications to the existing text of the UN 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 2020 as outlined in proposed programme budget for 2020 (A/74/6 (part V sect. 20) para 20.37), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
I. Proposal

Paragraph 1.3., correct to read:

“1.3. The frequency \( f \) is the number of flashes or groups of flashes (see Annex 5, para. 56) within one second,”

Paragraph 1.4., amend to read:

“1.4. The "on" time \( t_H \) means the period of time within which the luminous intensity of the flashing light is superior to 1/10 of the maximum value (peak value) \( J_{\text{m}} \).

In case of groups of several flashes the “on” time shall be measured from the beginning of the first flash of the group to the end of the last flash of the same group.”

Paragraph 1.5., amend to read:

“1.5. The "off" time \( t_D \) means the period of time within which the luminous intensity of the flashing light is less than 1/100 of the maximum value (peak value) \( J_{\text{m}} \), but not more than 10 cd. In the case of groups of several flashes the "off" time shall be measured from the end of the last flash of the group to the beginning of the first flash of the next group.”

Paragraph 2.2.5., correct to read:

“2.2.5. Two samples, in principle for a rated voltage of 12 volts and for only one colour, and eventually two other samples for any other rated voltage in the case where an application is submitted simultaneously or subsequently for approval of special warning lamps of other rated voltages. In this case, it is sufficient to carry out tests according to paragraph 5.55.6. below”

Annex 5, paragraph 7.1., correct to read:

“7.1. The frequency, the "ON" time and the "OFF" time shall be as specified in the table below

<table>
<thead>
<tr>
<th>Colour blue, amber or red</th>
<th>rotating system or flashing light sources (Categories T and X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency ( f ) (Hz)</td>
<td>max. 4.0</td>
</tr>
<tr>
<td></td>
<td>min. 2.0</td>
</tr>
<tr>
<td>&quot;ON&quot; time ( t_H ) (s)</td>
<td>max. 0.4/f</td>
</tr>
<tr>
<td>&quot;OFF&quot; time ( t_D ) (s)</td>
<td>min. 0.1</td>
</tr>
</tbody>
</table>

II. Justification

1. A recent review of the content of UN Regulation No. 65 has revealed some long-standing editorial errors that do not affect the technical requirements but may create confusion.

2. This proposal was originally considered at the eighty-first session of the Working Party on Lighting and Light-Signalling (GRE) as informal document GRE-81-05. At the end of the debate, GTB was invited to prepare an official document for consideration at the next session, reflecting the agreed improvements.

3. A revised proposal from GTB was discussed at the eighty-second session of GRE as document ECE/TRANS/WP.29/GRE/2019/17. At the same session, GRE also considered a proposal from Poland to clarify the definition of the "on" time for the case of a group of flashes (GRE-82-09).
GRE supported the GTB amendments in ECE/TRANS/WP.29/GRE/2019/17 but decided to postpone their submission to the World Forum (WP.29), awaiting a revised proposal to combine them with the Polish input (ECE/TRANS/WP.29/GRE/82, para. 39.). Therefore, the only portion of the proposal that is intended for discussion is the one concerning paragraphs 1.4. and 1.5. The rest of the proposal is provided for the convenience of the Secretariat.

Additional justification for the amendments to paragraphs 1.4. and 1.5.

5. The current definition is not adapted to the case where a single flash consists of several flashes. It can be interpreted, that it should be a sum of only the “on” time of each flash in the group (omitting the gaps between flashes). The amendment aims to clarify the definition and to avoid interpretation problems.

6. The definition of the “on” time is now similar to the definition of the “off” time and considers a group of flashes. In case of several flashes it is now clear where to start and finish the calculation for the “on” and “off” time.