ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Sixty-first session
Geneva, 30 March - 3 April 2009
Item 10(a) of the provisional agenda

REGULATION No. 99
(Gas-discharge light sources)

Proposal for draft amendments

Proposal for draft Supplement 5 to Regulation No. 99

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 re-introduce the "selective yellow" colour into Regulation No. 99. The proposal is a logical consequence of the fact that Regulation No. 19 allows the use of "selective yellow" light and of gas-discharge light sources. The modifications to the existing text of Regulation No. 99 are marked in bold or strikethrough characters.

*/ In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance performance of vehicles. The present document is submitted in conformity with that mandate.
A. PROPOSAL

Paragraphs 2.1.2. and 2.1.2.1., amend to read:

"2.1.2. Gas-discharge light sources of different "types" \(^1\) are gas-discharge light sources within the same category which differ in such essential respects as:

2.1.2.1. trade name or mark; that means:

(a) Gas-discharge light sources bearing the same trade name or mark but produced by different manufacturers are considered as being of different types.
(b) Gas-discharge light sources produced by the same manufacturer differing only by the trade name or mark may be considered to be of the same type;"

\(^1\) A selective yellow bulb or an additional selective yellow outer bulb, solely intended to change the colour but not the other characteristics of a gas-discharge light source emitting white light, does not constitute a change of type of the gas-discharge light source.

Paragraph 2.4.2., amend to read:

"2.4.2. …… The same Contracting Party may not assign the same code to another type of gas-discharge light source. If the applicant so desires the same approval code may be assigned to both gas-discharge light sources emitting white and selective yellow light (see paragraph 2.1.2.)."

Paragraph 3.8., amend to read:

"3.8. Luminous flux

When measured according to the conditions specified in Annex 4, the luminous flux shall be within the limits given on the relevant data sheet. In the case where white and selective yellow is specified for the same type, the objective value applies to light sources emitting white light, whereas the luminous flux of the light source emitting selective yellow light shall be at least 68 per cent of the specified value."

Paragraph 3.9.1., amend to read:

"3.9.1. The colour of the light emitted shall be white or selective yellow. Moreover, the colorimetric characteristics, expressed in CIE chromaticity coordinates, shall lie within the boundaries given on the relevant data sheet."
Paragraph 3.9.4, amend to read:

"3.9.4. The minimum red content of a gas-discharge light source emitting white light shall be such that: ..."

Paragraph 3.11., amend to read:

"3.11. Standard gas-discharge light sources

Standard (etalon) gas-discharge light sources shall comply with the requirements applicable to type approval light sources and to the specific requirements as stated in the relevant data sheet. In case of a type emitting white and selective yellow light, the standard light source shall emit white light."

Annex 1, sheets DxR/4 and DxS/4, amend the bottom part of the both tables to read:

<table>
<thead>
<tr>
<th>Luminous flux</th>
<th>....</th>
<th>....</th>
<th>....</th>
<th>....</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromaticity co-ordinates in the case of white light</td>
<td>Objective</td>
<td>x = 0.375</td>
<td>y = 0.375</td>
<td></td>
</tr>
<tr>
<td>Tolerance area</td>
<td>Boundaries</td>
<td>x = 0.345</td>
<td>y = 0.150 + 0.640 x</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>x = 0.405</td>
<td>y = 0.050 + 0.750 x</td>
<td></td>
</tr>
<tr>
<td>Intersection points</td>
<td>x = 0.345</td>
<td>y = 0.371</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>x = 0.405</td>
<td>y = 0.409</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>x = 0.405</td>
<td>y = 0.354</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>x = 0.345</td>
<td>y = 0.309</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annex 1, sheets DxR/4 and DxS/4, amend the bottom part of the both tables to read:

| Hot re-strike switch-off time | s | 10 | 10 |

B. JUSTIFICATION

During the fifty-fourth session of the Working Party on Lighting and Light-Signalling (GRE), it was decided to remove the colour selective yellow from Regulation No. 99 since no application in UNECE Regulations was identified after this colour had been deleted from all lamp regulations except from Regulation No. 19.

With the recent introduction of category "F3" lamps in Regulation No. 19, the use of selective yellow light and of gas-discharge light sources is allowed. However, as new type approvals of selective yellow gas discharge light sources according to Regulation No. 99 are no longer possible, it is necessary to re-introduce selective yellow into Regulation No. 99.