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INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

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Item 5(e) of the provisional agenda

COLLECTIVE AMENDMENTS

Regulations Nos. 3 and 48

Submitted by the expert from Japan */

The text reproduced below was prepared by the expert from Japan in order to correct inconsistencies among the Regulations in object. The modifications to the current text of the Regulations are marked in bold 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

A.1. PROPOSAL OF AMENDMENTS TO REGULATION No. 3 – (Retro-reflecting devices) (The following text is based upon Supplement 11 to the 02 series of amendments to the Regulation)

Annex 4.

Paragraph 3.1., amend to read:

"3.1. a colour which satisfies the conditions laid down in Annex 6 paragraph 2.30. of Regulation No. 48 for clear, red or amber retro-reflecting devices. This shall be ..."

Annex 6.

Paragraph 2., amend to read:

"2. When the retro-reflecting device is illuminated by CIE standard illuminant A, with an angle of divergence of 1/3 degrees and an illumination angle of \( V = H = 0 \) degrees, or, if this produces a colourless surface reflection, an angle \( V = \pm 5 \) degrees, \( H = 0 \) degrees, the trichromatic coordinates of the reflected luminous flux must be within the limits according to paragraph 2.30. of Regulation No.48.

2.1. In the case of red and amber, compliance with the colorimetric specifications shall be verified by a visual comparison test.

2.2. If any doubt remains after this test, compliance with the colorimetric specifications shall be verified by determining the trichromatic coordinates of the most doubtful sample."

Insert new paragraphs 3. to 3.2., to read:

"3. Clear retro-reflecting devices must not produce a selective reflection, that is to say, the trichromatic coordinates "x" and "y" of the standard illuminant "A" used to illuminate the retro-reflecting device must not undergo a change of more than 0.01 after reflection by the retro-reflecting device.

3.1. This shall be verified by the visual comparison test indicated above, the control field being illuminated by a light source of which the trichromatic coordinates differ by 0.01 from that of standard illuminant A.

3.2. In case of doubt, the trichromatic coordinates for the most selective sample shall be determined."
Annex 14.

Paragraph 4.1., amend to read:

"4.1. A colour which satisfies the conditions laid down in Annex 6 Regulation No. 48, paragraph 2.29. This shall be ..."

A.2. REGULATION No. 48 - (Installation of lighting and light-signalling devices) (The following text is based upon Supplement 4 to the 04 series of amendments to the Regulation)

Paragraph 2.31.3., amend to read:

"2.31.3. …

with intersection points:

\[
\begin{array}{cc}
R_1 & 0.690 & 0.310 \\
R_2 & 0.595 & 0.315 \\
R_3 & 0.569 & 0.341 \\
R_4 & 0.655 & 0.345 \\
\end{array}
\]

B. JUSTIFICATION

This proposal is aimed at modifying the proposal for draft collective amendments regarding colour specifications for the retro reflective and fluorescent materials (ECE/TRANS/WP29/GRE/2008/31), adopted at the sixtieth session of GRE.

Regulation No. 3:
ECE/TRANS/WP29/GRE/2008/31 proposed to refer to Regulation No. 48 for each color range specifications. However, Supplement 11 to the 02 Series of amendments to Regulation No. 3 deleted the paragraph on how to measure the colors. This would change the conventional way of color measurement. For this reason, it was re-defined in this proposal.

Regulation No. 48:
As regards the colour range of red under daytime conditions, since the intersection points of R3, R4 differ from those specified prior to Supplement 6 to the 01 Series of Amendments to Regulation No. 70, the original intersection points are used again in this proposal.