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Item 4.2.24 of the provisional agenda

1958 AGREEMENT

Consideration of draft amendments to existing Regulations

Proposal for Supplement 5 to the 04 series of amendments to Regulation No. 48
(Installation of lighting)

Submitted by the Working Party on Lighting and Light-Signalling */

The text reproduced below was adopted by the Working Party on Lighting and Light-Signalling (GRE) at its sixty-second session. It is based on ECE/TRANS/WP.29/GRE/2009/63, as reproduced in Annex VI to the report (ECE/TRANS/WP.29/GRE/62, para. 21). At the request of the Chairman of GRE, the proposal was subsequently updated via e-mail consultation of the GRE experts.

*/ 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.

Insert new paragraphs 2.7.30. and 2.7.30.1., to read:

"2.7.30. "Interdependent lamp system" means an assembly of two or three interdependent lamps providing the same function.

2.7.30.1. "Interdependent lamp" means a device operating as part of an interdependent lamp system. Interdependent lamps operate together when activated, have separate apparent surfaces in the direction of the reference axis and separate lamp bodies, and may have separate light source(s)."

Paragraphs 2.13., amend to read:

"2.13. "Angles of geometric visibility" means the angles which determine the field of the minimum solid angle in which the apparent surface of the lamp is visible. That field of the solid angle is determined by the segments of the sphere of which the centre coincides with the centre of reference of the lamp and the equator is parallel with the ground. These segments are determined in relation to the axis of reference. The horizontal angles β correspond to the longitude and the vertical angles α to the latitude."

Paragraph 2.16.1., amend to read:

"2.16.1. ...

(c) any assembly ...

...

or

(d) Any interdependent lamp system composed of two or three interdependent lamps providing the same function, approved together as type "Y" and installed so that the distance between adjacent apparent surfaces in the direction of the reference axis does not exceed 75 mm when measured perpendicularly to the reference axis."

Insert a new paragraph 5.7.2.2., to read:

"5.7.2.2. Or, in the case of interdependent lamps, the distance between adjacent apparent surfaces in the direction of the reference axis does not exceed 75 mm when measured perpendicularly to the reference axis."

Insert a new paragraph 5.11.4., to read:

"5.11.4. In the case of an interdependent lamp system, all light sources shall be switched ON and OFF simultaneously."

Paragraph 5.18.1., amend to read:

"5.18.1. if at all fixed positions of the movable components the lamps on the movable components meet all the position, geometric visibility and photometric requirements for those lamps."

Insert a new paragraph 5.18.2., to read:

"5.18.2. In the case where the functions referred to in paragraph 5.18. are obtained by an assembly of two lamps marked "D" (see paragraph 2.16.1.), only one of the lamps needs to meet the position, geometric visibility and photometric requirements for those lamps at all fixed positions of the movable components.

or"

Paragraph 5.18.2. (former), renumber as paragraph 5.18.3.

Insert a new paragraph 5.18.4., to read:

"5.18.4. In the case where the functions referred to in paragraph 5.18. are obtained by an interdependent lamp system either of the following conditions shall apply:

(a) Should the complete interdependent lamp system be mounted on the moving component(s), the requirements of paragraph 5.18.1. shall be satisfied. However, additional lamps for the above functions may be activated, when the movable component is in any fixed open position, provided that these additional lamps satisfy all the position, geometric visibility and photometric requirements applicable to the lamps installed on the movable component.

or

(b) Should the interdependent lamp system be partly mounted on the fixed component and partly mounted on a movable component, the interdependent lamp(s) specified by the Applicant during the device approval procedure shall meet all the position, outwards geometric visibility and photometric requirements for those lamps, at all fixed positions of the movable component(s). The inwards geometric visibility requirement(s) is(are) deemed to be satisfied if this(these) interdependent lamp(s) still conform(s) to the photometric values prescribed in the field of light distribution for the approval of the device, at all fixed positions of the movable component(s)."

Insert new paragraphs 5.28. to 5.28.5., to read:

"5.28. General provisions relating to Geometric Visibility.

5.28.1. There shall be no obstacle on the inside of the angles of geometric visibility to the propagation of light from any part of the apparent surface of the lamp observed

from infinity. However, no account is taken of obstacles, if they were already presented when the lamp was type-approved.

5.28.2. If measurements are taken closer to the lamp, the direction of observation shall be shifted parallel to achieve the same accuracy.

5.28.3. If, when the lamp is installed, any part of the apparent surface of the lamp is hidden by any further parts of the vehicle, proof shall be furnished that the part of the lamp not hidden by obstacles still conforms to the photometric values prescribed for the approval of the device.

5.28.4. When the vertical angle of geometric visibility below the horizontal may be reduced to 5° (lamp at less than 750 mm above the ground) the photometric field of measurements of the installed optical unit may be reduced to 5° below the horizontal.

5.28.5. In the case of an interdependent lamp system the geometric visibility requirements shall be fulfilled when all its interdependent lamps are operated together."

Paragraph 6.7.2.2., amend to read:

"6.7.2.2. Only, when ... either:

two ...median longitudinal plane, or
an interdependent lamp system of category S3 or S4 may be installed."
