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Proposal for Supplement 26 to the 01 Series of Regulation No. 6 and Supplement 4 to the 06 Series of Regulation No. 48

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The text reproduced below was prepared by the expert from the GTB to introduce "interdependent lamps" into Regulation No.6. The modifications to the existing text of the Regulation are marked in bold for new or strikethrough for deleted characters.

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In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106, ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

A. Proposal for Supplement 26 to the 01 series of amendments to Regulation No. 6

Paragraph 2.2.1., amend to read:

- "2.2.1. Drawings, in triplicate, sufficiently detailed to permit identification of the type and category and showing geometrically in what position(s) the direction indicator may be mounted on the vehicle; the axis of observation to be taken as the axis of reference in the tests (horizontal angle H = O°, vertical angle V = 0°); and the point to be taken as the centre of reference in the said tests. The drawings shall show the position intended for the approval number and the additional symbols in relation to the circle of the approval mark;
- "2.2.1. Drawings, in triplicate, sufficiently detailed to permit identification of the type and category and showing geometrically the following:
 - (a) in what position(s) the direction indicator may be mounted on the vehicle; the axis of observation to be taken as the axis of reference in the tests (horizontal angle $H=0^{\circ}$, vertical angle $V=0^{\circ}$); and the point to be taken as the centre of reference in the said tests.
 - (b) The geometrical conditions of installation of the device(s) that meet(s) the requirements of paragraph 6.
 - (c) In the case of an interdependent lamp system, the interdependent lamp or the combination of interdependent lamps that fulfill the requirements of paragraph 5.6, paragraph 6.1. and of Annex 4 to this Regulation.
 - (d) The drawings shall show the position intended for the approval number and the additional symbols in relation to the circle of the approval mark."

Paragraph 4.1.1., amend to read:

"4.1.1. If the two devices submitted for approval in pursuance of paragraph 2.2.4., above, meet the requirements of this Regulation, approval shall be granted.

All the devices of an interdependent lamp system must be submitted for type approval by the same applicant."

Paragraph 4.2.2.3., amend to read:

"4.2.2.3. On devices which may be used as part of an assembly of two lamps, the additional letter "D" to the right side of the symbol mentioned in paragraph 4.2.2.1.;

To the right side of the symbol mentioned in paragraph 4.2.2.1.; it shall be marked on each device:

- (a) the additional letter "D", on devices which may be used as part of an assembly of two lamps.
- (b) the additional letter "Y", on devices which may be used as part of an interdependent lamps system."

Add a new Paragraph 5.6., to read:

"5.6. An interdependent lamp system shall meet the requirements when all its interdependent lamps are operated together.

However, if the interdependent lamp system providing the rear direction indicator function is partly mounted on the fixed component and partly mounted on a movable component, the interdependent lamp(s) specified by the Applicant shall meet the geometric visibility, colorimetric and photometric requirement, at all fixed positions of the movable component(s). This does not apply to interdependent direction indicator lamps intended for fitting on vehicle(s) on which additional lamps to fulfill or complete the inboard geometric visibility are installed and activated when the movable component is in any fixed open position; in this case the inboard geometric visibility requirement is deemed to be satisfied if this (these) interdependent lamp(s) still conform to the photometric values prescribed in the field of light distribution."

Paragraph 6.1.2., amend to read:

- "6.1.2. When an assembly of two or more lamps **marked** "**D**" having the same function is deemed to be a single lamp, it shall comply with the requirements for:
 - (a) Maximum intensity when if all lamps together are lit;
 - (b) Minimum intensity if one lamp has failed."

Paragraph 6.2., amend to read:

- "6.2. In case of failure of **a** single lamp, **or of an interdependent lamp system** of the categories 1, 1a, 1b, 2a and 2b, containing more than one light source the following provisions shall apply:
- 6.2.1. A group of light sources,...."

Annex 2, item 9., amend to read:

"9. Concise description:

Only for installation....."

y. Concise description
Category: 1, 1a, 1b, 2a, 2b, 3, 4, 5, 6 ²
Number, category:
Function(s) produced by an interdependent lamp forming part of an interdependent lamps system:
Voltage and wattage:
Light source module specific identification code:

Annex3., insert a new item, to read:

"

Marking of Interdependent lamps



Marking of an interdependent lamp comprising part of an interdependent lamp system providing:

A rear direction indicator lamp (category 2a) approved in accordance with the 01 series of amendments to Regulation No. 6. This is also marked Y as it is an interdependent lamp forming part of an interdependent lamp system,

A rear fog lamp with variable luminous intensity (F2) approved in accordance with Regulation No. 38 in its original version.

Marking of an interdependent lamp comprising

part of an interdependent lamp system providing:

A rear direction indicator lamp (category 2a) approved in accordance with the 01 series of amendments to Regulation No. 6. This is also marked Y as it is an interdependent lamp forming part of an interdependent lamp system,

A red rear position (side) lamp (R1) approved in accordance with the 02 series of amendments to Regulation No. 7,

<u>A stop lamp</u> (S1) approved in accordance with Regulation No. 7 in its original version.

,,

B. Proposal for Supplement 4 to the 06 series of amendments to Regulation No. 48

Paragraph 5.18.4., amend to read:

"5.18.4. In the case ... the movable component.

or

(b) Should the interdependent lamp system be partly mounted on the fixed component and partly mounted on a movable component, with the exception of direction indicator lamps, the interdependent lamp(s) specified by the Applicant during the device approval procedure shall meet all the position, outwards geometric visibility, colorimetric 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).

For direction indicator lamps, the interdependent lamp(s) specified by the Applicant during the device approval procedure shall meet all the position, geometric visibility, photometric and colorimetric requirements at all fixed positions of the movable component(s). This does not apply where, to fulfil or complete the geometric visibility angle, additional lamps are activated when the movable component is in any fixed open position, provided that these additional lamps satisfy also all the position, photometric and colorimetric requirements applicable to the direction indicator lamps installed on the movable component."

II. Justification

- 1. Interdependent lamps being part of an interdependent lamp system were introduced into UN Regulations Nos. 7 and 48 following a proposal by GTB at the sixty-seventh GRE session (ECE/TRANS/WP.29/GRE/2009/62, ECE/TRANS/WP.29/GRE/2009/63 and a detailed justification can be found in GRE-62-2/Rev.1). At that time it was decided to await further consideration by GTB on the introduction of Interdependent Lamps into UN Regulation No. 6 because of the special application of direction indicator lamps as the hazard warning signal.
- 2. In the case of UN Regulation No. 7 devices it was established that, where Interdependent Lamps are installed on the vehicle and where the moveable component is in any open fixed position, the inboard geometric visibility requirement could be relaxed providing compliance to the photometric values prescribed in the field of light distribution for the approval of the device is demonstrated.
- 3. However, in the case of UN Regulation No. 6 devices, GTB concluded that the relaxation of the inboard geometric visibility requirement would not be acceptable because of their operation as hazard warning lamps. For this reason it is proposed to amend the paragraph 5.18.4(b) in UN Regulation No. 48 to require additional lamps to be activated to fulfil or complete the geometric visibility angles when the movable component is in any fixed open position, provided that these additional lamps satisfy also all the position, photometric and colorimetric requirements applicable to the direction indicator lamps installed on the movable component.
- 4. It is proposed that this will be an amendment to the 06 series of UN Regulation No. 48 and GTB is of the opinion that, as the simplified transitional provisions of UN Regulation No. 48, adopted by GRE at its sixty-ninth session will be in force, it is not necessary to apply these amendments retrospectively into the earlier 04 and 05 series that are still in force. However, the final decision concerning this matter will be taken by GRE.