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Working Party on Lighting and Light-Signalling (GRE) (Forty-second session, 14-16 April 1999, agenda item 1.2.)

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 48

(Installation of lighting and light-signalling devices)

Revision 2

Transmitted by the expert from France

Note: The text reproduced below was prepared by the expert from France with a view to including in the Regulation provisions authorizing the installation of a second pair of certain lamps on certain vehicles. This revision of the original proposal takes account of document TRANS/WP.29/GRE/R.188 and of the amendments agreed during the forty-first session of GRE (TRANS/WP.29/GRE/41, para. 19). The provisions which had been proposed in document TRANS/WP.29/GRE/1997/10/Rev.1 are printed in italics, whilst the new proposals are printed in bold.

<u>Note</u>: This document is distributed to the Experts on Lighting and Light Signalling only.

A. INTRODUCTION

Many vehicles such as buses, coaches, heavy vehicles and trailers are fitted with lamps on the upper part of the vehicle, thus doubling the regulation lighting.

The domestic legislation of some countries covers this double installation, and it would therefore be desirable to harmonize the situation by making provision for it in Regulation No. 48.

For certain vehicle categories it is proposed that:

- the rear functions should be doubled in the upper part of the vehicle: stop lamps, direction-indicator lamps, position lamps or end-outline marker lamps if not already installed on the upper part of the vehicle.

See below the amendments to the relevant paragraphs of Regulation No.48.

This further revision of the original proposal takes account of document TRANS/WP.29/GRE/R.188 and of the amendments agreed (text in bold and strikeout character) during the forty-first session of GRE. The amendments in italic character were introduced by the revision 1 of the documents.

* * *

B. PROPOSAL

Paragraph 5.16., amend to read:

- "5.16. <u>Number of lamps</u>
- 5.16.1. The number of lamps mounted on the vehicle should be equal to the number(s) specified in subparagraph 2 of each of the paragraphs 6.1 to 6.19.
- 5.16.2. The optional additional lamps specified in paragraphs 6.5, 6.7, 6.10 and 6.13, may only be installed simultaneously. The installation of a second rear position lamp or end-outline marker lamp is not required if the end-outline marker lamp has already been installed on the upper part of the vehicle."

Paragraphs 6.5.3. to 6.5.5.1. (Direction-indicator lamps), amend to read:

- "6.5.3. <u>Arrangements</u> (see figure below)
 - A. Two front direction-indicator lamps of the following categories:
 - 1 or 1a or 1b: (unchanged)

la or 1b: (unchanged)

1b: (unchanged)

two rear direction-indicator lamps (category 2a or 2b);

two optional additional lamps (category 2a or 2b) on all vehicles in categories M_2 , M_3 , N_2 , N_3 .

two side direction-indicator lamps ...

Rest: (unchanged)

B. Two rear direction-indicator lamps (category 2a or 2b);

two optional additional lamps (category 2a or 2b) on all vehicles in categories O_2 , O_3 and O_4 .

6.5.4. <u>Position</u>

6.5.4.1. In width: the edge ... after edge of the vehicle. This condition shall not apply to the additional rear lamps.

The distance between the inner edges ...

Rest: (unchanged)

- 6.5.4.2.3. If the structure of the vehicle does not permit these upper limits, measured as specified above, to be respected, and if the additional lamps are not installed, they may be increased ... categories 1, 1a, 1b, 2a and 2b.
- 6.5.4.2.4. If additional lamps are installed, they shall be placed at a the maximum height compatible with the applicable requirements of paragraph 6.5.4.1., concerning the width and the symmetry of the lamps and at a vertical distance of more than 600 mm above the from mandatory lamps.
- 6.5.5. <u>Geometric visibility</u>
- $6.5.5.1.\frac{*}{}$ Horizontal angles (see figure below).

Vertical angles: 15° above and below ... category 6. The vertical angle above the horizontal may be reduced to 5° if the additional lamps are **not** less than 2,100 mm above the ground."

 $_{\star}/$ See documents TRANS/WP.29/GRE/R.224 and TRANS/WP.29/GRE/38, annex 4).

Paragraph 6.5.8., amend to read:

"... thus formed to be detected.

For the additional pair of direction-indicator lamps on trailers/operating tell-tale shall not be mandatory."

Paragraphs 6.7.2. to 6.7.5. (Stop lamp), amend to read:

"6.7.2. <u>Number</u>

Two S1 or S2 category devices and one S3 category device on all categories of vehicles.

- 6.7.2.1. Except the case where category S3 device is installed, two optional additional category S1 or S2 devices may be installed on vehicles in categories M_2 , M_3 , N_2 , N_3 , O_2 , O_3 , and O_4 .
- 6.7.2.2. Only, when the median longitudinal plane ...

Rest: (unchanged)

6.7.3. <u>Arrangement</u>

No special requirement.

- 6.7.4. <u>Position</u>
- 6.7.4.1. In width: (unchanged, see TRANS/WP.29/GRE/38, annex 4)
- 6.7.4.2. In height:
- 6.7.4.2.1. For S1 or S2 category devices: ... within 1,500 mm and if the additional lamps are not installed. If the additional lamps are installed, they shall be positioned at a the maximum height compatible with the requirements of the width and the symmetry of the lamps and at a vertical distance of more than 600 mm above from the mandatory lamps.
- 6.7.4.2.2. For S3 category devices ...

Rest: (unchanged)

6.7.4.3. In length: (unchanged)

6.7.5. <u>Geometric visibility</u>

Horizontal angle: (unchanged)

Vertical angle: For S1 or S2 category devices ... less than

750 mm. The vertical angle above the

horizontal may be reduced to 5° in the case of additional lamps not less than 2,100 mm above

the ground;

For S3 category devices ... (unchanged)."

Paragraphs 6.10.2. to 6.10.5.1. (Rear position lamps), amend to read:

"6.10.2. <u>Number</u>

Two

6.10.2.1. Except the case where end-outline marker lamps are installed, two optional additional position lamps may be installed on all vehicles in categories M_2 , M_3 , N_2 , N_3 , O_2 , O_3 and O_4 .

6.10.3. <u>Arrangement</u>

No special requirement.

6.10.4. Position

6.10.4.1. In width: that point ... outer edge of the vehicle. This condition shall not apply to the additional rear lamps.

Rest: (unchanged)

- 6.10.4.2. In height: above the ground: ... within 1,500 mm and if the additional lamps are not installed. If the additional lamps are installed, they shall be placed at a the maximum height compatible with the applicable requirements of paragraph 6.10.4.1., width and with the symmetry of the lamps and at a vertical distance of more than 600 mm above from the mandatory lamps.
- 6.10.4.3. In length: at the rear of the vehicle.

6.10.5. <u>Geometric visibility</u>

 $6.10.5.1.\frac{*}{}$ Horizontal angle: (unchanged)

Vertical angle: 15° above ... 750 mm above the ground. The

vertical angle above the horizontal may be reduced to 5° in the case of lamps not less

than 2,100 mm above the ground." $\,$

^{*/} See documents TRANS/WP.29/GRE/R.244 and TRANS/WP.29/GRE/38, annex 4.

Paragraph	6.13.2. (End-outline marker lamp), amend to read:
"6.13.2.	<u>Number</u>
	Two visible from the front and two visible from the rear.
	Two optional additional rear lamps on all vehicles in categories M_2 , M_3 , N_2 , N_3 , 0_2 , 0_3 and 0_4 ."
