Informal document No. GRE-52-17 (52nd GRE, 30 March – 2 April 2004, agenda item 19.1.)

# PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION NO. 50 (Position, stop and direction indicator lamps for motorcycles) (transmitted by the expert from IMMA)

### A. PROPOSAL

Paragraph 7.4.1., delete of the footnote 3/:

Paragraph 7.4.1.1., delete of the footnote 3/:

Paragraph 7.4.1.2., delete of the footnote 3/:

Paragraph 7.4.1.3., delete of the footnote 3/:

footnote 3/, delete

Insert a new paragraph 7.11, 7.11.1. and 7.11.2, to read:

"7.11 Maximum values of front direction indicator lamps

"7.11.1 For devices of categories 11 and 11a, the intensity of the the light emitted outside the zone defined by the measuring points +/- 10 degrees H and +/- 10 degrees V (10 degrees-field) shall not exceed the following values:

Direction indicator of	Maximum values in cd outside the 10 degrees-field	
category	Single lamp	Single lamp containing more than one light
category		source
11	400	560
11a	400	560

Between the boundaries of the 10 degrees-field (+/- 10 degrees H and +/- 10 degrees V) and the 5 degrees-field (+/- 5 degrees H and +/- 5 degrees V), the maximum admissible values of the intensities are linearly increased up to the values as defined in paragraph 7.4.1 and 7.4.1.1.;

"7.11.2 For devices of categories 11b and 11c, the intensity of the the light emitted outside the zone defined by the measuring points +/- 15 degrees H and +/- 15 degrees V (15 degrees-field) shall not exceed the following values:

Direction indicator of category	Maximum values in cd outside the 15 degrees-field	
	Single lamp	Single lamp containing more than one light
		source
11b	250	350
11c	400	560

Between the boundaries of the 15 degrees-field ( $\pm$ /- 15 degrees H and  $\pm$ /- 15 degrees V) and the 5 degrees-field ( $\pm$ /- 5 degrees H and  $\pm$ /- 5 degrees V), the maximum values are increased linearly up to the values as defined in paragraph 7.4.1.2 and 7.4.1.3.

## **B.** Justification

In the ECE Regulation No. 50-00 Supplement 4, new categories 11a, 11b and 11c for the front direction indicator lamps have been provided. This new categories are basically in accordance with the ECE Regulation No. 6 (Direction indicator lamps for 4 wheel vehicles), except for the maximum intensities and their zones. Actually the maximum intensity of 400 cd outside the zone defined by the +/- 5 degrees H and +/- 10, as shown in the Footnote 3 in ECE Regulation No. 50, is not the same as the ECE Regulation No. 6, which makes some problems. For example, in Category 11c both the minimum value of 360 cd and the maximum value of 400 cd are applied on H-5L and H-5R. The range is only 40 cd, and practically it is very difficult to meet such a narrow range of the photometric values.

So, we propose the amendment of the ECE Regulation No. 50, so that the maximum values and their zones are correctly harmonized with ECE Regulation No. 6 and the above problem is resolved.

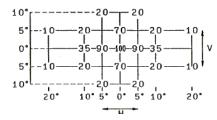
Category of the front direction indicator

R50-00 S3	Regulation No. 50-00 S4	
Category11	Category 11: distance between passing beam and direction indicator- 75mm or more	
	Category 11a: distance between passing beam and direction indicator- 40mm or more	
	Category 11b: distance between passing beam and direction indicator- 20mm or more	
	Category 11c: distance between passing beam and direction indicator- less than 20mm	

Photometric requirement of the front direction indicator

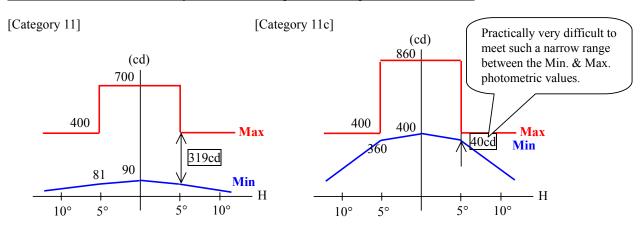
	H-V point	Max. intensity(cd)	
Category	Min. intensity (cd)	1 light source *2	
11	90 *1	700 *3	
11a	175 *1	700 *3	
11b	250 *1	800 *3	
11c	400 *1	860 *3	

\*1 luminous intensity distribution table for the minimum intensity



- \*2 In case of a single lamp containing more than one light source, the maximum intensity is given by multiplying by 1.4 the value prescribed for a single lamp.
- \*3 However, the intensity of the light emitted outside the zone defined by the +/- 5 degrees H and +/- 10 degrees V shall not exceed 400 cd

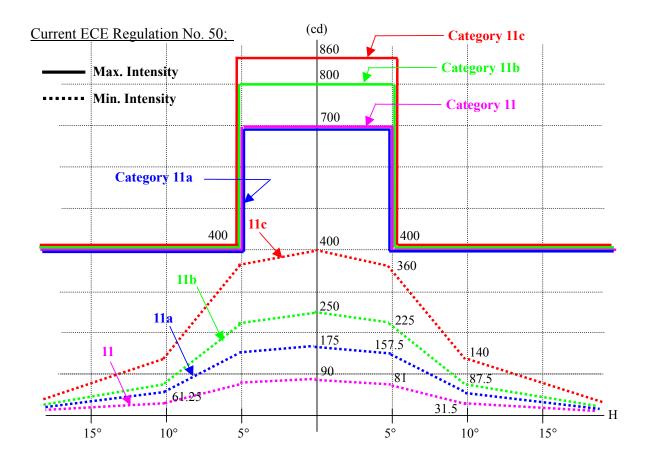
## Maximum and Minimum intensity on the H-H line specified in Regulation No. 50-00 S4



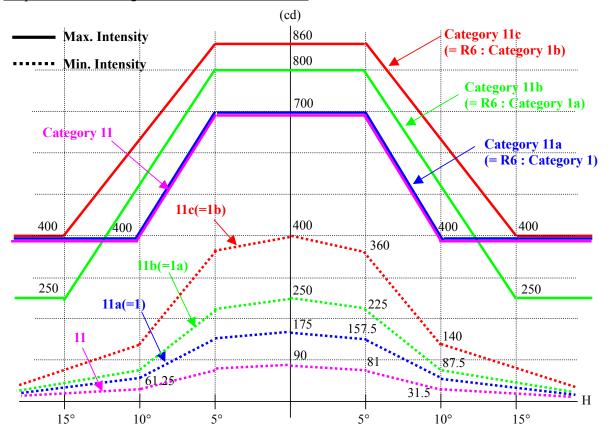
## **Proposal**

- Category 11, 11a
- (1) delete of the maximum intensity of 400cd to outside of the zone defined by the  $\pm$  5 degrees H and  $\pm$  10 degrees V
- (2) provide the new maximum intensity requirement to the outside the zone defined by the +/- 10 degree H and +/- 10 degree V (10 degrees-field).
- (3) Between the boundaries of the 10 degrees-field and the 5 degrees-field (+/- 5 degrees H and +/- 5 degrees V), the maximum values are increased linearly up to the 700cd.
- Category 11b, 11c
- (1) delete of the maximum intensity of 400cd to outside of the zone defined by the  $\pm$  5 degrees H and  $\pm$  10 degrees V
- (2) provide the new maximum intensity requirement to the outside the zone defined by the +/- 15 degree H and +/- 15 degree V (15 degrees-field).
- (3) Between the boundaries of the 15 degrees-field and the 5 degrees-field (+/- 5 degrees H and +/- 5 degrees V), the maximum values are increased linearly up to the 800cd(category 11b) or 860cd(category 11c).

	H-V point	Max. intensity(cd)		
Category	Min. intensity (cd)	Area	1 light source	
11	90 *1	inward of H=+/-5 deg, V=+/-5 deg	700	
		outward of H=+/-10 deg, V=+/-10 deg	400	
11a	175 *1	inward of H=+/-5 deg, V=+/-5 deg	700	
		outward of H=+/-10 deg, V=+/-10 deg	400	
11b	250 *1	inward of H=+/-5 deg, V=+/-5 deg	800	
		outward of H=+/-15 deg, V=+/-15 deg	250	
11c	400 *1	inward of H=+/-5 deg, V=+/-5 deg	860	
		outward of $H=+/-15$ deg, $V=+/-15$ deg	400	



Proposal for ECE Regulation No. 50 amendment;



ECE Regulation No. 6-01;

