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Item 7 (d) of the provisional agenda

Other UN Regulations: UN Regulations Nos. 98

(Headlamps with gas-discharge light sources) and 123 (Adaptive front lighting systems)

Revised proposal for corrections to UN Regulations Nos. 98 and 123

Submitted by the Informal Working Group on Simplification of Lighting and Light-Signalling Regulations*

The text reproduced below was prepared by the Informal Working Group on Simplification of Lighting and Light-Signalling Regulations (IWG SLR) after having identified errors in UN Regulation No. 149, due to the existing mistakes in frozen UN Regulations Nos. 98 and 123. The modifications to the existing text of the UN Regulations are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2020 as outlined in proposed programme budget for 2020 (A/74/6 (part V sect. 20) para 20.37), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

I. Proposal

A. Supplement 10 to the 01 series of amendments to UN Regulation No. 98

Paragraph 6.2.5., amend to read:

“6.2.5. After more than 10 minutes after ignition the luminous intensities at the test points referred to in the table below and in Annex 3, Figure B (or mirrored about the VV line for left-hand traffic) shall meet the following requirements:

Points or segments								Luminous intensity (cd)		Horizontal angle (degrees)	Vertical angle (degrees)
								Max	Min		
Any point in zone A (bounded by the following coordinates in degrees)											
8L	8L	8R	8R	6R	1,5R	V-V	4L				
1U	4U	4U	2U	1,5U	1,5U	H-H	H-H	625			
1	HV							625		0	0
2	B 50 L							350		3.43 L	0.57 U
3	75 R								12,500	1.15 R	0.57 D
4	50 L							18,480		3.43 L	0.86 D
5	25 L1							18,800		3.43 L	1.72 D
6	50 V								7,500	0	0.86 D
7	50 R								12,500	1.72 R	0.86 D
8	25 L2								2,500	9 L	1.72 D
9	25 R1								2,500	9 R	1.72 D
10	25 L3								1,250	15 L	1.72 D
11	25 R2								1,250	15 R	1.72 D
12	15 L								625	20 L	2.86 D
13	15 R								625	20 R	2.86 D
14									*	8 L	4 U
15									*	0	4 U
16									*	8 R	4 U
17									*	4 L	2 U
18									*	0	2 U
19									*	4 R	2 U
20									65	8 R	0
21									125	4 L	0
A to B	Segment I								3,750	5.15 L to 5.15 R	0.86 D
C – D								1,750		2.5 R	1 U
E to F	Segment III and under							12,500		9.37 L to 8.53 R	4.29 D
	E-I max R							43,800		Right of VV line	Above 1.72 D
	E-I max L							31,300		Left of VV line	

Note: In the table:

Letter L means that the point or segment is located on the left of VV line.

Letter R means that the point or segment is located on the right of VV line.

Letter U means the point or segment is located above HH line.

Letter D means the point or segment is located below HH line

* The luminous intensities at points 14 through 19 shall be such that:

$$14 + 15 + 16 \geq 190 \text{ cd and}$$

$$17 + 18 + 19 \geq 375 \text{ cd.}$$

** For left-hand traffic, the letter R shall be replaced by letter L and vice versa.

...”

B. Supplement 10 to the 01 series of amendments to UN Regulation No. 123

Annex 2, example 8 (after figure 13), amend to read:

“The system bearing the above approval marks meets the requirements of this Regulation (original version of the Regulation) in respect of both a passing-beam for left-hand traffic and a driving-beam with a maximum intensity comprised between ~~86,250~~**123,625** and ~~101,250~~**145,125** candelas (as indicated by the number 30) grouped with a front direction indicator lamp of category 1a, approved in accordance with the 01 series of amendments of Regulation No. 6 and a front position lamp approved in accordance with the 02 series of amendments of Regulation No. 7.

...”

Annex 4, introductory part, amend to read:

“Tests on complete systems

Once the photometric values have been measured according to the prescriptions of this Regulation, in the point of I_{max} for driving beam and in points 25LL, 50V and B50L (or **25RR, 50V and B50R for headlamps designed for left-hand traffic**), whichever applies for passing beam, a complete system sample shall be tested for stability of photometric performance in operation.

...”

Annex 4, paragraph 1.1.2.2., amend to read:

“1.1.2.2. Photometric test:

To comply with the requirements of this Regulation, the photometric values shall be verified in the following points:

Class C passing-beam, and each specified other passing-beam class: 50V, B50L, and ~~25RLL~~, if applicable.

...”

II. Justification

1. The proposal to rename the points of maximum luminous intensity on the right and the left part of the passing beam pattern corrects a mistake which was made by the 01 series of amendments to UN Regulation No. 98 when luminous intensity measurements were introduced instead of illuminance measurements: change of the symbols “E max R” and “E max L” to “I max R” and “I max L” was not done.

2. The proposal to amend UN Regulation No. 123 corrects a mistake introduced by Supplement 8 to the 01 series of amendments:

- For Annex 2, the maximum intensity corresponding to the number 30 should be corrected to “between 123,625 and 145,125”. This correction is needed because the modification from 12V to 13.2V was not implemented in example 8.
- For Annex 4, the measuring points 25L (for right-hand traffic) and 25R (for left-hand traffic) do not exist in the photometric requirements according to Annex 3 and have to be corrected to 25LL and 25RR, respectively. This correction applies to both the introductory part of Annex 4 as well to paragraph 1.1.2.2. of the same Annex where additionally an inconsistency is corrected in the introductory part.