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agenda item 1.4.4.)

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 107

(M₂ and M₃ vehicles)

Transmitted by the expert from the Russian Federation

Note: The text reproduced below was prepared by the expert from the Russian Federation to update the illumination requirements. The proposal is based on a document without an official symbol (informal document No. GRSG-89-27), distributed at the eighty-ninth session of GRSG (TRANS/WP.29/GRSG/68, para. 23). The proposal takes into account the draft 02 series of amendments to Regulation No. 107 (ECE/TRANS/WP.29/2006/26) as well as a proposal for draft Supplement 1 to the draft 02 series of amendments (ECE/TRANS/WP.29/GRSG/2006/5). The modifications to the text of the draft Supplement 1 to the draft 02 series of amendments to the Regulation are marked in **bold** or ~~striketrough~~ characters.

Note: This document is distributed to the Experts on General Safety Provisions only.

A. PROPOSAL

Annex 3,

Paragraph 7.8., amend to read:

"7.8. Artificial interior lighting."

Paragraph 7.8.5., amend to read:

"7.8.5. Control of the mandatory ~~interior~~ lighting shall be by manual switches under the control of the driver or automatically controlled."

Insert new paragraphs 7.8.6. to 7.8.6.5., to read:

"7.8.6. **When the electricity lighting is turned on to the full power, the illumination parameters shall be following:**

7.8.6.1. **Middle (arithmetical) illumination above the passenger seats cushion 1/ shall not be less:**

Vehicle class	Middle illumination (lx)	
	Incandescent lamps	Luminescent lamps
I and A	60	100
II	30	75
III and B	60	150

7.8.6.2. **Non-uniformity factor of illumination of passenger seats (ratio between maximal to minimum magnitude of illumination) shall not be more:**

- 3.0 for incandescent lamps,
- 2.0 for luminescent lamps.

7.8.6.3. **Minimum interior illumination of a vehicle shall be:**

Illuminating zone (surface)	Illumination (lx)	
	Incandescent lamps	Luminescent lamps
Gangway <u>2/</u>	20	50
Access passage, intercommunication staircase, half staircase <u>3/</u>	10	
Local (individual) passenger seats lighting (if fitted) <u>1/</u>	50	75
Conductor's seat <u>1/</u>	100	200
Driver's compartment, WC, wardrobe <u>1/</u>	30	75

- 7.8.6.4. In the case of vehicles of Class I, II and A, illumination on the ground surface near the service doors shall be not less than 5 lx 4/ (except service doors, which are located in the direct view of the driver, seating in the normal driving position).**
- 7.8.6.4.1. The lighting devices for the illumination of the area outside service doors shall be operated as follows:**
- 7.8.6.4.1.1. turn on simultaneously with at least one service door opened, and**
- 7.8.6.4.1.2. operating all the time, when door is effective, and**
- 7.8.6.4.1.3. turned off after a speed exceeding 5 km/h and shall be incapable of operation above that speed.**
- 7.8.6.4.2. If the requirements of paragraphs 7.8.7.4. and 7.8.7.4.1. of this annex are ensured by external lighting devices, these devices shall comply with the following requirements:**
- 7.8.6.4.2.1. height of the lower edge of devices (including their fittings) from the ground shall not be less than 2,000 mm (a kneeling system shall be engaged), and**
- 7.8.6.4.2.2. devices shall not protrude more than 50 mm outside the side wall of the vehicle, and**
- 7.8.6.4.2.3. light emitting by devices shall:**
- 7.8.6.4.2.3.1. be the white colour, and**
- 7.8.6.4.2.3.2. have the direction, other than forward or back, and**
- 7.8.6.4.2.3.3. not blind the drivers of other vehicles within 10 m from the lighting devices.**
- 7.8.6.5. Illumination on platform's surface of a lift or ramp (in their working position) shall be not less than 10 lx 5/.**

1/ at the height of 1,000 mm from the floor.

2/ at the level of the floor.

3/ at the level of the steps.

4/ at the distance up to 1,000 mm from any point of the lower edge of a door aperture.

5/ at the distance up to 750 mm from the plate of a door aperture."

Annex 8,

Paragraph 3.10., amend to read:

"3.10. (Reserved)."

Paragraph 3.10.1., should be deleted.

Annex 11, paragraph 2.4.2., amend to read:

" bus systems, if not retracted,

- **for vehicles of categories M₂ and M₃, lighting devices (including their fittings) for the illumination of the area outside service doors provided that the lighting devices are placed not less than 2,000 mm from the ground (when the kneeling system is turned) and do not protrude more than 50 mm outside the side of the vehicle."**

B. JUSTIFICATION

The level of illumination inside buses and outside, near the service doors, undoubtedly renders an influence on the safety, life and health of the users of buses.

Regulations Nos. 36, 52 and 107 contain the subjective requirements concerning the level of illumination in buses ("adequate lighting"), which can be ambiguously interpreted by Technical Services and vehicle manufacturers.

During the GRSG eighty-seventh and eighty-eighth sessions, the expert from Sweden initiated discussions on insufficient illumination of the bus service door area (TRANS/WP.29/GRSG/2005/2, informal documents Nos. GRSG-87-15 and GRSG-88-21).

Taking into account these discussions, the Russian Federation submits for consideration to the GRSG experts this proposal for draft amendments to the draft 02 series of amendments, introducing illumination requirements (on the basis of the Russian national standards) as well as the related measurement conditions.

The proposal suggests to ensure illumination of the area outside the service doors not only by internal lighting devices but also by external ones (that is in alignment with the Swedish proposal). For that purpose, it is proposed to delete "interior" from the paragraphs 7.8. and 7.8.5.
