

Proposal to amend the document ECE/TRANS/WP.29/GRE/2018/44 submitted by the Co-Chairs of the Task Force on Headlamp Switching (TF HS) related to a new 07 series of amendments to Regulation No. 48

Note: The text reproduced below was prepared by the Co-Chairs of the Task Force on Headlamp Switching (TF HS) with the aim of proposing a new 07 series of amendments to UN Regulation No. 48 which will introduce updated requirements for headlamps and daytime running lamps. The modifications to the existing text of UN Regulation No. 48 are marked in bold for new or strikethrough for deleted characters. Some text is shown in square brackets to indicate that discussion and a decision are required.

The text with red characters below indicates additional proposals from Japan and EC.

I. Proposal

Paragraphs 6.2.7. and its subparagraphs, amend to read:

- 6.2.7. Electrical connections
- 6.2.7.1. ~~The control for changing over to the dipped beam shall switch off all main beam headlamps simultaneously.~~ **When changing from main to dipped-beam, all main-beams shall be switched OFF simultaneously.**
- 6.2.7.2. The dipped-beam may remain switched ~~on~~**ON** at the same time as the main-beam.
- 6.2.7.3. In the case of dipped-beam headlamps according to Regulation No. 98, the gas-discharge light sources shall remain switched ~~on~~**ON** during the main-beam operation.
- 6.2.7.4. One additional light source or one or more LED module(s), located inside the dipped-beam headlamps or in a lamp (except the main-beam headlamp) grouped or reciprocally incorporated with the respective dipped-beam headlamps, may be activated to produce bend lighting, provided that the horizontal radius of curvature of the trajectory of the centre of gravity of the vehicle is 500 m or less. This may be demonstrated by the manufacturer by calculation or by other means accepted by the Type Approval Authority.
- ~~6.2.7.5. Dipped-beam headlamps may be switched ON or OFF automatically. However, it shall be always possible to switch these dipped-beam headlamps ON and OFF manually.~~
- ~~6.2.7.56.~~ The dipped-beam headlamps shall be switched ON and OFF automatically relative to the ambient light conditions (~~e.g. switch ON during night time driving conditions, tunnels, etc.~~) according to the requirements of Annex 13.
- [When the dipped beam headlamps are required to be switched ON according to the requirements of annex 13, the Daytime Running Lamps must be switched OFF.]**
- In addition, the following sub-paragraphs 6.2.7.5.1. and 6.2.7.5.2. apply.**
- 6.2.7.5.1. **Irrespective of the requirements of paragraph 6.2.7.5, under conditions requiring the dipped beam headlamps to be switched ON, the dipped-beam headlamps may remain**

switched OFF or, once automatically switched ON, may be switched OFF manually and remain switched OFF while one or more of the following conditions exist:

- (a) the automatic transmission control is in the park position;
- (b) the parking brake is in the locked position;
- (c) prior to the vehicle being set in motion for the first time after each manual activation of the device, which starts and/or stops the propulsion system.
- (d) the vehicle speed does not exceed [15] km/h. [In this case, the lamps referred to in paragraph 5.11. shall be switched ON];
- (e) the front fog lamps are switched ON.

~~[6.2.7.5.2. Irrespective of the requirements of paragraph 6.2.7.5, under conditions requiring the dipped beam headlamps to be switched ON, it shall be possible to switch OFF manually the dipped beam headlamps that shall remain switched OFF, unless manually switched ON again, while the following conditions exist:~~

- ~~(a) the automatic operation of the dipped beam headlamps as indicated in 6.2.7.5. is resumed each time the device which starts and/or stops the propulsion system is set in a position which makes it possible for the propulsion system to operate;~~
- ~~(b) throughout the entire period that the dipped beam headlamps remain switched OFF, a clear indication/warning is provided to the driver.~~

~~This indication/warning shall only be extinguished when:~~

- ~~(i) the device which starts and/or stops the propulsion system is set in a position which makes it impossible for the propulsion system to operate, or~~
- ~~(ii) the automatic operation of the dipped beam headlamps as indicated in 6.2.7.5. has been resumed.]~~

6.2.7.6. Irrespective of the requirements of paragraph 6.2.7.5, it shall always be possible to switch the dipped beam headlamps ON manually.

6.2.7.8.7. The automatic operation of the dipped-beam headlamps shall be resumed as soon as the conditions described in paragraph 6.2.7.5.1. no longer exist. The driver shall at all times be able to engage the automatic operation.

6.2.7.7.8. Without prejudice 6.2.7.56.1., ~~Irrespective of the requirements of paragraph 6.2.7.5~~ Notwithstanding the provisions of paragraph 6.2.7.5., in cases where the ambient illuminance is **1,000 lx or more**, the dipped-beam headlamps may switch ON and OFF automatically relative to other factors such as time or ambient conditions (e.g. time of the day, vehicle location, rain, fog, etc.).

Paragraph 6.19.7.5 amends to read:

- 6.19.7.45. ~~The lamps referred to in paragraph 5.11 may be switched ON when the daytime running lamps are switched ON. If this option is chosen, at least the rear position lamps shall be switched ON. When daytime running lamps are switched on, at least the rear position lamps shall be switched ON. Other lamps may also be switched ON according to paragraph 5.11.~~

Paragraphs 12.6. and its subparagraphs, amend to read:

- 12.6.2. As of 1 September [20XXYY], Contracting Parties applying this UN Regulation shall not be obliged to accept UN type approvals of [new] vehicle types to the preceding series of amendments **to this UN Regulation, first issued after 1 September [20XX].**
- ~~12.6.3. Until 1 September [20YY], Contracting Parties applying this UN Regulation shall accept UN type approvals to the preceding series of amendments, first issued before 1 September [20XX].~~
- ~~12.6.4. As from 1 September [20YY], Contracting Parties applying this UN Regulation shall not be obliged to accept type approvals issued to the preceding series of amendments to this Regulation.~~
- 12.6.3. Contracting Parties applying this UN Regulation shall continue to accept UN type-approvals to the preceding series of amendments to this UN Regulation, for the vehicle types which are not affected by the changes introduced by the 07 series of amendments.**

II. Justification

1. Japan basically supports the proposal from TF HS. There is some text which requires further discussion. This informal document is prepared in order to express Japan's opinion on these texts.
2. Regarding paragraph 6.2.7.5., since the text in square brackets is the provision for the electrical connection of Daytime Running Lamps (DRL), it should be included not in paragraph 6.2.7. but in paragraph 6.19.7. if such provision is needed.
3. Regarding the speed criteria in (d) of paragraph 6.2.7.5.1., Japan thinks the evidence and the reason should be clarified in order to change the speed criteria from 10 km/h (which was proposed in the previous document such as GRE/2018/20) to 15 km/h.
4. Regarding paragraph 6.2.7.5.2., this paragraph should be deleted if there is no further discussion. Japan is concerned that these provisions may impair the safety of the vehicle. It should be clarified that safety is ensured even if these provisions are introduced. The conditions for switching OFF should be limited and specific. The current proposal seems to allow the driver to switch OFF manually the dipped-beam headlamps at any time as long as a clear indication/warning is provided to the driver. In addition, the reason why these provisions are needed should be made clear.
5. Regarding paragraph 6.2.7.7-8., the change of the beginning of this paragraph from "Without prejudice XX" to "Irrespective of the requirements of XX" was proposed by TF HS. This requirement might allow the dipped-beam headlamps to be switched ON and OFF without considering the requirements of the paragraph XX. The intention of this paragraph is to allow the dipped-beam headlamps to be switched ON in cases where the ambient illuminance is 7,000 lx or more. This intention should be clarified.

6. EC is facing citizens' complaints concerning poor conspicuity of vehicles as seen from the rear in reduced visibility conditions, which are not covered by Annex 13 (i.e. low-beam automatic switching conditions not met yet). Mandating switching ON of at least rear position lamps together with DRL would address the issue.