

## Proposal for a Supplement to the 06 series of amendments of Regulation No. 48

**Note:** The text below is prepared by the expert from Japan in order to propose an amendment to the 06 series of Regulation No. 48. Modifications to the text are marked in **bold characters for new** or ~~striketrough for deleted text~~. The text with black characters below is the same as a document ECE/TRANS/WP.29/GRE/2018/20 submitted by the expert from SAE. **The text with red characters below is added proposal from Japan.**

### I. Proposal

*Add new paragraphs 2.37. to 2.40., to read:*

- “2.37. “Switch ON” means to manually or automatically operate an illuminating or signalling function to effectively emit light, irrespective of whether the function is operating correctly or not.**
- 2.38. “Switch OFF” means to manually or automatically operate an illuminating or signalling function to stop emitting light, irrespective of whether the function is operating correctly or not.**
- 2.39. “Activate” means to manually or automatically enable an illuminating or signalling function, irrespective of whether light is emitted or not (e.g. enable stand-by mode).**
- 2.40. “Deactivate” means to manually or automatically disable an illuminating or signalling function, irrespective of whether light is emitted or not (e.g. disable stand-by mode).”**

*Paragraph 5.11.1.3., amend to read:*

- “5.11. The electrical connections shall be such that the front and rear position lamps, the end-outline marker lamps, if they exist, the side-marker lamps, if they exist, and the rear registration plate lamp can only be switched ON and OFF simultaneously.**
- 5.11.1. This condition requirement does not apply while one or more of the following conditions exist:**
- ~~5.11.1.1.~~ **(a) When front and rear position lamps are switched ON, as well as side-marker lamps when combined or reciprocally incorporated with said lamps, are switched ON as parking lamps; ~~or~~**
- ~~5.11.1.2.~~ **(b) When side-marker lamps flash in conjunction with direction indicators; ~~or~~**
- ~~5.11.1.3.~~ **(c) When light signalling system operates according to 6.2.7.6.2. daytime running lamps are **activated switched ON**;**
- ~~5.11.2.~~ **(d) To front position lamps when their front position lamps’ function is substituted under the provisions of paragraph 5.12.1. below.**
- ~~5.11.32.~~ **In the case of an interdependent lamp system, all light sources in each individual lamp listed in paragraph 5.11 shall be switched ON and OFF simultaneously when such lamps is switched ON and OFF.”**

Paragraph 6.1.7.1., amend to read:

- “6.1.7.1. Except when they are used to give intermittent luminous warnings at short intervals, the main-beam headlamps may be switched ON only when ~~the master light switch is in headlamps ON position or in "AUTO" (automatic) position and the dipped-beam headlamps are switched ON manually or the conditions for automatic activation of dipped-beam headlamps exist.~~ In the latter case, ~~The main beam headlamps shall be switched OFF~~ automatically when **the dipped-beam headlamps are switched OFF manually or the conditions for automatic activation of dipped-beam headlamps ceased to exist.**”

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 immediately and 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 **equipped with light sources whose rise time to full intensity is more than [500] milliseconds** according to Regulation No. 98, these ~~gas discharge~~ light sources shall remain switched ~~on~~ON during the main-beam **headlamps** operation, **except when the latter are used to give intermittent luminous warnings at short intervals.**
- 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.~~
- 6.2.7.5.6. 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 **conditions described in Annex 13 or, providing that the dipped beam headlamps are switched ON at least under ambient light conditions described in Annex 13, the automatic switching may be controlled by other factors (e.g. time of the day, vehicle location, rain, fog, etc.).**
- 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.
- 6.2.7.7. **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 fully engaged;
- (c) the vehicle was not set in motion for the first time after the device, which starts, and/or stops the propulsion system was set in a position which makes it possible for the propulsion system to operate;
- (d) the vehicle speed does not exceed [10] 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. ~~In this case, the lamps referred to in paragraph 5.11. shall be switched ON.~~

6.2.7.8. The automatic operation of the dipped-beam headlamps shall be resumed as soon as the conditions described in paragraph 6.2.7.7. no longer exist. The driver shall at all times be able to engage the automatic operation.

~~6.2.7.7. Without prejudice 6.2.7.56.1., 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 6.9.8, amend to read:

"6.9.8. Tell-tale ~~optional~~.

Circuit-closed tell-tale mandatory.

This tell-tale shall be non-flashing and shall not be required if the instrument panel lighting can only be turned on simultaneously with the front position lamps.

This requirement does not apply when light signalling system operates according to paragraph 6.2.7.6.2.

However, a tell-tale indicating failure is mandatory if required by the component regulation."

Paragraph 6.10.8, amend to read:

"6.10.8. Tell-tale ~~optional~~.

Circuit-closed tell-tale mandatory. It shall be combined with that of the front position lamps.

This requirement does not apply when light signalling system operates according to paragraph 6.2.7.6.2.

However, a tell-tale indicating failure is mandatory if required by the component regulation."

Paragraphs 6.19.7. and its subparagraphs, amend to read:

"6.19.7. Electrical connections

6.19.7.1. The daytime running lamps shall be switched ON automatically when the device which starts and/or stops the ~~engine~~ (propulsion system) is set in a position which makes it possible for the ~~engine~~ (propulsion system) to operate **and**

- (a) the headlamps are not activated; ~~and/or~~
- (b) the front fog lamps are not switched ON.

- 6.19.7.2.** However, the daytime running lamps may remain OFF **or, once automatically switched ON, may be switched OFF manually and remain OFF** while **at least one of** the following conditions exists:
- 6.19.7.1.1 (a) ~~The~~ automatic transmission control is in the park position; ~~or~~
  - 6.19.7.1.2 (b) ~~The~~ parking brake is ~~in the applied position~~ **fully engaged**; ~~or~~
  - 6.19.7.1.3 (c) ~~Prior to the vehicle being~~ **was not** set in motion for the first time after ~~each manual activation of the propulsion system~~ **the device, which starts and/or stops the propulsion system was set in a position which makes it possible for the propulsion system to operate**;
  - 6.19.7.2. (d) ~~The daytime running lamps may be switched OFF manually when the vehicle speed does not exceed [10] km/h, provided they switch ON automatically when the vehicle speed exceeds 10 km/h or when the vehicle has travelled more than 100 m] and they remain ON until deliberately switched off again.~~
- 6.19.7.3. The automatic operation of the daytime running lamps shall be resumed as soon as the conditions described in paragraphs 6.19.7.2 no longer exist.**
- 6.19.7.34. The daytime running lamp shall switch OFF automatically when **either of the following conditions exists**:
- (a) the device which starts and/or stops the ~~engine~~ (propulsion system) is set in a position which makes it impossible for the ~~engine~~ (propulsion system) to operate; ~~or~~
  - (b) the front fog lamps **are switched ON**; ~~or~~;
  - (c) **the** headlamps are ~~activated~~ **switched ON**, except when ~~the latter they~~ they are used to give intermittent luminous warnings at short intervals.<sup>45</sup>
- 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.**
- 6.19.7.56. If the distance between the front direction-indicator lamp and the daytime running lamp is equal or less than 40 mm, the electrical connections of the daytime running lamp on the relevant side of the vehicle may be such that **during the entire period (both ON and OFF cycle) of activation of the direction-indicator lamp**, either:
- (a) It is switched OFF; or
  - (b) Its luminous intensity is reduced during the entire period (both ON and OFF cycle) of activation of a front direction-indicator lamp.
- 6.19.7.67. If a direction-indicator lamp is reciprocally incorporated with a daytime running lamp, the electrical connections of the daytime running lamp on the relevant side of the vehicle shall be such that the daytime running lamp is switched OFF during the entire period (both ON and OFF cycle) of activation of the direction-indicator lamp.”

*Paragraph 6.22.7.3, amend to read:*

“6.22.7.3 **The dipped-beam headlamps** ~~Switching ON and OFF of the passing-beam is subject to~~ **shall fulfil** the requirements for "Electrical connection" in paragraph 5.12. and 6.2.7. of this Regulation.”

## **II. Justification**

1. Japan basically supports the proposal from SAE in that only daytime running lamps (DRLs) or headlamps can be used in accordance with ambient light conditions, except when vehicles are stationary or running at very low speed (10km/h) and when their front fog lamps are switched ON.
2. This proposal is based on a document ECE/TRANS/WP.29/GRE/2018/20 submitted by SAE in order to add some modifications for the purpose of enhancing human-machine interfaces (HMI) and making some clarifications, as prescribed below (point 3 to 9).
3. Regarding paragraph 5.11.1.3., “switched ON” is more appropriate wording because paragraph 6.19.7.5. stipulates that the lamps referred to in paragraph 5.11. may be switched ON when the daytime running lamps are “switched ON”.
4. Regarding paragraph 6.1.7.1., in light of the definition of “switch ON” and “switch OFF” specified in paragraph 2.37. and 2.38., “manually or the conditions for automatic activation of dipped-beam headlamps exist” does not need to be stipulated.
5. Regarding paragraph 6.2.7.7., the wording “Irrespective of the requirements of paragraph 6.2.7.5.” is also necessary as well as paragraph 6.2.7.6. because both paragraph 6.2.7.6. and 6.2.7.7. stipulate the exception to the requirement of paragraph 6.2.7.5..
6. Regarding paragraph 6.2.7.7.(e), the latter sentence is not necessary because the front fog lamps cannot be switched ON unless the lamps referred to in paragraph 5.11. are switched on, according to requirement of paragraph 5.12..
7. Regarding paragraph 6.9.8. and 6.10.8., the tell-tale of front and rear position lamps continuously needs to be mandatory. Since there are some situations where the drivers can switch ON only these lamps, even if these situations are limited, it is necessary for the drivers to easily recognize whether these lamps are switched ON.
8. Regarding paragraph 6.19.7.1.(a), “/or” needs to be deleted because the daytime running lamps shall be switched ON automatically when both the headlamps and the front fog lamps are switched OFF in the situation where 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.
9. Regarding paragraph 6.19.7.4.(c), “switched ON” is more appropriate wording because the daytime running lamps shall switch OFF automatically not when the headlamps are in stand-by mode (activated) as specified in paragraph 2.39. but when they are effectively emitting light (switched ON) as specified in paragraph 2.37..