

Highlights of R48-09SIG discussions

October, 2021

Background and Purpose

Excerpts from the Report of the 84th GRE

28. The expert from Japan presented a draft new series of amendments that introduces park conditions and an answer-back signal in the scope of UN Regulation No. 48 (ECE/TRANS/WP.29/GRE/2021/2, GRE-84-29 and GRE-84-30). The expert from OICA posed questions on the proposal (GRE-84-33) and the experts from Japan provided their replies (GRE-84-34). Several experts made further remarks on the functionalities of answer-back signals and the proposed selection of lamps for such signals.
29. The Chair concluded that the proposal would need fine-tuning. **To make progress and prepare a revised proposal for the next session, GRE agreed to establish a Special Interest Group (SIG) on these topics, which would be co-chaired by the experts from Finland and the Netherlands while OICA would act as Secretary.** GRE noted that the first meeting of SIG was planned to take place on 7 June 2021.

1st SIG meeting: 7 June 2021

Participants; NL, FIN, IT, FR, UK, DE, CY, KR, ZA, JP / OICA, CLEPA, ADAC

2nd SIG meeting: 1 September 2021

Participants; NL, FIN, FR, CY, ZA, JP / OICA, CLEPA

What the SIG group has done①

The SIG shared a video of the problematic lamps under park condition to raise awareness among the participants. Public available movies about “wake-up & shut-down signal” were viewed by SIG.

SIG 1st session

JP: Here is an example of a lamp that Japan is concerned about. The current UN R48 regulations do absolutely nothing to regulate such lamps.

<https://www.youtube.com/watch?v=zleH3kpElp8>

SIG 2nd session

OICA: URLs to public available movies about “wake-up and shutdown signal”

#	URL	car
1	https://www.audimedia.tv/de/audimediatv/video/footage-lichtsignaturen-5336	<ul style="list-style-type: none">• Audi Q8• Audi A8• Audi A7• Audi RS7
2	https://www.youtube.com/watch?v=xUuTuCuYSc	<ul style="list-style-type: none">• Opel Insignia
3	https://www.youtube.com/watch?v=l8cilusjOYg	<ul style="list-style-type: none">• Peugeot 508

*The vehicles in both videos are type-approved vehicles sold on the market.



These videos have prompted participating CPs to mention the need for a review of the current position that lamps under park condition are outside the scope of UN R48.

What the SIG group has done②

OICA conduct presentation([SIG-02-09](#)) of “Study in real traffic: Investigation of the Impairment on Road Traffic through Animated Rear Lamps and Daytime Running Lights in Front Lamp” ([SIG-01-04](#))

- ❑ Only static observers
- ❑ No dynamic observers like “driver of a car” or “rider of a bicycle”
- ❑ Study conducted during daytime
- ❑ Dry weather (no wet roads)
- ❑ No distraction noticed by the observers



Unfortunately, as the OICA presentation was a static test conducted only in daylight, it did not provide evidence that the animation of the lamps under park condition does not interfere with other road users.

Conclusions of the two SIG meetings

Conclusion of SIG 1st session :

Therefore, lamps under park condition including the so-called “wake-up & shut-down signal” will be the focus of the work of SIG.

【lamps under park condition】

- ❑ **A two phase approach is not necessary. Everything should be addressed together.**
- ❑ Provisions for the lamps under park condition should be incorporated in UN R48
- ❑ **It has to be clarified where the provisions should be incorporated. In paragraph 5 or in paragraph 6 of UN R48.**
- ❑ To be able to distinguish the “wake-up & shut-down signal” from the existing requirements in UN R48 etc. for flashing, lighting or changing of intensity of the lamps under park condition.
- ❑ **The provisions of the lamps have to consider the following aspects**
 - **Which lamps are allowed**
 - **Colour**
 - **Intensity**
 - **Duration**
 - **Flashing or non-flashing**
 - **Change of intensity**
 - **Trigger**

Conclusion of SIG 2nd session :

- **Requirements regarding “lamps under park condition” have to be considered to be added in UN R48.**
- **R48-09 SIG decided to seek guidance from 85th GRE in a status report on the direction of the regulation of lamps under park condition in UN R48.**

[Reference] Overview of regulations of lamps under park condition considered by Japan

In response to the direction given at the first SIG that UN R48 as a whole should comprehensively regulate lamps under park condition is stationary, JP would like to provide an overview of the regulations that Japan has considered.

Required Precondition 1:

Under paragraph 5. of UN R48, it has to be stipulated that lamps other than those listed below (1) to (4) (cited in next page) must not be switched on under park condition.

Required Precondition 2:

The submission of a document clarifying which lamps (1) to (4) are to be switched on under park condition and under which scenario (e.g. timing of the start of lighting, line diagram clearly showing flashing and changes of intensity, clarification of the underlying regulations, etc.) is to be required.

[Reference] Overview of regulations of lamps under park condition considered by Japan

1. Which lamps are allowed

(1) Status display of R97, R116, R162 and R163(Direction-indicator (DI) lamps)

(2) ECL

(3) Wake up & Shut down signal (including so called AB signal)

JP's idea: dipped-beam headlamps, the direction-indicator lamps, the rear registration plate lamp(s), the front position lamps, the rear position lamps, the parking lamps, the side-marker lamps, the end-outline marker lamps, the cornering lamps, the adaptive front lighting system(*[ex.link](#)), the maneuvering lamps

(4) Allowed in individual specification

Awareness that Hazard warning signal (Direction-indicator lamps+the amber side-marker lamps) and Parking lamps are already permitted to be lit under UN R48, paragraph 6.

[Reference] Overview of regulations of lamps under park condition considered by Japan

2. Colour

- (1) **Amber**: Only the individual specifications under paragraph 6. of UN R48 of DI lamps is applicable.
(Basis of law: any use of lighting and light-signalling devices outside the passenger compartment shall fulfil the requirements of Regulation No. 48.)
- (2) **White**: ECL has to be white. (Basis of law: approved lamps emitting white light with the exception of main beam head lamps, day time running lamps and reversing lamps may be switched ON as courtesy lamp function.)
- (3) JP's idea: In accordance with the individual specifications under UN R48 is only applicable.
- (4) The individual specifications under paragraph 6. of UN R48 is only applicable.
(Basis of law: Hazard warning signal: **Amber**, Parking lamp: **White** in front, **Red** at the rear, **Amber** if reciprocally incorporated in the side direction-indicator lamps or in the side-marker lamps.)

3. Intensity

Subject to the individual requirements set out in R48.

[Reference] Overview of regulations of lamps under park condition considered by Japan

4. Duration

- (1) Basis of law: the duration of the optical indication by the direction indicators **does not exceed 3 seconds.**
- (2) Not regulated.
- (3) JP's idea: If there are a flashing signal or a signal with increasing/reducing luminous intensity, the duration of the optical indication **shall not exceed 3 seconds.**
- (4) Not regulated.

[Reference] Overview of regulations of lamps under park condition considered by Japan

5. Flashing or non-flashing

○: applicable, ×: Unapplicable

(1)	(2)	(3)	(4)	
○	×	○	Hazard warning signal	Parking lamp
			○	×

6. Change of intensity

○: applicable, ×: Unapplicable

(1)	(2)	(3)	(4)
×	×	○	×

[Reference] Overview of regulations of lamps under park condition considered by Japan

7. Trigger

- (1) (Basis of law: VAS shall, in the event of intrusion into or interference with a vehicle, provide a warning signal.(regulated in certain reg. (see of R97 5.1. , R116 6.2.1, R162 and R163))
- (2) (Basis of law: (a)The propulsion system is stopped; or (b)A driver or passenger door is opened; or (c)A load compartment door is opened.)
- (3) JP's idea: the locking [and/]or unlocking of the doors[, the opening and/or closing of the doors,] [and/]or the detection of the vehicle user approaching with the key [and/]or in accordance with other conditions prescribed as conditions similar to this stated by the manufacturers.
- (4) The individual specifications under paragraph 6 of UN R48.

(Basis of law: Hazard warning signal: The signal shall be operated by means of a separate manual control enabling all the direction-indicator lamps to flash in phase., Parking lamp: The connection shall allow the parking lamp(s) on the same side of the vehicle to be switched ON independently of any other lamps.)