

# **Basic questions for SIG “parking state” Presented by Audi**

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## Basic questions for SIG “parking state”

- › The target of this document is clarification of baselines for the establishment of regulations for the parked state of vehicles.
- › The SIG on the 09 Series of UN Regulation 48 discussed text for this purpose but the underlying principles have not been discussed in Detail which led to three diverging documents for further discussion.
- › The documents presented by the Japanese delegates and by OICA seem to converge somehow but with a limited pace.
- › Clarification of the underlying targets and concepts could be beneficial in order speed up the process.
- › The following pages present questions that we deem important for this purpose.

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- 1)
- The justification for regulating the parked state of vehicles indicates, that the contracting parties are not actually concerned with the current situation but see a need to gain regulatory power to avoid excessive discomfort, distraction or glare from parked vehicles.
- The contracting parties have not identified safety problems with use cases available in the market although some have been discussed being borderline.
  
- **Is it correct, that all existing forms of lighting technology shall stay acceptable in the future regulated situation?**
  
- **If not, which of the existing technology shall be banned for which reason?**

\* 3. At the SIG, it was viewed as a problem that the lamps not subjected to the provisions under the park condition in the current UN Regulation No. 48 have been put in the market, based on free interpretation by motor vehicle manufacturers, etc., and that it would be difficult to restrict those lamps safely by the Type approval authority under the provisions under the park condition in the current UN Regulation No. 48.

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- 2)
- The justification presented for the introduction of regulations for the parked state identify that future regulation shall accept technology that does not impair traffic safety\*.
- USA as well follows a concept of allowance of lamps other than those necessary for traffic safety as defined by law if they do not impair traffic safety\*\*.
- China defined a regulation for the installation of other lamps and explicitly excludes the parked state from the regulation of lighting and light signaling equipment\*\*\*.
- The current UN regulation defines excessive discomfort, distraction and glare as sources of impairment e.g. in the evaluation of AFS systems.
  
- **Are these three parameters accepted for the evaluation of impairment of traffic safety?**
- **If not, which additional parameters must be covered by the regulation on the parked state?**

\* 4. Meanwhile, to increase user convenience, some manufacturers have produced vehicles with a function that allows lights to flash in conjunction with the locking and unlocking of the doors while a vehicle is under the park condition. We believe that such functions can be permitted to the extent that they do not impair traffic safety. \*

\*\* Impairment being identified mainly by causing confusion with regulated signals or glare.

571.108 S6.2 Impairment. S6.2.1 No additional lamp, reflective device, or other motor vehicle equipment is permitted to be installed that impairs the effectiveness of lighting equipment required by this standard.

\*\*\* Impairment not happening when the vehicle is not ready to move.

GB4785-2019 4.31 The external lighting and light-signalling devices that are not defined by this Standard can be activated if the vehicle is stationary and one or more of the following conditions are satisfied, but validity of external lighting and light signalling devices defined in this Standard shall not be prejudiced: -- The engine (propulsion system) is stopped; -- A driver or passenger door is opened; -- A boot door is opened.

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- 3)
- National legislation does regulate lamps different from UN defined lamps e.g. for “working lamps” mostly for the parked state\* (sometimes defined for the non moving vehicle).
- The UN regulation accepts national lamps to a degree that they may differ from regulated lamps on a component level but they may not provide different functions\*\*.
- Contracting parties may refuse a UN type approval if the vehicle does not comply to the approved type.
- Therefore such national lamps are considered for type evaluation in future while currently the national legislation covers an area outside of the scope of the scope of UN regulation 48.
  
- **Shall all nationally legislated lamps be identified and their performance be harmonized in the UN regulation?**
- **Shall national lamps be accepted for other functions than the ones defined by the UN regulations?**

\* e.g. German STVZO § 52 (7) working lamps to illuminate equipment or working areas that may not be used while driving.

\*\*2.4.1. "Equivalent lamps" means lamps having the same function and authorized in the country in which the vehicle is registered; such lamps may have different characteristics from those installed on the vehicle when it is approved on condition that they satisfy the requirements of this Regulation.

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- › 4)
- › The Japanese draft introduces the idea of “triggers” which is not fully understood by industry.
- › The current regulation defines standardised signals for conditions of use and criteria for impairment of nonregulated lamps.
- › Standardised lighting and light signalling have functions important for the driver to be able to participate in traffic (visibility) or important to other traffic members for their driving task (light signals).
- › They are assigned with reasons for activation and their use is trained in driving schools.
- › The regulations for the parked state currently include functions necessary for traffic safety (e.g. hazard warning, parking lamp).
- › The regulation for the parked state in future shall include functions not necessary for traffic safety but beneficial for user experience.
- › Other road users cannot identify the reason of such user dedicated light and are not trained to react on such light so the idea of triggers for impairment evaluation is not obvious.
  
- › **What is the idea/concept of triggers and how do they serve a function in impairment evaluation?**