

Proposal to amend ECE/TRANS/WP.29/GRE/2023/9/Rev.2

This document is a revised proposal to amend ECE/TRANS/WP.29/GRE/2023/9/Rev.2 which is submitted to the ninetieth session of the Working Party on Lighting and Light-Signalling (GRE).

I. Proposal

Paragraph 6.1.7.2.1., amend to read:

~~“6.1.7.2.1. In the case that the vehicle is controlled by an ADS, either~~

~~–the control unit of the main-beam headlamps shall receive a signal produced by the ADS to deactivate the main-beam headlamp to avoid causing discomfort, distraction or glare to other road users when present; or~~

~~–the main-beam headlamps shall be deactivated.”~~

“6.1.7.2.1. In the case that the vehicle is controlled by an ADS, either,

- the applicant shall prove to the satisfaction of the Type-Approval Authority that the automatic main-beam operation is controlled by the ADS to avoid causing discomfort, distraction or glare to other road users; or

- the main-beam headlamps shall be deactivated.”

Paragraph 6.22.7.1.2.1., amend to read:

~~“6.22.7.1.2.1. In the case that the vehicle is controlled by an ADS, either~~

~~–the control unit of the main-beam headlamps shall receive a signal produced by the ADS to deactivate the main-beam headlamp to avoid causing discomfort, distraction or glare to other road users when present; or~~

~~–the main-beam headlamps shall be deactivated.”~~

“6.22.7.1.2.1. In the case that the vehicle is controlled by an ADS, either,

- the applicant shall prove to the satisfaction of the Type-Approval Authority that the automatic main-beam operation is controlled by the ADS to avoid causing discomfort, distraction or glare to other road users; or

- the main-beam headlamps shall be deactivated.”

II. Justification

1. Current automatic main-beam system operation relies on the support of a human driver to identify other road users and to take appropriate action.
2. It is identified that if an applicant for a vehicle with ADS cannot prove that the ADS is able to perform the same tasks that are assigned to a human driver, the main-beam must be switched OFF.
3. This term guarantees, that in the case the ADS is not able to perform the same tasks that are assigned to a human driver, independent of the system status at the time of transfer of responsibility to the ADS, there is no light output by the main-beam when the ADS controls the vehicle.
4. If however the ADS shows acceptable performance in the recognition of other road users, automatic main beam operation under the control of the ADS is acceptable.
5. The text is future proof and technology neutral.
6. As soon as a UN Regulation for performance evaluation (the “driver’s license” of an ADS) exists, this could be identified as proof of ADS qualification under this paragraph.
7. The concrete level of recognition performance of an ADS should be subject to discussion in GRVA therefore do not need to be part of the initial adjustment of R48 to automated driving.