

Proposal for amendments to GRVA-05-07 (as revised)

This document proposes amendments to GRVA-05-07 on Automated Lane Keeping Systems). Proposed changes to the current text of the Regulation are marked in **bold** for new text, and ~~strike through~~ for deleted text.

I. Proposal

Paragraph 2.1.1., amend to read

- “2.1.1. *"Vehicle Type with regard to Automated Lane Keeping System (ALKS)"* means a category of vehicles which do not differ in such essential aspects as:
- (a) Vehicle features which significantly influence the performances of the Automated Lane Keeping System (ALKS),
 - (b) The **system characteristics and** design of the Automated Lane Keeping System (ALKS),
 - (c) ~~Manufacturer's designation of vehicle type."~~

II. Justification

A. Paragraph 2.1.1., ALKS type definition

The proposal is based on the understanding that all necessary aspects regarding a significant change of system behavior are sufficiently covered by items (a) and (b) of the existing type definition.

The aspect item (c) addresses is not necessary regarding a significant change of system behavior. The addition of (c), as proposed during the last session of the Informal Working Group on ALKS, does not bring an additional relevant item and is therefore not necessary.

Item (a) ensures that the system is only fitted to those vehicles under which the performance as required by the provisions of this regulation can be ensured. If fitting the system to a different vehicle leads to a relevant change in system behaviour (e.g. due to a different fitment of sensors or different braking behaviour of that vehicle), this would, according to paragraph 10, lead to a re-assessment of the approval.

Item (b) ensures that when either the characteristics of the system (e.g. its maximum operational speed, system boundaries) or design of the system (e.g. type of sensors that are part of the system) changes, this leads to a re-assessment of the approval according to paragraph 10.

In order to reintroduce what the intention of the originally used word “type” was, which was deleted during the last session of the IWG ACSF due to its unclear meaning with regard to an ALKS, we propose to insert “system characteristics” under item (b).

Item (c) could result in a required separate ALKS approval for each engine or “type” (sedan, stationwagon...) of a vehicle, which are not even relevant factors when assessing the performance of an ALKS.

We therefor propose to delete item (c), because its requirements are sufficiently covered by items (a) and (b).