

## Proposal for amendments to UN Regulation No. 79 Proposal for an alternative to the actuation of the remote control device for the use of RCP Amending document GRVA/2021/12

This document reflects the current discussions in the TF on ADAS.

Text in red colour are amendments to document ECE/TRANS/WP.29/GRVA/2021/12.

### I. Proposal

*Paragraph 2.4.8.*, amend to read:

2.4.8. "Remote Controlled Parking (RCP)" means an ACSF of category A, actuated by the driver, providing parking or low speed manoeuvring. The actuation is made ~~by remote control~~ in close proximity to the vehicle.

*Paragraph 2.4.9.*, amend to read:

2.4.9. "*Specified maximum RCP operating range (SRCP<sub>max</sub>)*" means the maximum distance between the nearest point of the motor vehicle and the remote control device **or alternatively the driver (for systems based on detection of driver position and movement)**, up to which ACSF is designed to operate.

*Paragraphs 5.6.1.2.1. and 5.6.1.2.2.* (5.6.1.2. for reference only), amend to read:

5.6.1.2. Additional provisions for RCP

5.6.1.2.1. The parking manoeuvre shall be initiated by the driver but controlled by the system. A direct influence on steering angle, value of acceleration and deceleration via the remote-control device **or by the motion movement of the driver** shall not be possible.

5.6.1.2.2. **Either** a continuous actuation of the remote-control device by the driver **or alternatively (for systems based on detection of driver position and motion movement) a continuous motion movement of the driver in the same longitudinal direction as the vehicle**, is required during the parking manoeuvre.

*Paragraph 5.6.1.2.3.*, amend to read:

5.6.1.2.3. **For systems based on continuous actuation of the remote-control device, the vehicle shall stop immediately if:**

- (a) The continuous actuation is interrupted; or
- (b) The distance between vehicle and remote-control device exceeds the specified maximum RCP operating range (SRCP<sub>max</sub>); or
- (c) The signal between remote control and vehicle is lost.

~~the vehicle shall stop immediately.~~

**For systems based on detection of driver position and motion movement, the vehicle shall stop immediately if:**

- (a) The continuous ~~motion movement~~ of the driver is interrupted; or
- (b) The distance between vehicle and remote-control device **or driver** exceeds the specified maximum RCP operating range (SRCP<sub>max</sub>); ~~or~~

**(c) The detection of the driver is lost; or**

**(d) There is a rapid increase in the movement speed of the driver.**

*New paragraph 5.6.1.3.1.4., insert to read:*

**5.6.1.3.1.4. For RCP systems based on detection of driver position and ~~motion~~ movement the manufacturer shall ~~provide the demonstrate~~ to the technical ~~authorities with an explanation~~ service during type approval how a person is identified as the driver, ~~and~~ how this person is tracked and how the driver initiates and terminates control. This shall be subject to agreement of the technical service.**

## **II. Justification**

1. This proposal aims to allow an alternative to the continuous actuation of the remote-control device.
  2. With this proposal the continued movement of the driver is introduced as an alternative means to support driver attentiveness.
  3. This alternative possibility requires driver engagement and supports the driver to focus on the area around the vehicle.
  4. Termination of control is signalled to the driver according to current paragraph 5.6.1.1.5.
  5. Provisions for termination of control (deactivation) are not necessary since situations unclear for the driver are avoided by the fact that all RCP systems need to identify the dedicated parking space (lines/obstacles) to know the intended trajectory. This in combination with the conditions for when the vehicle must stop, ensures safety for the driver.
  6. RCP is not about controlling the movement of the vehicle but about making sure the driver is aware and in control. The driver is only permitting the vehicle to continue the parking manoeuvre by his/her continuous action. If this action is by a finger or the entire body would require the same level of engagement.
  7. More information can be found in the Q&A document [GRVA-08-06](#).
  8. Informal document [GRVA-05-47](#) (video) provides background additional information.
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