

Proposal for amendments to UN R79 (Steering equipment)

Remote Control Parking (RCP)

Speed adjustment feature



UN R79 – RCP Safety improvement

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 of the driver shall not be possible. **A direct influence on the vehicle speed shall only be possible via the remote-control device within the defined operational conditions.**

The issue:

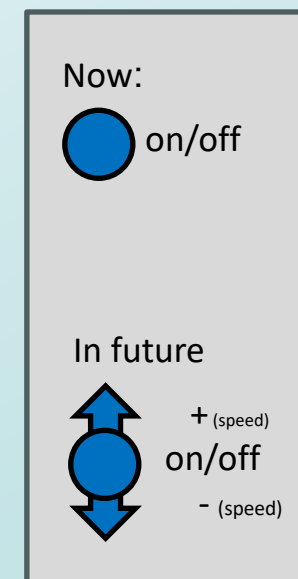
The system cannot distinguish whether the user is willing to initiate an emergency braking (by releasing the “button” of the remote-control device) or to bring the vehicle to a standstill without emergency. → As a result, the system must always perform an emergency braking.

Concept Idea:

- Emergency braking takes place as today by releasing the “button” of the remote-control device.
- Parking manoeuvres without emergency is made possible by the driver with an additional element of the remote-control device available to regulate the driving speed within the RCP operating range (S_{RCPmax}) at a speed not higher than 10 km/h.
- This allows a more precise and smoother operation, compared to the default behaviour of the system.

Safety Arguments:

- Improved controllability by the driver
- The driver can easily familiarize oneself with the function without generating useless emergency braking(s)
- The driver can also bring the system to a standstill before the final state is reached and not with a sudden stop (e.g. to stop before being too close from a wall, for example).
- The driver can prevent the sudden stop of the system in foreseeable situations.



The implementation of such a “speed adjustment” feature, without changing the trajectory, is a safety and comfort improvement.