DRAFT

Regulation applicable to Automated Vehicles/driverless vehicles: [X] yes [ ] no

UN Regulation No. 79 (Steering)	UN Group: GRVA	Potential approach for application: ~~no amendment required~~ | amendment | new Regulation

Content Summary (existing Regulation)

- Ensure that all components of the steering system are designed properly to ensure high level of safety:
- No physical breakage of mechanical components (well dimensioned)
- Steering forces are at level which can be handled by the driver, even in case of failure
- Steering performance in nominal cases
- Steering performance in failure cases
- Warnings to be issued to warn the driver
- ADAS specific requirements

Summary of required changes

- Replacing the driver actuating the steering control with the steering demand generated by the ADS
- Testing section to be updated
- Warnings/failure signals to be transmitted to the ADS to ensure adequate response
- Driver assistance content not applicable to ADS vehicles could be deleted for standalone Regulation for AV's
- Definitions reviewed/added/amended
- Scope

Content relevant for FAV's / driverless vehicles

- System robustness (well dimensioned)
- Steering performance under nominal conditions
- Steering performance under failure conditions
- Steering performance in „maintenance mode"
- Warnings/failure signals to be provided to the ADS (e.g. to ensure ADS algorithm to respond adequately, to warn the operator/control tower/occupants as/if appropriate, etc.)
- Perfomance considering max design speed of the vehicles, that the ADS is in control of the entire driving dynamics (safety concept incl. transfer to MRC), ...

Specifics for vehicles that can be driven manually and driverless:

- Consider that the steering demand can be requested by the actuation of manual controls (driver) or by generation of the ADS
- HMI
- Warning/failure signals (system status/condition)

Content to be covered by (potential) ADS Regulation

- Generation of steering demand by the ADS
- Response to warning/failure signals
- HMI intended for communication with driver (control tower, occupants, etc.)