

Principles

2.6. Driver Availability Recognition

- Driver presence:
 - Check the use of the seat belt
 - Check if driver is present in the seat
- Driver availability / awareness:
 - Check whether the driver is not sleeping and ready/able to take over manual control

- *Need for measurable values for the driver presence and awareness for the Technical Service for Type Approval.*

2.7. Transition Demand and System Operation during Transition phase

- System shall detect its limits and always issue a transition demand before/upon reaching the limits.
- System shall work properly during the whole transition phase
- Transition phase shall be long enough for normal drivers (not sleeping; no medical issues) to take over manual control again.
- Indication of the transition request shall be clear (unique signal in the vehicle) for the driver.
- Transition phase shall be escalating and uncomfortable/demanding to prevent misuse and to enforce/educate the driver to take over manually control as soon as possible.
- Vehicle is not allowed to be brought to standstill by the system during the transition phase except the traffic situation requires it.
- Transition phase can only ends when the driver takes manual control or when a MRM starts.
- System shall go off (be deactivated) automatically after a transition phase except a MRM is needed/started.

- *Need for measurable values for the warning strategies and detailed Information about the operational capabilities of the system with a single system failure and the measures of the system during the transition phase for the Technical Service for Type Approval.*

2.8. Information to the driver

- Clear system status indication to the driver
- Unique and standardised indication for a “Level 3” system being active (e.g. green steering wheel with an additional “A”). In addition other indications are able.
- Clear unique escalation strategy which causes no confusion to the driver.
- Use of the defined “Hands-On-Symbol” e.g. from B1 for the takeover request. In addition other indications are able.
- Avoid mode confusion.

2.9. **Minimum Risk Manoeuvre**

- Only starts after a transition demand if the driver has not taken over manual control.
- Minimum risk means minimum for ego vehicle and for other traffic.
 - If the vehicle is fitted with the capabilities to surveil the traffic behind and beside the vehicle, a MRM with a safe lane change/s to the hard shoulder shall be the first option to be considered in the MRM strategy before come to standstill.
 - Without these capabilities, standstill in the driving lane is the MRM (no problem for slow speed systems, high speed systems may be limited in using of lanes to not come to a standstill in the fastest lane)
- MRM always ends with a standstill of the vehicle (if the driver has not taken over control in between)
- Activation of the hazard lights.
- System shall be deactivated automatically after a MRM.
- System activation after a MRM is only possible after a new ignition cycle.
- The vehicle shall not move away after standstill without manual input.

2.10. **Emergency Manoeuvre**

- Only allowed if a traffic situation requires it to prevent a imminent collision.
- Full deceleration capabilities of the vehicle and evasive manoeuvre in the lane allowed.
- No transition demand required; Emergency Manoeuvre works in parallel with ongoing transition phase/MRM with higher priority for EM.
- Deactivation of the system needed only after an EM brought the vehicle to a standstill with transition demand

Reminder

- *Activation of the hazard warning light*