

**OICA CLEPA input for FRAV ADS Safety Requirements – User Safety**

- 5.11. ADS interactions with ADS vehicle users.
- 5.11.1. Scope and purpose.
- 5.11.1.1. This section recommends functional requirements with regard to the safety of driver, fallback-user, and passenger interactions with an ADS.
- 5.11.2. Vehicles not designed to carry occupants.
- 5.11.2.1. ADS vehicles designed without accommodations for a driver or passengers shall be exempt from requirements under para. 5.11.3.
- 5.11.3. Vehicles designed to carry occupants.
- 5.11.3.1. General requirements.
  - [5.11.3.1.1.] [Subject to safety concept of the ADS, the ADS shall signal the presence of a fault that prevents the ADS from performing the DDT functions required by its feature(s) pursuant to para. 4.9.]
  - [5.11.3.1.2.] [Subject to safety concept of the ADS, the ADS shall signal its intention to place the vehicle in an MRC to the ADS user or vehicle occupants.]
- 5.11.3.2. ADS vehicles that permit manual driving.
  - ADS use-cases and/or features permitting manual driving, [in relation to their activation or deactivation, particularly in motion], shall have means to monitor parameters relevant to engagement or disengagement of [driver/user] for the DDT.
- 5.11.3.2.1. ADS feature activation.
  - 5.11.3.2.1.1. The ADS controls relevant to safety shall accommodate the appropriate interactions for that ADS feature.
    - [5.11.3.2.1.2.] [Subject to safety concept of the ADS, the ADS shall signal the availability of a feature for activation.]
  - 5.11.3.2.1.3. If an ADS feature activation changes a user role, and the ADS feature has controls relevant to safety, the controls shall be [identified] in the context for the user relevant to safety.
  - 5.11.3.2.1.4. An ADS feature activation intended to change the user role shall signal its activation state.
  - 5.11.3.2.1.5. Upon feature activation, indicators, tell-tales, and warnings not related to the operation of ADS feature may be disabled, deactivated, inhibited, or by other means be made unavailable to the user.

- 5.11.3.2.1.6. Upon feature activation, vehicle controls not related to the operation of the ADS feature may be disabled, suppressed, deactivated, inhibited, or by other means made unavailable to the user.
- 5.11.3.2.1.7 The ADS may control the operation of closures, if available, as relevant to occupant safety, or to restrict or enable access to compartments. Controls related to closures may be disabled by the ADS.
- 5.11.3.2.2. ADS feature deactivation  
This section covers manual and automatic ADS feature deactivation [including the case resulting in Transition of Control].
  - 5.11.3.2.2.1. Controls that enable ADS feature deactivation, shall provide an indication signaling attempt to deactivate and or deactivation, when operated.
  - 5.11.3.2.2.2. Controls enabling ADS feature deactivation, shall, at least when the vehicle is in motion, also be associated with additional conditions for the purpose of enabling protection for unintended deactivation in motion.
  - 5.11.3.2.2.3. ADS feature deactivation may be delayed, suppressed, canceled, ignored, aborted or by other means prevented from being executed if it is estimated by the ADS that the situation is unsuitable for the subsequent mode of vehicle operation.
  - 5.11.3.2.2.4 If a feature allows an initiation of transfer of controls through the driver controls or controls that enable ADS feature deactivation, the deactivation conditions in Requirements 5.11.3.2.2.1, 5.11.3.2.2.2 and 5.11.3.2.2.3 above continue to apply.
  - 5.11.3.2.2.5. ADS features using automatic deactivation in motion, when the subsequent mode of operation is not ADS, should use a set of conditions to support an assessment of readiness to re-engage in the driving task and if the conditions cannot be fulfilled, the ADS shall trigger a fallback to an MRC.
  - 5.11.3.2.2.6. [For ADS allowing manual driving], an automatic ADS feature deactivation in normal use, such as ODD exit, should be indicated in timely manner to support that the user may re-engage to the driving task as appropriate
  - 5.11.3.2.2.7. ADS features operating control of closures, shall no longer influence closures or the controls associated with closures.
  - 5.11.3.2.2.8. If fitted, controls associated with the operation of the ADS feature shall no longer influence the ADS feature.
  - 5.11.3.2.2.9. If fitted, controls inhibited or suppressed by the ADS feature shall not be influenced by the ADS feature after deactivation.

- 5.11.3.2.2.10. If fitted, indicators, tell-tales, warnings not related to the operation of the ADS feature, that were disabled, de-activated, inhibited or by other means made unavailable when the ADS feature was activated, shall no longer be influenced by the ADS feature.
- 5.11.3.3. ADS vehicles [and/or features] that prohibit manual driving.
- 5.11.3.3.1. The ADS shall provide vehicle occupants with means to request to stop the fully automated vehicle.