

Issues to seek guidance from GRVA

Issues to seek guidance from GRVA (1/2)

- 5.3.8.2. Speed Limit Compliance Assistance:
 - Option 1: The system may provide lateral and longitudinal assistance above the system determined road speed limit, if requested by the driver to do so, because:
 - the system may erroneously misidentify the speed limit;
 - in certain locations infrastructure or lack of connectivity may impact the ability of the system to identify and meet the relevant speed limit;
 - the emergent behavior of a string of traffic is considered to be an important safety risk, so the driver should be able to determine the contextual speed limit and should be able to set such as appropriate;
 - radical deceleration and acceleration profiles can be a safety risk;
 - a continuous optical warning is mandated in a case where the vehicle speed is above the system determined road speed limit, so the driver should be able to determine what the correct speed limit is in a given situation to resolve this situation;
 - sometimes signs are wrong, e.g., subsequent to construction works, and as such this should not only be a matter of the system; for this reason, the driver should have a say in what the appropriate limit is.
 - there are existing safeguards which require a reset of the speed limit when a new speed limit is determined.
 - Option 2: The system shall not allow the driver to set a maximum speed above the system-determined speed limit, because
 - more advanced speed limit detection systems are better capable and use map data to correct erroneous detection.
 - the system should not be allowed set a higher speed limit and be encouraged to speed.

Issues to seek guidance from GRVA (2/2)

5.5.4.2. Driver State Monitoring:

What would be suitable timing to introduce provisions for driver disengagement determination purely by visual (eyes/head) monitoring, thereby suppressing hands-off warnings (= providing opportunity for “hands-free” DCAS)?

- Option 1: Included in phase 1 (00 series of DCAS) – targeted for Jan. 2024 GRVA
 - Tentative provisions are currently in square brackets in GRVA-17-05 (5.5.4.2.1 – Driver Disengagement Monitoring)
 - Limited system boundaries (highway type of roads, where pedestrians and cyclists are prohibited, and which are equipped with a physical separation dividing the traffic moving in opposite directions)
 - System capable to assess the eye gaze / head orientation of the driver
 - All assistance systems in par. 5.1.5 active
 - System informs the driver appropriately via the HMI this modus of monitoring to safeguard relevant driver behavior
 - Adjustment of longitudinal and/or lateral control parameters or issue warnings in case of detected upcoming system boundary condition
 - A dedicated warning cascade including eyes-on warnings, hands-on requests, take-over requests and RMF is applicable
 - (Compliance to all standard DCAS requirements - but allowing suppression of hands-off warning)
 - Agreement on the vehicle categories still needed (not yet discussed in detail in ADAS TF)
- Option 2: Included in phase 2, after adoption of phase 1
 - Monitoring purely by visual determination not deemed ready/mature for integration in phase 1
 - On phase 1, the system shall monitor both hands-on and eyes-on. If visual disengagement determination is temporarily unavailable, the system shall only perform the lane keeping feature and shall not initiate any manoeuvre
 - Timeline for phase 2 to be developed

Thank you for your attention!