

Principles to Guide Technical Work on DCAS Regulation

Report from the ADAS Task Force Drafting Group

- Drafting Group kick-off session (7 March)
 - Accelerate work on draft text
 - Efficiently organized path forward
 - Ensure coverage (identify any gaps)
 - Common baseline to focus efforts
- Agreed to develop core principles to guide work
 - Ensure consensus on DCAS purpose, design, usage
 - Developed list of 20-25 elements from task force work to date
 - Refined to four “core principles” from which to defined scope/coverage
- Drafting Group wants Task Force view on its consensus
 - Intention to align Master Document contents with principles

- Key principles concerning DCAS design and correct use
- Four core principles
 1. “Driver” refers to a human being driving a vehicle.
 2. A DCAS is a driver-operated vehicle system.
 3. A DCAS assists the driver via sustained lateral and longitudinal motion-control support.
 4. The availability of a DCAS to the driver is constrained by defined system boundaries.
- These principles have implications for ensuring safe use of DCAS.

“Driver” refers to a human being driving a vehicle.

- A DCAS does not replace the driver (ADS); a DCAS assists the driver (ADAS).
- A DCAS does not change the driver’s responsibilities for control of the vehicle.

A DCAS is a driver-operated vehicle system.

- A DCAS must prevent reasonably foreseeable risks of driver misuse or abuse.
- A DCAS does not aim to permit driver activities other than driving in addition to those permitted for manual driving.
- A DCAS must have means to evaluate continuous driver involvement in and supervision of the vehicle operation.
- A DCAS must provide sufficient information to enable the driver to supervise its motion-control assistance.

A DCAS assists the driver via sustained lateral and longitudinal motion-control support.

- The DCAS support must not adversely impact road safety.
- The DCAS support must not adversely impact driver control over the vehicle behavior.

The availability of a DCAS to the driver is constrained by defined system boundaries.

- The manufacturer must describe the system boundaries.

Text should follow the principles.

Drafting Group has held more detailed discussions; however, the group agrees it should not move forward without ADAS Task Force feedback on the principles.

Consolidated list of principles

1. **“Driver” refers to a human being driving a vehicle.**
 - 1.1. A DCAS does not replace the driver (ADS); a DCAS assists the driver (ADAS).
 - 1.2. A DCAS does not change the driver’s responsibilities for control of the vehicle.
2. **A DCAS is a driver-operated vehicle system.**
 - 2.1. A DCAS must prevent reasonably foreseeable risks of driver misuse or abuse.
 - 2.2. A DCAS must have means to evaluate continuous driver involvement in and supervision of the vehicle operation.
 - 2.3. A DCAS do not aim to permit driver activities other than driving in addition to those permitted for manual driving.
 - 2.4. A DCAS must provide sufficient information to enable the driver to supervise its motion-control assistance.
3. **A DCAS assists the driver via sustained lateral and longitudinal motion-control support.**
 - 3.1. The DCAS support must not adversely impact road safety.
 - 3.2. The DCAS support must not adversely impact driver control over the vehicle behavior.
4. **The availability of a DCAS to the driver is constrained by defined system boundaries.**
 - 4.1. The manufacturer must describe the system boundaries.