To improve the interactive concept of driver assistance systems and to go further towards highly automated driving, it is necessary to extend the environmental perception and the driver monitoring.

The detection distance can be improved by merging the ADAS sensors with the V2X communication and intelligent localization.

The driver behavior needs to be used to adapt the cooperation concepts and to improve the user acceptance.

**Functions and System**
- Driver monitoring > distraction, drowsiness detection
- Extend the ADAS sensors perception, using V2X communication and intelligent localization

**Features**
- Driver Monitoring:
  - Interior Camera > distraction, drowsiness
  - Driver Model > behavior, performance
- Enhancement of sensor-based ADAS features, e.g.: Predictive ACC, "green" ACC
- Improved feature reliability

**Benefits and Possibilities**
- Extend the perception, detection and assessment of road obstacles and dangerous situations
- Adapt the interaction and the cooperation to the driver state and the driving situation
- Improved driver assistance functions can be realized for a higher comfort
- Increased end user acceptance