

Updates in highly automated driving - key components for driver-vehicle interaction

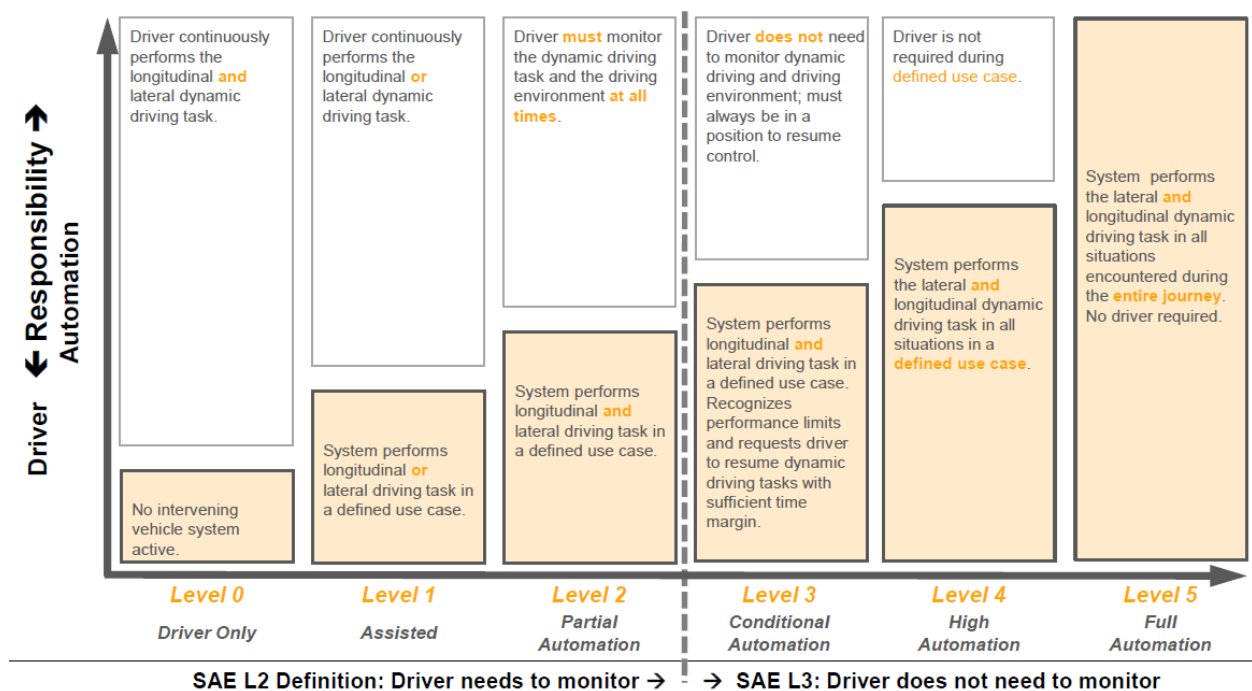
Dirk Zittlau, Director of Product Development Center Camera Products
 Continental AG, Germany
Dirk.Zittlau@continental-corporation.com

Summary: This presentation describes the driving factors and proposed solutions and services for connecting, controlling and operating vehicles in the future context of automated driving. One important target is to develop intelligent solutions that make driving safer and more comfortable. Therefore, the holistically connect vehicles with drivers and passengers and with other vehicles and the environment, including the holistic interaction concepts needed for the interfaces between the driver and the vehicle will be analyzed and potential solutions are presented.

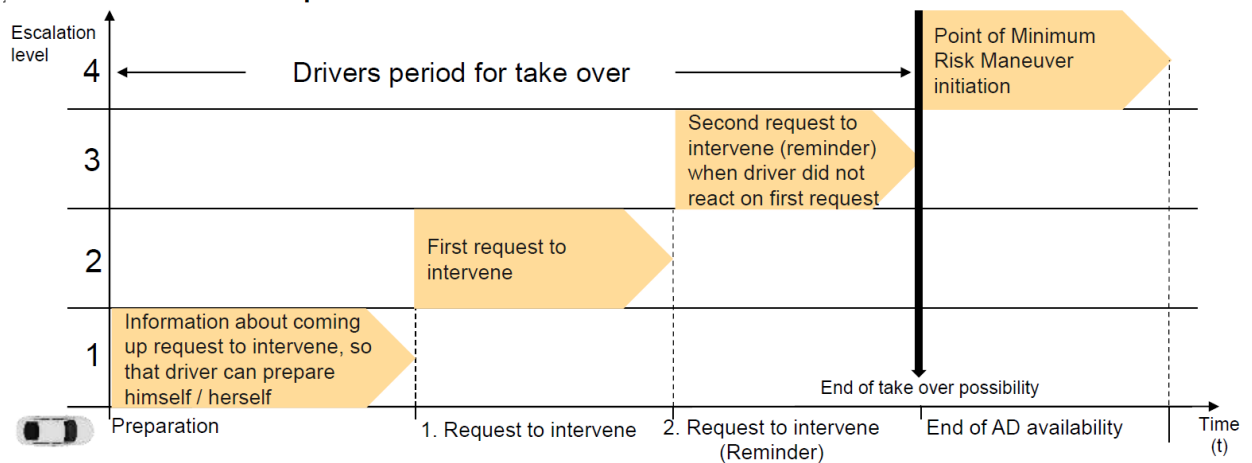
Keywords: Automated Driving, Human-Machine Interface, Driver Monitoring, Cabin Monitoring, Car Safety and Comfort, Holistic HMI

Description of your Keynote Presentation

The actual car industry is heading towards a driver out of the loop that will change the actual car driving paradigm. This will affect both input devices and output device inside the car. One of the key aspects are if the systems can be trusted by the “driver” and passengers. Therefore, a holistic approach is proposed to fulfill both safety requirements and comfort aspects.



The detailed presentation will emphasize the impact on the product in relationship to the roll-out of Level 0 to Level 5 Automation of cars.



As example, the integration of interior cameras will enable a reliable method for automated intervention in traffic situations where the driver is not reacting as expected after the car will request intervention.

The presentation will contain 3 main chapters:

- Holistic Design Approach
- Human Machine Interaction for highly automated driving
- Key components for HMI for highly automated driving