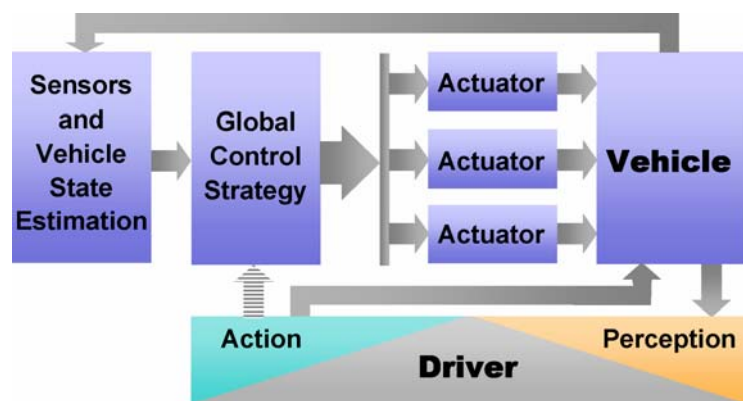


Evaluation of Driver-Vehicle Interaction

The way the driver perceives the vehicle reactions to both disturbances and his own steering inputs greatly influences the driver's experience of drivability, safety and comfort. Current research activities provide:

- Improved insight into driver-vehicle interaction
- Correlation between objective vehicle characteristics and subjective impression of driving

Control loop taking the driver into consideration



Driver's perception of vehicle movement

Correlation

Favorable driving and steering experience under normal driving conditions

Moderate and calculable disturbance reaction

Advantageous feedback upon sensible control actions

Correlation between objective measurements and subjective impression of driving

With the growing number of active systems in the vehicle the freedom of design of the handling characteristics increases. Detailed knowledge about the driver-vehicle interaction will help to use the full potential of the new technologies. Key issues are:

- Consideration of the driver in an early development stage
- Common design criteria for an improvement of the driver's subjective assessment
- Brand by Wire
- Adaptation of the vehicle to the driver