

# IAV and AUTOSAR

IAV Services for Digital Mobility



The integration of several interrelated factors within the AUTOSAR structure enables IAV to develop efficient solutions, while simultaneously adhering to cost restraints. This is why IAV remains one of the preferred partners in automotive research and development.

## Powertrain

### Engineering Competence

- ▶ ECU development
- ▶ Software engineering
- ▶ Algorithm design
- ▶ HiL simulation and testing
- ▶ Calibration

### System Competence

- ▶ Diesel and gasoline engines
- ▶ HCCI engines
- ▶ Hybrid powertrains
- ▶ Fuel cells
- ▶ Transmission

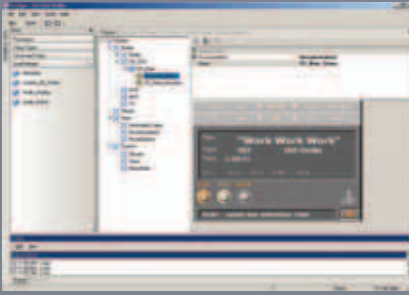
## Safety

### Engineering Competence

- ▶ ECU prototype development
- ▶ Software engineering
- ▶ Algorithm design
- ▶ HiL simulation and testing
- ▶ Application/Calibration

### System Competence

- ▶ Airbag control including rollover and periphery
- ▶ Passenger occupied detection system (PODS)
- ▶ Active chassis control



## Human Machine Interface (HMI)

### Engineering Competence

- ▶ Design of use and test concepts
- ▶ Realization of HMI use cases
- ▶ Specification of complete HMI layout and behavior
- ▶ HMI simulations

### System Competence

- ▶ HMI target software
- ▶ Automatic HMI test
- ▶ Software development support
- ▶ Real prototyping

## Body/Comfort

### Engineering Competence

- ▶ Requirements engineering
- ▶ Specification/Test/Integration
- ▶ Hardware and software development
- ▶ Simulation systems/components
- ▶ Analysis/Benchmark

### System Competence

- ▶ Network architecture/compliance
- ▶ Instrument cluster
- ▶ Advanced lighting systems
- ▶ Seat memory systems
- ▶ Driver assistance systems

## Multimedia/Telematics

### Engineering Competence

- ▶ System specification
- ▶ Networking
- ▶ Hardware and software development
- ▶ Product design
- ▶ System integration
- ▶ System test

### System Competence

- ▶ Navigation
- ▶ Integrated car phone
- ▶ Infotainment
- ▶ Car radio
- ▶ Audio systems/acoustics
- ▶ Telematics/telediagnosics

## Chassis

### Engineering Competence

- ▶ ECU Prototype development
- ▶ Software engineering
- ▶ Algorithm design
- ▶ HiL simulation and testing
- ▶ Application/Calibration

### System Competence

- ▶ Tire pressure monitoring system
- ▶ Electronic power steering
- ▶ Four wheel drives and lockers
- ▶ Electronic stability program
- ▶ Variable roll stabilizer
- ▶ Active ride control
- ▶ Global chassis control

