



NEW  CONTROL

**Integrated, Fail-Operational, Cognitive
Perception, Planning and Control Systems
for Highly Automated Vehicles**

NewControl

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NewControl – Goal, Objectives & Facts

- **Goal:**

Develop and deliver virtualized platforms for vehicular subsystems that are essential to autonomous operation at SAE Level 3+.

- **Objectives:**

- Accurate and robust adaptive perception systems
- Cost-effective fail-operational processing hardware for cognition, perception and control
- Verifiable and certifiable approaches for safety-critical control functions
- Holistic platform for efficient and stable propulsion control
- Competitive advantage to European industry
- Increased user acceptance of automated control functions





AVL List GmbH:

WP 6 leader, enhancing algorithms for adaptive systems from software engineering applied for health, self-diagnostic and fail operation. Examining the possibility of improving the energy consumption of adaptive controllers by investigating neuromorphic processing units.



Infineon Technologies Austria AG:

WP 3 leader, designing, developing and manufacturing adaptive environment perception striving for further mitigation of perturbations.



Kompetenzzentrum – Das Virtuelle Fahrzeug, Forschungsgesellschaft mbh:

SC3 leader, defining overall system architecture and vehicle and traffic modelling and developing adaptive and predictive motion planning and control.



TTTech Computertechnik AG:

SC2 leader, working on conceptual design and prototypical implementation of technology, e.g. scheduling, and the development of a next generation embedded software platform for autonomous driving.



Thank you for your attention!



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