

# VOLKSWAGEN

AKTIENGESELLSCHAFT

## Temporary Auto Pilot

Highly automated driving on motorways



### Motivation and Objectives

- The Temporary Auto Pilot (TAP) is fundamentally intended to support the driver in monotonous traffic situations like traffic jams or long distance driving
- Here the driver can experience work underload which can lead to a lack of focus and an increased accident risk
- The TAP offers different levels of automation to the driver:
  - Highly-Automated: autom. longitudinal and lateral control (Pilot), hands-off driving
  - Semi-Automated: autom. longitudinal control (ACC) hands-on driving
  - Assisted driving: assisted lateral control (LKAS) hands-on driving
  - Safety function: emergency braking
- Therefore the TAP always offers the best possible support to the driver
- By this means the TAP supports comfort and safety of the driver

### Final Event

- Date: 22nd June 2011
- Place: Gothenburg

### Consortium Partners



### Technology

- Prototypical Implementation of the TAP functionality in an experimental vehicle
- Sensor platform: 77 GHz radar (series production), mono camera (series production), ultrasonic sensors (series production), laser scanners (prototype), E-horizon (prototype)
- Sensor data fusion, plausibilisation and interpretation of environment sensor data
- Transparent functional integration of Pilot function together with established driver assistance systems (ACC, LKAS)
- Driver state assessment via direct (driver monitoring camera, hands on detection) and indirect (steering angle, lane keeping, controls) methods

### Project Organization

- Start / End: February 2008 / July 2011
- Budget / Funding: 2 M€ / 1 M€
- Funded by: EC, DG Information Society and Media
- Priority Area: ICT for Intelligent Vehicles
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