

interactive



Accident avoidance by active intervention for Intelligent Vehicles

www.interactIVe-ip.eu

interactIVe – Lessons learnt and next steps

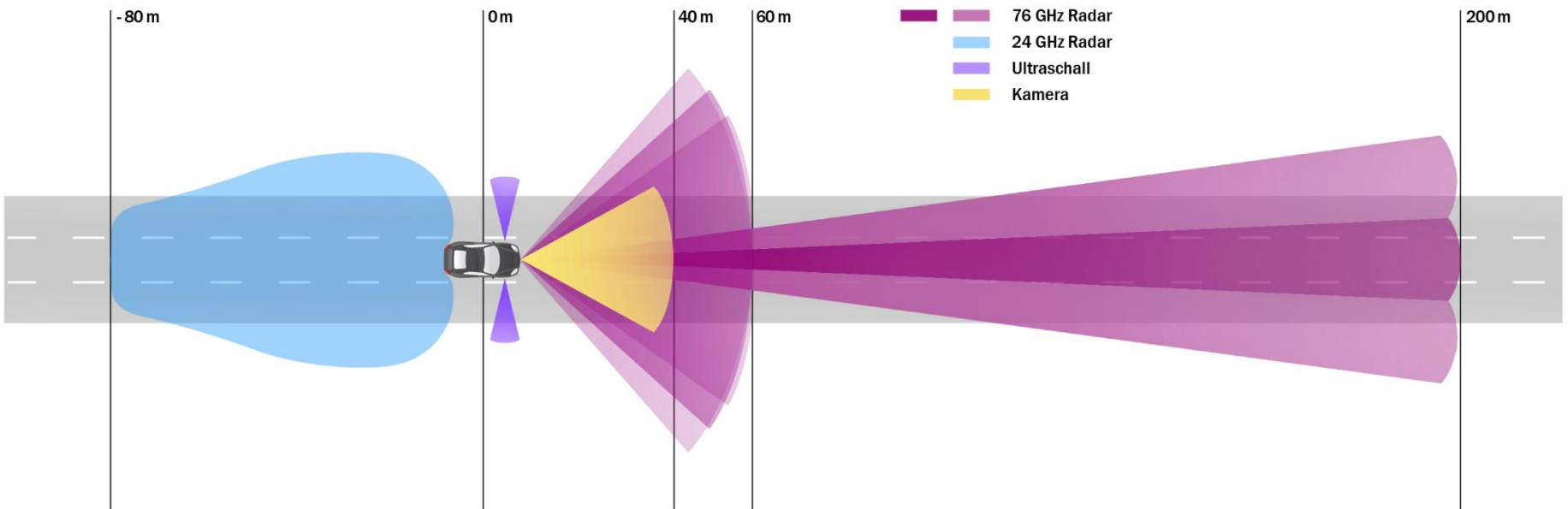
Aria Etemad
Volkswagen Group Research

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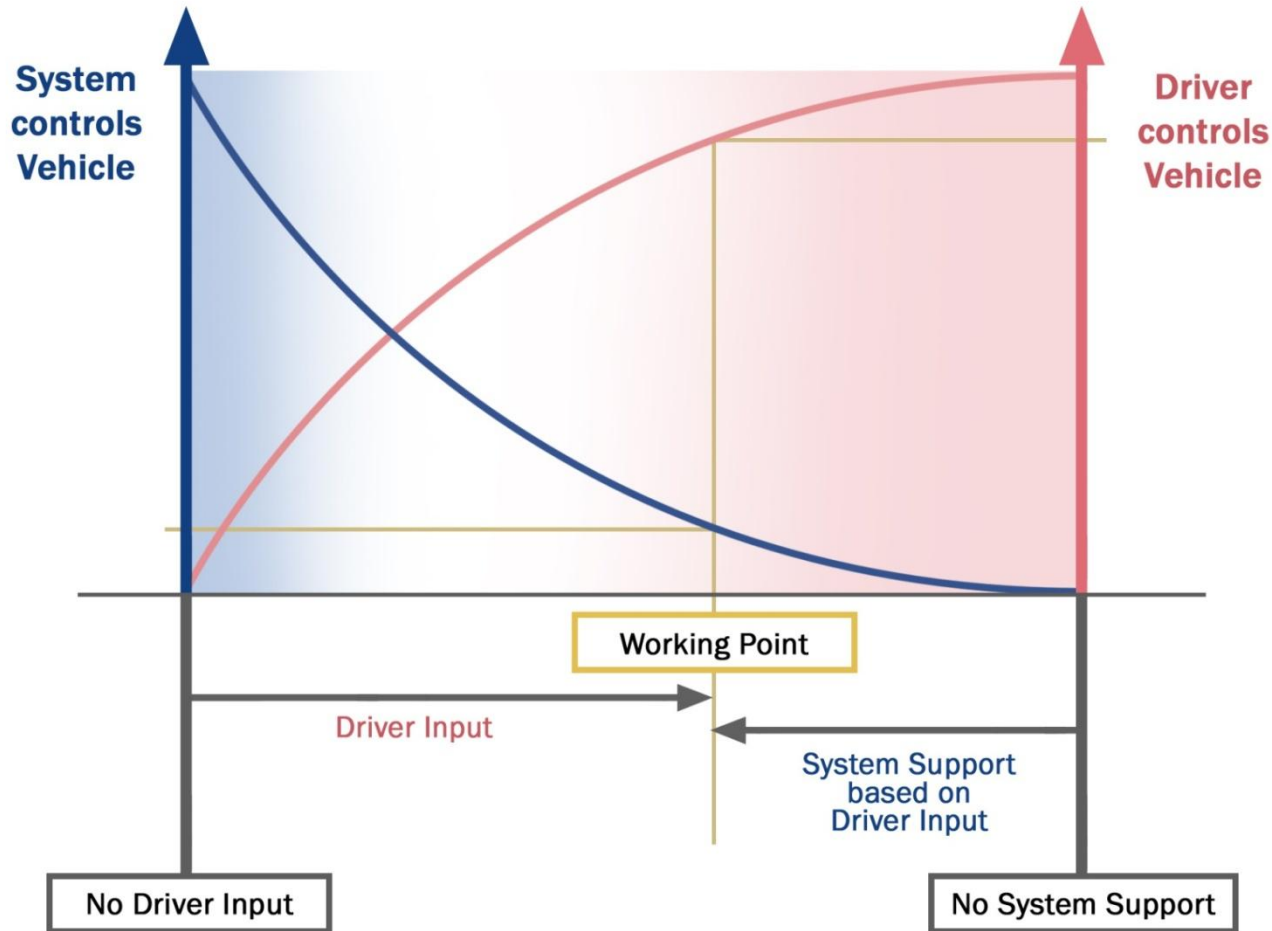
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AKTIENGESELLSCHAFT

Sensor concept



Support: splitting driving task between driver and vehicle



Research concept



interactIVe Demonstrators – assistance for drivers

SECONDS

- Continuous Support
- Curve Speed Control
- Enhanced Dynamic Pass Predictor
- Safe Cruise



INCA

- Lane Change Collis. Avoid.
- Oncoming Vehicle Collis. Avoidance/Mitigation
- Rear End Collis. Avoidance
- Side Impact Avoidance
- Run-off Road Prevention



EMIC

- Emergency Steer Assist
- Collision Mitigation



AdaptIVe: Automated Driving Applications & Technologies for Intelligent Vehicles



Levels of Automation (BASt 2011)

Assisted driving

- The driver permanently controls either longitudinal or lateral control. The other task can be automated to a certain extent by the assistance system.

Partly automated

- The system takes over longitudinal and lateral control, the driver shall permanently monitor the system and shall be prepared to take over control at any time.

Highly automated

- The system takes over longitudinal and lateral control; the driver must no longer permanently monitor the system. In case of a take-over request, the driver must take-over control with a certain time buffer.

Fully automated

- The system takes over longitudinal and lateral control completely and permanently. In case of a take-over request that is not carried out, the system will return to the minimal risk condition by itself.

AdaptIVe: project structure

SP1: IP Management (VW)

SP2: Response 4 (DAI)

SP3: Human-Vehicle Integration – collaborative automation (VTEC)

**SP4: Automation in
close-distance
scenarios (DEL)**

**SP5: Automation in
urban scenarios
(CRF)**

**SP6: Automation in
highway scenarios
(VW)**

SP7: Evaluation (IKA)

Thanks are given to the interactiVe Consortium

- OEMs



BMW Group
Research and Technology



VOLKSWAGEN
AKTIENGESELLSCHAFT

DAIMLER



VOLVO

- Suppliers



DELPHI

NAVTEQ



conekT

- Research

CHALMERS



bast



UNIVERSITY
OF TRENTO - Italy

- SMEs



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Thank you.

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Contact:

Aria Etemad

VOLKSWAGEN AG

Letter box 1777, 38436 Wolfsburg, Germany

Phone: +49 5361 896 2334, Email: aria.etemad@volkswagen.de