AdaptIVe

Automated Driving Applications & Technologies for Intelligent Vehicles

Project Coordinator Aria Etemad
Volswagen Group Research

Presented by Lars Bjelkeflo
Volvo Group Trucks Technology
### Project overview

<table>
<thead>
<tr>
<th><strong>Budget:</strong></th>
<th>EUR 25 Million</th>
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<tr>
<td><strong>European Commission:</strong></td>
<td>EUR 14.3 Million</td>
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</table>

| **Duration:** | 42 months (January 2014 – June 2017) |

| **Coordinator:** | Aria Etemad, Volkswagen Group Research |

| **8 Countries:** | France, Germany, Greece, Italy, Spain, Sweden, The Netherlands, UK |

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[European Commission Information Society and Media]

[European Council for Automotive R&D]
AdaptIVe

The Consortium

[Logos of various organizations]
Previous projects

Normal Driving

Increasing Hazard

Crash
Towards automation

System controls Vehicle

Driver controls Vehicle

Working Point

Driver Input

No Driver Input

No System Support

System Support based on Driver Input
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.
## Classification of existing applications

<table>
<thead>
<tr>
<th>Speed</th>
<th>Event Based</th>
<th>Assisted</th>
<th>Partly automated</th>
<th>Highly automated</th>
<th>Fully automated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Event based</td>
<td>City Stop, Park assist</td>
<td></td>
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<tr>
<td></td>
<td>permanent</td>
<td>ACC+</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mid</td>
<td>Event based</td>
<td>FCW, BLIS, CMbB</td>
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<td>ESC</td>
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<tr>
<td></td>
<td>permanent</td>
<td>ACC, LDW, LKA, LCA</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Event based</td>
<td>FCW, BLIS, CMbB</td>
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</table>
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)
Contact:

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Driver Assistance and Integrated Safety

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