

DESERVE

Development Platform for Safe and Efficient Drive

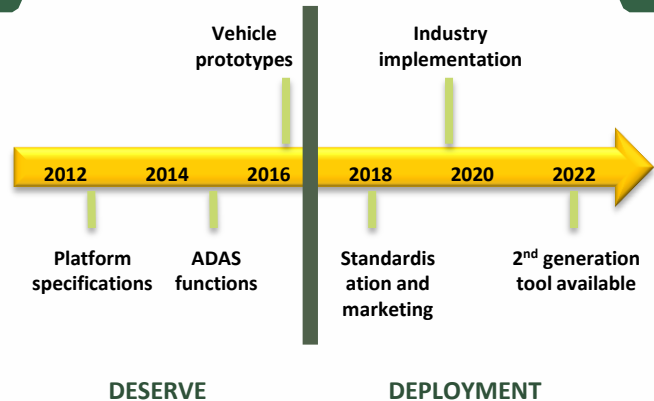
Vision

Design and develop a Tool Platform for embedded ADAS

- exploiting the benefits of cross-domain software reuse
- standardising the automotive software component interfaces
- easy integration of heterogeneous modules

Low cost, highly reliable, standardized Tool Platform for can seamlessly integrating different functions, sensors, actuators and HMI to enable the development of a new generation of ADAS applications.

Schedule & Milestones



Sub-project

1. Requirements and Specifications
2. ADAS development Platform
3. Driver behaviour - HMI
4. Test Case Functions
5. Integration and Tests
6. Validation and Evaluation
7. Dissemination and exploitation
8. Project Management

Facts

Budget	25 M€
EU Funding	4.2 M€
National funding	7,2 M€
Schedule	Sep 2012 – Feb 2016
Programme	ECSEL Joint Undertaking
Coordinator	Matti Kutila, VTT
Partners	23 partners from 9 countries
Contact	matti.kutila@vtt.fi
Website	www.deserve-project.eu

Final Event

16th December, 2015

Contacts



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DESERVE

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DESERVE Platform:
„The journey is the reward“

ADAS application portfolio

(compliant with DESERVE module concept)

Functions:
Emergency brake,
VRU protection,
InterUrban Assist,

Common Modules:
Lane course,
VRU detector,
Vehicle detector,

Requirement engineering for next generation ADAS systems

Matlab/Simulink/ADTF/RTMaps

Model Based DSE

ADAS rapid prototyping framework

Specifications and requirements for System on Chip (SoC)

MicroAutoBox, FPGA-Board,
Embedded PC, Aurix, ...

Validation and Test

Cost prediction
(silicon area, throughput, Pw, ...)

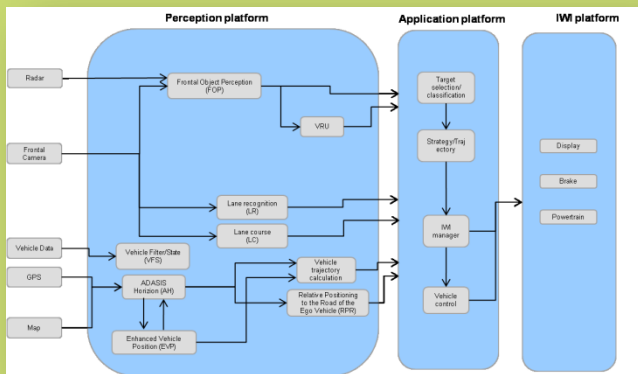
HIL, MIL, PIL test bench

next generation embedded ADAS systems

Iterative process
> 15% speed up

Results

- Methodology for the common software platform
- Development of the selected ADAS functions
- HMI design, driver model and driver monitoring
- Verification of the tool platform methodology
- Implementation of the 5 demonstrators



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