Piloting Automated Driving on European Roads

SAFER Research Day

2018-04-19

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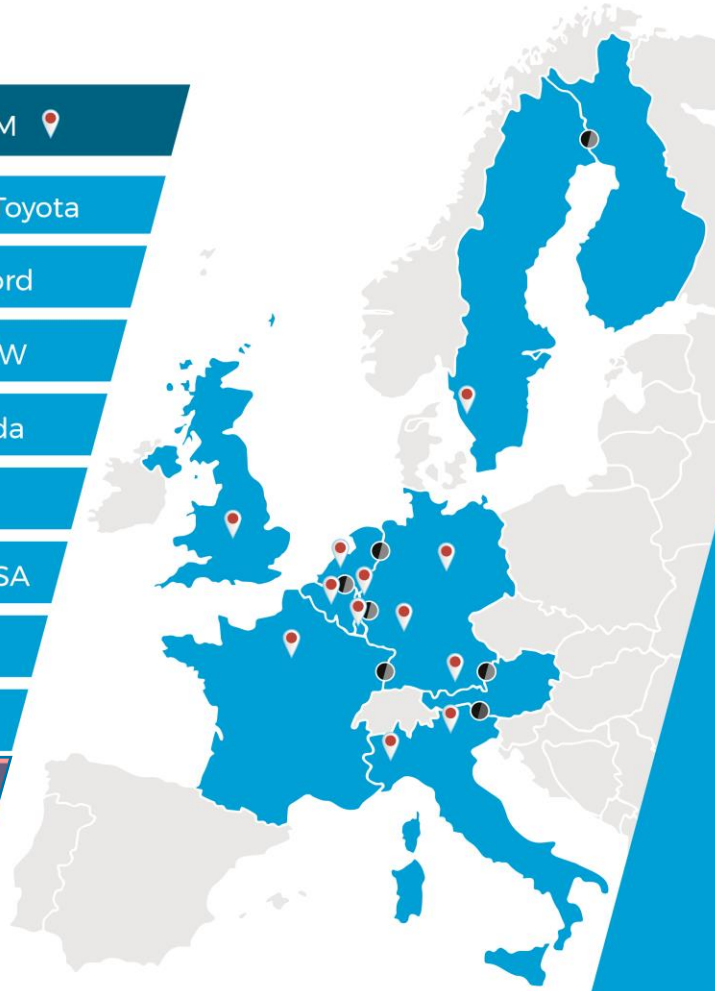
L3Pilot
Driving Automation
1,000
drivers
100
cars
10
countries

Pilot across Europe

CROSSBORDER		COUNTRY / REGION / OEM	
Austria	Germany	*BE* / Brussels / *NL*	Toyota
Austria	Italy	*DE* / Aachen	Ford
Belgium	Germany	*DE* / Munich	BMW
Belgium	Netherlands	*DE* / Offenbach	Honda
Finland	Sweden	*DE* / Wolfsburg	VW
France	Germany	*FR* / Paris and other regions	REN / PSA
Germany	Netherlands	*IT* / Turin and Trento	CRF
		LU / *NL*	Delphi
		SE / Gothenburg	Volvo
		UK / Coventry	JLR



Facts

Supported by eucar EUROPEAN COUNCIL FOR AUTOMOTIVE R&D

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 723051.

Large scale SAE level 3 PILOT

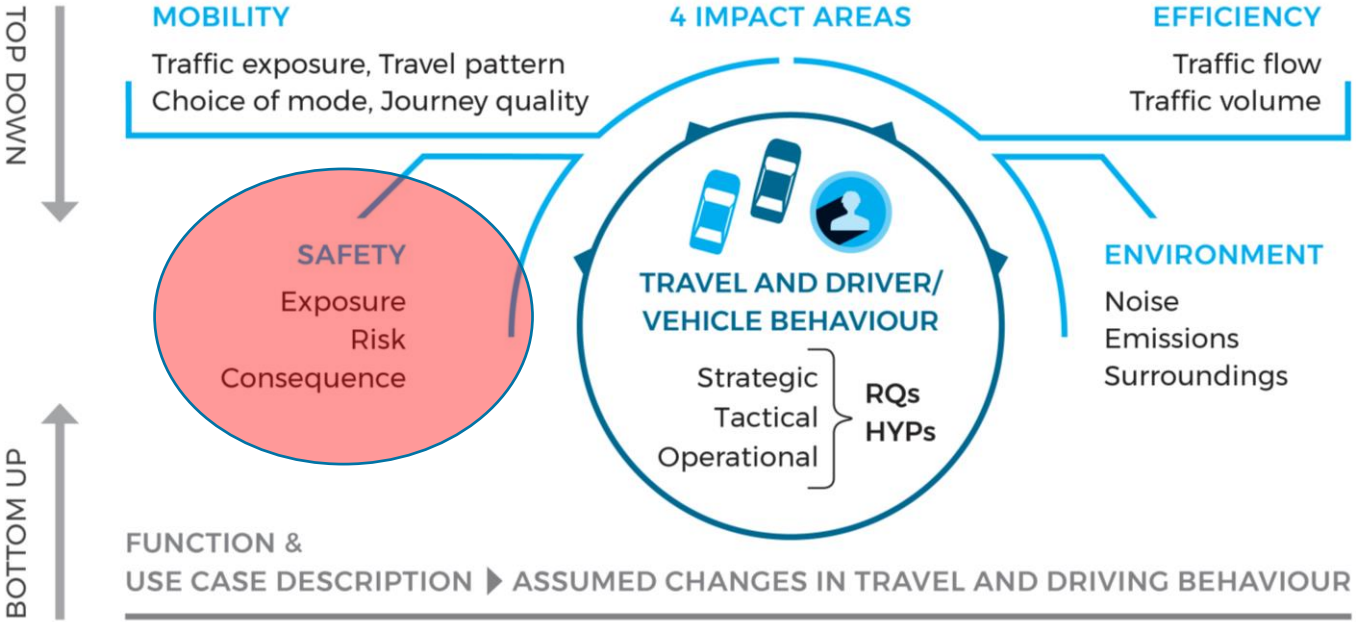
48 months DURATION, starting in September 2017

€36 million FUNDING

34 PARTNERS, among them OEMs, suppliers, research, SMEs, insurers, authorities and user groups

MAIN GOAL:
Investigate impact of automated driving on safety, mobility, efficiency and environment

Impact Assessment



L3Pilot Driving Automation

Objectives

1,000 drivers 100 cars 10 European countries Piloting Automated Driving on European Roads.

Methodology

Data

Evaluation

Fleet

Piloting

Code of Practice

PREPARE → DRIVE → EVALUATE

DEPLOY - Europe-wide Piloting Environment - User Studies - Business Studies


Traffic Jam

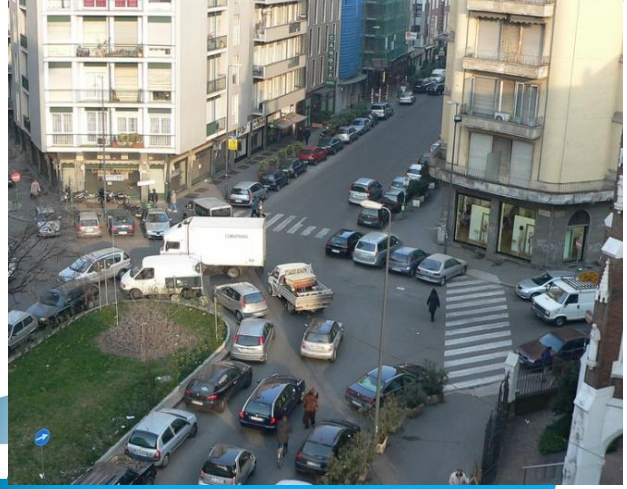

Motorway


Parking


Urban

Motorway

- Lane following and in some cases overtaking in a highly or fully automated manner
- Investigate planned take-over and fall-back strategy
- Naturalistic driving on Gothenburg urban motorways (DriveMe project)



Urban

- Complex traffic and dynamic environment with multiple objects of different types (incl. pedestrians)
- Interaction with vulnerable road users such as cyclists and pedestrians
- Test drives on Gothenburg urban motorway with “Wizard of Oz” vehicles

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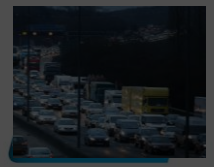
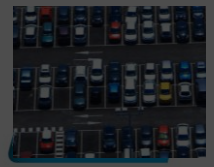
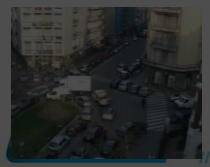


Traffic Jam

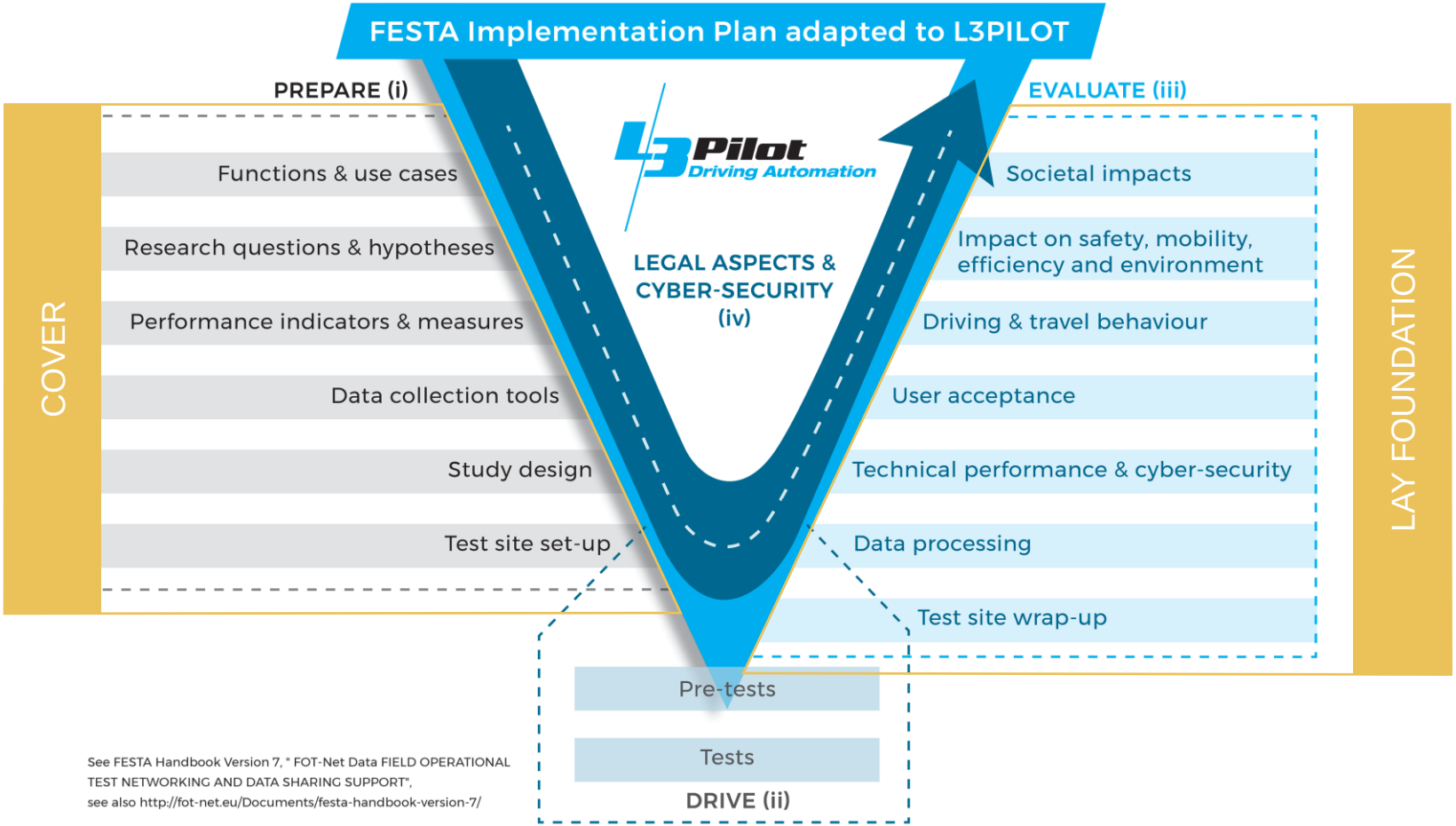
Motorway



Parking



Urban


FESTA Implementation Plan adapted to L3PILOT
PREPARE (i)
EVALUATE (iii)
COVER
LAY FOUNDATION
Functions & use cases
Research questions & hypotheses
Performance indicators & measures
Data collection tools
Study design
Test site set-up
Societal impacts
Impact on safety, mobility, efficiency and environment
Driving & travel behaviour
User acceptance
Technical performance & cyber-security
Data processing
Test site wrap-up
L3Pilot Driving Automation
LEGAL ASPECTS & CYBER-SECURITY (iv)
Pre-tests
Tests
DRIVE (ii)
See FESTA Handbook Version 7, " FOT-Net Data FIELD OPERATIONAL TEST NETWORKING AND DATA SHARING SUPPORT",
see also http://fot-net.eu/Documents/festa-handbook-version-7/

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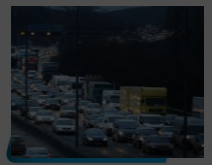

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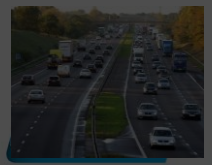
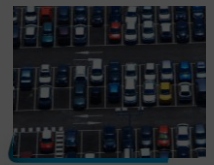
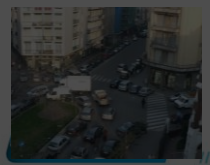


Motorway

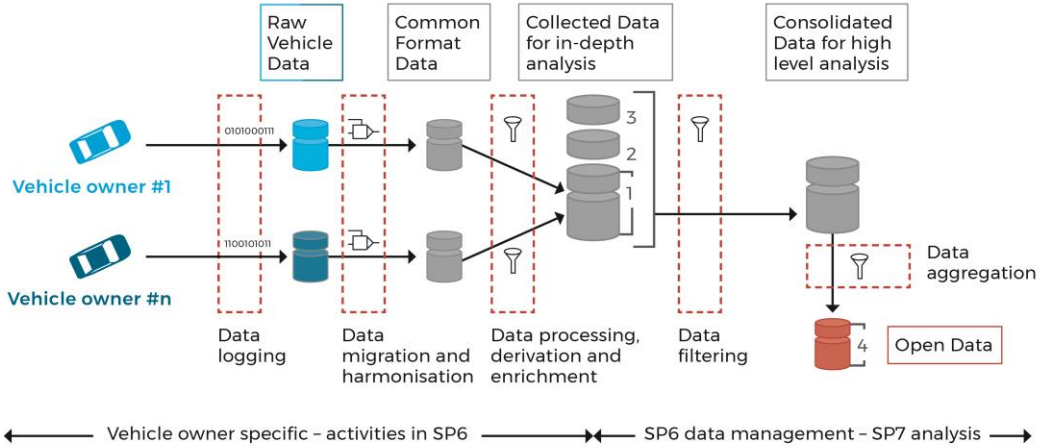


Parking



Urban

Expected Data Flow



Categories of data:

1 Derived Vehicle Data (CAN, GPS, PIs, video, and/or video annotations)
2 Subjective Data (interviews, questionnaires, simulator studies)
3 External Data (weather, map, ...)
4 Open Data (aggregated data)

Tools provided by SP5

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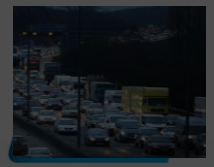

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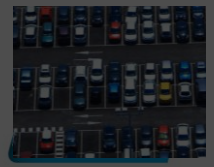

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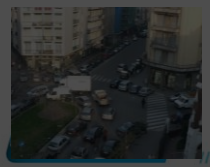
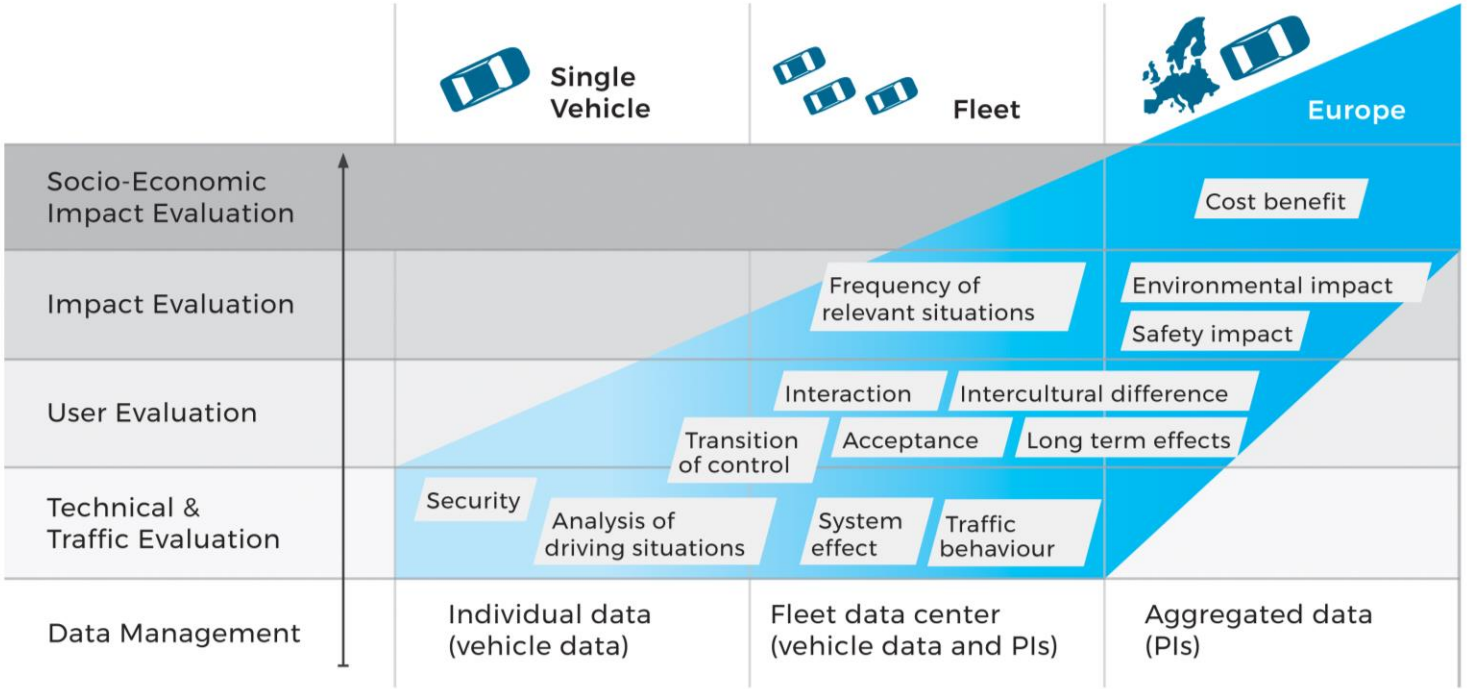


Urban

Methodology



Thank you for your kind attention.

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