

Piloting Automated Driving on European Roads

SHOW 1st Concertation Workshop

16 December 2020, virtual

Aria Etemad

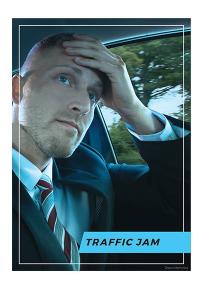
Volkswagen Group Innovation

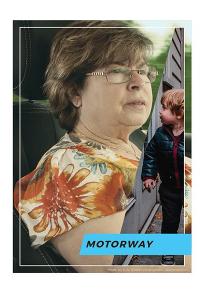


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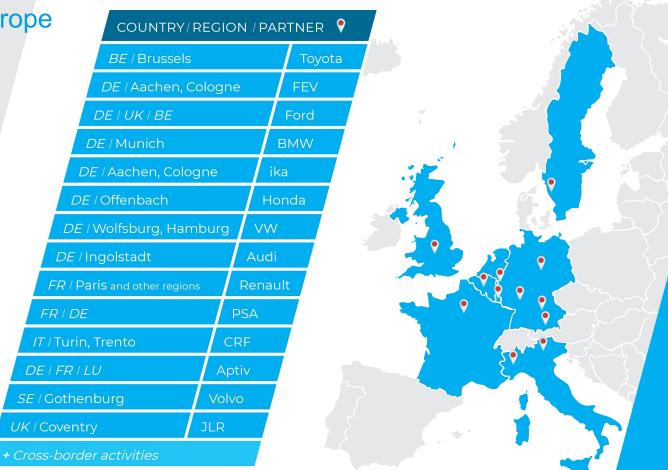






Pilot across Europe









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



€68 million BUDGET

48 months DURATION, starting in September 2017

€36 million FUNDING

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

12 COUNTRIES involved: Austria, Belgium, France, Finland, Germany, Greece, Italy, Netherlands, Norway, Sweden, Switzerland, UK



Partners



























TOYOTA



Suppliers

OEMs



SMEs









Deutsches Zentrum für Luft- und Raumfahrt German Aerospace Center























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Authority











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



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Methodology

Data

Evaluation













Fleet

Piloting

Code of Practice

PREPARE

DRIVE

EVALUATE

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

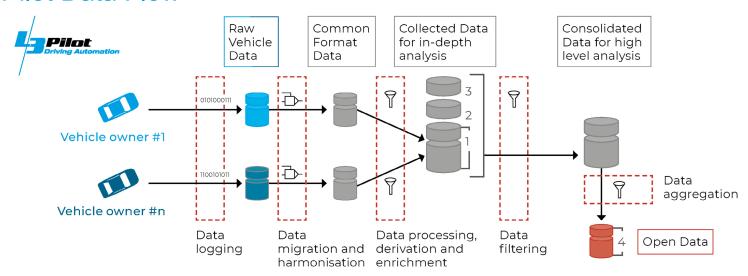








L3Pilot Data Flow



← Vehicle owner specific – activities in SP6 → SP6 data management – SP7 analysis →

Categories of data:

Tools provided by SP5

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



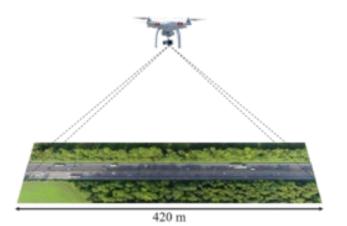


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L3Pilot Data: OpenDD – A Large-Scale Roundabout Drone Dataset https://l3pilot.eu/data/



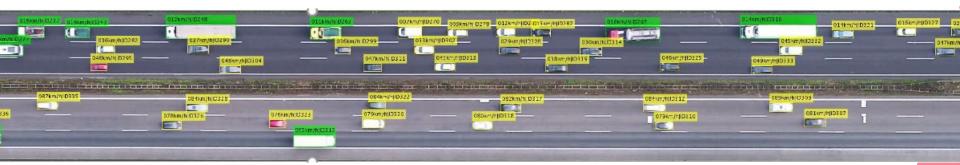
L3Pilot Data: FKA Drone Dataset





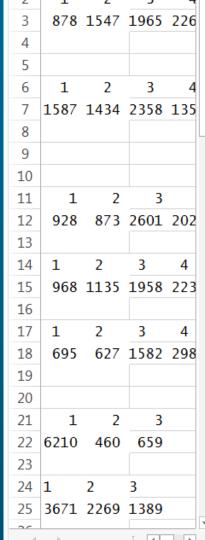






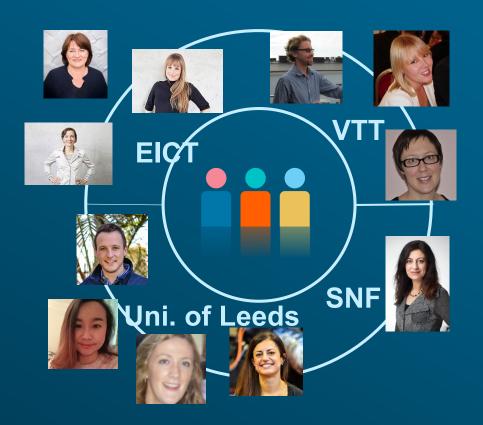


L3 User Acceptance Survey



Working group: Who we are and what we do





- Share data set among working group members
- Develop common publication plan
- Align questionnaire with pilot site questionnaire and other related studies
- Address user-related RQs that will not be addressed by other studies

Facts and Figures: Online Survey









17 countries

18,631 car drivers

Data collection

05-06/2019 & 02-03/2020

Long-term // Representative // Worldwide

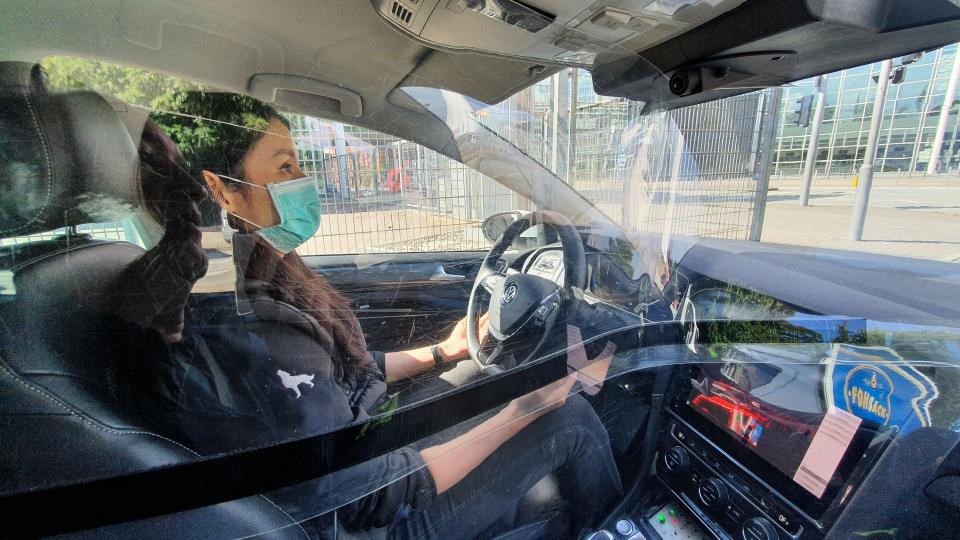
Piloting activities











Piloting activities









Autonomous Drive









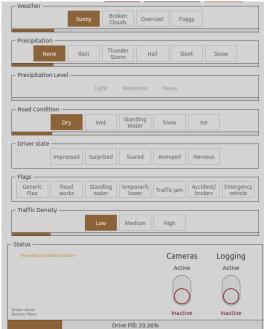


A few lessons learnt

- Camera logging solution
- Data logging and ADF system visualisation tool
- Experimental metadata (drive type, participant ID) and situational variables (e.g. weather, traffic flow) logging tool
- Conversion from raw data to CDF should not be underestimated
- Version control for conversion tools is essential
- Data quality checks required from early on (pre-pilot data files)









H2020 DT-ART-06-2020 Large-scale, cross-border demonstration of highly automated driving functions for passenger cars

Making automation robust and reliable

2021 - 2025



Thank you for your kind attention.

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