



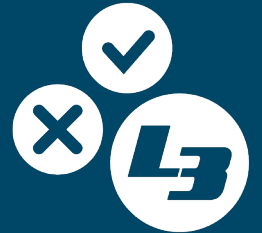
## ADF Impact Assessment – Wrap-Up Session

### L3Pilot Final Event

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*And all “impact assessment” contributors*

# *Evaluation*

## 1. Scope of the impact assessment



1. Mobility 

2. Traffic Safety 

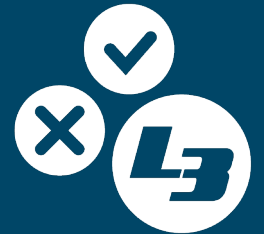
3. Traffic Efficiency 

4. Environment 

5. Socio-economics 

# *Evaluation*

## 2. Main Findings

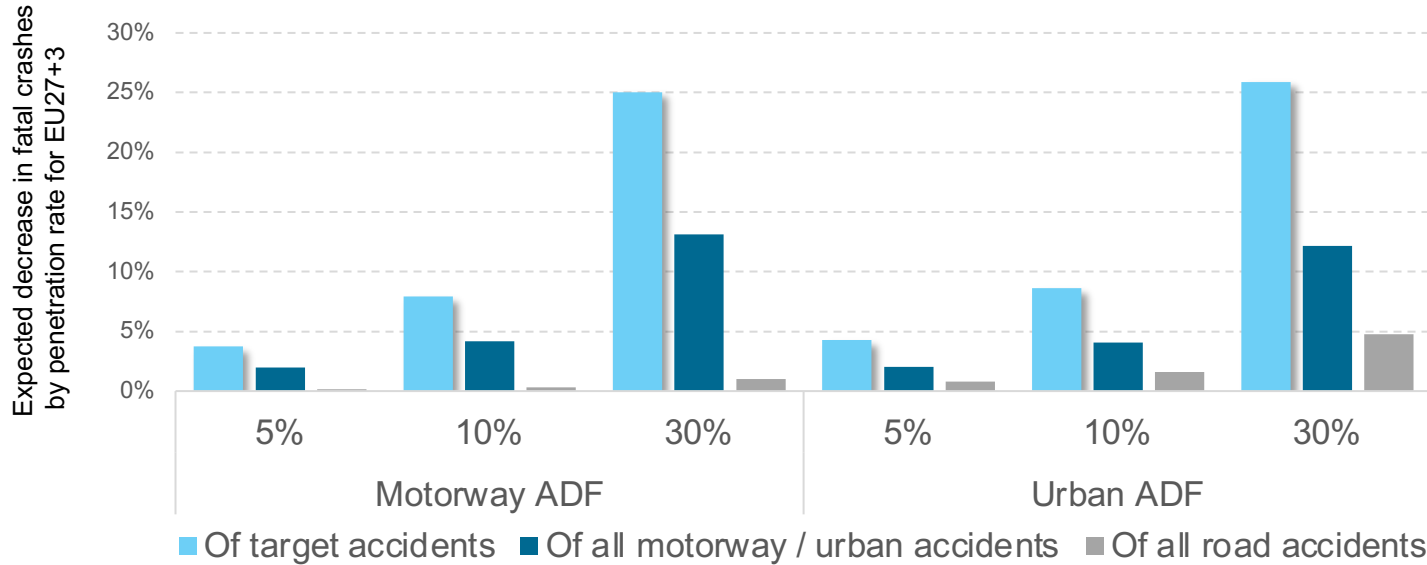


# 1. Mobility



ADF passenger cars increase travel quality, and may modify travel patterns (e.g. driving in rush hours less unpleasant, shift from public transport to car) and amount of travel (drive more with ADF) for a significant part of drivers.

# 1. Safety



## ADF passenger cars save lives and mitigate injuries

# 3. Efficiency & 4. Environment



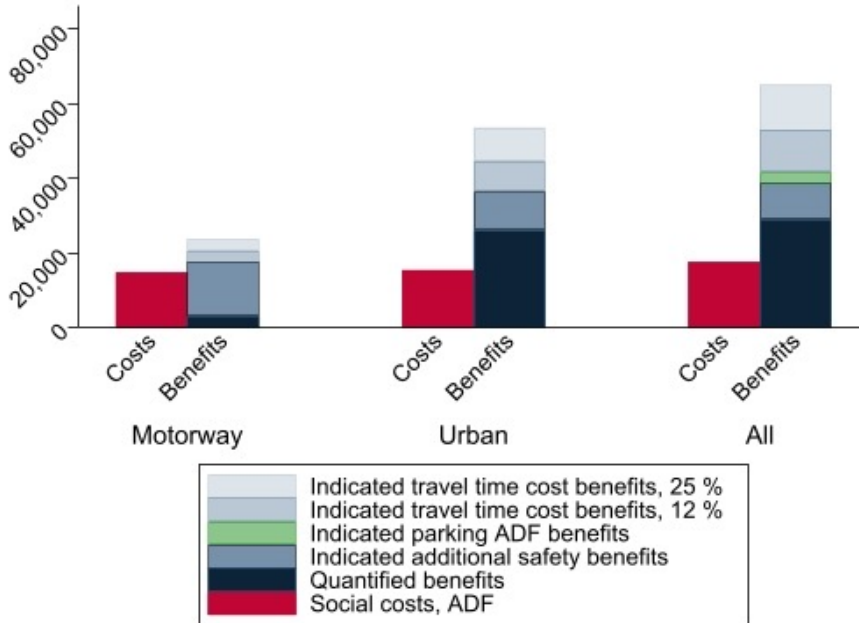
- **Urban**

- Benefits for both travel time and emissions at highest traffic volumes and high penetration rates
- Effect dependent on network properties and structure

- **Motorways**

- Scaled-up effects of ADF on traffic efficiency and emissions are rather small
- Impacts are largest with high traffic volume and penetration rates
- However, most driving on EU motorways takes place in low traffic conditions

# 5. Socio-Economic Impacts



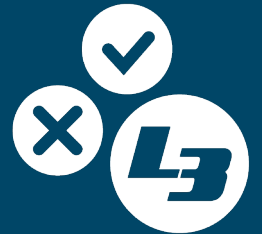
Benefit cost ratio of introduction of ADF on motorways and urban areas is higher than one



# *Evaluation*

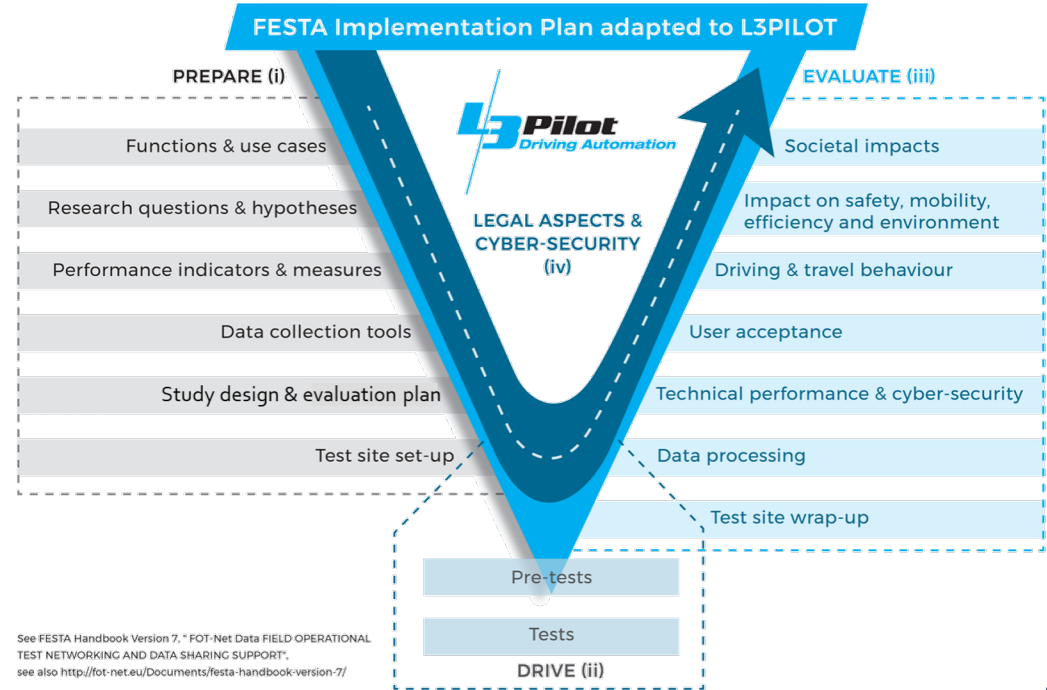
## 3. Method

How did we proceed to  
answer research  
questions ?



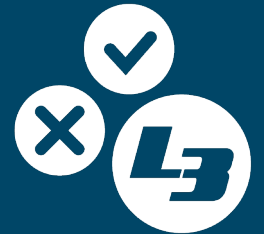


# We successfully modified and applied the FESTA approach for AD pilots



## *Evaluation*

### 4. Overall Conclusion



# Conclusion (1)

- Data – both from the pilot as well as external – played a crucial role
- L3Pilot contributed to evaluation methodology development in many areas
- Investigation of safety and efficiency impacts at different penetration rates calls for computer simulations
- Similar methods could be easily applied to other ADF, especially shuttles, robot taxis based on public transportation
- Value of travel time during automated driving should be further investigated, noticeably in the light of longer and defragmented ODDs

# Conclusion (2)

- Assessing “mature ADF” and not specific L3Pilot prototypes shows the overall tendencies that each variant would likely follow
- It is important to keep in mind that the mature functions are assumed to be market-ready
- Methodology-wise comprehensive approaches were implemented that can be built upon further
- Impact results are overall very positive and encouraging
- In urban higher gains could be achieved (i.e. higher number of accidents to be prevented or mitigated). However, it is a much bigger technical challenge
- Socio economic impact assessment can be extended in the future to consider analyses per economic actors
- There are valuable contributions for the continuation of efficient standardisation and regulation



Thank you for your kind attention.

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And all impact assessment contributors



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