



Setting experimental procedure for the pilots

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Merja Penttinen
VTT



www.L3Pilot.eu

[Twitter@_L3Pilot_](https://twitter.com/_L3Pilot_)

[LinkedInL3Pilot](https://www.linkedin.com/company/l3pilot)

Objectives for the experimental procedures

- The main objective is to provide a solid evaluation methodology to be implemented throughout L3Pilot pilot sites.
- Furthermore, the aim is to harmonize the evaluation criteria by providing detailed requirements for the pilots in the intention to create holistic evaluation results of the L3pilot project.
- As the first step, the overall testing plan is being provided.
- Later, the detailed testing plan per pilot site will be finalized during the fall 2018.

Step 2: Define experimental procedures and make plans how to implement them on the pilot sites



Controlled tests:

- What is allowed?
- By whom?
- Where?
- When?
- In which conditions?
- For how long?
- Etc...

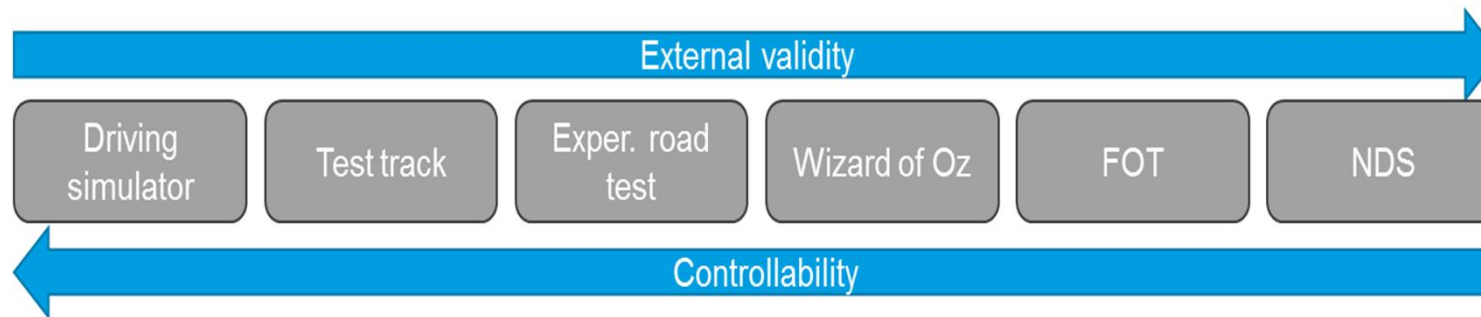
What belongs to experimental procedures?

- Approaches
- Participants
- Experimental designs & environments

- Scaling up and input for the Code of Practice of AD



Approaches validity vs. controllability



Participants

- How to select the participants for the tests?
 - Demographics
 - Representativeness
 - Variation
 - Familiarity with the systems
 - Naïve subjects
 - Experienced subjects
 - Driving experience
 - Internal vs. External participants
 - Professional vs. non-professional drivers



Experimental designs

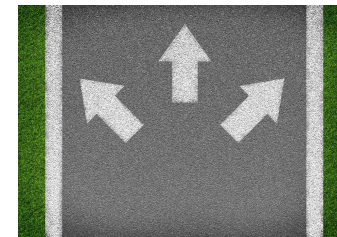
= “framework” for data collection and analysis

- Within/between subjects
 - Preliminary plans/suggestions for the analyses
 - Before-after measurements (control and experimental group)
- Baseline(s) selection
 - Common baseline or individual baseline?
 - Baseline for professional vs. general public
- Duration of test driving in field
- Combinations of measurements, Order of measurements
- Definition of events – a basic unit for the analyses



Experimental environments

- Test environment (circumstances and situations)
- Geographical location
- Road type
- Traffic conditions and interaction with other road users
- Time of day
- Seasonal effects (weather conditions)
- ...
- -> Link to scaling-up principles



Practical support to the test sites

- Visits to the test sites
 - Planned approach and test subjects
 - Additional information on operators, safety drivers etc.
 - Professional drivers – company employees – externals?
 - Baseline(s)
 - Test environments
 - Route/routes; Weather and traffic situations covered
 - Basic functionality of the AD
 - The role of the driver(s)
 - Planned data collection, objective and subjective data
 - Summary: analysis of each research question - > to ensure L3Pilot-evaluation





Thank you for your kind attention.

Merja Penttinen
merja.penttinen@vtt.fi



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