Setting experimental procedure for the pilots

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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.

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