Panel discussion

• How to find priorities for implementation and how to implement?
  – City of Amsterdam: learning by doing (pragmatic approach) → living lab approach
  – France: stepwise → connectivity and then automation
Panel discussion

- Security
  - Gbit level to 10GBits level (car data increases)
  - Multi-communication channels (mix of technologies! 5G, UWB etc)
  - Upgradability of security mechanisms during life-time of a car → research questions of today (not yet solved)
Panel discussion

• Security – how to test?
  – Do have OEMs to share everything?
  – Autonomy: Bad driver vs. better driver
  – Certification tests instead (cars will always feature different technologies)
  – EuroNCAP for security (rating)
  – Number / kind of scenarios
Panel discussion

• Moore’s law has changed (Stanford article)
  – Slows down
  – SW becomes more and more important
  – SW intense vehicles
• Upgradability of HW components
  – Subject of research
  – Natural evolution
• Extendibility of car configuration
  – Has to be considered in the design phase
  – No process in place right now
Panel discussion

• V2X in different countries
  – Addressed by today but not yet implemented
  – Corridor experiments
  – Current use cases might change in 10 years → we have to be dynamic and adopt to new mobility

• Public transport
  – Diverse mobility
  – Can technology be transferred?
Panel discussion

- Evolution of the car of tomorrow
  - Infrastructure sensors might lower costs
  - Question of policy
  - Shared mobility
  - Cars will “just” be a commodity
  - Society with no individual car ownership “Mobility as a service”
Panel discussion

• How to train cars and how to practice “drivers” of the future?
  – Tons of data how driver behave (no automation)
  – Include not deployed features already now to generate new suitable data
  – Process of type certification is missing
Panel discussion

• Timeframe of e-mobility and automation
  – E-mobility (Norway example)
  – Automation: 2030, 2040, 2050 (progressive, conservative)
  – Shared mobility (new entrants like Uber etc.)
  – Mistakes help (see VW)

• Anyway, it will come!
Thank you for your attention