Experiments with automated driving in real-life situations

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A first drive with fully automated vehicle...
RADD research themes

- Interaction with and acceptance by the user
- Automated driving in public transport
- Automated driving in goods transport
- Interaction with non-automated road users
- Integration into the traffic system
Research Lab Automated Driving Delft
Our partners

• Initiated by
Automated Vehicles Last Mile
Rivium Buses (Rotterdam)

Separated track
Road based transponders
Supervisory control
Since 1999…
WePod
Toyota Prius

- Hybrid passenger car
- Manual driving with support tools
- Equipped with hardware for automated driving
- Platoon driving
- Joystick driving
Twizy

- Electric dual-mode
- 1 person
- Manually driven on standard roads
- Automated driving on bicycle paths
- Currently, prepared for drive-by-wire
Jackal

- Small platform
  - 50x43x25 cm
- Max speed 7 km/h
- Mounting platform for special instruments and equipment
- Driven by remote control
Trust?
Expectations?
Behaviour?
Virtual Reality Experiment

- Visit of Welly
- 360° recordings with a dedicated camera
- VR glasses

Nunez Velasco et al (in prep)
Campus as living lab

RADD
- Performance of automated vehicles
- User experience
- Interaction other traffic
- Network & system performance

Bikelab
- Monitoring and management of bicycle flows
- Monitoring mobility
- Smart Bike experiments

Joint systems for monitoring, joint experiments

Realtime monitoring Dashboard mobility (PZH)
Campus as living lab

- Star light camera - 7
- Overzichtscamera - 12
- Cyclosense - 20
- Radar - 4
- Control room
- Ontvangstruimte
- Garage
- Waarschuwingsbord

Green Village
Omheind testterrein
Thank you for your attention!

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