Intelligent Mobility for Smart Cities

11 September 2013, Valkenburg Airport Katwijk, the Netherlands

A high-level technology demonstration day during which visitors, both public and professionals, can take the driver’s seat and experience the latest mobility applications. Participants will get an overview of a diverse variety of technologies, systems, services & actual deployment examples in the field of efficient, cooperative, smart and safe mobility. The event is organized by the Royal Dutch Touring Club (ANWB) and the Fédération Internationale d’Automobile (FIA) supported by the European Commission.

Demonstrations iMobility Challenge

Plenary demonstrations

11.30 - 12.00: Cooperative systems for urban areas
Demonstration of the latest in-car systems for the improvement of safety and quality of life in cities such as in-car sensing systems to protect pedestrians and cyclists and applications for sustainable traffic management in urban areas. See how smart vehicle technology can support the driver. Live demonstration of TNO and Imtech Traffic & Infra.

13.45 - 14.15: Autonomous Driving Car
First shown in the Netherlands, the Autonomous Driving Car. The Netherlands and other EU countries need to prepare for the arrival of autonomous driving cars that are able to drive through traffic independently. Experience what it is like when car technology takes over. And what does this mean for the policy regulations in the Netherlands for the next few years. Live demonstration of the autonomous driving car from Mercedes-Benz in collaboration with the RDW.

14.30 - 15.00: eCall demonstration dangerous goods
What happens when a car crashes and automatically activates an emergency call? A complete overview of the process of a car crash, an emergency call to the the public service answering point (PSAP) until the follow-up assistance of emergency services. And what happens when a tank lorry is involved in the same crash? A unique live demonstration of the HeEro project in cooperation with Rijkswaterstaat, Police, 112 emergency center, ANWB, NXP and various emergency services.

15.30 - 16.00: Competition between celebrity drivers
Race with Formula 1 drivers Nico Rosberg, Giedo van der Garde & Robin Frijns.

Demonstrations during the entire day

Energy efficient & sustainable mobility

- Forze hydrogen racing cars
  Forze Hydrogen Racing Team from the TU Delft

- Race between URE08 electric race car & Tesla Model S
  University Racing Team Eindhoven

- Eco-Runner Fuel efficient cars
  Eco-Runner Team from the TU Delft

- Ekolectric Xperiece: Ekolectric car + other sustainable concepts
  Accenda + TU Delft + City of Delft

- Ecomotive Electric car
  Ecomotive team from the Eindhoven University of Technology
• Electric driving experience: various electric vehicles + Twizy circuit
  Renault Nederland

• Electric driving experience: various electric cars on a circuit
  ANWB

• Electric driving experience: various electric cars + SLS Electric Drive
  Mercedes-Benz

• CNG/Greengas Propelled CO2 neutral passenger cars & vans
  Fiat Group Automobiles NL

• The Iveco Dual Energy concept: extremely flexible technology for light commercial vehicles, capable of switching to the most appropriate source of energy depending on the vehicle’s mission. One source is exclusively electric, in order to ensure zero local emissions and low noise levels, the other is hybrid and fits long journeys and extra-urban missions, in order to reduce fuel consumption and CO2 emissions by up to 25%.
  IVECO

• Eco gaming: test your driving sustainability
  CGI

• Spijk-e: electric city vehicle
  Spijkstaal Electro BV

• Eco Challenge App: join the fun of competing in energy efficient driving
  Greater Than AB

• Eco Ramp Metering: energy optimum for traffic competing for scarce road space
  Vialis

• Ecological Driving Support: tactical driving recommendations during driving with visual display and haptic gas pedal
  Ford Forschungszentrum

• Technologies for EV charging infrastructure including: DC fast charging stations, such as the Terra 53 multi-standard DC fast charging station, the Terra SC Duo, powerful network management software, flexible maintenance service portfolio and realtime connected services in cooperation with the ANWB ABB bv
  ANWB ABB bv

• Fuel cell / road led: safe and sustainable lighting without burdening the natural surroundings. The solution for all traffic locations without power source. Roadled® has its own power source, the sun.
  HR Groep
## Cooperative systems

- **Cooperative Adaptive Cruise Control:** impact of CACC on traffic flow  
  DITCM + Automotive NL + TU Delft + Technolution

- **Car2car communication:** cooperative in-car platform in order to reduce congestion problems  
  DITCM + Automotive NL

- **Electronic Emergency Brake Light:** driver information on harsh braking vehicle ahead received by vehicle to vehicle communication  
  Ford Forschungszentrum

- **Local Road Hazard Warning:** driver information on road hazard ahead, e.g. road works, broken down vehicle, shed load etc.  
  Ford Forschungszentrum

- **Cooperative energy efficient intersection control:** cooperative demonstration on intersection priority and intersection approach advice  
  Imtech Traffic & Infra

- **In-vehicle signage:** road signs in the car  
  CGI

- **Green flow demonstrator:** cooperative priority for heavy goods vehicles  
  Imtech Traffic & Infra

- **In-vehicle signage:** display traffic signs in vehicle received by wireless infrastructure to vehicle communication e.g. speed limits  
  Ford Forschungszentrum

- **V2I use case:** demonstration of the possibilities of vehicle to roadside units communication  
  Kapsch Traffic Com

- **VCMAP:** mobile traffic control centre which is used in the region The Hague  
  MAPtm

- **Cooperative Driving Simulator:** driving simulator showing various cooperative applications  
  Imtech Traffic & Infra

- **Evolution of Cooperative Headway:** results of research into in-car information systems about which vehicle speed is optimal and in which lane you should be driving to minimize fuel consumption  
  CGI
Safe mobility

- Accident Free Driving: wide range of in-car safety systems for passenger, vans as well as trucks including the new S-class of Mercedes-Benz
- Emergency Call solutions
- Breakdown Call interactive
- Service Call
- Information Call, Breakdown Call, Service Call + battery check
- Crash simulator
- Instrumented Car & Bicycle: car and bike instrumented with cameras and sensors to study driver’s behaviour
- Mobility behaviour: better understanding of mobility behaviour and effects of interventions based on data and models
- Airbag for bicycles and in-car sensing systems for vulnerable road users
- Demonstrator incident management
- Bikelab: steer assist for bicycles

Smart mobility

- Sbarro – Connected Car & Car Diagnostics: a data-centered driving environment with entertainment and connection resources available on-demand, at the touch of a button
- Imflow demonstrator: city traffic simulation by using adaptive network control systems
- SMART in-car project: improving traffic flow safety with realtime data
- Connected Vehicle: an international ‘Connected Vehicle: an international ‘Connected
Vehicle’ program featuring telematics applications, content and services

- Mobile devices: big data for mobility related solutions; use big data in order to provide smart planning and smart mobility systems
  
  Goudappel Coffeng

- Short term and tactical prognostic model: advanced traffic models which are applied in advanced traffic management
  
  Goudappel Coffeng

- Network Management: implementing safety, sustainability & efficiency policies
  
  Vialis

- Vivaldi: truly integrated traffic & parking management
  
  Vialis

- MobiMaestro: demonstrator of user friendly traffic management software
  
  Technolution

- Car sharing: technology based on the use of a smartphone to make a reservation for the car and open/close the car
  
  Arval bv

- Personal Rapid Transit: a transport method that offers personal, on-demand non-stop transportation between any two points on a network of specially built guide-ways.
  
  2getthere

- Spitsmijdenproject ‘SLIM uit de spits’: congestion avoidance project with appealing results of rewarding drivers to avoid commuting during rush hours in the Arnhem- Nijmegen area. A new SLIM App has recently been introduced as a next step in influencing travelling behaviour.
  
  ARS T&TT + Stadsregio Arnhem Nijmegen

- Demonstrator Realtime traffic & travel information
  
  ANWB + Tomtom

- Demonstrator Realtime traffic & travel information public transport vs car
  
  TomTom

- Ultimate signs: sustainable produced traffic signs
  
  HR Group