



CITY

1 FUTURE PROOF DECISIONS FOR ACCESSIBLE AND LIVABLE CITIES

Urban Strategy

[TNO stand](#), [Impl. visit IC](#), [Impl. visit TNO](#)

2 VALIDATED CONNECTED AUTOMATED DRIVING BASED ON SCENARIOS

Streetwise

[TNO stand](#), [Impl. visit TNO](#)

3 IMPACT EVALUATION AND TRIALS OF CONNECTED AUTOMATED MOBILITY

New Mobility Modeller

[TNO stand](#), [Impl. visit IC](#), [TS23](#), [TS29](#), [TS38](#)



TRAFFIC

4 (TRUCK) PLATOONING IN PRACTICE ENSEMBLE, Autopilot

[TNO stand](#), [Impl. visit TNO](#), [SIS14](#), [TS25](#)

5 SAFE TRANSITION TO CONNECTED AUTOMATED DRIVING SYSTEMS

Streetproof

[Impl. visit TNO](#)

6 HYBRID COMMUNICATION TECHNOLOGY FOR CONNECTED AUTOMATED DRIVING SYSTEMS

[Demo Siemens](#)



VEHICLE

7 ROBUST CONNECTED AUTOMATED VEHICLE SYSTEMS

CAD Hardware in the Loop (HIL) setup

[Impl. visit TNO](#)

8 IMPLEMENTATION & INTEROPERABLE C-ITS SERVICES

C-mobile, talking, traffic, Standards & Practices

[Demo TNO](#), [demo C-Mobile](#), [SIS02](#), [SIS20](#), [TS11](#), [TS21](#), [TS39](#)

9 C-ITS FOR SUSTAINABLE VEHICLES

Hybrid powertrain Hardware in the Loop (HIL) setup

[Impl. visit TNO](#), [TS09](#)



DRIVER

11 HUMAN IN/OUT THE LOOP

Driving simulator & human behaviour research

[Impl. visit TNO](#); [SIS30](#)

10 AUTOMATED VALET PARKING

Autopilot

[Demo autopilot](#), [TS05](#), [TS09](#)

**WANT TO KNOW MORE ON THESE TOPICS?
COME AND MEET OUR EXPERTS AT OUR STANDS, SESSIONS & DEMOS.
INTERESTED IN A PERSONAL APPOINTMENT? GET IN CONTACT!**

IMPLEMENTATION VISITS - HELMOND

	TNO Traffic & Transport	Innovation Centre (ic)
TUE	10:00 - 12:00	15:00 - 17:00
WED	13:00 - 15:00	15:00 - 17:00
THU	13:00 - 15:00	15:00 - 17:00

TECHNICAL SESSIONS - EINDHOVEN

MON	TS05	TP1811	13:30 - 14:30	Saturn
TUE	TS09	TP1717	10:30 - 11:30	Pollux
TUE	TS11	TP1975	13:00 - 14:00	Neptune
TUE	TS21	TP1850	17:15 - 18:15	Pollux
TUE	TS23	TP1832	17:15 - 18:15	Foyer
TUE	TS23	TP1730	17:15 - 18:15	Foyer
WED	TS25	TP1800	10:30 - 11:30	Saturn
WED	TS29	TP1754	13:00 - 14:00	Saturn
THU	TS38	TP1929	09:00 - 10:00	Foyer
THU	TS39	TP1951	09:00 - 10:00	Sun

STANDS

TNO stand - Eindhoven, Evoluon, Dutch street
TNO stand - Helmond, Automotive Campus
Autopilot stand - Helmond, Automotive Campus

DEMOS - HELMOND

TNO	WED - THU
C-mobile	WED - THU
Siemens	WED - THU
Autopilot	MON - TUE - WED - THU

SPECIAL INTEREST SESSIONS - EINDHOVEN

MON	SIS02	15:00 - 16:00	Jupiter
TUE	SIS14	13:00 - 14:00	Castor
TUE	SIS30	13:00 - 14:00	Sun
TUE	SIS20	14:30 - 15:30	Foyer

1 FUTURE PROOF DECISIONS FOR ACCESSIBLE AND LIVABLE CITIES

Our entire mobility system is changing by digitalization and automation. The connected vehicle is just a small part of the system. TNO will demonstrate by use of the simulation environment (Urban Strategy) the impact of intelligent mobility on city level and show how TNO can help you in good decision making on system-to-system level by overseeing the consequences of a mobility innovation. In a city case demonstration, a TNO expert will show you how sophisticated software, expertise and use of real requisite data makes it evident why one solution is better than another.

Contact: Jeroen.borst@tno.nl

2 VALIDATED CONNECTED AUTOMATED DRIVING BASED ON SCENARIOS

As the number of connected automated driving vehicles will rapidly increase the coming years, a need to guarantee traffic safety based on real-life circumstances on European level arises. TNO has developed a methodology and scenario database (Streetwise), to facilitate this process. Come to our stand or implementation visit and get familiar with Streetwise.

Contact: Maurice.kwakkernaat@tno.nl

3 IMPACT EVALUATION AND TRIALS OF CONNECTED AUTOMATED MOBILITY

The impact of Connected Cooperative Automated Driving looks promising, but the exact implications are not clear yet. TNO investigates by large scale real-life trials and validated simulations the actual impact of Connected Cooperative automated driving). Come to our technical presentations and get informed about the executed trials and developed micro simulation models. See yourself how we gained knowledge and simulation models can be used for other locations.

Contact: Isabel.wilmink@tno.nl

4 (TRUCK) PLATOONING IN PRACTICE

TNO leads the European project ENSEMBLE, in which the Truck industry and research institutes work together to bring multi-brand truck platooning on the road. Come to our special interest session and you will be updated on the progress of truck platooning development on European scale, and its promising impact on safety and sustainability.

Contact: Marika.Hoedemaeker@tno.nl

5 SAFE TRANSITION TO CONNECTED AUTOMATED DRIVING SYSTEMS

TNO is working on a methodology (streetproof) to facilitate a safe transition of Connected Cooperative Automated driving on the road in Europe. Come to our implementation visit and you will see how by monitoring, safety indicators and traffic services traffic can be used to enable a safe transition towards automated driving.

Contact: Maurice.kwakkernaat@tno.nl

6 HYBRID COMMUNICATION TECHNOLOGY FOR CONNECTED AUTOMATED DRIVING SYSTEMS

In future, cars and infrastructure will communicate with each other. TNO, together with partners is working on hybrid communication technology. In a live demonstration, two cooperative vehicles are using hybrid communication in a blindspot use case to communicate with each other.

Contact: maurice.kwakkernaat@tno.nl

7 ROBUST CONNECTED AUTOMATED VEHICLE SYSTEMS

To speed up the development of truck automation and platooning TNO has developed a Hardware in The Loop (HIL) setup. In this setup the newly developed algorithms can be tested on the real hardware, by putting the hardware in the loop with multiple simulated trucks. Come to our implementation visit and get a demonstration of the HIL setup and get an insight view.

Contact: Maurice.kwakkernaat@tno.nl

8 IMPLEMENTATION & INTEROPERABLE C-ITS SERVICES

TNO leads the Smart mobility community for standards and practices on behalf of public and private partners. The aim of the collaboration is to accelerate the implementation of smart mobility. Come to our special interest session and get updated on the actual status.

Contact: Joelle.vandenBroek@tno.nl

9 C-ITS FOR SUSTAINABLE VEHICLES

TNO has developed a Hardware-in-the-Loop setup to test algorithms on real hardware in a simulation environment for truck automation and platooning. Come to our implementation visit and see how communication with intelligent traffic lights can be used to optimise the motor-management of a hybrid truck to reduce emissions.

Contact: Rob.schut@tno.nl

10 AUTOMATED VALET PARKING & PLATOONING - AUTOPILOT

What if the domains of Internet of Things (IoT) and Connected Automated driving are brought together? The European project Autopilot has worked out several use cases, to show multiple connected services. TNO's contribution to this project is on smart models and algorithms to enable safe automated Valet parking and platooning to accelerate the developments for the Automotive industry. TNO will use this knowledge in broader perspective to advise the government in a direction to an effective future proof mobility system with connected automated driving vehicles. Come to our autopilot demonstration and experience the services.

contact: sven.jansen@tno.nl

11 HUMAN IN/OUT THE LOOP - DRIVING SIMULATOR

The development of a smart, safe and sustainable traffic system requires more than only the development of intelligent vehicles. The role of the driver. Come to our special interest session and our implementation visit. TNO experts will tell you how the driver aspects are taken into account in the integrated TNO research approach, including the use of a driving simulator.

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