



26th **ESV 19**
NETHERLANDS

FIELDTRIP A

TNO/ TASS

Address for navigation system: Steenovenweg 1, Helmond

Note! Please let us know at congress@esv2019.com if you will arrive by own transport

Contact:

Joelle van der Broek

Manager Smart Mobility

Stefanie de Hair

Research Scientist Integrated Vehicle Safety
Mobility (operational contact)

Jan Sybren Boersma

Fieldtrip coordinator and RDW host

General information

Title

Simulation as tool for real-world high-risk traffic situations
Providing real-world behavior to virtual scenario simulation

Location

Automotive Campus TNO / TASS, Automotive Campus 30, Helmond

Description

'Safety of Connected Automated Mobility'

Simulation has been used for development of safe vehicles for many years. Future automated technology leans heavily on the results of these simulations. In order to make those simulations useful, new methods are necessary to feed real-world relevant simulation cases into virtual environments for testing vehicle(models). TNO and her partners develops and operates different tools that separately or combined offer unique possibilities for these purposes. The technical visit provides a demonstration of the Facilities on the Automotive Campus from TNO, Siemens/Tass, InnovatieCentrale: vehicles, tools and insight into recent results of projects related to applications and methodologies for Connected and Automated Driving (C-AD).

The program consists of a plenary program (safety developments on the Automotive Campus) and four parallel tracks, covering the following topics:

1. Streetwise and Prescan: scenario based methodologies and tooling for validation of C-AD applications
2. HIL-Facilities for multi-vehicle-interaction and demonstrations, as well as the streetproof safety monitoring approach
3. Driving simulator and VeHIL facility with realistic simulations of a true vehicle in a simulated environment
4. A visit to the Traffic Control and Traffic Innovation Center as well as a demonstration of the tool Urban Strategy to see how integrated safety strategies can be embedded in a safe system approach.

The sessions are limited to 15 persons (4x15 persons).

<https://www.tno.nl/en/focus-areas/traffic-transport/> of www.tno.nl/ivs

<https://innovatiecentrale.nl/en>

<https://tass.plm.automation.siemens.com/>

Duration

June 13th, 2019; 14:00- 17:30

Schedule

14:00 Departure from Evoluon by bus

14:30 start

14:40 session 1

session 2

break

	session 3 session 4 closure 17:00/ 17:30 Return at Eindhoven (Evoluon and hotels)
Websites	https://www.tno.nl/ https://tass.plm.automation.siemens.com/
Sessions	
Session 1	Streetwise scenario based validation for C-AD
Session 2	<ul style="list-style-type: none"> - HiL Facility (HiL = Hardware in the Loop): - HiL simulation in combination with MicroSimulation for C-AD - HiL Predictive A.I. based approach for energy management in hybrid drive chain of Trucks in communication with iVRi
Session 3	<ul style="list-style-type: none"> - VeHiL facility (VEHiL = Vehicle in the Loop) - C-AD with applications and driving simulator for CcAD - New Mobility Modeller and urban Strategy
Session 4	Innovatie centrale/ Verkeerscentrale Projects of the traffic control centre to support integrated safety learning partly on the safe system approach.
Practical information	
Dress Code	Flat shoes (industrial floors), short distances to walk between test facilities.
Access	Elevators, doors are extra wide, large bathrooms for disabled people.
On-site parking	Parking for participants is possible. Automotive Campus, Steenovenweg 1 Helmond (please let organization know)