**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:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Joelle van der Broek</td>
<td>Manager Smart Mobility</td>
</tr>
<tr>
<td>Stefanie de Hair</td>
<td>Research Scientist Integrated Vehicle Safety Mobility (operational contact)</td>
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<tr>
<td>Jan Sybren Boersma</td>
<td>Fieldtrip coordinator and RDW host</td>
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**General information**

| **Title** | **Simulation as tool for real-world high-risk traffic situations**  
* Providing real-world behavior to virtual scenario simulation |
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<tr>
<td><strong>Location</strong></td>
<td>Automotive Campus TNO / TASS, Automotive Campus 30, Helmond</td>
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| **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://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 |
<table>
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<th>Session</th>
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<td><strong>Closure</strong></td>
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<td><strong>17:00/ 17:30 Return at Eindhoven (Evoluon and hotels)</strong></td>
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**Websites**
- [https://www.tno.nl/](https://www.tno.nl/)
- [https://tass.plm.automation.siemens.com/](https://tass.plm.automation.siemens.com/)

**Sessions**

**Session 1**
- Streetwise scenario based validation for C-AD

**Session 2**
- 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**
- 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)