VDI

8th International VDI Conference

Autonomous Trucks

The Future of Transportation

March 12-13, 2025, Düsseldorf

- Autonomous Trucking
- Software-Defined Vehicle
- Sensor Technology for Trucking
- Data Management
- Operational Challenges and Scalable Solutions

+ International Best Practices
+ Panel Discussion: Organized by PAVE Europe
+ Fireside Chat: Autonomous Trucking

Meet international Experts from:

AVL · BOSCH · Continental Engineering Services · driveblocks · dSPACE · INTELSAT · MAN · PAVE EUROPE · Plus · P3 · SCANTINEL PHOTONICS · Technische Universität Braunschweig

About us

The Association of German Engineers (VDI) is one of the largest technical-scientific associations in Europe. Throughout the years, the VDI has successfully expanded its activities nationally and internationally to foster and impart knowledge about technology-related issues. As a financially independent, politically unaffiliated and non-profit organization the VDI is recognized as the key representative of engineers both within the profession and in public.

Reasons to attend

Meet international experts from the trucking industry.

Learn where the industry is headed and how to stay ahead of the curve.

Discuss technical challenges, current developments, and the newest solutions.

Prepare for two days full of insights, contacts, and new ideas.

Supporting Experts

Gerhard Nowak, Managing Partner, ifp consulting
Stephan Keese, Managing Partner Roland Berger North America, Roland Berger
Sunny Choi, VP Global Business Development, Plus AI

Upcoming Events

International VDI Conference
AI in Vehicles & Software Engineering
April 1–2, 2025 in Berlin

International VDI Conference
Connected Off-Highway Machines
June 4–5, 2025 in Dusseldorf

09:00   Registration & welcome coffee

10:00   Chair's welcome and opening address
Conference chair: Gerhard Nowak, Managing Partner, ifp consulting

I. Autonomous Trucking

10:10   Autonomous Trucking: Path Towards Commercialization
- State and outlook of the autonomous trucking landscape
- Learnings from first pilot programs: opportunities & challenges to be solved
- Business Models: How to collaborate and generate revenue with autonomous trucking

Sunny Choi, VP Global Business Development, Plus AI, USA

10:30   Fireside Chat - Autonomous Trucking
Join a dynamic discussion with leading experts from OEMs, Tier-1 suppliers, and technology providers as they dive into the world of Autonomous Trucking, sharing insights and visions for the future of this transformative industry.

11:30   ☕ Networking & Coffee Break

II. Software-Defined Vehicle

12:00   Managing Reuse and Dependencies of Hardware and Software Components in SDV Architectures
- How to holistically structure the SDV stack to improve development speed and efficiency
- Architecture layers and APIs to consider system-level dependencies between software and hardware
- How to decouple teams for software, hardware and integration while improving cooperation
- How to enable separate value streams for managing reusable software and hardware assets

Dr. Frank Schreiner, Chief Engineer, Business Center Systems Engineering, Continental Engineering Services, Germany

12:30   The Role of SoCs in Autonomous Vehicle Systems
- Software-Defined SoCs for Autonomous Trucking
- Enhancing Operational Efficiency
- Enabling Advanced Safety Feature

Speaker to be announced

13:00   🍽 Lunch

III. Sensor Technology

14:30 Next Gen Sensor Setups for Autonomous Driving: Status Quo, Trends and Future Developments
- Overview of Sensor setups, with distinct strategies from industry leaders like Aurora, Kodiak and Torc
- Radar advances as dominant sensor; LIDAR adoption slows
- P3 Future vision of next gen sensor stack

Patrick Eisele, Senior Consultant Autonomous Mobility, co-author: Michael Herdrich, Consultant Autonomous Mobility, both: P3 automotive GmbH, Germany

15:00 Mapless Autonomy as a Complementary Perception and Sensor-Fusion Approach for Highway Trucking
- Leveraging a fully sensor-based environment model as a complementary perception path
- Results of real world testing on multiple vehicle platforms
- Challenges and opportunities in generalizing AI based approaches towards different setups and geographies

Dr. Alexander Wischnewski, Managing Director & CTO, driveblocks, Germany

15:30   Cost-Effective and Compact Single Chip FMCW LiDAR Solution for Autonomous Trucks
- Future trends in sensors and emerging photonic chips
- FMCW LiDAR solution - the next generation of sensing technology
- Scantinel's Single-Chip FMCW LiDAR approach

Michael Richter, CEO, Scantinel Photonics GmbH, Germany

16:00   ☕ Networking & coffee break

16:30   Interactive World Café Session
During the interactive World Café Session, we invite you to directly engage with other experts. It is an interactively moderated discussion on different topics. Discuss and identify challenges within your sector as well as problems, needs and solutions. The focus is on the participants – Decide what exactly you would like to discuss and introduce your own experiences and cases.

17:30   End of conference day one

18:00   Get-together
At the end of the first conference day we kindly invite you to use the relaxed and informal atmosphere for in-depth conversations with other participants and speakers.

09:25   Chair's welcome
Stephan Keese, Managing Partner Roland Berger North America, Roland Berger

09:30 Building User Trust and Understanding in Autonomous Trucks and Urban Goods Delivery - PAVE Europe
- Introduction to PAVE Europe & Panel Discussion
- Industry Insights on Autonomous Logistics
- Improving Perception and Building Trust and Understanding
- Addressing Concerns and Managing Expectations

Panelist: To be announced
Guido Di Pasquale, PAVE Europe, Belgium

IV. Data Management

10:30 Towards a Safety Argumentation for a Driverless Truck
- Address challenges of how to argue that an autonomous truck without a human fallback driver is acceptably safe
- Step forward towards a safety argumentation for safe autonomous trucks
- Systematical development and decomposition of safety claims
- Enabling hub-to-hub transport on highways (project ATLAS-L4)
- Perspectives from science and industry

Klaus Lamm, Safety Manager Autonomous Vehicles and Automotive SPICE® Assessor, MAN Truck & Bus SE, Germany

& Marvin Loba, Research Associate with the Institute of Control Engineering, Technische Universität Braunschweig, Germany

11:15 ☕ Networking & coffee break

12:00 Data Driven Development Solutions for Enhanced AD Validation
- Efficient route planning
- Quality assured data collection
- Analytics platform for user friendly evaluation
- Data virtualization

Gernot Hasenbichler, Senior Product Manager ADAS and Autonomous Driving, AVL List GmbH, Austria

12:30 Linking Real-World Data with Simulation through a Cross-Continental Data Management Platform
- Utilizing real-world traffic data for scenario-based safety assessment
- Combining analytic-based approach and data-driven explorative approach for identification of hazardous scenarios
- Generative AI for data insight and scenario generation

Marco Buller, Business Development Manager, dSPACE, Germany

13:00 🍽 Lunch

V. Operational Challenges and Scalable Solutions

14:30 Viable Operation of AD Trucks – Operational Concepts and Scalable Service Solutions as Bottlenecks in the AD Ecosystem?
- Navigating the way from a first AD pilot to a scalable operation concept of an AD fleet
- Scalable services for AD Trucks – example pre-trip inspection
- Regulatory framework and impact on operational readiness
- Challenges for operators, OEMs and legislator
- Automation and integration of inspection systems for an execution of vehicle inspections

Uwe Riedel, Project Lead - Mobility Service Hub, Robert Bosch GmbH, Germany

15:00 Everywhere, All-the-Time Connectivity - Extending the Digital Fleet
- Fleet Digitalization and Existing Connectivity Solutions
- The Vision: Ubiquitous Fleet Connectivity
- Complex Data Applications and Integration
- Cost Containment and Service Differentiation
- Seamless 5G connectivity between terrestrial mobile networks (TN) and satellite communications networks (NTN)

Scott Congdon, Business and Market Development, Intelsat, USA

15:30   Closing Remarks

15:45   End of conference

Exhibition / Sponsoring

If you want to meet with and reach out to the first-rate experts attending this VDI conference and to powerfully present your products and services to the well-informed community of conference participants, please contact:

Vanessa Ulbrich
Project Consultant Exhibitions & Sponsoring
Phone: +49 211 6214-918
Email: Ulbrich@vdi.de

Become a speaker

Become a speaker at our international VDI Automotive Conferences. Make yourself known in the industry and discuss best practice examples with other international experts. We are looking for speakers on: Cyber Security for Vehicles, Software-Defined Vehicle and Autonomous Driving.

Please submit your topic to:
Annick Cathrin Braun
Product Manager International Business
Phone: +49 211 6214-8646
E-Mail: annick.braun@vdi.de

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Conference venue
Hilton Düsseldorf
Georg-Glock-Str. 20
40474 Düsseldorf
Phone: +49 211 43770
Email: info@hiltondusseldorf.com

HRS Das Hotelportal

You will find more hotels close to the venue at www.vdi-wissensforum.de/hrs

Hotel room reservation: A limited number of rooms at the Hilton Düsseldorf has been reserved for the benefit of the conference participants.
Please refer to "VDI Conference". For more hotels: www.vdi-wissensforum.de/hrs

VDI Wissensforum service package: The conference package includes the conference documents (online), beverages during breaks, lunch and the get-together on March 12, 2025.

Conference attendance conditions and terms can be found on our website: www.vdi-wissensforum.de/en/terms-and-conditions/

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Registration

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Autonomous Trucks

VDI

VDI Wissensforum GmbH | VDI-Platz 1 | 40468 Düsseldorf | Germany
www

Yes, I will participate as follows:

Participation Fee + VAT
☐ **VDI Conference 12.-13.03.2025**
(01KO915025) **€ 1.990**

☐ I am interested in sponsoring and/or exhibition
☐ Participation Fee VDI-Members* Save 50 € for each Conference Day.
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Please register at www.vdi-international.com. Your credit card information will be transmitted encrypted to guarantee the security of your data.