2nd International VDI Conference

Future of Buses

Autonomous & Electric Buses

November 27-28, 2019, Amsterdam, The Netherlands

- Electrification & Charging – Field Experiences from Operator & OEM Perspectives
- Regulation & Policy Framework in the new Mobility Age
- New Business Models & holistic Mobility Systems
- Requirements for next Generation Buses
- Autonomous, smart & connected Bus Systems as Part of Public Transport

+ Interactive World Café Session
+ International VDI Workshop: Designing On-Demand Transport Services

Meet international Experts from:

ALSTOM  ASSURED  ebus  EvoBus  FlixBUS  hmi  HOCHBAHN
IRJ  MAN  NUANCE  Optibus  Ruter#  Transports Interurbains de Barcelona  VIA Rail  ZF

An event organized by VDI Wissensforum GmbH
www.vdi-international.com/ 01K0932019
09:00  Registration & Welcome Coffee
10:00  Chair’s Welcome and Opening Address

I. Electrification: Field Experiences from Operator & OEM Perspectives
10:15  The Future of E-Buses – Lessons learned from Luxembourg’s E-Mobility Test-Bed
   • Understanding differences: One optimal solution for all bus operators needs does not exist
   • Future charging: It’s all about flexibility and robustness
   • Depot automation: First step towards the self-driving bus
Dr. Marcin Seredyński, Head of Innovation and Research, Volvo Bus Corporation – E-Bus Competence Center, Luxembourg

10:45  The Future of electric and on-demand Buses
   • On the road to full electrification
   • Joint-venture services in on demand mobility services
   • Alphaba - The first commercial self-driving bus tested on public road
Hallie Liao, Head of International Development, Shenzhen Bus Group, China

11:15  On the Route to Emission-Free Bus Operation: Challenges, Lessons Learned & Impulses from the Field
   • Challenges when transforming bus fleets from diesel to electric vehicles
   • Lessons learned
   • Impulses and recommendations from the system operators point of view
Dr.-Ing. Markus Dietmannsberger, Project Manager Electric Buses, Hamburger Hochbahn AG, Germany

II. Implementation of Charging Infrastructure for E-Buses
13:30  Charging Infrastructure for E-Buses: Experiences of a Bus Company
   • Implementing a charging infrastructure for electric bus lines
   • Technical characteristics of the electric charging infrastructure
   • Reference regulations and standardization processes
Josep Ariño, Electrical Engineer, Management Maintenance and Infrastructure Projects, TMB, Spain

14:00  ASSURED: Boosting the Integration of urban commercial electric Vehicles with high power fast-charging Infrastructure
   • Drivers of market evolution of clean e-buses
   • Contribution of e-bus fleets to improve PT services
   • Key technological innovations and enablers
   • Current project progress: Contribution to interoperability and standardisation
Hans Bekkers, Business Development Manager Public Transport, VDL Bus & Coach, The Netherlands

14:30  Interactive World Café Session
We invite you to directly engage with other experts. Discuss and identify challenges, needs and solutions while focus is on you – choose your favourite topics and bring in your own experiences!
Topics:
   • The next level of urban mobility, Traton
   • Hydrogen & fuel cell vs. electro, Shenzhen Bus Group
   • Validation and testing of automated buses & shuttles, Transpolis
   • DRT as today's forerunner into the autonomous future, IOKI
   • The perfect sensor set for autonomous buses? (open)

15:45  🍵 Networking & Coffee Break

16:15  Slot reserved for IVECO
Jean-Marc Boucheret, Sustainable Mobility Manager, Iveco Bus, France

16:45  The European Commission’s Role in the Future of Buses
Robert Missen, Directorate-General for Mobility & Transport, Head of Unit Innovation & Research, European Commission, Belgium

17:15  Bus & Coach Transport in a new Mobility Era
   • Decarbonisation: The coach of the future
   • Digitalisation: Data sharing, new market entrants, MaaS and regulatory response
   • Bus and coach transport in smart cities
Rémi Lebeda, Senior Manager, IRU, Brussels

17:45  End of Conference Day One

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.
## IV. New Business Models & holistic Mobility Systems

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter/Details</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Future of Buses: Smarter and greener Mobility for Everyone</td>
<td>Stefan Tontsch, Vice President Operations, FlixMobility GmbH, Germany</td>
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<tr>
<td></td>
<td>• The characteristics of the Flixbus business model</td>
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<td>• The mobility ecosystem and innovation</td>
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<td>• Future operation strategy</td>
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<td>09:30</td>
<td>Insights from existing On-Demand Ridepooling Services worldwide</td>
<td>Jan Lüdtke, Head of Strategic Partnerships, ViaVan, Germany</td>
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<td>• Empirical insights how to launch and scale an on-demand transit system successfully</td>
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<td>• Key learnings from over 60 million provided on-demand ridepooling trips</td>
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<td>• Software-as-a-service and transportation-as-a-service</td>
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<td>• Ridepooling – Valuable addition or strong competition for traditional PT?</td>
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## V. Requirements for next Generation Buses

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<tr>
<td>10:30</td>
<td>What is Public Transportation expecting from City Buses?</td>
<td>Benjamin Bailly, Head of electric Bus, Alstom, France</td>
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<td></td>
<td>• A new architecture to optimize usage of new technologies</td>
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<td>• A new way of operating</td>
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<td>• A new object integrated in the city</td>
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<td>11:00</td>
<td>Next Generation active Safety Systems for City Buses – The Foundation for Automated Driving</td>
<td>René Bruintjes, Development Engineer, Daimler Buses, EvoBus GmbH, Germany</td>
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<td>• Active safety systems in city buses</td>
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<td>• Brake assistance in dynamic urban traffic situations</td>
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<td>• Protection of bicyclists and pedestrians</td>
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<td>11:30</td>
<td>Together facing the Future: User-centered Product Management</td>
<td>Dr. Michael Roth, Product Strategy, MAN Truck &amp; Bus SE, Germany</td>
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<td></td>
<td>• Why the evolution of mobility raises new challenges</td>
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<td></td>
<td>• How MAN focuses users to understand and solve challenges</td>
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<td>• How the user-centered approach is integrated in product management and products</td>
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## VI. Towards 100% Autonomous?! Smart & connected Bus Systems as Part of Public Transport

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<tr>
<td>13:00</td>
<td>Autonomous Driving – Changing Next Generation Mobility</td>
<td>Anja Petrich, Autonomous Mobility Systems, ZF Friedrichshafen AG, Germany</td>
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<td></td>
<td>• Global trends and disruption in mobility</td>
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<td>• Market segments and opportunities arising through AD</td>
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<td>• Approach on next generation mobility</td>
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<td>13:30</td>
<td>HEAT - Hamburg Electric Autonomous Transportation</td>
<td>Natalie Rodriguez, Senior Project Manager, co-author: Katrin Schwager, Business</td>
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<td>• Project Overview: What and why?</td>
<td>Developer, both: Hamburger Hochbahn AG, Germany</td>
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<td>• Requirements for automated driving from an Operator’s perspective</td>
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<td>• Current development, main challenges and lessons learned</td>
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<td>14:00</td>
<td>The Virtual Infrastructure: A Necessity for future autonomous Transportation</td>
<td>Mohammed Hikmet, Executive Chairman, HMI Technologies, New Zealand</td>
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<td>• Virtual infrastructure as the current missing link in the AV ecosystem</td>
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<td>• Virtual infrastructure provides the road code for AVs</td>
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<td>• Allowing multiple manufacturers to operate on the same platform</td>
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<td>• AV’s or vehicles following virtual infrastructure?</td>
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<td>14:30</td>
<td>Networking &amp; Coffee Break</td>
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<td>15:00</td>
<td>What can and can’t AI do for Public Transport?</td>
<td>Volker Aderhold, General Manager DACH, co-author: Amos Haggiag, CEO and</td>
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<td>• Al in transport – Data driven planning</td>
<td>Co-founder, both: Optibus, Germany / Israel</td>
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<td>• Al for real-time transport</td>
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<td>• Separating myth from reality about AI</td>
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<td>15:30</td>
<td>Trust Me: Multimodal Uses on AV &amp; EV Buses</td>
<td>Dr. Carie Cunningham, Senior UX Researcher, Nuance, USA</td>
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<td></td>
<td>• Findings on multimodal interaction topics</td>
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<td>• How does voice technology influence trust in AV buses?</td>
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<td>• How does stress and uncertainty influence AV and EV use?</td>
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<td>• What information needs to be communicated to the users?</td>
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<td>16:00</td>
<td>Conference Chair’s closing Remarks</td>
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<td>16:15</td>
<td>End of Conference</td>
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International VDI Workshop

Designing On-Demand Transport Services

Workshop Chair:
Steffen Schaefer, New Mobility | Smart Cities Advisor, Germany

Date and Venue:
November 29, 2019, Amsterdam, The Netherlands

Time:
09:00-16:00

Content:
Public Transport is on the rise in most regions of the world and buses will play a central role in future urban and rural environments – however, not with oversized vehicles driving on a fixed route and schedule. Instead, On-Demand Transport services are emerging as modern, agile and efficient, affordable services. Transport will be made available when needed and in two flavors: with and without human drivers. In this workshop, participants will learn about options regarding vehicles, software and services available on the market. A rich set of materials and information will be provided that will be useful in practice after the workshop. There will also be an introduction into Design Thinking and User Experience strategy to explain major steps in the design of such services. The main part of the workshop consists of breakout sessions in which relevant topics will be elaborated in a short presentation. Participants will then in groups design the various aspects of an On-Demand Transport service of their choice, followed by mutual presentations and discussion of results.

Introduction:
• The case for On-Demand Transport
• On-Demand Transport experiences – Lessons learned from past deployments?

Breakout Sessions – Planned Topics include:
• Business strategy | Business model
• Customer segments, service areas & value-added services
• Vehicles (autonomous | human-driven)
• Software services (traveler & driver apps, pooling | routing, charging | servicing)
• User Experience (UX), including integration of other transport modes

Discussion, Conclusion & Outlook
This workshop is most interesting for mobility providers and transport operators planning to roll out a service, for vehicle manufacturers who want to understand how their vehicles are used and innovation managers who want to understand everything about On Demand Transport and Mobility.
Registrations:
Registrations for conference attendance must be made in writing. Confirmation of your registration and the associated invoice will be mailed to you. Please do not pay your conference attendance fee until you have received our invoice and its invoice number to be stated for transfer. Dutch VAT directives apply. Please state your VAT-ID with your registration.

Conference venue
Radisson Blu Hotel Amsterdam Airport
Boeing Avenue 2
1119PB Schiphol-Rijk, The Netherlands
Phone: +31 20 655 3131
Email: Reservations.Amsterdam.Airport@Radissonblu.com

Hotel room reservation:
A limited number of rooms has been reserved for the benefit of the conference participants at the Radisson Blu Hotel Amsterdam Airport. 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 November 27, 2019.

Conference attendance conditions and terms:
By way of your registration you accept the conference attendance conditions and terms of VDI Wissensforum GmbH as binding. Any cancellation of your registration must be made in writing. We will charge you only an administrative fee of € 50.00 plus Dutch VAT if you cancel your registration earlier than 14 days ahead of the conference date. Any cancellation that reaches us after this deadline will entail the conference attendance fee as stated in our invoice to be charged in full. The date of the post office stamp of your written cancellation will be the decisive criterion. In that case, we will gladly mail you the conference documents on request. Subject to agreement, you may name a substitute participant. Individual parts and sections of conferences and seminars cannot be booked. You will be informed without delay if an event has to be cancelled for unforeseeable reasons. In that instance, you will be entitled only to a refund of your conference attendance fee if already paid. We reserve the right to exchange speakers and/or change the program sequence in exceptional cases. In any case, the liability of VDI Wissensforum GmbH is restricted exclusively to the conference attendance fee.

Data protection:
VDI Wissensforum GmbH captures and processes the address data of conference participants for their own corporate advertising purposes, enabling renowned companies and institutes to reach out to participants by way of information and offers within their own marketing activities. We have outsourced in part the technical implementation of data processing to external service providers. If you do not want to receive any information and offers in the future, you may contradict the use of your personal data by us or any third party for advertising purposes. In that case, kindly notify us of your contradiction by using the email wissensforum@vdi.de or any other of the contact options mentioned.

Supporting Experts

Edwin Mermans, Senior Advisor International Affairs, Province of Noord-Brabant, The Netherlands
Dr. Gerhard Nowak, Partner, Qvartz, Germany
Dr.-Ing. Rainer Witzig, Head of Product Strategy Bus, MAN Truck & Bus AG, Germany

Become a speaker

Become a speaker at our international VDI Conferences. Make yourself known in the industry and discuss best practice examples with other international experts. We are looking for speakers on: Testing & Validation for Automated and Autonomous Driving, Autonomous & Electrified Buses, Alternative Drives for Cars, 48Volt, Charging Infrastructure, Automotive Sensors, Automotive AI, Cyber Security for Vehicles, Future Mobility and Functional Safety.

Please submit your topic to:

Leonie Bohnstedt
Product Manager
International Business
Phone: +49 211 6214 - 461
Email: bohnstedt@vdi.de
Yes, I will participate as follows:

Participation Fee + VAT
☐ VDI Conference 27.-28.11.2019 (01KO932019) € 1790

and
☐ Workshop 29.11.2019 (01ST929001) € 950

or

Package Price (Please tick the boxes)
☐ (Conference + 1 Workshop) € 2460

☐ I am interested in sponsoring and/or exhibition

☐ Participation Fee VDI-Members* Save 50 € for each Conference Day.

* For the price category 2, please state your VDI membership number

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ZIP Code, City, Country

Phone Fax

Email

Please state your invoice address if this differs from the address given