

# 12th VDV Electric Buses Conference and exhibition ElekBu

# Mobility of the Future

16-17 March 2021 · Digital

- Political and social framework
- Sector coupling and hydrogen
- Field reports from public transport companies
- Depot designs
- Power supply and charging management
- Battery development and battery handling









# Employee Training E-Mobility

# Charge Management

Battery Development
Hydrogen

12th VDV Electric Buses Conference and exhibition ElekBu

# Mobility of the Future

The bus market is facing radical restructuring. The EU and the federal government push the change forward. Their goal: to make tomorrow's mobility fossil-free. To this end, various instruments, regulations and laws are currently being modified at the same time. As the technical development advances rapidly, the transport companies are forced to make substantial and long-term investments with uncertainty. Plus, the unanswered question of how to react to the national implementation of the Clean Vehicles Directive. One thing is clear: the decade of the e-bus - whether battery-electric or fuel cell - has begun.

As a result, transport companies have to make many fundamental decisions. The procurement of new buses is not enough: For the conversion to electrical energy in the form of a battery or hydrogen, new systemic approaches are necessary: tank and charging concepts, depot design, parking and IT systems for disposition taking into account the range or Tank and loading capacities must be designed. New space has to be found, new security areas have to be designated, the staff has to be retrained. It is therefore time to exchange experiences on operational and technical implementation, the latest developments, successfully introduced processes – perhaps also errors – as well as further training for employees and other topics. The ElekBu offers exchange opportunities with manufacturers and service providers and shows the potential of current and new technology and concepts.

The publication of the federal funding program for the procurement of e-buses is expected in January, immediately before the VDV electric bus conference and the exhibition ElekBu: a volume of up to 800 million euros is available for the period up to 2024. The program intends to provide funding of 80 percent of the additional costs of vehicles and 40 percent of the infrastructure – which can be combined with state subsidies. In order to make the right decisions about the system change and to learn from each other in the industry, the exchange of experiences is now crucial.

Our combined event offers the ideal environment to find the right technology and associated funding programs for your own company.

# Live stage March 16, 2021

### 09:00

Opening of reception, exhibition and the matchmaking

### Focus on political and social framework conditions

### 10:00

Greetings from the organizers

Martin Schmitz, Managing Director Technology, Association of German Transport Companies (VDV) and Executive Chairman of Forum for Transport & Logistics

### 10:05

Greetings

Ingo Wortmann, President of the Association of German Transport Companies (VDV)

### 10:15

Title follows

EU commission (inquired)

### 10:25

Opening lecture

Sate Secretary Dr. Tamara Zieschang, Federal Ministry of Transport and Digital Infrastructure

### 10:45

Greetings

Cem Özdemir MdB, Chairman of the Committee on Transport and Digital Infrastructure, German Bundestag (inquired)

### 11:10

Keynote: Future of Electric Drives

Prof. Dr. Manfred Schrödl, Institute board, Institute for Energy Systems and Electrical Drives, TU Wien

### 11:30

Greetings

Kurt-Christoph von Knobelsdorff, Managing director, NOW GmbH

### 11:40

The VDV Bus Study - Decade of the Bus Christiane Henrich-Köhler, Senior Managerin Infrastructure & Mobility, PricewaterhouseCoopers GmbH

### 12:00

Lunch break with a visit to the exhibition, networking via the networking tools and product presentations

# Stream March 16, 2021

Focus on generation, transport, storage, depot design, petrol station

### 11:30

Local hydrogen production

Conrad Tschersich, Managing Director AWG Abfall-wirtschaftsgesellschaft mbH Wuppertal (inquired)

### 11:45

Green hydrogen / Production costs and uses Tilo Vogdt, Authorized officer, WV Energie AG

### 12:00

Storage and transport of hydrogen in LOHC Dr. Marcus Guzmann, CSO Chief Sales Officer, Hydrogenious LOHC Technologies GmbH

### 12:15

Fuel cell technology as an alternative in public transport concepts

Alexander Bunzel, VCDB VerkehrsConsult Dresden-Berlin GmbH

### 12:30

Challenges in H2 refueling in heavy-duty applications (bus)

Markus Wiedemann, Head of the Automotive Division, Stuttgarter Straßenbahnen AG

### 12:45

Fuel Cell Electric Buses – a solution with many advantages for zero-emission public transit
Oben Uluc, Sales Director, Ballard Power Systems Inc.

### 13:00

Speakers Corner: Conrad Tschersich

### 13:15

Boulevard of Ideas

### 13:30

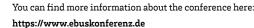
Boulevard of Ideas

### 13:45

Boulevard of Ideas



#VDVElektrobusse #ElekBu









# Live stage March 16, 2021

### Focus on charging management and energy supply

### 13:00

The Berlin way

Dr. Rolf Erfurt, Board member operations, Berliner Verkehrsbetriebe AöR (inquired)

### 13:15

Charging infrastructure and provider of depot visualization and load and charging management

Thomas Volk, Managing Director, Stromnetz Hamburg GmbH

### 13:30

Cloud-based smart grid solution
Alexander Wolf, Stadtwerke München GmbH

### 13:45

The change of a bus depot to an e-bus depot
Wolfgang Reitmeier, Head of Departments and Workshops,
Electromobility, Association of German Transport Companies
(VDV)

### 14:00

Energy supply for depots

Andreas Laske, Mobility Division, Siemens AG (inquired)

### 14:15

Speakers Corner:

N.N.

Coffee break with a visit to the exhibition, networking via the networking tools and product presentations

### Focus on battery technology - operational experience

### 15:30

Market overview

Dieter Hanke and Kirsten Krämer, Omnibusspiegel

### 15:45

The eCitaro - introduction of technology and vehicle variants

Daniel Vorgerd, Head of High Voltage System Application, Daimler Buses

### 16:00

Findings from the SUVEREN project -Effects on the e-bus industry Lukas Fast, FOGTEC Brandschutz GmbH

### 16:15

BOB-Battery trolleybus in Solingen

Adrian Dogge, Stadtwerke Solingen GmbH

### 16:30

Speakers Corner:

Dieter Hanke and Kirsten Krämer, Omnibusspiegel

# Stream March 16, 2021

### 14:00

The colors of hydrogen

Marcel Corneille, Managing Director, EMCEL GmbH

### 14:15

Operating experience with the largest H2 bus fleet in Germany

Dr. Marcel Frank, Managing Director, Regionalverkehr Köln GmbH

### 14:30

DB subsidiary Autokraft - experience with the use of H2 buses

Christopher Alting, Head of Production Bus Division, DB Regio AG

### 14:45

Boulevard of Ideas

### 15:00

Speakers Corner:

Dr. Marcel Frank, Managing Director, Regionalverkehr Köln GmbH

### Focus on battery technology - operational experience

### 15:00

Boulevard of Ideas

### 15:15

The new e-CITEA

Boris Höltermann, VDL Bus & Coach Deutschland GmbH

### 15:30 Uhr

Efficient operation despite electric buses
Matthias Rogge, Managing Director, ebusplan GmbH

### 15:45

We electrify the city!

Christoph Scholz,Head of automotive engineering and Lukas Lexy, Head of maintenance projects and deputy operations manager on German Ordinance on the Construction and Operation of Rail Systems for Light-Rail Transit / German Federal Regulations on the Operation of Motor Transport Companies for Passenger Services, BOGESTRA AG

### 16:00

Speakers Corner:

N.N.

Coffee break with a visit to the exhibition, networking via the networking tools and product presentations







# Live stage March 16, 2021

### 16:30

Coffee break with a visit to the exhibition, networking via the networking tools and product presentations

### 17:30

Status of the conversion of the KVB bus fleet Jörn Schwarze, Member of the Board,, Kölner Verkehrs-Betriebe AG

### 17.40

Boulevard of Ideas

### 17:50

Kiel charged up

Dr. Stephan Nahmer, Member of the Executive Board, SBRS GmbH and

Thomas Mau, Head of Operations and Technology / Authorized officer, KVG Kieler Verkehrsgesellschaft mbH

### 18:00

E-buses - how far can we get? Elke Maria van Zadel, Head of Technology, IT and Infrastructure, ÜSTRA Hannoversche Verkehrsbetriebe AG and Managing Director, regiobus Hannover GmbH

### 18:10 - 20:00

Virtual get together in the matchmaking tool Visit of the exhibition (appointment required)

# Live stage March 17, 2021

### Focus on Battery developments

### 8:30

Greetings

Werner Overkamp, Vice President of the Association of German Transport Companies (VDV) and Chairman of the Board of Directors BUS

### 8:35

Lecture by the Federal Environment Ministry State Secretary Jochen Flasbarth, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (inquired)

### 8:50

Current status of developments in battery technology / battery market

Prof. Dr. Dirk Uwe Sauer, Institute for Power Electronics and Electrical Drives, ISEA / RWTH Aachen

### 09:10

Battery technologies for commercial applications of the future – what options are in store for us Sven Schulz, CEO AKASOL AG

# Stream March 16, 2021

### International experience reports

Moderation: Arno Kerkhof, Head of Bus Transport Unit, K&I, UITP (The International Association of Public Transport)

### 16:30

Title follows

RATP (inquired)

### 16:45

Title follows

Christophe Martin, GROUPE TEC Belgien

### 17:00

Title follows

Lidia Leon, Head of Service, EMT Madrid

### 17:15

Title follows

Slobodan Misanovic, Projektmanager, GSP Beograd

### 17:30

Title follows

Bob Blitz, Bus Network Planning Manager, Transport for London

### 17:45

ASSURED Project

Aida Abdulah, Senior Project Manager, UITP (The International Association of Public Transport)

### 18:00

Title follows

SEMITAN FRANCE, Nantes (angefragt)

### 18:10 - 20:00

Virtual get together in the matchmaking tool Visit of the exhibition (appointment required)







# Live stage March 17, 2021

### 09:25

Microvast Sustainable Battery Solutions Tailored for Smart Cities

Sascha Kelterborn, Senior Vice President, Microvast, Inc.

### 09:40

Environmentally friendly recycling of lithium-ion batteries *N.N.* 

### 09:55

Fire protection for battery buses Prof. Dr. Roland Goertz, Head of the Chair for Chemical Safety and Fire Protection, Bergische Universität Wuppertal

### 10:15

Speakers Corner:

N.N.

Coffee break with a visit to the exhibition, networking via the networking tools and product presentations

Focus on depot design / charge management and heating / air conditioning / ventilation

### 11:35

Future of the sustainable transport Erhan Eren, Business Director Deutschland, Österreich und Schweiz, Iveco Magirus AG

### 11:45

Experience with management systems
Toralf Müller, Managing Director, Verkehrsbetriebe
Hamburg-Holstein GmbH

### 12:00

Electromobility in the depot Maximilian Haag, Sales Manager Electromobility, CarMedialab GmbH

Stefan Tintera, Product manager electromobility, initperdis GmbH

### 12:10

E-bus operation in Münster since 2016 - experiences, challenges and opportunities Eckhard Schläfke, Operations manager for transport operations, Stadtwerke Münster GmbH

### 12:30

Boulevard of Ideas

### 12:45

Speakers Corner:

N.N

Lunch break with a visit to the exhibition, networking via the networking tools and product presentations

# Stream March 17, 2021

Topic block depot design / charge management and heating / air conditioning / ventilation

### 10:30

Boulevard of Ideas

### 10:40

Boulevard of Ideas

### 10:50

Boulevard of Ideas

### 11:00

Boulevard of Ideas

### 11.10

Boulevard of Ideas

### 11:20

Speakers Corner: N.N.

Lunch break with a visit to the exhibition, networking via the networking tools and product presentations

### Focus on processes and system selection

### 12:50

System selection decision-making process Dr. Michael Faltenbacher, Team Lead Transport and Mobility, thinkstep AG

### 13:00

Decision-making process on the way to e-mobility Janine Mielzarek, Authorized officer electromobility and new mobility, Offenbacher Verkehrs-Betriebe GmbH

### 13:15

Extract from many years of e-mobility experience and its success factors in partnership with a well-known operator from Göteborg

Marie Carlsson, Director Business Solutions, Volvo Bus Corporation

### 13:30

The importance of vehicle data for the efficient control of the depot and loading processes Eric Nöh, Head of Sales Public Transport, PSI Transcom GmbH

### 13:45

Boulevard of Ideas







# Live stage March 17, 2021

### 14:15

ABB charging solutions for the sustainable reduction of emissions in local public transport Christof Kunze, Produkt Manager HVC, ABB AG

### 14.25

Boulevard of Ideas

### 14:35

Autonomous and electric through the city: new solutions from  ${\tt ZF}$ 

Jochen Benz, Head of Key Account Management and Business Development, ZF Mobility Solutions GmbH and Bernd Wachter, Commercial Vehicle Technology - Director Sales Europe, ZF Friedrichshafen AG

### 14:45

New depot and charging infrastructure Mark Hogenmüller, Managing Director / Operations Manager, Reutlinger Stadtverkehr RSV Service GmbH

### 15:00

Boulevard of Ideas

# Focus on Assistance with the introduction of e-mobility

### 15:15

VDV activities to define the vehicle data set
Minh-Thuy Truong, Head of the automotive department,
Association of German Transport Companies (VDV)

Tax aspects of e-mobility (energy storage, recovery, etc.)
Petra Maring, Head of Tax Department, Association of
German Transport Companies (VDV)

### 15:25

Insurance requirements for loading and parking N.N.

### 15:35

Sustainable procurement for battery buses Janina Heel, Sustainability Management Officer, Hamburger Hochbahn AG

### 15:45

Requirements for training for workshop employees Rico Seipel, Project manager e-mobility, Dresdner Verkehrsbetriebe AG

### 16:00

End of the conference

### Until 17:00

Visit to the exhibtion (appointment required)

# Stream March 17, 2021

### 14:00

Speakers Corner: N.N.

Lunch break with a visit to the exhibition, networking via the networking tools and product presentations

# Focus on Assistance with the introduction of e-mobility

### 15:15

Retrofitting instead of buying a new one - conversion from diesel to electric buses

Harald Ludescher, Sales Manager, Ziehl-Abegg

Automotive GmbH & Co. KG

### 15:25

Our way to regular service with electric buses in Leipzig

Torsten Schmidt, Project manager for electric buses, Leipziger Verkehrsbetriebe (LVB) GmbH

### 15.35

New version of VDV publication 260 charging infrastructure for electric buses Eberhard Nickel, Chairman of the VDV Committee for Electrical Energy Systems (AEE), Leipziger Verkehrsbetriebe (LVB) GmbH

### 15:45

Carefree operation of the E-bus depot - thanks to VDV 463 and vCharM

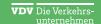
Rebekka Haisch, Product Management Expert, Vector Informatik GmbH

### 16:00

End of the conference

### Until 17:00

Visit to the exhibtion (appointment required)







# **OUR MODERATION**

### **Martin Schmitz**

Managing Director Technology, Association of German Transport Companies (VDV) and Chairman of the Forum for Transport and Logistics

Reiner Bieck

DEVK Versicherungen

Arno Kerkhof

UITP (The International Association of Public Transport)

Minh-Thuy Truong

Association of German Transport Companies (VDV)

**Wolfgang Reitmeier** 

Association of German Transport Companies (VDV)

# **OUR SPEAKERS**

Aida Abdullah

UITP (The International Association of Public Transport)

Maximilian Haag

Christopher Alting

DB Regio AG

Jochen Benz

ZF Mobility Solutions GmbH

**Bob Blitz** 

Transport for London

Alexander Bunzel

VCDB VerkehrsConsult Dresden-Berlin GmbH

Marie Carlsson

Volvo Bus Corporation

Marcel Corneille

EMCEL GmbH

Adrian Dogge

Stadtwerke Solingen GmbH

Erhan Eren

Iveco Magirus AG

Dr. Rolf Erfurt

Berliner Verkehrsbetriebe AöR

Dr. Michael Faltenbacher

thinkstep AG

Lukas Fast

FOGTEC Brandschutz GmbH

Dr. Marcel Frank

Regionalverkehr Köln GmbH

State Secretary Jochen Flasbarth

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Prof. Dr. Roland Goertz

Bergische Universität Wuppertal

Dr. Marcus Guzmann

HYDROGENIOUS LOHC TECHNOLOGIES GmbH

waxiiiiuaii naag

CarMedialab GmbH, a company of INIT group

Rebekka Haisch

Vector Informatik GmbH

Dieter Hanke

Omnibusspiegel

Janina Heel

Hamburger Hochbahn AG

Christiane Henrich-Köhler

PricewaterhouseCoopers GmbH

Mark Hogenmüller

Reutlinger Stadtverkehr RSV Service GmbH

Boris Höltermann

VDL Bus & Coach Deutschland GmbH

Sascha Kelterborn

Microvast, Inc

Dr. Volkhardt Klöppner

üstra Hannoversche Verkehrsbetriebe AG

Kurt-Christoph von Knobelsdorff

NOW GmbH

Kirsten Krämer

Omnibusspiegel

**Christof Kunze** 

**ABB AG** 

**Andreas Laske** 

Siemens AG

Lidia Leon

**EMT Madrid** 







### **OUR SPEAKERS**

Lukas Lexy

**BOGESTRA AG** 

Harald Ludescher

Ziehl-Abegg Automotive GmbH & Co. KG

Dr. Jan Marien

Isabellenhütte Heusler GmbH & Co. KG

Petra Maring

Association of German Transport Companies (VDV)

**Christophe Martin** 

**GROUPE TEC Belgien** 

Thomas Mau

KVG Kieler Verkehrsgesellschaft mbH

Janine Mielzarek

Offenbacher Verkehrs-Betriebe GmbH

Slobodan Misanovic

**GSP** Beograd

Toralf Müller

Verkehrsbetriebe Hamburg-Holstein GmbH

Dr. Stefan Nahmer

SBRS GmbH

Eric Nöh

PSI Transcom GmbH

Werner Overkamp

Association of German Transport Companies (VDV)

Cem Özdemir MdB

German Bundestag

**Matthias Rogge** 

ebusplan GmbH

Prof. Dr. Dirk Uwe Sauer

ISEA / RWTH Aachen

Eckhard Schläfke

Stadtwerke Münster GmbH

**Torsten Schmidt** 

Leipziger Verkehrsbetriebe (LVB) GmbH

Prof. Dr. Manfred Schrödl

TU Wien

**Christoph Scholz** 

**BOGESTRA AG** 

Sven Schulz

AKASOL AG

Jörn Schwarze

Kölner Verkehrs-Betriebe AG

Rico Seipel

Dresdner Verkehrsbetriebe AG

Stefan Tintera

initperdis GmbH

**Conrad Tschersich** 

AWG Abfallwirtschaftsgesellschaft mbH Wuppertal

Oben Uluc

Ballard Power Systems Inc.

Tilo Vogd

WV Energie AG

Thomas Volk

Stromnetz Hamburg GmbH

**Daniel Vorgerd** 

Daimler Buses

**Bernd Wachter** 

ZF Friedrichshafen AG

Markus Wiedemann

Stuttgarter Straßenbahnen AG

**Alexander Wolf** 

Stadtwerke München GmbH

Ingo Wortmann

Association of German Transport Companies (VDV)

Elke Maria van Zadel

ÜSTRA Hannoversche Verkehrsbetriebe AG and regiobus Hannover GmbH

State Secretary Dr. Tamara Zieschang

Federal Ministry of Transport and Digital Infrastructure



