# Siemens in the Open Space

AGENDA – IAA Studio, Wittelsbacherplatz



# September 7<sup>th</sup>

#### 3:00 PM - 3:45 PM | Autonomous vehicle development - From Chip to City

# Matthieu Worm, Director Autonomous Vehicles – Simulation and Test Solutions | Siemens Digital Industries Software

A revolution is transforming the automotive industry. Powerful digital technologies are driving demand for autonomous transport solutions, and they are disrupting existing approaches to car building. All the major players work to adapt to the future reality of cars becoming "computers on wheels." Siemens Digital Industries Software enables this transition with digitalization solutions from Chip to City. In this session, I will explain our approach of closed-loop engineering, bringing continuity throughout the supply chain, from the chip and core electronics, through the system and vehicle, and into the city level mobility solutions. A framework that combines collection and processing of real-life sensor data with a physics-based digital twin is a prerequisite for future proof engineering processes for autonomous vehicles.



#### 6:00 PM - 6:40 PM | Expert talk: Is electric the (only) future of automotive?

- Dr. Stefan Kneip, Vice President / Partner | Siemens Advanta
- Dr. Stefan Perras, Head of Connected eMobility | Siemens AG

In the race for decarbonization, the battery-powered electric car appears to be the clear winner in the automotive industry. Or is it too early to declare a winning technology? Which roles will hydrogen and e-fuel powertrains play? And how will the picture change when looking at other mobility segments – from trucks and trains, to ships and airplanes? What is (still) needed from a regulatory and technological side to scale decarbonization in time to meet our climate goals? And what is it going to cost? Join our two Siemens experts for a talk about (E)mobility and new energy technologies. They will provide answers to and demystify some of the most crucial questions around decarbonization.



# September 8<sup>th</sup>

### 11:00 AM – 12:00 PM | High Power Charging of Electric Trucks: Key challenges and success factors

- Claas Bracklo, Chairman | CharlN e.V.
- Michael Bucher, Senior Manager Strategy & Internationalization eMobility | EnBW mobility+
- Dr. Stefan Perras, Head of Connected eMobility | Siemens AG
- Dr. Christoph Schönwandt, Head of GoGreen & Corporate Projects | DHL Freight GmbH
- Jan Wohlmuther, Head of Customer System Consulting for Zero Emission Vehicles | Daimler Truck AG

As the electrification of passenger vehicles progresses at full speed, the next electrification candidate already awaits: trucks.

With European Union CO2 regulations kicking in from 2025 on, the pressure is rising for OEMs to electrify their fleets.

High hopes are placed on the upcoming global Megawatt Charging System (MCS) standard to charge commercial vehicles at megawatt speed. What do these charging systems look like, what are the requirements of fleet operators, and what does this mean for the energy grid?

Tune in to get hands-on experience from industry experts and learn more about the challenges and success factors for truck charging.



#### 2:00 PM – 3:00 PM | GERMAN | Wer braucht die Verkehrswende?

- Prof. Dr.-Ing. Klaus Bogenberger, Leiter Lehrstuhl für Verkehrstechnik | Technische Universität München
- Naomi Hinkel, Pressesprecherin | Stadtschüler\*innenvertretung München
- Dr. rer. nat., Dipl.-Psych. Jens Schade, Professor Verkehrspsychologie | Technische Universität Dresden
- Markus Schlitt, Chief Executive Officer | Yunex Traffic
- Oswald Utz, Ehrenamtlicher Behindertenbeauftragter der Landeshauptstadt München

Our goal at Yunex Traffic is to make our cities more livable through intelligent road-traffic solutions. It's important to us to hear from those who live, work, and commute here. We want to pay special attention to those for whom mobility is a major challenge. That's why we've also invited a representative of the Munich City Pupils' Association (SSV) as well as the honorary Representative for the Disabled of the City of Munich to our podium. Through contributions from traffic psychology and traffic science, we'll take a look at different future scenarios and their effects on people. After all, the livable cities of tomorrow are based on our actions today.



#### 5:00 – 5:45 PM | MaaS – how to make sense of the choice of transportation modes

#### Michael Frankenberg, CEO Hacon & Head of Siemens Mobility Intermodal Solution

Digitalization has changed Mobility vastly over the years. With the rise of smartphonebased apps, many more transportation modes like carsharing, ridesharing or e-scooters have emerged and now compete with classic public transport and private cars. With that, travelers face the challenge of finding optimal modes of transport that get them from A to B according to their unique travel preferences, whether it be price, time, or comfort. To grant travelers easy and convenient access to all the available mobility options, it's crucial to connect all the mobility providers to provide integrated Mobility-as-a-Service (MaaS) platforms and apps – so that travelers can plan, book and pay their journey with one account and via one single interface.



#### 6:00 PM - 7:00 PM | Mastering the big loop in autonomous driving

- Andrés Hernández, Senior Vice President / Senior Partner |
  Siemens Advanta
- Dr. Markus Junginger, CTO | DräxImaier
- Dr. Nari Kahle, Author "Mobilität in Bewegung" | CARIAD by Volkswagen Group
- Dr. Henning Lategahn, Managing Director | Atlatec GmbH

In the coming years, we will see autonomous vehicles shape the #FutureofMobility all across the globe. For this to happen, an ecosystem of mobility providers (OEMs, suppliers, tech and platform companies, etc.) and regulators (governmental institutions, smart cities) will have to cope with plenty of challenges along the way. These challenges will not only focus on technology itself, but also on strategy, organization, and methodology – as well as the social and ethical impact of autonomous driving on organizations, regions and individuals. Join our session to master the big loop!



# September 9<sup>th</sup>

#### 11:00 AM - 11:45 AM | GERMAN: Porsche turns to AR to grade up its service

- Steffen Loose, Account Manager | Siemens Digital Industries Software
- Jan Witkamp, AR Portfolio Developer | Siemens Digital Industries Software

Porsche aims to use the CAD data of the new Taycan for the world's first workshop solution with augmented reality (AR). This is intended to make servicing and maintenance of the company's first all-electric sports car easier and faster to use. Another plus for workshop employees: They no longer have to sift through pages of repair manuals, thereby making their work much more fun. Learn more about how Siemens and Porsche are working together to turn this vision into reality.



#### 1:00 PM - 1:30 PM | GERMAN: Can sustainability in rail transport still be increased?

# Jochen Steinbauer, Platform Director H2 Technologies for Regional Trains | Siemens Mobility GmbH

From an ecological point of view, rail transport is already one of the most efficient means of transportation. Nevertheless, there are still over 1,600 diesel multiple units in use in Germany, which will have to be replaced in the next 10 to 20 years. Several technologies lend themselves to this, such as battery and hydrogen traction. Hydrogen traction in particular offers added value in terms of the energy transition, because it decouples energy generation from consumption while linking different sectors together. Thus, there are new approaches in rail transport that not only make it more sustainable, but also contribute to the energy transition.



### 2:00 PM - 2:30 PM | Leveraging connected and autonomous driving for compelling first/last mile public transport

# **Kunal Chandra, Vice President, Shared Autonomous Mobility | Siemens Mobility GmbH**

Siemens Mobility is developing next-generation infrastructure solutions to accelerate the uptake of autonomous mobility solutions – particularly in the public-transport sector and in close partnership with city governments and public transport operators. By integrating state-of-the-art technologies such as AI, deep learning, sensor data fusion, edge computing, and cloud computing, we can develop embedded and cloud-based HW/SW stacks for enabling autonomous driving in public transport that can be commercialized and homologated.



### 4:00 PM - 5:00 PM | Charging of autonomous electric vehicles – A showcase by Siemens and Einride

- Tomas Ohlson, Founding Engineer & Technology Strategy
  Director | Einride AB
- Dr. Stefan Perras, Head of Connected eMobility | Siemens AG

On top of the already apparent trend to electrify transport, autonomy will take center stage over the next decade. One of the unanswered questions is: How will autonomous vehicles be charged when there is no driver present? Siemens has developed an autonomous fast-charging station and has showcased it together with the fully autonomous truck developed by Einride. In this panel, both companies present their autonomous solutions and discuss the future of electric autonomous mobility.

