



PROGRAM

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TIMETABLE 1st E-MOBILITY INTEGRATION SYMPOSIUM

MONDAY, 23 OCTOBER 2017	
E-Mobility Symposium	
08:00 – 09:00	FOYER
	REGISTRATION
09:00 – 09:10	ROOM XY
	OPENING: WELCOME AND INTRODUCTION
09:10 – 10:50	ROOM
	SESSION 1: KEYNOTE SESSION
COFFEE BREAK (30MIN) & POSTER SESSION	
11:20 – 13:00	ROOM
	SESSION 2A: EV'S AND DISTRIBUTION GRIDS
	ROOM
	SESSION 2B: INTERNATIONAL EXPERIENCE
LUNCH (1H)	
14:00 – 15:45	ROOM
	SESSION 3A: EV'S AND POWER SYSTEM ASPECTS
	ROOM
	SESSION 3B: EV CHARGING EXPERIENCE
COFFEE BREAK (15MIN) & POSTER SESSION	
16:00 – 17:20	ROOM
	SESSION 4A: GRID CODE AND POWER QUALITY
	ROOM
	SESSION 4B: MODELLING
17:25-18:15	SESSION 5 – PODIUMS DISCUSSION AND CLOSURE

MONDAY, 23 OCTOBER 2017

08:00 – 09:00 Registration

09:00 – 09:10 Welcome

09:10 – 10:50 SESSION 1 – KEYNOTE SESSION

> Session Chair T. Ackermann (Energynautics, Germany)

09:10 – 10:30 Presentations (20 min. each)

- **Presentation 1**
Name (Company, Country), Name (Company, Country), ... [EMOB17-000](#)
- **Presentation 2**
Name (Company, Country), Name (Company, Country), ... [EMOB17-000](#)
- **Presentation 3**
Name (Company, Country), Name (Company, Country), ... [EMOB17-000](#)
- **E-Mobility and its Future Effect on Demand and Flexibility: Chances and Challenges 2035 from a Transmission System Operator's Perspective**
R. Bauer, T. Köbinger (50Hertz Transmission, Germany), G. Papaefthymiou, R. Kuwahata (Elia Grid International (egi), Germany) ([Submission-ID Emob-190](#))

10:30 – 10:50 Discussions

10:50 – 11:15 COFFEE BREAK

11:15 – 13:00 SESSION 2A – EV'S AND DISTRIBUTION GRIDS

> Session Chair Name (Company, Country)

11:15 – 12:45 Presentations (16 min. each)

- **Benefits and Barriers for V2X (Vehicle-to-Everything) Deployment**
S. González-Villafranca, M. Sanmartí, C. Corchero (IREC | IEA (International Energy Agency), Spain) ([Submission-ID Emob-17](#))
- **Determination of the Integration and Influencing Potential of Rapid Charging Systems for Electric Vehicles in Distribution Grids**
M. Kurth, A.Schnettler, M. Gödde, M. Meyer (RWTH Aachen University, Germany), A. Probst (Netze BW, Stuttgart, Germany), D. Pieper (Netzgesellschaft Düsseldorf, Germany) ([Submission-ID Emob-155](#))
- **Flash Recharging Tram Catenary-Free: Impact Analysis on Italian Distribution Networks**
C. Carlini, D. Moneta (RSE, Italy) ([Submission-ID Emob-60](#))
- **Maximizing EV-Integration in Low-Voltage Grids Using the Universal Smart Energy Framework**
E. Coster, H. Fidder, M. Broekmans (Stedin, Netherlands) ([Submission-ID Emob-74](#))
- **Peak Capping by Means of Buffer Storages in Charging Stations**
J. Wussow, B. Engel (Technical University Brunswick, Germany) ([Submission-ID Emob-79](#))
- **Impact of EV Charging on Low-Voltage Grids and the Potential of Battery Storage as Temporary Utility During Grid Reinforcement**
L. Held, Lukas, M. Uhrig, M. R. Suriyah, T. Leibfried (Karlsruhe Institute of Technology, Germany), E. Junge, S. Lossau, M. Konermann (Netze BW, Germany) ([Submission-ID Emob-139](#))

12:45– 13:00 Discussions

11:15 – 13:00	SESSION 2B – INTERNATIONAL EXPERIENCE
> Session Chair	Name (Company, Country)
11:15 – 12:45	Presentations (15 min. each)
	<ul style="list-style-type: none"> • Transformation of the German Energy Sector with Increasing Market Penetration of Carbon-Free Car Technologies K. Goldammer, O. Arnhold, M. Fleck, F. Grüger, O. Hoch, B. Schachler (Reiner Lemoine Institute, Berlin, Germany) (Submission-ID Emob-142) • Regulatory Issues in the Development of Electromobility Services: Lesson Learned from the Italian Experience L. Lo Schiavo, D. Bonafede (Autorità per l'energia elettrica, il gas e il sistema idrico, Italy), S. Celaschi, F. Colzi (RSE, Italy) (Submission-ID Emob-54) • Electric Mobility – The Challenges of Regulating the Charging Infrastructure During Early Market Development in Brazil A.C. Marques de Araujo, R.E. Hardinge-Bailey de Amorim (ANEEL - Brazilian Electricity Regulatory Agency, Brazil) (Submission-ID Emob-57) • Effects of Heavy-Duty Vehicle Electrification on Infrastructure: The Case of Switzerland E. Çabukoglu, G. Georges, L. Küng, K. Boulouchos (ETH Zurich - Aerothermochemistry and Combustion Systems Laboratory (LAV), Switzerland) (Submission-ID Emob-110) • Integration of Multifarious Electric Vehicle Charging Infrastructure Flexibility: Applications in India G. Ghatikar (Board of Governors and Working Group Chair, India Smart Grid Forum, Electric Power Research Institute, USA), A. Ahuja (Research Associate, India), R. Pillai (India Smart Grid Forum Global Smart Grid Federation, India) (Submission-ID Emob-222) • The Impact of Electric Vehicles Deployment on Production Cost in a Caribbean Island Country E. Taibi (International Renewable Energy Agency (IRENA), Germany) (Submission-ID Emob-9) • Charge-and-Share (CAS) Project -Electric Vehicle Demonstration on Sustainable Charge, Energy Mobility & Sharing- Y. Ota (Tokyo City University, Japan), T. Nakajima (Tokyo City University, Japan) (Submission-ID Emob-171)
12:45 – 13:00	Discussions
13:00 – 14:00	LUNCH BREAK
14:00 – 15:45	SESSION 3A – EV'S AND POWER SYSTEM ASPECTS
> Session Chair	Name (Company, Country)
14:00 – 15:30	Presentations (15 min. each)
	<ul style="list-style-type: none"> • Necessary Contribution to LFSM of Electric Vehicles to Ensure Frequency Stability in the ENTSO-E Continental Europe Synchronous Area G. Kerber (LEW Verteilnetz, Augsburg, Germany), J. Lehner (TransnetBW, Germany) (Submission-ID Emob-84) • EV Charging Coordination to Secure Power Grid Stability B. Kirpes, S. Klingert (Universität Mannheim, Germany), M. Pérez Ortega (Gfi Informatique, Belgium), F. Gotzler, M. Achatz (E-WALD, Germany), H. de Meer (Universität Passau, Germany) (Submission-ID Emob-186) • Grid Integration of Electric Vehicle Fleets Using a Traffic Light Concept M. Vasconcelos, M. Kurth, A. Schnettler (RWTH Aachen University, Germany) (Submission-ID Emob-82) • Grid Impact of Electric Vehicles with Secondary Control Reserve Capability T. Degner, G. Arnold, R. Brandl, J. Dollichon, A. Scheidler (Fraunhofer IWES, Germany) (Submission-ID Emob-298) • Dynamic Frequency Analyses of Power System with Renewable Energy Generations and Electric Vehicles L. Cai, X. Lei, Y. Lan, T. Lan (Global Energy Interconnection Research Institute (GEIRI) Europe, Germany) (Submission-ID Emob-136) • Leveraging the Benefits of Integrating and Interacting Electric Vehicles and Distributed Energy Resources M. Paschmann (University of Cologne ewi , Germany) (Submission-ID Emob-99) • The vision of E-mobility in the Perspective of the Existing Power Infrastructure - Successfully Managing Conflicting Expectations K. Burges, M. Döring (Ecofys Germany, Germany) (Submission-ID Emob-284)-15 minuten
15:30 – 15:45	Discussions

14:00 – 15:45	SESSION 3B – EV CHARGING EXPERIENCE
> Session Chair	Name (Company, Country)

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|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:00 – 15:30 | Presentations (15 min. each) |
| | <ul style="list-style-type: none"> • Impacts on Terminal Power Demands of Bus Depots in Hamburg Caused by Fully Electrified Bus Fleets Using Field Data
M. Dietmannsberger (Hamburger Hochbahn AG,, Germany) (Submission-ID Emob-24) • Grid Compatible Flash Charging Technology
V. Holz (ABB, Germany) (Submission-ID Emob-51) • Technical Data Analysis and Evaluation of Fast Charging Processes of several Electric Vehicles
G. Göhler, L. Effing (University of Stuttgart, Germany) (Submission-ID Emob-78) • Fast and Easy Integration of High Power Charging Infrastructure into Existing Medium Voltage Grids
F. Mayer, C. Strafiel (WRD, Germany), J. Winkler (ENERCON, Germany) (Submission-ID Emob-36) • EV Integration into the Power Grids by Using eRoaming and Smart Charging to Foster the Development of eMobility
C. Hahn, P. Gumienny, M. Gagnebin (CEO, Germany) (Submission-ID Emob-273) • Assist EV Drivers to Act Smarter
S. Klingert, C. Kacperski, F. Kutzner (University of Mannheim, Germany) (Submission-ID Emob-189) |

15:30 – 15:45	Discussions
15:45 – 16:00	COFFEE BREAK

16:00 – 17:45	SESSION 4A – GRID CODE AND POWER QUALITY
> Session Chair	Name (Company, Country)

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|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16:00 – 17:04 | Presentations (16 min. each) |
| | <ul style="list-style-type: none"> • Compliance Assessment of Grid Connected EV Charging Stations
J. Langstädtler (FGH, Germany), J. Döll (FGH, Germany) (Submission-ID Emob-47) • Harmonic Resonance Assessment for Ultra Fast Charging Station - A Case Study on Dutch MV Grid
Y. Sun (DNV GL Energy, Netherlands Technical University Eindhoven, Netherlands), E. de Jong (DNV GL Energy, Netherlands Technical University Eindhoven, Netherlands), S. Cobben (Alliander, Duiven, Netherlands Technical University Eindhoven, Netherlands), V. Cuk, (Technical University Eindhoven, Netherlands) (Submission-ID Emob-90) • Impact of Electric Vehicles on Power Quality in Central Charging Infrastructures
F. Möller, S. Müller, J. Meyer (Technical University Dresden, Germany) (Submission-ID Emob-101) • Measurement and Calculation of Harmonics in the Grid when Charging Electric Vehicles
J. Persson, Y. He, Ying, J. Wetterström (Vattenfall R&D, Sweden) (Submission-ID Emob-127) |

17:04 – 17:20	Discussions
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16:00 – 17:45	SESSION 4B – MODELLING
> Session Chair	Name (Company, Country)
16:00 – 17:04	Presentations (16 min. each)
	<ul style="list-style-type: none"> • Modelling e-Mobility in Sector Coupling Studies A.Kies, T. Brown, S. Schramm (Frankfurt Institute for Advanced Studies, Germany) (Submission-ID Emob-290) • Modelling and Simulation of a Public Transport System with Battery-Trolleybuses for an Efficient E-Mobility Integration D. Baumeister, M. Salih, P. Steinbusch, R. Uhlig, M. Zdrallek (Bergische Universität Wuppertal, Germany), S. Mour (SWS Netze Solingen, Germany), H. Ben Zid (Stadtwerke Solingen, Germany) (Submission-ID Emob-105) • Development of a Model for Power Grids by Using a Cellular Approach for an Optimum Integration of Electric Charging Infrastructure J. Vopava, T. Kienberger (Montanuniversitaet Leoben, Austria) (Submission-ID Emob-66) • Forecast Model for Time-Dependant Electromobile Loads for the Use Cases Airport and Trade Fair H. Triebke (Fraunhofer IAO, Germany) (Submission-ID Emob-137) • Assessment of the Marginal Emission Factor Associated with Electric Vehicles Charging G. Pareschi, G. Georges, K. Boulouchos (ETH Zürich, Switzerland) (Submission-ID Emob-154)
17:04 – 17:20	Discussions

17:25 – 18:15	SESSION 5 – PODIUMS DISCUSSION AND CLOSURE
> Session Chair	Name (Company, Country)
17:25 – 18:10	<ul style="list-style-type: none"> • Presentation 1 Name (Company, Country), Name (Company, Country), ... EMOB17-000 • Podiums Discussion Panel TBA
18:10– 18:15	Closure

POSTER PRESENTATIONS

- **NEFUSTA - the Electrical Fueling Station for e-Mobility AND Grid Support**
J. van der Burgt (DNV GL, Netherlands) ([Submission-ID Emob-23](#))
- **Solarroads – Making eMobility Sustainable**
D. Müller-Judex (Solmove, Germany) ([Submission-ID Emob-28](#))
- **Spatial Markov Chain Model for Electric Vehicles Charging**
M. Shepero, J. Munkhammar (Uppsala University, Sweden) ([Submission-ID Emob-34](#))
- **Revolutionary Storage Solution with Parallel Control of Battery Cells**
W. Walter (ASD Automatic Storage Device, Germany) ([Submission-ID Emob-42](#))
- **Legal Framework Conditions for the Operation of Charging Stations on Factory Premises under the German Energy Law**
F. Lietz, Franziska, E. Brodt, Y. Hanke (RITTER GENT COLLEGEN, Germany) ([Submission-ID Emob-71](#))
- **Providing Charging Electricity and Space Heating for Buildings Using Combined Heat and Power Generation and Photovoltaics**
G. Georges, L. Küng, K. Boulouchos (ETH Zurich, Switzerland) ([Submission-ID Emob-80](#))
- **The Improvement of Grid Integration for Electromobility through Innovative Business Models**
K. Rambow-Hoeschele (Bosch, Germany | Aalen University, Germany | Glasgow Caledonian University, United Kingdom), I. Walter (Aalen University, Germany | Carl Zeiss Meditec, Germany | Glasgow Caledonian University, United Kingdom), A. Nagl (Aalen University, Germany), D. Harrison, B. Wood (Glasgow Caledonian University, United Kingdom), K. Bozem (bozem | consulting associates | munich, Germany), K. Braun, P. Hoch, Peter (Aalen University, Germany) ([Submission-ID Emob-85](#))
- **Demands on the Electrical Grid Due to Electro Mobility in Hamburg**
M. Schumann, M.-F. Meyer (Helmut Schmidt University / University of the Federal Armed Forces Hamburg, Germany), M. Dietmannsberger (Hamburger Hochbahn, Germany), D. Schulz (Helmut Schmidt University / University of the Federal Armed Forces Hamburg, Germany) ([Submission-ID Emob-102](#))
- **Sector Coupling: Optimized Scheduling of Electric Vehicle Charging and Heat Production in Residential Districts**
M. Zimmerlin, M. Wilferth, T. Leibfried (Karlsruhe Institute of Technology, Germany) ([Submission-ID Emob-107](#))
- **Simultaneity Analyses on Power Generation by Renewables and Consumption Regimes of Electrified Public Bus Transport under Various Charging Strategies**
P. Dicke, M. Pruckner (Friedrich Alexander University Erlangen-Nürnberg (FAU), Germany) ([Submission-ID Emob-111](#))
- **A DC Grid Based Centralized Charging System for Multiple Electric Vehicles in Distribution Network**
T. Lan, Y. Lan, H. Yin, X. Wu, L. Cai, X. Lei (Global Energy Interconnection Research Institute Europe, Germany) ([Submission-ID Emob-158](#))
- **HIL Test of Power System Frequency Control by Electric Vehicles**
H. Toda, Y. Ota, T. Nakajima (Tokyo City University, Japan), K.-i. Kawabe (Tokyo Institute of Technology, Japan), A. Yokoyama (University of Tokyo, Japan) ([Submission-ID Emob-167](#))
- **Energy Transfer on Demand - the Challenge for Modern Automotive Batteries**
P. Birke (University of Stuttgart, Germany) ([Submission-ID Emob-169](#))
- **CAPEX to OPEX transformation, an Accelerator for EV & PHEV**
C. Girardeau (Schneider Electric, France) ([Submission-ID Emob-177](#))
- **Evolution of Electric Vehicle Scenario in India – Analysis with V2G Parking Lot**
A. Ramanan, I. Mitra (GIZ, India) ([Submission-ID Emob-180](#))
- **Grid Storage Application of Electric Vehicles under Battery Life Degradation**
A. Kies, D. Kaufhold, T. Brown, S. Schramm (Frankfurt Institute for Advanced Studies, Germany) ([Submission-ID Emob-195](#))
- **The user Impact on the Lifetime of EV Batteries and the Suitability for Reuse of Li-Ion Batteries**
A. Dautfest, C. Debes, R. Heim, Rüdiger (Fraunhofer-Institute for Structural Durability and System Reliability LBF, Germany) ([Submission-ID Emob-197](#))
- **Integration of EVs, including fuel cell vehicles, into power system and its operation.**
Z. Lukszo, E. Park Lee (Delft University of Technology, Netherlands) ([Submission-ID Emob-200](#))
- **Examinations on Speed Charging Systems with and without Battery Buffers for Smart Grids**

- G. Duschl-Graw (Beuth Hochschule für Technik Berlin, Germany) ([Submission-ID Emob-201](#))
- [Exploring Electric Vehicle Participation in the Icelandic Balancing Market as Virtual Power Plant](#)
F. Steingrube (Reykjavik University, Iceland), S. Perkin (Reykjavik University, Iceland | Landsnet, Iceland), E. Lazarczyk, H. Stefánsson (Reykjavik University, Iceland) ([Submission-ID Emob-246](#))
 - [Integrated Modelling of the Provision of Power System Ancillary Services from Electrolysers for the Sizing of Fuel Cell Electric Vehicle Infrastructure: a German Case Study](#)
S. Clegg, P. Mancarella (University of Manchester, United Kingdom) ([Submission-ID Emob-289](#))
 - [Electric Vehicle Charging in Real Estate Environment](#)
M. Peräniitty (Parking Energy, Finland) ([Submission-ID Emob-293](#))
 - [Integration of PEV and PV in a Distribution Network in Norway - Considering the Distributed Reactive Power Control, Case Study](#)
S. Zaferanlouei, M. Korpås (Norwegian University of Science and Technology, Norway) ([Submission-ID Emob-296](#))
 - [Holistic Platform for the Integration Testing in Digital World of e-Vehicles](#)
R. Nicolini, D. Villani, A. Bertani, F. Fraioli (CESI, Italy) ([Submission-ID Emob-297](#))