

# European Electric Road Systems' Symposium 2023

14th & 15th February, 2023 at Fraunhofer ENIQ,  
EUREF Campus 23/24, 10829 Berlin, Germany.



## Day 1 – February 14<sup>th</sup>

### Opening Session (13:00 – 15:30, Moderation: Matts Andersson & Patrick Plötz, [dial-in here](#))

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|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13:00 – 13:10 | Matts Andersson (WSP) and Patrick Plötz (Fraunhofer ISI)                                                                                                                                                                          |
| 13:10 – 13:35 | Michael Lehmann (Univ. of Applied Sciences Erfurt): Scientific Keynote                                                                                                                                                            |
| 13:40 – 14:05 | Rebecka Johansson (Swedish Ministry of Rural Affairs and Infrastructure),<br>Alexander Thal (National Organisation Hydrogen and Fuel Cell Technology),<br>Markus Becker (German Ministry for Economic Affairs and Climate Action) |
| 14:05 – 14:30 | Axel Volkery (Deputy Head of Unit Sustainable and Intelligent Transport at European<br>Commission): EU strategy for ERS                                                                                                           |
| 14:30 – 15:15 | <i>Panel discussion</i> : The industry's view on the way forward                                                                                                                                                                  |
| 15:15 – 15:30 | Matts Andersson (WSP): Program overview                                                                                                                                                                                           |

### Parallel Sessions (16:00 – 18:30)

#### ERS from an administration perspective (Session chair: Roger Ullström)

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|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16:00 – 16:20 | Jakob Rogstadius (RISE Research Institutes of Sweden AB): Interaction Effects<br>between Battery Electric Trucks, ERS and Static Charging Infrastructure                                           |
| 16:20 – 16:40 | Erik Johansson (WSP): Regulating Electric Road Systems in Europe – How can a<br>deployment of ERS be facilitated?                                                                                  |
| 16:40 – 17:00 | Giverny Knezevic (IKEM – Institut für Klimaschutz, Energie und Mobilität): A<br>stakeholder and legal view on ERS                                                                                  |
| 17:00 – 17:20 | Dominik Gurske (Die Autobahn GmbH des Bundes): ERS from a highway<br>administration perspective                                                                                                    |
| 17:20 – 18:30 | Björn Carselid & Jonas Åberg (Trafikverket): Workshop "How will a fully developed<br>electric road affect the road operator from an accessibility, traffic safety, and<br>management perspective?" |

#### Industry perspective and activities for ERS (Session chair: Britta Sommer)

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|---------------|-------------------------------------------------------------------------------------------------------------------------------|
| 16:00 – 16:20 | Andreas Wendt (Electreon Germany GmbH): Wireless ERS solutions                                                                |
| 16:20 – 16:40 | Dan Zethraeus (Elonroad): Current results for the Elonroad ERS demo in Lund,<br>Sweden                                        |
| 16:40 – 17:00 | Josephine Adorelle (Evias AB): The Evias solution for ERS                                                                     |
| 17:00 – 17:20 | Patrick Duprat (Alstom): Alstom ERS Solutions and ERS standardization at EU level                                             |
| 17:20 – 17:40 | Patrik Akerman (Siemens Mobility GmbH): The case for catenary ERS                                                             |
| 17:40 – 18:00 | Philippe Nobileau (ZE–Drive): The simple & affordable electric road ZE–Feed                                                   |
| 18:00 – 18:20 | Mauricio Esguerra (MAGMENT GmbH): Magnetizable concrete and asphalt: the<br>enabling technology for dynamic wireless charging |

### Networking Dinner (self-paid, 19:30 at Wirtshaus Heuberger, Gotenstraße 1, 10829 Berlin)

## Day 2 – February 15<sup>th</sup>

### Parallel Sessions (8:30 – 10:30)

#### National ERS plans and activities (Session chair: Till Gnann)

- 08:30 – 08:50 Arjan van Vliet (Dutch Ministry of Infrastructure and Water Management): Current state of ERS in the Netherlands
- 08:50 – 09:10 Bernard Jacob (Université Gustave Eiffel): ERS situation in France – Assessment of current technologies, potential deployment and benefits
- 09:10 – 09:30 Britta Sommer (VDI/VDE Innovation + Technik GmbH): ERS research in Germany
- 09:30 – 09:50 Michael Rohrer (Austrian Energy Agency): ERS feasibility study for Austria
- 09:50 – 10:10 Henrik Sällberg (Blekinge Institute of Technology): Determinants of road freight transport companies' adoption and utilization of electric road systems
- 10:10 – 10:30 Roger Ullström & Kenneth Natanaelsson (Trafikverket): The Swedish ERS activities

#### The potential and barriers for ERS (Session chair: Erik Johansson)

- 08:30 – 08:50 Alexander Prinz (TU Berlin): Pantograph testing and measurements at currents of more than 100 amperes.
- 08:50 – 09:10 Aline Scherrer (Fraunhofer ISI): Perspectives of manufacturers & policymakers on ERS
- 09:10 – 09:30 Gordon Witham (Institute for Automotive Engineering ika, RWTH Aachen University): The research project BEV Goes eHighway in Highway
- 09:30 – 09:50 Julius Jöhrens (ifeu Institute for Energy and Environmental Research Heidelberg) & Moritz Mottschall (Öko Institute Berlin): ERS Strategies and TCO analysis for different European countries
- 09:50 – 10:10 Laurenz Bremer (Technische Universität Darmstadt): Hessian eHighway test track ELISA – Findings of the accompanying research
- 10:10 – 10:30 Carolin Grüter (TU Berlin & University of Weimar): Electrification of road freight transport – Short-term recommendations for action from an economic point of view

### Closing session (11:00 – 12:00, Moderation: Matts Andersson & Patrick Plötz)

- 11:00 – 11:20 Matteo Craglia (International Transport Forum): Decarbonising Europe's Trucks: How to Minimise Cost Uncertainty and the Role of ERS
- 11:20 – 11:35 Uta Burghard (Fraunhofer ISI): The importance of technology acceptance for ERS
- 11:35 – 11:50 Jan Pettersson (Trafikverket), Bernard Jacob (Univ. G. Eiffel), Britta Sommer (VDI/VDE Innovation + Technik GmbH): Lessons learnt and next steps
- 11:50 – 12:00 Matts Andersson (WSP) and Patrick Plötz (Fraunhofer ISI): Farewell

The Symposium has been organised as part of the International Research Collaboration on Electric Road Systems II (CollERS2), a collaboration between Germany, France and Sweden, which provides a platform for exchange of knowledge in the field of electrification of heavy road transport, with a focus on Electric Road Systems (ERS). The overall aim of the project is to increase the common knowledge about ERS and complementary non-ERS technologies, and how these alternatives can contribute to a technology shift that leads to reduced emissions from heavy road transport. More info at <https://electric-road-systems.eu/>



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