

WDF 2025

WAYSIDE DIGITALISATION FORUM

15-17 October 2025

Vienna, Austria



PROGRAMME



WDF 2025

15-17 October 2025



LOCATION

Hotel Andaz
am Belvedere
Vienna | Austria



REGISTRATION

Sign up and contribute to
shaping tomorrow's railways:
www.wdfvienna.com

ABOUT THE EVENT

The Wayside Digitalisation Forum (WDF) is the premier global event for driving innovation and shaping the future of digital signalling, focusing on object control and monitoring. Building on the success of the renowned Wheel Detection Forum, this new format of the WDF expands its emphasis on cutting-edge field elements, their seamless integration into various systems and efficient operations throughout the entire life cycle.

Join a vibrant community of railway operators, system suppliers and integrators as well as consultants from around the world. Explore the

latest innovations, exchange visionary ideas and discuss standardisation initiatives such as EULYNX. With engaging networking, real-world case studies, and inspiring technical presentations, the WDF is your opportunity to connect, collaborate, and drive progress in creating more efficient and future-ready rail systems.

Be part of the conversation to shape tomorrow's railways!

www.wdfvienna.com



WHAT AWAITS YOU

- Inspiring Keynote Speeches
 - Strategic inputs on digital signalling as a key to high performing railway networks
 - Future-proof concepts for controlling of field objects
 - How to tackle challenges in operating a digital signalling system
- Sharing experiences and expectations on OC based on EULYNX
 - Insights on data acquisition, monitoring, and predictive maintenance in digital signalling
 - News on intelligent wayside objects transforming signalling

PROGRAMME

DAY 1

Wednesday, 15 October 2025



Andreas Matthä, CEO (ÖBB) | Chair of the Management Committee (CER),
ÖBB-Holding AG | CER - Community of European Railways

Driving Capacity and Cost Efficiency: Modernising Rail Operations and Signalling

The keynote will highlight on the importance of collaboration between the industry and railway companies to drive innovation while ensuring cost-efficient solutions in both initial investment and maintenance.



Anil Rai, Managing Director, Austrian Rail Industry Association

Austria's Railway Industry: A Success Story of Innovation and Collaboration

In this welcome speech, the Austrian Railway Industry Association will highlight the outstanding achievements of Austria's railway sector, emphasizing its global leadership in innovation.



Bogdan Godziejewski, President, IRSE

Global Trends in Railway Signalling: Innovation, Safety, and Future Challenges

Insights into the latest global trends in railway signalling, focusing on technological advancements, safety improvements, and the future challenges shaping the industry worldwide.



Michael Thiel, CEO, Frauscher Sensor Technology

Future-Ready Signalling: How Intelligent Field Elements Redefine Cost and Flexibility

A visionary perspective on how intelligent field elements are transforming railway signalling, enhancing flexibility, reducing costs, and driving the next generation of efficient and scalable system solutions.



DAY 2

Thursday, 16 October 2025

STREAM 1: Strategies on future signalling and controlling of field objects



Shobhan Chaudhuri, Advisor/R&D/S&T,
Delhi Metro Rail Corporation (Ex-Indian Railways)

Digital Transformation of Indian Railways: A Path to Sustainable and Smart Mobility

- Improving Indian Railways efficacy with zero unsafe conditions and punctual operations
- Enhancing passenger experience through seamless digital services.
- Expanding network capacity with smart automation and real-time monitoring.
- Reducing lifecycle costs with intelligent, data-driven train solutions.



Richard Plokhaar, Senior Technical Director, WSP

Jonathan Hu, Senior Technical Director, WSP

Current developments in the North American signalling worlds

- Positive Train Control (PTC) implementations in the USA and PTC or driver warning system ("Enhanced Train Control, ETC) for the Canadian market
- ERTMS/ETCS L2 initiative around Toronto
- Existing and ongoing CBTC implementations in Canada and USA
- Challenges around vehicle detection methods in combination with broken rail detection.



Shaping the Future of Rail: Digital Transformation Across Australia

- Diverse regulations and standards challenge national harmonisation.
- State-driven digital projects enhance safety, capacity, and efficiency.
- Case studies showcase digital transformation across major Australian rail networks.



Thursday, 16 October 2025

STREAM 2: Why digital signalling is the key to future rail network



Bernd Elsweiler, Head of Digital Interlocking Systems, DB InfraGO
Digital Interlocking: A modern platform to support ETCS rollout in Europe

- DB's first digital interlocking incl. security layer in Donauwörth
- Experiences from first year in operation
- Leverage COTS technology and simplifying life cycle management



Mirko Blazic, Technical Lead / EULYNX Consortium, EULYNX
EULYNX: Enabling the digital transformation for railway signalling

- EULYNX specifies standardised interfaces for signalling systems, enabling seamless integration between equipment from different suppliers.
- Modular and standardised architecture helps infrastructure managers optimise migration strategies, add flexibility to lifecycle management, and extend the lifespan of installed components.
- EULYNX enables the shift towards modular, scalable systems, ensuring flexibility for future upgrades and alignment with digital signalling advancements.



Discussion Round

Navigating the Future of Digital Interlocking: Industry Perspectives

Moderation: Michael Leining

Market readiness of
digital interlocking
solutions.

Key challenges for
integrators of modularised
interlockings and
strategies for overcoming
them

Important steps for
suppliers and operators to
successfully implement
digital interlocking
solutions.

STREAM 3: Overcoming challenges in operating a digital signalling system



Karl-Albrecht Klinge, Founder, praedicta GmbH

Overcoming Challenges in Digital Signaling: The Role of EU-Rail Service Function Diagnostics and Service Function Configuration

- EU-Rail Service Function Diagnostics: a standardized approach for monitoring, analyzing and managing digital signaling systems, ensuring real-time data availability and seamless integration.
- EU-Rail Service Function Configuration: enabling safe and non-safe asset configuration, incorporating management functions to ensure consistency and reliability in system updates.
- How data-driven maintenance and structured configuration management reduce reactive interventions, enhance system availability and operational resilience.



Max Schubert, Managing Director, INCYDE GmbH

Cybersecurity in Digital Signalling: A Holistic Approach

- Evolving cyber threat landscape in digital signalling: Ransomware, manipulation, data breaches and potential disruptions from AI-driven attacks.
- Resilient cybersecurity concepts: Key steps to engineer robust security frameworks, such as risk assessment, multi-layered defense strategies and continuous monitoring.
- Proactive incident response and recovery: Implementing real-time threat detection, rapid incident response and disaster recovery plans to ensure operational continuity in case of a cyber attack.



Dominik Eger, Information Security Officer | CISSP, OHB Teledata GmbH

Resilient Cybersecurity for Decentralised Signalling Systems: The OHB Approach

- OHB's resilient cybersecurity concept protects decentralised signalling systems against cyber threats through advanced encryption, access control, and monitoring.
- Maintenance operations, such as remote access and updates, are carried out via secure, authenticated channels to ensure data integrity and system safety.
- Opportunities to use an intelligent platform for OT asset management for the efficient analysis of data from downstream processes.



STREAM 4: Sharing experiences and expectation on OC based on EULYNX



Alexander Kruse, Technical Product Manager, SNCF

Sayfeddine Eddous, Systems Engineer, SNCF

SNCF Réseau modernises the French rail network signalling system: Decisions, strategy, and challenges

- Generalising axle counters as reference train detection system across the French rail network in project "CE FAdC": Stakeholder management and alignment with SNCF Réseau's signalling systems digitalisation strategy.
- Using EULYNX specifications for integrating CE FAdC with the new French digital interlocking "Argos": Expectations and added value.
- Tailoring the CE FAdC system to the French operational and technical characteristics: Major challenges and lessons learned.



Juha Lehtola, Project Manager, ERTMS Program, Finnish Transport Infrastructure Agency

ERTMS program in Finland: Advancing European Rail Operations with EULYNX Integration

- FTIA pioneers the separation of interlocking system and field elements, enabling modular deployment.
- Finnish ERTMS program, including renewal of all signalling systems, becomes the first European project to deploy EULYNXcompliant interfaces, fostering interoperability and valuable insights for future implementations across European rail networks.
- Collaboration and innovation: Partnerships with several suppliers and experts ensure flexibility, supplier diversity, and innovative solutions that set benchmarks for digital railway systems.



Finnish Transport
Infrastructure Agency

Discussion Round

Sharing experiences and expectation on increasing digitalization of signaling.

Moderation: Michael Leining

What are the major benefits of utilising digitalisation for signalling?

Who's major responsibility is it to take care of interface coordination and management?

What are the biggest challenges to implement or migrate to fully digitized signalling solutions?

STREAM 1: Innovations driving digitalisation in signalling



Florian Einböck, Product Management Signalling, Frauscher Sensor Technology
Future-Ready Signalling: How Intelligent Field Elements Redefine Cost and Flexibility

- The evolution of intelligent field elements for reliable and more efficient signalling
- Accelerating roll outs and cutting down life cycle costs through unified frameworks and standardisation
- Modern architecture and open networks are key for flexibility and reduced cabling efforts

 **FRAUSCHER**



Sergio Repetto, Head of System Development, Research and Development Division, RFI S.p.A.

SIPAC: Transforming Trackside Maintenance Through Safety, Innovation, and Efficiency

- Enhancing safety with certified, vital control systems replacing manual procedures.
- Maintainers use tablets to send track possession commands to interlocking systems.
- SIL4 architecture integrates commercial devices over public cellular networks.

 **RFI**
RETE FERROVIARIA ITALIANA
GRUPPO FERROVIE DELLO STATO ITALIANE



Hannes Denil, Teamlead Trackside signalling product management, Infrabel
Improving the TCO of signalling assets by pushing digitalisation even further

- Digitalisation as a strategic catalyst in service of the goals of our company.
- Flatten the road for our technicians by adding on the digitalisation train: latest developments regarding digitalisation of signalling at Infrabel and their added user-value.
- Defining the future through standardised diagnostics layers: deep dive in the business need of diagnostics and how Infrabel scoped each need to transform the next generation of signalling products.

INFRABEL

Friday, 17 October 2025

STREAM 2: Data acquisition, monitoring and predictive maintenance in digital signalling



Dominic Winkler, Lead Digital Twin Architect, ÖBB-Infrastruktur AG
Empowering Predictive Maintenance with a Digital Twin & 360° Operational View

- Bad actor analysis: Identifying main drivers for network disruptions across wayside infrastructure components.
- Holistic, data-driven Insights: Discover how digital twin technology unifies operational and maintenance data for comprehensive, predictive analyses.
- Seamless integration of IoT data: Integrating a wide range of real-time data for enhanced decision-making and predictive maintenance.



Darren Dykstra, Programme Engineering Manager, Network Rail
Diagnostic Data Acquisition, Monitoring, and Predictive Maintenance in Digital Signalling

- Deploying Diagnostic Data acquisition platform in today's "Cyber Secure World"
- Real-time insights and predictive maintenance interventions - How Insights empowers Frontline staff and managers
- Facilitating the future of Automated faulting diagnosis and reporting Highlighting real-world challenges and benefits through practical railway use cases.



Tim Flower, Account Director North Europe, KONUX
Data Acquisition, Monitoring, and Predictive Maintenance

- Holistic digitalisation approach: Consolidating data from multiple sources to streamline railway network operations.
- Real-time insights and predictive maintenance: How continuous data analysis empowers troubleshooting, predictive maintenance, and optimised resource allocation.
- Facilitating a seamless digital transformation journey: How integrating with ERP systems, IoT devices, and third-party solutions enhances the value of current tools.



SIDE EVENT

Wednesday, 15 October 2025

SITE VISIT AT ÖBB OMC VIENNA

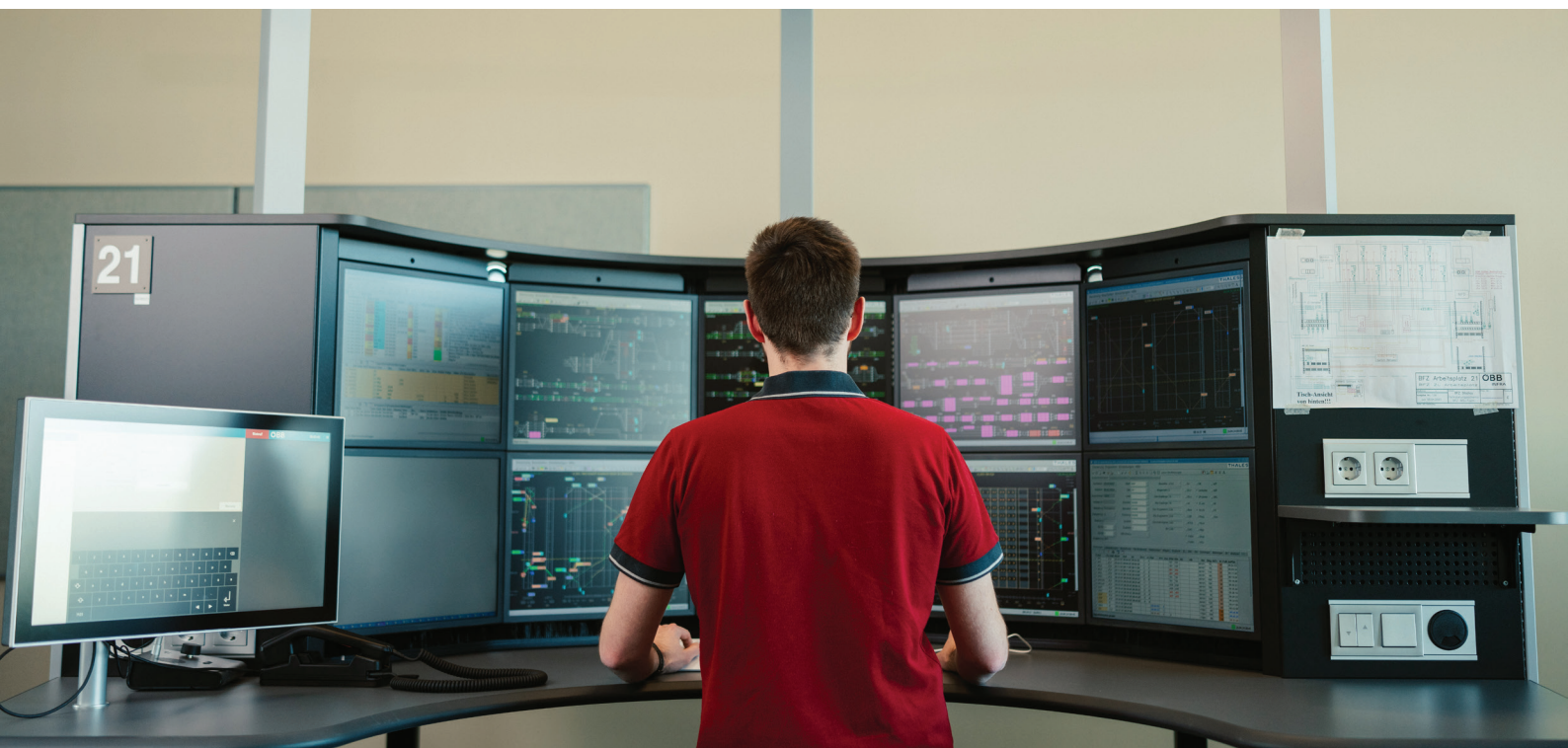
Over 1,000 ÖBB Operations Management employees monitor, control and dispatch around 7,000 trains on the Austrian rail network every day, around the clock – either at operations centres along the route or at one of the five Operations Management Centres (OMCs) across the country. One of these OMCs is located in Vienna Stadlau.

Join us on a tour through this new, modern and future-proof location, which is the workplace for around 350 experts. At the same time, it is an essential building block for a digital and efficient rail infrastructure in Austria.

The Vienna OMC enables ÖBB to ensure that their critical infrastructure is geographically redundant in both technical and structural terms. If one OMC fails, for example due to extreme weather, colleagues can continue working relatively quickly at replacement workstations. This mitigates financial and operational impacts and increases the availability of the entire rail system.



Pictures: ÖBB/Lukas Leonte



SIDE EVENT

Thursday, 16 October 2025

GALA DINNER AT PALAIS FERSTEL

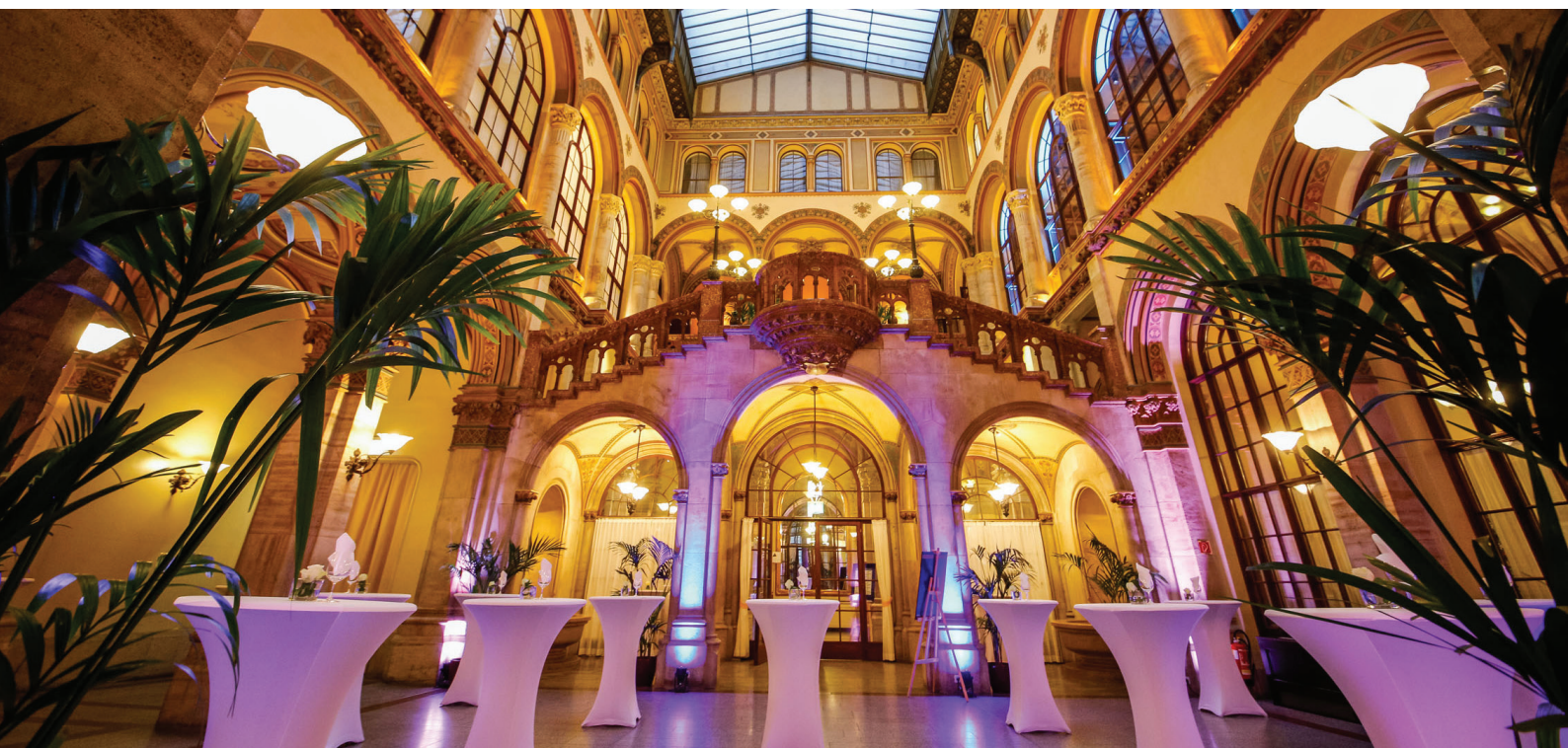
Join us for a special evening at the stunning Palais Ferstel, one of Vienna's most elegant historic venues. This exclusive Gala Dinner offers the perfect opportunity to reflect on the insights and inspirations gathered during the Wayside Digitalisation Forum so far.

In a refined setting, enjoy excellent cuisine and engaging conversations with fellow professionals. Share your experiences in the digitalisation of railway signalling, exchange new ideas, and expand your network in a relaxed, inspiring atmosphere.

Networking and knowledge-sharing are at the heart of the WDF – and this evening brings both together in a truly memorable location.



Pictures: Palais Ferstel, Wien



SIDE EVENT

Friday, 17 October 2025

EXPLORE VIENNA: GUIDED CITY TOUR BY BUS

Discover Vienna's most famous sights during a comfortable two-hour ride with Big Bus Tours.

Starting at 2 p.m., participants will be picked up directly from the hotel and taken on a panoramic journey through the city. The route includes highlights such as the historic Ringstrasse, the famous Prater with its iconic Giant Ferris Wheel, the modern skyline along the Danube Island and UNO City, the vibrant Naschmarkt, and the majestic Schönbrunn Palace. The tour concludes back at the hotel around 4 p.m.



Pictures: Big Bus Vienna GmbH





more than **250** railway experts

20+ technical presentations

International discussion platform

Excellent **networking** possibilities

Amplifying the Conversation

Our media partners help us extend the reach of the Wayside Digitalisation Forum far beyond the venue. Through trusted coverage and expert journalism, they spotlight the topics and voices shaping the future of rail.

*zukun**ft**bahn*
www.eisenbahn.blog

Eurail
press

IRJ
International Railway Journal

P RIVATBAHN
MAGAZIN

 **RailEngineer**

 **Rail Analysis™**

 **Railway Gazette**
GROUP

 **Railway-News**

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QUESTIONS ABOUT THE PROGRAMME

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Programme Director



QUESTIONS ABOUT THE EVENT

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QUESTIONS ABOUT THE EVENT

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Organisational Event Manager