UKRRIN Inspire: How can we deliver RTS 2024?

10:30 – 15:30 15 October, University of Huddersfield

AGENDA

10:00	**ARRIVAL** (Opportunity to attend IRR tour)
10:40	**Welcome and Introductions** Paul Allen, Director – Institute of Railway Research, **University of Huddersfield**
10:45	**Opening Keynote Address** Abi Hayes, Director, Public Transport and Rail Strategy and Rail Analysis, **Department for Transport**
11:00	**RTS 2024 Presentation** *An introduction to the Rail Technical Strategy 2024 and each of the three refreshed priorities: Low Emissions, Efficient and Reliable Assets, and Optimised Train Operations.* • **RTS Introduction**: Luisa Moisio, Director of Research, **RSSB** • **Low Emissions Priority**: Clive Burrows, Group Engineering Director, **First Group** • **Efficient and Reliable Assets Priority**: John Edgley, Chief Track and S&C Engineer, **Network Rail** • **Optimised Train Operations**: David Horne, Managing Director, **LNER**
11:20	**RTS 2024 Panel Discussion** *Industry sponsors will participate in this joint panel to reflect on the role of the RTS, and the technical progress needed to deliver the railway our customers want and need.* **Chaired by**: Joanna Binstead, Head of Education and Skills **Siemens Mobility**, General Manager **NTAR**, Chair of **UKRRIN**,

11:40	**UKRRIN Insights on Optimised Train Operations**
	
	Case studies showcasing research in the optimised train operations space.
	
	• **Automated Driver Competency Indicators**
	  Marcus Carmichael, **RSSB**
	  University of Huddersfield, Cogitare, C2C
	
	• **R&D of Digital Twin Model for West Midlands Railway Network**
	  Lei Chen, **University of Birmingham**
	  West Midlands Rail Executive, West Midlands Railway, Network Rail
	
	• **Developing the Red Aspect Approach to Signals Toolkit (RAATS) to give a richer picture of operational data**
	  Julian Stow **University of Huddersfield**
	  RSSB

11:55	**Q&A Chaired by** Joanna Binstead

12:05	**UKRRIN Insights on Low Emissions**
	
	Case studies showcasing research in the low emissions priority space.
	
	• **Optimising pantograph-OLE interaction for lower cost electrification**
	  João Pombo, **University of Huddersfield**
	  Bristol University, Network Rail, Wabtec and Brecknell Willis
	
	• **Performance and sustainability metrics for optimisation of steel sleeper deployment**
	  Jacob Whittle, **University of Sheffield**, and Jake Corteen **British Steel**
	
	• **The Carbon Fibre Railway Axle**
	  Sam Hawksbee, **University of Huddersfield**
	  University of Nottingham, Advanced Composite Structures-Australia, Network Rail, Lucchini, Rolls-Royce

12:20	**Q&A** Chaired by Joanna Binstead
12:30	**LUNCH BREAK AND NETWORKING** *Lunch and networking with opportunities to share your thoughts via an RTS interactive activity and tour IRR facilities.*

14:15	**UKRRIN Insights on Efficient and Reliable Assets**
	
	Case studies showcasing research and initiatives in the efficient and reliable assets space.
	
	• **Making the most of WILD data**
	  Phil Shackleton, **University of Huddersfield**
	  RSSB, Network Rail, Freightliner, VTG Rail UK
	
	• **Rail Measurement and Inspection based on Multi-sensor Integration and Deep Learning**
	  Edd, Stewart, University of Birmingham
	
	• **Optimising rail grinding practice for premium rail materials**
	  University of Sheffield
	  British Steel
	
	• **Fibre Derived Measurement: Optical Fibres on the Rail**
	  David Milne, **University of Southampton**
	  Network Rail
	
	• **Demonstration of autonomous ultrasonic AI inspections**
	  Isidro Durazo Cardenas, **Cranfield University**
	  Network Rail
	
	• **LABRADOR: Simulating braking performance for more reliable operations**
	  Julian Stow, **University of Huddersfield** and Sharon Odetunde, **RSSB**

14:45	**Q&A** Chaired by Paul Allen
15:00	**Closing Keynote Address** Ian Duncan, Head of Siemens Mobility Rolling Stock Engineering Life Cycle, **Siemens Mobility**
15:15	**Closing Remarks** Paul Allen, Director – Institute of Railway Research, **University of Huddersfield**
15:30	**EVENT CLOSE**