# RAIL ELECTRIFICATION: REBUILDING CONFIDENCE





HOSTED WITH:



5 June 2019 One Birdcage Walk, London

Railway Division **Seminar** 

More details available at: www.imeche.org/railelectrification

### **SEMINAR SPEAKERS INCLUDE:**

Mark Hopwood, Managing Director Great Western Railway

Richard Stainton, Professional Head, Electrical Power **Network Rail** 

Mary Hewitt, Strategy and Policy and Director **Arriva** 

Bill Reeve, Commercial Director

**Transport Scotland** 

Phil Doughty, Professional Head, Contact Systems **Network Rail** 



**EVENT PARTNERS:** 









## RAIL ELECTRIFICATION: REBUILDING CONFIDENCE

5 June 2019, One Birdcage Walk, London

DEVELOPED JOINTLY WITH THE RAILWAY INDUSTRY ASSOCIATION (RIA), THIS SEMINAR WILL REFLECT ON RECENT RAIL ELECTRIFICATION EXPERIENCES TO IDENTIFY LESSONS LEARNED AND EXPLORE WHAT ELECTRIFICATION SHOULD COST. DISCUSS HOW THE INDUSTRY AND GOVERNMENT CAN REGAIN THEIR CONFIDENCE IN ELECTRIFICATION BEING THE FIRST CONSIDERATION IN ANY MOVE TO DECARBONISE THE RAILWAY BY 2040.

Address the cost and engineering issues being faced by the industry, and how these are being managed by operators and contractors alike. Hear lessons learned from implementation projects to take back to your organisation, including an exclusive review from Network Rail.

This year, presentations will address challenges from the past, how these experiences are shaping current projects and the future of the rail industry and electrification policy.

New for 2019 - Learn about the latest innovations during RIA-led "Unlocking Innovation" sessions relating to:

- 1. Reducing electrification costs
- 2. Delivering electrification more effectively

### SEMINAR TOPICS INCLUDE:

- Transport Scotland share insights into the changing landscape of rail electrification and what this might mean for current and future projects
- Network Rail reflect on recent experiences and discuss lessons learned for future projects
- Railway Industry Association discuss ways in which the implementation of electrification can be made economically viable
- Porterbrook and Ricardo deliver a joint presentation to discuss hybridisation options for the electrification transformation of diesel trains
- Great Western Railway share practical insights from current electrification projects

#### ATTEND THIS SEMINAR TO:

- Receive exclusive updates on the status of projects going ahead and future electrification plans from Great Western Railway and Network Rail
- Hear insights from key opinion leaders on the changing landscape of rail electrification and the move towards a policy reset, including Arriva and Transport Scotland
- Learn about the latest innovations during the RIA-led "Unlocking Innovation" sessions relating to reducing costs and improving delivery
- Take part in an interactive discussion with other industry experts to express your views on the future of electrification policy
- Ask key questions specific to your project needs during the Q&A sessions following each presentation

### ORGANISING / ADVISORY COMMITTEE:

Railway Division

**Institution of Mechanical Engineers** 

#### **MEMBER CREDITS:**

Iain Flynn

Independent Rail Manager and Engineer

David Clarke, Technical Director,

Railway Industry Association

Martin Beable, Engineering Director,

Abellio Greater Anglia

Martin Elliot, Chief Technical Officer,

Ricardo Rail

Peter Stanton, Senior Engineer,

Vertex-SE Ltd

Andy Mellors, Managing Director,

South Western Railway

## **PROGRAMME**

WEDNESDAY, 5 JUNE 2019		
08:30	REGISTRATION AND REFRESHMENTS	
09:00	CHAIR'S OPENING REMARKS	
09:10	THE CHANGING LANDSCAPE OF RAIL ELECTRIFICATION	
KEYNOTE ADDRESS	Bill Reeve, Commercial Director, Transport Scotland	
09:35	QUESTION AND ANSWER SESSION	
09:40	DOING IT BETTER NEXT TIME: REFLECTING ON RECENT EXPERIENCE	
	Phil Doughty, Professional Head, Contact Systems, Network Rail	
10:00	WHAT THE GOVERNMENT WANTS AND NEEDS FROM INDUSTRY	
	Speaker to be confirmed	
10:20	ELECTRIFICATION: THE SILVER BULLET	
10:40	Stephen Kent, Research Fellow, University of Birmingham	
10:40	QUESTION AND ANSWER SESSION NETWORKING REFRESHMENT BREAK	
10:55	MAKING ELECTRIFICATION ECONOMICALLY VIABLE	
11:25	David Clarke, Technical Director, Railway Industry Association	
11:45	PRACTICAL LESSONS FROM ELECTRIFICATION PROJECTS	
	Brian Sweeney, Senior Project Engineer, Network Rail	
12:05	Presentation to be announced	
	Steve Cox, Engineering and Technical Director SS&I UK, Alstom	
12:25	QUESTION AND ANSWER SESSION	
12:40	NETWORKING LUNCH	
13:40	HYBRID ELECTRIFICATION IN REAL LIFE – GREAT WESTERN ELECTRIFICATION	
	Mark Hopwood, Managing Director, Great Western Railway	
14:00	QUESTION AND ANSWER SESSION	
14:05	RAILWAY INDUSTRY ASSOCIATION-LED SESSION: UNLOCKING INNOVATION	
	A series of 5 short presentations looking at innovation and alternative projects, proposals and new technologies.	
14:25	25 KV ELECTRIFICATION WITH LOW VOLTAGE CLEARANCES – REDUCING THE COST OF ELECTRIFICATION	
	Richard Stainton, Professional Head, Electrical Power, Network Rail	
14:45	PUTTING ELECTRICITY INTO DIESEL TRAINS: CLEANING CITY AIR	
	Helen Simpson, Head of Innovation and Technical Services, Porterbrook Stephen Gossling, Senior Consultant, Ricardo	
15:05	QUESTION AND ANSWER SESSION	
15:25	NETWORKING REFRESHMENT BREAK	
15:55	WHAT DOES THE INDUSTRY THINK ELECTRIFICATION POLICY SHOULD BE?	
PANEL DISCUSSION	Mark Gaynor, Interim Director of Planning, Engineering and Operations, Rail Delivery Group David Clarke, Technical Director, Railway Industry Association James Abbott, Editor, Modern Railways Peter Dearman, Electrification Advisor, Bechtel	
16:25 KEYNOTE SPEAKER	REMINDING OURSELVES WHAT RAILWAYS ARE FOR, AND THE ROLE OF ELECTRIFICATION AND OTHER POWER SOLUTIONS	
	Mary Hewitt, Strategy and Policy Director, Arriva	
17:00	QUESTION AND ANSWER SESSION	
17:05	CHAIR'S CLOSING REMARKS	
17:10	END OF SEMINAR	

For the most up-to-date and detailed programme for the event, please visit: www.imeche.org/railelectrification

<sup>•</sup> This programme is subject to change.

<sup>•</sup> The Institution is not responsible for the views or opinions expressed by individual speakers

### HOW TO BOOK YOUR PLACE

#### **FEES AND CHARGES**

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Delegate Type	EARLY BIRD RATE Until 26 April 2019	STANDARD RATE
Member, Institution of Mechanical Engineers / Supporting Organisation	£260 + VAT = £312	£290 + VAT = £348
Non-member	£350 + VAT = £420	£390 + VAT = £468
Full-time Student/Retired	£90 + VAT = £108	£100+ VAT = £120

#### THREE WAYS TO BOOK

1 online

www.imeche.org/railelectrification

2 email:

eventenquiries@imeche.org

3 phone

+44 (0)20 7973 1251

Please read the information listed below as each booking is subject to the Institution's standard terms and conditions.

#### CONDITIONS OF BOOKING

Completed application forms should be returned to the address above, along with the correct payment. Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible

#### SPECIAL REQUIREMENTS

Please inform us of any special requirements, ie dietary or access, on the relevant section of the booking form or email eventenquiries@imeche.org

For a refund (minus £25+VAT admin charge), cancellations must be received at least 30 days prior to the event. Replacement delegates are welcome at any time. The Institution reserves the right to cancel any event. In this case, the full fee  $\,$ will be refunded unless a mutually convenient transfer can be arranged. In the event that the Institution postpones an event for any reason and the delegate is unable or unwilling to attend on the rescheduled date, they will receive a full refund of

the fee paid. The Institution is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. The Institution shall assume no liability whatsoever if this event is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this conference impracticable, illegal or impossible. For the purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency.

Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organisers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. The Institution reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated on the event's webpage as soon as possible.

#### I.IABII.ITY

The organisers do not accept liability for any injuries or losses of any nature incurred by delegates and/or accompanying persons, nor for loss or damage to their luggage and/or personal belongings.

#### **CONFERENCE VENUE**

Institution of Mechanical Engineers One Birdcage Walk Westminster London SW1H 9JJ

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#### OTHER EVENTS TO LOOK FOR



### **ATO: INTEGRATION TO ACHIEVE A TRULY** INTEROPERABLE SYSTEM

#### 9 May 2019, London

Address the critical issue of the technical integration for ATO and the importance of Signal and Rolling Stock engineers working together to optimise performance. This event will feature case studies and detail the regulatory requirements for its implementation. Network with key players in rail from the UK and Europe to discuss ATO along with the future of mainline rail

#### www.imeche.org/ato



## THE FUTURE OF RAIL: YOUNG ENGINEERS PRESENTATION **COMPETITION AND RAILWAY DIVISION AGM**

### 13 May 2019, London

Each year, the Institution of Mechanical Engineers' Railway Division hold s a competition of technical presentations. Attend this competition which is open to all young railway engineers including apprentices, undergraduates and those in the early stages of their career. Plus, don't miss the Railway Division AGM taking place straight after the competition.

### www.imeche.org/futureofrail

The Institution of Mechanical Engineers organises over 120 events a year, including free-to-attend lectures as well as conferences, seminars, annual luncheons and dinners. Please visit www.imeche.org/events for the complete list of events.

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