

# The 4th Institution of Engineering and Technology Professional Development Course on Railway Electrification Infrastructure and Systems (REIS)

**Monday, 1 - Friday, 5 June 2009**

Monday		Tuesday		Wednesday		Thursday		Friday	
Time	REQUIREMENTS AND CONSTRAINTS	Time	ELECTRIFICATION INFRASTRUCTURE DESIGN	Time	SIGNALS, COMMUNICATION, PLANT AND TRACTION DESIGN	Time	SYSTEM INTEGRATION AND ASSET MANAGEMENT	Time	SUSTAINABILITY AND CARBON REDUCTION
	Morning Chair: <b>Phil Williams</b> Afternoon Chair: <b>Phil Williams</b>		Morning Chair: <b>Phil Carmichael</b> Afternoon Chair: <b>Phil Carmichael</b>		Morning Chair: <b>Colin Goodman</b> Afternoon Chair: <b>Martyn Chymera</b>		Morning Chair: <b>Martyn Chymera</b> Afternoon Chair: <b>Colin Goodman</b>		Chairman: <b>John Vint</b>
<b>09.30</b>	<b>Registration and Refreshments</b>	<b>08.45</b>	<b>Chair's Introduction/Overview</b>	<b>08.45</b>	<b>Chair's Introduction/Overview</b>	<b>08.45</b>	<b>Chair's Introduction/ Overview</b>	<b>08.50</b>	<b>Chair's introduction/Overview</b>
<b>10.00</b>	REIS Chairman: <b>Roger White</b> Course Opening	<b>09.00</b>	<b>B1 Roger White</b> DC Electrification Supply System Design	<b>09.00</b>	<b>C1 David Fenner</b> Railway Signalling	<b>09.00</b>	<b>D1 Les McCormack</b> Railway Electrical Systems Integration and Electromagnetic Compatibility (EMC)	<b>09.00</b>	<b>E1 Gerry McFadden</b> Sustainability and Carbon Reduction on Electrified Railways
		<b>09.50</b>	<b>Break</b>	<b>09.50</b>	<b>Break</b>	<b>09.50</b>	<b>Break</b>	<b>09.50</b>	<b>Break</b>
<b>10.15</b>	<b>Keynote: Roger Kemp</b> Sustainability - Challenges for the Rail Industry	<b>10.00</b>	<b>B2 Dave Hartland</b> Electric Contact Systems – Passing Power to the Trains	<b>10.00</b>	<b>C2 Frank Foley</b> Impact of Electrification Systems on Signalling Systems	<b>10.00</b>	<b>D2 Maya Petkova</b> Integration for EMC and Network Rail's Management Process	<b>10.00</b>	<b>E2 Stuart Hillmansen</b> Sustainable Traction Drives
<b>11.15</b>	<b>Q &amp; A</b>								
<b>11.25</b>	<b>Comfort Break</b>	<b>10.50</b>	<b>Refreshments</b>	<b>10.50</b>	<b>Refreshments</b>	<b>10.50</b>	<b>Refreshments</b>	<b>10.50</b>	<b>Refreshments</b>
<b>11.40</b>	<b>A1 Felix Schmid</b> Electric Railway Systems in Common Use	<b>11.15</b>	<b>B3 Dave Knights</b> Protection for DC Substations and AC Track Feeder Stations	<b>11.15</b>	<b>C3 Brian Aldred &amp; Naran Gorasia</b> Railway Communication Systems	<b>11.15</b>	<b>D3 Dominic Kelsey</b> Earthing Design and Integration – Principles	<b>11.15</b>	<b>Closing Keynote: Mike Stubbs</b> Sustainability - Responsibility and Development in Modern Railways
<b>12.30</b>	<b>Lunch</b>	<b>12.05</b>	<b>Review Session B1, B2 &amp; B3</b>	<b>12.05</b>	<b>Review Session C1, C2 &amp; C3</b>	<b>12.05</b>	<b>Review Session D1, D2 &amp; D3</b>	<b>12.05</b>	<b>Review Session E1, E2 &amp; E3</b>
<b>13.30</b>	<b>A2 Nicholas Wrobel</b> Customer Requirements - the Driver for Engineering Solutions	<b>12.30</b>	<b>Lunch</b>	<b>12.30</b>	<b>Lunch</b>	<b>12.30</b>	<b>Lunch</b>	<b>12.30</b>	<b>Chairman's Closing Address</b>
<b>14.20</b>	<b>Review Session for A1 and A2</b>	<b>13.30</b>	<b>B4 Roger White</b> AC 25kV 50Hz Electrification Supply Design	<b>13.30</b>	<b>C4 Tom Loades</b> SCADA & Related Telecommunications Systems	<b>13.30</b>	<b>D4 Nick Jordan</b> AC & DC Electric Railway Interfaces	<b>12.45</b>	<b>Lunch and Departure</b>
<b>14.45</b>	<b>Break</b>	<b>14.20</b>	<b>Break</b>	<b>14.20</b>	<b>Break</b>	<b>14.20</b>	<b>Break</b>		
<b>14.50</b>	<b>A3 Colin Goodman</b> Modelling and Simulation	<b>14.25</b>	<b>B5 Keith Warburton</b> Overhead Line Equipment Design and Pantograph Interface	<b>14.25</b>	<b>C5 Dave Burton</b> Auxiliary Plant & Equipment for Station and Tunnel Services	<b>14.25</b>	<b>D5 David Bradley</b> Compatibility Between Railway Electrical Systems – Methodology and Examples		
<b>15.40</b>	<b>Refreshments</b>	<b>15.15</b>	<b>Refreshments</b>	<b>15.15</b>	<b>Refreshments</b>	<b>15.15</b>	<b>Refreshments</b>		
<b>15.55</b>	<b>A4 Daren Stinton</b> Upgrading the London Underground Power Supply System	<b>15.30</b>	<b>Review Session B4 &amp; B5</b> <b>End of Formal Session</b>	<b>15.30</b>	<b>C6 Richard Catlow</b> Electrification System Testing	<b>15.30</b>	<b>D6 Ian Cotton &amp; Pete Aylott</b> Impact and Management of Stray Current on DC Rail Systems		
<b>16.45</b>	<b>Review Session A3 and A4</b>		<b>Technical Visits</b> <ul style="list-style-type: none"> <li>• DLR</li> <li>• London Underground</li> <li>• Tubelines</li> </ul>	<b>16.20</b>	<b>Review Session C4, C5, C6</b>	<b>16.20</b> <b>16.45</b>	<b>Review Session D4, D5 &amp; D6</b> <b>End of Formal Session</b>		
<b>17:00</b>	<b>End of Formal Session</b>			<b>16.45</b>	<b>End of Formal Session</b>	<b>19.00</b>	<b>Pre-Dinner Presentation</b> Keith Clarke, CEO, Atkins Global		
<b>17.05</b>	<b>Drinks Reception</b>					<b>19:30</b>	<b>Course Dinner</b>		