

## ICE TRANSPORT ASSET MANAGEMENT

### Optimising performance with data-driven decisions

21 November, London

## Pre-conference

08:00 Pre-conference breakfast briefing in association with Colas: Enterprise Asset Management

- Creating a strategic approach to asset management through use of data
- Why day-to-day management of infrastructure must align with corporate level objectives
- Open discussion and Q&A focusing on challenges faced by asset owners and operators

#### Chaired by Ed McCann, Vice President for Knowledge, Institution of Civil Engineers

Please note this is an invite-only session aimed at infrastructure asset owners and operators. If you are interested in attending, please contact <u>events@ice.org.uk</u>

## **Conference programme**

09:00 Chair's opening remarks

Andrew Boagey, Chair, Railway Civil Engineers Association

09:05 Keynote address: Government priorities for the UK transport sector

Update from government on current and future transport infrastructure strategy

The Rt Hon John Hayes CBE MP, Minister of State for Transport Legislation and Maritime, Department for Transport

- 09:20 Keeping the outcomes in mind: UK transport challenges to 2050 and how better asset management can meet them
  - Critical challenges and next steps for UK transport sector
  - The importance of strategic asset management to boost efficiency and performance

#### 09:35 **Q&A**

09:45 Learning from other sectors: Digital transformation and equipment health management in aerospace

- Rolls-Royce in the aerospace market is predominantly a services business, and is transforming to be a digitally-advanced services business
- Delivering profitable services requires careful control of both planned costs (reduce where you can) and surprises (eliminate)
- Equipment health management is the capability brought to bear: monitoring, simulating and forecasting the business
- And a Digital culture, eco-system, platform and academy are the levers to accelerate

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# 10:05 Digital Transformation: How can technology and data help us understand infrastructure assets better?

- How digital processes and technology are opening up new possibilities
- How to create a joined up and strategic approach to realise benefits

10:20 **Q&A** 

10:30 Speed networking, refreshments and exhibition

11:15 Conference divides into three streams:

Stream 1 – Highways Led by: Matthew Lugg, Director of Public Services, WSP

#### Stream 2 – Railways

Led by: Andrew Boagey, Chair, Railway Civil Engineers Association

#### Stream 3 – International Gateways (Airports and Ports)

Led by: Stuart White, Director Business Unit Maritime & Aviation Europe, Royal HaskoningDHV

#### Stream Session 1: Client experiences and the role of digital in meeting future challenges

- How has the journey to digitisation progressed so far for asset owners and operators?
- How can digital offer new solutions to existing and future challenges?
- How can the alternative industry experience be applied to transport infrastructure sectors?





		Institution of Civil Engine
Highways	Railways	International Gateways (Airports and Ports)
Led by: Matthew Lugg, Director of	Led by: Andrew Boagey, Chair,	Led by: Stuart White, Director
Public Services, WSP	Railway Civil Engineers Association	Business Unit Maritime & Aviation
		Europe, Royal HaskoningDHV
11:15 Well-managed Highway		
Infrastructure, A Code of Practice:	11:15 Digital transformation on a	11:20 The journey to digitisation at
one year on	Victorian to cyber asset base	Dublin Airport
<ul> <li>An update on implementing</li> </ul>		
the UK Roads Liaison Group	James Dean, Director, Route Asset	<ul> <li>Experiences at Dublin Airport</li> </ul>
CoP, one year on from its	Manager (LNW), <b>Network Rail</b>	on the journey to ISO55001 -
launch		successes and lessons learnt
<ul> <li>Evolution of best practice plus</li> </ul>		<ul> <li>Your recommendations on how</li> </ul>
insights and evaluation	11:35 A digital future for rail asset	and why asset management
findings from authorities	management – the HS2 approach	should be centralised in the
<ul> <li>Why applying technology and</li> </ul>		business and linked to core
digital asset management is	<ul> <li>Building a strategic, whole life</li> </ul>	objectives
essential to informing better	cycle asset management	<ul> <li>Use of technology and data at</li> </ul>
risk based decision making	approach at HS2	Dublin Airport – the benefits,
-	<ul> <li>Opportunities and challenges for</li> </ul>	lessons learnt, how to apply
Lila Tachtsi, UKRLG and Technical	new high speed rail	and use it in the right way, and
Director, Atkins	infrastructure	realise culture shift towards
Senior Representative,	<ul> <li>Advances in digital innovation</li> </ul>	digital
Department for Transport	and data management to deliver	-
	better understanding of assets	Peter Chambers, Group Head of
11:35 Highways England's new	-	Asset Care, Dublin & Cork Airport
asset delivery approach	David White, Head of Asset	
	Management & Strategic Planning,	11:40 Asset management at Bristol
<ul> <li>Why Highways England is</li> </ul>	HS2	Port – successes and challenges
changing to a new asset		C C
delivery approach, and what it		John Chaplin, Director of External
involves		Affairs & Special Projects, The
<ul> <li>How implementation is</li> </ul>		Bristol Port Company
progressing including the data		. ,
management approach		

 What lessons have been learned and future delivery strategy

Martin Hobbs, Asset Delivery National Rollout Director, Highways England

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# 11:55 Highways data & information – a neglected asset?

- Highways maintenance is so often focused on potholes and carriageway resurfacing, but data is so often mistreated with no clear strategy for collection and management
- The new CoP places greater emphasis on having a maintenance management strategy for all highway assets; including data and information
- This session addresses the issue of why we should treat data as the most vital asset we have and why we so often neglect our intelligence

Chris Dyer, Head of Consultancy, Infrastructure Asset Management, Yotta & Emily See, Professional Services Consultant, Yotta

12:15 Panel discussion: Can digital really help challenges faced by highways authorities? If so, what is the right approach to realise benefits?

Above speakers plus: Chris Founds, Infrastructure Director, CJ Founds Associates

12:50 Lunch and exhibition

#### 12:00 World café discussion

- How can digital help address asset management challenges being faced by rail asset owners?
- What barriers and blockers are there to realising this?
- How can the aerospace example be applied to the railway sector?

#### 12:00 World café discussion

- How can digital help address asset management challenges being faced by port/airport asset owners?
- What barriers and blockers are there to realising this?
- How can the aerospace example be applied to the port/airport sector?





### Stream Session 2: The role of data in improving efficiency, performance and value

- What are the latest data gathering initiatives at asset sites?
- How can we turn big data into useful data and best support decision making?
- Case studies what's actually possible at the moment?

Highways	Railways	International Gateways (Airports and Ports)
<i>Led by:</i> <b>Matthew Lugg</b> , Director of Public Services, <b>WSP</b>	<i>Led by:</i> Andrew Boagey, Chair, Railway Civil Engineers Association	<i>Led by:</i> <b>Stuart White,</b> Director Business Unit Maritime & Aviation Europe, <b>Royal HaskoningDHV</b>
13:50 Pothole Spotter: Early findings from the public/private nnovative trial to revolutionise local road maintenance	<ul> <li>13:50 Developing an approach for high speed rail renewals at HS1</li> <li>Update on renewal programme plans for LW's</li> </ul>	13:50 Data challenges and solutions for managing old and new assets or a single site
Steve Berry OBE, Head, Highways Maintenance, Innovation, Resilience, Light Rail and	programme plans for UK's existing high speed rail network	14:10 State of the art visualisation and data acquisition techniques for ports and harbours
Cableways Branch, <b>Department for</b> <b>Fransport</b> <b>Dr David Greenfield,</b> Pothole- Spotter Research Programme Lead and Managing Director, <b>SOENECS</b>	<ul> <li>14:10 The Rail Technical Strategy: Capability Delivery Plan, our assets and our data</li> <li>Mobilising the Rail Technical Strategy: Capability Delivery</li> </ul>	<ul> <li>Insight on new technology that can transform inspection regime</li> <li>How best to gather and utilise data to support decision making</li> </ul>
<ul> <li>14:10 Improving information management and interoperability for national roads authorities</li> <li>Overview of CEDR INTERLINK, a two-year European research project on asset information management for road</li> </ul>	<ul> <li>Plan</li> <li>Establishing the link between data and disruption</li> <li>How do we turn our data into asset management intelligence?</li> </ul>	<b>James Turley</b> , Senior Maritime Engineer, <b>Arup</b>
<ul> <li>infrastructure, due for completion in autumn 2018</li> <li>The information needs of those who own, operate and deliver road assets, and current approaches to meeting those needs</li> <li>How to apply open standards- based digital technologies to improve interoperability, future proof asset data, and avoid vendor lock-in</li> </ul>	Karl Butler-Garnham – Work Package Owner CDP Key Capability "More value from data" – Cross- Industry RTS Programme Team Janine Fountain – Work Package Owner CDP Key Capability "Minimal disruption to train services" – Cross-Industry RTS Programme Team	

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Aonghus O'Keeffe, CEDR INTERLINK Research Consortium & Chartered Engineer, Associate, Roughan & O'Donovan 14:30 Panel discussion: Getting value from technology – strategy vs. operations

14:30 Panel discussion: How far are we towards turning big data into useful data? What do we need to do to get there?

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#### 15:10 Refreshments, networking and exhibition

#### 15:40 Panel discussion: Ambition vs. realism for achieving ISO55001

Peter Chambers, Group Head of Asset Care, Dublin & Cork Airport David Simpson, Investment Director, Egis International & Connect Plus

#### 16:15 The increasing importance of a security-minded approach to asset management

- The nature of security vulnerabilities that arise from the increased use of, and dependence on, advancements in digital engineering, information and communication technologies in infrastructure asset management
- Security as an enabler, and not a blocker, of innovation
- Managing and maintaining an appropriate and proportionate security-minded approach

#### Alex Luck, Principal, A Luck Associates

#### 16:35 The role of people: behaviours and skills to deliver productivity and digital transformation

- Shifts in culture and behaviour towards digitally enabled asset management
- Upskilling and reskilling to work with technology and data
- Putting it all together skills, asset management and technology combining to boost productivity

#### Neil Robertson, CEO, National Skills Academy for Rail





#### 16:55 Are we moving towards self-aware assets, and what will this mean?

- Today's asset management challenges for maintaining key infrastructural assets
- A vision and pathway for intelligent infrastructural assets
- Current developments in intelligent infrastructure

Professor Duncan McFarlane, Professor of Industrial Informational Engineering, Cambridge Centre for Smart Infrastructure and Construction

- 17:15 Next steps with ICE and Chair's closing remarks Andrew Boagey, Chair, Railway Civil Engineers Association
- 17:20 Networking drinks reception

