

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 events@ice.org.uk

Conference programme

09:00 Chair's opening remarks

09:05 Keynote address: Government priorities and budget outlook for transport sector

- Update from government on current and future transport infrastructure strategy

Department for Transport Minister

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

Nick Ward – Head of Solutions Management, OEM Digital Services, **Rolls Royce**



Register online at
ice-tam.com

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?

Highways

Led by: **Matthew Lugg**, Director of Public Services, **WSP**

11:15 Well-managed Highway Infrastructure, A Code of Practice: one year on

- An update on implementing the UK Roads Liaison Group CoP, one year on from its launch
- Evolution of best practice plus insights and evaluation findings from authorities
- Why applying technology and digital asset management is essential to informing better risk based decision making

Lila Tachtsi, **UKRLG** and Technical Director, **Atkins**
Senior Representative,
Department for Transport

11:35 Highways England's new asset delivery approach

- Why Highways England is changing to a new asset delivery approach, and what it involves
- How implementation is progressing including the data management approach
- What lessons have been learned and future delivery strategy

Martin Hobbs, Asset Delivery National Rollout Director,
Highways England

Railways

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

11:15 Digital Transformation on a Victorian to cyber asset base

James Dean, Director, Route Asset Manager (LNW), **Network Rail**

11:35 A digital future for rail asset management – the HS2 approach

- Building a strategic, whole life cycle asset management approach at HS2
- Opportunities and challenges for new high speed rail infrastructure
- Advances in digital innovation and data management to deliver better understanding of assets

David White, Head of Asset Management & Strategic Planning,
HS2

International Gateways (Airports and Ports)

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

11:20 The journey to digitisation at Dublin Airport

- Experiences at Dublin Airport on the journey to ISO55001 - successes and lessons learnt
- Your recommendations on how and why asset management should be centralised in the business and linked to core objectives
- Use of technology and data at Dublin Airport – the benefits, lessons learnt, how to apply and use it in the right way, and realise culture shift towards digital

Peter Chambers, Group Head of Asset Care, **Dublin & Cork Airport**

11:40 Asset management at Bristol Port – successes and challenges

John Chaplin, Director of External Affairs & Special Projects, **The Bristol Port Company**



Highways

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

Railways

12:00 World café discussion

- How can digital help address AM 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?

International Gateways

12:00 World café discussion

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- 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)
<p>Led by: Matthew Lugg, Director of Public Services, WSP</p>	<p>Led by: Andrew Boagey, Chair, Railway Civil Engineers Association</p>	<p>Led by: Stuart White, Director Business Unit Maritime & Aviation Europe, Royal HaskoningDHV</p>
<p>13:50 Pothole Spotter: Early findings from the public/private innovative trial to revolutionise local road maintenance</p>	<p>13:50 Developing an approach for high speed rail renewals at HS1</p>	<p>13:50 Data challenges and solutions for managing old and new assets on a single site</p>
<p>Steve Berry OBE, Head, Highways Maintenance, Innovation, Resilience, Light Rail and Cableways Branch, Department for Transport Dr David Greenfield, Pothole-Spotter Research Programme Lead and Managing Director, SOENECS</p>	<ul style="list-style-type: none"> ▪ Update on renewal programme plans for UK’s existing high speed rail network 	<p>14:10 State of the art visualisation and data acquisition techniques for ports and harbours</p>
<p>14:10 Improving information management and interoperability for national roads authorities</p>	<p>14:10 The role of standards in digital transformation – balancing innovation with risk and cost</p>	<ul style="list-style-type: none"> ▪ Insight on new technology that can transform inspection regimes ▪ How best to gather and utilise data to support decision making
<ul style="list-style-type: none"> ▪ Overview of CEDR INTERLINK, a two-year European research project on asset information management for road infrastructure, due for completion in autumn 2018 ▪ The information needs of those who own, operate and deliver road assets, and current approaches to meeting those needs ▪ How to apply open standards-based digital technologies to improve interoperability, future proof asset data, and avoid vendor lock-in 	<ul style="list-style-type: none"> ▪ How standards can best support the integration of new asset management technology and solutions <p>Senior Representative, Rail Safety and Standards Board</p>	<p>James Turley, Senior Maritime Engineer, Arup</p>



Highways

Aonghus O’Keeffe, CEDR
INTERLINK Research Consortium &
Chartered Engineer, Associate,
Roughan & O’Donovan

Railways

14:30 **Panel discussion:**
Getting value from technology –
strategy vs. operations

International Gateways

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How far are we towards turning big
data into useful data?
What do we need to do to get there?

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there?

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: what behaviours and culture do we need to support digital transformation?**



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

17:20 Networking drinks reception

