



Monday 25 & Tuesday 26 November 2019  
America Square Conference Centre, London

Key event highlights:

- Dedicated half day seminar focused on the monitoring and maintenance of existing structures
- Exploring innovation in materials, access and technology
- A vibrant meeting place for the key stakeholders in the supply chain – clients, consulting engineers, contractors, architects and specialist suppliers
- In depth analysis of several high-profile bridge projects, including existing assets and new builds

Monday 25 November 2019

*Pre-Conference Seminar*

## Monitoring & Maintenance

Innovation and best practice in the maintenance of existing assets

13.00 Registration and refreshments

13.20 Welcome and introduction

13.30 **KEYNOTE: The bridge monitoring and maintenance strategy of Transport Scotland**  
*Hazel McDonald, chief bridge engineer, Transport Scotland*

14.00 **Design for operation and maintenance**

In 2017 the SCI's Steel Bridges Group held a workshop primarily aimed at main contractors involved in construction and maintenance operations as well as client organisations. The presentation will share the collated results of the industry survey and explain the direction of travel for future SBG guidance.

*Andrew Hodgkinson, director, Hewson Consulting*

14.30 **Structural health monitoring: An insight into SHM on the Queensferry Crossing & Forth Road Bridge**

*Ewan Angus, major bridges director, Amey*

15.00 **Case study: Nene Bridge pier strengthening**

*Dan Wood, project manager – major projects & Tim Henson, senior engineer, Skanska*

15.30 Break for refreshments & networking

- 16.00 Case study: Humber Bridge hanger replacement and testing  
*Andrew Arundel, head of engineering & infrastructure, Humber Bridge Board*
- 16.30 PANEL: How competent are your inspectors? What can be done to improve inspector competency?  
*Panellists:*  
*Bill Harvey, director, Bill Harvey Associates*  
*Kevin Dentith, chief engineer – bridges & structures, Devon County Council*  
*Joanna Bonnet, director, COWI*
- 17.10 Forth Road Bridge: Main expansion joint replacement  
*Angus Bruce, major bridge manager – forth road bridge, Amey*
- 17.40 Closing remarks from the chair
- 17.45 Close of seminar

Tuesday 26 November 2019

*Main Conference*

## The Future of Bridges

Exploring innovation in the design, construction, monitoring and maintenance of bridges

- 07.30 Registration opens
- 07.45 Breakfast Briefing: A deep dive into the Heads of the Valleys A465 Gateway Arch (45 mins)  
Featuring contributions from:  
*Rachel Mitchell, senior group engineer, Atkins*  
*Tom Osborne, director, Knight Architects*
- 08.45 Opening remarks from the chair
- 08.50 KEYNOTE 1: The future of bridge engineering  
*Ian Firth, director & consulting structural engineer, COWI*
- 09.15 KEYNOTE 2: Addressing the climate emergency in our design and construction strategies  
*Speaker tbc*
- 09.40 Why did the Morandi Bridge collapse and what can we learn from it?  
*Tullia Iori, professor of architectural engineering, University of Roma Tor Vergata*
- 10.10 Learning the lessons of the Florida International University footbridge disaster  
*Speaker tbc*
- 10.40 Morning break for refreshments & networking
- 11.10 PANEL: Exploring materials and manufacture innovation: Driving sustainability and durability in bridge design  
*Panellists:*

*Chris Hendy, technical director – bridge engineering, Atkins*  
*David Knight, director, CAKE Industries*

**11.55 PANEL: Clients and bridge owners**

*Panellists:*

*Hazel McDonald, chief bridge engineer, Transport Scotland*  
*Speaker to be confirmed, Network Rail*

**12.40 Lunch**

**14.00 Case study: Design and construction of the Northern Spire Bridge, Sunderland**

*Simon Fryer, technical director, Buro Happold*

*Tony Dempsey, director, Roughan & O'Donovan*

*Stephen McCaffery, Project Director, Farrans - Victor Buyck JV*

**14.30 PANEL: Exploring the bridge requirement of HS2**

*Panellists:*

*Speakers tbc*

**15.15 Update on the Design Manual for Roads & Bridges for structures standards**

*Neil Loudon, group manager – structures, Highways England*

**15.35 Afternoon break for refreshments & networking**

**16.05 Case study: East West Rail**

*Speakers tbc*

**16.35 Case study: Challenges in the construction and engineering of the Lille Langbro, Copenhagen**

*Davood Liaghat, head of bridge engineering & civil structures, Buro Happold*

*Simon Roberts, associate director, Wilkinson Eyre*

*Michael Thorogood, director, Eadon Consulting*

**17.05 Closing keynote: The future of bridge architecture**

*Martin Knight, managing director, Knight Architects*

**17.35 Closing remarks from the chair**

**17.40 Close of conference**

**18.00 Evening roundtable (sponsored)**

EMAP 2019. The programme may change due to unforeseen circumstances. EMAP reserves the right to alter the venue and/or speakers.