

## Minutes of the 59<sup>th</sup> meeting of the UK Bridges Board (UKBB) held at the CIHT on 23 May 2019

### Board members in attendance:

Liz Kirkham	(Chair) ADEPT/Gloucestershire County Council
Kevin Dentith	ADEPT/Devon County Council
Alistair Dore	Wakefield representing ADEPT
Sharanjit Gill	Transport for London
Keith Harwood	Hertfordshire County Council, BOF
Richard Fish	BOF
Colin Hall	Network Rail
Gary Kemp	DfT
Stuart Molyneux	Metropolitan Councils
Peter Simpson	Canal & River Trust
Brett Archibald (for Hazel McDonald)	Transport Scotland
Andrew Strang	SCOTS/Perth and Kinross Council
Satbir Gill	Representing TAG
Jason Hibbert	Welsh Government
Nick Burgess	London Underground
Neil Loudon	Highways England
Justin Ward	CIHT (Secretariat)

### 1. Welcome

Liz welcomed everyone; apologies were noted for Hazel McDonald, Steve Berry, Colin Ferris and Bob Humphreys

### 2. BOF

Richard Fish noted that BOF's last meeting focused on the governance of bridges in the UK and Ireland. There was a lengthy discussion on bridge collapses.

Liz Kirkham noted that she had raised the board's previously expressed concerns about the lack of a statutory investigatory unit on highway bridge collapses at UKRLG, and had taken an action from UKRLG on this to contact RAIB about their processes.

Neil Loudon said that there is SCOSS but they do not have the same responsibilities as the RAIB (as they have statutory powers). Satbir Gill noted the importance of the HSE in investigating safety issues, Neil Loudon said they are involved with SCOSS/CROSS but that they cannot investigate. Neil said that the advantage of RAIB is the fast reporting of bridge failures (within six months) and sometimes the recommendations are more far-reaching than just the rail network. Colin Hall said that the recommendations from RAIB are useful.

Richard Fish said that the important issue is that lessons are learnt and disseminated.. Kevin Dentith said that the investigation is the responsibility of the bridge owner.

**Action: Justin Ward to raise the suggestion for CIHT to call for the UK to set-up an investigatory unit following bridge collapses through extending the remit of RAIB to include all bridges (not just rail)**

## **BOF Grand Challenges**

Keith Harwood said that this document raises the major issues that BOF consider the bridge community faces including large overarching issues. These are:

1. Preventing bridge failures is one of the Grand Challenges.
2. Extending the life of existing structures.
3. Building bridges that will perform better
4. Embrace innovation and embed technology
5. Securing a competent and diverse workforce

Keith Dentith mentioned the NCE conference: The Future of Roads that will include reference to bridges.

**Action: Jason Hibbert to seek to include data from the State of Nation report on bridges for inclusion in the BOF Grand Challenges document**

Liz Kirkham suggested including reference to the Industrial Strategy. The Board noted that including coverage of UK wide issues would be useful. Kevin Dentith suggested working with the RAC Foundation for data sources.

Richard Fish said the BOF Grand Challenges should be a live document and should act as a test for the activities, including research, of the UK Bridges Board.

**Action: UKBB members to provide comments to Keith Harwood on the BOF Grand Challenges by 14<sup>th</sup> June**

**Action: Liz Kirkham to explore including coverage of the BOF Grand Challenges at the ADEPT and Highways UK**

**Action: Liz Kirkham to share the BOF Grand Challenges at the next UK Roads Liaison Group**

**Action: Justin Ward to consider coverage of BOF Grand Challenges in CIHT podcast and in UKRLG pages in Transportation Professional**

The Board discussed feedback from Steve Berry's email that was submitted in advance of the meeting. Neil Loudon said that he would have welcomed update on sensors

**Action: Steve Berry to provide more detail on the research project on the use of low-cost sensors**

Gary Kemp highlighted DfT was looking at improving research coverage within the Department so as to maximise the benefits of the work.

Neil Loudon noted that BIM and scour were issues and Keith Harwood said that these are areas where a lot of people are working.

Jason Hibbert added the BIM guidance from 2016 looked at Level 2 compliance, but that BIM Level 3 was not being strongly focused on by the sector due to the economic benefits of this. Jason added the issues of scour and he said there was a need for further work in this area. British Geological Survey is looking at a high-level assessment of scour risk. Neil Loudon said he was aware of at least five universities working on scour and that Highways England was working with them.

Gary Kemp highlighted the live labs work with ADEPT that was launched in January that encouraged the private sector working with local authorities.

Liz Kirkham said that the BOF Grand Challenges should be the framework by which research proposals are considered.

Andrew Strang said that BIM has been used for a large bridge project in Scotland but was not used more widely. Kevin Dentith said that BIM was not being used widely by local authorities.

### 3. Research

Keith Harwood gave an update on the Structures Toolkit. Keith said there has been a slight delay on the project and that in an industry session there was good support for this from software developers and that it would be a useful asset management toolkit. There is a draft of the toolkit available (on Excel format), but that over the longer-term it would be good to integrate this into software systems. Keith said the publication date would be for the end of June. The current toolkit is published by Cipfa (as it is a valuation toolkit), but as this new version will be more about asset management and lifecycle planning, it would be better for it to be published by UKBB/UKRLG.

**Action: Keith Harwood and Justin Ward to publish the Structures Toolkit and supporting paperwork on the UK Bridges Board website**

**Action: Justin Ward to work with Keith Harwood to include coverage in Transportation Professional UKRLG pages**

Keith said that it would be useful to include reference to the Structures Toolkit at conference events. Keith said that it will be important to consider ongoing support, given updates in Excel.

**Masonry arch research** – Liz Kirkham said that work is ongoing and should be published this summer available through CIRIA. Richard Fish said they are looking for examples of different assessment tools and it is likely that ADEPT members will have awareness of this.

**Parapet systems** – this was delayed but will be picked up (see below) in future research.

**Safety critical fixings** – Neil Loudon said this was launched at CIRIA on 18 March and is available on the CIRIA website. Neil said that Neil Loudon is drafting an implementation plan for Highways England and will be working with Transport Scotland and other UKBB members on this.

**Action: Kevin Dentith to work with Neil Loudon to work on an implementation approach for local authorities following the publication of the Safety Critical Fixing document**

#### **Future research proposals**

The Board agreed to the following prioritisation of research proposals (in priority order):

1. Provision of parapet system on local roads
2. Structures condition performance indicator guidance
3. Extent and consequences of overloaded HGVs
4. Preventative maintenance of concrete structures

Neil Loudon raised the issues of an HGVs following an issue from a haulier who wanted to move vehicles around the network that has raised an issue of loading for that. The Board noted changes with weights from EV buses and there would be future issues on loading from platooning trucks and other developments.

**Action: Gary Kemp to arrange for a meeting between Neil Loudon and the DfT team that work on the *Construction and Use* regulations to ensure that bridge owners issues are considered for future requirements (making this clear this applies across all the network)**

**Action: Jason Hibbert to investigate additional funding from the Welsh Government for additional funding for the research proposals (concrete structures, condition performance indicators and overloaded HGVs)**

**Action: Gary Kemp to provide an update on timing for research funding commitments**

#### **4. Highways England/Local Authority Boundary issue**

Neil Loudon provided an update on the project following legal advice that has been provided to Highways England.

**Action: Neil Loudon to share the Highways England legal advice with Kevin Dentith, Andrew Strang and Liz Kirkham for ADEPT and SCOTS to consider**

#### **5. Parapet Height Document**

Liz Kirkham said that UKRLG was pleased for the UK Bridges Board to publish this.

**Action: Colin Hall to investigate the finalisation of the Parapet Height Document for final review by UK Bridges Board members**

#### **6. Bridge Inspector Certification Scheme**

Neil Loudon noted he had asked for an update on the scheme from Lantra. Neil said the main change was the move to modulization that will be launched in July (having a set of core competencies with the opportunity to select one, two or three of the other modules). Neil said that the change is not straightforward as had bearings on the fees and smartcards.

Neil added the intention was that the Lantra scheme would become part of a National Sector Scheme (31), the document for this is in-hand. Neil said that the sector scheme would certify employing organisations. The BIC scheme is aimed at inspectors. The NSS is aimed at organisations.

Kevin Dentith said that the ADEPT Bridges Group had raised some concerns with the Lantra scheme. As such, ADEPT is finalising their own scheme considering the scheme in SCOTS and a scheme in Devon.

Following a further discussion, the board outlined that bridge inspections are fundamental to what bridge owners do from a safety and risk perspective and there is a need for consistency within the sector.

## 7. Minutes of the last meeting

Agreed subject to minor amendment noted by Jason Hibbert.

The actions were noted. With the following actions carried over:

**Action: Gary Kemp to confirm funding commitment on bridge condition indicator**

**Action: Richard Fish to complete research proforma on review of state-of-the-art sensors for corrosion in reinforced concrete**

**Action: Liz Kirkham to redraft letter on BICS**

**Action: Justin Ward and Liz Kirkham to invite LoBEG to be represented on UKBB**

**Action: Colin Hall to contact Justin Ward regarding update from Network Rail from the Bridge Strike Prevention Group**

## 8. Minutes of the UKRLG meeting

These were noted.

The Board noted the review by CIHT on Improving Local Highways.

Andrew Strang noted there was an issue in Scotland regarding capitalisation of funding for major inspections. Andrew said that if there was a national drive to bring forward capital and revenue funding together that would be welcomed.

Kevin Dentith said that Steve Berry highlighted the potential to use capital funding for principal inspections and that he was exploring this with Treasury.

## 9. AOB

**NCE conference (3<sup>rd</sup>/4<sup>th</sup> July)** – this was highlighted by Kevin Dentith.

**Temporary bridges guidance** – highlighted by Neil Loudon

**Action: Richard Fish to explore securing representation from Long-span bridge group onto the UKBB**

**TR22 Structures Monitoring** – street lighting column indicator has been released. Satbir Gill highlighted that this should have been given to the UK Bridges Board for consultation.

**LoRaWan – Internet of Things** - Jason Hibbert highlighted the potential for the use of this for low cost information and that he was investigating the use for this for monitoring retaining walls. Neil Loudon said that Cambridge Centre for Smart Infrastructure in Construction was involved in this area.

## 10. Date of next meeting

19 September 2019