Minutes of the 55th meeting of the UK Bridges Board (UKBB) held at the CIHT on 1 February 2018

Board members in attendance:

Liz Kirkham (Chair) ADEPT/Gloucestershire County Council

Nick Burgess London Underground

Graham Cole ADEPT/BOF

Kevin Dentith – by web call ADEPT/Devon County Council

Richard Fish BOF

Rob Dean Network Rail

Bob Humphreys CSS Wales, Gwynedd Council

Gary Kemp Df

Stuart Molyneux Metropolitan Councils
Hazel McDonald Transport Scotland
Neil Loudon Highways England
Wayne Hindshaw Transport Scotland

Andrew Strang SCOTS/Perth and Kinross Council

Martin Saachs (for Satbir Gill)

Jason Hibbert – by web call

Justin Ward

Representing TAG

Welsh Government

CIHT (Secretariat)

1. Welcome

Liz welcomed everyone to the meeting. Apologies were recorded for Nicola Head, Satbir Gill, Colin Ferris and Peter Walker.

2. Minutes of the last meeting

Amend minutes as suggested by Kevin Dentith.

Matters arising

CIRIA – commencing work on Unmanned Aerial Vehicles and BSI and the major drone group work on UAVs.

Wayne has a paper to share on Transport Scotland work on overloading. Wayne noted use of ANPR at specific sites and that the DVSA has an enforcement centre in Livingston, where evidence would go to them.

Richard Fish asked the Big Bridges Group to come up with a proposal for a representative but noted this action is ongoing.

Representation on the Asset Management Board from this group - Liz noted that Keith Harwood was providing ADEPT Bridges Group representation. Stuart Molyneux agreed to be the UKBB rep on the UK AM Board.

DMRB review – Neil Loudon said that the person leading the DRMB (Steve Davy) would be the most appropriate contact to speak with Steve Berry.

Network Rail – instead of a letter being sent it was noted that a meeting had been convened instead – see item 13.

BridgeCat update – Gary noted that Steve Berry said that GAIST could provide an update at a future meeting.

3. UK Roads Liaison Group minutes

The minutes were noted. Amend to certification scheme (for BICS scheme) as noted in the minutes.

4. UK Bridges Board Business Plan

The Board reviewed the updated business plan, and further changes were made. There were a number of specific actions identified. Wayne Hindshaw asked for update on a report of legal action involving Network Rail and a highway authority. Wayne said the outcome of this could set future legal precedence.

BIM guidance – noted that this has been published. Liz noted that this was on the
plan to raise awareness of this within the sector. Wayne noted that understanding of
BIM was still limited. Rob Dean said that research was being published with machine
learning for existing bridges to develop models. Also work on drones by Huddersfield
University to create 'exploded diagrams' to develop set inventory.

Action – UKRLG article on the work by Network Rail research on machine learning application to develop 3D models for existing bridges

Kevin noted that the BIM guidance was published in 2016 and it was called Better Information Management. No one has taken action with regards to what it means for the industry. Kevin said it was much more about the management of data. The Guidance document probably needs to be relaunched.

Action – add an item to next agenda on the BIM Guidance Document.

Liz requested an update on research from DfT and the possibility of top-slicing the Highways Maintenance Block to enable research funding. Gary Kemp said that this was still an aim but that Ministers had not made a final commitment.

 Technology scanning for bridges – Richard said this is an element that BOF is always doing. Richard said that involving Keith is looking to pull together some of the innovations from the supporters of the Bridge Conference in March.

Action: Richard Fish to share any developments regarding technology following the Bridge Conference 2018

 Parapet height – Rob Dean said that Network Rail had a standard that was briefed in 2016. Rob noted this was part of wider work on trespass and personal safety incidents and translocation risk. Rob said that he attended a PACTS meeting, Liz agreed that supporting the work by PACTS would be most appropriate.

Action: Update item to work with PACTS on personal safety incidents – what to consider and how

Rob Dean noted that at the design stage how to investigate risks from personal safety incidents e.g. liaison with NHS, Samaritans.

• Learning from failures to improve safety item was discussed.

Action: Justin Ward to arrange for an update from Alistair Sloane to provide an update from SCOSS/CROSS.

Neil Loudon said the major issue being considered currently is the Grenfell Tower fire and the wider implications from this.

Action: Kevin Dentith to circulate CROSS newsletter for Justin Ward to circulate to UKBB members

Neil noted that there was a discussion of broadening SCOSS/CROSS's remit to include fire safety (post Grenfell) and also having legal powers to have access to structural reports. HSE are supporters of SCOSS/CROSS.

Sharing of safety data - Rob Dean said that Network Rail share their safety related failures with the sector, but noted that visibility from other infrastructure owners. Rob noted that the focal point can be provided via SCOSS/CROSS. Liz said 200 bridge owners would make it difficult to coordinate this together. Rob asked regarding reference in the Code of Practice.

Action: to check if reference to reporting safety related incidents is in the Code of Practice Well managed Highway Infrastructure

 There was a discussion on case studies to support the code, with the following action agreed:

Action: Liz to share Gloucestershire bridge hierarchy with this group

The requirement to continue to have design and maintenance standards for masonry parapets and structures in general was noted for DMRB.

5. Changes to authorised weight regulations

After a detailed discussion, the following was agreed:

Action: Liz Kirkham to feedback that the move to 3.5 tonne limit encompasses wider issues such as the assessment standards, signing, asset management, road safety and TSRGD

Action: Gary Kemp to feedback within DfT that the consultation on weight limits this should have involved the bridge community.

Action: Meeting to be arranged between DfT and UKBB representatives on the issues

Action: Potential research project to create a future proof assessment risk profiling based on increasing weight limits (link to Andrew Strang on European research).

6. RAC Foundation research on bridges

The Board noted issues with the definition of sub-standard and issues of consistency with data across local authorities. Rob said that as an industry that wider consistency would be useful for a state of the nation report. Wayne Hindsaw said that Transport Scotland produce an Annual report with costs against them. Liz said the report does generate news interest; that the quality of data across the UK was not of sufficient quality; and that this helps make the case externally and within authorities.

Action: ADEPT Bridges Group will continue to work with RAC Foundation on the research on bridges

Action: Rob Dean to share the list of criteria on Network Rail's definition of substandard bridges with Liz Kirkham

7. Personal safety incidents

Liz reported that she and Rob Dean had attended a PACTS meeting on preventing suicides on the highway, including at bridges.

Neil Loudon noted that Highways England has published a preventing suicides toolkit. Rob Dean said that it was important to look at the local community in the environment of a bridge, as this would help determine the risk factors. Wayne Hindshaw noted this is a public health issue and that the funding of the solutions should come from public health budgets.

Jason Hibbert noted that in Wales good progress was being made on the trunk road side with links with health colleagues, road safety and police. Kevin noted that there can be small scale engineering interventions at a low cost that can have an impact. Richard Fish said the Golden Gate Bridge has ended up with a safety net that was partly funded by health budgets. It was noted that a coroner report had suggested that the parapet height should be increased.

Action: Justin Ward to share letter of hope letter as shared by Kevin Dentith

8. Boundary arrangements

Wayne Hindshaw noted that Scotland produced 'Extent of network' document in the 1990s and since then largely things have moved along well. But over the last 18 months, there had been increasing management issues with lighting in underpasses, high mast lights etc. Neil Loudon said that the latest update was sitting with ADEPT. Liz said it would be considered at the next ADEPT Bridges Group meeting, in February.

Action: Liz Kirkham to feedback following review from ADEPT on boundary arrangement document

9. Bridge Inspector Certification Scheme

Neil Loudon noted that the scheme sits with the UK Bridges Board. It was agreed that the Bridges Board should be taking more steps to promote and reinforce the scheme. Lantra would appreciate a letter from the UK Bridges Board and for the UK Bridges Board to send out a letter to constituent partners about the BICS scheme and importance of it. Neil added that feedback on progress from all parties on the BICS scheme would be useful and a link on the UKRLG website to the scheme.

Highways England lead inspectors to be BICS accredited by June and progress updates have been requested from service providers. Hazel said that a number of inspectors are expected to be accredited by June.

Action: Hazel McDonald to draft the letter on the BICS scheme for review/approval by Liz Kirkham

Action: Neil Loudon to help via Lantra to provide details on uptake of the BICS

Andrew Strang noted that SCOTS Bridges are producing a guidance document recommending best practice was to go through the BICS but that this was not compulsory.

Liz noted the Code of Practice recommendation was to be able to demonstrate competency in all areas, and for inspections that this was irrespective of whether the inspection is carried out in-house or by an external contractor.

10. DMRB review

Neil Loudon noted that the review is underway, in terms of Structures there are 105 documents being reviewed.

Action: Neil Loudon to share a coarse overview of the DMRB programme

Neil noted that Highways England were having internal discussions about the requirements for standards for design and maintenance of masonry bridges and parapets. Neil said he considers that the document needs updating to take account of recent research. Kevin Dentith noted Steve Davey from Highways England was to attend the ADEPT Bridges Group on 13th February.

Action: Neil Loudon to ensure Steve Davey provide an update on the status of masonry parapets in DMRB to the ADEPT Bridges Group

11. BOF

Richard Fish noted slower than expected progress on BOF Grand Challenges. Richard noted that Keith Harwood, as agreed, had proposed to raise as more questions than answers on six key issues – these would be completed on a single page document. Richard noted that Neil had given an interesting presentation on the ongoing benchmarking study of 200 bridges. The Board asked to have that at the next UKBB meeting.

Action: Neil Loudon to give a presentation on the benchmarking study on 200 bridges by Highways England has made some interesting recommendations

New masonry arch and 3D assessment will be reviewed at a future meeting. Also having a meeting before the Annual Bridge conference.

Andrew Strang asked about recent work by Network Rail on a bridge with high alumina cement. Rob Dean said a recent inspection had revealed a high level of conversion, which was unexpected in the environment that the bridge was in. The bridge has now been partly replaced. Network Rail are still investigating how many bridges could be at risk. It is likely that the material came from a British Rail casting yard.

Rob said the issue was reported to SCOSS/CROSS, Highway England and ADEPT.

Action: Rob Dean to share note on issue of high alumina cement

12. Current research update

Safety critical fixings - Neil Loudon said the work is now completed, will be published by CIRIA alongside another piece of work by CIRIA on facilities fixings. May/June launch time. This is a risk-based approach in four sections, there are lots of case studies and lots of lessons learnt back to design i.e. design out, or put redundancy in. The key issue will be how different authorities implement it – the challenge would be establishing the scale of numbers of safety critical fixings, etc. Neil said this is part of hidden defects, therefore what changes does the industry need to make to respond to the document. For instance in the UKRLG Code, in standards, in asset management systems. This will be up to individual authorities but the challenge is – do you know where you have safety critical fixings.

Liz Kirkham said that the methodology as to how the new Code of Practice is to be updated needed to be established.

Action: Liz Kirkham to raise at UKRLG process for updating the Code of Practice.

The Board noted various issues relating to retaining walls, highlighting the recent incident on the motorway between Edinburgh and Glasgow. Kevin Dentith said Devon County Council have recently cleared vegetation from 25km of drystone retaining walls and were surprised to find very little work required.. The Board noted water management is critical both in design and in operation and management for retaining wall safety. Rob Dean noted that Network Rail are implementing a condition marking indicator for retaining walls.

13. Access planning sub-group updates

The Board noted that this Group was no longer operating. Liz said she met with Richard Waters (Lincolnshire Council and Chair of the Group) and members of the Rail group from DfT. Rob said there needed to be a clearer understanding of priorities within Network Rail. There was a brief reference to the Canal & River Trust but not discussed further.

Action: Gary Kemp to chase up within DfT the issues on access planning and any follow-up

Liz Kirkham thanked Wayne Hindshaw for all his contributions to the UK Bridges Board as Wayne is due to leave Transport Scotland.

14. Date of next meetings

21 June 2018

18 October 2018