

BRIDGE OWNERS FORUM

MINUTES OF MEETING BOF 60: WEDNESDAY 13 MARCH 2019 IN THE AYLESFORD SUITE, RICOH ARENA, COVENTRY

PRESENT:

Bill Bryce	SSE
Andy Featherby	Canal and River Trust
Richard Fish	Technical Secretary
Jim Hall	CSS Wales
Keith Harwood	ADEPT
Daniel Healy	Department for Infrastructure - Northern Ireland
Jason Hibbert	Welsh Government
Trish Johnson	Big Bridge Group
Neil Loudon	Highways England
Hazel McDonald	Transport Scotland
Campbell Middleton	Cambridge University Engineering Department (Chairman)
Paul Thomas	Railway Paths Ltd.
Paul Fidler	CUED
Guests:	
Graham Cole	Boffer Emeritus
Kevin Dentith	Chair of ADEPT Bridges Group
Liz Kirkham	Chair of UKBB

1. Welcome, Introductions and Apologies

The Chairman welcomed everyone to this additional meeting, hosted by the organisers of the Annual Bridges Conference, in particular guests from ADEPT and UKBB. As for similar pre-conference BOF meetings, the agenda had been designed to enable a wider debate on topics of interest.

Minutes and matters arising from BOF 59 were deferred to the agenda for BOF 61 in May.

Richard Fish noted that apologies had been received from the following:

Nick Burgess	LUL
Henry Dempsey	SCOTS
Liam Duffy	Transport Infrastructure Ireland
Tomas Garcia	HS2
Philip Gray	TfL
Colin Hall	Network Rail

The Chairman noted that Rob Dean had left Network Rail since BOF 59 and the meeting wished him every success in his new role with HS1. Richard Fish noted that Colin Hall would be replacing Rob on BOF (and UKBB).

The Chairman explained the reason for the two part agenda but encouraged a lively debate for the part 1 discussion items.

Part 1 - BOF Members plus Guests

2. Discussion: The State of UK Bridge Management

The Chairman introduced the first of the agenda discussion items by giving his perspective on the history of bridge management from the start of the Bridge Assessment and Strengthening Programme in the early 1990s through to the introduction of the Code of Practice and current Asset Management.

He also outlined the current Government sector deals for research, including construction and housing with the emphasis on new build projects. It was recognised, however, that there were no similar initiatives for existing infrastructure.

Kevin Dentith explained the background to the RAC surveys (now in the third year and to which this year, 99% of local highway authorities had responded) which he believed helped to raise the profile of the state of the existing bridge stock and the maintenance backlog. ADEPT had been working with the RAC Foundation to help frame questions which would be most appropriate. This year had seen additional questions on post-tensioned bridges and exposed the fact that out of 647 local authority owned structures, there were 200 that had either no PTSI or no risk review in accordance with BD54. Neil Loudon reported that Highways England had some 850 post-tensioned bridges but pointed out that not all required a PTSI as this figure included those with partial, such as transverse, prestress. He also noted that Highways England were adopting a more risk-based approach to the management of post-tensioned bridges.

Kevin also noted that the survey had identified the number of “sub-standard” bridges, explaining that this was the BD79 definition and the problem was perhaps not as big as might be thought. Discussion extended into other possible definitions, such as those

used in the USA: Structurally Deficient, Fracture Critical and Functionally Obsolete. Liz Kirkham noted that Gloucestershire CC used the term “managed” bridges in which a BCI score was < 60. Neil Loudon noted that scour or fatigue prone bridges should also be somehow classified although they might be in good condition and unrestricted. Paul Thomas suggested that one of the benefits of the RAC surveys should be in identifying trends

Further discussion covered the lack of capacity and capability in Local Authority bridge management, starting with fact that there were no longer any County Surveyors. There were also fewer Chartered Engineers and a reduction in the concept of intelligent clients. It was noted that posts had been split so that those responsible for bridges had many other roles in their organisations. Jim Hall suggested that smaller unitary authorities were probably in the worst position with an example of one where there was effectively 1/8 of a person managing bridges. Richard Fish warned against the over-reliance on consultants who left bridge owners with difficult decisions as they were not paid to take risks. Liz Kirkham noted that the capacity issue was being addressed in a report by Matthew Lugg (former ADEPT, and current CIHT, President) which was reviewing council sizes and options for possible alliances from a highway authority viewpoint. She also pointed out that some changes had already taken place with the establishment of the Major Road Network (MRN) and Sub-Regional Transport Boards. There could even be options for a Northern Ireland model whereby the recently renamed Roads Service managed all roads (and bridges), with the exception of a few DBFOs, in the province. It was recognised, however, that there was likely to be political resistance to any proposed changes to local councils.

The conversation turned to budgets, with Liz Kirkham noting that there was no longer ring-fencing of government grants and allocations were left to local politicians. She reported on a discussion at the ADEPT Engineering Board that had explored the option of combining Capital and Revenue into Total expenditure. (Capex + Opex = Totex). This could be of benefit with regard to bridges as present local authority revenue budgets were allocated to quick fixes such as pot hole repairs. Jim Hall noted, and Paul Thomas and Andy Featherby agreed, that most bridge maintenance budgets were simply spent on vegetation clearance and also that his authority spent four times as much on roundabout flower beds than bridge maintenance.

Kevin Dentith noted that DfT’s Steve Berry had attended a recent ADEPT Bridges Group meeting and had described a new £200m Challenge Funding allocation which might help bridge management. Kevin suggested that better value for money could be achieved by targeting the capacity issue and investing in people rather than bridges, with the emphasis on sound asset management.

Neil Loudon suggested that there should be three key issues:

- Dealing with an aging infrastructure
- Attracting and retaining competent professionals
- Identifying gaps in our knowledge.

Jason Hibbert suggested that we should also follow the SCOSS approach and look at the pre-cursor issues such as problems identified at Hammersmith and, more recently, the Churchill Way flyover in Liverpool.

Hazel McDonald saw a catch-22 situation in that while we were seen to be successfully “managing” the problems, there was no need for politicians to take action. Liz Kirkham agreed, noting that the 2009 Cumbria collapses had led to significant additional funding. Hazel confirmed a similar situation with the TS budget when the Forth Road Bridge had to be closed after the truss end link had failed.

Graham Cole questioned how do we demonstrate that a bridge was actually sub-standard? Plus, a BD79 sub-standard bridge requires a formalised monitoring regime. How is this to be achieved with owners with low professional capacity? Keith Harwood reported that Hertfordshire CC reported their bridges in terms of risk rather than condition, almost in a marketing context. This had struck a chord with local members and the budget had increased significantly.

3. Discussion: How should we demonstrate competence?

The Chairman noted that the previous item had covered some competence issues and discussion now centred on BICS.

Graham Cole summarised the current position:

- Some of the inconsistencies in the scheme criteria had now been addressed
- A modular approach would soon be adopted
- 40 had now been certified at Inspector or Senior Inspector level
- 200 will have attended workshops by the end of March

The Chairman asked for status reports:

- Hazel McDonald reported that TS had extended their deadline for full compliance to 1 July 2019. She had also reviewed a number of CVs of “inspectors” put forward by consultants, some of whom had never undertaken inspections!
- Andy Featherby noted that C&RT had included the need for competency in their Asset Management Document but there were doubts as to whether BICS could be enforced.
- Daniel Healy suggested that modularisation might help the adoption of BICS in Northern Ireland.
- Jim Hall reported that 20 out of 22 CSS Wales authorities will *not* adopt BICS, mostly down to cost especially as subscriptions are not paid by councils and have to be met by individuals. The other issue was the lack of variety in bridge types in small authorities, although he accepted that modularisation may help.

- Kevin Dentith reported that he had asked for a show of hands at the last ADEPT bridges group meeting and there had been *zero* support, mostly due to the cost. He was also aware that other in-house competency schemes were being developed in Scotland and Suffolk and in his own authority, Devon, with the possibility of combining these into a lower cost alternative.
- Neil Loudon confirmed that Highways England were committed to BICS and were also developing a career path for Bridge Inspectors.
- Paul Thomas noted that Railway Paths are going to take on an apprentice who will be trained towards the BICS qualification. The Chairman remarked that recruiting apprentices was a good idea and should be considered by others.

The Chairman concluded this item by reminding the meeting that BOF had pushed long and hard for the certification of bridge inspectors and encouraged everyone to adopt BICS.

4. Discussion: Relative Roles of UKBB, ADEPT and BOF – Gaps and Overlaps

The Chairman gave a brief account of the origins of BOF and its initial research orientated workload. Liz Kirkham stated that the present working relationship between UKBB and BOF was working very well, noting that UKBB had to be geared to policy and strategy issues. She also pointed out that DfT often asked for rapid responses to calls for research and BOF provided an agility to react quickly and effectively.

Neil Loudon agreed that BOF gave the opportunity to consider the big issues in greater depth, especially noting the successful themed meetings in recent years. Neil also added that collectively the groups needed to identify needs, effectively the BOF Grand Challenges, and the road map through which to achieve them.

Kevin Dentith described the ADEPT group, and its sub-set of Area Bridge Conferences, as both a bottom up and top down arrangement with local authorities able to keep in touch with national issues as well as having the chance to air any problems that were causing concern at a local level. He welcomed closer links between ADEPT and BOF and suggested that the latter could serve as a critical friend for some of the issues that were discussed at the ADEPT group.

Discussion in this item also extended into bigger research issues such as accelerated bridge construction, off-site manufacture and digital bridges.

5. Grand Challenges – Update and Way Forward

Keith Harwood reprised the background behind the recent BOF Grand Challenges initiative and suggested that they should be used either to test research proposals or to issue to interested parties to help inform proposals being put forward. Liz Kirkham was

very supportive of both concept and format and suggested that they would provide guidance for discussions with DfT as well as helping with funding bids.

Specific actions remain as at BOF 59 but it was agreed that the final submissions should be endorsed at BOF 61 before consideration by UKBB on 23rd May before being taken to UKRLG.

6. Bridge Research Projects – 2019/20: Update

Liz Kirkham gave a brief update on progress with the projects proposed by BOF, endorsed by UKBB and soon to be considered by UKRLG.

7. Any Other Business

- a) **Masonry Arches:** Graham Cole reported the good progress being made on the CIRIA report which would encapsulate Matthew Gilbert's work on Permissible Limit State assessments. He also noted that the Steering Group was providing excellent input.

The Chairman thanked guests Liz Kirkham, Kevin Dentith and Graham Cole for their contributions to the discussions which he suggested might continue at the Conference drinks reception. Liz, Kevin and Graham left the meeting.

Part 2 - BOF Members only

8. BOF: Future, Function, Form and Funding

The Chairman explained the background to this item and the current imbalance between BOF income and expenditure, especially if resources needed to be found to upgrade the website.

After considering a number of scenarios, the meeting concluded that the present arrangements were working well and that having a Technical Secretary was essential. It was also noted that BOF's profile in the bridge community had never been higher and this should be maintained.

The number of meetings per year was questioned especially as this was the third year in which an additional meeting had been arranged, hosted by the bridge conference organisers. It was agreed that meetings should be limited to three per year with timings to be discussed at BOF 61.

ACTION 1: Chairman/All

In terms of funding, it was agreed that subscription rates should be increased in order to balance the books with the principle continuing that larger owners should pay more. The Chairman was charged with deriving an equitable funding formula in conjunction with his business manager at CUED and invoices would be issued in early April.

ACTION 2: Chairman

It was also agreed that widening BOF membership would be beneficial to include perhaps smaller and private owners.

ACTION 3: All

The Chairman also agreed to locate a “Benefits of BOF” document which had been used to encourage new members.

ACTION 4: Chairman

9. Any Other Business

- a) **Safety Critical Fixings:** Neil Loudon that the launch of the CIRIA guide was to take place on Monday 18th March.
- b) **Media requests post Genoa:** Trish Johnson suggested that BOF could have a role following occasions such as the Morandi collapse in order to improve consistency with the media. She noted that UKBB had discussed media briefing sheets on other topics such as suicide prevention.
- c) **Marketing Specialists:** Noting Keith Harwood’s earlier comments, Trish Johnson questioned how this might be taken forward. The Chairman advised that CUED were soon to be interviewing for a Communications Manager and will consider this further.

ACTION 5: Chairman

10. Next Meeting

BOF 61 will be held at the Forth Bridges, Scotland, on 14th and 15th May 2019. Richard Fish will issue details in due course.

ACTION 6: Richard Fish

11. Close

The Chairman closed the meeting and looked forward to a successful conference.

ACTIONS:

	Agenda Reference	Action by	Action required	Completed
1	Item 8	Chairman	BOF Meetings: Timings to be discussed at BOF 61.	
2	Item 8	Chairman	BOF Subscriptions: To be reviewed and issued for 2019/20.	
3	Item 8	All	Additional BOF Members: To be identified and approached. *	
4	Item 8	Chairman	Benefits of BOF: To be located.	
5	Item 9	Chairman	BOF Marketing: To be considered.	
6	Item 10	Richard Fish	BOF 61 Arrangements: To be prepared and issued.	

*Post meeting note: Rochester Bridges Trust have accepted an invitation to join BOF, represented by Sue Threader.

Richard Fish,
BOF Technical Secretary,
1st May 2019