

BRIDGE OWNERS FORUM

MINUTES OF MEETING BOF13: TUESDAY 28th SEPTEMBER 2004 AT JESUS COLLEGE, CAMBRIDGE

PRESENT

DoRD (NI)	Wilson	Ronnie
HA	Jandu	Awtar
CSS/Oxford. CC	Brown	Peter
Network Rail	Bell	Brian
LUL	Moriarty	Jim
LoBEG/RBK	McFarlane	Richard
Welsh Assembly	Collins	John
British Waterways	Dils	Martin
Scottish Exec.	Brodie	Andrew
Humber Bridge	Hill	Peter
HA	Loudon	Neil
CUED- Chairman	Middleton	Campbell
CUED	Fidler	Paul
CUED - Secretary	Walker	Graeme
Visitors		
EPSRC	Tansley	Claire
Atkins	Sterrit	Garry

APOLOGIES FOR ABSENCE

G.Hayter (HA), J.Clarke (BRB), G.Cole (CSS)

1. INTRODUCTION

The Chairman welcomed all present and particularly the new members; Richard McFarlane representing LoBEG, Peter Hill, who has replaced Roger Evans as the Humber Bridge representative, Martin Dils from British Waterways and Andrew Brodie representing the Scottish Exec.

The Chairman also introduced the guest speakers; Neil Loudon, who was to give feedback on the CMI seminar on Innovation in Monitoring and Maintenance of Ageing Infrastructure from the point of view of the HA, Dr Claire Tansley representing EPSRC and Dr Garry Sterrit of Atkins, who was to give an update on the BMS.

2. MINUTES OF MEETING BOF12: 8 JUNE 2004

The minutes of the previous meeting of the Forum were accepted.

John Collins asked that earlier minutes be changed such that the corrections were not highlighted, and only the final agreed version was made available.

ACTION: CHAIRMAN

3. ACTIONS FROM MINUTES

Referring to minute 9 the Chairman requested that the Forum members suggest the names of people who should be invited to attend the first International Bridges Forum that is scheduled for June 2005.

ACTION: ALL

All other actions were covered by later items on the Agenda.

4. EPSRC – BRIDGE RESEARCH INITIATIVE

The Chairman welcomed Dr Claire Tansley who then gave a presentation on the role of EPSRC outlining how funding is allocated. She highlighted the three main ways in which industry can become involved:

- Taking part in peer review
- Collaborating on research and postgraduate training
- Strategic partnerships

It was highlighted that government agencies, as well as industry, can form strategic partnerships with EPSRC.

Brian Bell suggested that more members of the forum should become involved in the peer review board, as there are currently few industrialists on the board. Currently Brian Bell and Neil Loudon sit on the review board. To become involved, a potential candidate must be nominated by a member of the board.

Dr Tansley agreed that an outline of preferred research topics, prepared by BOF, would be useful in helping to guide the programme manager in producing the business plan, which is written every two years.

The Chairman agreed to add links to the EPSRC brochures to the BOF website.

ACTION: CHAIRMAN

5. DISCUSSION OF ISSUES RAISED AT THE CMI SEMINAR

The Chairman invited Neil Loudon to start the discussion by outlining the research on sensors that was being carried out by the HA.

Neil Loudon briefly discussed new construction, commenting that there was rarely any reason for monitoring in this situation, except occasionally in the case of unusual structures. Monitoring is of more use in the management of existing structures, where its use can normally be grouped into one of two categories. Monitoring devices can either be retrofitted to a structure before repair and strengthening work is carried out, so that the effects of the refit can be examined, or monitoring can be used to identify the defects within a structure, and more importantly the cause of the defects, so that a suitable remedial strategy can be developed.

Two specific projects were discussed. One was the use of acoustic emissions to try and evaluate the condition of hinge structures, which are difficult to inspect visually. An EPSRC proposal for the development of this technique has been submitted.

The second project discussed was the development of an IR thermography system to evaluate the extent of concrete spalling on bridge structures. This system will highlight potential problem areas, and has the advantage that it can be carried out from the side of the carriageway, as opposed to hammer testing which requires lane closure, and is also slow to carry out.

The difficulty in drawing the line between using government money to help private industry develop a general idea compared with funding a commercial development was highlighted.

Discussing the conference, it was felt that care had to be taken not to use sensors to provide a mass of unnecessary data. The Chairman highlighted the advances that had been made in modern sensors, namely their low power requirements, low cost and wireless communication, and pointed out that they were ideally suited as an inexpensive method for monitoring critical elements of a structure for damage. John Collins suggested that the Forum members should each list the problems they had for which sensors may provide a solution. A list of common problems could then be produced, and published on the website to provide guidance for researchers. It was felt that the list shouldn't be limited by what people thought sensors can measure, but instead list what it is desired to measure, and leave it to the academics to determine how (and if) they can be measured.

6. BMS UPDATE

The Chairman invited Dr Garry Sterritt to update the Forum on the work being carried out by Atkins for various organisations. The slides from this talk are included on the website.

7. UPDATE ON BOF RESEARCH PROJECTS

Masonry arch guide

Brian Bell reported that the production of a best practice guide for masonry arch bridges has been delayed due to problems with a sub-contractor. A new sub-contractor has been found, but work has been delayed by approximately 3 months. It is anticipated that the final draft will be completed by January 2005.

Revision of BS6779 Part 4

Brian Bell reported that the BSI has not agreed to underwrite the cost of having BS6779 Part 4 rewritten.

Research proposals from researchers

The Chairman reported that the Bridges Board have advised that the Minister has decided that there will be no funding for new bridge related research projects in 2005.

He suggested that the authors of the eight short listed proposals be approached to discover if they would still be interested in funding for 2006. Those that are would be asked to submit further details, as listed under item 8 of the minutes of BOF12.

ACTION: CHAIRMAN

Awtar Jandu reported that the HA was already involved in three of the proposals put forwards by the University of Edinburgh. The Chairman asked that Awtar Jandu approach the researchers to discover what funding (if any) they had already obtained from other sources.

ACTION: A. JANDU

8. RESEARCH PROPOSALS FROM OWNERS

Evaluation of Occupant risk during collision with masonry parapets and boundary walls - John Collins (Welsh Assembly)

John Collins requested support for this project from BOF members, with the aim of presenting it to the Bridges Board. There was little support from the rest of the Forum. The Chairman suggested that John Collins discuss the proposal with Ronnie Wilson (who had left the meeting earlier) and retable it at the next BOF meeting.

ACTION: J. COLLINS

9. OTHER BUSINESS

Website password

John Collins asked that the website password be sent to him and the new members of the Owners Forum.

ACTION: CHAIRMAN

EPSRC Workshop

Brian Bell drew the Forum's attention to an EPSRC workshop being held at the Old Trafford football ground on the 19th October 2004. The workshop will review the civil engineering monitoring research funded by EPSRC in recent years.

First International Bridges Forum

The Chairman agreed to email possible dates to the members of the Forum. Members are asked to advise the Chairman of their availability on these dates.

ACTION: CHAIRMAN

Kingston bridge

A.Brodie was asked to send a copy of the Kingston bridge report to the Chairman for inclusion on the BOF website.

ACTION: A.Brodie

New Ideas Form (HA) - *PLC2 form*

Gerry Hayter (HA) had asked the Chairman to draw the attention of BOF members to the HA's new ideas form. A copy of this will be added to the BOF website. The deadline for submission for projects for the 2005/06 round is 8th October 2005. Awtar Jandu agreed to send a copy of the form to the Chairman for inclusion on the BOF website.

ACTION: A.JANDU/ CHAIRMAN

10. DATE AND LOCATION OF NEXT MEETING

Ronnie Wilson suggested that the next meeting of the Forum be held in Northern Ireland. It was agreed by the members of the Forum that the meeting would start on the morning of the 10th January, concluding lunchtime on the 11th and include a visit to a local bridge site of interest.

ACTION: R. WILSON