

ADEPT ENGINEERING BOARD

NATIONAL BRIDGES GROUP

MEETING NOTES

Venue: Online – MS Teams

Date and Time: 10:30 on Wednesday 09 October 2024

Present:

Name	Present	Init.	Representing
Keith Harwood	✓	KH	Chair
Helen Rowe	✓	HR	Secretary
Osian Richards	✓	OR	CSS Wales, Chair
Bob Humphreys		ВН	CSS Wales
Caroline Haycock	✓	СН	East Mids
Abul Tarafder	✓	AT	East Mids, Chair
Clive Woodruff	✓	CWo	East, Chair
Callum Gillett	✓	CG	East, Sec
Colin Ferris	✓	CF	Infrastructure NI
Kevin McCarron		KM	Infrastructure NI
Aidan McCusker		AMcc	Isle of Man
Alex Holden		AH	Isle of Man
Stuart Molyneux	✓	SM	North West, Chair
Colin Jenkins	✓	CJ	North West, Sec
Donald MacPherson	✓	DM	SCOTS, Chair
Maria Lucey		ML	SCOTS
Alan Mclean	✓	AMcI	South East, Chair
Scott Gregory	✓	SGr	South East, Sec
Rob Causton	✓	RC	South West, Chair
Emma Cockburn		EC	South West, Sec
Maureen Robson	✓	MR	TfL
Sharan Gill		SGi	TfL
Chris Wright		CWr	West Mids, Chair
Chris Plant	✓	CP	West Mids, Sec
Andrew Pierce	✓	AP	Yorks/Humber, Chair
Claire Richardson	✓	CR	Yorks/Humber, Sec
Patrick Smith	✓	PS	North, Chair
Guests			
David Castlo	✓	DC	Network Rail
Bridget Demaine	✓	BD	Network Rail
Richard Sykes	✓	RS	Network Rail
Joanne Saunders	✓	JS	Island Roads
Anil Kumar	✓	AK	TfL
Kevin Dentith		KDe	Independent, Ex Chair of ADEPT NBG
Alistair Dore		AD	Historical Railways Estate
Kieran Dodds		KDo	National Highways



ITEM		ACTION
1.	Introductions	
2.	PRESENTATION: Network Rail NEST – Bridget Demaine and	
0.4	Richard Sykes	
2.1	Presentation summary – Slides appended for further information.	
	Introduction to NEST and why it has been developed. Questions:	
2.2	SM – Don't think we have access to CARRS directly, used to get it from	
2.2	engineers so do we contact Bridget to get access now?	
	BD/RS – Yes that's correct, you can then get access to the Power BI	
	reports, but you can also keep going through the local engineers too.	
	Idea is to make the information accessible to everyone so you don't	
	have to keep asking people.	
2.3	MR – You talked about having 3D models of the structures, is there	
	scope to add defects to those 3D models? Would be particularly handy	
	for multispan structures. DC – Not yet, but it does have the capability to store that data. There is	
	a parallel project called "panoptic" asset records which is developing this	
	capability now.	
2.4	SG – Currently use the structures dashboard and that's great, is there	
	any thought to adding a bridge owner section in the reports so LA's can	
	filter by the assets they own?	
	RS – That info should be in there but I will take it away and ask for this	RS
2.5	to be confirmed.	
2.5	KH – Will we get just examinations access or will we get assessment reports too?	
	RS – The aim is to decommission CARRS so the idea is to replicate the	
	data in there, which currently is just examinations.	
	DC – We are only carrying visual examination on your bridges so do not	
	have assessment data.	
	KH – But it would be helpful to see the assessments of your assets	
	carrying highway.	D.O.
	DC – I can take that away and see what data we can share with you as	DC
2.6	outside parties. CG – Can we see info around propping/interim measures on an asset?	
2.0	DC – This info is in there but not sure if it's shared with outside parties.	DC
	I'll take it back.	
3.	PRESENTATION: Network Rail ACE System – David Castlo	
3.1	DC is the national escalation lead for NR on asset protection.	
	They have 5 regions and those regions operate slightly differently and	
	they recognise this can cause frustration for customers who cross	
	boundaries of those regions, so they created ACE to try and iron this	
	out. Questions:	
3.2	KH – Am I right in thinking all projects are in ACE now?	
0.2	DC – All projects are now in ACE. You can contact via online form,	
	email and the ACE platform.	
3.3	RC – Will all future programmed works be in the system?	
	DC – The aim is that all outside party works are in the system, not quite	
	there yet though but that is aim.	
	RC – Will NR projects be in there?	
İ	DC – No, those will be in NEST.	



4.	Liaison with Network Rail, Access Planning Group	
4.1	SM – Not had any new liaison from NR. Did catch up with Julian Staden	
	at UKBB and he will take this up within NR and find who needs to lead	
	on this and bring it back to life. Other thing is the working group on BG3,	
	the note we set up has now been given to CRT for the work on the	
	agreement. It was raised at UKBB about the backlog but unclear if DfT	
	noticed this figure or not.	
4.2	CP – Access planning group – referred to things like NEST and ACE,	
	but the presentations have made it make more sense. CP would like	
	feedback from the ADEPT group on NEST/ACE to go back to NR. The	
	aim is these are trying to be more proactive solutions to the issues with	
	possessions. CP wants to share the slides from today with more local	
	groups so they can learn about it. How many people use NEST/ACE?	
	JS and others have access to CARS, HR uses ACE, CP uses ACE.	
	Within the ACE system there is a customer feedback questionnaire	
	which DC can use to improve the situation.	
	CP noted that possession issues are improving in the Staffordshire	
	region. Remaining issues are not actually NR caused issues generally.	
	BAPA for low headroom should be zero charge.	
	Insurance levels should be more proportionate to the scheme, so he's	
	working with the head of ASPRO to get that changed.	
4.3	KH – DC has improved collaboration with NR, he's slowly making things	
	better and making positive changes.	
	CP – Does feel things are moving in the right direction.	
5.	Feedback and Liaison with other groups	
5.1	CSS Wales – OR: CSS Wales have started trying to do a carbon	
	calculator, they've spoken to Rochester Bridge Trust to see how they do	
	it. Reporting of structural failures work is still ongoing. Difficulty is where	
	to store the data. Can it go on the BOF website?	
	Starting conversation with CADW (equivalent of Historic England in	
	Wales) to get a blanket agreement to repair historic structures rather	
	than asking for permission every time. They are hoping this will make it	
	easier to repair these structures and reduce disruption particularly on	
	narrow structures.	
5.2	SCOTS – DM: In light of reduced budgets, difficulty with reduced	
	staffing levels and no consultancy support, SCOTS members are now	
	looking to try and push out general inspections to longer frequencies to	
	cut costs. One difficulty is linking this into the assessment report	
	frequencies. Complexity and cost of stage 2 scour assessments is also	
	a concern. Highlighted including parapet failures to report to CROSS.	
	KH – The COP allowed bridge owners to move out PIs but not GIs,	
	you're doing it the other way around?	
	DM – Cuts are so much that they can't solve budget problem with just	
	pushing out the PIs.	
	KH – There should be more to this than just frequency, can we focus	
	inspections on high risk areas e.g. structures with history of scour have	
	dive surveys rather than just cutting frequency of whole inspection.	
	RC – Cornwall have agreement that GIs depending on the structure can	
	be 2, 4, 6 or even 12 year frequency. They don't do Pls on all structures	
	either, they only do high retaining walls and long span bridges, all	
	depends on the structure.	
	OR – We only have roughly 20 structures out of 630 that require PI	OR
	because ours are so small span there is no difference other than the	
•	•	



report. CSS Wales did go through this process of extending GIs and there was a spreadsheet to do this, happy to share this with SCOTS. CJ – Keep GIs at every 2 years. Would like the PIs to be able to extend from 12 to 18 years.

KH – Lots of authorities are making up their own rules so by all means extend to 18 years on a risk basis.

HR – RC who have you agreed this approach with?

RC – Cornwall Council – happy to share the agreement with the group.

CP – In Staffordshire they approach it with engineering judgement and do the "special" assessments on a needs basis.

OR – Highways Act requires the inspection regime is appropriate, therefore as long as you can prove in court that the regime is adequate then you're probably ok. Don't have to follow DMRB but have to have good reasons to deviate.

CF – In NI they do risk assessments to extend PIs to 12 years max. but maintain 2 years GI frequency. This is written into policy.

KH – Concerning that we are all doing things differently, we probably need to agree an approach across ADEPT.

DM – Threats are increasing (climate change, managed decline, etc) at the same time as budget cuts are increasing so this is a really difficult issue to manage.

CF – Admirable to have a common approach but feel it is unrealistic as even though the Dept. of Inf are a signatory to DMRB, even they are having to deviate due to cost cuts but verifying this with the policy. Think it will be very difficult to get an agreed common approach.

CG – Seems counter intuitive effort are focused on periods being pushed out despite the risks increasing, we should be pushing back on the funding reductions as ADEPT rather than being quick to agree to cut back on our competencies.

KH – Asset management board are putting a presentation together to the Treasury, better to feed in to that. "The funding case for highway maintenance". CG and JS volunteered to help input into that from us if needed. KH to find details of the presentation and how to assist and share with CG and JS. CG happy to lead working group on that. JS happy to help – contextualise the issue with case studies. Transport south east is looking at socio economic impact of these things. Can we use the approach in social value to monetise the social value of closures?

CP – Seems highly variable, trying to get to a point of agreed best practice seems like a good idea.

OR – I think its possible to get agreement. But agree we need to fight in the other direction. Need to focus on failures to present this position. Failure definition needs looking at though.

HR – Can we not use the TfL approach and modelling the impact to the London pound for restrictions to the network?

MR – Not aware of this but would be cautious applying TfL approach to wider UK.

CJ – NR approach can try and predict remaining life in the components. This helps allocate funding.

KH – This brings about two key topics for further discussion:

- Extending inspection frequencies – can we collate all the examples of different approaches to extending frequencies? KH/HR will then compile.

RC

KΗ

ALL



	- Input to the Funding Case document	
5.3	BOF & UKBB – UKBB – Draft minutes out now. Morning as normal, afternoon on carbon.	
	 Update to post tensioning DMRB CS 465 – requirement for rules about who can make decisions on PT, competency criteria "AND" being changed to "OR" to account for limited people in industry who can meet the "AND" requirement now. Scour – NH have shared 2 of 3 proposed presentations on their internal training for scour to CS 469. We will circulate these. Wind induced failure of a 2.4m high anti suicide aluminium 	HR
	 Whild induced failure of a 2.4m riight anti-suicide aldministric parapet. MCHW – had parts for comment. Not many comments from ADEPT partly because the new approach seems very different. Due on March 2025 for release. KH trying to get NH to do presentation for us. 	КН
	 Inspection manual ready next month. KDe has offered to do a presentation for us on it in Feb ADEPT NBG meeting. Research funding – various things we have asked for, all waiting on DfT funding. No update on that until at least 2025 due to change of government. NR – research projects update. 	KDe
	 PIARC – 3 questionnaires wanting input from us. Sharing international thoughts. KH noted previous very useful output. Hazel update on BICS – e portfolio reduced, more guidance on how to do the portfolio, will be community hub. CP – are NH stepping back from BICS steering group? KH – not that we are aware of. SM – seems to be different perspectives from different parts of NH. KH asked to find out more about protecting piers with steel plates in Devon, deflecting debris rather than scour protection. RC confirms. DfT push for increased vehicle weights/sizes – not going away. 	ALL
5.4	 HR/SM/CF ran through the afternoon session – slides will be shared. BOF – Bridge failures and bridge strikes. Next meeting covers suicide prevention. NH guidance due to come out soon. BOF producing case studies. Minutes have been circulated from June. OR - Are inspector competency schemes going on BOF website? KH – No, ADEPT website with link to it on BOF. HRESAF, ALLG, BSPG – 	HR
	ALLG – No luck with ab loads liaison group as yet. HRESAF – No update from AD on HRESAF as not present. RC – RE: HRE, we have 2 items: 1) We are trying to take on 2 bridges to facilitate local railway, its taken ages to get legal agreements from their teams. 2) They have strengthened a bridge locally but Cornwall not informed. RC to send note to KH to take to next HRESAF. CRT – Rights and duties legal advice.	RC
6. 6.1	Knowledge sharing and discussion Commuted Sums	



HR explained background – KCC feels an update to the CS calculator is needed to include retaining walls, special geotechnical measures and additional hard to access structures such as those over managed waterways requiring notices to mariners etc in view of the update to the wider ADEPT CS guidance document. HR has a volunteer from Kent for a working group but would like others to say if this is something they want updating and volunteer.

CR - Kirklees did a spreadsheet for retaining walls before, happy to chair the commuted sums working group if that is helpful.

CG – Wants to be involved too. His area of improvement is around the discount factor used and being consistent in its application.

AMcl – Volunteering as well, was involved before with the ADEPT group. Can we link in with SAVI too?

Group to meet and agree a chair.

AMcI/CR/ CG/HR

6.2 CSS/Railtrack cost sharing protocol

General update: Group updating the CSS BG3 guidance on sharing costs. All agreed an update needed. CRT wanted to join in. Hasn't met since Dec 2023 due to chair being busy. CRT view is they can use outdated assessment method for liability purposes using MEXE because it was the method used at the time. Assessment to old standards seems to be more favourable to CRT for the cost of strengthening bridges.

HR – Professional engineering level we shouldn't be using an assessment method that's outdated/knowingly problematic.

OR – Agree with HR. Surely the traffic of the day argument only applies to bridges constructed under a specific act or order?

KH – CRT say law uses assessment of the day to define liability, then adequate assessment using current approaches to define actual capacity but the liability part defines the capacity for deciding who pays for bringing it up to current standards. Statutory instrument only covers NR and specifically mentions assessing in accordance with BE4 which allows MEXE and 24 tonne loading.

HR – If the statutory instrument only covers NR, CRT are asking to be a new party to it, surely we have to bring up to current standards if we are materially changing the agreement which we are if we are adding new parties?

CWo – Has the precedent not already been set by what we do with NR? KH – Not necessarily a uniform approach by NR either.

CJ – Feel the agreement has to be unique to NR, we can't let CRT join on terms that would be unfavourable to local authorities. CRT should be bound by the last upgrade they did which would probably be BD21.

CP – So how do we actually respond to this?

KH – This is a legal question. Don't think there's a mechanism to get ADEPT to pay for legal advice, last time Hertfordshire paid.

CP – I am worried about this example setting a precedent for everyone. Who has CRT bridges? CWo, CR, KH, AP, CH. All happy to assist CP in reviewing response to CRT letter.

OR – Can the LGA help? This is obviously a high risk area for us.

KH – Or the DfT legal team maybe? Another working group needed of those affected by CRT?

6.3 Future ADEPT roles

KH gave background, he is moving on to become Technical Secretary

CP/CWo/ CR/KH/ AP/CH



	of BOF so stepping down as Chair of ADEPT. All change possibly!	ALL
7.	KH asked for emails of suggestions for roles and volunteers for roles. Updates from National Highways and Historic Rail Estate	ALL
7. 7.1	· ·	
7.1 8.	No attendees present to update. PRESENTATION: Bridge Maintenance and the UNSDGs – Joanne	
0.	Saunders	
8.1	Presentation summary – Slides appended for further information.	
0.1	Highlighted ways civil engineers can impact on UNSDGs.	
	Local approach.	
	Banana approach.	
	Questions:	
8.2	HR – Jo would you share your banana calculation approach?	
0.2	JS – I would recommend starting from the book "How bad are	
	bananas?" by Mike Berners-Lee	
9.	PRESENTATION: Carbon Management at TfL – Anil Kumar	
9.1	Presentation summary – Slides appended for further information.	
0.1	How to meet net zero by 2030? Supported by TfL management.	
	Aims of carbon management and application to all project stages.	
	Whole life carbon approach. Identified that option selection is the most	
	critical stage for impacting carbon output.	
10.	Upcoming conferences and events	
10.1	Bridges 2025 12-13 March 2025, Coventry	
10.2	Bridges Scotland 2024 27-28 November	
10.3	NCE Bridges in July, CBDG in June	
11.	Minutes of last meeting – 10 th July 2024	
11.1	Minutes agreed.	
11.2	Actions – HR ran through completed actions and reminded those	
	outstanding. Group agreed actions over 1 year old can be removed.	
11.2.1	Caroline hasn't reported her issue as she is concerned it would be	
	identifiable.	
	KH has had his first success with getting a CROSS report out (nearly).	
12.	AOB	
12.1	CJ – EA guidance note dated August sent to KH. Make aware for the	
	processing of the EA permits is now central and the processing time is	
	now up to 16 weeks. Had to look at the Highways Act to allow us onto	
	their land to do work. Surprised at the restriction on putting scaffold	
	across the whole river.	
	CR – Extent of information required by EA seems to have changed –	
	seems much more rigorous.	
	CJ – UK govt. website has a quick risk assessment that you can use to	
	say you have gone through questions to check its low risk work.	
	JS – having issues with schemes being distributed centrally and losing	
	efficiency and local knowledge in that sense too. Happy to be part of a	
	working group to try and resolve these issues.	
	HR – Noted and agreed, rigour seems to have ramped up. KH – Need a CP equivalent with NR for the EA.	
	OR – Same issue in Wales even though different body.	
	CWo – Agreed rigour has increased and timescales are very high.	
	PS – Rarely had anything other than a bespoke permit needed in	
	Northumherland	
	Northumberland. Action on KH/HR to find out who the equivalent of DC is for EA	KH/HD
	Northumberland. Action on KH/HR to find out who the equivalent of DC is for EA. CJ – Wants similar approach to the Historic England blanket permit.	KH/HR



12.3	How are people assuring private structures? KCC have maintenance deed for new structures – no ability to force people to enter into the deed. RC – Can force action under the Building Act. HR – And under Highways Act, and do work and recover cost. AMcl – SCC do inspections of private structures (GI type) and do notify owners if there is an issue found. RC – Box culvert unit. Reinforcement does not look like the reinforcement in the design? Investigation conducted by hydrodemolition of the unit and every single box was incorrect. The manufacturer had redesigned the box themselves without telling them, then the cages built don't match those designs either. Cover isn't appropriate, concrete used isn't compliant, reinforcement is missing. CG - Works examiner under CG300? Means liability should be clear. OR – Similar issue. Something like 20% were wrong. Are these CE marked? Surely this is fraud? If not then very least it's a defect. PS – Had similar issues with steelwork, but it showed lack of understanding of effect of errors. AP – Steelwork manufacturer issued a warning to clients that they had had a number of structures of weld failures in bridges they had supplied. Now not clear how many will be acceptable with the reduction in capacity. OR – Think this needs presenting at BOF/UKBB and raising higher as this is clearly quite a big issue.	KH/HR
13.	Future Meetings/ Date of Next Meeting	
13.1	UKBB new dates announced.	
	Group happy with 2 weeks after UKBB on a Wednesday.	
13.2	In person for one? July date? In person at Bridges conference meeting? HR to send poll to members for response.	HR