



Minutes for the Anchor Working Group Meeting

1st September 2025, at 7pm

Held via Zoom

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1.0 Apologies for Absence

Richard Vooght, Ian Walker

2.0 Persons present

Aidan Kuhlmann, Chris Bolton, Pete Knight, Vince Allkins, Bob Mehew, Mark Richards, Ian Patrick

Minutes compiled by Katie Eavis (not present at the meeting) using the Zoom recording.

No quorate number required.

3.0 Current Composition of the Working Group

N.B. This is the first meeting of a new working group, split off from the T&E Working Group.

	Position	Name	Initials
Convenor		(VACANT)	
Regional Anchor Officers	CNCC	Ian Walker	IW
	CSCC	Andrew Atkinson	AA
	CW/OC	Vince Allkins	VA
	DCA	Pete Knight	PK
	DCUC	Richard Vooght	RV
Other Members	NAMHO	Steve Holding	SH
		Bob Mehew	BM
		Mark Richards	MR
		Ian Patrick	IP
BCA Executive		Chris Bolton	CJB
		Aidan Kuhlmann	AK

N.B: meeting chaired by Aidan Kuhlmann in lieu of a convenor.

4.0 Acceptance of previous meeting's minutes

This is the first meeting of the Working Group and consequently there are no previous meetings minutes to approve. However, the previous Training and Equipment Working Group's minutes were approved at that meeting and can be found attached to this document as Appendix 1.

As a new working group there are no minutes to approve. However, AK hopes everyone has had a chance to read the minutes from the recent Training and Equipment meeting, which have been approved.

5.0 Reports

5.1 CNCC - IP

IP states Ian Walker is taking over and will provide detailed reports going forward.

AK adds he has received a report that CNCC currently have 500 IC anchors, and CNCC places roughly 50 per year.

5.2 Caving Wales - VA

Currently using BP and IC Anchors. Happy to continue with both types, if available. In their region there is confusion with people putting in all kinds of anchors, which Caving Wales have no control over.

Roy Fellows is keen to work with BCA anchors, especially in reference to mine exploration. Roy has recently written a paper which VA will distribute. VA suggests inviting Roy to this group.

5.3 DCA – PK

DCA are currently using BP anchors. No objections to the IC anchor, but have stocks of the BP one, and it is DCA's preferred choice. Previously DCA have ordered their own BP anchors when they need more. DCA have around 250 BP anchors in stock ready to be installed, including some specialized for pull throughs with 8mm rings fitted by Bolt Products.

DCA have test beds at Horseshoe quarry, BM has also been involved with this. This has been used to test resin, so DCA are now happy to use both Fisher FISV Plus and the EM+ resin.

DCA have had a few installers retire, and PK has two new installers to train. For a while PK has been filling both equipment and projects roles at DCA, however someone has come forward to take on equipment. Whilst not a bolter she is happy to co-ordinate. PK will still train and assess new DCA installers.

5.4 Discussion resulting from the above reports

At this point there was some discussion about the best way to anchor caves. IP and PK both agreed it was best to avoid too many anchors, but that too minimalist an approach often led to cavers adding their own bolts of various varieties and this is not ideal. AK stated that the policy on number of bolts varied by region and should be left to the regions to consider. IP noted the depth of knowledge required by installers, such as identification of sound rock, in addition to drilling and installing the anchor.

6.0 Matters arising from the previous Council Meeting

6.1 Current stock of Anchors and the purchasing of more stocks.

The group needs to decide on how many anchors it needs to acquire over the next period to ensure regions have a sufficient stock of anchors to continue carrying out their ordinary bolting activities.

- Aidan Kuhlmann

Previous meetings have been trying to ascertain the number of available anchors and how RCCs acquire these. From IP's earlier report CNCC has plenty of IC anchors. And DCA acquire their own BP anchors.

DCUC and CSCC were not represented at this meeting.

AK requests all regions email AK and CJB with stock numbers and also indicate if regions would prefer to acquire their own anchors or do it centrally.

6.2 To create a document compiling all bolting test data gathered by the BCA, its volunteers, and Regional Councils.

Please see the document Bob Mehew has created documenting the history of the Anchor Scheme so far. This work needs reviewing so far and we need

to discuss the direction of the work going forward to centralise the research and data.

- Aidan Kuhlmann

BM has written a report on the history of the BCA bolting scheme. It gives a quick intro into how the anchors have evolved over time.

PK thanks BM for doing the report. The history of the scheme is really useful. MR concurs with PK.

7.0 Items for Discussion

7.1 Discussions on current composition of the working group:

This is an opportunity to discuss who members would like to include in this Working Group. Note that Working Group members do not need to be affiliated with a relevant Regional Council or Associated Body and can simply be interested individuals.

- Aidan Kuhlmann

AK states the group isn't limited to regions and associated bodies but also open to interested individuals and asks if anyone has any suggestions for people should be added to this new group?

No-one proposes any current additions, but Pete K asks if members can invite new members at any point. AK states the process would be to email the group convenor in those cases. But the door is open to invite additional people/ groups.

CJB said that he would like to remain a member of the group (he attended this initial meeting as an Exec member) and could contribute engineering knowledge.

7.2 Convenor

The Group will need a Convenor to Chair meetings, schedule regular meetings, write reports to council meetings, and produce the minutes for the meetings. The convenor does not have to come from inside the current group and can be recruited from outside. Chris, Rostam, and I are keen to support volunteers into roles such as this if they need help. However, some previous experience of committee work, IT skills, and organisational skills are desirable.

- Aidan Kuhlmann

AK states this group needs a convenor, to chair and schedule meetings, provide a 100–200-word update to each council meeting and write minutes. Although BCA is hoping in the long term for minutes to be done for the voluntary working groups.

PK states he has a large workload in other areas but has always had an interest in anchors and would be happy to help convene meetings. Ideally PK would rather not be responsible for minutes, and the extra workload that brings.

AK states he can do minutes in the interim, but they might be slow to appear. PK is happy to start convening these working group meetings on that basis.

PK adds he is hopefully handing over the DCA equipment role soon and moving back to projects. But still has an interest in anchors as an installer as well as professionally.

AK asks for approval from the attendees.

All in approval.

PK to be convener of the Anchor working group going forward.

7.3 Terms of Reference

The Terms of Reference (ToR) were approved at the last Council Meeting on 22nd of July 2025. They were updated to fit a more standard format for all Terms of Reference. It will provide the basis for the current meeting, but it should be noted that it can be amended by Council at any time. Consequently, members are invited to comment on and discuss any changes they may wish to make to the ToR.

The ToR should be read in conjunction with the changed Training and Equipment Groups ToR because the goal was to provide both groups different spaces to discuss their issues which vary quite differently. However, it should be noted that membership of one Working Group does not exclude an individual from the other working group.

- Aidan Kuhlmann

AK states these can be changed at any time but do need approval at a council meeting. AK has recently re-written the terms of reference for the Anchor working group, as he has for all the working groups. However, if anyone would like to suggest changes these would be welcome.

MR questions if the terms of reference should directly mention that regional councils are responsible for their own anchor schemes, rather than the working group.

PK says that is contained within the bolting policy document, so doesn't necessarily need to be in the terms of reference.

AK concurs, stating he wants the terms of reference to be specific enough to direct the group but also allow some flexibility.

MR also asks for clarification about Point E: "to monitor the placement and use of anchors and disseminate technical information and learning within the BCA." and whether the group is expected to literally monitor placements.

AK states 'monitor' was meant as a zoomed-out overview.

After some discussion the suggestion is to drop the word "monitor" and change this to "disseminate technical information and learning within the BCA and the RCCs."

PK brings up section 1F. Stating the DCA currently order bolts themselves and then claim back via BCA channels. Going forward should all RCCs deal with anchor purchases via this group, with the BCA ordering and distributing centrally?

CJB states they can be bought locally or centrally, but as BCA treasurer he would like advance warning of big orders. He wonders if the cost could be spread over several years, if big batches are bought centrally.

AK confirms the terms of reference are intended to allow regional purchases, as well as central ones.

PK suggests a slight re-word to make this clear: "to monitor the BCA and Regional Caving Councils' stock of anchors, and where necessary initiate the purchase of anchors."

7.4 Proposal to undertake work to expand the BCA Anchor Scheme to Non-Karstic BCA Rock Mediums

The idea for the need for this work comes from the mine exploring community and follows on from Steve Holding's report to the last Training and Equipment meeting held on the 10/12/2024.

The BCA is a body to represent the interests of cavers and mine explorers and currently under the BCA anchor scheme anchors can only be placed in limestone. Many mines are not found in limestone and therefore work needs to be undertaken to see if the scheme can be expanded to include other rock mediums to meet the needs of the mine exploring community – both to prevent the issue of over-bolting and anchor failure in mines and to protect these venues on conservation grounds (all reasons the scheme was established in relation to caves).

I have written a short document introducing the different rock mediums I would believe would be worth discussing in the context of North Wales, but this is simply due to the geographical area of my own knowledge. It is intended as a springboard for further discussion

- Aidan Kuhlmann

MR asks VA if Caving Wales have a specific policy on bolting in mines.

VA explains the process – someone requests anchors, information is gathered, including broad agreement from all involved but especially landowners. Then Caving Wales gives the go ahead.

VA states Caving Wales are worried about the use of BCA/ CW resin bolts used in show mines (essentially a workplace) as the rock is not limestone. VA states the importance of having test beds in different types of rock. The above results in several additional discussions, documented below.

7.4.1 Show Mines

There was a lot of discussion around the likelihood, risks and potential liabilities of BCA anchors potentially being used in show caves/ show mines. The consensus was the owners of show caves and mines are responsible for their own due diligence in using any sort of bolts, and regional councils would be able to refuse any requested anchor installations that would be used in a commercial show cave or mine.

CJB suggests a disclaimer on any publicly available BCA anchor information along the lines of: "this information is prepared for the purpose of BCA for recreational cavers and recreational caver instruction. Anybody using the information for other purposes does so at their own risk", or the information is not provided for that purpose.

BM suggested the working group, and each region, should review what documentation it has produced and whether it needs a disclaimer adding.

8.0 Any Other Business

8.1 Lost Documents

CJB raises an issue from the last E and T meeting, where BM mentioned documents that used to be on the BCA website had been lost. CJB has had a look and may have found them. He will forward to BM. AK asked for a copy as well.

CJB will talk to Simon (BCA IT) about storing the large volume (100GB) of bolting related information held by BM in an archive.

8.2 Data on anchor extractions

BM says someone has asked for a data set of anchor extractions. He is searching for data and will try to pull something together. BM will then pass on to someone else to make them accessible.

8.3 Use of Anchors in other rock types and anchor test beds

Within the group there was interest in whether work can be done to test more anchors in other rock types, with a view to potentially increasing the use of BCA anchors in the future. This would be help with mine exploration in many areas.

PK thinks test data should also be pulled together and information shared between the regions. To save all regions conducting the same tests, on the same rock types.

CJB and BM both add there is a lot to be considered in this area, in terms of varying rock strength, hardness, bedding direction etc. BM cautioned the need to check the tests are comparable across regions, as within a rock type, e.g. limestone, there can be large differences.

PK suggested a code of practice document for how test beds are conducted, minimum number of anchors tested etc would be helpful here and provide robust and comparable data on factors such as rock strength. BM will pull together a list of what was recorded from the various test bed reports he holds.

AK suggests moving forward Caving Wales share Roy Fellows' report on bolting in mine. VA states Roy doesn't believe the rock type is suitable in a lot

of his sites for BCA anchors. This will be discussed further at the next meeting, once the report has been circulated.

8.4 Anchor approvals within regions

BM states DCA differ from other RCC as specific caves and pitches to be bolted/ re-bolted are agreed at a meeting (although bolt placement is left to the installer).

It is suggested that a future meeting looks at how this approval of bolting venues works across other regionals, and if the anchor policy document adequately covers this.

PK goes further and suggests the whole anchor policy document is a little out of date and suggest the working group work on updating/ expanding it as needed.

IP later clarifies that CNCC also agree anchor venues (caves/ pitches) at a meeting, and most pass very easily.

8.5 Anchor extraction

VA suggests the next meeting discusses the extraction of existing anchors. Specifically extracting, without stressing the rock, DMM anchors, spits and BP anchors. Also re-using holes in a test bed. PK suggests moving forward as a working group it might be worth having some meetings on one specific topic, without other agenda items – such as anchor extractions, as well as regular meetings with multiple agenda items.

8.6 Reporting of defects

BM suggests mandatory reporting by RCC of defects. PK says there is something in the anchor policy, but it could with updating and extra definitions of what should be reported to the working group. PK would be interested to know if other regions are finding shrinkage of resin for DMM Eco-anchors.

8.7 Discussion about the acquisition of anchors by RCC

Item 7.3 lead to some discussion about the current procedure for acquiring anchors. VA specifically asks about the procedure for getting hold of IC Anchors, previously these had been acquired by asking CNCC. CJB and MR both confirm this is still to correct procedure. CNCC hold a stock of BCA IC Anchors and hands these out, on request, to groups who are following the BCA anchor policy.

8.8 Closing Remarks

CJB concludes this has been a useful meeting with good discussion, and others concur that splitting the anchor working group from the larger training and equipment group is a good thing.

AK clarifies that the anchor group is now separate from the Training & Equipment group and will report directly to the BCA council. Anchor group members can also attend T and E meetings if they wish and will remain on the email list unless they ask to be removed.

As the new convenor PK will be expected to submit a few words about the Anchor groups activities at Council Meetings. The next meeting is 2 weeks tomorrow. As the meeting chair AK will report to the next meeting, and new convenor PK will report after the next meeting.

8.0 Details of the Next Meeting

Next meeting will be Monday the 1st of December at 7pm.