UNCONFIRMED MINUTES OF THE TWENTY FOURTH MEETING OF THE UK NATIONAL COMMITTEE FOR ANTARCTIC RESEARCH
Tuesday 11th June, 2019, 13.00
British Antarctic Survey, Cambridge

Present:

Prof M. Bentley	Chair, University of Durham
Mrs K. Gosling	Secretary, British Antarctic Survey
Prof. J. E. Francis	British Antarctic Survey
Mr. S. Colwell	British Antarctic Survey
Prof. J. Turner	British Antarctic Survey
Dr T. Bracegirdle	British Antarctic Survey
Dr C. Nath	SCAR Executive Director, Cambridge
Prof. E. Wolff	University of Cambridge
Dr D. Bakker	University of East Anglia
Dr H. Griffiths	British Antarctic Survey
Prof J. Smellie	University of Leicester
Dr P. Whitehouse	University of Durham
Dr N. Johnston	British Antarctic Survey
Dr A. Fox	British Antarctic Survey
Prof. P. Convey	British Antarctic Survey
Dr S. Doubleday	Foreign and Commonwealth Office
Ms R. Cooper	Royal Society
Dr H. Peat	British Antarctic Survey
Prof L. Peck	British Antarctic Survey
Prof. J.A. Dowdeswell	Scott Polar Research Institute
Prof. M.J. Siegert	Imperial College London
Dr R. Bingham	University of Edinburgh
Dr Kevin Hughes	British Antarctic Survey
Ms Vicky Dewar-Fowler	British Antarctic Survey

Apologies:

Dr R. Larter	British Antarctic Survey
Dr. H. Beadman	Natural Environment Research Council
Dr K. Hendry	University of Bristol
Dr A. Jungblut	Natural History Museum

1 WELCOME AND INTRODUCTIONS

Mike Bentley welcomed everybody to the meeting. He led a series of short introductions around the table.

2 TWENTY-THIRD MEETING OF THE UK NATIONAL COMMITTEE FOR ANTARCTIC RESEARCH ON WEDNESDAY 6th JUNE, 2018 (*paper*)

The Chair presented the minutes from the last meeting. No amendments were requested and the minutes were accepted as a true record of the twenty-third Committee Meeting.

3 MATTERS ARISING INCLUDING ACTIONS FROM LAST MEETING (*paper*)

All actions arising from the 23rd meeting have now been addressed.

4 UKNCAR MEMBERSHIP AND ELECTION OF NEW CO-OPTED MEMBERS (*paper*)

There are number of memberships due to expire in 2019:

Kate Hendry – agreed to renew until 2022
Anne Jungblut – agreed to renew until 2022
Robert Bingham– agreed to renew until 2022
Pippa Whitehouse – no longer co-opted member, continuing as SERCE representative
Dorothee Bakker – agreed to renew until 2022

New member Vicky Dewar Fowler has joined as UKPN representative, replacing Amber Leeson.

5 UPDATE TO UKNCAR TERMS OF REFERENCE

The Terms of Reference were updated to reflect the change in responsibility for payment of the SCAR membership fee. The fee will now be paid by BAS 51% and Royal Society 49%.
The amended Terms of Reference were approved by the committee.

6 REPORT FROM THE DIRECTOR OF BAS

Jane Francis provided an update on recent and upcoming changes at the British Antarctic Survey and across NERC.
The RRS Sir David Attenborough is due to be functional at the end of 2019. Sea trials are due to commence in the Arctic in summer 2020, if these go according to plan the ship will sail to Antarctica in the 2020-21 season. The RRS Ernest Shackleton has been returned to its lease. The JCR will be sold at the end of the 2019-20 season.
Jane addressed concern raised by committee members about 2020-21 science cruises, and any changes to the planning model. Responsibility for marine cruise planning is held by NERC. They currently work to 1-2 year cycles, there are discussions about whether this model will need to change in the future. It was agreed MB would write to NERC on behalf of UKNCAR to request clarity on the future of marine planning. The committee agreed there should be a clear information channel from the SDA steering committee to UKNCAR then to SCAR. **MB**

7 ROYAL SOCIETY

7.1 COMMUNICATIONS

Ruth Cooper acknowledged the huge amount work reported on in the UKNCAR annual report to the Royal Society. This is briefly reported on at GERC and should also be shared with NERC via Helen Beadman.
Ruth also highlighted the Royal Society Discussion Meetings, scientists can submit a proposal for a two-day meeting in their field, there has not been a polar meeting since 2015.

7.2 SCAR SUBSCRIPTION

Covered in item 5.

8 NERC UPDATES (*paper*)

There was a discussion about the reduction in successful NERC grants, the following points were raised:

- The implementation of demand management is leading to good proposals that are not being funded, with no alternative routes for funding available.
- Request for the NERC report to include directed programmes, as there has been significant funding over the past few years for example Thwaites. **HB**
- It is also requested that the report included totals funding amounts, so it is clear whether or not a reduction in the number of successful grants is leading to a reduction in funding, or are larger grants being funded.
- Jane Francis explained the need for the polar science community to adapt to the UKRI funding strategy, and consider how it can fit into the cross- disciplinary funding programmes.
- FCO continue to make the case with BEIS to fund Antarctic science as well as infrastructure projects

9 SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH

9.1 Standing Scientific Group (SSG) Reports

Geosciences SSG (paper and *oral report*)

Kate Hendry was not able to attend the meeting but has submitted a written report. Updates on SERCE, AntVolc and Action Group on Geological Heritage and Geoconservation can be seen below. The group has participated in RoSES/ ORCHESTRA expeditions and fieldwork for the NSR-NERC Thwaites project. The committee are reminded of the upcoming XIII International Symposium on Antarctic Earth Sciences 2019, Incheon, Korea (registration ends June 30th).

Life Sciences SSG (paper and *oral report*)

Pete Convey provided an update.

Life Sciences was represented in several committees and meeting over the past months including:

- the executive committee for the organisation of SCAR OSC in Hobart 2020 (currently discussing the theme sessions);
- the IUCN workshop on Important Marine Mammal Areas (IMMA) in October 2018 (several EGBAMM members participated to this) and, more recently, the Monaco Open Ocean Week at the end of March 2019 where the preliminary results of the IMMA workshop were discussed;
- the executive committee of MEASO, attending the upcoming Woking MEASO meeting in June 2019.

Physical Sciences SSG (paper and *oral report*)

Steve Colwell provided an update. There continues to be a high number of groups with in Physical Sciences. Two new action groups have been established with UK Chairs: ANtarctic Gravity Wave Instrument Network (ANGWIN), Tracy Moffat-Griffin, and the Earth Observation Action Group (EOAG), Anna Hogg.

The high number of groups means funding is stretched further, therefore they are looking at closing groups if they don't report or present at OSC.

9.2 Update on Scientific Research Programmes (*paper and oral reports*)

Past Antarctic Ice Sheet Dynamics (PAIS) (*paper and oral report*)

Mike Bentley provided an update. PAIS activity has included participation in two International Ocean Discovery Program (IODP) expeditions, the first research cruise for NERC-NSF International Thwaites Glacier Collaboration (ITGC), and the NERC funded BEAMISH project involving hot-water drilling through Rutford Ice Stream. The successor to PAIS is actively being discussed in partnership with SERCE and part of the planning for SCAR's next scientific programmes. Much of the next stage will be done at ISAES 2019 (July, South Korea).

Antarctic Climate Change in the 21st Century (AntClim21) (*paper and oral report*)

Tom Bracegirdle provided an update. Tom is lead author on a paper on climate projections: *Back to the Future: Using long-term observational and paleo-proxy reconstructions to improve model projections of Antarctic climate. Geosciences, under review*. He acknowledged the contribution from PAIS. The AntClim21 CMIP6/IPCC AR6 workshop to be held at BAS 26-28th June 2019. The group will end in 2020.

State of the Antarctic Ecosystem (AntEco) (paper and *oral report*)

Huw Griffiths provided an update. Funding has been mainly been directed to ECRs and participants from less well-presented Antarctic nations to enable them to attend POLAR2018, this will also be the case for Hobart in 2020. Rowan Whittle (BAS) awarded $5000 USD for a Seymour Island Synthesis & Workshop. UK members from the group are involved in the first Marine Ecosystem Assessment of the Southern Ocean (MEASO).

Antarctic Thresholds – Ecosystem Resilience and Adaptation (AnT-ERA) (oral report)

Lloyd Peck provided an update. A major round-up meeting for the programme is being held at the end of June at University of Coimbra, Portugal, Lloyd is attending. The results are intended to support stakeholders and represent the progress in the field in the 10 years the programme has been running.

Solid Earth Response and Influence on Cryosphere Evolution (SERCE) (*paper and oral report*)

Pippa Whitehouse provided an update. The group held a major meeting at POLAR 2018 in Davos attended by approx. 50 scientists. There was a successful field season for the NERC-funded project to use GPS to measure bedrock deformation across Antarctica in response to ice sheet change. Pippa was lead author for a paper published: *Solid Earth processes and the evolution of the Antarctic Ice Sheet (invited review). Nature Communications, 10:503.*

9.3 Update on SCAR Expert Groups

ACCE (climate change and environment) (*paper and oral report*)

John Turner provided an update. The group has been working on an Information Paper to the 2019 Treaty meeting, it has been a challenge to pitch and the right level and to non-English speakers. It has been 10 years since the original ACCE volume was published, so they are considering the preparation of a major refereed paper on Antarctic climate change and the environment. John asked if there are any other UK scientists who would like to join the group.

ICED (climate and ecosystems) (*paper and oral report*)
Nadine Johnston provided an update. There has been a proposed restructure of the group as it transitions with IMBeR under Future Earth and SCOR. A refreshed Scientific Steering Committee for ICED and a set of Task Teams will take the science forward in their future policy research areas: 1. Understanding and quantifying the state and variability of Southern Ocean ecosystems; 2. Improving scenarios, predictions and projections of future Southern Ocean-human systems at multiple scales; 3. Improving and achieving sustainable ocean governance.

IPICS (ice cores) (*paper and oral update*)
Eric Wolff provided an update. Liz Thomas has joined the group to represent the 2k project. The European Beyond EPICA Oldest Ice has been funded, the site has been selected and drilling should be complete by 2024. Fieldwork for the EU funded ERC project WACSWAIN was successfully completed in the 2018/19, a further season will take place in 2019/20. The next IPICS Open Science Meeting will be held in Crans Montana (Switzerland) in October 2020.

OpMet (meteorology) (*paper and oral update*)
Steve Colwell provided an update. He reported an increase in the number of ships providing observational data. The group is planning a scoping workshop later in the year for setting up an Antarctic regional climate centre (RCC) for the World Meteorological Organisation (WMO), similar to the Arctic.

AntVolc (Antarctic volcanism) (*paper and oral report*)
John Smelie provided an update. John has stepped down as Chair but remains on the committee. The volume on Volcanism in Antarctic is due for completion later this year, and publication in 2020. A white paper is planned in two years time.

ANTOS (near-shore and terrestrial observation) (*oral report*)
Pete Convey provided an update. The group has been involved in setting up an environmental monitoring network in the terrestrial and nearshore environments around Antarctica and the sub-Antarctic. Positive progress has been made with a number of nations having set up stations, the aim is to encourage other countries to participate.

SCAGI (Antarctic geographic information) (*paper and oral report*)
Adrian Fox provided an update. Adrian chaired the SCAR-SCAGI meeting at Davos (June 2018) and an inter-sessional meeting Pisa (June 2019). The group has been coordinating the Air Operations Maps Series project, providing a series of maps specifically designed for the Air Aviation Community. The UK has provided 7 of the 16 maps and coordinates the project. Feedback from the aviation community has been positive. The group has contributed to the review of SCAGI Antarctic place-name guidelines, the document will be finalised and submitted to SCAR delegates at Hobart 2020.

Action Group on Geological Heritage and Geoconservation (*paper and oral report)*
Kevin Hughes provided an update. The Action Group has developed a 'Draft SCAR Code of Conduct on Geosciences Field Research Activities in Antarctica' to

help researchers minimize the environmental impact of their fieldwork. This has been submitted for consideration at CEP in July. Once formal comments are received, it will be submitted as a Working paper for endorsement through resolution at CEP 2020. The methodology developed by the Action Group to identify sites of geological value could be implemented by SCAR Geosciences, possibly through the establishment of an Expert Group. However, this may have a cost implication and before SCAR can make this offer to CEP, it would need the approval of the SCAR Delegates. The UKNCAR should be aware that it may be asked to provide a view on this issue at some point.

AntArchitecture Action Group (oral report)

Rob Bingham provided an update for this newly formed group. The initial aim of the group is to bring together key datasets on the internal layering of Antarctic Ice Sheets. The milestone at end of Year 2 is to produce a white paper outlining the need for an Antarctic radar-layers database, the potential applications, and methods for achieving it.

9.4 Update on SCAR Treaty activities

Martin Siegert reported that the Grantham Institute has led on a briefing note, with input from a group of leading UK polar scientists, titled *'The Antarctic Peninsula under a 1.5^{o}C global warming scenario. What change is it locked in to?'.* The briefing note will be presented at the July Treaty meeting. Martin will circulate the paper to the committee.

Stuart Doubleday thanked Martin and other authors for the contribution, he commented on the importance of having a paper like this to state the practical implications of climate change.

Jane Francis also reported that SCAR are putting more science into the Treaty meetings. At the upcoming meeting there will be a talk from SCAR President Stephen Chown on the last 60 years of Antarctic science as well as the 1.5^{o}C briefing note.

Chandrika Nath explained that SCAR is taking over the New Zealand led Antarctic Environments Portal, the portal holds science-based information used to contribute to the CEP on its advice and recommendations to the Antarctic Treaty Consultative Parties.

Martin Siegert asked what was planned to mark the 200 year anniversary of the discovery of Antarctica next year. Stuart Doubleday reported the UK Antarctic Heritage Trust is planning activities for this as well as the anniversary of the discovery of the South Shetland Islands this year. SD will circulate the potted history produced by the FCO.

9.5 Input to Programme Planning Groups for SCAR's next Programmes

MB reminded the committee that the current Scientific Research Porgrammes will end in 2020, and the process for forming the next group of programmes has begun. There is expected to be a shift to a smaller number of larger programmes. There are currently a large number of action groups therefore funding id spread thinly, SCAR may look at the value of these groups. Three Programme Planning Groups have been formed: AntIcon, AIDSL and AntClim$^{now.}$

AntIcon – relates to conservation and management of the Antarctic and Southern Ocean. Nadine Johnston, Pete Convey and Huw Griffith reported involvement from their respective action and expert groups (ICED and AntEco).

AIDSL – is focused on Antarctic ice sheet contribution to past and future sea level

rise. MB confirmed involvement from PAIS, SERCE and AntClim[21] in this group.
AntClim[now]- will investigate the near-term conditions of the Antarctic climate system (years to decades). Tom Bracegirdle is one of the current chief officers, he reported the group has spent the first year developing a draft SRP science implementation plan for submission in 2020. A planning workshop is arranged for 9-10th October at BAS. They will be seeking a dialogue with Antarctic stakeholders outside the science community as the final part of the plan.

9.6 SCAR OSC 2020, Hobart – Feedback on session list (*paper*)

The deadline for comments on the draft session list is 28th June 2019. MB welcomed feedback from the group by email before the deadline. It was noted there is no social science representation in this group to feedback, Mike Bentley will contact UK polar social scientists to invite feedback. **MB**

10 FUTURE SCIENCE DEVELOPMENTS

UK Antarctic science Meeting 2020 – Edinburgh – Robert Bingham reported that a committee was being formed and the dates has not yet been set.

Future SCAR OSC Meetings 2022. 2024 – Mike Bentley asked if there was interest in the UK hosting an OSC meeting in the future. Stuart Doubleday will find out the process for the UK to host. **SD**

11 FOREIGN AND COMMONWEALTH OFFICE (FCO) UPDATE

Stuart Doubleday reported on other UK activities beyond this committee:

- Hosted tourism workshop in Rotterdam in April. There are 30 new tourist ships, and 20-30,000 additional tourists are predicted over the next few years.
- 60th anniversary –signing of the treaty event is planned in December involving an all-party parliamentary group.
- 200 year anniversary – FCO funding to BAS on diversity with Antarctic science with the BAS communications team
- South Georgia – there has been significant NGO campaigning to close fisheries around the South Sandwich Islands, FCO is funding additional scientific research in this area.

12 UPDATE ON THE SIR DAVID ATTENBOROUGH – covered in item 6

13 INTERNATIONAL THWAITES GLACIER COLLABORATION (ITGC) – covered in item 6

14 UK POLAR NETWORK *(paper and oral report)*

Vicky Dewar-Fowler reported on a statement of collaboration at POLAR2018 between UKPN and APECs Russia Presidents. This helps to formalise collaboration between the two national committees.

It has been a busy year of outreach activities and workshops including Science and diversity and digital outreach workshop at the Challenger Conference, Launch of Polar Worlds Gallery at the National Maritime Museum, Southampton Science Festival, school visits, launch of a new Polar Pen Pal scheme, Polar Educators International Conference and Antarctic flags/ Antarctica Day. A worksop is planned at the upcoming Arctic Science Conference.

15 UK POLAR DATA CENTRE *(paper and oral report)*

Helen Peat provided an update. It is proving difficult for all nations to provide metadata to the Antarctic Master Directory and to easily update it. SCADM is looking at providing a tool that can search relevant directories for Antarctic data, an upcoming hackathon will start this piece of work.

Jonathon Kool is the new SCADM Officer. SCADM are keen to provide data management advice to SCAR research programmes, especially when development of a data product is involved.

16 THE UK ANTARCTIC AND ARCTIC POLAR PARTNERSHIP (UKAAP)

There was a discussion about the role of UKAAP, the point was raised that there is a crossover between UKAAP and UKNCAR and UKAAP's role may need to be defined more clearly. It could be a helpful vehicle for the community to influence large NERC programmes, or for example to influence the new ship schedule.

17 ANY OTHER BUSINESS

Chandrika Nath reported that SCAR are working to develop their communications, they are keen to tell more stories from the community. If anyone would like to get involved they should get in touch.