

Polar Research and Operations Board Terms of Reference

Objective

The Polar Research and Operations Board (PROB) has a role in the governance of NERC polar scientific and operations infrastructure and facilities, making recommendations to the NERC Executive Chair and NERC Management Board (NMB) on their prioritisation and balance of use (Annex A).

The Board will note the specific context of its advice:

- i. The increasing interest and demand from the academic and policy communities in polar research and for such research to have increasing ambition in terms of scope and logistical support (including deep field work and international collaboration). There is also a growing diversity of funding for polar research, including different NERC programmes (e.g., Discovery science, Fellowships, National Capability), European Space Agency, and EU, resulting in planning and meeting expectations becoming more complex.
- ii. The Antarctic Infrastructure Modernisation Programme (AIMP) involves a major portfolio of construction for at least the next 10 years. This will impact the availability of facilities for and to support research. This includes the demand for longer Antarctic seasons and the subsequent impact on Arctic field seasons.
- iii. The RRS *Sir David Attenborough* (SDA) as a single ship operation with dual tasking of logistics and marine/field science support. Other facilities, including aircraft have similar competing demands on their use.
- iv. The Antarctic Logistics and Infrastructure (ALI) partition of the science budget has been created with a dual purpose: maximising frontier science and maintaining the effective UK presence in Antarctica and the Southern Atlantic.
- v. How decision making and advice aligns and contributes to the NERC operational carbon reduction targets (40% by 2025, 70% by 2035 based on a 17/18 baseline) and UKRI commitment to achieving net zero operational carbon emissions by 2040.

Remit and recommendations

The Board will make recommendations concerning the following to the NERC Executive Chair and NERC Management Board:

- 1) Advising on the prioritisation and planning of the activities of polar science and support capabilities, taking a strategic 5–10-year view on planning (supported by the BAS Polar Operations and Science Team to support BAS leadership). ‘Activities’ are defined as the entire range of polar operations to include marine science, support for terrestrial polar research, construction and Antarctic and Arctic research station logistical support.
- 2) Advising on the balance of the deployment of assets between research station logistical support, infrastructure improvement and science (marine science and support to land-based science).
- 3) Advising on alternative and wider delivery mechanisms, either
 - a. within NERC’s owned capabilities, linking with CPEB¹ and FAAM² Board as appropriate; or

¹ Cruise Programme Executive Board

² Facility for Airborne Atmospheric Measurements

- b. through hiring or support of other capabilities including those commercially available or through other polar operators and international partners.
- 4) Providing feedback to NMB and NERC Executive Chair on demand, capacity and financial pressures of polar infrastructures to support managing demand and communications with the user community as necessary.
- 5) Advising on the use of infrastructure by external customers and revenue generating activities for polar and non-polar activities, whilst paying due regard to reputation management and financial imperatives. 'External' customers are users of polar infrastructure who are not conducting research directly supported by UKRI funding.
- 6) Monitoring the quality of NERC polar and research capabilities including directions of travel for research and infrastructure and, where appropriate, recommending further investigations into specific issues.
- 7) Advising and supporting NERC and BAS on communications to the user community, including on research opportunities and shaping demand.
- 8) In the event of prioritisation issues not being able to be resolved by the PROB and after subsequent consultation with other appropriate NERC Boards that maintain oversight of NERC capabilities, PROB will escalate such issues to NMB.
- 9) Reviewing the progress of NERC polar research and operations through time in order to maintain a strategic view of the approaches to prioritisation and planning which are most effective.
- 10) Advising on how polar operations will be enhanced long term to support the delivery of net zero research capability by 2040 and NERC interim carbon reduction targets. This includes identification of opportunities and recommendations for investment and advising on operational policy change.

Methods of Working

The Board will meet biannually. It may be necessary for the chair to convene ad hoc meetings between main meetings, as required.

Membership

- Chair – NERC Director of Strategic Partnerships (Iain Williams)
- BAS Director (Jane Francis)
- NERC Associate Director of Major Programmes (Leigh Storey)
- NERC Director of Research and Skills (Tracy Shimmield)
- BAS Director / Head of Operations (Oliver Darke / Dave Wattam)
- NERC Head of Marine Planning (Natalie Powney)
- Independent member from the academic user community (Mike Bentley, Durham University)
- Independent member representing overseas polar facilities expertise (Uwe Nixdorf, Alfred Wegener Institute)

In attendance – BAS Operations Programme Manager (as appropriate) (Christopher Aldridge)

The Independent members of the Board are appointed on a three-year membership in the first instance, with an option to appoint for a second term. Appointments will be staggered to maintain continuity of knowledge. If any individual member resigns from the Board, a replacement will be found at the earliest convenient opportunity in consultation with the Board Chair.

Annex A

Reporting structure most relevant to the Polar Research Operations Board (PROB)

