European Polar Board - At the confluence of science and policy in the Polar regions

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Executive Secretary, EPB

Arctic Frontiers, Tromsø

29th January 2020
Mission

To **promote, coordinate and advance** European research in the high latitudes by providing a single collaborative platform for European polar researchers
Strengths - Composite and comprehensive membership

Range of research and infrastructure organisations - a mix of scientific excellence and management skill

The EPB's 27 Members include national polar programmes, research institutions, government departments, national funding agencies and university centres from across Europe, representing the combined polar research communities of 19 countries.
Strengths – Bipolar vision

20 POLAR RESEARCH VESSELS
The EPB Members operate a total of 20 research ships specialised for operations in polar waters, including heavy icebreakers, along with countless smaller vessels and craft in Arctic and Antarctic waters. If all EPB Members’ research vessels were lined up, bow to stern, they would stretch over 2 km.

7 POLAR RESEARCH AIRCRAFT
EPB Members operate seven aircraft dedicated to polar research, carrying out scientific surveys and providing logistical support to field operations in the Antarctic and the Arctic.

67 POLAR RESEARCH FIELD FACILITIES
EPB Members own or operate a total of 67 polar fieldwork facilities, including large stations, cabins, shelters and field camps to support field campaigns by polar researchers – 33 in Antarctica and 34 in the Arctic.
The EPB is a structure supporting international cooperation in polar research

• The EPB provides a single contact point through which all of its Members can be reached.

• Members actively share knowledge and best practices.

• Uniquely positioned with a Polar (Arctic and Antarctic) European focus.
EPB – How does it work?

**Action Groups**
- Defined activities within a limited lifetime
- 5 Action Groups active

**Projects**
- Externally funded, where EPB plays a variety of roles
- 4 Projects ongoing, or recently funded
The Global Exploration Roadmap, International Space Exploration Coordination Group
CHOICEe

- Investigating the epidemiology of potential newly developed allergic reactions in Antarctic over-wintering station staff, as an analogue for space flights
- Through the EPB, ESA able to develop collaborative project with all EPB Members interested in involving their stations in CHOICEe
- Possible due to EPB being a single contact point to EPB Members
Main objectives:

• Research to inform Space travel
• Better health of employees living in long term isolation at the polar regions

Translates to:

• Longer term policy implications for health of people living in the polar regions
EPB Action Groups

Action Group on Polar Infrastructure
Transfer and further maintenance the EU-PolarNet Polar Infrastructures Database, and creating the EU-PolarNet Polar Infrastructures Catalogue

Action Group on Environmental Impacts of Polar Research & Logistics
Sharing best practice examples of reducing impact of polar research from both poles
Upcoming activity- to share and work towards harmonising access requirements between Members, to also benefit international partners

- European Polar Infrastructure Catalogue and Database
- Coordinate and share information on infrastructure facilities and access
- Leads to tools and coordinated initiatives that can support collaboration with international partners around the world
Action Group on Environmental Impacts of Polar Research and Logistics

- Collate existing examples of guidelines and best practices for minimising the environmental impact of Polar research and logistics
- Identify gaps or areas in need of updates
- Identify potential for sharing knowledge and expertise between the Arctic and Antarctic
- Synthesise existing best practices and recommendations into practical guidelines for EPB Members
- Coordinate with partner organisations to align the Action Group’s work with other initiatives
Areas of focus

- Use of plastics in Polar research and logistics
- Distinction between environmental degradation due to human activity, and impacts of broader ongoing climate and environmental changes
- Impact of research activities, such as sampling, on wildlife, e.g. on birds
- Direct and indirect environmental impacts of human activities including cumulative impacts
Expected outcome: Synthesis Report Outline

• Types of research activities and their environmental impact
• Types of legal frameworks
• Best Practices and tools for minimising environmental impacts including gaps in knowledge
• Recommendations and practical guidelines for operators, research groups and decision-makers
• Suggestions / Summaries for (various) stakeholders
EU-PolarNet

Connecting science with society

World’s largest consortium of expertise and infrastructure for Polar research

17 European countries
22 consortium members
24 cooperation partners
Antonio Quesada

10 overarching research themes with several key questions and related societal relevance have been identified.
EU-PolarNet White Papers

Recently published on www.eu-polarnet.eu

Dr Nicole Biebow
**Effects of EU-PolarNet White Papers**

**LC-CLA-17-2020**: Polar climate: understanding the polar processes in a global context in the Arctic and Antarctic Regions

**LC-CLA-07-2019**: The changing cryosphere: uncertainties, risks and opportunities –
*Subtopic*: Changes in Arctic biodiversity

Dr Nicole Biebow
Effects of EU-PolarNet White Papers

**LC-CLA-07-2019:** The changing cryosphere: uncertainties, risks and opportunities – *Subtopic:* Sustainable opportunities in a changing Arctic

**LC-CLA-07-2019:** The changing cryosphere: uncertainties, risks and opportunities – *Subtopic:* Arctic standards

Dr Nicole Biebow
LC-CLA-07-2019: The changing cryosphere: uncertainties, risks and opportunities – Subtopic: Sustainable opportunities in a changing Arctic

No dedicated call yet – but cross-cutting to all calls

Subtopic: Arctic standards
Stakeholder Engagement in Arctic Research - EU-PolarNet

Equal partner
- Initial meetings during project planning phase.
- Co-designing the project.
- Co-production of knowledge.
- Regular updates and meetings.
- Fully beneficiaries (incl budget for the time used for the project).
- Feedback and results given in understandable format & language.

Advisor
- Stakeholders invited to project steering group either during proposal writing phase or after granted funding.
- Advice asked throughout the project.
- Meeting and travel costs covered.
- Feedback and results shared.

Expert
- Stakeholders invited to workshops to give feedback to the pre-set questions.
- Travel costs covered/ no costs covered.
- Project results shared in paper (reports etc).

Visitor
- Input asked anonymously e.g. in online surveys or handouts shared publicly.
- No results shared, no feedback.
- No compensation of the time used.

Time needed for the stakeholder engagement with local and Indigenous communities during the project’s lifetime

Dr Kirsi Latola
Key lessons learnt

• Respect and trust
  – their time and efforts used (funding)
  – their expertise (from planning to solutions)

• Accept
  – Administrative constrains
  – Commitments and priorities

• Relevance
  – Interest and need
  – Co-design

Dr Kirsi Latola
Recommendations

- Co-design and co-production of knowledge
  - Trust building
  - Early and on-going engagement
  - Participation more than collaboration
  - Identifying research questions with the local communities
- Representativeness of the stakeholder engaged, diversity
- Time and money
  - Seed money, equal partners
- Knowledge sharing
- Engagement through intermediaries
“Acknowledgement
Contributions of various persons and organisations are thanked for their contributions at the stakeholder events and online surveys conducted by the EU-PolarNet. This included hundreds of persons and thus we are not able to thank them all separately, however each and one of them have given most valuable input to this White Paper. Special thanks go to the EU-Polar Cluster projects: APPLICATE, Blue-Action, INTAROS and NUNATARYUK and polar projects REXSAC, “The resilience of the Antarctic Treaty System to the future challenges”, “Antarctic tourism”, “Living data”, “On Creating Cultural Heritage in Antarctica”, “Life in the Chilean Antarctic bases, 1948-1958:political context and daily life”, “Borderscaping Antarctica”, “POLARGOV”, and “Greening the Poles: Science, the Environment, and the Creation of the Modern Arctic and Antarctic” who share valuable information on their practices in stakeholder engagement.”

https://www.eu-polarnet.eu/project-themes/interaction-with-stakeholders/

Dr Kirsi Latola
Thank you

For further information visit our website, join our mailing list:

www.europeanpolarboard.org

Twitter @EuPolarBoard
@DrRenukaBadhe
Action Group on Environmental Impacts of Polar Research and Logistics

Chair: Tania Gibéryen, polar.lu
Members: J Chappellaz, J Jania, E Topp-Jørgensen, K Jones-Williams

- Established at EPB Autumn Plenary Meeting in November 2018
- Developing best practice guidelines for EPB Members and others
- Cooperating with partner organisations
- Focused on all environmental impacts, strong focus on plastics
- Lessons between poles
Aims and Objectives

• Collate existing examples of guidelines and best practices for minimising the environmental impact of polar research and logistics

• Identify gaps or areas in need of updates

• Identify potential for sharing knowledge and expertise between the Arctic and Antarctic
Aims and Objectives

• Synthesise existing best practices and recommendations into practical guidelines for EPB Members

• Coordinate with partner organisations to align the Action Group’s work with other initiatives

• Liaise with EPB Action Group on Infrastructure
Areas of focus

- Use of plastics in polar research and logistics
- Carbon footprint of polar research and logistics activities
- Distinction between environmental degradation due to human activity, and impacts of broader ongoing climate and environmental changes
- Impact of research activities, such as sampling, on wildlife, e.g. on birds
- Direct and indirect environmental impacts of human activities
- Cumulative impacts
Synthesis Report Outline

• Introduction

• Scope and aim of the report

• Methodology of the report

• Types of research in polar regions

• Types of research activities and their environmental impact

• Legal frameworks
Synthesis Report Outline

• Best Practices and tools for minimising environmental impacts

• Issues of special importance and gaps in knowledge

• Recommendations for operators, research groups and decision-makers

• Suggestions for practical guidelines

• Summaries for (different) stakeholders