EUROPEAN POLAR BOARD 1995 - 2020

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

Dr R BADHE
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

27 EPB MEMBERS

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

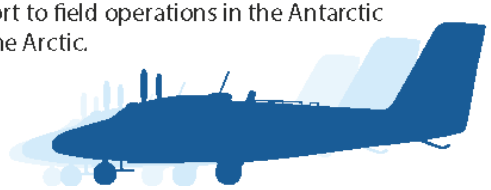
The EPB Members operate a total of 20 research ships specialised for operations in polar waters, including heavy icebreakers, along with countless smaller vessels and craft in Arctic and Antarctic waters. If all EPB Members' research vessels were lined up, bow to stern, they would stretch over 2 km.

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.

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.



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

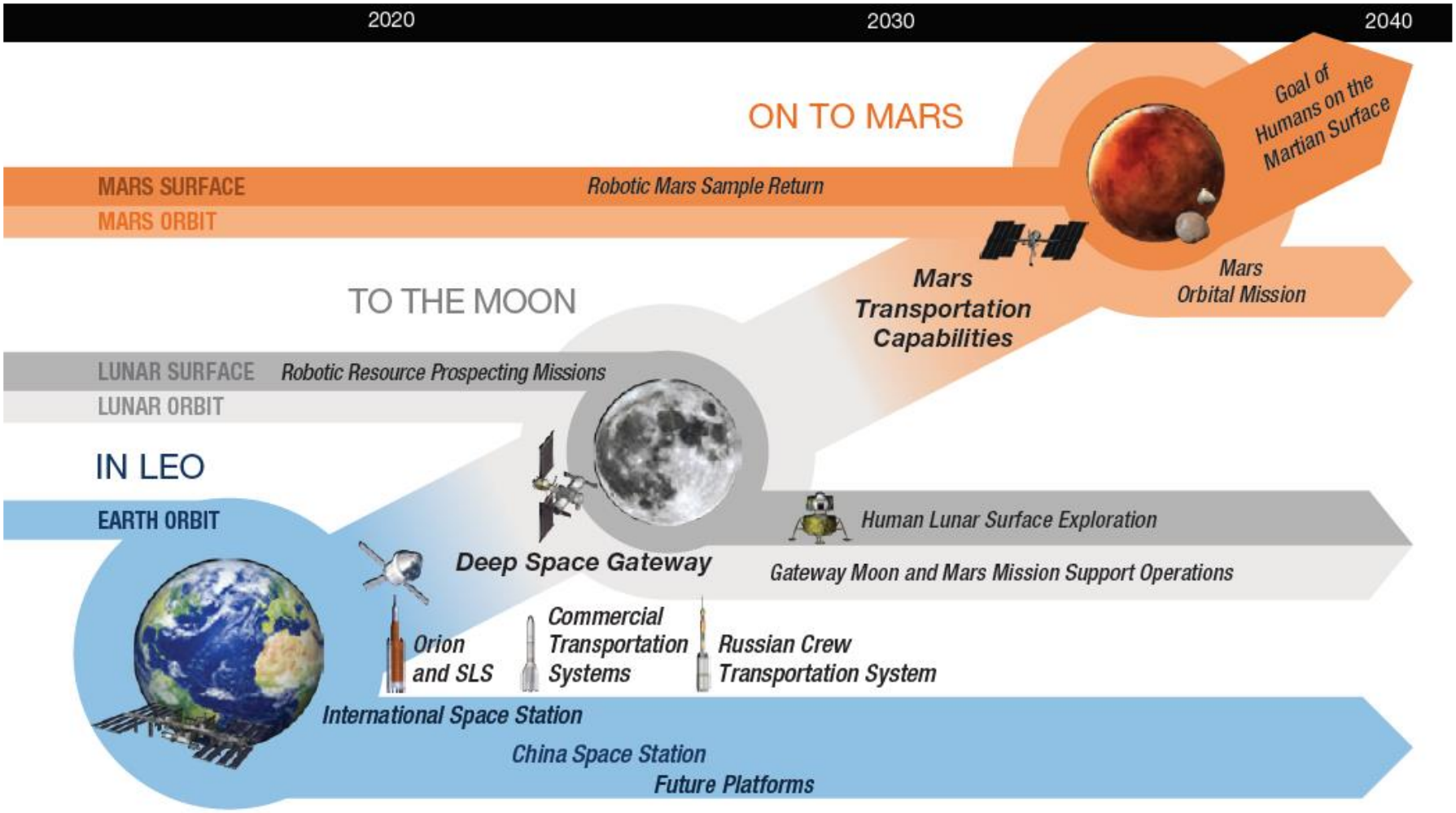
5 Action Groups active

Projects

Externally funded, where EPB plays a variety of roles

4 Projects ongoing, or recently funded

CHOICE*epidemiology*



The Global Exploration Roadmap, International Space Exploration Coordination Group

CHOICE*epidemiology*

CHOICE*e*

- 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

Importance

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

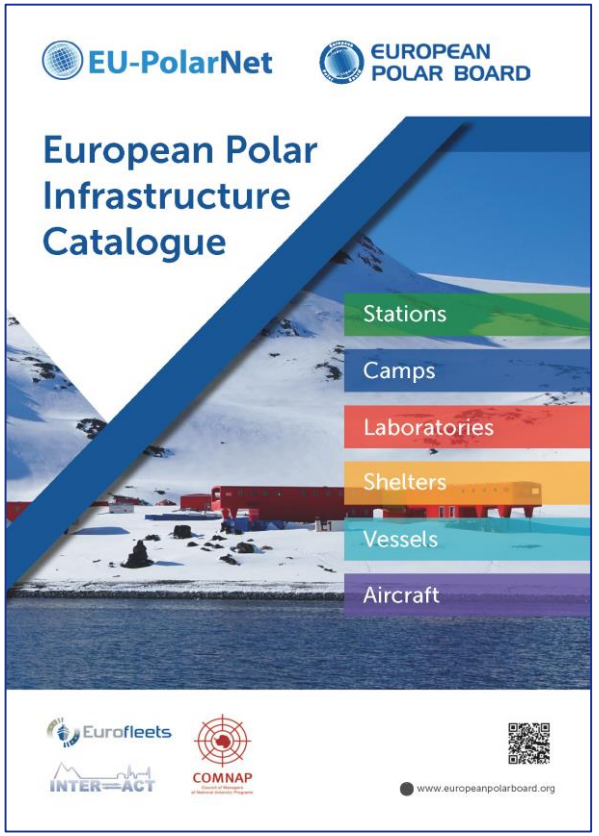
Action Group on Environmental Impacts of Polar Research & Logistics

Sharing best practice examples of reducing impact of polar research from both poles

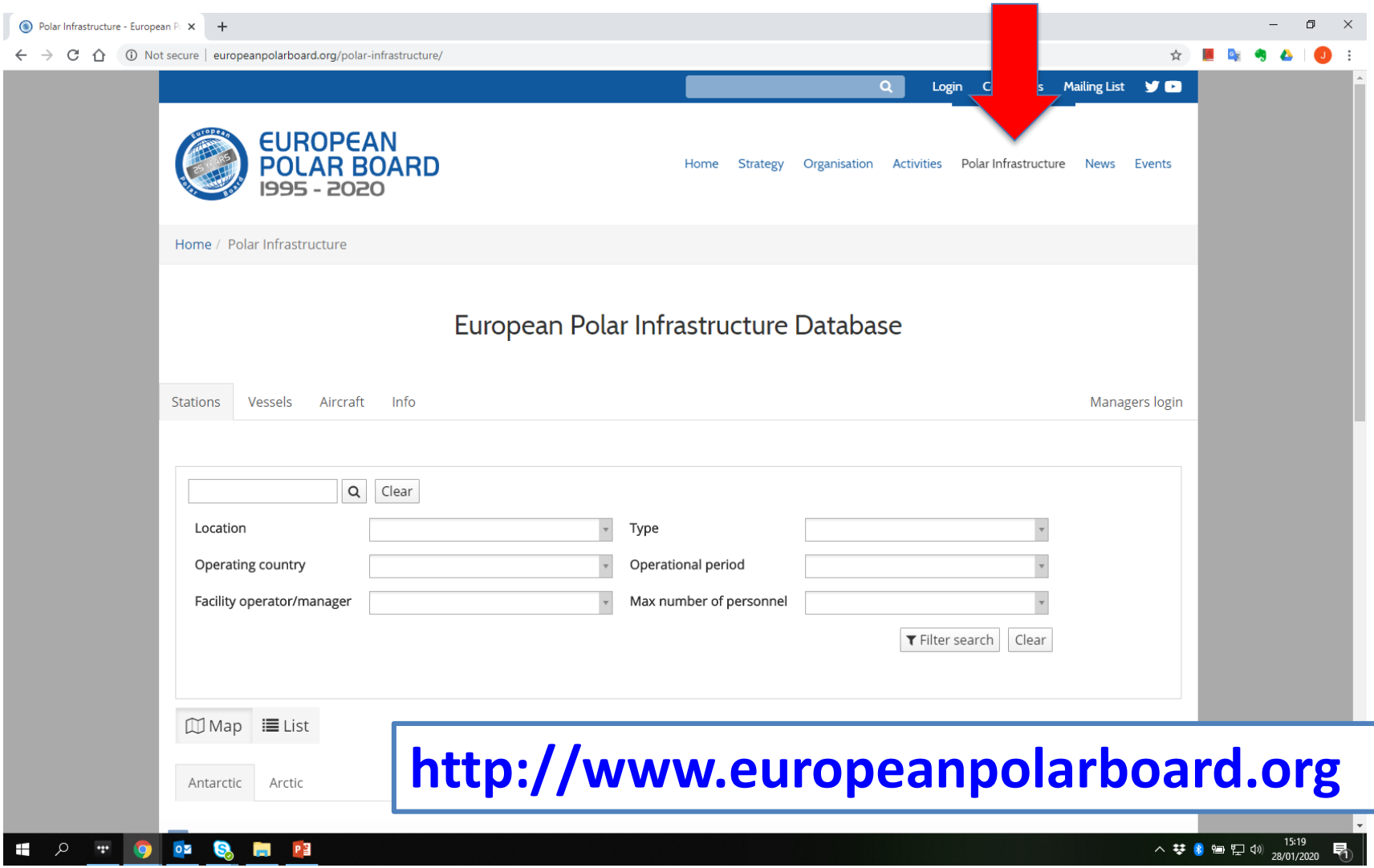
EPB Action Group on Infrastructure

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



European Polar Infrastructure



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

Action Group on Environmental Impacts of Polar Research and Logistics

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

Affiliated Partner

EUROPEAN POLAR BOARD

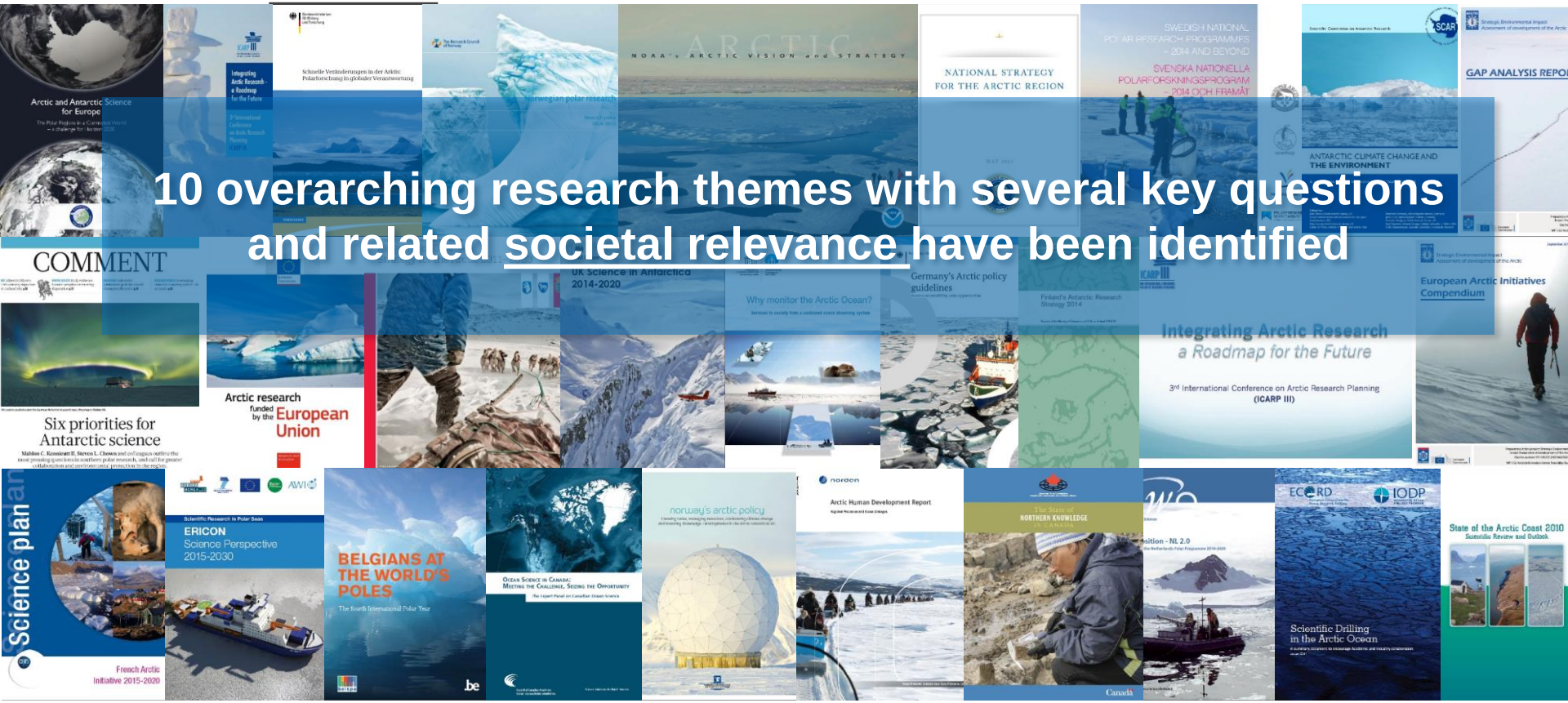
World's largest consortium of expertise and infrastructure for Polar research

17 European countries

22 consortium members

24 cooperation partners

Assessing Polar Priorities



10 overarching research themes with several key questions and related societal relevance have been identified

Dr Nicole Biebow

EU-PolarNet

The White Paper Workshop

Dr Nicole Biebow

EU-PolarNet

EU-PolarNet White Papers

Recently published on
www.eu-polarnet.eu

Dr Nicole Biebow

EU-PolarNet

Effects of EU-PolarNet White Papers

Glacier front, Alpefjord, Northeast Greenland National Park (Photo: Peter Prokosch)

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

Arctic Fox (*Alopex Lagopus*), Lena Delta (Photo: Peter Prokosch)

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

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

Effects of EU-PolarNet White Papers

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

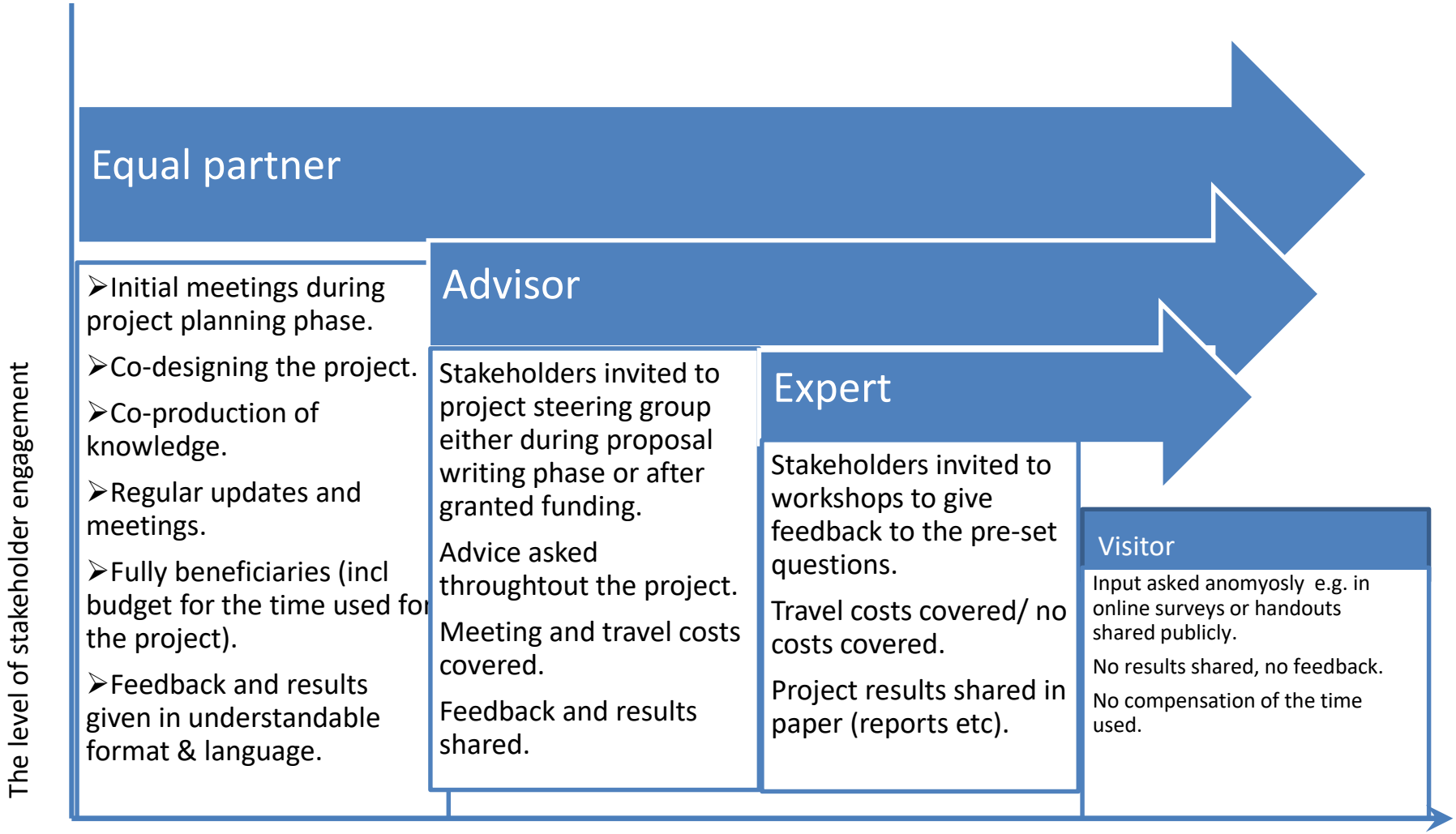
No dedicated call yet – but cross-cutting to all calls

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

Dr Nicole Biebow

EU-PolarNet

Stakeholder Engagement in Arctic Research - EU-PolarNet



Dr Kirsi Latola

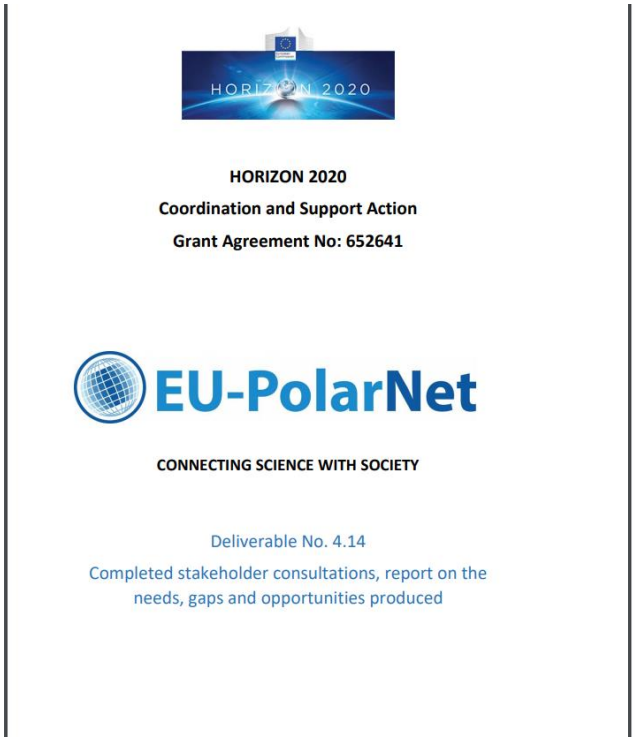
EU-PolarNet

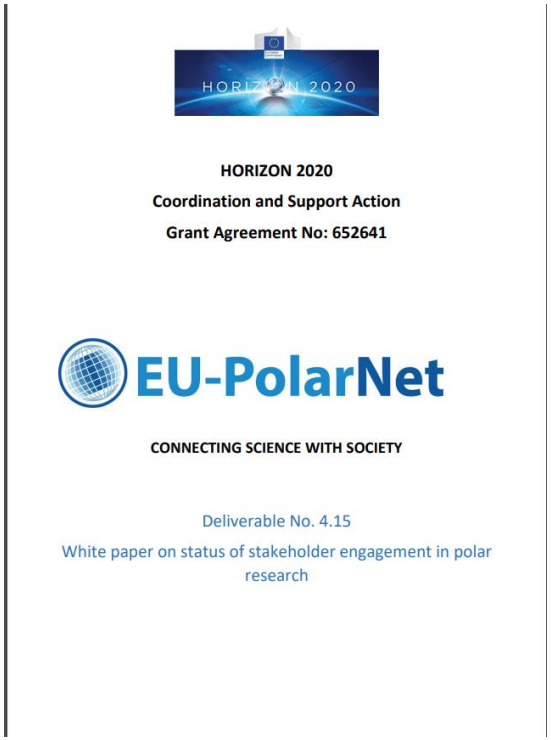
Key lessons learnt

- Respect and trust
  - their time and efforts used (funding)
  - their expertise (from planning to solutions)
- Accept
  - Administrational constrains
  - Commitments and priorities
- Relevance
  - Interest and need
  - Co-design

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/

Thank you

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

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EPB Action Group

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

EPB Action Group

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

EPB Action Group

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

EPB Action Group

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