



# POLARIN

POLAR  
RESEARCH  
INFRASTRUCTURE  
NETWORK

## Work package 1 Challenge driven access to research infrastructures



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# Objective



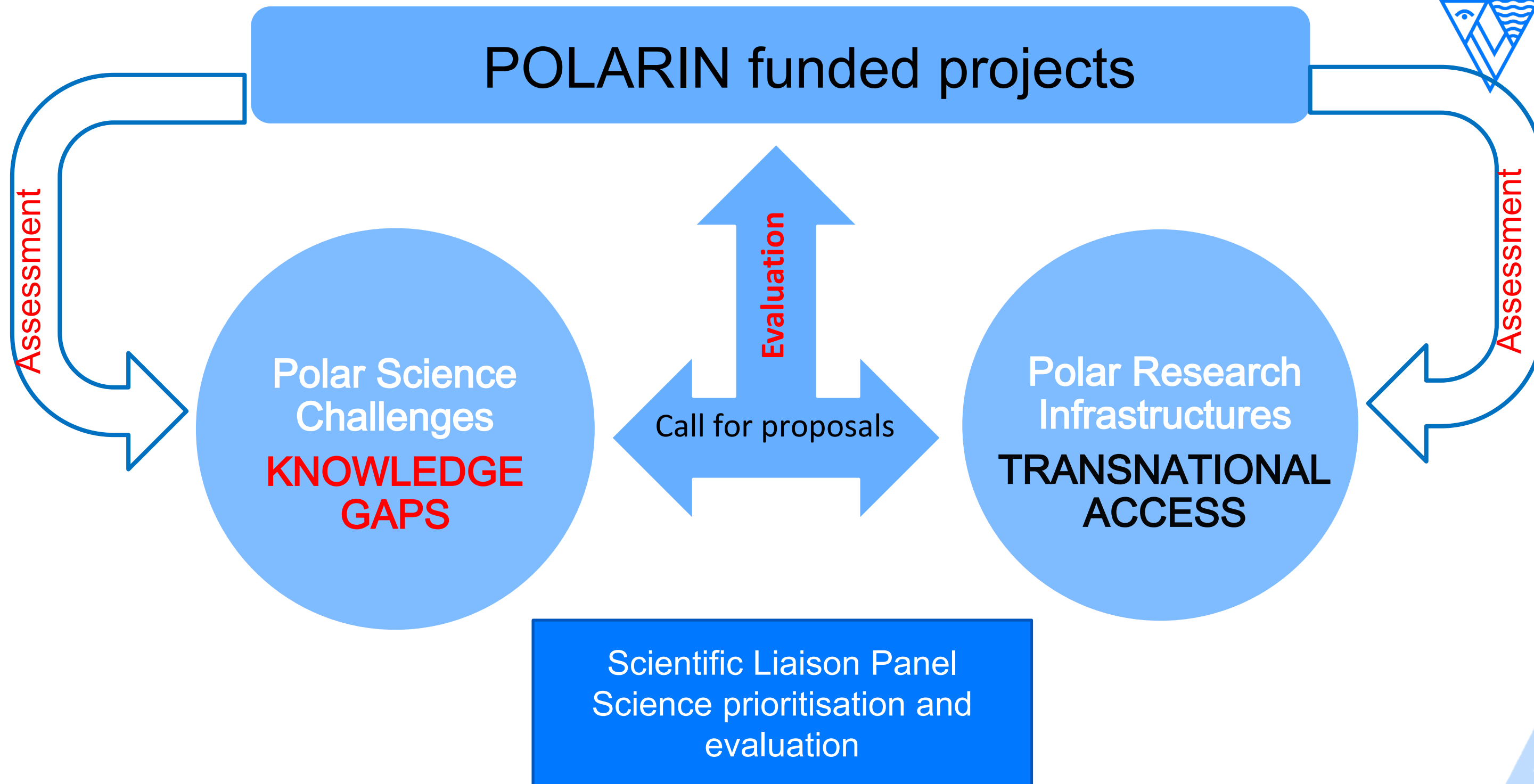
Provide guidance to coordination, implementation and evaluation of TA to POLARIN research infrastructures by:

- Defining the scientific needs
- Defining the framework of the scientific evaluation of TA applications : evaluation criteria, evaluation system, call documentation
- Implementing proposal selection for subsequent logistical evaluation
- Identifying data products and tools for assessment of funded projects and identification of knowledge gaps for subsequent call for proposals





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# Tasks



- Task 1.1: Scientific framework for challenge driven call definition and integration (M1-M42) → science framing



- Task 1.2: Scientific evaluation (M1-M48) → selection of projects



- Task 1.3: Optimizing the scientific outcome of the access programme (M7-M58) → project monitoring



# Task 1.1



Task 1.1 aims at developing the scientific framework for regular TA calls to POLARIN Ris to:

- 1) Evaluate, define, and update **OVERARCHING SCIENCE PRIORITIES**
- 2) Establish and nominate (in consultation with T1.2) the **SCIENTIFIC LIAISON PANEL** (SLP) to assist in implementing the call's scientific framework.
- 3) Describe **PROCEDURE FOR PROVISION OF ACCESS TO SERVICES**
- 4) Review **EXISTING SCIENCE PRIORITIES** and provide **ANNUAL UPDATES OF NEW SCIENCE PRIORITIES** identified by major Arctic and Antarctic science organisations and Networks
- 5) Identify **VALIDATION/CALIBRATION NEEDS** by the Earth Observation and **MODELLING** communities
- 6) Provide **UPDATES OF THE SCIENTIFIC FRAMEWORK** for each of the subsequent calls for proposals
- 7) Contribute to the establishment of the **EVALUATION CRITERIA** to be developed in Task 1.2.

# Task 1.1: Approach (1)

## Implementing a Scientific Liaison Panel



The Scientific Liaison Panel (SLP) will support WP1 activities in:

- Defining the priority topics for the call for proposals
- Defining the scientific framework of the call for proposals (eligibility criteria, terms of conditions, ...)
- Performing the scientific evaluation of the proposals

Composition of the SLP

- Scientific experts and representatives from major polar science organizations
- Experts from inside and outside the POLARIN consortium
- Range of expertise spanning across major disciplines, Arctic and Antarctic, terrestrial and marine sciences

**Deliverable for the first year:**

D1.1 (CNRS) at M5 = July 2024

**IMPLEMENTATION OF THE SLP WITH TERMS OF REFERENCE**

*POLARIN Kick-off meeting - Bremerhaven – 18 April 2024*



# Task 1.1: Approach (2)

## Overarching science priorities



Defining overarching science priorities as input to call design:

- Related to the POLARIN six overarching science themes
- Major scientific challenges (global interest, societal impact,...)
- Interdisciplinary research (to value the complementary sets of POLARIN infrastructures)

### **Deliverable for the first year:**

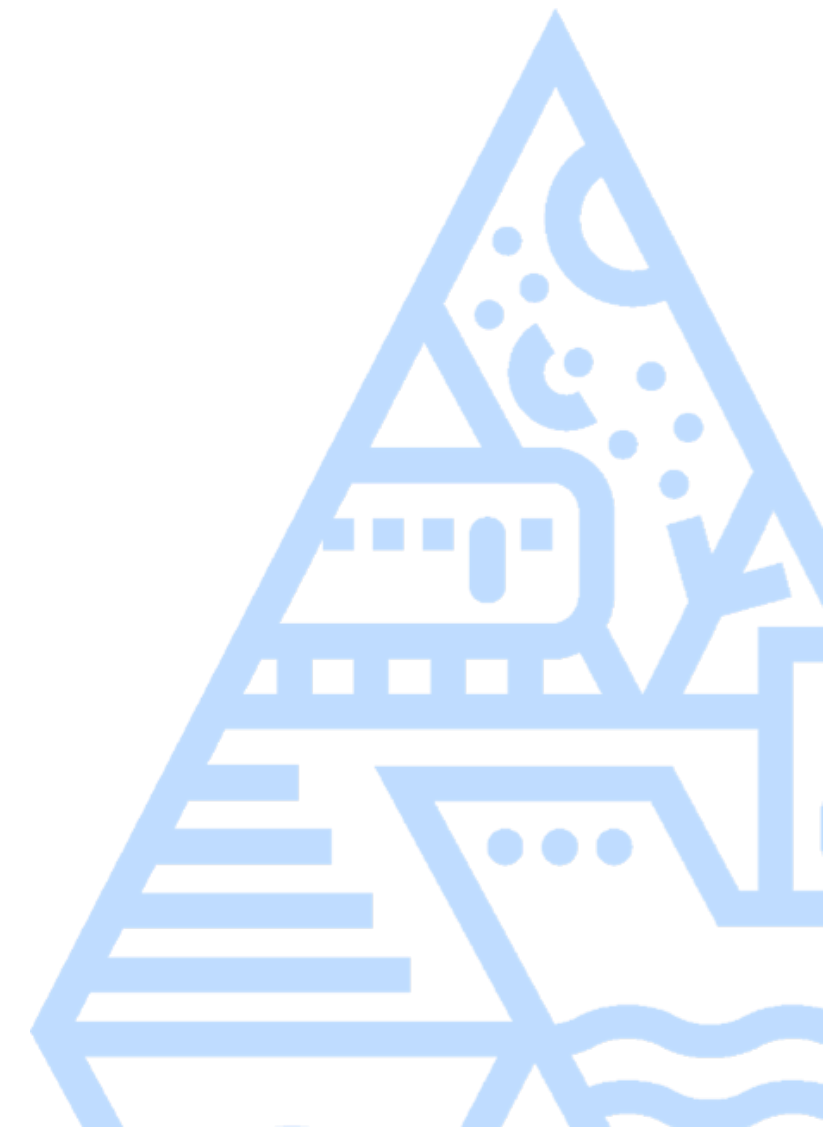
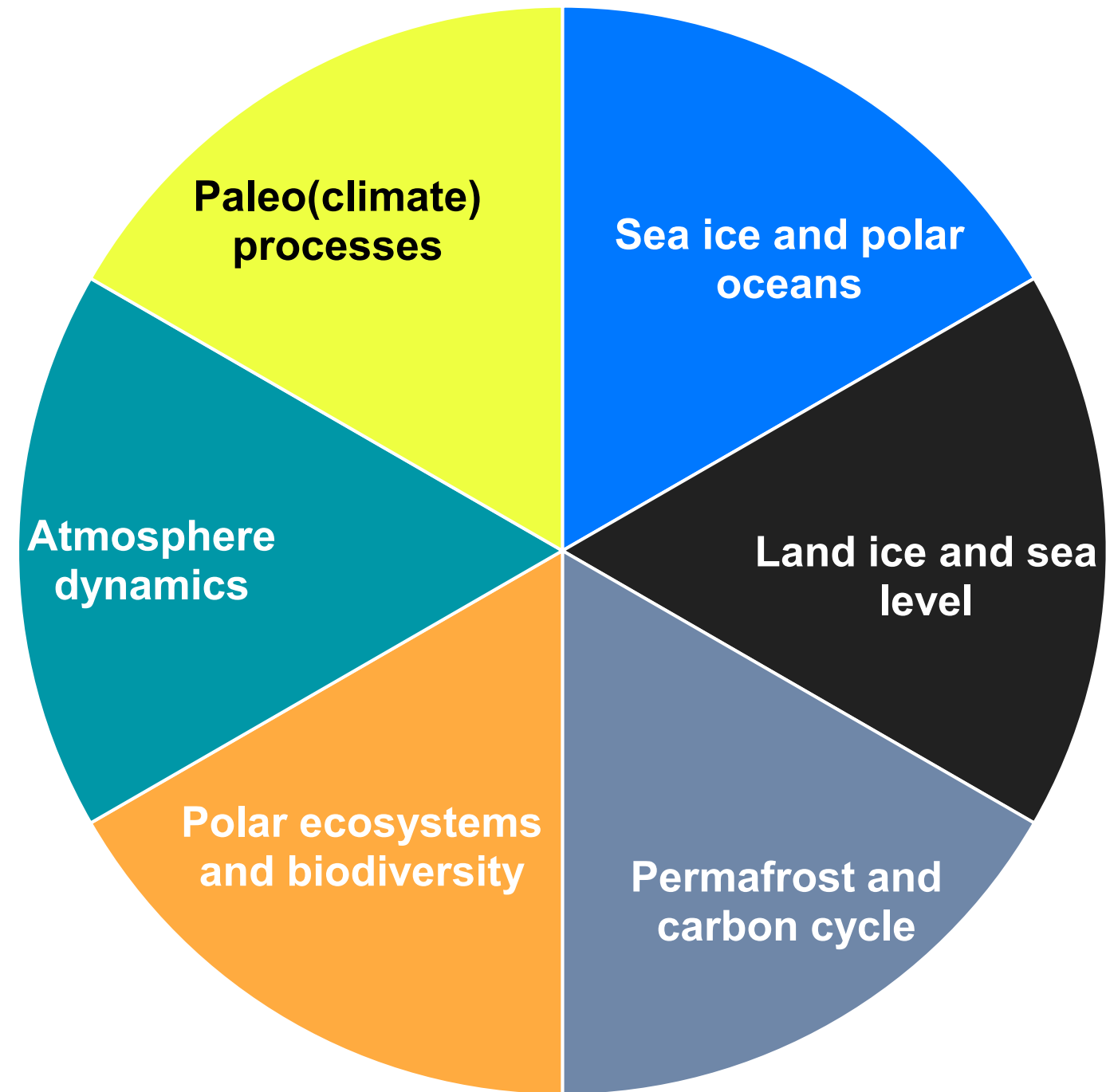
D1.4 (CNRS) at M8 = October 2024

**OVERVIEW REPORT OF EXISTING SCIENCE PRIORITIES BY MAJOR ARCTIC AND ANTARCTIC ORGANISATIONS AND VALIDATION/CALIBRATION NEEDS BY IN-SITU OBSERVATION, REMOTE SENSING, AND MODELLING COMMUNITIES**

*POLARIN Kick-off meeting - Bremerhaven – 18 April 2024*



# Overarching scientific challenges



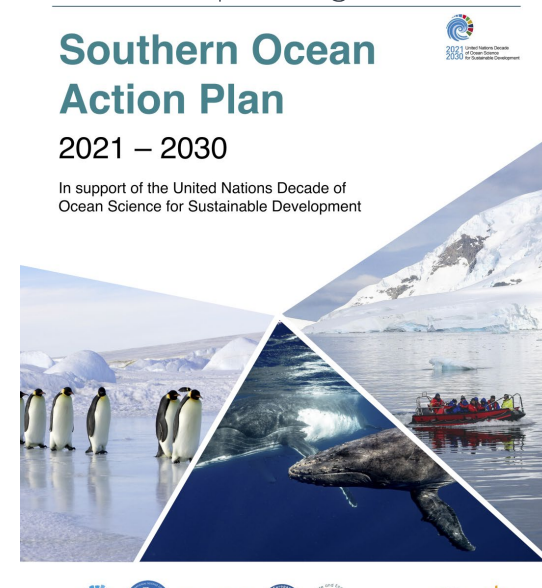


# Task 1.1: Approach (2)

## Overarching science priorities

Take advantages of existing polar science programmes and strategies :

- International and European science plans
- EU-PolarNet Integrated Polar Research Programme and Whites papers
- Outcome of previous large-scale projects



# Task 1.1: Approach(3)

## Overall procedure of access to services



### Eligibility Check

Compliance with deadline of the Call

Compliance with the eligibility criteria

Compliance with application form completion and the proposal structure

Procedure for provision of access to services (for discussion)

- 1) Eligibility criteria
- 2) Terms and conditions

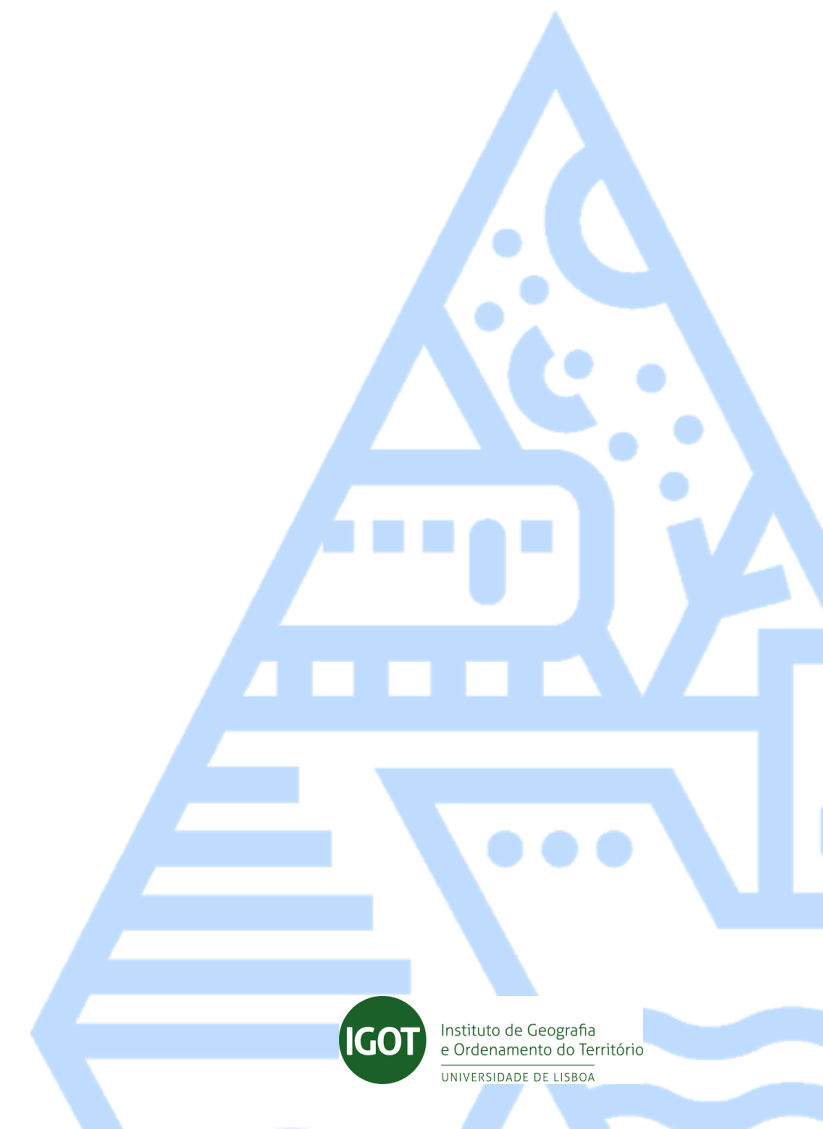
### **Deliverable for the first year:**

D1.2 (IGOT-UL) at M6 = August 2024

**REPORT ON PROCEDURE FOR PROVISION OF TA** (content to be discussed)

### **Best practices:**

from EUROFLEETS, ARICE, INTERACT + AQUARIUS



# Task 1.2

## Scientific evaluation



Task 1.2 will take care of the entire scientific evaluation and follow up of the proposals submitted:

- 1) Collaborate to SLP selection by Task 1.1;
- 2) Define and agree a shared evaluation system to access POLARIN Ris; ensure objectivity, transparency, equality of treatment, and confidentiality (collaboration with Task 1.1 and SLP); draft code of conduct, evaluation templates, criteria, guidelines for external reviewers (collaboration with SLP) ;
- 3) Coordinate the scientific evaluation of proposals; provide evaluation reports for each of the calls for proposals;
- 4) Review the granted access projects in collaboration with T1.3 and T1.1

Deliverable for the first year:

D1.3 (OGS) at M7 = September 2024

DESCRIPTION OF THE EVALUATION PROCESS, EVALUATION CRITERIA,  
CODE OF CONDUCT, AND GUIDELINES AND TEMPLATES FOR EXTERNAL REVIEWERS

Best practices:

from EUROFLEETS, ARICE, INTERACT + AQUARIUS



# Task 1.2: Approach (1)

## Scientific evaluation process

Proposal evaluation

(SLP + external reviewers + WPI Team):



1) Eligibility Check (WPI Team);

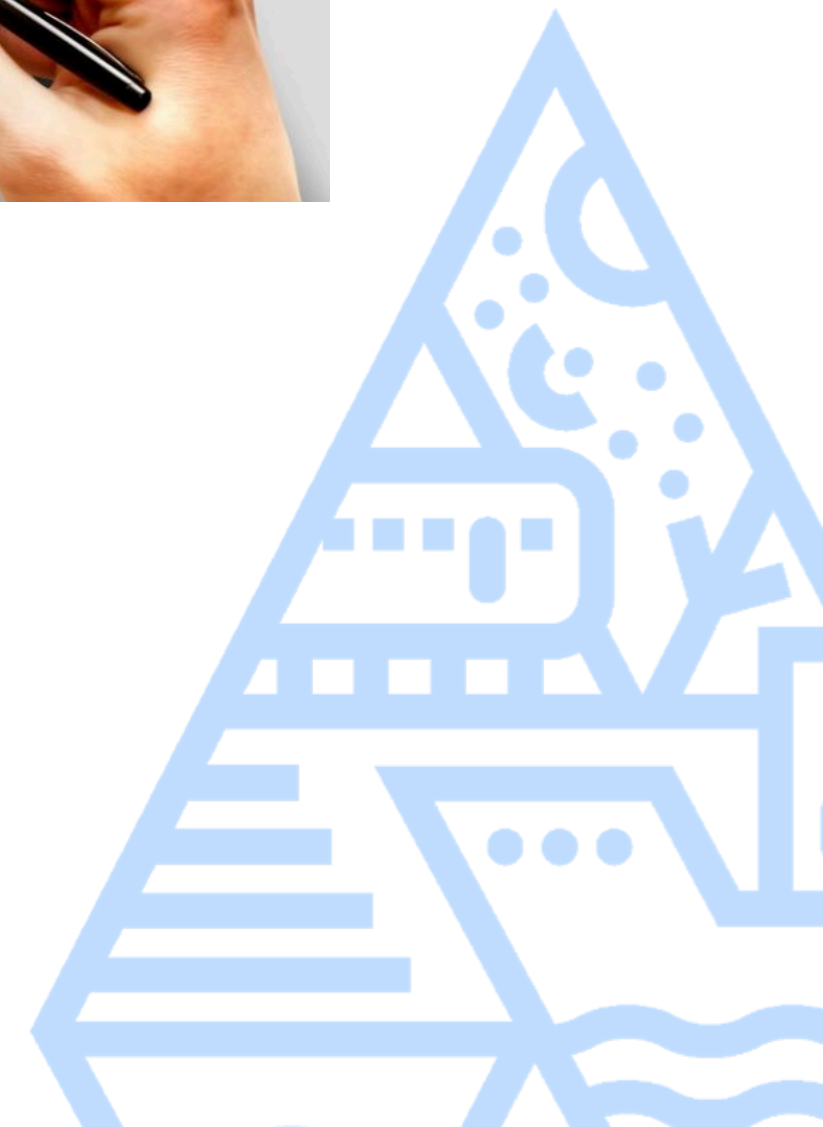
2) Selection of the SLP expert (“watchdog”) that will evaluate and accompany each proposal (SLP helped by WPI Team);

3) Selection of reviewers (watchdog);

4) Individual assessment (watchdog + at least 2 reviewers);

5) Consensus Evaluation (SLP helped by WPI Team);

6) Ranking and recommendation to logistic panel (SLP helped by WPI Team).



# Task 1.2: Approach (2)

## Evaluation criteria

### Evaluation criteria

- 1) Scientific and technical quality of the planned research;
- 2) Quality of the work programme & value for money;
- 3) Scientific merits of the user group leader and user group;
- 4) Technical capability and data exploitation;
- 5) Team composition and interdisciplinarity;
- 6) Training of young scientists, dissemination & outreach.

### Priorities (to be discussed):

- A) not having previously used the installation;
- B) working in countries with no equivalent research infrastructure;
- C) integrating multiple infrastructures;
- D) Being an early career researcher.



# Task 1.3

## Optimising the scientific outcome of the access programme

Task 1.3 will focus on identifying knowledge gaps and evaluating the capacity of POLARIN RIs in addressing them:

- 1) Identify data products (in cooperation with WP4) to help identify current knowledge gaps (thematic, geographical, and/or validation/calibration) based on existing data sets;
- 2) Superimpose the identified data products with POLARIN RIs to identify RIs which potentially can fill geographical gaps;
- 3) Analyse how TA projects help addressing the POLARIN science priorities and gaps to determine the scientific focus of subsequent POLARIN calls for proposals;
- 4) Review (in collaboration with T1.1 and T1.2) the granted access projects to report on how POLARIN TA has contributed to addressing the identified challenges;

Deliverable for the first year:

D1.5 (AU) at M12 = February 2025

[POLAR KNOWLEDGE GAPS AND POTENTIAL OF POLARIN RIs IN ADDRESSING THEM](#)



# Task 1.3: Approach

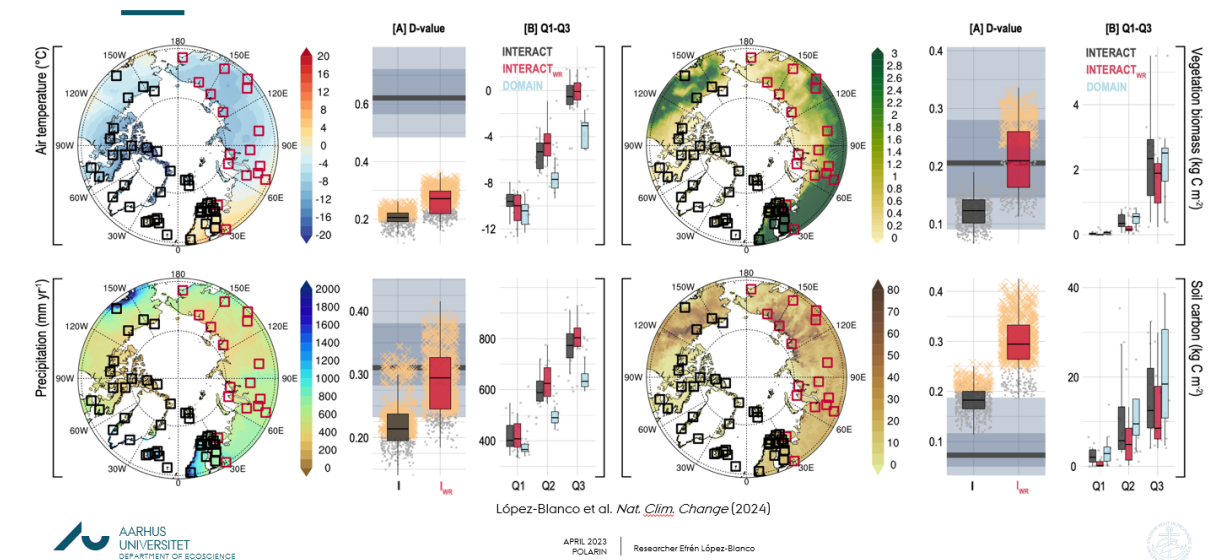
## Monitoring of knowledge gaps



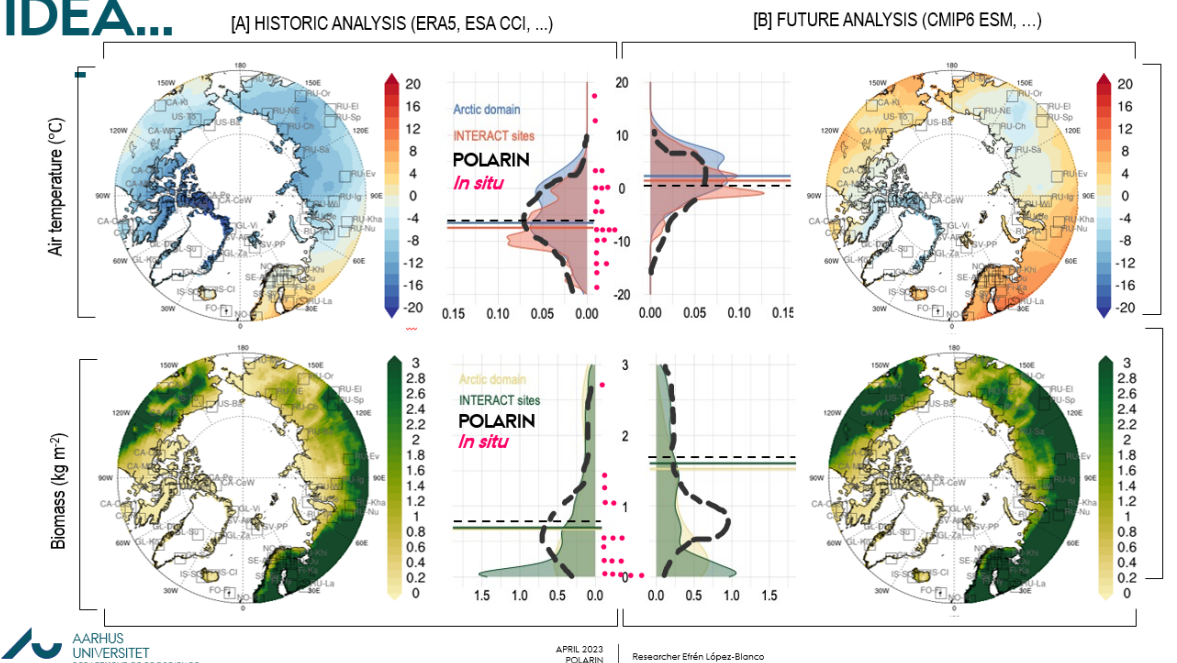
- How well do thematic monitoring networks represent current state and future predictions of the polar climate and environment?
- Use remote sensing and Earth System Models to assess representativeness of sampling sites now and in the future
- Identify POLARIN infrastructures that can help fill observational gaps
- Based on analytical tool from recent peer reviewed paper

(Lopez-Blanco *et al.* (2024). Towards an increasingly biased view of Arctic Change, Nature Climate Change)

### RESULTS FROM NAT CLIM. CHANGE PAPER



### IDEA...



# Upcoming deliverables (Year 1-2)



- D1.1 Implementation of the SLP with Terms of Reference, M5, (CNRS)
- D1.2 Report on procedure for provision of TA, M6, (IGOT-UL)
- D1.3 Description of the evaluation process, evaluation criteria, code of conduct, and guidelines and templates for external reviewers, M7, (OGS)
- D1.4 Overview report of existing science priorities by major Arctic and Antarctic organisations and validation/calibration needs by in-situ observation, remote sensing, and modelling communities, M8, (CNRS)
- D1.5 Polar Knowledge gaps and potential of POLARIN RIs in addressing them, M12, (AU) **Call for proposal**
- D1.6 Selection report of the first call for proposals, M18, (OGS)
- D1.7 Update report on knowledge gaps, M21, (AU).

**Process set-up**

**Call for proposal: cycle 1**



# 5. Collaboration with other WPs/programmes



Links with other POLARIN activities :

- Management of calls (provision of information and logistical evaluation) : WP2
- Evaluation of the TA potential of POLARIN research infrastructures : WP3
- Improvement of data services and products : WP4

For discussion : Time line for exchange of necessary information with other WP.

