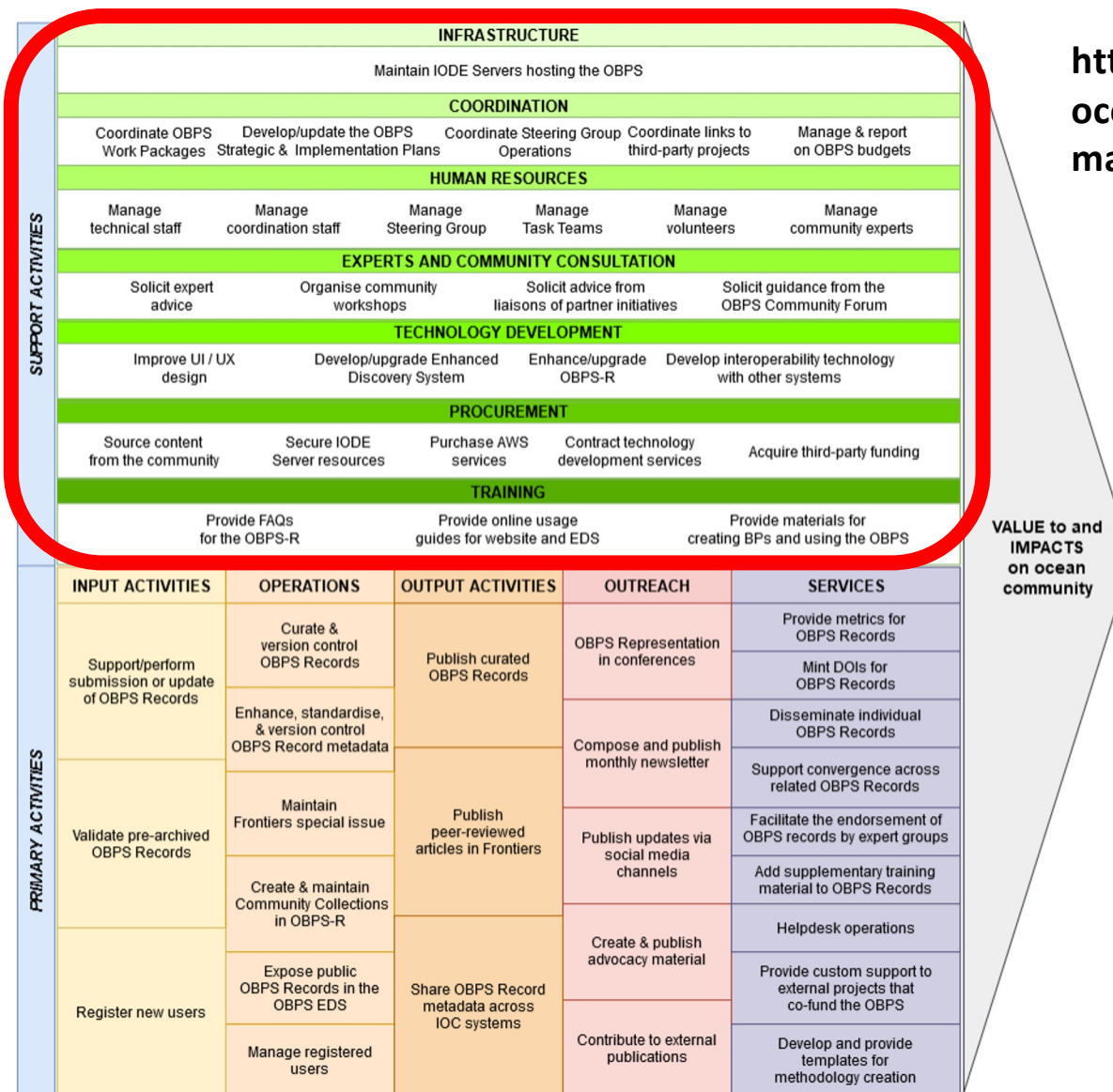# Towards an Arctic Best Practices System
design of a next-generation Arctic knowledge archive

Pier Luigi Buttigieg, Jay Pearlman, Francoise Pearlman, Siri Jodha Singh Khalsa, René Garello

https://workshop5.oceanbestpractices.org/mapping-value

| INFRASTRUCTURE					
Maintain IODE Servers hosting the OBPS					
COORDINATION					
Coordinate OBPS Work Packages	Develop/update the OBPS Strategic & Implementation Plans	Coordinate Steering Group Operations	Coordinate links to third-party projects		Manage & report on OBPS budgets
HUMAN RESOURCES					
Manage technical staff	Manage coordination staff	Manage Steering Group	Manage Task Teams	Manage volunteers	Manage community experts
EXPERTS AND COMMUNITY CONSULTATION					
Solicit expert advice	Organise community workshops		Solicit advice from liaisons of partner initiatives		Solicit guidance from the OBPS Community Forum
TECHNOLOGY DEVELOPMENT					
Improve UI / UX design	Develop/upgrade Enhanced Discovery System		Enhance/upgrade OBPS-R		Develop interoperability technology with other systems
PROCUREMENT					
Source content from the community	Secure IODE Server resources	Purchase AWS services	Contract technology development services		Acquire third-party funding
TRAINING					
Provide FAQs for the OBPS-R		Provide online usage guides for website and EDS		Provide materials for creating BPs and using the OBPS	

SUPPORT ACTIVITIES (rows above)

VALUE to and IMPACTS on ocean community

PRIMARY ACTIVITIES (rows below)

INPUT ACTIVITIES	OPERATIONS	OUTPUT ACTIVITIES	OUTREACH	SERVICES
Support/perform submission or update of OBPS Records	Curate & version control OBPS Records	Publish curated OBPS Records	OBPS Representation in conferences	Provide metrics for OBPS Records
				Mint DOIs for OBPS Records
	Enhance, standardise, & version control OBPS Record metadata		Compose and publish monthly newsletter	Disseminate individual OBPS Records
Validate pre-archived OBPS Records	Maintain Frontiers special issue	Publish peer-reviewed articles in Frontiers		Support convergence across related OBPS Records
			Publish updates via social media channels	Facilitate the endorsement of OBPS records by expert groups
	Create & maintain Community Collections in OBPS-R			Add supplementary training material to OBPS Records
	Expose public OBPS Records in the OBPS EDS	Share OBPS Record metadata across IOC systems	Create & publish advocacy material	Helpdesk operations
Register new users				Provide custom support to external projects that co-fund the OBPS
	Manage registered users		Contribute to external publications	Develop and provide templates for methodology creation

INFRASTRUCTURE

SUPPORT ACTIVITIES

Coordinate OBPS Work Packages	Develop Strategic &
Manage technical staff	Manag coordinatio
Solicit expert advice	

Towards an Arctic Practices System

Conveners: Stein Sandven (NERSC)

Format: Open, moderated meeting / panel

As part of its mission and in consultation with Arctic communities, CAPARDUS will develop a Roadmap to create an Arctic Practices System (APS), emulating part of the Ocean Best Practices System's functionality, but tailoring it to the needs of the Arctic region and its people. In this session, CAPARDUS partners will introduce some of their consideration for the APS, and address questions such as:

workshops · liaisons or partner initiatives · OBPS Community Forum

TECHNOLOGY DEVELOPMENT

| Improve UI / UX design | Develop/upgrade Enhanced Discovery System | Enhance/upgrade OBPS-R | Develop interoperability technology with other systems |

PROCUREMENT

| Source content from the community | Secure IODE Server resources | Purchase AWS services | Contract technology development services | Acquire third-party funding |

TRAINING

| Provide FAQs for the OBPS-R | Provide online usage guides for website and EDS | Provide materials for creating BPs and using the OBPS |

VALU
IMP

Objectives

Enhance the coordination of practices and standards across multi-stakeholder and multidisciplinary Arctic communities

1. Identify which local and international practices and standards are essential in each CAPARDUS use case (coordinated with WP1)

2. Design an Arctic Practices System (APS) suited to the needs of stakeholders across use cases, and also be able to integrate key standards needed to support practices of stakeholders

3. Examine outcome of the APS design and produce a roadmap towards implementation

The workflow

Interlinking Arctic regions through improved and responsible knowledge sharing

- WPs 2-5 gather insight into regional/local ways of living in, working in, protecting, and adapting to a changing Arctic

- WPs 1 & 6 will design a stable environment to promote improved organisation and alignment of knowledge and practice

WP2 WP3 WP4 WP5

WP 1
Standards Framework

WP 6
APS

WP7
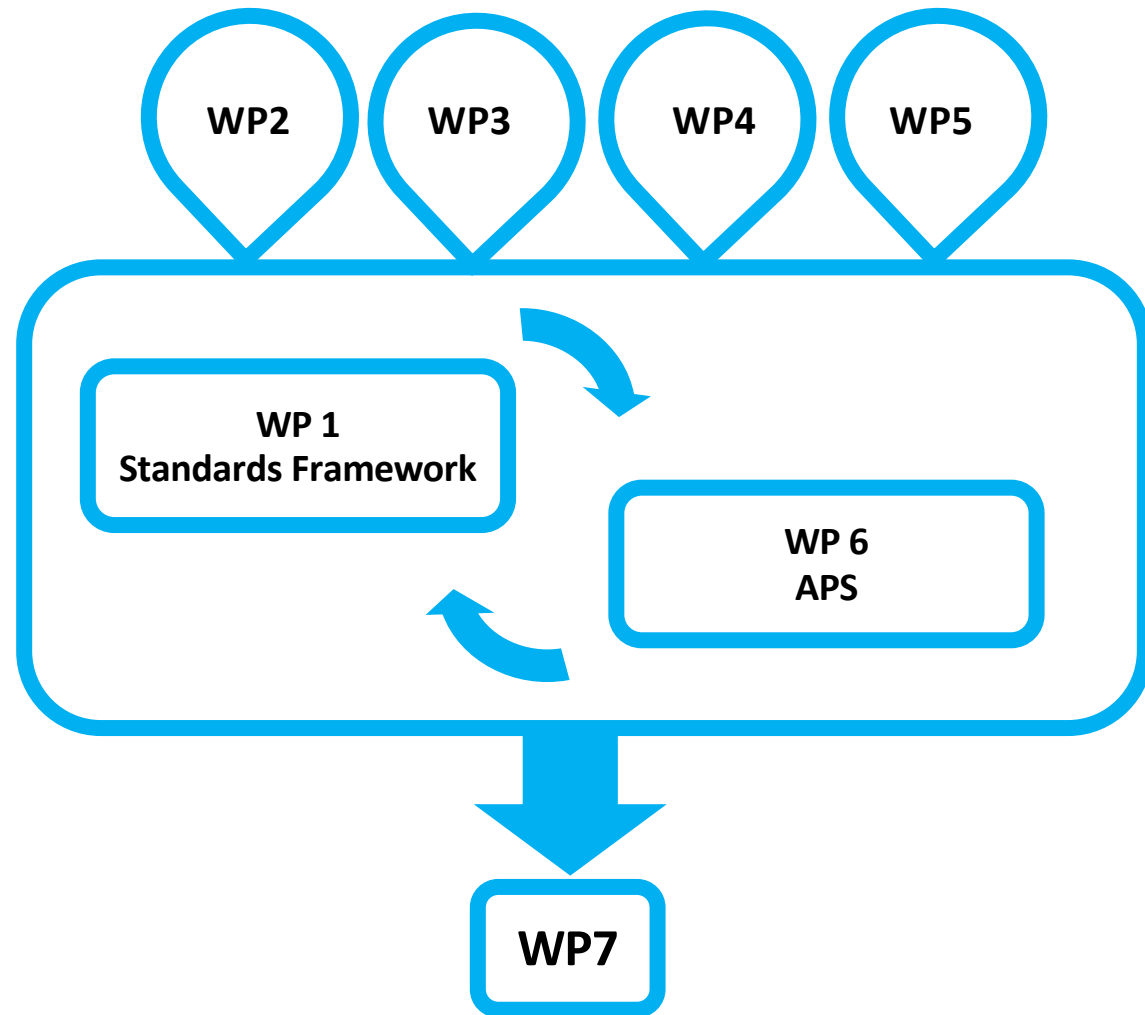
The workflow

WP1 ↔ WP6

- WP1's surveys and framework for Arctic standards will help shape the APS' recommended templates and submission processes to maximise reach across existing systems

- WP6 will design a means to leverage and help shape the Framework to improve best practice development across stakeholders
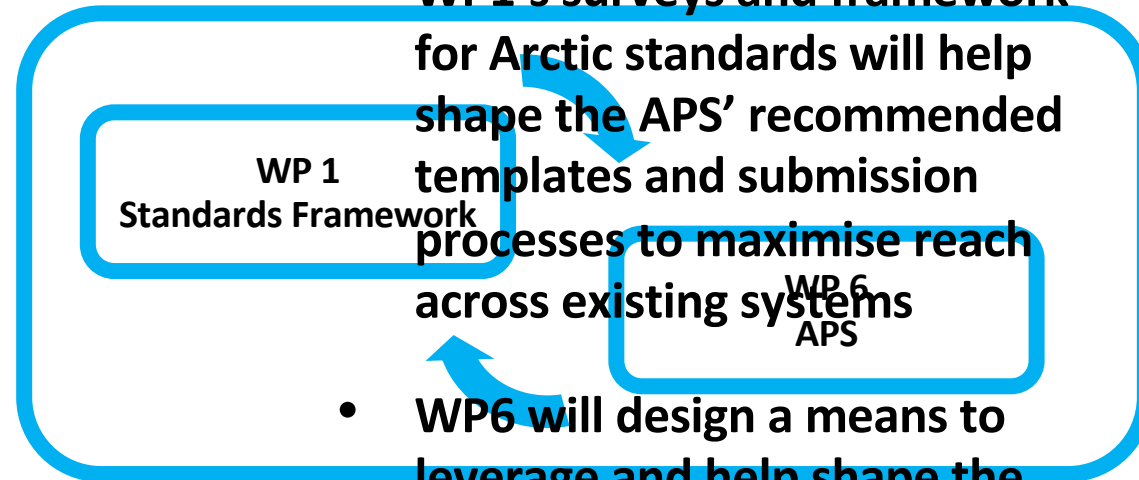
WP 1
Standards Framework

WP 6
APS

Building on past success : The OBPS

ARCTIC Practices

BROWSE BY

| By Issue Date | Authors | Titles | Subjects |

Search within this community and its collections:

[   ] Go

Collections in this community

Arctic Practices [63]

Recent Submissions

Project and Community Management in Polar Sciences – Challenges and Opportunities.

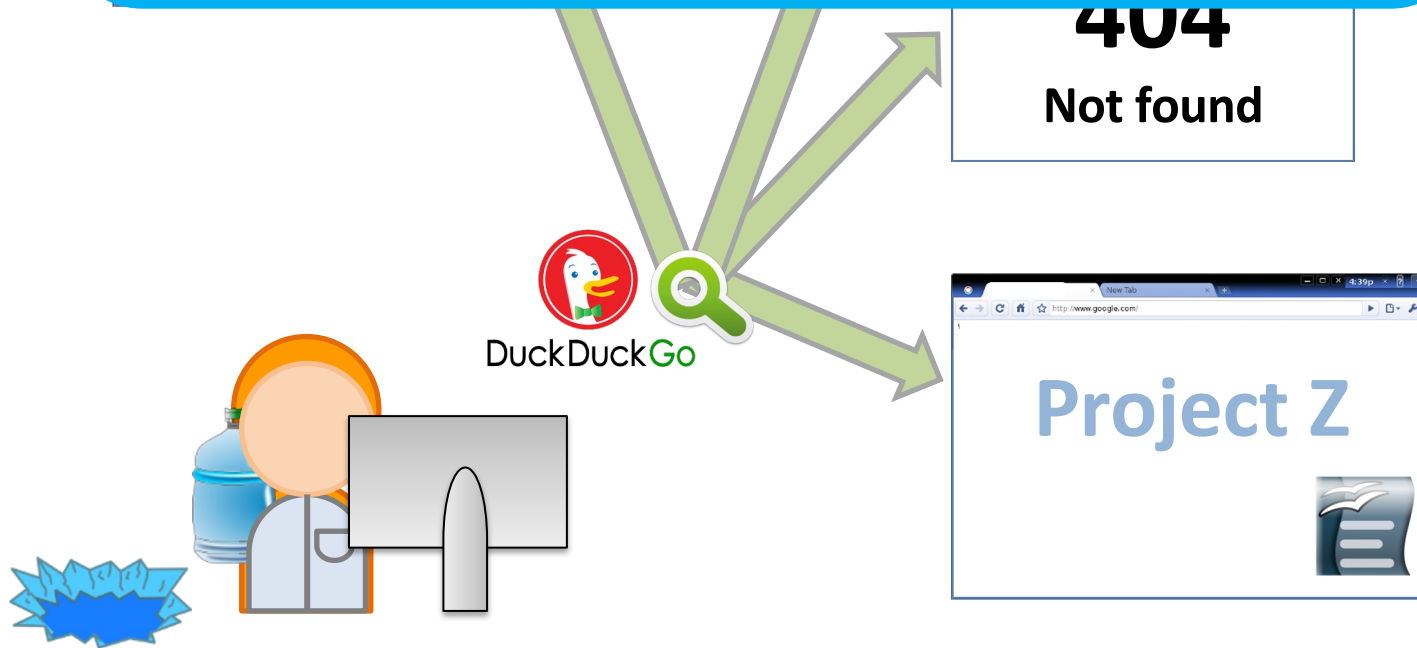Werner, Kirstin; Zaika, Yulia; Pavlov, Alexey K.; Lidström, Sven; Pope, Allen; Badhe, Renuka; Brückner, Marlen; Cristini, Luisa (2019)

Because geoscientific research often occurs via community-instigated bursts of activity with multi-investigator collaborations variously labelled as e.g., years (The International Polar Year IPY), experiments (World Ocean ...

The Mission: solutions for a FAIRer future for Ocean Best Practices
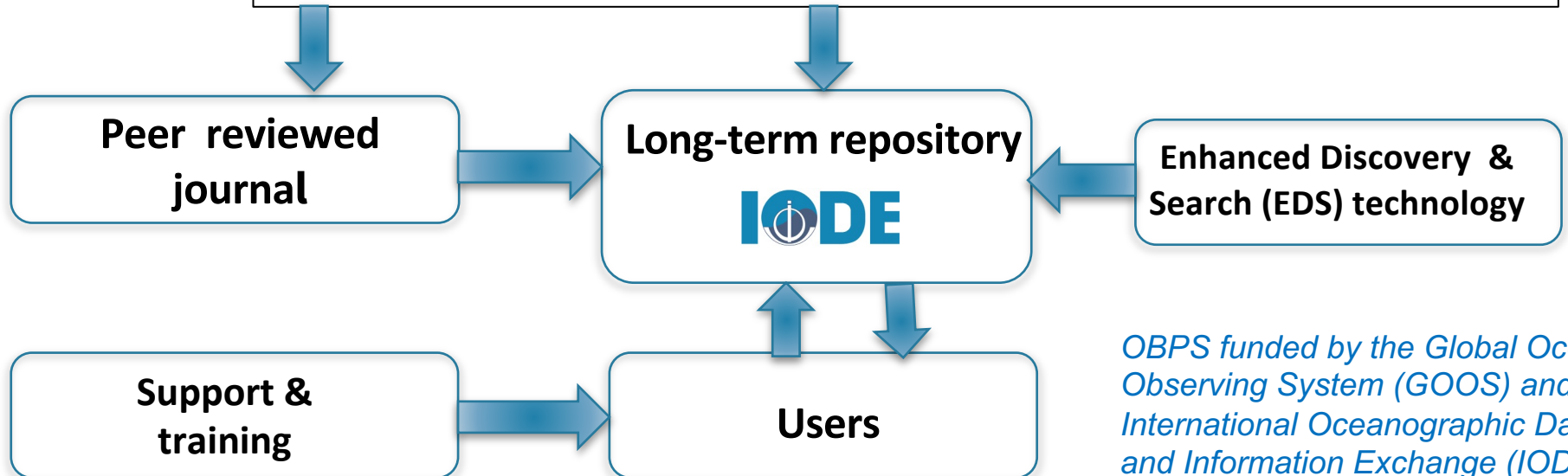
FAIR: **Findable, Accessible, Interoperable, Reusable**

Most potential BPs are scattered, have varying degrees of accessibility, and varying digital lifetimes

404
Not found

Project Z

The Ocean Best Practices System

Participating Organizations and Programs

Peer reviewed journal

Long-term repository IODE

Enhanced Discovery & Search (EDS) technology

Support & training

Users

OBPS funded by the Global Ocean Observing System (GOOS) and International Oceanographic Data and Information Exchange (IODE)

Tagging Module

Title
Author Author
Part 1

Title
Author Author
Part 1

Raw text extraction

OceanBestPractices
Repository of Ocean Community Practices in
Ocean Research, Observation and
Data/Information Management

Title
Author Author
Part 1

Semantic + ElasticSearch interface

United Nations
Educational, Scientific and
Cultural Organization

Intergovernmental
Oceanographic
Commission

Ocean best practices

Type to search our Ocean Best Practice Archive

Search 227 documents for 118348 terms from 2 ontologies

Search

ABOUT | FAQ | FEEDBACK | Submit a new Best Practice

Link back to original documents

Submission interface

frontiers
in Marine Science

Ocean Observation Section for BPs

Method Developers

OceanBestPractices
Repository of Ocean Community Practices in
Ocean Research, Observation and
Data/Information Management

BROWSE

All of OceanBestPractices

Communities & Collections

By Issue Date

Authors

Titles

Subjects

Their BP
Author   Author
Part 1

My BP
Author   Author
Part 1

Sensors and platforms, Environments, Chemicals, SDGs...

NERC Vocab Server

OBO Foundry Ontologies
ENVO, CHEBI, SDGIO
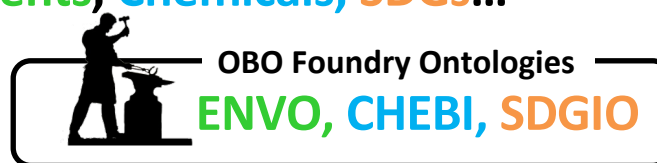
Considerations for an Arctic Best Practices System

Oral histories

Way-of-life stories & guides

Food knowledge

https://eloka-arctic.org/sites/eloka-arctic.org/files/images/arctic-map-polar-720-04112019(1).png
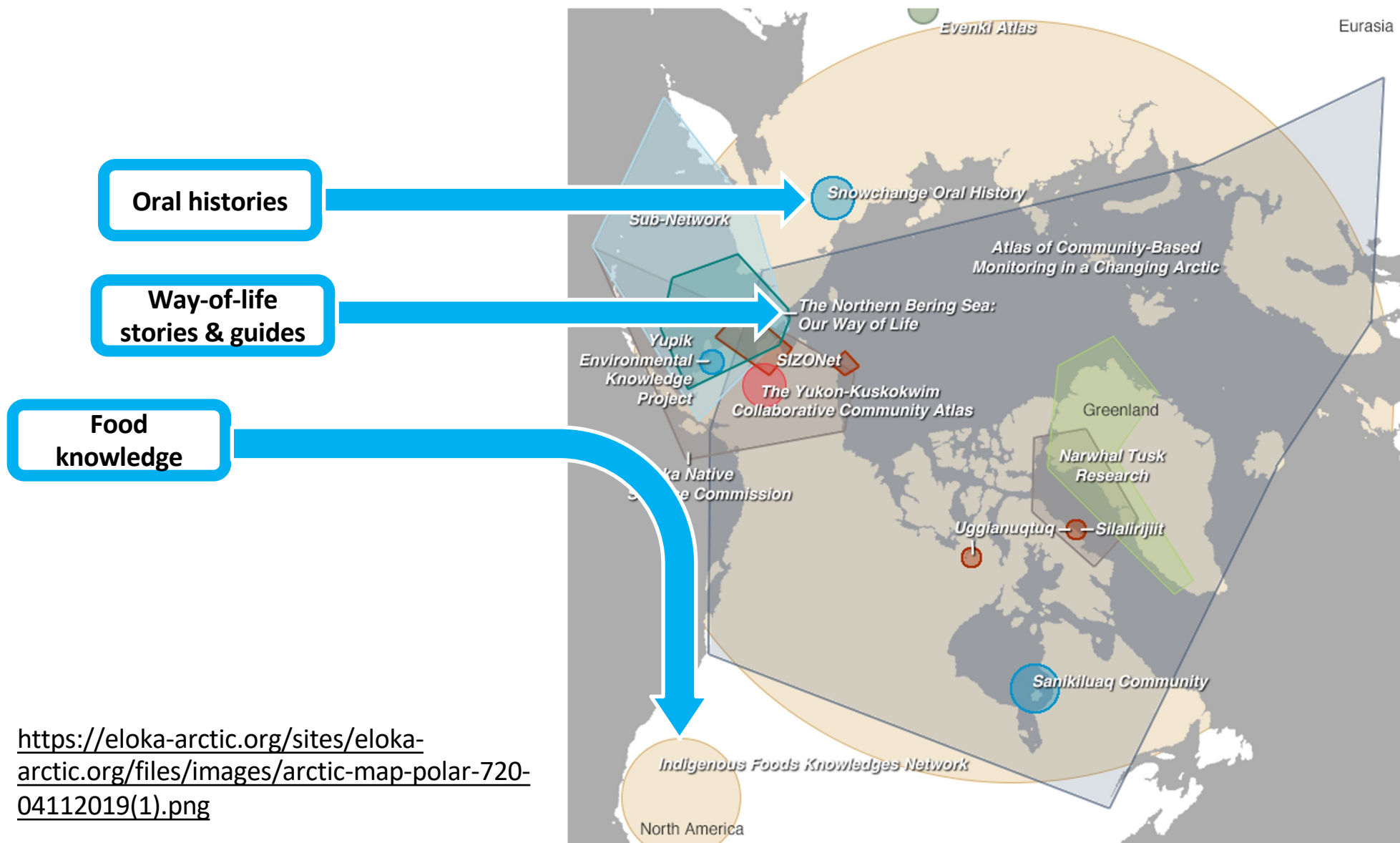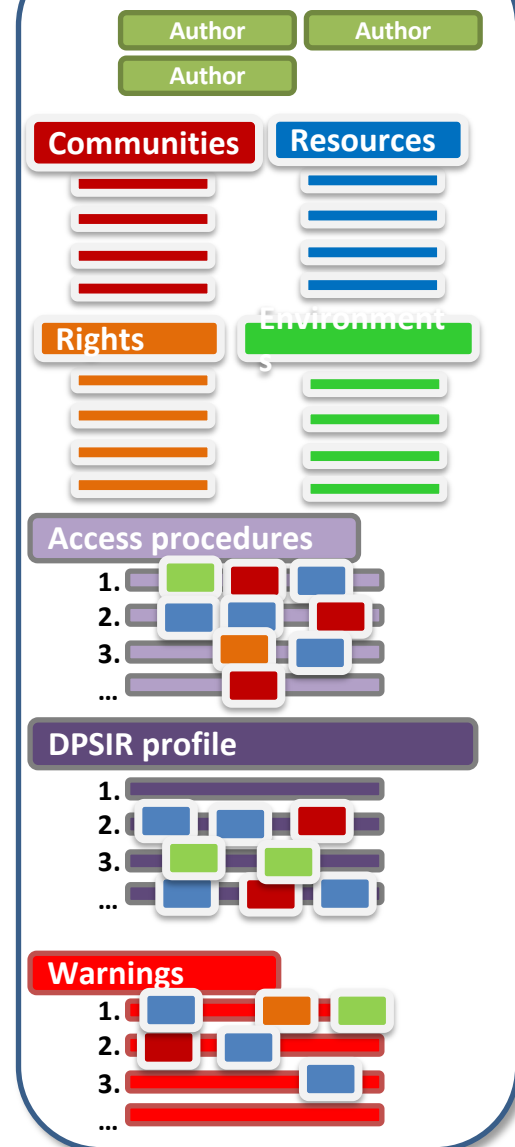
- **Retrieve the communities affected by the pressures derived from multi-year ice loss**

- **Retrieve all documents that use the software "ArcGIS"**

- **Retrieve the access procedures required for First Nation's food histories in the Canadian Arctic**

Inspired by https://smartprotocols.github.io/

The APS Mission: CARE-based solutions for a FAIRer future for Arctic Best Practices

CARE: **Collective benefit, Authority to Control, Responsibility, Ethics**

FAIR: **Findable, Accessible, Interoperable, Reusable**

Wilkinson et al. (2016) *Scientific Data* 3, DOI:10.1038/sdata.2016.18

Next steps

- **Develop working model with WPs 2-5 around stakeholder engagement**

- **Determine working model with WP1 on how to leverage Arctic standards development and BP development solutions**

- **Design user experience of the APS to fit stakeholder profiles, e.g.,**

  - **Map-based visualisations and access / interface with data, information, and knowledge**

  - **Touch screen / tactile user experience options**

  - **Multi-lingual natural language processing**

  - **AI with awareness of local and indigenous concerns**