

# Arctic PASSION and SAVs

Michael Karcher and the Arctic PASSION team



# Overall Project Objectives

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- Co-create a coherent, integrated and sustainable pan-Arctic Observing System of Systems
- Meaningful collaboration with Arctic communities, Indigenous Peoples and organisations;
- Expand monitoring capabilities, also through broad inclusion of Indigenous Knowledge and Local Knowledge;
- Improve data interoperability and simplify access to 'application-ready' environmental data for the benefit of all users;
- Improve monitoring to support predictions, risk assessment, inform and guide mitigation and adaptation and sustainable development
- Initiate SAV Expert Panels and develop SAVs in support of SAON's ROADS program

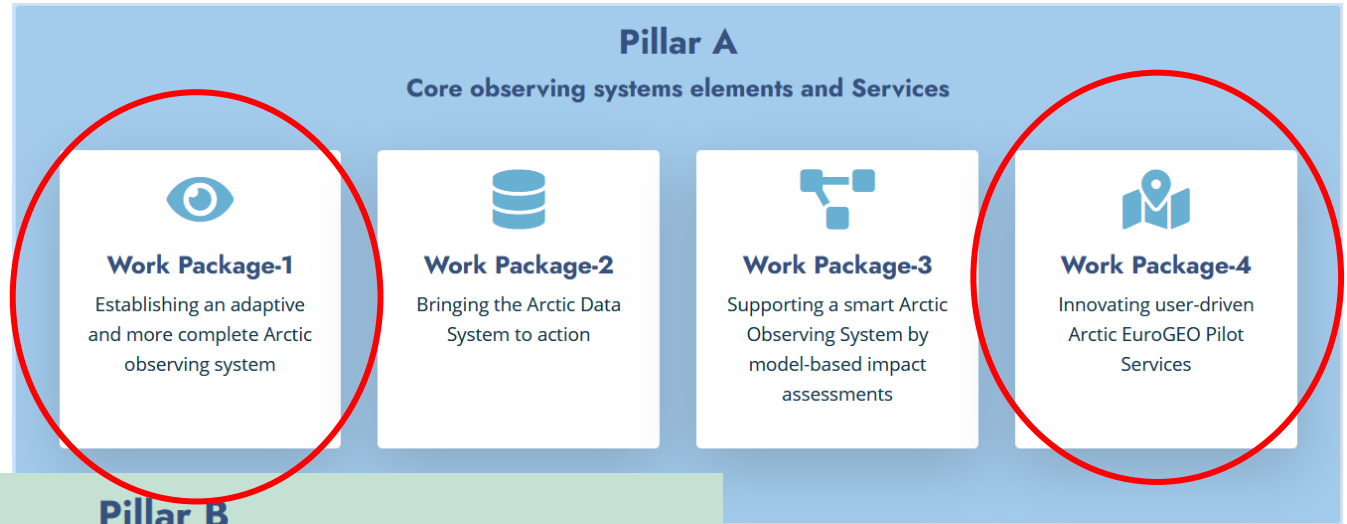
# Arctic PASSION and SAVs

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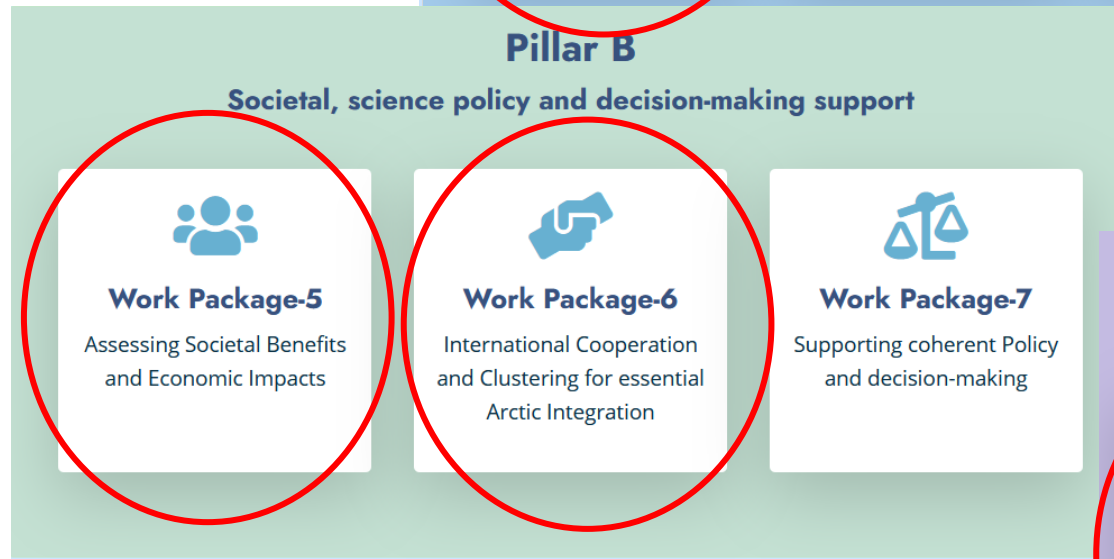
- Themes of large societal relevance
- Internal expertise in the project to support the process from the science side
- Three SAV themes (with links to three related Pilot Services)
  - Permafrost (Living on frozen ground)
  - Wildfires
  - Sea Ice

# Work Package structure and SAV related actions

Strengthening core observing system elements

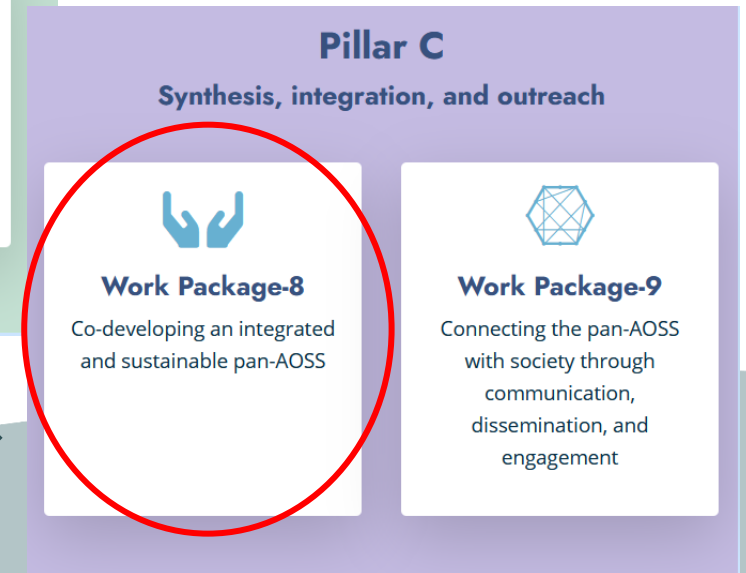


Decision-making support



[www.arcticpassion.eu](http://www.arcticpassion.eu)

Synthesis and outreach



## Eight Pilot Services

Co-create Pilot Services to provide new information to support emergency preparedness, food security, responses to climate and socio-economic changes.

1. 'Event Database of CBM Using Oral Histories, IK and LK' (Snowchange)
2. 'Pan-Arctic requirements-driven Permafrost Service' (AWI)
3. 'State of the Arctic Environment' service (NPI)
4. 'Integrated Fire Risk Management (INFRA) Service' (CNR)
5. 'Local Atmospheric Pollutant Forecast Service' (JRC)
6. 'Improving Safety for Shipping in the Polar Seas Service' (BAS)
7. 'CBM for Arctic marine climate change, noise pollution & impacts on marine living resources' (GINR/DMI)
8. 'Lake Ice Service for Arctic Climate and Safety' (SYKE)

# Developing and documenting SAVs

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- Initiate an Expert Panel (EP)
- Assess Scope of Needs and Benefits - Assess Shared Benefits
- Translate needs into requirements
- Translate requirements into implementation and commitments





## Wildfires as a SAV

### Why are wildfires considered as a SAV?

Dramatic increase in the frequency and intensity of extreme wildfire events in the Arctic. Wildfires in Siberia are projected to be intensified by 200-350% by the end of the century.

-> Their impacts on ecosystems and communities are clear.

Wildfires are a key topic of the Arctic PASSION project:

- Pilot service called "Integrated Fire Risk Management"
- Wildfires as a SAV

### Where are we now:

We have held numerous discussions to prepare and best support the work of the Expert Panel. We are looking for Indigenous experts to co-create the Expert Panel and lead the work on wildfires, collaborating with science and services!

Come and join us 😊

**Do not miss!**

This afternoon at 15:05, Hringátta/Circuleight, Harpa K2 Level





## Permafrost (Living on frozen Ground) as a SAV

### Why is permafrost considered as a SAV?

- It is an integral part of the living environment for many Indigenous communities and Arctic inhabitants in general
- It is also a key indicator and a system component of climate change also on the local scale

Permafrost is a key topic of the Arctic PASSION project:

- Pilot service called “Pan-Arctic requirements-driven Permafrost”
- Permafrost as a SAV

### Where are we now:

We are starting to prepare and best support the Expert Panel co-creation process. For this we are in discussion with Indigenous, local and science experts.







## Sea Ice as a SAV

### Why is sea ice considered as a SAV?

- It is an integral part of the living environment for many Indigenous communities for millennia
- It impacts safety of shipping in ice infested waters
- It is also a key indicator and a system component of climate change on a local to regional scale

### Sea Ice is a key topic of the Arctic PASSION project:

- Sea Ice is a prime phenomenon for the Arctic Observing System components
- Pilot service called “Improving Safety for Shipping in the Polar Seas”
- Sea Ice as a SAV

### Where are we now:

We are in the process of identifying the relevant scale for the SAVs (local or regional). We are looking for Indigenous experts and local experts to co-create the Expert Panel.



# Aspects of Arctic PASSION's approach

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- Committed to **support SAON and the ROADS process**
- **Contractually bound** to the European Commission to deliver SAVs until summer 2025
- Realizing that the processes for the SAV identification and the EP formation and progress are **evolving** (based the ROADS Advisory Panel as well as the AOS)
- Arctic PASSION tries to accomodate these as good as possible but due to the call framework we will not be able to fulfill all stages of an ideal **co-creation process**
- **Arctic PASSION and RNA-CoObs are piloting** these efforts and hope that we can create a sound base for further improvements of the process in the future
- We see the SAV process and the EPs as having a hight potential for **empowerment** and a support of **equity** for Indigenous and local Arctic inhabitants