Sustainable Arctic Observation Network (SAON)

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Mission and Vision

The *Mission* of SAON is to support and strengthen the development of <u>multinational engagement</u> for sustained and coordinated <u>pan-Arctic observing and data sharing systems</u> that serve societal needs, particularly related to environmental, social, economic and cultural issues.

The *Vision* of SAON is well-defined <u>observing networks</u> that enable users to have <u>access to free, open and high</u> <u>quality data</u> that will realize pan-Arctic and global valueadded services and provide societal benefits.



SAON – outside the scope

SAON will **not** undertake science planning, policy setting, conduct observations, data archival, or funding of these efforts, which will remain the responsibility of the ongoing networks/sites/systems and data centers, the organizations that support them, or appropriate policy officials



SAON Membership

- All interested parties through national bodies and Permanent Participants
- Indigenous organisations (PPs): AIA, ICC, Saami Council
- All eight Arctic Council nations
- Non-AC countries: China, Germany, Italy, Japan, Korea, Poland, Spain, UK
- AC Working Groups
- Organisations: European Commission, EEA, GEO, ICES, IPA, ISAC, WMO (more)
- Networks: IASOA, INTERACT (more)

SAON is a joint effort of the **Arctic Council** (through AMAP) and the **International Arctic Science Committee**





Foundational statements

Arctic Observing Summit (2016):

- Coordinate the implementation of a pan-Arctic observing system with regional and global observing initiatives (...)
- (...) develop a <u>broad, globally connected Arctic</u>
 observing data and information system of systems

Arctic Science Ministerial (2016):

 SAON (..) a critical contributor to 'Strengthening and Integrating Arctic Observations and Data Sharing'



SAON Framework

- Task-based strategic activities that allow bottom-up and top-down implementation and achievement of key strategic goals
- Strategic activities conducted through SAON Committees
- Focus on leveraging existing efforts and networks; not on building redundant ones
- Engagement through the Arctic Observing Summit (Davos, 2018), Polar Data Forum series, and others



SAON and GEO / GEOCRI

- SAON is a Participating Organisation to the Group on Earth Observations (GEO), acting as the "Arctic Extension" / Liason for GEOSS/GEO.
- The aspiration is that SAON will step up as 'ArcticGEOSS'.
- SAON is through the Committees currently contributing to the GEO Cold Regions Initiative (GEOCRI), an initiative across the Arctic, Antarctic, high-latitude oceans, Himalaya-Third Pole and High-Mountain areas.





Arctic Framework Social Benefit Areas (mapped to GEO SBAs)

- 1. Disaster Preparedness (Disaster Resilience)
- 2. Environmental Quality
- 3. Food Security (Food Security and Sustainable Agriculture)
- 4. Fundamental Understanding of Arctic Systems
- **5. Human Health** (Public Health Surveillance)
- **6. Infrastructure and Operations** (Infrastructure and Transport Management)
- 7. Marine and Coastal Ecosystems and Processes (Biodiversity and Ecosystem Sustainability)
- 8. Natural Resources (Energy and Mineral Resources Management)
- 9. Resilient Communities
- 10. Sociocultural Services
- **11. Terrestrial and Freshwater Ecosystems and Processes** (Biodiversity and Ecosystem Sustainability)
- 12. Weather and Climate





Committees

- Arctic Data Committee (ADC)
 - Led by Peter Pulsifer, US National Snow and Ice Data Center
- Committee on Observations and Networks (CON)
 - Led by Lisa Loseto, Fisheries and Oceans, Canada, Hannele Savela, INTERACT





SAON CON Goals

CON - the "home of the networks"

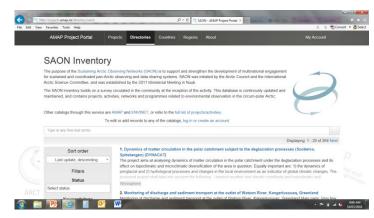
- ✓ provision of information on the baseline arctic observational assets
- ✓ improvement of the Arctic observing networks (i.e. identify synergies, gaps, duplication)
- ✓ sustainability of observational platforms among nations and organizations (including indigenous peoples)
- ✓ improved planning (including funding) of current and future observational systems



Example: Inventory

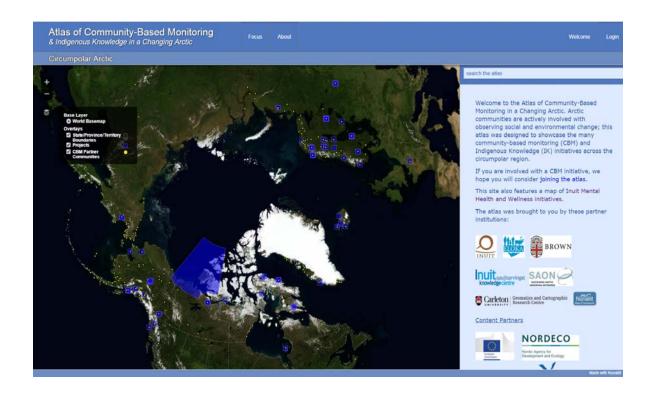
"The Committee will be develop and implement a plan for the establishment of an inventory and related gap analysis of circum-Arctic observational and monitoring assets"

In cooperation with EU-PolarNet: "Inventory of existing monitoring and modelling programmes"





Thematic Inventories CBM Atlas



Arctic Data Committee



. Advising IASC and SAON on matters related to data management and data sharing:

Identifying common metadata elements







- Formed Nov '14
- IASC-SAON partnership
- National and voluntary members + Indigenous (2017)
- Promote and enable:
 - Understanding the system
 - Effective data policy
 - Infrastructure
 - Ethically open access
 - Attribution
 - Standards and interoperability









http://arcticdc.org

Statement of Principles and Practices for Arctic Data Management April 16, 2013

All MSC-endorsed scientific results shall be verifiable and reproducible through ethically open access to all data recessary to produce those results. Data shall be preserved, accessible, and used in accordance with scientific norms of fair attribution and use.

To this end, IASC Council approves the following actions:

- Endorsement of the Statement of Principles and Practices for Arctic Data Management;
- 2. Establishment of an IASC Data Standing Committee:
- 3. To undertake measures towards adoption of national data policies consistent with



More information: www.arcticobserving.org

