



## The Sustaining Arctic Observing Networks (SAON): Status

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### Background

The purpose of the Sustaining Arctic Observing Networks (SAON) is to support and strengthen the development of multinational engagement for sustained and coordinated pan-Arctic observing and data sharing. SAON has been established on the initiative of the Arctic Council (AC) and the International Arctic Science Committee (IASC).

In 2014 SAON established two committees: the Arctic Data Committee (ADC) and the Committee on Observations and Networks (CON).

### The Arctic Data Committee

The SAON Vision is that users should have access to free, open and high quality data that will realize pan-Arctic and global value-added services and provide societal benefits. The Committee should give advice to the SAON Board on how to meet this vision from the point of view of information and data services keeping in mind the IASC Statement of Principles and Practices for Arctic Data Management. When the work involves traditional and local knowledge of Arctic Communities, particular consideration has to be given to sharing practices for sensitive information.

The Committee has defined these work packages:

- *Establishing a map of the arctic data management “ecosystem” or “universe”.* This will be both a concept map indicating projects, services and relationships as well as a geographic map indicating location. Lead: Dr. Peter Pulsifer, ELOKA/NSIDC, USA
- *Identifying and promoting common metadata elements.* The work package will develop recommendations on a common set of metadata elements relevant across Arctic sciences, to facilitate interoperability and

sharing between Arctic data repositories and online portals. To start, this effort will focus on identifying Arctic data centres or initiatives that have established a metadata template/schema/profile etc. Initially, a limited set of disciplines or focus areas will be identified to make the scope manageable. Wherever possible and practical, the effort will build on and/or contribute to other related initiatives. Lead: Dr. Julie Friddell, Polar Data Catalogue, Canada

- *Engaging in data citation and publication movement.* The work package will provide a report and guide on data publication and citation for Arctic researchers. This would provide the Arctic community with a resource to help researchers to understand developments in this area, including DOIs (Digital Object Identifiers). Lead: Alex Tate, British Antarctic Survey, UK
- *Interoperability experiment.* This work package will bring together a number of data services under a single interface to address Societal/Science Priority Areas. The key focus will be selected areas of societal significance including health and well-being, food security, freshwater security, built infrastructure, coastal and riverine vulnerability, and teleconnections. Lead: Jointly led with early participation interest indicated by Canada, Iceland, Norway, United Kingdom, United States

Peter Pulsifer, NSIDC, USA is the chair of the ADC. More information: <http://arcticdc.org>

## The Committee on Observations and Networks

The Committee should give advice to the SAON Board on how to fund, coordinate and expand the scope of arctic observational activities and address the questions of how to ensure sustainability of observational platforms in the Arctic and how easier access to them can be achieved. It should also ensure the promotion of community-based monitoring within SAON and work on best practices for the utilization of traditional knowledge within Arctic observing activities

The projects (in progress) for the SAON Committee on Observations and Networks (CON) are:

- *Atmospheric observations initiative.* A lot of information is collected on a wide temporal range through a large number of different actions. The project will seek to understand the status of Arctic observations, both in terms of spatial and temporal coverage. It will investigate the capability to monitor the vertical atmospheric column and the capability to provide useful information to models.
- *EU PolarNet.* The AC Working Group the Arctic Monitoring and Assessment Programme is involved in the EU Horizon 2020 project EU PolarNet. AMAP is co-lead for three work packages: “Strengthen international cooperation and implement the Trans-Atlantic Research Alliance”, “Optimisation of existing monitoring and modelling programmes”, and “Data Management and Interoperability”. CON will be involved in this work, mainly in the “Optimisation of existing monitoring and modelling programmes”.
- *CBM atlas.* A proposal on “Developing a Mechanism for Community-Based Monitoring (CBM) Projects to Contribute to Terrestrial Biodiversity Monitoring Assessments” has been submitted to Polar Knowledge Canada, formally the Canadian High Arctic Research Station (CHARS). Several objectives directly support SAON CON objectives: Inventory of CBMs and Indicator Networks/observing system identification.
- *Indicators network.* Indicators are observations or calculations that can be used to track conditions and trends, and Arctic indicators are a priority under the US chairmanship of the Arctic Council. The US Global Change Research Program has developed an indicator concept, and CON is investigating how this can be used in an Arctic context.
- *Inventory of AC Working Group projects.* A need has been identified to create a better overview of ongoing activities of the AC Working Groups. This will allow better coordination with AC countries.

Lisa Loseto from Fisheries and Oceans, Canada is the chair of the Committee. More information: <http://www.arcticobserving.org/committees/con>

## Governance

Members of the SAON Board are the Arctic states, the Permanent Participants and Working Groups of the Arctic Council, non-Arctic states and regional and international organisations with an interest in Arctic observational activities. The SAON Executive Committee is responsible for overall governance issues and meets approximately once a month. Currently, USA represents the Arctic countries in the Committee, while the Inuit Circumpolar Council (ICC) is the member for the AC Permanent Participants.

Christine Daae Olseng from the Norwegian Research Council is the Chair of SAON, and Larry Hinzman from University of Alaska is the vice-Chair.

SAON is involved in the organization of the Polar Data Forum (<http://www.polar-data-forum.org>) and the Arctic Observing Summit (<http://www.arcticobservingsummit.org>).

The AMAP and IASC Secretariats contribute resources to the SAON Secretariat. More information about SAON is available at [www.arcticobserving.org](http://www.arcticobserving.org). The SAON Secretariat can be reached through [jan.rene.larsen.amap.no](mailto:jan.rene.larsen.amap.no).