



Agenda Item 15

AMAP WG30/15/4

Helsinki, Finland, 28 November – 1 December 2016

Sustaining Arctic Observing Networks (SAON)

Prepared and presented by AMAP Secretariat

18 November 2016

Background:

The document gives an overview of the status and activities of SAON

Requests to WG:

For information

SAON Status

External review - follow up

The external review recommended that SAON should focus on

- Refining its vision, mission and goals,
- Improving its organizational structure,
- Focusing on funding and sustainability,
- Increasing outreach and communication

The review was presented to the SAO meeting in October 2017. The summary from the meeting says that “The SAOC noted that everyone supports the idea of SAON, and that the entity has had a number of successes in its first 5 years. Nonetheless, SAON is evolving, and this review process has delivered some good ideas for potential improvements to SAON, and for ways in which the Council can help it to improve.”

The SAON Executive is currently developing a strategic plan for SAON. It will address the bullets above and will be discussed during a physical Board meeting 11th January 2017 in Washington DC. The Board is also planning a physical meeting during ASSW in Prague, Czech Republic in April 2017. The SAON Committees will be invited to join part of this meeting.

Arctic Data Committee (ADC)

The overarching purpose of the ADC is to promote and facilitate international collaboration towards the goal of free, ethically open, sustained and timely access to Arctic data through useful, usable, and interoperable systems.

ADC co-organised a workshop on data interoperability in Frascati, Italy in October 2016 and met physically for the third time. The workplan for ADC has these tasks:

- Documenting and understanding the Arctic data management ecosystem
- Defining a polar metadata profile
- Defining persistent identifiers for data sets
- Updating the Terms of Reference and establishing MoUs with SCADM and SOOS

Peter Pulsifer, NSIDC, USA is the chair ADC. Tacoma Tacoma (The Netherlands) and Stein Tronstad (Norway) are vice-chairs.

Committee on Observations and Networks (CON)

The committee advises the SAON Board on co-ordination/collaboration of Arctic observing activities and addresses questions regarding sustainability of observational platforms among nations and organizations (including indigenous peoples) to improve efforts on Arctic sustaining observing networks (i.e. identify synergies, gaps, duplication) and to enable effective planning (including funding) of current and future observational systems. 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.

CON has contributed to the compilation of the information underlying the EU-PolarNet inventory of existing polar monitoring and modelling programmes¹.

The Committee is currently updating its Terms of Reference. As a part of this, CON plans to strengthen its role as the framework for Arctic observing networks. Lisa Loseto, DFO, Canada, is the chair of CON, and Hannele Savela (Finland) is the co-chair.

Arctic Science Ministerial meeting

The White House Arctic Science Ministerial was held 28 September 2016, Washington, DC, USA. The joint statement mentions SAON as a critical contributor to 'Strengthening and Integrating Arctic Observations and Data Sharing'².

The associated Fact Sheet³ informs that the U.S. National Oceanic and Atmospheric Administration (NOAA) will open a U.S. SAON Office: "It will foster interagency and international collaboration in the development of Arctic observing and data systems, as well as the delivery of higher-level data and information to the scientific community and policymakers".

The Fact Sheet mentions two initiatives as being established in support of SAON:

- "EyesNorth," a U.S. National Science Foundation research-coordination network of community-based observing initiatives in the Arctic and beyond. It involves scientists and northern residents in Finland, Greenland, Iceland, Norway, the Russian Federation, Sweden, the United States, and elsewhere.
- Norway is establishing SIOS (Svalbard Integrated Arctic Earth Observing System), a research infrastructure coordination organization of 26 partners from Europe and Asia.

Arctic Observing Framework

As a follow up to the Arctic Science Ministerial, the SAON Board has been invited to contribute to an initiative led by the Science and Technology Policy Institute (STPI) in Washington DC. The initiative will facilitate an international effort to identify common objectives that rely on earth observing data to deliver societal benefit in the Arctic. The initiative will convene a workshop 12-13 January 2017. In preparation, STPI has reviewed international Arctic strategy documents and identified the notional Social Benefit Areas listed in the Appendix. The SAON Board has nominated members to the workshop organizing committee and Subject Matter Experts. SAON is expected to coordinate the implementation of a pan-Arctic observing system⁴, and the framework can serve as a valuable input to this process.

¹ http://www.eu-polarnet.eu/fileadmin/user_upload/www.eu-polarnet.eu/Members_documents/Deliverables/WP2/D2_3_Inventory_of_existing_monitoring_and_modelling_programmes.pdf

² <https://www.whitehouse.gov/the-press-office/2016/09/28/joint-statement-ministers>

³ <https://www.whitehouse.gov/the-press-office/2016/09/28/fact-sheet-united-states-hosts-first-ever-arctic-science-ministerial>

⁴ <http://www.arcticobservingsummit.org/aos-2016-conference-statement-0>

Communication and outreach

Arctic Circle

The Group on Earth Observations (GEO) had organized a plenary session on the status of observations in the Arctic. The SAON vice-Chair, Larry Hinzman, participated in the panel and gave presentations on AMAP and SAON.

European Polar Board

Ulf Jonsell (member of the SAON Board for Sweden) presented SAON at the meeting in Stockholm in April 2016.

GEO-XIII Plenary

The GEO-XIII Plenary was held in St. Petersburg, Russian Federation in November 2016. SAON is a Participating Organization to GEO, acting as the Arctic Extension/Liaison for GEOSS/GEO, and SAON contributes to GEO's 'Cold Region Initiative' (GEOCRI).

During the plenary, a presentation was given to a GEOCRI side event, which was co-chaired by Hannele Savela.

SAON had submitted a statement to GEO-XIII, emphasizing its contribution to GEOCRI:

- Developing inventories of Arctic observational assets, including organizations, programs, projects, networks and systems
- Documenting and understanding the Arctic data management ecosystem
- Maintaining an atlas of Community Based Monitoring

Arctic Observing Summit (AOS)

AOS is a joint effort of the International Study of Arctic Change (ISAC) and SAON. The Executive Committee has been established, and the next AOS will be held during ASSW in Davos, Switzerland, June 2018⁵.

Integrated Arctic Observing System - INTAROS

INTAROS is an EU-funded Horizon 2020 project, led by Nansen Environmental and Remote Sensing Center, Norway. The overall objective is to develop an efficient integrated Arctic Observation System by extending, improving and unifying existing and evolving systems in the different regions of the Arctic.

The objectives for the six main work packages are

1. Establish a Pan-Arctic forum for collaboration across EU and non-EU countries and transnational organisations (WP1)
2. Develop a Roadmap for building a sustainable Arctic observing system (WP1)
3. Exploit existing observing systems and databases (WP2)
4. Fill gaps of the present in situ observing systems (WP3)
5. Enhance community-based observing programmes (WP4)
6. Develop and implement the iAOS platform for integration of multidisciplinary data from distributed repositories (WP5)
7. Develop professional skills in using the iAOS platform (WP5)
8. Use of data in numerical models, collaboration with APPLICATE and BLUE ACTION (WP6)
9. Demonstrate benefit of data from INTAROS for stakeholder groups (WP6)

⁵ <http://www.polar2018.org>

The requirement in the call is that the project should contribute to implementing the Transatlantic Ocean Research Alliance, SAON and GEOCRI. WP1 will “review the high-level requirements and develop the strategy for the Pan Arctic Observing system based on GEO Cold Region Initiative (CRI), SAON and other international initiatives, related to the Arctic and European Blue Growth strategy”.

Project kick-off will be in January 2017, and a meeting with the SAON chairmanship will be arranged, also in January.

Appendix: Notional Arctic Observation Societal Benefit Areas

Energy and Mineral Resources

Environmental Quality

Food Security

Fundamental Understanding of Arctic Environmental Systems

Human Health and Well-Being

Safe and Resilient Infrastructure

Marine Ecosystems and Processes

Resilient Communities (including energy security, infrastructure security, water security)

Terrestrial Ecosystems and Processes

Weather