



## CANADA

**Title: A Path Forward for SAON Canada**

### **Background:**

The purpose of Sustaining Arctic Observing Networks (SAON) is to enhance Arctic-wide observing activities by facilitating partnerships and synergies among existing observation and data management activities, and to promote sharing and synthesis of data and information. As a member state of the Arctic Council and the International Arctic Science Committee (IASC), Canada has established a SAON National Coordinating Committee (SAON Canada) to coordinate its activities. SAON encourages sustained and coordinated pan-Arctic observing and data sharing to serve societal needs, particularly those related to environmental, social, economic and cultural issues. Canada shares the SAON vision that users of observations have open access to data to realize pan-Arctic and global value-added services and societal benefits.

### **SAON Canada – Coming of Age**

The SAON Canada Coordinating Committee is responsible for engaging its members to work together to attain the SAON vision. Members of the National Committee represent federal and territorial governments, academia, Aboriginal groups, and other representative organizations. One of the first initiatives undertaken was the compilation of an inventory of current Arctic observing networks in Canada (2009; the first comprehensive inventory of observing initiatives compiled in Canada).

Since 2009, additional information on Arctic observing systems has been compiled by the Government of Canada as a component of an initiative called “Federal Integrated Network of Science and Technology- FINEST”. Further to that exercise, the SAON Inventory is being updated and expanded to include those elements from the inventory of monitoring efforts that were included in the FINEST work of 2011.

Building on this baseline initiative, and to offer a more comprehensive inventory, data and knowledge from Community-based Monitoring (CBM) activities in the Arctic are being included to ensure that the value and benefits of CBM are adequately reflected in the SAON Inventory. This work is being undertaken in collaboration with the Inuit Circumpolar Council (ICC) and other partners across the North.

In order to more widely share SAON Canada information, a new website has been launched: [www.arcticobservingcanada.ca](http://www.arcticobservingcanada.ca). It is linked to the international SAON website [www.arcticobserving.com](http://www.arcticobserving.com), and will enable readers to review the Inventory, and to link to other Canadian Arctic initiatives such as the Canadian High Arctic Research Station, the Canadian Network of Northern Research Operators, ArcticNet, the Centre d'études nordiques, etc. A geo-referenced visualization tool on this new site will allow users to easily discover many of the existing networks and data-sets.

### **SAON Canada – Re-thinking Connections**

All parties with interests in Arctic monitoring recognize that the existing monitoring networks generally lack coordination across their various functions. At present, Arctic observing programs, as well as data collection and management activities, are scattered and housed in many organizations and jurisdictions, sometimes at the individual researcher level. There is an increasing willingness to work more closely together and across disciplines; we believe that further optimization of observing and data management can be achieved by working more collaboratively.

The new SAON Canada web site will serve as a window to Canadian Arctic observing networks and their activities. The site will begin to provide “one-stop shopping” within Canada for both Canadian and international scientists, policy and decision makers, and will enhance connections both nationally and internationally. The site will direct users to the wide range of available data and to the key contacts responsible for each network. The geo-referenced mapping tool that is under development will facilitate data and information sharing, and endeavour to help users to work together to better discover, coordinate and integrate their data and knowledge. Recognizing that there are other initiatives underway across Canada to develop web-based geo-referenced mapping tools, we are working with others to build synergies and ensure effectiveness in attaining our common objectives.

This national work will facilitate our participation on the international scene.

### **SAON Canada – Ways and Means Forward**

This work will align with and link to other efforts within the Government of Canada to improve data interoperability, and the overall efficiency of data gathering, interpretation and application. Observing activities in the Canadian Arctic will ideally share common standards and a common but distributed data platform that would facilitate easy retrieval and interpretation. Such platforms exist; it is time to agree on a way forward across the range of fields of observation and disciplines.

As in any collaborative activity, the first step is to agree to work together. Playing as a team requires letting go of some control of data, and trusting the other partners. It does not mean relinquishing control of initiatives and leadership on them, to the contrary.

The next steps would see involved parties pooling their efforts and energies to increase the accessibility and interoperability of datasets. It does not mean starting from scratch, because some of this work is already underway or has been completed (e.g., through the Arctic Council's Circumpolar Biodiversity Monitoring Program).

This proposed way forward for SAON Canada will enable observing networks to share and display current observation activities on a geospatial platform, and to improve access to Arctic data. As a result of this initiative, it is envisioned that researchers within existing and future observing networks will discover opportunities to work in closer coordination with other researchers to utilize data and work across disciplines and its ensuing benefits for all.

At the Arctic Observing Summit, 2013, we will engage interested parties in a discussion of options for moving forward on this initiative, and in particular address some of the issues we face. These include how to share data that may not yet have been published; how to include traditional ecological knowledge; what is required on a practical level to improve data accessibility and interoperability; what to do about legacy data that are not in digital form; and what platform(s) or systems to use to access, display and (potentially) house data.

Helen Joseph  
Director, Oceanography and Climate Branch  
Fisheries and Oceans Canada  
Canadian National SAON Representative - ([helen.joseph@dfo-mpo.gc.ca](mailto:helen.joseph@dfo-mpo.gc.ca); 613-990-6930)

And

Jean-Marie Beaulieu  
Senior Science Advisor  
Canadian Polar Commission  
Canadian SAON Secretariat - ([jean-marie.beaulieu@polarcom.gc.ca](mailto:jean-marie.beaulieu@polarcom.gc.ca); 613-947-9108)