Plan for Initiation of the Operational Phase of SAON. September 23, 2010 (draft).

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Plan for Initiation of the Operational Phase of SAON

September 23, 2010 (draft)

Executive Summary

To be prepared by co-chairs.

1. Introduction and Drivers of SAON

The Sustaining Arctic Observing Networks (SAON) process has been underway since early 2007. Its purpose is to support and strengthen the development of multinational engagement for sustained and coordinated pan-Arctic observing and data sharing systems that serve societal needs, particularly related to environmental, social, economic and cultural issues. SAON promotes the vision 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. Its goal is to enhance Arctic-wide observing activities by facilitating partnerships and synergies among existing observing and data networks (“building blocks”), and promoting sharing and synthesis of data and information. SAON also wants to facilitate the inclusion of Arctic Indigenous peoples in observing activities, in particular by promoting community-based monitoring (CBM) efforts. SAON itself will not undertake observations, archive data, or provide funds for these efforts, which will remain the responsibility of either the ongoing networks or the organizations that support them.

The history of development of SAON parallels the development of the International Polar Year 2007-2009. The scoping document for the IPY called for a legacy of sustained Arctic observing. The Arctic Council recognized its potential role in creating this legacy and included in its Salekhard Declaration (2006) the request for Arctic states and partners to work toward such a capability, leading to creation of the SAON Initiating Group and its report. The Council reiterated its desire for an international approach to sustained Arctic observing in the Council’s Tromsø Declaration (2009), which established a defined SAON Steering Group to guide the effort.

The final report of the SAON IG provided the rationale for SAON: “Climate change, contamination, biodiversity loss and changes to the physical environment of the Arctic have serious impacts both inside and outside the Arctic. Trends indicate that the severity of the impacts is projected to increase in the near future. Natural capital and prospects for human development may be undermined. Arctic countries and their people are faced with new environmental, economic and societal challenges. Global activities affect the Arctic environment while changes in the Arctic environment have global consequences. Hence, the broader global community must be engaged in improved monitoring of the
Arctic to better understand the changes and their affects, and must address the social and human
dimension in Arctic observation. The need for comprehensive, sustained and interdisciplinary Arctic
observations and data management has been identified previously in the Arctic Climate Impact
Assessment (ACIA) and the report of the International Conference on Arctic Research Planning (ICARP
II), among others. Although the International Polar Year 2007-2008 (IPY) has provided an opportunity
to implement new observing activities in the Arctic, and even though there are a wide range of
ongoing observing programs, networks and existing observational platforms, many Arctic observing
activities are still fragmentary and exist in varying stages of development. From the present
fragmentary state, there is a need to fill spatial, temporal and disciplinary gaps in observing records,
to strengthen the sustainability of observing programs, and make data readily available.”

More recently the State of the Arctic Conference (2010) noted the environmental drivers for an
observing effort in its Conference statement: “The Arctic is changing rapidly. Human activity is a
contributing factor to the changes that are observed across the Arctic, including increased air
temperatures, changing ocean circulation, rising sea level, reduced sea ice cover, and thawing
permafrost. These changes are affecting ecosystems, living resources, and people, including
those outside of the Arctic. The speed of change has surprised scientists, exemplified by
events such as the large sea ice retreat and record minimum in summer of 2007. Given the
non-linear nature of many processes that govern the physical, biological, and human systems
in the Arctic, further surprises are likely.” The SOA Conference Statement included as one of two
goals: “To leverage the capacity of arctic nations, organizations, and agencies to expand support
and coordination for arctic science”. The Statement made four recommendations, of which two
are: “Fully Implement a Coordinated, Multi-Disciplinary Arctic Observing System” and “(Allow)
Open Access to Arctic Areas and Data”.

Most recently, the Arctic Council held its first meeting of Deputy Ministers, who reviewed the
status of SAON. The report from this meeting states that “the task oriented, step wise approach was
applauded” and that the “SAON SG was encouraged to work towards consensus on an institutional
framework to present to SAOs in October 2010”.

2. Review of SAON Initiating Group Process and Report

The Sustaining Arctic Observing Networks Initiating Group (SAON-IG) was formed in January 2007,
and consisted of 13 international organizations representing the Arctic Council, Arctic residents, the
Arctic research community and operational and funding agencies.

The SAON-IG agreed as its mission to develop a set of recommendations on how to achieve long-
term Arctic-wide observing activities that provide free, open and timely access to high quality data
that will realize pan-Arctic and global added-value services and provide societal benefits.

The first step towards achieving this mission was to solicit input from a broad community. The
group facilitated three international workshops and two regional meetings that were broadly attended
by representatives of the science community, operational agencies and indigenous peoples.

Building on the contributions from approximately 350 experts and participants at these workshops
and meetings, the SAON-IG developed the following Recommendations:
1: The Arctic Council (including permanent participants and observers) should lead the facilitation of international collaboration among government agencies, researchers, and northern residents, especially indigenous peoples at the community level, to promote a sustainable pan-Arctic observing system.

2: The governments of the Arctic Council member states should commit to:
   - Sustaining their current level of observing activities, and data and information services, and making every reasonable effort to increase the scope of those activities in the future;
   - Creating a data dissemination protocol to make data and information freely, openly and easily accessible in a timely fashion at minimal costs to users, taking into account relevant national legislation, and seek to ensure that relevant national organizations adhere to similar policies.

3: The Arctic states are urged to increase inter-governmental cooperation in coordinating and integrating Arctic observing activities, and associated data and information management. In order to facilitate this and the efficient operation of an Arctic Observing Forum, each of the Arctic states is encouraged to create a national interagency group to coordinate and integrate their Arctic observing activities, and resulting data and information services. These groups shall form the basis for increased inter-governmental communication and cooperation on Arctic observing.

4: Recognizing that the Arctic issues are of global common concern and that they are of scientific interest to all states, the Arctic Council member states are urged to welcome non-Arctic states and international organizations as partners to the inter-governmental cooperation that will be necessary to sustain and improve Arctic observing capacity, and data and information services. Non-Arctic states are therefore also encouraged to adopt, support and implement actions that are recommended to the Arctic states in 1-3 above.

Timeline and Actions

(i) The SAON IG Report was delivered to the Arctic Council and partners in December 2008 and was on the agenda for the Arctic Council Ministerial Meeting in April 2009. (All SAON-IG recommendations were agreed, except for establishing the Arctic Observing Forum)

(ii) AMAP, IASC and SAON-IG members to actively communicate SAON Recommendations to people and agencies in the Arctic and non-Arctic countries. (In addition to using the website – www.arcticobserving.org – this action was followed up by presentations at numerous international meetings, such as the EU Monaco meeting, the UNESCO Monaco meeting, Arctic Parliamentarians etc.)

(iii) The SAON Helsinki workshop provided guidance as to next steps and actions:
   - An inventory of existing networks and programs
   - Support for the development of long-term data management systems
   - Encourage commitments for sustained coordination and funding of observations, and
   - Establishment of an organization to continue the work of the SAON-IG

In conclusion, the SAON process initiated by the SAON-IG was very successful and paved the way for the SAON-IG successor.
3. **SAON SG Priorities and Accomplishments**

At their meeting in Tromsø in April 2009, Arctic Council (AC) Ministers agreed:

- That the Arctic Council should take the lead in implementing the SAON process together with the International Arctic Science Committee (IASC) and the World Meteorological Organization (WMO).
- To establish a SAON Steering Group (SAON SG) consisting of representatives of each of the 8 Arctic Council member states, AC Permanent Participants, AC Working Groups, IASC and WMO, to develop an institutional framework and a work plan.

They further recommended that:

- Arctic Council member states should:
  - sustain and increase current level of observing activities and data and information services,
  - create a data dissemination protocol,
  - Each Arctic state should create a national inter-agency group, which should form the basis for increased inter-governmental cooperation.
  - Each state should welcome non-Arctic states in this intergovernmental cooperation, and adopt, support and implement the recommendations above.

Establishing a new SAON body (SAON SG) was a challenge as many new persons came in, and only a few had a SAON background.

However, in June 2009 the first teleconference was held at which four priority areas were agreed:

- Inventory of existing networks
- Data access and sharing
- Community-based monitoring
- Multinational collaboration among funding and implementing agencies.

In addition, it was agreed that a SAON Brochure should be worked out as well as up-grading the web site and moving it to become a part of the Arctic Portal.

3.1 **Inventory of existing networks**

The SAON IG had made a preliminary listing of international/multinational networks undertaking Arctic observing. However, less was known on a national basis and with national representatives being present on the SAON SG, we had a unique opportunity in finding out.

The main objective of this task was to ensure that each country knew which networks they already had, and thereby prepared to discuss cross-border cooperation.

It turned out to be more demanding than initially anticipated, partly because some national
representatives only represented their own agency as no national inter-agency group was formed. Consequently, the national representative had to collect information from other agencies without a formal authority to do so.

After some guiding, support and help national inventories are available and can be accessed on the web site: [www.arcticobserving.org](http://www.arcticobserving.org)

Lessons learned:

- All countries must comply with the recommendation on creating a national inter-agency group, or at least a similar mechanism supported at national level. Working out these national reports demonstrated the need for them, and when starting on inter-governmental observing cooperation even more so.

- The most useful lesson learnt was at national level discovering all their national observing networks with overlaps and gaps, and consequently an interesting opportunity for coordination and savings. In some countries, it started a national process as various agencies got to know more about each other Arctic observing and the potential for cooperation.

As mentioned, these inventories are important tools for inter-governmental cooperation, and should be supplemented as non-Arctic states and international organizations/networks join the SAON.

3.2 Data access and data sharing

The SAON SG joined with the IPY Data Management Committee to conduct a data management workshop in Oslo, Norway on June 7-8 prior to the start of the 2010 IPY Conference. The goal of the workshop was to reach a common understanding on the goals and scope of the SAON data management activities; address the question of how to ensure relevant stakeholder input; identify key areas for further work; establish a work plan (including responsibilities for implementing one or more demonstration projects on inter-network data collaboration, focusing on identified key issues); outline the recommended approach for developing the SAON data strategy and related SAON data policy; and propose concrete activities to address identified ‘key issues’.

Outcomes of the Oslo workshop:

- The initial focus of the SAON data strategy should be on primary/raw observational data (as opposed to summary data/data products/metadata). As well, data access should focus on the scientific community (as opposed to the wider public) during the initial phase. This will enable the first level of capability to be established making the next step of serving data products to policy makers and other decision makers possible.

- When developing SAON data management activities there are four specific areas that the SAON SG should focus on. These include data sharing; interoperability; preservation of data through sustainable, long-term archiving that has dedicated funding; and governance.
• Additionally, the SAON SG should identify national points of contact for participating SAON network affiliations that will be accountable for coordinating national data.

• Not all disciplines handle data collection, labeling, or management in the same way. Therefore it is recommended that the SAON SG propose specific definitions regarding data collection, labeling, and management requirements for various disciplines. These requirements should be inclusive and comprehensive according to a common framework, and take into account relevant existing data management procedures.

• The SAON SG, assisted by data management experts, should develop some form of statement outlining the principles/guidelines for SAON data management. This statement could take the form of a charter or something similar; SAON should not attempt to define a ‘SAON data policy’; presenting only a list of ‘best practices’ was considered too weak.

• The SAON data statement should support and promote the concepts of ‘free, open, and timely (i.e. shortest possible time for) access to high-quality data …’ at the same time recognizing legitimate restrictions and practicalities.

• SAON should acknowledge the need for sustained long-term data archives; promote efforts to ensure that data are archived in these repositories. If such archives do not exist, SAON should promote efforts to establish (and fund over the longer-term) such archives. Every SAON network must have access to one or more long-term sustained data archive.

• The SAON data management strategy should acknowledge that different data types (TEK, research data, operational monitoring data, etc.) require different solutions (there is no one-size-fits-all data solution).

• SAON needs to recognize that affiliated networks/program have their own established data policies that apply to providers of data and users of data. SAON should endeavor to ensure that, as they are developed over time, the data policies operated by SAON partner programs/networks aspire to and are compatible with the general SAON data management principles as stated above.

• Funding for data management should be an integral part of funding for all data collection activities. Funding needs to be allocated to both project/program (i.e. data collection)-related expenses and long-term data archiving expenses. If necessary (to ensure open and timely access to data) funding agencies should consider using holdback of funding until data have been appropriately archived and are accessible.

• SAON should support standardization of metadata and could attempt to define its own (high-level) metadata standard based on existing activities (e.g. extension of IPY activities in this respect).

• SAON should encourage publication (of data) in open access journals.

• SAON could consider a data dissemination protocol based around the (Arctic) member states and national SAON implementation approaches.

• SAON needs to conduct additional work to gain perspectives relating to data management associated with social-economic sciences as these groups were under-represented at the data management workshop.

3.3 Community-based monitoring
As requested by the SAON SG, a group was formed consisting of Arctic Council Permanent Participants (PPs), CAFF and SAON representatives, which worked out a proposal on how to move forward on the inclusion of local traditional knowledge (LTK) and CBM into SAON. The group proposed to first conduct an inventory to evaluate current use of LTK and CBM projects. As another step a workshop was recommended which would bring together experts on CBM and the use of LTK to discuss experiences so far and propose next steps. The SAON CBM/LTK group got further support from the project ELOKA (Exchange for Local Observations and Knowledge of the Arctic). A workshop was held in Ottawa which brought together people involved in ELOKA, SAON, and other CBM/LTK projects. It was discussed how interested groups can work together. Representatives from ELOKA provided a proposal for the SAON Agency Officials workshop in Miami, and were also part of the data management workshop organized by SAON. Details on outcomes of those meetings are outlined below.

Outcomes of the Miami workshop with regards to CBM/LTK:

- It was suggested that ELOKA should be used as an initial project that can be promoted within SAON.
- It was determined at the SAON funding agencies meeting in Miami that in order to ensure successful sharing of health data, guidelines for standards and health ethics need to be developed early on. Especially health data from Arctic communities is very sensitive, and it is unlikely that communities would want to make the data publicly available, unless certain standards are being met.

One urgent area that needs development for supporting community-based monitoring is data management. Currently, data management for CBM is done on a project by project basis, with varying outcomes and products. Priority should be placed on developing a circumpolar network for supporting CBM and data management services for Arctic LTK and community based observations so that this information can be protected and shared within and across projects, communities, and nations.

Members of the polar data management community met while in Oslo to discuss the development of a metadata profile for both Arctic and Antarctic polar data. Metadata is a set of information that captures the basic characteristics of a data resource. A metadata profile is a set of required fields and vocabularies for a given metadata standard. The need to consider CBM and LTK requirements in such a profile was raised in the meeting. Peter Pulsifer of the ELOKA project volunteered to contribute to the metadata profile working group to help identify and meet these requirements.

Specific recommendations to SAON regarding CBM and LTK

- LTK and CBM need a prominent role and priority in SAON
- One priority can be the development of a strategy to strengthen and expand a comprehensive CBM program

ELOKA, in consultation with the emerging circumpolar network described, should be used to take a
leading role in the development of this international strategy, with a focus on support services for LTK and CBM projects (as the needs and goals of CBM around the Arctic vary).

3.4 Multi-national collaboration among funding and implementing agencies

The SAON SG organized a workshop for representatives of observing funding and implementing agencies to seek their views on feasible mechanisms for harmonizing actions involving priority-setting, decision-making, and implementation regarding long-term observing activities in the Arctic. The participants view on priorities for SAON greatly influenced the content of this implementation plan.

In summary, the agency officials stated that SAON needs to demonstrate value added to activities already underway. Key activities could focus on drawing connections between groups or disciplines, promoting standardization, promoting data sharing and access, and developing information products useful to end users. They also stated that there needs to be a central component of SAON in some form and that governmental commitments would be required if SAON is to be successful. They confirmed that within country coordination would be essential to the success of SAON.

Participants suggested several possible tasks for SAON, many of which are reflected in the task proposals that have been submitted to the SAON SG. It was suggested strongly that an initial set of priorities be established along with an “institutional framework” for the long-term conduct of SAON.

3.5 SAON web site

The SAON SG agreed that the SAON website needed a permanent home and to be updated on a regular basis. An offer from Iceland was accepted to house the SAON website as part of the Arctic Portal complex, and this has worked very well. As part of the transition to an operational state, additional effort will be needed to make the SAON website be a primary source of information on Arctic observing and data sharing.

4. Relationship Between SAON and Other Polar Initiatives and Priorities

4.1. Arctic Council IPY Legacy Project

The Norwegian Polar Institute convened a workshop during the IPY Conference in Oslo in June, 2010 to gather information on priorities for inclusion in the Arctic Council’s contribution to the legacy of the IPY. Several of the ideas discussed fall within the scope of the operational phase of SAON. For example, the Chair’s Report from the Workshop on the legacy of the International Polar Year, includes the following recommended follow-up actions:

- National authorities and funding agencies should be encouraged to develop and use procedures which require data management and sharing.
- The development, support and use of the Polar Information Commons (PIC) should be encouraged to be used as the mechanism for sharing of data and information from the IPY and spin-off activities.
• Arctic collaboration on logistics, science and monitoring should be strengthened, aiming for
developing the Arctic Ocean as an “Ocean of Science” and the Arctic area as a whole as an
“Area of cooperation”.

These are the recommended actions from the workshop that relate to data access and sharing,
and to collaboration on monitoring. Creating the operational phase of SAON would be a significant
step toward initiating these actions.

4.2. International Polar Decade

The World Meteorological Organization has proposed establishing the International Polar Decade
(IPD) to capitalize on the science, technology, and infrastructure employed during the IPY, and to
maintain the level of international cooperation displayed during the IPY. But the IPD would be more
focused on a small set of themes and projects. These projects still need to be defined, but likely
would be confined to those that would benefit from a decadal perspective, require international
cooperation, and address important societal needs.

If the IPD is established as an international activity, then the operational phase of SAON could be a
significant contribution by the AC and the IASC to the IPD. The countries providing support to SAON
likewise could count SAON as one of their contributions to the IPD.

5. Transition of SAON to an Operational Activity

5.1. Scope of the operational phase of SAON

The SAON Steering Group proposes that the SAON process be transitioned from a planning phase
to an operational phase and that SAON be recast from the “Sustaining Arctic Observing Networks
process” to the “Sustained Arctic Observing Networks Program”. The purpose of the SAON Program
will be to continue to advance the SAON goal - to enhance Arctic-wide observing activities by
facilitating partnerships and synergies among existing “building blocks”, and promoting sharing and
synthesis of data and information - and SAON will do so through a task-oriented approach intended to
produce specific improvements in Arctic observing and data sharing. In order to be clearer about the
scope of effort to be undertaken by SAON, the SG proposes the following “rules” for SAON tasks:

SAON will not undertake observations, conduct research, perform scientific analysis or
assessment, nor be a source of funding for these activities. SAON will identify issues, gaps and
opportunities related to Arctic observing and data sharing and take a multi-national approach
to demonstrate improvements to the current situation. SAON will work with a broadly defined
Arctic observing community and with national and multi-national organizations and non-
governmental partners to define and undertake its tasks.

Given this scope and the nature of the tasks already submitted, it seems that the immediate
future of SAON work will focus on metadata standards, data integration and access, decision-support
tools, and workshops aimed at improving the state of Arctic observing and data management. The
SAON SG also has agreed that SAON should focus on multinational approaches, meaning that any task
undertaken by SAON should involve participants from at least three countries, with both Arctic and
Recognizing that the ultimate aim of SAON is to provide societal benefits, the SAON SG developed the following "logic model" to demonstrate how specific SAON tasks could lead to societal benefits. Four societal benefits were chosen, one or more key need(s) identified for each, and specific submitted SAON tasks aligned to show how SAON would help meet the need and produce the benefit.

1. Improve the management of Arctic natural resources
   - Key Need: Describe the status and trends of key ecosystems and natural resources
   - SAON Task: Demonstrate use of existing databases for development of ecosystem services for decision makers (improve integration of and access to data on key species, resources, and environmental variables; examine existing CBMP data bases as a test case for SAON)
   - SAON Task: Improve GIS based mapping tools to support resource management

2. Sustain and enhance quality of human life in the Arctic
   - Key Need: Describe status and trends of human health; and of social, cultural, and economic conditions
   - SAON Task: Improve integration of and access to data on human health and on social, cultural, and economic variables

3. Enable effective societal response to a changing Arctic environment
   - Key Need: Improve observations of the Arctic environment
     - SAON Task: Create electronic geospatial depictions of existing observing platforms and their sensors and samplers (build upon existing national observing inventories)
     - SAON Task: Promotion of CBM and access to CBM data (for example through ELOKA), convene topical workshops focused on CBM and inclusion of LTK
     - Key Need: Improve integration of and access to data bases of key climate and environmental variables (SAON)
       - SAON Task: Improve interoperability of metadata and data online archives
       - SAON Task: Define a common polar metadata profile in association with SCADM
       - SAON Task: Integrate and make available data describing the Arctic Ocean structure during the period of the IPY
       - SAON Task: Integrate Nordic databases on hazardous substances to enable a regional perspective; seek to include data from other Arctic countries
       - SAON Task: Demonstrate integration and visualization of data related to sea ice and permafrost
       - SAON Task: Integrate existing datasets describing the state of the Pacific sector of the Arctic
       - SAON Task: Enhance data access and data sharing capability of the web portal serving the International Arctic Systems for Observing the Atmosphere
       - SAON Task: Integrate and compare data from Arctic components of the Global Atmosphere Watch sites
     - Key Need: Improve modeling and predictive capability for natural and socioeconomic systems
       - SAON Task: Convene workshop on to agree on key social and economic variables amenable to modeling and prediction
450  • SAON Task: Identification of data gaps that need to be filled
451 4. Inform SAON Partners and Stakeholders
452  • Key Need: Improve communication among data providers and data users
453  • SAON Task: Organize existing national observing inventories into a web-
454  searchable format to increase public knowledge of existing activities
455  • SAON Task: Convene Arctic Observing Summit (2 year intervals)
456  • SAON Task: Organize workshops on specific topics of interest to segments of
457  Arctic observing and user communities aimed at improving observing or data
458  handling capabilities (e.g., atmospheric chemistry and processes; polar data and
459  information management; polar observing technologies; classification of
460  knowledge from indigenous sources; community based monitoring;
461  strengthening existing networks; etc.
462  • Key Need: Increase use and effectiveness of electronic communication
463  • SAON Task: Enhance and maintain SAON website
464  • SAON Task: Create and maintain “active” communication tools (e.g. electronic
465  newsletter, social networking, webinars)
466
467 468  During spring and summer of 2010, the SAON SG called for submission of ideas for tasks that
469  SAON might undertake during the coming few years. Not surprisingly, there were a variety of tasks
470  proposed of vastly different scope and content. Now that the SG has better defined the scope of
471  SAON and stated the desire to link SAON to the four benefits described above, it will ask that task
472  proposals be updated and enhanced. To this end, the SG has agreed to the following process for
473  updating or developing new task proposals:
474
475  1. Alert Task authors of the need for more complete proposals, with outputs aligned
476     with the SAON focus areas described above (SG will define format and
477     requirements and time line)
478  2. Task authors will entrain others to help with the work, and strive to engage
479     participants from at least three countries, and will consult with potential sponsors
480     to gauge interest
481  3. The SG will determine the need for coordination among proposals and arrange for
482     joint teleconferences and email consultations
483  4. Updated or new task proposals will be included in final SAON plan for
484     implementation of operational phase
485
486  5.2. Institutional framework for the operational phase of SAON
487
488  The work of SAON must be defined, organized and managed by a small group of people who have
489  been given that responsibility. The SAON SG proposes that the Arctic Council and the International
490  Arctic Science Committee jointly establish the SAON Program Board, and give it the responsibility for
491  defining and directing the SAON Program, under Terms of Reference and Rules of Procedure to be
492  prepared by the Board, with the Arctic Council having a greater policy oversight and the IASC having a
493  greater scientific oversight of the Board. The SAON Program Board would be co-chaired by a
494  representative each from the AC and from the IASC. The Board would be composed of one
495  representative from each participating country, one representative from each participating AC
496  Working Group, representatives from the AC Permanent Participants, and one representative from the
All Arctic Council Member States, all Arctic Council Observer States (formal and ad hoc) and all IASC Member States are invited to have a member on the SAON Program Board, if that country desires to take an active role in SAON. This inclusiveness reflects the Arctic Council’s statements that both Arctic and Non-arctic States are encouraged to contribute to sustained observations of the Arctic.

Figure 1: Proposed structure of the SAON Program. Key elements include: establishment of the SAON Program Board by the AC and the IASC, supported by the SAON Secretariat; establishment of a SAON coordinating function within each participating country that would send a representative to the Board and communicate national priorities and interests; and creation of a number of “task teams” to implement agreed tasks, with both governmental and many other types of organizations involved in tasks.

The important work of SAON is conducted by the various Task Teams. There will be a self-forming team for each Task, with membership from the

Potential Partner Organizations
- Observing Networks (SAON “Building Blocks”)
- IASC Working Groups
- International Arctic Science Organizations ( CliC, IASSA, etc)
- International Global Science Organizations ( WMO, IOC, UNEP, GEO, etc)
- Private Industry
- Non-profit organizations
- Sub-national governments
participating countries, AC organizations, IASC, and other partners. The Task Team members will be responsible for providing the resources to complete the Task. The criterion for membership on a Task Team is that the country or organization contributes to the completion of the Task.

The National SAON Coordinating Committees (NSCC) (or whatever name is preferred in each country) are also critical to the success of SAON. These committees will be the means for determining national priorities for SAON and for identifying resources for implementation of Tasks. Each committee will send a spokesperson to serve on the SAON Board.

The SAON Board is the international coordinating body for SAON. The Board would be composed of representatives of countries (Arctic and non-Arctic on an equal basis), AC organizations, and IASC Council. The criterion for membership is that the country or organization should be actively involved in the work of SAON. Both the AC and the IASC will nominate a Co-Chair to the Board, in addition to their other representatives.

5.3. Process for definition and implementation of SAON Tasks

The SAON SG, starting in spring 2010, solicited ideas for SAON tasks from members of the SG and from a small number of existing observing networks and a variety of ideas were submitted. Most of these tasks are used as examples of SAON Tasks in a previous section of this report, and all are summarized in an appendix. The SG has already committed to including a full description of high priority tasks in the final version of this plan. To prepare these descriptions, the SG will inform authors of the existing task statements of the need for more complete proposals to include budgets and expected outcomes. The authors will be encouraged to entrain others to broaden the participation in each task, and to consult with potential sponsors to gauge interest in supporting the work. The SG will determine the need for coordination among proposed tasks and initiate coordination activities as needed. The SG also will continue to work within their country or community to attract additional task ideas.

Following review (and hopefully approval) of this plan by the IASC in March 2011 and by the AC in May 2011, tasks will be initiated as resources permit. The SAON Board will prepare progress reports for IASC and AC review on a periodic basis or as requested.

As work progresses, it is likely that members of the SAON Board, the national coordinating bodies, and the many SAON partners will develop ideas for additional tasks for SAON. The SG proposes that an “Arctic Observing Summit” be held every two or so years as a primary means of gathering new insight from the broad community on future priorities for SAON. The working groups of the AC and the IASC also will be a source of recommendations for SAON. The Board will form Task Teams for those new ideas that appear to have broad interest and potential for support.

Appendices

1. Compendium of submitted tasks
2. Report from Agency Officials Workshop
3. Report from Data Management Workshop
4. Status Report on Inclusion of Community-Based Monitoring in SAON