

# SAON Progress report to the SAO meeting in Stockholm 20-21 March 2013.

2013

## Sustaining Arctic Observing Networks (SAON)

[Sustaining Arctic Observing Networks \(SAON\).](#)

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### Background and Governance

SAON was endorsed by the Ministerial Meeting of the Arctic Council in Nuuk 2011 and by the International Arctic Science Committee (IASC). The SAON Terms of Reference outlines the governance structure of SAON: 1) Tasks (projects), 2) National SAON Coordinating Committees, 3) Board, 4) Executive Committee 5), and 6) Secretariat

### Tasks

SAON now has 23 different Tasks. These are in different stages of progress, and a summary can be found in the Appendix. In its review of the Tasks at the second meeting of the Board, the Board noted that most Tasks are in a good shape, with good progress, and mostly are well funded.

### National SAON Coordinating Committees

The National Committees report to the Board, and the reports have been digitized and are accessible at <http://www.arcticobserving.org/networks>

### Board

The SAON Board held its second meeting in Potsdam, Germany, 1-2 October 2012.

The first order of business centered around brief reports by all of the SAON tasks on their progress to date in achieving their goals, related to either observation assets coordination or integrated data delivery, or both.

The second order of business was on the establishment of a high-level SAON strategy for setting overarching goals and objectives over the entire SAON portfolio. This will provide SAON with a short and concise strategic plan that aligns high-level network product generation with the various SAON tasks and ultimately allow for the evaluation of tasks in the context of SAON's strategic goals.

The third and final order of business was to provide an overview of the status of the SAON Terms of Reference (ToR) and Rules of Procedure (RoP). This involved the evoking of an 'adaptive management' process in which the existing ToR/RoP would be open for comments and change during each two-year SAON program review, the first of which is slated to start during the late summer or early autumn of 2013.

### Executive Committee

The SAON Executive Committee has been established with a composition as described in the RoP. Sweden represents the Arctic countries, while ICC is the member for the AC Permanent Participants.

### Secretariat

The AMAP and IASC Secretariats contribute resources to the SAON Secretariat.

## Appendix. Summary of SAON Tasks

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| Title                                     | IPA-IASC-SAON-SCAR workshop on data user requirements definition for permafrost observing in GTN-P (T1)   |
| Lead(s)                                   | Inga May, AWI (email: Inga.May@awi.de)  |
| Objective(s)                              | The International Permafrost Association will organize a workshop to establish data user requirements for the dissemination and visualization of the permafrost data products of the Global Terrestrial Network on Permafrost (GTN-P).            |
| Status                                    | In operational phase, this has been established: <ul style="list-style-type: none"> <li>• Governance Structure</li> <li>• Database (working soon semi-operational)</li> <li>• International standards</li> <li>• Personnel and Funding</li> </ul> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/97">http://www.arcticobserving.org/tasks/97</a>   |

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| Title                                     | Polar Metadata Profile and Recommended Vocabularies (T2)  |
| Lead(s)                                   | John Huck, University of Alberta Libraries, (jhuck@ualberta.ca)   |
| Objective(s)                              | 1) Develop an ISO compliant metadata profile for discovery of Arctic and Antarctic data<br>2) Develop documentation of the metadata profile<br>3) Develop a show-case system to enhance adoption of the profile in the Arctic scientific community                  |
| Status                                    | Milestones: <ul style="list-style-type: none"> <li>• Comparison of ISO profiles completed (January 2012)</li> <li>• Survey of vocabularies begun (2011)</li> <li>• New task leader appointed (May 2012)</li> <li>• Task team reconvened (September 2012)</li> </ul> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/98">http://www.arcticobserving.org/tasks/98</a>   |

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| Title   | Circumpolar Health Observatory (T3)  |
| Lead(s) | Kue Young, TransCanada Pipelines Chair, Dalla Lana School of Public Health, University of Toronto, Canada<br>Susan Chatwood, Scientific and Executive Director, Institute for Circumpolar Health Research, Yellowknife, NT, Canada |

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| Objective(s)                              | <ul style="list-style-type: none"> <li>• CirCHOB is an international collaborative health information system, involved in systematic, standardized, and consistent data collection and analysis.</li> <li>• CirCHOB's purpose is to monitor trends and patterns in health status, health determinants, and health care, and provide an on-going and sustainable knowledge base and analytical support for decision-makers, service providers, academic researchers and consumers.</li> <li>• CirHOB promotes training and research in population health and health systems.</li> </ul> |
| Status                                    | The Circumpolar Health Observatory has made tremendous progress since February 2011. It is now fully functional and interactive. All data to 2004 are up-to-date, and several modules have also been updated to 2009. The updating will continue   |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/99">http://www.arcticobserving.org/tasks/99</a>  |

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| Title                                     | Role of Remote Sensing in Arctic Monitoring (T4)  |
| Lead(s)                                   | Helen Joseph, Fisheries and Oceans Canada, Yves Crevier, CSA, Charles Hannah, DFO, Bill Crawford, DFO, Seth Reinhart, NGMP; Dave Fox, EC.   |
| Objective(s)                              | To build on the MORSE program engaging users and communities, and particularly Northern Communities in Arctic Coastal areas, with a focus on ocean and marine ecosystem monitoring. |
| Status                                    | Replanning ongoing  |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/113">http://www.arcticobserving.org/tasks/113</a>   |

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| Title                 | The Canadian IPY Data Assembly Centre Network: A Case Study (T5)   |
| Lead(s)               | Scott Tomlinson ( <a href="mailto:Scott.Tomlinson@ainc-inac.gc.ca">Scott.Tomlinson@ainc-inac.gc.ca</a> ), Northern Affairs Organization, Canada (...more...)   |
| Objective(s)          | To develop a case study or best practices document that outlines a successful approach to a sustainable data management network for Arctic Science.  |
| Status                | The IPY Data Assembly Centre Network has been actively engaged in preserving the data and information collected as part of the Canadian Program for IPY as well as developing a governance model that will maintain the network going forward. The Canadian Polar Data Network as it is now named, is currently providing data management support for the Beaufort Region Environmental Assessment (a science program that is collecting data and information on the Beaufort Region funded by Aboriginal Affairs and Northern Development Canada) and is in discussions with the Canadian High Arctic Research Station to develop some pilot projects on data and information management for the science program for the station. |
| Full Task description | <a href="http://www.arcticobserving.org/tasks/112">http://www.arcticobserving.org/tasks/112</a>  |

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| Title                                     | Establishing an Arctic network on environmental monitoring of hazardous substances (T6)  |
| Lead(s)                                   | Ola Glesne, Norwegian Climate and Pollution Agency (...more...)  |
| Objective(s)                              | <ul style="list-style-type: none"> <li>• To establish observing networks on Arctic monitoring of hazardous substances in SAON.</li> <li>• To share data in a practical way (including choice of existing databases).</li> <li>• To make the data available for all.</li> <li>• To make the data comparable and interoperable.</li> <li>• To establish good practices in cooperating monitoring activities in the future.</li> <li>• To create an on-line project pilot, including an interactive and interoperable database retrieval and sharing software with a mapping and interpretation interface.</li> </ul> |
| Status                                    | Two workshops have been held. The focus of these have been to <ul style="list-style-type: none"> <li>• evaluate existing data storage facilities, formats, services and coordination in order to</li> <li>• develop principles for standardization and free data sharing,</li> <li>• establish a metadata profile based on current state-of-the-art agreed standards and,</li> <li>• establish a well functioning data network in the Arctic</li> </ul>  |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/111">http://www.arcticobserving.org/tasks/111</a>  |

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| Title                                     | Polar data and information management principles and practice (T7)   |
| Lead(s)                                   | <ul style="list-style-type: none"> <li>• Simon Wilson, AMAP Secretariat</li> <li>• Scott Tomlinson, Northern Affairs Organization, Canada</li> <li>• Neil Holdsworth, ICES</li> </ul>                                      |
| Objective(s)                              | To inform and motivate scientists why data reporting is essential; to disseminate tools that can assist in this process, and to identify needs for further activities to support this part of the data management process. |
| Status                                    | The first out of two workshops have been held. The participants obtained hands-on experience with the data conversion tool.  |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/110">http://www.arcticobserving.org/tasks/110</a>  |

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| Title   | Coordination of existing Arctic relevant Meta-databases and Project Directories (T8) |
| Lead(s) | Jan René Larsen, AMAP Secretariat  |

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| Objective(s)                              | To improve interoperability of (some) existing Arctic relevant meta-databases and Project Directories – and make them accessible for searches through common interface.   |
| Status                                    | <ul style="list-style-type: none"> <li>• Architecture considerations have been done</li> <li>• Initial contacts have been established with <ul style="list-style-type: none"> <li>○ The AMAP Project Directory</li> <li>○ ICES (As AMAP's Thematic Data Centre for contaminants in the marine environment)</li> <li>○ NILU (As AMAP's Thematic Data Centre for contaminants in atmosphere)</li> <li>○ Northern Contaminants Programme, Canadian Cryospheric Information Network/Polar Data Catalogue</li> </ul> </li> <li>• Cooperation with the SAON Task 'Polar Metadata Profile and Recommended Vocabularies (T2)' has been established</li> </ul> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/109">http://www.arcticobserving.org/tasks/109</a>   |

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| Title                                     | An International Review of Community-Based Monitoring in the Context of the Sustaining Arctic Observing Networks Process (T9)  |
| Lead(s)                                   | Eva Kruemmel, Inuit Circumpolar Council, Canada; Noor Johnson, Brown University, USA; Peter L. Pulsifer, Exchange for Local Observations and Knowledge of the Arctic (ELOKA); Scot Nickels, Inuit Qaujisarvingat: The Inuit Knowledge Centre, Inuit Tapiriit Kanatami, Canada  |
| Objective(s)                              | <p>The primary objectives of this task are:</p> <p>1) to develop an online atlas of community-based monitoring projects across the circumpolar Arctic; and</p> <p>2) to develop a synthesis report on the state of community-based monitoring that addresses the role of local and traditional knowledge in observing and monitoring activities.</p> <p>Status: The atlas is under development and the website will be live in the spring of 2013. The synthesis report will follow based on in-depth interviews with CBM researchers and practitioners.</p> |
| Status                                    | <p><u>Two components:</u></p> <ol style="list-style-type: none"> <li>1. Online map-based inventory of CBM projects</li> <li>2. Review on the state of CBM in the Arctic</li> </ol>   |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/108">http://www.arcticobserving.org/tasks/108</a>  |

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| Title   | Development of Community-Based Monitoring Classification to Improve Standardization of Vocabularies (T10)   |
| Lead(s) | Jim Gamble (aia@Alaska.net), Interim Executive Director, Aleut International Association (AIA), USA; Victoria Gofman (victoriag@alaska.net), Principal, Collaborative Research and Consulting, USA (...more...) |

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| Objective(s)                              | The objective is to convene a series of workshops to develop a Community Based Monitoring Classification that uses standardized terminology leading to a better CBM metadata standard and better interoperability of CBM data. |
| Status                                    | <ul style="list-style-type: none"> <li>• Discussions with ELOKA about coordination</li> <li>• Possible 1<sup>st</sup> workshop in conjunction with BSSN meeting planned for September 2013 in Anchorage</li> </ul>             |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/107">http://www.arcticobserving.org/tasks/107</a>  |

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| Title                                     | PEOPLE – ACE (T11)   |
| Lead(s)                                   | Marty Kress (mkress@vcsi.org), VCSI, United States (...more...)  |
| Objective(s)                              | PEOPLE-ACE will develop an open-access, web-based, regional, national, and local environmental research and decision-support system that will provide a monitoring, analysis, and visualization capability based on <b>geospatial analysis</b> , earth observation data and modeling analysis for the Arctic.  |
| Status                                    | <p>On-going:</p> <ul style="list-style-type: none"> <li>• Coordinating a Transition Plan with Navy, NOAA, USNIC, USEUCOM, NASA MSFC, and UAHuntsville to clarify out-year support responsibilities</li> <li>• Working to expand international participation and support – on the working groups, with data and model sharing, SAON support, etc. – key targets – Russia and Canada</li> <li>• Working with Universities conducting Arctic research to develop new products – focus on buoy data and archived sea-ice extent data – integrate research efforts into baseline – integrating new Navy Sea Ice Model, SAR and AIS data, etc.</li> <li>• Collaborating with other key activities to avoid duplication and provide key capabilities – Arctic ERMA, AON, etc.</li> <li>• Framing key follow on collaborations that address critical requirements gap aligned with Arctic Council – from basic communications, to sea ice monitoring, emergency response, maritime domain awareness, etc.</li> </ul> <p>Milestones:</p> <ul style="list-style-type: none"> <li>• Feb 2012: Begin alpha testing with various priority users – USCG, NWS, NIC, etc.</li> <li>• April 2012: Present Tool (alpha release) to International Community – IPY Conference in Montreal, SAON Workshop, Multiple Events at the Canadian Embassy in Washington, DC.</li> <li>• December 2012: Begin beta testing</li> <li>• March 2013: Conduct Technical/Operational Demonstration</li> <li>• June 2013: Transition operational system to NOAA – U.S. National Ice Center</li> </ul> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/106">http://www.arcticobserving.org/tasks/106</a>  |

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| Title                                     | Arctic Observing Summit (T12)   |
| Lead(s)                                   | Craig Lee, University of Washington (craig@apl.washington.edu); Peter Schlosser (schlosser@ldeo.columbia.edu as co-lead) (...more...)   |
| Objective(s)                              | <p>Overall goal: Provide a platform for exchange on design and implementation of long-term, cross-domain, international Arctic Observing system for:</p> <ul style="list-style-type: none"> <li>• Science community (national and international meetings)</li> <li>• Funding agencies</li> <li>• Stakeholders</li> <li>• Create a (recurring) venue that will allow for and facilitate coordination, joint planning and review of (long-term) Arctic observing activities, with the goal of increasing coherence, intercomparability, and scientific and stakeholder relevance of observing programs while minimizing duplication and major gaps</li> <li>• Improve interagency and international communication and coordination of (long-term) observations aimed at improving understanding and responding to Arctic change</li> <li>• Develop a forum or mechanism that facilitates joint planning for coordinated, networked observations, enhances information and knowledge transfer between different disciplines, agencies and stakeholder</li> </ul> |
| Status                                    | <p><u>2012</u></p> <ul style="list-style-type: none"> <li>• September and October: <ul style="list-style-type: none"> <li>– Officially announce the 2013 AOS</li> <li>– Prepare and release call for white papers.</li> <li>– Identify topics and authors for solicited white papers.</li> <li>– Begin work on INAOS Status Report.</li> </ul> </li> <li>• December <ul style="list-style-type: none"> <li>– ISAC Town Hall at the American Geophysical Union annual meeting</li> </ul> </li> </ul> <p><u>2013</u></p> <ul style="list-style-type: none"> <li>• January <ul style="list-style-type: none"> <li>– White paper submission deadline.</li> <li>– Papers available for public comment on AOS website.</li> </ul> </li> <li>• February <ul style="list-style-type: none"> <li>– White paper review.</li> <li>– Revised white papers on web by 1 March 2013</li> </ul> </li> <li>• April: AOS, Vancouver, Canada</li> </ul>  |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/105">http://www.arcticobserving.org/tasks/105</a>   |



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| Title                                     | Arctic Marine Biodiversity Monitoring Plan (CAFF/CBMP) (T13)   |
| Lead(s)                                   | Mike Gill; Chair, Circumpolar Biodiversity Monitoring Program, Canada (...more...)   |
| Objective(s)                              | To create a publicly accessible, efficient, customizable and transparent platform to access, archive, integrate and depict information on the status and trends in arctic marine biodiversity and use this as a pilot approach to coordinated, web-based circumpolar data management   |
| Status                                    | During the first two years of implementation (2011-2013), the focus is on identifying, aggregating, and integrating pan-Arctic datasets, including QA/QC, and developing data sharing agreements among members of the Expert Networks (e.g., for sharing and using unpublished data). The majority of the Expert Networks are at this stage. The data generated through this activity will be served and accessible via the CBMP's Arctic Biodiversity Data Service ( <a href="http://www.abds.is">www.abds.is</a> ). The next step will involve testing indicators to assess which ones will be able to detect real change vis-à-vis natural variability, and distinguish signal from noise, all the while using existing data (i.e., there is no new data collection). The most promising indicators will be used to produce and report baselines and changes occurring across Arctic marine ecosystems. This will require integrating existing marine biodiversity monitoring efforts across the Arctic, and using a suite of common biological parameters and indicators; key abiotic parameters relevant to marine biodiversity; optimal sampling schemes; and Arctic Marine Areas, according to which monitoring results will be organized and reported. |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/104">http://www.arcticobserving.org/tasks/104</a>  |

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| Title                                     | Arctic Ocean Structure (IPY) (T14)  |
| Lead(s)                                   | Gleb Panteleev, IARC, USA, Sergey Kirillov, AARII, Russia (...more...)  |
| Objective(s)                              | The purpose of this project is to acquire available data from the Arctic Ocean during the IPY period, process the data, and assemble them into an integrated database.  |
| Status                                    | 1) Succeed to get 80% of the Russian Data. Another 20% of the data will be downloaded soon.<br>2) Developed the project database: <a href="http://oregon.iarc.uaf.edu/dbaccess.html">http://oregon.iarc.uaf.edu/dbaccess.html</a> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/103">http://www.arcticobserving.org/tasks/103</a>   |

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| Title        | Expand Historical Climate Analysis to the Pacific Sector of the Arctic (T15)  |
| Lead(s)      | James E. Overland (James.E.Overland(at)noaa.gov), NOAA, Pacific Marine Environmental Laboratory, USA (...more...)   |
| Objective(s) | Provide comprehensive survey, rescue, and interpretation of climate-relevant historical data in the North Pacific & Arctic regions<br>The project is divided into five activities that will each result in a distinct data/research product:<br>a. Bibliography |

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|   | <p>b. Data identification and transcription</p> <p>c. Integration with existing datasets</p> <p>d. Web interface for research and public outreach</p> <p>e. Synthesis</p>  |
| Status                                    | <p>Updating the January status report: We have launched a beta-test version of Old Weather at <a href="http://www.oldweather.org">www.oldweather.org</a> . This implements a new user interface that is adaptable to different formats of manuscript logs found at the US National Archives. We have set up two internships at two National Archives locations in the DC area. This has vastly increased our imaging output and will allow us to make a public launch of Old Weather - Arctic next month with an initial inventory of over 100,000 logbook pages. We have completed a project website which will launch simultaneously (you can see it now at <a href="http://www.pmel.noaa.gov/arctic/rediscover">www.pmel.noaa.gov/arctic/rediscover</a> ). Finally, we have set up joint program with the New Bedford Whaling Museum that will allow us to image and analyze nearly the full inventory of Arctic whaling ship logbooks that are still in existence. In the past year we have received additional support from the North Pacific Research Board (NPRB) and the National Science Foundation (NSF), primarily for student support and equipment.</p> |
| Full Task description and progress report | <p><a href="http://www.arcticobserving.org/tasks/102">http://www.arcticobserving.org/tasks/102</a></p>   |

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| Title        | CBM Inventory (CAFF) (T16)   |
| Lead(s)      | Project partners include Circumpolar Biodiversity Monitoring Programme (CBMP), Exchange for Local Observations and Knowledge of the Arctic (ELOKA), ICC, Saami Council, Gwich'in Council International (GCI), Arctic Athabaskan Council (AAC), and RAIPON  |
| Objective(s) | <p>The primary objective is to identify and maintain a current inventory of existing arctic CBM/ LTK/ TK, TEK biodiversity monitoring programs and datasets, in order to facilitate their discovery and use to assist monitoring and assessment efforts. The inventory 'service' will be available online for query and access.</p> <p>An observation network that includes strong community involvement can greatly enhance scientific research, especially for research in the Arctic. CAFFs Circumpolar Biodiversity Monitoring Program's (CBMP) primary activities relate to the development of pan arctic integrated monitoring plans. Such plans require significant partnerships with Arctic Council countries to identify existing monitoring programs and datasets. However, despite various efforts, the need to include community based programs and datasets largely remains unfulfilled due to lack of capacity. For the successful linkage of CBM and LTK to the CBMP process, it is necessary to create an inventory of current arctic CBM/ LTK biodiversity monitoring programs/ datasets.</p> |
| Status       | <p>A project plan and budget has been developed and project partners engaged. A team approach will be applied to implement the project activities i.e:</p> <ul style="list-style-type: none"> <li>• CBMP will assist with the coordination, communication of various project partners.</li> <li>• Permanent Participants, with participation of their membership 'scope' will be charged with identifying the key</li> </ul>   |

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|   | <p>arctic biodiversity monitoring programs/ datasets that involve CBM/ LTK/ TK. And also inputting the list of records for consolidation by the database service managers.</p> <ul style="list-style-type: none"> <li>• ELOKA will focus on providing technical expertise for managing metadata records and provide access to datasets via agreed upon Open Geospatial Consortium interoperability services to the CBMP data portal.</li> </ul> <p>Once project funding has been secured the expected outcomes include:</p> <ul style="list-style-type: none"> <li>• A searchable website of a comprehensive and up to date list of known circumpolar CBM/ LTK biodiversity monitoring programs in the north. Updated annually.</li> <li>• An accessible database for interoperability/ integration with CBMP's data portal.</li> <li>• Improved participation of local knowledge and community based monitoring efforts within CBMP Expert Monitoring Groups</li> <li>• Improved involvement of CBM/ LTK when recommending arctic monitoring indicators for the integrated monitoring plans.</li> <li>• Enhanced capacity for PP's to evaluate state of CBM/ LTK in the north for future assessments and reporting requirements.</li> <li>• A model for coordinating arctic CBM/ LTK metadata management.</li> <li>• Improved access to examples of CBM/ LTK biodiversity monitoring for communities and researchers seeking to conduct research in the north.</li> <li>• Enhanced linkages of individual CBM/ LTK programs with each other spatially and by theme.</li> </ul> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/101">http://www.arcticobserving.org/tasks/101</a>   |

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| Title        | INTERACT (T17)  |
| Lead(s)      | Prof. Terry Callaghan, The Royal Swedish Academy of Sciences (...more...)   |
| Objective(s) | <ul style="list-style-type: none"> <li>• upgrading and intensifying its monitoring activities, for example by the development of short term activities such as those in IPY into long-term monitoring</li> <li>• providing more accessible and comprehensive metadata</li> <li>• addressing key environmental questions formulated by international assessments of current and past research in the Arctic by developing partnerships with the research community</li> <li>• combining research with monitoring and modelling to predict future environmental changes and their impacts</li> <li>• bringing stakeholders together with researchers and the observation community to facilitate the development of strategies to adapt to environmental change</li> <li>• formulating and testing fundamental ecological, biological and geoscience theory by developing partnerships with the research community</li> </ul> |

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| Status                                    | The project started in 2001 as a network of nine European research stations. By June 2012, the network involved 45 infrastructures and covered all Arctic countries, alpine regions in Central Europe and southern Siberia. Within the first year of the current phase, it led to news reports of record low ice levels in Greenland glaciers and energy and greenhouse gas measuring equipment was installed at four Arctic sites |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/100">http://www.arcticobserving.org/tasks/100</a>  |

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| Title                                     | International Arctic Systems for Observing the Atmosphere (IASOA) (N1)  |
| Lead(s)                                   | Sandy Starkweather, Cooperative Institute for Research in Environmental Science (CIRES) – University of Colorado, sandra.starkweather@colorado.edu; Taneil Uttal (taneil.uttal@noaa.gov) (...more...)   |
| Objective(s)                              | <p>IASOA objectives for this task fall into 3 categories: planning, partnering and implementing.</p> <ul style="list-style-type: none"> <li>• IASOA planning objectives include the development of a science plan, strategic plan and implementation plan. These are foundational tasks on the path towards developing targeted synthesis and assessment science data products.</li> <li>• IASOA partnering objectives include integrating with relevant organizations and contributing to relevant activities within the IASOA boundaries of Arctic atmospheric (and atmosphere-surface flux), sustained, ground-based observing.</li> <li>• IASOA implementation objectives include: a) developing synthesis and assessment science deliverables from IASOA observations; b) sustaining and enhancing the IASOA data portal (<a href="http://iasoa.org">http://iasoa.org</a>); c) enhancing the network of observations to expand the potential for science deliverables.</li> </ul>                                      |
| Status                                    | <ul style="list-style-type: none"> <li>• Half-day workshop planned for AOS (SAON Task T12) <ul style="list-style-type: none"> <li>– Workshop will focus on developing two pan-Arctic synthesis contributions to 2013 Arctic Report Card (1. Surface equivalent black carbon; 2. Longwave radiation balance.)</li> <li>– Workshop coordinated with GEOSummit meeting to develop enhanced participation of Summit, Greenland scientists in IASOA activities</li> </ul> </li> <li>• Creating enhanced data portal to support searches, discovery and use. 9 months of funding from U.S. NSF to support development of IASOA data sharing goals that support the Mission Statement: <ul style="list-style-type: none"> <li>– Complete IASOA metadata schema &amp; authoring tool. Schema is interoperable with GAW &amp; SAON Task (T2); Populating DB</li> <li>– On-going work to enhance data portal to support searches, discovery and use. Demo's of the new portal scheduled for EGU, ASSW, and AOS</li> </ul> </li> </ul> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/119">http://www.arcticobserving.org/tasks/119</a>   |

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| Title | A Research Coordination Network for Very Interdisciplinary Arctic Data and Information (N2) |
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| Lead(s)                                   | Mark A Parsons, Peter Pulsifer, David Carlson, and Shari Gearheard (...more...)   |
| Objective(s)                              | Deliver data and information to foster interdisciplinary research and education to support an integrative approach for human adaptation and response to Arctic change. In this project, we propose to build on the momentum of IPY in a phased approach to further enhance international relationships and train and empower individual data managers in order to develop a sustained Arctic data network.  |
| Status                                    | Way forward: <ul style="list-style-type: none"> <li>• Erica Key, NSF is organizing coordination discussion groups in preparation for for the Arctic Observing Summit and creating an online collaboration space.</li> <li>• Metadata sharing and brokering experimentation continues (slowly).</li> <li>• IASC Data Policy Group launched.</li> <li>• We continue to try and identify and coordinate funding. An ongoing issue is aligning what different networks and data centers are actually funded to do.</li> </ul> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/118">http://www.arcticobserving.org/tasks/118</a>   |

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| Title        | WMO Contribution to the Sustaining Arctic Observing Networks (SAON) through the WMO Rolling Review of Requirements (N3)   |
| Lead(s)      | WMO   |
| Objective(s) | The objective is to assist in a design of arctic observing systems according to justify requirements and in their evolution based on the long-term Vision for the observing systems and the Plan for implementation that is based on a gap analysis between the user requirements and observing systems capabilities.<br>The suggested process is that SAON review arctic user requirements, based on existing reports, such as those of the International Conference on Arctic Research and Planning (ICARP), the Snow, Water, Ice, Permafrost in the Arctic (SWIPA) as well as other related reports (e.g. from Arctic Council and IASC Working Groups), and compile observational needs (in-situ and satellite) that then can be used to guide SAON “projects”. These observational requirements should be properly reflected in the WMO User Requirements database. This would then help SAON networks implementers to identify where sustained networks need strengthening or where new observations are needed. |
| Status       | <ul style="list-style-type: none"> <li>• The WMO CBS Inter-Programme Expert Team on the Observing Systems Design and Evolution (IPET-OSDE) <ul style="list-style-type: none"> <li>○ RRR process, including review &amp; update of user requirements for arctic observation</li> <li>○ Implementation Plan for the evolution of the global observing systems (EGOS-IP) <ul style="list-style-type: none"> <li>▪ Outlines key activities to be implemented during 2012-2025 for maintaining &amp; developing of global observing systems addressing observational requirements for weather, water, and climate</li> <li>▪ Requires close cooperation with partner organizations, e.g. SAON</li> <li>▪ Includes 115 actions (with agents for implementation, time frame, performance indicators)</li> </ul> </li> </ul> </li> </ul>  |

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|   | <ul style="list-style-type: none"> <li>SAON representative in the IPET-OSDE will represent SAON community.</li> </ul> |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/117">http://www.arcticobserving.org/tasks/117</a>                       |

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| Title                                     | Arctic Biodiversity Coalition (ABC) (N4)   |
| Lead(s)                                   | Terry V. Callaghan, Chair, IASC Terrestrial WG & Coordinator, INTERACT; Mike Gill, Chair, Circumpolar Biodiversity Monitoring Program  |
| Objective(s)                              | <ul style="list-style-type: none"> <li>Building capacity for taxonomic studies/field identification.</li> <li>Cataloguing biodiversity</li> <li>Monitoring biodiversity trends</li> <li>difficult taxa</li> <li>harmonising intensive research station-based monitoring with extensive field surveys.</li> <li>explaining and predicting biodiversity and its trends</li> <li>determining the roles of biodiversity, e.g. in ecosystem function</li> </ul> |
| Status                                    | Planning is ongoing  |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/116">http://www.arcticobserving.org/tasks/116</a>  |

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| Title                                     | Eye on Earth - Polarwatch (an electronic-Information and Observing Network in the Arctic): Building a Shared Environmental Information Service to support SAON (N5)   |
| Lead(s)                                   | Nikolaj Bock – Coordination; Chris Steenmans – SEIS; Barbara Clark – Linking networks   |
| Objective(s)                              | To support the development of an Arctic SAON e-IONET facility, delivered via the global public service Eye on Earth <a href="http://www.eyearth.org">www.eyearth.org</a> of a network of environmental networks, using SEIS principles for access and sharing environmental information and building on existing and new environmental priority data flows from EEA countries, the Russian Federation and USA (in the first instance) |
| Status                                    | Planning is ongoing   |
| Full Task description and progress report | <a href="http://www.arcticobserving.org/tasks/115">http://www.arcticobserving.org/tasks/115</a>   |

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| Title   | Distributed Biological Observatory   |
| Lead(s) | Jackie Grebmeier (jgrebmei@umces.edu) Univ. of Maryland, Center for Environmental Studies, USA |

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| Objective(s)                              | <p>The Distributed Biological Observatory (DBO) was initiated by the Pacific Arctic Group (PAG) and has been supported by the Marine Working Group (MWG) of the International Arctic Science Committee (IASC). Under this proposed task, work will be done to strengthen the DBO and put it on a path to sustainability and product delivery. In particular, effort will be placed on the following activities:</p> <ol style="list-style-type: none"> <li>1. Forming science teams to coordinate observations and data management</li> <li>2. Developing an effective data management protocol</li> <li>3. Identifying opportunities for integrated data analysis and synthesis</li> <li>4. Disseminating results of DBO activities and products</li> </ol> |
| Status                                    | <p>Fall 2012 – Biological and physical science teams propose specific actions<br/> Winter/Spring 2013 – DBO data workshop<br/> Spring 2013 - Report to Pacific Arctic Group at Arctic Science Summit Week on progress and plans<br/> Spring 2013 – Science teams begin work on initial products<br/> Spring 2014 – Report to Pacific Arctic Group at Arctic Science Summit Week on progress and plans<br/> The timeline from spring 2014 will depend on accomplishments and PAG evaluation of effectiveness.</p>   |
| Full Task description and progress report | <p><a href="http://www.arcticobserving.org/tasks/139">http://www.arcticobserving.org/tasks/139</a></p>   |