



The Arctic Observing Summit

Procedures and Processes



Table of Contents

Introduction	3
Governance	3
Mandate and Appointment of the Executive Committee.....	3
Mandate and Appointment of the Scientific Committee	4
Approval and Amendment.....	4
Appendix A. Guidelines for AOS Thematic Working Groups	5
Thematic Structure and Community Engagement	5
Thematic Working Group Leads	5
Charge to Thematic Working Groups	5
Appointment of TWG Members.....	5
Support for the TWGs.....	6
Guide for Thematic Working Group Synthesis Documents	6
Synthesis Documents – Template, Content, Timeline	6
Appendix B. Breakout Session Organization and Outcomes	7
Charges to Breakout Groups.....	7
Guidelines for Breakout Group Discussion and Reporting	7
Appendix C. White Paper Process	8
Procedures and Timeline for Submission and Review	8
Guidelines for Format of White Papers and Statements.....	9
White Papers.....	9
Short Statements.....	9
Guidelines for Reviewers.....	10

Introduction

The Arctic Observing Summit (AOS) is a Sustaining Arctic Observing Networks (SAON) outreach activity. It has been co-organized since inception in 2013 by the International Study of Arctic Change (ISAC), the International Arctic Science Committee (IASC), and SAON. The AOS is normally organized in the context of IASC's Arctic Science Summit Week (ASSW) in alternate years to the ASSW Science Conference. The products and recommendations from each Summit will contribute towards the ongoing definition and implementation of an international, collaborative, comprehensive and sustained Arctic Observing System of Systems. This document describes the process for appointing the governance bodies of the AOS.

Governance

The AOS is planned and executed by an Executive Committee in collaboration with a Scientific Committee

Mandate and Appointment of the Executive Committee

The Executive Committee (EC) leads the overall planning and development of each Summit, including the identification of the Scientific Committee, selection of Summit themes, nature of the program, and logistics planning. Thematic or topical areas are selected by the EC based on outcomes and recommendations from the preceding Summit(s). The EC and SC tracks progress of Thematic Working Groups prior to a Summit. A member of the EC may represent more than one organization. The EC consists of:

Three Co-Chairs:

- one appointed from ISAC
- one appointed from SAON
- one appointed from the ASSW Local Organizing Committee

The EC Co-Chairs will select from among themselves an administrative and logistical Lead.

An *Ex-Officio* Member from each of:

- ISAC (Executive Director)
- IASC (Executive Secretary)
- SAON (Secretariat)
- A conference manager from the ASSW local organizing team where desired.

And:

- At least one representative of an Arctic Indigenous organization (e.g., Inuit Circumpolar Council, Saami Council, etc.).
- The Co-Chairs from the Summit immediately prior are invited.

For balance, and to ensure Summit objectives are met for any given year, additional EC members may be added following consensus among the Co-Chairs. For example, members of the EC could represent, for example:

- Relevant global organization (World Meteorological Organization - WMO, Group on Earth Observations - GEO, etc.)
- The Arctic Data Committee (ADC)
- The SAON Committee on Networks (CON)
- The Forum of Arctic Research Operators (FARO)
- The Association of Early Polar Career Scientists (APECS)
- The International Arctic Social Sciences Association (IASSA)

Mandate and Appointment of the Scientific Committee

The Scientific Committee (SC) provides intellectual and logistical support to the EC. The SC consists of Members at Large with the expertise to guide Summit activities prior to, during, and following the Summit(s) for which they are appointed.

Members of a Summit SC are selected based on relevant expertise with respect to the themes of the Summit, on prior engagement in Summit or Summit-relevant activities, and/or ability to help achieve Summit goals.

The EC develops a roster of names/organizations to successfully develop the scientific program and to lead/co-lead any associated Summit working groups (Appendix 1). When consensus is reached, invitations to potential SC Member(s) are issued from the ISAC International Program Office (IPO) and signed by the EC Co-Chairs.

The EC and the SC should display diversity across disciplines, gender, career stages, sectors and organizations. Members should carry weight with respect to scientific expertise, and/or Indigenous Knowledge, engagement with observational initiatives and/or end use of observation products, and/or access to resources and connections. Inclusion of underrepresented groups as well as early career scientists is encouraged and AOS partners should be engaged to facilitate this.

Approval and Amendment

This document was approved by consensus of the 2020 AOS Executive Committee. Future amendments to this document and its appendices shall be made by consensus of the AOS Executive Committee.

Appendix A. Guidelines for AOS Thematic Working Groups

Each AOS is informed by the activities of Thematic Working Groups (TWGs), normally (co-)led by members of the Scientific Committee (SC). The Executive Committee (EC) has prepared guidelines for constitution of the TWGs, for expectations regarding tasks prior to a Summit, and for products and contributions following a Summit.

Thematic Structure and Community Engagement

Normally a Summit addresses 4-6 themes building on recommendations and outcomes from previous events. Normally, every second Summit is informed by community-led white paper contributions addressing the given themes in that year. At alternate Summits, community input is solicited through submission of shorter statements addressing the themes. Thematic Working Groups (TWGs) are organized in advance to further develop Summit themes and related activities as deemed appropriate, and to provide relevant recommendations that feed into the Summit Statement.

Thematic Working Group Leads

The EC identifies (Co-)Leads for each TWG who are charged with coordinating and managing the TWGs and Breakout Groups (BG) at the Summit and soliciting input (as whitepapers or other formats). (Co-)Leads participate in planning calls with EC and SC.

Charge to Thematic Working Groups

The TWGs support the review of white papers and statements, provide expertise, and highlight issues/topics requiring further attention prior to, during, and following a Summit. They prepare synthesis documents based on relevant whitepapers, short statements, and breakout group discussions. These TWG products are used for inclusion in AOS reports, and/or for journal, website and other relevant publications.

TWG activities include:

- Contributing to development of the Summit agenda with leadership on elements relevant to each TWG;
- Synthesizing TWG/BG relevant outcomes of previous Summits and preparing recommendations and action items for the upcoming Summit;
- Reviewing the 'state of the art' under the TWG theme or area of AOS-relevance
- Preparing a summary of white papers/statements, formulation of actionable recommendations and a path for post-Summit implementation of recommendations;
- Attending the Summit;
- Co-producing Summit concluding documents.

Appointment of TWG Members

(Co-)Leads of TWGs work with the EC/SC and their networks to identify and invite potential working group members, keeping in mind diversity and balance. The ideal size of a TWG is 8 to 12 participants. The EC/SC and (Co-)Leads may also engage experts outside the TWGs.

Support for the TWGs

TWGs are supported by one or more Early Career Researchers (ECRs) as Rapporteurs whose Summit participation should be funded. They are engaged for their relevant expertise and ability to assist with secretarial and reporting duties. ECR funding should be secured through the activities of the AOS organizing entities (ISAC, SAON, ASSW Local Hosts, IASC). The EC/SC will provide appropriate support for communications among working group members (videoconferencing, online workspace, etc.).

Guide for Thematic Working Group Synthesis Documents

Community input is obtained through submission of topical white papers and/or short statements prior to a Summit (see Appendix C). Each TWG is charged with preparing a synthesis of the submissions that address their theme. TWGs may also consider contributions relevant to their theme but submitted under others.

Synthesis Documents – Template, Content, Timeline

The following template should be used to format and structure synthesis documents:

General formatting:

- Follow the formatting for text, references, figures, and tables established for *Arctic*;
- The cover page must include: document title and relevant theme; list of all authors, Author affiliations and contact information.

Content should include:

- Overview of the relevant theme and brief summary of papers reviewed;
- Contribution highlights (gaps and needs, priorities, challenges, opportunities, etc.);
- Identification of linkages to other thematic submissions (commonalities, synergies, areas of future collaboration; etc.), and to other programs and initiatives;
- Examples of successful structures, tools, case studies;
- Recommendations both specific and general, timelines for implementation and where feasible, an assessment of associated costs and benefits;

Syntheses are published on the AOS website for public review one month prior to the AOS.

Appendix B. Breakout Session Organization and Outcomes

Drawing on AOS plenaries, written contributions, past reports, relevant materials from elsewhere and active discussion, TWG Leads/ Co-leads will organize and run breakout sessions with support from a moderator and a rapporteur.

Charges to Breakout Groups

- Prioritize findings, questions and recommendations from relevant AOS materials.
- Identify tractable actions and goals and a path for achieving them.

Guidelines for Breakout Group Discussion and Reporting

The following are general instructions for Breakout Groups that can be used and modified as needed depending upon group theme and the overall objectives and structure of the AOS in any given year:

- Identification of priorities relevant to group theme;
- Identification of gaps relevant to group theme;
- Prioritization of recommendations;
- Identification of timescale for implementation of recommendations (short-term, 5 year, 10 year, indeterminate);
- Identification of scope for implementation of recommendations (local, regional, national, international, private sector, public sector, etc.);
- Identification of concrete actions for implementation;
- Identification of emerging issues for future AOS attention;
- Identification and prioritization of issues or opportunities with respect to international collaboration and coordination;
- Identification of observing system needs for optimization, additions, improvement, alignment with societal needs, etc.,
- Identification of shortfalls in observing use of observation information that arise from difficulties in data dissemination, product conceptualization and delivery;
- Identification of target audience(s) for recommendations (for example, Senior Arctic Officials, Arctic Science Ministerial, funding agencies, etc.);
- Identification of successful examples from within and from outside the Arctic context;
- Revision and expansion of synthesis documents to incorporate results from WG sessions;
- Produce draft outline of AOS findings and recommendations, include those pertaining to cross-cutting issues and partner responsibilities.

Appendix C. White Paper Process

In some years, community input to the Arctic Observing Summit is sought prior to the Summit through a white paper process. White papers serve to highlight important data, management, or logistical needs, explore emerging issues and opportunities, address current challenges, present new initiatives, or review on-going observing activities and programs. Papers may also cover issues that are relevant for the development, implementation, operation, benefits and support of an Arctic observing system, components of that system, and necessary technologies.

Community white papers should link to the themes identified for the Summit. Authors should indicate which theme(s) their submission(s) address. However, other input on relevant topics related is welcome..

In addition to full white paper submission, input is also accepted in the form of short statements.

Procedures for Submission and Review

- A call for white papers and/or shorter statements is issued 12 months before an upcoming Summit.
- Submissions are due three months after the call is issued. The call can be extended.
 - Papers and statements are submitted online to www.arcticobservingsummit.org
 - The review process is facilitated by the ISAC IPO.
- White papers are peer-reviewed by two or three appropriate experts. Short statements are reviewed by the EC, the SC, the TWGS, or external reviewers as needed.
- Contributions are sorted after review and assigned to TWGs for synthesis through the ISAC IPO.
- Contributions are shared internally with the AOS committees prior to completion of review.
- The review process is two months. Revised papers and statements are due four months before the AOS.
- Following review and revision papers are distributed to the TWGs and posted on the AOS website as they are received.
- In years where syntheses are prepared the TWGs should receive the white papers no later than three months before the Summit.
- Syntheses will be posted on the AOS website two weeks before the Summit.

Timeline for Submission and Review

Action	Target Date
Call for submission of white papers and short statements	12 months prior to the Summit
Submission of white papers and statements	9 months prior to the Summit
White papers sent for internal and external review	8 months prior to the Summit
Reviews of white papers returned	7 months prior to the Summit
Revised white papers returned	5 months prior to the Summit
Distribution of white papers and statements to Thematic Working Groups	4 months prior to the Summit
Posting of white papers and statements on AOS website	4 months prior to the Summit
Working group synthesis documents due and posted	2 weeks prior to the Summit

Guidelines for Format of White Papers and Statements

White Papers

- 5000 words or less (~10 pages of text) and references as appropriate;
- List all coauthors, affiliation(s), institutions and contact information;
- Identify a main contact;
- The title should be descriptive;
- Include an abstract (300 words maximum);
- Up to three 3 figures.

Short Statements

- 1500 words in length and referenced as appropriate;
- List all coauthors, affiliation(s), institutions and contact information;
- Identify a main contact;
- The title should be descriptive;
- The first paragraph of text should indicate the objective or topic of the statement;
- Up to one figure.

Formatting of the document and references should follow the style guidelines of the journal *Arctic* (<http://arctic.ucalgary.ca/guide-authors>). All submissions should be in PDFs with figures and/or tables labelled with clear titles and captions.

Guidelines for Reviewers

- Reviewers will assess how well the white papers address the overarching goals and expected outcomes of the AOS (e.g. under the AOS themes, does the white paper contribute to recommendations, highlight an issue or opportunity, suggest a solution or strategy, introduce an initiative or describe ongoing work related to AOS, mention work for future Summits, etc.).
- Reviewers are **not** asked to provide acceptance/rejection-type evaluations or full technical reviews of the underlying science.
- Reviewers should suggest revisions where appropriate and feasible within the given time frame. Focus on providing constructive feedback and improving alignment with AOS objectives.
- Reviews should include general comments and suggestions for how authors can tie their papers into the set of topics and themes to be discussed at the Summit. Consider in the comments how the white papers can contribute the discussions in the break-out groups, as well as recommendations emerging from the Summit.
- Reviews should include comments that provide concrete alignment with AOS themes, possible recommendations, and proposed solutions.