

IASC Council Meeting

Draft Minutes

23 May 2019

NArFU Main Campus, Room 1220

Arkhangelsk, Russia



In attendance

Peter Schweitzer, Austria
Kent Moore, Canada
Huigen Yang, China (Vice-President)
Josef Elster, Czech Republic
Lise Lotte Sørensen, Denmark
Sten Lund, Greenland
Paula Kankaanpää, Finland (Vice-President)
Jérôme Chappelaz, France
Günther Heinemann, Germany
Þorsteinn Gunnarsson, Iceland
M. Ravichandran, India
Vito Vitale, Italy
Hiroyuki Enomoto, Japan
Yeadong Kim, Korea
Rien Aerts, Netherlands
Christine Daae Olseng, Norway
Michał Łuszczuk, Poland
João Canário, Portugal
Vladimir Pavlenko, Russia (Vice-President)

Antonio Quesada, Spain
Peter Sköld, Sweden
Martin Schneebeli, Switzerland
Henry Burgess, United Kingdom (Vice-President)
Matthew Druckenmiller, USA
Larry Hinzman, USA (President)

Allen Pope, IASC Executive Secretary
Hjalti Ómar Ágústsson, IASC Executive Officer
Federica Scarpa, IASC Comms. Manager
Becky Hewitt, TWG Secretary
Rui Wang, Outgoing AWG Secretary
Jeanette Axelsson, Outgoing MWG Secretary
Laura Ghigliotti, Incoming MWG Secretary
Gunnar Már Gunnarsson, SHWG Secretary

There were ~70 observers present.

1. Opening

1.1. Welcome and Practical Information

The president opened the meeting by welcoming all the members present and complementing the venue. Council members then introduced themselves. The president thanked the hosts and Council Member Vladimir Pavlenko for hosting and the warm welcome. The President then reminded scientists to take care of each other and there was a moment of silence for two Polish scientists who died in an avalanche in Svalbard the previous week. The President then presented the agenda.

1.2. Approval of the Minutes from the Last Meeting

The President presented the minutes from last meeting and asked for comments. The Secretariat did not receive any comments on the minutes of the last meeting. The minutes were approved.

See attachment:

- **A1 IASC Council 2018 Open Meeting Minutes**

1.3. Adoption of the Agenda

The Agenda was adopted.

1.4. President's Report (Hinzman)

The President thanked the Finnish presidency in the Arctic Council for their work and welcomed cooperation with the Icelandic chairmanship. He noted that IASC was present in all high-level Arctic programs and emphasized that climate change is accelerating and that there is more need now than ever for research. Science must remain above politics and focus on the science. IASC can take a leading role in helping the next generation of researchers to reach their potential and the ASSW is a great opportunity to network and discuss accomplishments and research. He then encouraged people to share their knowledge and reminded everybody that they are present not only as individuals, but also as national representatives.

1.5. Executive Secretary's Report (Pope)

The Executive Secretary, Allen Pope, started by introducing the Secretariat and thanking Gunnar Már Gunnarsson, outgoing Executive Officer, for his work for the Secretariat and introducing new Executive Officer Hjalti Ómar Ágústsson. He then introduced the new dispersed secretariat and thanked the outgoing secretaries for their contributions. The Secretary then provided a status report on the main activities of the IASC Secretariat. This report included the secretarial support for the IASC WGs, the work of the Action Groups and an overview of outreach and communication activities, e.g., the IASC Bulletin 2019 and where it could be found. Special thanks to IASC Communications Manager Federica Scarpa for all her hard work on communication and outreach. He then highlighted IASC support to over 160 Early Career Scientist in 2018. The Secretariat aims to be responsive to the IASC community and welcomes everyone to visit the Secretariat in Akureyri if they are passing through.

Action: Report to ExCom Status of Rannís support at their meeting in October, if not before.

2. IASC Fellows

The new IASC Fellows Coordinator, Alevtina Evgrafova, could not attend and the Executive Secretary introduced the IASC Fellowship program and thanked Maja Lisowska, the outgoing Fellowship Coordinator, for her service. The 2019 IASC Fellows then each gave a short introduction to themselves and their work. (see: <https://iasc.info/capacity->

[building/fellowship/iasc-fellows](#)).

Sophie Haslett | Atmosphere WG
Barbara Barzycka | Cryosphere WG
Maria Lund Paulsen | Marine WG
Megan Sheremata | Social and Human WG
Clay Prater | Terrestrial WG

The President encouraged WGs to mentor and work with the Fellows so as to achieve the aim of the program to engage young researchers in Arctic research.

3. IASC Partnerships

3.1 Updated Memoranda of Understanding

The Executive Secretary will present information on updated and upcoming IASC partnership agreements. Council is asked to provide input into how IASC can enact the intentions stated in these MoUs.

The ES explained that the purpose of MoUs and LoIs is forming formal partnerships and identifying our priorities and have something to refer to in the future.

All MoUs, many of which are tri-lateral with SCAR, were reviewed with an intent to include tangible and measurable collaborative aims. Under review are WMO, EPB and IPA, CLiC has been encouraged to move up to WMO. IACS is also being revised with work being done on new wording and specific language. New MoUs being worked on NORP and EPB and the IPA which works closely with the CWG.

All information available on the IASC website.

See attachments:

- **A2 SCAR-IASC-IACS MoU**
- **A3 SCAR-IASC-WMO MoU**
- **A4 SCAR-IASC-APECS MoU**
- **A5 EPB-SCAR-IASC MoU**
- **A6 IASC-SCAR-IPA LoA**
- **A7 IASC-PAG MoU**

3.2 UArctic – Arctic Science Agreement Survey

IASC Partner, the University of the Arctic, will present preliminary outcomes of a survey on Potentials and Expectations of the Agreement on Enhancing Arctic Scientific Cooperation.

Andrey Petrov introduced the ASA and its background and presented preliminary outcomes of a survey led by UArctic on “Potential and Expectations of the Agreement on Enhancing Arctic Scientific Cooperation.” The Agreement itself was signed in 2017 by the 8 Arctic countries and is deposited in Denmark. UArctic posted an open online survey in February - April 2019, which was also publicized by IASC. It was shared openly at websites, social media, emails etc. The survey had three parts: Contacts; Knowledge about the agreement; Negative and positive experiences in getting access. Total number of respondents 136 from 17 countries in North America, Europe (incl. Greenland) and Asia, including email answers from Russian Federation in Russian. Majority of participants were ok with their names being public, speaking for themselves, not their institutions. Results of the survey are being analyzed, report will be out this summer. Andrey presented preliminary results and statistics of the survey. Andrey asks IASC to highlight ASA so

people know about it.

Can the ASA help us in cooperation?

Survey results show that all parts of the agreement were relevant to Arctic scientists. Survey results highlighted the importance of infrastructure, logistics and access to areas, information and data. Educational activities and capacity building very also very important to respondents.

The question is where the problems lie and what should we be addressing: Access to Arctic countries can be a hurdle. Respondents reported issues people have faced such as getting permits and transferring money. These are serious areas of concern but easy to fix through cooperation. However, it was noted that the number of complaints was actually very low – which is a very encouraging takeaway point. In an environment of increased de-internationalization, Arctic sciences must rise above that.

The Council discussed the presentation and noted that perhaps a survey, building on the results of the survey presented, with a bigger sample might give more in depth answers. The Council looks forward to the full report.

3.3. Arctic Council Chairmanship Update

Council member Þorsteinn Gunnarsson gave an update on the Icelandic Arctic Council Chairmanship, as well as further information on IASC involvement in Arctic Council activities. Gunnarsson presents the main themes of the Icelandic presidency:

1. Arctic Marine Environment. “The Arctic Council will continue its work on monitoring and assessment, protection of marine and coastal ecosystems, and promotion of sustainable use of marine resources.”
2. Climate and green energy solutions “The Arctic Council will continue observing and assessing climate impacts on Arctic marine, freshwater and terrestrial ecosystems, and an update report on Arctic climate change will be prepared for the 2021 Ministerial meeting in Reykjavík.”
3. People and communities in the Arctic
4. Stronger Arctic Council

Gunnarsson noted that ASSW 2020 in Akureyri will be part of the Icelandic chairmanship program and the International Science Day will be back to back with the SAO meeting that will be held in Akureyri. This increases the possibility of SAO participation.

Gunnarsson noted that there will be a meeting regarding the Arctic Science Agreement at ASSW 2020. Gunnarsson emphasized that both he himself and IASC have on occasions advised the Icelandic chairmanship on Arctic issues and that IASC is well engaged in the chairmanship program and Iceland is eager to engage IASC for a successful chairmanship.

The President thanked Gunnarsson for the presentation and declared appreciation for the coordination between SAO and ASSW.

4. IASC Implementation Plan (Hinzman/ExCom)

From 2018 Council meeting: “It was noted that the [strategic] plan is broad and achieves in including most of the critical issues for Arctic science. It was, therefore, suggested that the Strategic Plan should be supplemented with a more practical Action Plan for the next five years.”

The President presented the Council with a draft of an implementation strategy which has been created by the ExCom. This Implementation was then opened for discussion, informed by IASC Council | 23 May 2019 | Arkhangelsk

materials produced by the Secretariat, and guided by a group voting exercise.

IASC Strategic Plan 2018-2023, based on the ICARP III science priorities, was implemented in 2018 but was deemed to need an Action Plan which has been in development over the last year with engagement from IASC ExCom, Council, Working Group Chairs, and IASC Partners.

The SP is framed around 3 main pillars:

- Facilitating Arctic Research Cooperation
- Promoting Engagement
- Ensuring Knowledge Exchange Priorities

The President explained what has been done and what is going to be done (see Attachment 9) and emphasized that all bodies within IASC should align actions and decisions with the SP. He also noted that the SP is being translated into Chinese and Russian and possibly other languages.

Secretariat tasks to goals – The Secretariat mapped the tasks it supports and how they relate to the goals. See that every action and goal (9 different goals) all supported to some extent in those efforts. Also mapped the budget and IASC spending.

In light of these discussions, the president then presented a process of the group voting exercise which is a way of engaging the Council in a discussion on how to implement the SP. Each pillar and goal are important but take different levels of priorities and effort, some take high priority and effort but others are low priority and high effort etc.

At the end of the session everyone was given red and green stickers to pin on the table. Council was encouraged to look at the SP and get familiar with it and then asked to place stickers on the group voting table to indicate their views on success/shortcomings of SP before going to coffee break.

See attachments:

- **A8 Draft Implementation Plan**
- **A9 Secretariat Tasks & Strategic Plan Implementation**

Coffee Break (10:30 – 11:00)

Open Session (11:00-13:00)

4. IASC Implementation Plan, continued (Hinzman/ExCom; 30 min)

See above.

LH hands the floor over to AP. Results of “Sticker voting” presented.

AP – total of 93 success and 84 shortcoming votes.

1.1	19 / 0
1.2	2 / 16
1.3	1 / 18
2.1	7 / 16
2.2	4 / 14
2.3	22 / 0
3.1	14 / 3
3.2	5 / 16
3.3	19 / 1

AP – asks for comments

The Council discussed the results of the voting exercise and noted that a lot of focus was put on the role of IASC in securing international funding. Council discussed that although under the current structure the role of IASC in building Arctic research capacity was limited, there was still a lot IASC could do. The Fellows are a part of that capacity and although IASC may not have the means it has clout which can be used for lobbying for investments in Arctic research capacity.

Council also discussed that Cross-Cutting activities were expensive but also a success and that the rewards far outweigh the costs. The Council noted that the members were always representatives of their states and as such the whole exercise should be used as a tool for informing communication between members and their states and within the Council itself. Ultimately the most important thing is to transfer knowledge to policy makers. Council also discussed that the voting showed shortcomings in Indigenous involvement. Indigenous involvement has been an issue from the beginning and much has been done but progress is slow.

Council was reminded that these messages are important to take back to their national institutions.

- *HB – Majority of red on 2.1 to emphasize the role of IASC on international funding, could have been put in other places as well. Should continue to make efforts there.*
- *Schweitzer – Austria agrees that 2.1 has shortcomings, but structurally impossible to really do that, it is very expensive. A goal that is not attainable under the current structure.*
- *LH – a lot that IASC could do, Fellows part of research capacity. But can also play a role in encouraging states to invest in capacity in scientific efforts. IASC has not the means but may have clout to lobby.*
- *Enomoto Japan – IASC recognizes the importance of this, some issues get too much attention. There is also more to do in the area of data and observations. As well as transferring science to policymakers.*
- *LH – Not only the natural environment but also the scientific environment is changing rapidly (political diplomatic) so it is right that we should be thinking about the impact of our research.*
- *HY – XC activities have been supported but are expensive. Arctic research is mainly supported by national bodies. Could make an effort to get funding from elsewhere.*
- *LH – the effort invested XC has a greater impact and the resources give greater reward than the amount allocated.*
- *ML, Poland – We are assessing ourselves and the member states, not IASC in fact. What IASC can do means what can states do. Should address ourselves, not the organization or the Secretariat. Take that home with us and see what we can do.*
- *LH – You are right, we want guidance from your nations and for you to take this back to your states.*
- *Switzerland – We need to work on this further and agree with Poland but we as a group must identify the problems and work on improving. We need to have a kind of signature of IASC. Important that IASC is representing the nations. The most important to transferring knowledge to policy makers, if we go there the others will come. Must identify how.*
- *LH – right, good to use IASC to influence*
- *Spain – We should revisit this discussion in future years. We also need to keep looking forward. Knowledge transfer is very important – just because we are doing a good job doesn't mean we should stop doing that and focus on other things.*
- *Germany – Was nothing on the ASM in the priorities?*
- *AP – trying not to be too presumptuous of IASC role as observers at ASM but have been fortunate enough to be asked for advice.*
- *USA – it may take time to reach goals. E.g. the voting shows that there is a shortcoming in Indigenous involvement. Maybe keep the long view in mind for some of these rather than short term. That way, we are strategic rather than reactive.*
- *LH – I have been involved from the beginning and Indigenous engagement has been a priority the whole time but seems to be a slow progress. Come a long way but still much to do.*
- *Peter, Sweden – importance of transferring knowledge (Spain) very good that IASC has taken*

the initiative with reports (state reports) (also psychology in putting dots).

- *LH – thank you for your inputs. The ExCom is thankful for thoughts and inputs to take forwards.*

The President thanked the Council and ExCom will keep working on the AP based on the results and discussions. Will implement this for next year and revisit at ASSW 2020.

5. IASC Working Groups

5.1. Working Group Updates and Work Plans (WG Chairs)

Under this agenda item, the Chairs of the five Working Groups (WGs) presented brief status reports of the WG activities in 2018-19 and an outlook on their plans for the future. Detailed information on the activities of the IASC WGs is available on the IASC website and in the IASC Bulletin 2019, which was distributed at the meeting. The WG budgets were presented in the Executive Session of the Council Meeting.

- Atmosphere WG – presented by newly elected Chair Stephen Arnold
 - Noted the amount of money they were spending on truly internationally collaborative projects
 - Requested further guidance related to the intended audience of the national reports
 - Looked forward to more interaction with the Action Group on Indigenous Involvement
 - Many innovative and productive projects being supported – see presentation
- Cryosphere WG – presented by the Chair Guðfinna (Tollý) Aðalgeirsdóttir
 - Will need more time for the national reports, and want to know whether this will be an annual or intermittent process. Echoed comments about needing more guidance regarding the intended audience. Related: How is ICARP-III still used and promoted.
 - For AGII: More clarification on local vs Indigenous knowledge and involvement
- Marine WG – presented by the Chair Lee Cooper
 - Elections were deferred to later in 2019
 - Gordon Research Conference presented as a unique conference that MWG is excited to be able to support
 - Reported on the work of freshwater groups – report, and ArcFRI
- Social & Human WG – presented by newly elected Chair Andrey Petrov
 - Presented new leadership
 - Specifically interested in more guidance and mentorship of WG members
 - National Committees: difficult to engage, but positive, and good for IASC publicity
 - Q: Will there be opportunities for sharing in other countries/disciplines?
- Terrestrial WG – presented by the outgoing Chair Philip Wookey (in place of newly elected chair Josef Elster)
 - Presented their excited projects and also introduced new leadership
 - Inquired about the level of discussion / trading between the working group support of various projects. It was answered that this was not the case, and each group made their decisions independently but tended to be inclusive in their decisions.

All Chairs thanked outgoing members and Fellows and welcomed new members. The chairs emphasized the benefits of cross-cutting activities and the importance of cooperation between the WGs.

See attachment:

- **A10 Provided as requested at the 2017 Council Meeting, recent Working Group attendance records.**

Council noted that AWG, SHWG, and TWG Chairs and Vice-Chairs were elected at ASSW2019. A MWG election will take place online this fall. Forthcoming election timing will be informed by the work of the Bylaws Action Group.

Action: Secretariat to send reminders about WG members and leadership rotating off.

5.2. Member Country Survey (Hinzman)

The Council is asked to consider the results of a survey commissioned by Council from their meeting in 2018, in particular exploring Working Group roles, engagement, and support. This survey stemmed from a concern considering disparities in support of Working Group members.

A letter submitted by the Social & Human Working Group considering disparities in support of Working Group members was submitted to the Council in 2018 for discussion at Polar2018. To address the issues presented in the letter it was decided to send out a survey on how WG and Council members are selected and supported. General conclusions were presented, and Council encouraged to read the Survey Responses (see attachment 11). Members were asked to take best practices back to their countries to their advantage.

Council were very interested to consider the results of the survey, in particular responses to the question “Is there anything else you would like to add regarding your national IASC Working Group member selection, support, and participation”

- ❖ Request consideration of more IASC support for under-resourced national delegations
- ❖ Request materials to support national presentations about IASC and IASC WG work
- ❖ Encouragement of more diversity & Indigenous representation
- ❖ Welcome sharing of best-practices in engagement

The Council discussed the recommendations. Increased IASC support for under-resourced delegations was discussed but ultimately declined since it is the responsibility of states to fund their delegations and increased IASC support would essentially mean that some states were subsidizing others. Requests for materials to support national presentations was also discussed – the Secretariat reminded those present that presentations are already provide by the Secretariat and updated at least annually.

Action: IASC Secretariat to prepare a report for dissemination back to home countries.

Action: Secretariat to updated presentation for 2019, have it distributed by the President, and share it on the IASC website.

Council proposed a tool for measuring diversity in representation and collect data over time, in particular gender, a process that has already begun within the Secretariat.

Action: IASC Secretariat to be in contact with Mervi Heikkinen regarding discussion of an action plan.

See attachment:

- **A11 Member Country Survey Responses**

6. IASC Action Groups

In considering objectives of its Strategic Plan, IASC is receiving reports from three Action Groups at three stages of their work. Council will be presented with these groups for their consideration, discussion, and approval.

6.1. Indigenous Involvement (Lund)

Action Group Chair Sten Lund presented Council with an update on the progress on the IASC Action Group on Indigenous Involvement, tasked with providing recommendations for improving IASC’s involvement of Indigenous people and Indigenous knowledge.

Lund presented the work of the AG and pointed out that although the mission to facilitate cooperation in all aspects of Arctic research is simple, it is not easy. It is important to gather information on best practices from various sources that have experience in working with Indigenous communities. A lot of time has gone into very important discussions on definitions and various views on what to include and the group is working on a glossary of terms. Contact between the scientific community and Indigenous Peoples, including regarding utilization of Indigenous knowledge, is in different stages. The process is not really formalized, and a glossary would be a step towards getting everybody on the same page.

Lund presented a table/checklist to use for the discussions the AG is having. Following the group's ToR, the focus is very much on better involvement of Indigenous people in IASC activities and incorporating Indigenous/traditional knowledge into the full breadth of IASC activities. Lund emphasized that in its work on defining what constitutes Indigenous Knowledge, the AGII tried to steer away from politics and legal issues. Lund presented general results of a Survey sent out before the meeting which will be used to help identify opportunities for Indigenous participation with IASC and develop a set of draft recommendations. Among possible methods proposed are using Fellowship programs to encourage greater involvement of IPs and perhaps an IASC Statement on Principles for Incorporating Indigenous/Traditional Knowledge into IASC Activities. All these issues will be discussed at AGII meeting on the 28 May, which the group is invited to. The AG expects to continue its work over the next year and deliver a report to Council at ASSW2020.

See attachment:

➤ **A12 AGII Survey**

Lunch Break (13:10 – 14:00)

Open Session (14:00-15:30)

6. IASC Action Groups

6.2. Linking Science & Business

Larry Hinzman presented the Council with the outcomes and recommendations of the panels convened by the Action Group on Arctic Science and Business/Industry Cooperation. Council was invited to comment on recommendations for implementation.

The AG was intended to have a short-term mandate investigating opportunities for IASC to invest or take further action in the future. This is a final report. Two workshops during AC in Iceland 2017 and 2018, the purpose of which was to determine how to get Arctic science and business and industry to cooperate. Hoped to exchange knowledge and experience and resources. The idea is to use science to reduce risk in investment and get industry and business to pay for research. There is increased interest of small businesses and large industry in the Arctic but investment comes with great challenges in both short and long term that science can help with.

The AG invited groups from resource extraction, shipping, high tech and scientists to match up to show how they could help each other addressing these challenges. What can science do to diminish the obstacles and limits to development and expansion? Easy to explain why science

and industry/business need each other but getting them to cooperate is not so straight forward. Ownership over knowledge may be a contentious issue and must be agreed on beforehand. Getting industry to invest in projects for the common good is easier if the financial incentive is clear. New technologies can reduce cost and benefit both science and industry. Hinzman took shipping as a great example of industry supporting science to research sea-ice conditions and changing climate. There is great value in increased cooperation between industry and science.

Council discussed the report and concerns were raised over ethical considerations and the different motives of actors in such cooperation. Hinzman emphasized that scientists must always consider what research they are willing to participate in and that ethics will always be an important factor to consider. Council discussed the positive potential of cooperation and how IASC could be instrumental in creating a link between Arctic science and industry/business – particular topics include data sharing, bioprospecting/biomedical industry, and the shipping industry.

Action: Hinzman to submit a summary op-ed to a relevant publication.

6.3. Bylaws Action Group (Burgess)

Council was presented with an update and recommendations from the Bylaws Action Group. Council was invited for consideration and comment.

The AG Chair, Henry Burgess, discusses the background of the AG. IASC has a strong governing system, but there are a number of duplications and contradictions that need to be addressed.

The AG is proposing an updated and comprehensive Handbook that would serve as a single and easily readable source of the procedures and processes by which IASC, as a whole, operates. It should be a living document, updated and approved by ExCom and Council as needed, and publicly available on the IASC website. The Action Group does not recommend that any changes are made to the IASC Founding Articles. It strongly recommends that the Founding Articles are included – as a complete and unamended document – within the Handbook. The Handbook would then be the reference-point rather than earlier documents.

ExCom has received updates and has given its full approval for the work done so far. Recommendations will eventually be presented to ExCom for approval and then the Council.

See attachment:

➤ **A13 Summary Note from Bylaws Action Group, in both English and Russian**

AP – In addition, regarding IASC documentation, we didn't have written guidance for hosts for ASSW and not really clear what was expected. Have written some guidelines which are still in process. Also working on a document on hosting more inclusive meeting agendas.

7. Other IASC Activities

7.1. International Science Initiative in the Russian Arctic

Arkady Tishkov could not make it to present the Council with an update on the activities of IASC's ISIRA Group. The Executive Secretary summarized the intended agenda for the upcoming ISIRA meeting; council members were invited to the ISIRA meeting, which was held at 11:00 on 26 May. IASC Executive Secretary gave Tishkov's apologies and also gave a short summary of the history and current status of the initiative. ISIRA meeting materials are posted on the IASC website.

7.2. SAON (Gunnarsson)

IASC Council Member Þorsteinn Gunnarsson presented an update on SAON and lead a discussion on how IASC can better contribute to and support SAON. SAON is a joint effort of the Arctic Council (through AMAP) and the International Arctic Science Committee with the aim of free and ethically open access to all Arctic observational data. The current SAON Strategy 2018-2028 was approved by the SAON Board 16th May 2018 and is organized around three key goals:

- 1. Create a roadmap to a well-integrated Arctic Observing System;*
- 2. Promote free and ethically open access to all Arctic observational data; and*
- 3. Ensure sustainability of Arctic Observing*

SAON has created a Road Map Task Force with the objective to develop a high-level definition for the SAON *road map* for Arctic observing. The Task Force's mandate is to develop a high-level, structural definition for the *SAON Road Map for Arctic Observing* that will serve to generate strong international investments in Arctic observing, and to define how *Arctic Societal Benefit Areas* or other objectives should be used to shape the *Road Map for Arctic Observing*. The SAON *Road Map for Arctic Observing* definition should build upon national efforts and needs, existing Arctic road mapping activities, and ultimately serve as a guide for developing concrete national plans to support pan-Arctic observing needs. The deliverables from the Task Force will be a 2-3 page product that will address the points laid out and provide sufficient background and context to understand how these points were defined and the context in which they should be applied, timelines that will be provided by a draft team ready for review in the fall, a presentation at the Arctic Circle Assembly in Reykjavik, and a white paper to be presented at the Arctic Observing Summit, 2020. Þorsteinn asked the council for comments for the deliverables, specifically:

- How does this concept resonate with national funding bodies?
- Could this exercise build a stronger relationship with *IASC Working Groups*
 - Could each WG designate observing experts?
 - Could essential variables defined through this exercise be matched with WGs?

The main objectives of goal 2 are a road map outlining a world-wide system that will provide researchers and others with access to all Arctic observational data, a world-wide system for access to all Arctic data and to establish a Persistent Consortium of Organisations to Oversee the Development of a world-wide system for access to all Arctic data.

The SAON Secretariat has been supported financially by Norway since 2011 but has received financial support from Finland, Japan, Canada and USA in 2019 following a reduction in Norwegian support. Þorsteinn asks the Council to assist in soliciting support for the Secretariat from their home countries. For more information see: www.arcticobserving.org

7.3. Arctic Observing Summit (Eicken / Bradley)

Council will be presented with background, outcomes from AOS2018, and plans for 2020. Council is asked to note the report and provide input into the planning of Arctic Observing Summit 2020.

Eicken thanks the Council for the opportunity to present AOS to them.

Presentation started with a brief reminder of what AOS is and its goals: to provide community-driven, science-based guidance for the design, implementation, coordination and sustained long-term operation of an international network of Arctic observing systems that serves a wide spectrum of needs, and to create a forum for coordination and exchange between academia, government agencies, Indigenous & local communities, industry, non-governmental organizations and other Arctic stakeholders involved in or in need of long-term observations.

Eicken then presented the thematic history of what AOS has dealt with in the past and emphasized the integral part data plays in the pursuit of knowledge. Eicken then discussed the AOS 2018 Call to Action at ASM-2 which highlighted the benefits of shared observation, both for science and on a broader level, for Arctic and non-Arctic nations alike. The SAON roadmap a tool to get players to move in concert to a common goal. Ongoing observations need to be better coordinated and linked to SAON roadmap.

Eicken then presented the draft themes for the 2020 Arctic Observing Summit: Observing for Action which will take place in Akureyri in March 2020. The themes are:

1. Design, Optimization and Implementation
2. Observing in Support of Adaptation and Mitigation
3. Observing in Support of Global Action
4. Data Interoperability and Federated Search
5. Indigenous Needs

Eicken emphasized that observing is a part of adaptation and mitigation. AOS is making a deliberate effort to engage IP needs and views in its work. AOS are recruiting for the WGs and Eicken asked the Council to please refer good candidates to AOS.

SAON is transitioning from biennial meetings to being more process organized under SAON and the international Secretariat and Task Teams. The question is “what can IASC do?”. First, it is important to retain IASC and SAON co-oversight. Other point, how can we ensure a strong link to ASM?

Council noted the ambitious report and discussed what “key variables” meant. AOS takes a pragmatic view of the issues, e.g. the state of the oceans and what are the issues communities are facing in terms of food security. AOS feels that we are at a point where all variables can be combined into an observation framework based around societal benefit areas. The Council also discussed the challenges regarding Indigenous Knowledge and qualitative research and AOS has been in cooperation with Indigenous Peoples to define the problems for the research communities.

7.4 Arctic Data Committee (Pulsifer, by video)

Peter Pulsifer presented a video report with particular focus on ADC’s latest activities.

Pulsifer presented the history and background of website. Much of the work in the last year has been driven by the statement from October 2018. The data system (of systems) has number of different components, infrastructure, resources, standards etc.

Recent activities have been mostly around community building. Many members representing national communities, research collaborations, and others.

Last major event was the Polar Data and Systems Architecture Workshop in Geneva in November 2018 (see: <https://arcticdc.org/meetings/conferences/polar-data-architecture-workshop>). Most of the effort in Geneva was focused on data accessibility. Working on writing the results up and creating a database.

Data must be discoverable to be of use. ADC is working with Google to make sure their systems work with the work that the Federated Search working group (POLDER) is doing. Working on cataloging all the databases that do exist.

The way forward – IASC members can Identify individuals or organizations that are responsible

for data in their countries and encourage engagement. They can also identify individuals who are interested and generate resources to support the effort.

Third Polar Data Forum will be in Finland in November 2019.

Q: send to peter.Pulsifer@colorado.edu

LH – the group has done great work in the last years.

7.5 Arctic Science Ministerial

Hiroyuki Enomoto and Þorsteinn Gunnarsson presented an update on the planning of the 3rd Arctic Science Ministerial. Council is asked to note the report and invited to provide comments in response to any requests.

ASM3 in Japan is organized in cooperation between Iceland and Japan. It will be in November 2020 in Tokyo. Organizers also want to utilize the opportunities that will present itself next year in meetings in Arctic Circle in Reykjavík, ISAR-6 in Tokyo, ASSW in Akureyri, and ICASS in Arkhangelsk.

Þorsteinn adds that this advance notice from two governments to the science community gives good time for scientists to present their views. ASSW will begin with an international science day and will be used to prepare discussion on ASM3. The preparation should lay the foundation for great inputs for discussions for the ministers.

Executive Secretary Pope thanks the Icelandic organizers for including IASC in an informal advisory committee. One of the ideas is to better include scientific input in the ASM3 discussions through an open, longer consultative process. IASC also has suggested more internationally collaborative deliverables, rather than solely nationally-driven deliverables.

8. Any Other Business (25 min)

8.1. Working Group on a Forum of Arctic Science Funders

As an outcome of ASM2, there are initial discussions around scoping a Forum of Arctic Funders; this is by no means yet a formalized process. IASC only observer invited to partake. The group is hosting a meeting in Iceland this fall. Discussion on appointments to group between Vito and AP and the way forward. The Secretariat will keep IASC leadership up to date on this topic.

9. Notice of Next Meeting

AP – introduces ASSW 2020: Akureyri, Iceland; 27 March – 2 April 2020

More information will be available at <https://www.assw2020.is/>.

Þorsteinn and Federica are the people to contact for answers.