

Report: SAO plenary meeting

Levi, Finland | 22-23 March 2018

Second SAO plenary meeting during the Finnish Chairmanship

Link to meeting documents:

https://oaarchive.arctic-council.org/handle/11374/2125



Acronyms and abbreviations commonly found in Arctic Council reports

AAC Arctic Athabaskan Council

AACA Adaptation Actions for a Changing Arctic (AMAP)
ABA Arctic Biodiversity Assessment (CAFF, 2013)

ABC Arctic Biodiversity Congress

ACAP Arctic Contaminants Action Program (1 of 6 Working Groups)

ACGF Arctic Coast Guard Forum

ACIA Arctic Climate Impact Assessment (AMAP, 2005)

ACS Arctic Council Secretariat
AEC Arctic Economic Council

AEMM Arctic Environment Ministers' meeting

AIA Aleut International Association

AMAP Arctic Monitoring and Assessment Programme (1 of 6 Working Groups)

AMATII Arctic Maritime and Aviation Transportation Infrastructure Initiative (SDWG)

AMBI Arctic Migratory Bird Initiative (CAFF initiative)

AMSA Arctic Marine Shipping Assessment (PAME, 2009)

AMSP Arctic Marine Strategic Plan 2015-2025 (PAME, 2015)

AOA Arctic Ocean acidification

AORF Arctic Offshore Regulators' Forum

ARA Arctic Resilience Assessment

ARAF Arctic Resilience Action Framework

ARF Arctic Resilience Forum

ARIAS Arctic Invasive Alien Species project (CAFF initiative)

ARR Arctic Resilience Report

ASTD Arctic Ship Traffic Data project (PAME initiative)

BCM Black carbon and methane

CAFF Conservation of Arctic Flora and Fauna (1 of 6 Working Groups)
CBMP Circumpolar Biodiversity Monitoring Program (CAFF initiative)

CCAC Climate and Clean Air Coalition

CLEO Circumpolar Local Environmental Observers [network] (ACAP initiative)

EA Ecosystem Approach [to Management]

EG / EGs Expert Group(s)

EGBCM Expert Group in support of Implementation of the Framework for Action on Black

Carbon and Methane

EPPR Emergency Prevention, Preparedness and Response (1 of 6 Working Groups)

ERMA Environmental Response Management Application (EPPR initiative)

GCI Gwich'in Council International

HFO Heavy Fuel Oil

HLPF-SD UN High-Level Political Forum on Sustainable Development

ICC Inuit Circumpolar Council
IK Indigenous knowledge

IMO International Maritime Organization



ITU International Telecommunications Union

IPCAP Indigenous Peoples Contaminants Action Program (ACAP Expert Group)

IPCC Intergovernmental Panel on Climate Change

IPS Indigenous Peoples' Secretariat

LRTAP UNECE Convention on Long-Range Transboundary Air Pollution

MAC Model Arctic Council
MFA Ministry of Foreign Affairs

MOSPA Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in

the Arctic (2013)

MOU Memorandum of Understanding

MPA Marine protected area

O&G Oil and gas

OAR Open Access Repository

PAME Protection of the Arctic Marine Environment (1 of 6 Working Groups)

POPs Persistent organic pollutants
PP / PPs Permanent Participant(s)
PSI Project Support Instrument

RAIPON Russian Association of Indigenous Peoples of the North
RRFP [Arctic] Regional Reception Facilities Plan (PAME initiative)
SAMBR State of the Arctic Marine Biodiversity Report (CAFF initiative)

SAO / SAOs Senior Arctic Official(s)

SAOC SAO Chair (Chair of the Senior Arctic Officials)

SAON Sustaining Arctic Observing Networks
SAOX Senior Arctic Officials' executive [meeting]

SAR Search and rescue

SCTF Task Force on Enhancing Scientific Cooperation in the Arctic

SDGs [UN] Sustainable Development Goals
SDI [Arctic] Spatial Data Infrastructure

SDWG Sustainable Development Working Group (1 of 6 Working Groups)

SLCFs Short-lived climate forcers
SLCPs Short-lived climate pollutants

SWIPA Snow, Water, Ice and Permafrost in the Arctic (AMAP)

TF / TFs Task Force(s)

TFAMC Task Force on Arctic Marine Cooperation

TFAMC-I Task Force on Arctic Marine Cooperation (2015-2017)
TFAMC-II Task Force on Arctic Marine Cooperation (2017-2019)
TFICA Task Force on Improved Connectivity in the Arctic
TFOPP Task Force on Arctic Marine Oil Pollution Prevention

TFTIA Task Force on Telecommunications Infrastructure in the Arctic

TK Traditional knowledge

TLK Traditional and local knowledge

UNFCCC UN Framework Convention on Climate Change

WG Working Group

WMO World Meteorological Organization



1. Introduction

1.1. Opening remarks

The SAOC welcomed delegates to the second plenary meeting of SAOs during the Chairmanship of Finland (2017-2019).

The Saami Council welcomed delegates to the region, which borders on Sápmi, and introduced youth delegates from the Saami Council and ICC who were attending the SAO plenary meeting.

1.2. Approval of agenda

The agenda was approved as presented.

1.3. Welcome speech

Minister of Transport and Communications of Finland Anne Berner delivered a welcome speech via video. She praised the developing collaboration between the WMO and the Arctic Council as well as AMAP's decision to include meteorology as a permanent component of its future work plans. She also pointed to improved connectivity as a major step to improving the resilience of Arctic communities.

2. Report from SAO executive meeting

The SAOC provided information on issues discussed in the SAO executive meeting held on 21 March 2018. He noted the following points in particular.

- Regarding the strategic plan for the Arctic Council, Canada provided a review of the workshop held in London, after which delegates to the SAOX discussed the first draft of the plan. The draft has four sections an introduction, principles, priorities, and implementation and follow-up. The discussions were animated by: a strong focus on the Arctic Council's desired functions; promotion of the well-being of the inhabitants of the Arctic; regular referral to the three pillars of sustainable development; a sense of the Council's role in communicating outward about the Arctic; and knowledge of the Council's influence in helping to maintain an environment of peace, constructive cooperation, and dialogue in the region.
- Regarding the Task Force on Arctic Marine Cooperation, delegates recognized that
 its work is closely connected to the strategic planning process. The TFAMC-II was
 asked to focus its remaining time on complementary enhancements, and it was
 advised to devote thought to improving coordination of the Council's marine work



and suspend the work on drafting Terms of Reference for a possible new subsidiary body at this stage.

- Planning continues for the Arctic Environment Ministers' meeting (AEMM) to be held in Rovaniemi in October 2018. Finland is gathering input now in order to synthesize background documents for the event. The outcome will be a Chair's summary that will feed into preparations for the Arctic Council Ministerial meeting in spring 2019. The meeting will tie into the Arctic Biodiversity Congress.
- The review of the PSI is proceeding according to the terms of reference agreed upon earlier.
- The Arctic Council will move forward on a cooperative initiative with the OECD to examine the economic consequences of black carbon abatement work. AMAP and the EGBCM will take the lead.
- The Arctic Council will have a presence at two upcoming international forums. First, the UN High-Level Political Forum on Sustainable Development (New York, July 2018). Second, the UNFCCC COP24 (Katowice, Poland, December 2018). The Chairmanship will coordinate both events.

3. Arctic Council Secretariat update

Background and discussion

Nina Vaaja, director of the ACS, presented the ACS's annual report for the year 2017. The report includes information on the activities of IPS and the ACAP and EPPR secretariats, all of which are housed within the ACS. She noted that many ACS staff members have acquired substantial experience, as many are in their second four-year term. She advised delegates of several staff changes in 2017, including the retirement of previous ACS director Magnus Johannesson and the hiring of Anna Degteva as executive secretary to the IPS, succeeding Elle Merete Omma.

She pointed out that the ACS was well within its budget for 2018, and she drew attention to a change in the ACS's criteria for revenue recognition as recommended by the ACS's auditor. In 2016 and previous years, States' contributions were recognized as income on the date of receipt. In 2017 (and henceforth) States' contributions were recognized as income when used. This means that, for accounting purposes, any unused funds at the end of the year are not presented as a surplus in the ACS accounts, but rather as deferred income — a short-term liability — that the ACS owes to the States. The unused funds thus categorized are transferred to the next year's budget and deducted from States' contributions.

Looking to the future, she highlighted the upcoming move of the ACS into its new offices and welcomed the move of the AMAP secretariat to Tromsø, where it will be co-located with the ACS. She also highlighted two open positions at the ACS and asked all delegates for help in publicizing these positions broadly to attract the best possible candidates.



She thanked: the Government of Norway as hosts; the United States and Finland as Chairs during 2017, with special mention of SAO Chairs David Balton and Aleksi Härkönen; the Kingdom of Denmark, Finland, and Russia for their contribution of seconded staff members; and the United States and Canada for extra financial contributions.

During the discussion that followed, there was general praise for the work done by the ACS in the areas of logistics, coordination, and communications. Several States and PPs noted that only two States contribute financially to the regular budget of the IPS, and they asked other States to consider supporting the IPS as well. The U.S. asked whether the ACS could provide a "refresher course" in record-keeping procedures, with particular reference to the guidelines for publishing documents from SAO executive meetings. The ACS director replied that the executive meeting documents reports will be kept out of public reach for a period of 20 years, as agreed by the SAOs. Canada raised the idea of increased capacity at the ACS to support the strategic planning process, and praised the change from a static version of the "Amarok" to an updated SharePoint system.

Summary / Conclusion

SAOs took note of the annual report and approved the ACS accounts, financial statements, and auditor's report.

4. Update on the Agreement on Enhancing International Arctic Scientific Cooperation (2017)

Background and discussion

Anne Meldgaard of the Kingdom of Denmark provided an update on the status of the scientific cooperation agreement signed at the 10th Arctic Council Ministerial meeting in Fairbanks, Alaska in 2017. The Kingdom of Denmark is the depositary for the agreement. Seven States have completed their internal procedures, and the remaining State is expected to have its internal procedure completed within a few weeks. The agreement will enter into force one month after the notification has been received from the final State; this should be sometime in May if all proceeds as expected. The Kingdom of Denmark is considering various options for convening the first meeting in the review process. In accordance with the agreement, such a meeting must take place no later than one year after the agreement has entered into force.

The Kingdom of Denmark hopes to be able to formally announce the entry into force of the agreement at a meeting on 23 May in Ilulissat, Greenland, to celebrate the 10-year anniversary of the signing of the Ilulissat Declaration. The Kingdom of Denmark has invited all States and PPs and hopes to secure high-level participation in order to demonstrate the States' continued commitment to peaceful cooperation in the Arctic.



Summary / Conclusion

This item was for information.

5. Thematic discussion: meteorological cooperation

Background and discussion

Presenters for this agenda point were as follows.

- David Grimes, President, World Meteorological Organization
- Wenjian Zhang, Assistant Secretary-General, World Meteorological Organization
- Juhani Damski, Director General, Finnish Meteorological Institute
- Árni Snorrason, Director General, Icelandic Meteorological Office
- Aleksandr Makarov, Director, Roshydromet Arctic and Antarctic Research Institute
- Marianne Kroglund, Chair, AMAP

President of the WMO David Grimes opened the discussion. He described the context in which the Arctic Council, the WMO, and the national meteorological institutes can increase their collaboration, and drew attention to the WMO as part of a broad community of institutes engaged in meteorological research and related work. The WMO as an Arctic Council Observer and partner thus serves as a gateway to many different resources. He also pointed out the need for improvements in the observational networks in the Arctic. Assistant Secretary-General Wenjian Zhang highlighted the role of the WMO in improving quantitative prediction of climate change in the Arctic and the global implications of this change.

The representatives of national meteorological institutes of Finland, Iceland, and Russian Federation presented the capabilities of their own institutes in e.g. providing meteorological observations, modeling the dispersion of pollutants, and improving understanding about the Earth's climate system. They highlighted the need for sustained international cooperation and mentioned valuable initiatives such as the WMO's Polar Regional Climate Center and Year of Polar Prediction. Enhanced satellite observations, especially Highly Elliptical Orbit (HEO) missions were found as a potential tool to improve the collection of much-needed data in the Arctic. Director General of the Finnish Meteorological Institute Prof. Juhani Damski urged joint investments in HEO satellites to improve the capability to monitor the Arctic as a whole.

The experts pointed out the potential role of the Arctic Council as an end user of the data and services that could help in meaningful ways to set the strategic direction for the national meteorological institutes' work in the Arctic.



Marianne Kroglund, Chair of AMAP, provided a summary of the discussion between Working Groups, the WMO, and national meteorological institutes that took place on the previous day. She brought up the wide variety of needs that the different Working Groups have and the value of meteorological data and services as a foundational element of the work that goes on in each Working Group. Ms. Kroglund pointed out the need for both short-term forecasting and improved climate modeling, and she reviewed the numerous different ways in which the meteorological expert organizations and the Arctic Council Working Groups could be of service to one another. She mentioned, inter alia, risk management and adaptation to climate change as a potential area of valuable cooperation, as well as ice and biodiversity monitoring, and understanding drift and dispersion in SAR activities and oil spill response. The AMAP Chair also noted that, on some occasions, there is a lot of data, but it is difficult to access. On the other hand, there are gaps in data collection. Several concrete outcomes emerged from the previous day's meeting.

- Points of contact have been identified for this line of work for the Working Groups, national meteorological institutes, and the WMO.
- The Working Groups have issued invitations to their upcoming meetings to all the institutes in question.
- AMAP has decided to include meteorological cooperation as a fixed element of its future work.

During the discussion that followed, the SAOs were unanimous in their support for enhancing collaboration on these important issues. It was noted that, in order to respond to the challenge of climate change, we need accelerate our common work. Many emphasized the need to improve the observational networks in the Arctic. Several PPs highlighted the importance of including ground-based monitoring in plans for the future, and of avoiding reliance on solely remote and satellite-based sensing. The PPs also raised their concerns about the possible negative effects of climate change on freshwater resources in the Arctic.

Summary / Conclusion

This item was for discussion. The SAOC thanked the participants for their inputs and expressed gratitude to the Finnish Meteorological Institute and the WMO for organizing the week of meteorological events back-to-back with the Arctic Council events in Levi. He stressed the future-oriented character of the discussions and pointed out that meteorological work is increasingly connected to the work of the Arctic Council and its Working Groups. The SAOC also thanked AMAP for its active role in advancing the use of meteorological expertise in the work of the Arctic Council.



6. The SDGs in Arctic cooperation

Background and discussion

Under this agenda point, delegates took up the question of how the Sustainable Development Goals (SDGs) tie in to the work of the Arctic Council. They also heard about two events held since the SAO meeting in October 2017 that addressed this particular theme.

The SDWG Chair began by pointing out that promoting sustainable development in the Arctic has been the core of the Arctic Council's mandate since its establishment, and that – while implementation of the SDGs is the responsibility of individual States – the SDGs and Agenda 2030 can give added momentum to the Council's work on sustainable development in the Arctic. Indeed, SDWG has asked its social, economic, and cultural expert group (SECEG) to analyze how Agenda 2030 and the SDGs could best be utilized for the benefit of the Arctic.

Timo Koivurova of the SECEG followed with an examination of how the Arctic Council could support the attainment of the SDGs in the Arctic. He focused on how the Council could catalyze the research that is needed to achieve that goal, citing for example the possibility of identifying how the Council's existing initiatives already contribute to the SDGs. He also highlighted the SDGs as a vehicle to raise Arctic issues in a global context.

Mr. Koivurova brought out several key messages that emerged from the Rovaniemi Arctic Spirit conference (November 2017). He highlighted the centrality of Arctic indigenous peoples in all the discussions that took place there, especially in discussions about such challenging issues as land use and inclusion in decision-making. He also noted that many participants emphasized the role that towns and cities play in supporting sustainable development in the Arctic.

Anne Meldgaard of the Kingdom of Denmark reviewed the event "SDGs in the Arctic: local and global perspectives" held in Copenhagen in December 2017. The main theme was sustainable economic development in the Arctic region, and Ms. Meldgaard presented a couple of key examples of sustainable economic development in practice from Greenland and the Faroe Islands. One major conclusion to emerge from the event was that the SDGs have a great deal to offer in an Arctic setting, especially as guides for the Council's strategic work, and Ms. Meldgaard pointed to the development of the strategic plan as an opportunity to highlight the importance of the SDGs in the Arctic.

The discussion that followed included a good deal of support for a closer and more visible tie-in between the Arctic Council's work and the SDGs. Some delegations suggested that the SDGs could be a matrix to help guide and organize the Council's work, while others supported mapping the Council's existing work against the SDGs. Others noted that other regional organizations – particularly the Council of Baltic Sea States – have prepared strategies for regional work towards achieving the SDGs. Some pointed out that the SDGs



were not produced with the polar regions in mind and would need to be translated in some way to fit the Arctic context. Others pointed out that the implementation of the SDGs is a national responsibility.

The Saami Council and ICC both welcomed increased focus on the SDGs in SDWG and in the Council more broadly, and they stated their support for inclusion and consideration of Arctic indigenous peoples in the current discussion.

CAFF drew attention to an information document provided to the SAO meeting giving an overview of CAFF's activities and how they may contribute to supporting implementation of the SDGs and the Aichi targets. AMAP noted that the SDGs have an evident connection to the resilience framework.

Summary / Conclusion

This item was for information and discussion. The SAOC closed the conversation, citing it as a good beginning. He concluded that the Arctic Council could offer valuable guidance in the pursuit of the SDGs in the Arctic, while their implementation is a national responsibility.

7. Arctic Council side event at UNFCCC COP23

Background and discussion

On Monday 6 November 2017 (the opening day of COP23, held in Bonn, Germany), the Arctic Council hosted a panel discussion with speakers from AMAP, ICC, Finland, and the WMO. The panel addressed the global implications of rapid change in the Arctic. The event drew largely on the results of the 2017 SWIPA assessment, and devoted time to the need for adaptation, as well as to the knowledge and role of indigenous peoples. Finland's SAO thanked the ACS, AMAP, and Finland's Ministry for the Environment for assembling the event, and noted the background document included with this agenda point that could be helpful in organizing similar events in the future. The event was well-attended, with 75 people in the room and broad "virtual" attention as well.

AMAP highlighted the value of such events as a way to bring forward scientific work to the policy community and to highlight the research that provides a background for many of the decisions made in the Arctic Council.

Summary / Conclusion

This item was for information.



8. Exercise of the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (2013)

Background and discussion

Chair of EPPR Jens Peter Holst-Andersen gave a brief synopsis of the third exercise of the MOSPA agreement, held in March 2018 in Oulu, Finland. The table-top exercise scenario meets EPPR's role in exercising the operational guidelines of the MOSPA agreement. It had several objectives. The first objective was to review and test notification protocols of the MOSPA and the related Copenhagen Agreement between the Nordic countries. This was done via a connectivity test involving a request for assistance sent from Finland to all other Arctic States. The outcome was an excellent 100% success rate in less than 90 minutes. The second objective was to demonstrate the ability to use the response equipment database available on the EPPR website. After doing so, participants in the table-top exercise offered input as to how the database and the user interface could be improved. The third objective was to identify a liaison for each Party to coordinate the rendering of assistance to the Party in need. This is an important and challenging component of well-coordinated emergency response. The fourth objective was to demonstrate the ability to use the 2017 COSRVA to facilitate decision-making on oil spill response planning and tactics. The after-action report detailing all of this will be out soon.

The EPPR Chair gave much of the credit for this well-organized exercise to Wes James (U.S. Coast Guard) and Jorma Rytkönen (Finnish Environment Institute). He also encouraged delegates to look at the recently revamped EPPR website, eppr.org.

Finland offered a deeper dive into the other events that took place in Oulu during the same week. These included a conference on oil spill response in the Arctic, a live exercise organized by the Finnish border guard and the Swedish coast guard, and a meeting of the principals of the Arctic Coast Guard Forum.

During the discussion that followed, there was general praise for EPPR and its work in this exercise. Iceland asked the EPPR Chair to elaborate on EPPR's role in the implementation of the MOSPA and its operational guidelines. In response, the Chair said that the implementation of the MOSPA is a national responsibility. EPPR's role is still developing and under discussion. He pointed out that EPPR cannot have an operational role by commanding physical assets on land, in the air, or at sea, but that it can support the exercises by helping with planning and by running table-top exercises on EPPR-related work and projects.

Summary / Conclusion

This item was for discussion.



9. Conference on harmonized implementation of the Polar Code

Background and discussion

The IMO Polar Code entered into force in the beginning of 2017. Its enforcement enhances both shipping safety and environmental protection in its application areas in Arctic and Antarctic waters. To support harmonized implementation of the Polar Code, the Finnish Transport Safety Agency and PAME organized an international conference addressing that theme on 22 February 2018 in Helsinki. Dr. Anita Mäkinen provided a synopsis of the conference, which attracted 130 participants.

The Secretary General of the IMO Mr. Kitack Lim and the Secretary General of the WMO Mr. Petteri Taalas made keynote presentations in the conference highlighting the interest of their organizations in the role of the Arctic Council in supporting the harmonized implementation of the Polar Code.

The conference addressed issues such as the challenges of implementing the Polar Code for national administrators and for seafarers, and the discussions there showed that the Polar Code's regulations and requirements leave room for different interpretation by the parties. Crew training was also raised as a significant challenge, as was the issue of the long period between an accident and evacuation in the Arctic. These and other findings from the conference are being prepared for submission to the IMO.

Several States emphasized the importance of the conference's conclusions and stated their strong support for this line of PAME's work.

Summary / Conclusion

This item was for information.

10. Arctic Resilience Forum preparations

Background and discussion

Saara Lilja-Rothsten of the Finnish Ministry for Agriculture and Forestry provided an update on preparations for the upcoming ARF. The aims of the ARF, planned for 10-11 September 2018 in Rovaniemi, are (1) to create the conditions to strengthen the resilience and adaptability of actors in the Arctic regions and (2) to disseminate best practices and tools for adapting to climate change and to manage climate and weather-related impacts and other risks that are posed by rapid change in the Arctic. The preparations for the 2018 ARF are colled by Finland, Sweden, the U.S., SDWG, and the ACS. The program will include an open seminar on the first day for resilience experts and practitioners from many different levels and for key policymakers and stakeholders. The second day will be a smaller workshop



dedicated to discussion of how the climate resilience work of the Arctic Council's Working Groups can be strengthened.

Ms. Lilja-Rothsten then presented some key takeaways from a preparatory meeting held on the previous day. That meeting focused primarily on the opportunities that the ARF presents to showcase ongoing actions that strengthen resilience and on the challenge of thoroughly analyzing the work ongoing in the Arctic Council WGs that strengthens resilience. She then briefly presented a pre-study of best practices for Arctic resilience and highlighted the value of the Arctic Spatial Data Infrastructure as a contributor to enhanced resilience.

In the brief discussion that followed, the SAOs, PPs, and WGs that spoke were supportive of the ongoing work, and they looked forward to the future of resilience work in the Council in general. Several speakers noted the value of the meeting held with the Working Groups and mentioned the importance of including the private sector in the preparation of the ARF.

Summary / Conclusion

This item was for information and guidance.

11. Arctic Biodiversity Congress preparations

Background and discussion

CAFF Chair Cynthia Jacobson presented on the second Arctic Biodiversity Congress (ABC), which will be held in Rovaniemi on 9-11 October 2018. The 2018 ABC will promote the conservation and sustainable use of Arctic biodiversity through dialogue among scientists, policymakers, government officials, industry, civil society, and indigenous peoples. A youth summit focused on Arctic biodiversity is also being organized to contribute to capacity-building among youth, and the final day of the 2018 ABC will tie in with the 2018 AEMM. The program will be framed by the ABA recommendation headings, and the three-day program will include keynote addresses, plenary panels, a poster session, excursions, side meetings, and a photography competition. CAFF is seeking diversity among the keynote speakers and within the program, which is informed by the advice and participation of PPs, States, WGs, Observers, and a committee of industry representatives. The CAFF Chair thanked Finland's Ministry of Environment, the CAFF secretariat, and the Nordic Council of Ministers for their efforts and support.

The call for content (sessions and papers) had a deadline of 30 March 2018. Early bird registration ends on 30 June 2018.

During the discussion, the SAOs, PPs, and WGs were all looking forward to the 2018 ABC. The Saami Council and ICC both encouraged States to consider providing support for indigenous youth to attend the event. PAME, EPPR, and AMAP all noted their intent to host or co-host sessions at the 2018 ABC as well.



Summary / Conclusion

This item was for information and guidance.

12. Model Arctic Council preparations

Background and discussion

A Model Arctic Council (MAC) will be co-organized and hosted by the University of Lapland and UArctic from 29 October to 2 November 2018. Prof. Lassi Heininen reviewed the fundamental aims of the MAC and the expected outcomes for students, as well as expectations for students' preparations. He expressed the hope that SAOs, PPs, WGs, and Observers might find time to observe the final session of MAC 2018, and to offer guidance to students if asked during their preparations for the session. Thus far, 90 students have applied to take part.

The Kingdom of Denmark, PAME, and CAFF all pointed to their previous experience with initiatives to include and educate youth and offered to assist by sharing their lessons-learned. CAFF also encouraged all delegations to consider including youth representatives in their delegations to future meetings. The Saami Council encouraged the organizers to work to ensure that indigenous issues are well understood in order to be appropriately addressed during the simulation. The SAOC concluded by highlighting this as one example of UArctic contributing to the work of the Arctic Council.

Summary / Conclusion

This item was for information.

13. Thematic discussion: connectivity

Background and discussion

Presenters for this agenda point were as follows.

- Tuomas Aslak Juuso, 2nd Vice-president, Sámi parliament of Finland
- Laura Mäkitie, Neurologist, Project Manager, Helsinki University Central Hospital
- Harri Saarnisaari, Researcher, Centre for Wireless Communications, University of Oulu
- Andrey Kirillovich, Department Director, FGUP Space Communication, Russia
- Jack Kaye, Associate Director for Research, NASA
- Martti Kirkko-Jaakkola, Research Scientist, Finnish Land Survey
- Ragnar Thorvardarson, Senior Adviser, Ministry for Foreign Affairs of Iceland
- Marjukka Vihavainen-Pitkänen, TFICA co-Chair, Finnish Ministry for Transport and Communications



The presenters provided comprehensive accounts of connectivity challenges in the Arctic, ranging from bad coverage, low internet speed, the lack of land and sea cables, high costs, and the reluctance of traditional mobile network operations to invest in the Arctic. These challenges jeopardize maritime and aeronautical navigation and safety, they reduce access to health and education services, and they limit the development of sustainable livelihoods and entrepreneurship in the Arctic. Examples of the benefits and opportunities of enhanced connectivity for people and communities were also highlighted, notably in the health sector.

Speakers presented a number of possible solutions ranging from new satellite systems with high elliptical orbits (Russia is prepared to launch four such satellites), alternative micronetwork operator models, telehealth, more international cooperation in the field of data sharing, improvement of satellite navigation and geospatial information services, new funding models, and suggestions for public-private partnerships. The Finnish project ARKKI is currently conducting a survey on navigational challenges in the Arctic and will organize a seminar devoted on this issue in Olos, Finland 16-18 April 2018.

The TFICA co-Chair emphasized that user needs are in the center of the current work of the Task Force. She stressed the need to tackle the digital divide in the Arctic, focusing on delivering connectivity solutions that are affordable and of use to Arctic inhabitants. The TFICA will have its next meeting in Washington, DC on 16-17 May 2018. It has invited, via the national delegations, company representatives to take part and present potential solutions at the meeting.

Delegates welcomed the presentations and gave updates on national plans for new space activities, including plans to launch two new Norwegian satellites in 2022 and Swedish minisatellites this year. Several delegates stressed the need to treat all market players on an equal footing in the work of the TFICA. PP representatives stressed the need for developing public-private partnerships. Working Groups acknowledged that their awareness of the TFICA's work could be improved, and they provided examples of its potential benefits to their work on issues such as safe shipping, real-time information on sea ice, and services improving the quality of life in Arctic communities.

The TFICA was encouraged to be forward-looking in its work and focus on identifying user needs, exploring pan-Arctic solutions and employing regional and cross-border perspective in its work. Many noted that improvements to Arctic connectivity might best be achieved with a combination of different technologies. It was also suggested that the connectivity issue should be included in the Arctic Council agenda also during future Chairmanships.

The representatives from the Sámi Parliament and the Saami Council pointed out the role of good connectivity in enabling connections to Saami living outside the homeland area as well as connections across borders. They gave practical examples of how gaps in connectivity affect their livelihoods and daily lives. The Saami Council also raised their concern about the possible negative effects to Saami livelihoods and culture of the planned railway from northern Finland to the Arctic Ocean.



Summary / Conclusion

The SAOC concluded that connectivity was a moving target. He noted that participants had stressed maritime connectivity and the need to provide services to communities. The need to use new technologies to ensure indigenous peoples' access to knowledge, language education, and education in general was also emphasized. Many speakers referred to the AEC and its role. The AEC participates in the TFICA, it hosted a broadband summit last year, and it will have a broadband summit in Japan in June.

The SAOC thanked all presenters for their inspiring presentations. He also thanked the TFICA for taking forward its challenging work, and he thanked the Working Groups for explaining what role connectivity currently plays in their work and for committing to engaging more with the TFICA in the future after having learned about possible synergies.

14. Report from the WG-Observer session

Background and discussion

Working Group Chairs reported on the results of the WG-Observer session on four selected themes:

- air pollution, in particular black carbon;
- biodiversity, in particular migratory birds;
- the ecosystem approach to management and marine protected areas; and
- small community engagement, including search and rescue.

The session was a useful opportunity to improve learning and coordination and discuss possible joint initiatives. More time could have been allocated to the lively discussions.

Observers provided advice, offered subject-matter expertise, and offered to host meetings on topics such as migratory birds and marine protected areas. Observers also requested info on the division of labor between WGs, and they stressed the need for more detailed profiles for Observer participation in order to provide the Working Groups with the right kind of expertise. The WGs encouraged Observer participation in their meetings.

Summary / Conclusion

This item was for information.



15. Working Group progress reports

Background and discussion

The SAOC invited SAOs and PPs to put forward clarifying questions or comments on the WGs' 2-page progress reports that had been provided as background material for the meeting. Several delegates commended the WGs for their work, for their collaboration, for engaging in cross-cutting projects, and for including the input from the Observers in their work. Delegates referred to specific projects such as CAFF/PAME work on implementation of the Arctic Invasive Alien Species (ARIAS) Strategy and Action Plan, ACAP's concrete response to AMAP's assessments, and the importance of incorporating biodiversity in all Arctic Council work. EPPR and PAME were encouraged to work together on Arctic shipping accidents. The importance of Arctic wetlands to local peoples' livelihoods was stressed. It was hoped that the Arctic Resilience Forum could be a step towards enhancing resilience in the Arctic. Iceland will be hosting PAME's Arctic Marine Litter Expert Group's first workshop in Akureyri, Iceland, on 5-6 June 2018 and encourages all to nominate experts to attend.

Summary / Conclusion

This item was for information and guidance.

16. Any other business

16.1. Strategy for SAON

On behalf of the SAON Board, AMAP Chair Marianne Kroglund presented the strategy for SAON that was published in January 2018. The strategy describes SAON's vision, mission, guiding principle, and goals, and outlines the manner in which the goals will be achieved. SAON's vision is a connected, collaborative, and comprehensive long-term pan-Arctic observing system that serves societal needs. The SAOs and the PPs welcomed the strategy and pointed out that SAON had highly relevant principles and goals. However, they raised questions about the implementation and resources and called for additional funding and support from all relevant stakeholders. It was noted that CAFF engaged in the development of the SAON Strategy and that CAFF has developed a new Strategic Plan for the Circumpolar Biodiversity Monitoring Program covering the period 2018-2021.

The SAOC concluded that SAON was moving in the right direction and looked forward to an update in future meetings.



16.2. Preparations for the 2nd Arctic Science Ministerial

On behalf of the European Commission, Germany, and Finland, Dr. Volker Rachold from the German Arctic Office delivered an update on the preparations for the 2nd Arctic Science Ministerial to be held in Berlin, Germany on 25-26 October 2018. The meeting is not an Arctic Council event but, rather, a scientific activity. It will consist of an Arctic Science Forum and an Arctic Science Ministerial meeting. The three themes for the meeting will be:

- strengthening, integrating and sustaining Arctic observations, facilitating access to Arctic data, and sharing Arctic research infrastructure;
- understanding the regional and global dynamics of Arctic change; and
- assessing vulnerability and building the resilience of Arctic environments and societies.

The organizers aim to involve indigenous peoples in a meaningful way. The PPs of the Arctic Council have been invited not in their capacity as PPs but as representatives of Arctic indigenous peoples. Germany will cover their travel costs. The Saami Council thanked the organizers for the funding provided to indigenous peoples' representatives.

AMAP Chair Marianne Kroglund encouraged the organizers to engage the Arctic Council Working Groups in the preparations for the conference; the organizers said that they would look into this issue. The SAOC noted that it was up to all States to ensure coordination between their Arctic Council representatives and the participants to the meeting in Berlin.

16.3. Agreement on Prevention of Unregulated Commercial Fishing in the Arctic High Seas

SAO for the U.S. Julia Gourley informed the participants that the Agreement on Prevention of Unregulated Commercial Fishing in the Arctic High Seas was concluded on 30 November 2017 by the five Arctic coastal states of Canada, the Kingdom of Denmark, Norway, Russian Federation, and the U.S., as well as China, Japan, South Korea, Iceland, and the EU. It will be a legally binding agreement and the signatories will commit to abstain from any future unregulated commercial fishing in the international waters of the Arctic Ocean. The agreement will also facilitate collaborative international research to keep track of fish stocks and ecosystems in the area. The agreement will be in force for 16 years with subsequent automatic five-year extensions unless a Party to the agreement actively objects.

The agreement is due to be signed this summer. The Kingdom of Denmark stated that Greenland would like to offer to host the signing of the agreement. The ICC thanked Canada, the Kingdom of Denmark, and the U.S. for including ICC delegates in their national delegations to the negotiations.

Special appreciation was expressed for the contribution of Ambassador David Balton in his role as the chief negotiator of the agreement.



16.4. Joint Russia-U.S. proposal on the establishment of twoway routes and precautionary areas in the Bering Sea and Bering Strait

SAO for the Russian Federation Vladimir Barbin and SAO for the U.S. Julia Gourley presented a joint Russia-U.S. proposal on the establishment of two-way routes and precautionary areas in the Bering Sea and Bering Strait. The proposal demonstrated continued U.S. and Russian cooperation in the Arctic.

Increased shipping in the Bering Sea and Bering Strait has given rise to higher risks of shipping collisions and environmental impacts from shipping. Based on this analysis, the U.S. and Russian Federation have jointly developed a proposal on routing measures. The proposal contains six two-way routes and precautionary areas to be avoided to increase maritime security and safeguard wildlife habitats. The Russian SAO thanked the WWF for encouraging Russia and the U.S. to propose such measures. The proposal was approved by the IMO subcommittee on search and rescue (SAR) in February 2018. The proposal has now been submitted to the 99th session of the IMO marine safety committee. It will enter into force six months after the safety committee's approval.

The SAOC thanked Russia and the U.S. for the information provided on this proposal of significance for the Arctic region and for Arctic cooperation in general.

16.5. Information by the Kingdom of Denmark on two upcoming meetings

The Kingdom of Denmark reminded participants of the celebration of the 10th anniversary of the Ilulissat declaration, which will take place on 23 May in Ilulissat, Greenland. The Arctic States and the PPs have all been invited. High-level political participation would be important to send a strong signal about Arctic cooperation. In case Ministers of Foreign Affairs were themselves unable to join, the participation of other Ministers would also be welcome. Special block bookings have been made to accommodate participants.

The Kingdom of Denmark will also be hosting the next Arctic Circle Forum in Tórshavn on 8-9 May 2018. Stakeholders were invited to explore the successes and challenges in building dynamic economies and sustainable communities in the Arctic.

The SAOC thanked all delegates for their active participation. He also thanked all those who contributed to the full week of meetings, including national and local authorities and organizations, local tourist enterprises, the team from Finland's Ministry for Foreign Affairs, and the ACS.

The next SAO plenary meeting will be held in Rovaniemi, Finland on 1-2 November 2018.