

Memorandum to Senior Arctic Officials 07/10/2015

Joint meeting of Arctic Council Working Groups

ACAP, AMAP, CAFF, PAME

Summary report September 2015

Contents

1. Background	1
2. Structure	1
3. Key Messages	2
Annex 1: Meeting participants.....	2
Annex 2: Standardized geospatial Data Management and sharing: Project Arctic SDI (ACAP).....	6
Annex 3: Climate Change: Project - AACA (AMAP)	7
Annex 4: Biodiversity reporting: CBMP and its State of the Arctic Biodiversity Reports (CAFF)	9
Annex 5: Area-based Management: Project - Arctic MPA Network (PAME).....	10

1. Background

Four Arctic Council Working Groups (ACAP, AMAP, CAFF and PAME) met in Tromsø on September 16th to discuss cross-cutting activities. Approximately 192 people took part including representatives from Arctic states, Permanent Participants, Working Groups (WG), Observer states and organizations (Annex 1). This memo presents common or key elements identified during the meetings breakout sessions.

2. Structure

The meeting started with a plenary session where introductions were made by the Chair of the Senior Arctic Officials (SAO), the Norwegian SAO and the CAFF Chair (on behalf of the four WGs). This was followed by four parallel breakout sessions focused on the following themes:

- Standardized geospatial Data Management and sharing: Project Arctic SDI (ACAP)
- Climate Change: Project - AACA (AMAP)
- Biodiversity reporting and assessment: CBMP and its State of the Arctic Biodiversity Reports (CAFF)
- Area-based Management: Project - Arctic MPA Network (PAME)

Background papers were produced for each breakout session providing context and questions to be addressed. Each session was structured to ensure even representation from across the four WGs, governmental, indigenous and non-governmental organizations. Participants were asked to consider two general questions on cooperative actions within the Arctic Council and two more specific questions pertinent to the cross-cutting activity being addressed by a particular session. See Annex's 2-5 for more detail on outcomes from individual breakout sessions.

3. Key Messages

Several key messages arose which addressed common elements across the four sessions:

Data management: There is a need to ensure a systematic approach to data management to facilitate access to data produced by WGs. This would require the application of common standards to ensure coordination and interoperability. The Arctic SDI was raised as a potential tool to enhance coordination across Arctic WGs.

Experts: There is a need to broaden and coordinate the pool of experts engaged in Arctic Council activities including experts in Traditional Knowledge and geospatial management. It was suggested that coordinating mechanisms were needed to avoid approaching the same experts, and to ensure expert groups can contribute to multiple Working Group initiatives, when appropriate. The need to engage younger experts in Arctic Council work was emphasized so as to ensure new blood and ideas found their way into Arctic Council activities.

Planning: There is a need for long-term strategic planning by the Arctic Council to improve coordination of Working Group activities. Working Group initiatives would be organized to address common goals in response to shared issues and concerns.

Furthermore a broad range of suggestions relevant to the cross-cutting themes were also identified e.g. establishment of cross-cutting expert groups to address MPA development and spatial data management (see Annexes 2-5).

4. Recommendation to SAOs:

Joint meetings between the WGs may be arranged once every AC chairmanship period and would probably give most effect to the chairmanship program if it's arranged in the beginning of the period. In the future there may be more value in having smaller numbers of WGs (2-3) meet jointly in order to address specific projects. This may also be more sustainable due to the costs involved in hosting such meetings. This kind of collaboration should also involve other WGs and Task Forces than those gathered in Tromsø this time.

Annex 1: Meeting participants

1	Alanen	Aulikki	Finland
2	Anderson	Rebecca	US
3	Armstrong	Thomas	USA
4	Aronsen	Hanne	Norway
5	Aronsson	Mora	Sweden
6	Bahktov	Alexey	Russia
7	Baldursson	Trausti	Iceland
8	Balton	David	US
9	Barry	Tom	CAFF Secretariat
10	Behe	Carolina	Inuit Circumpolar Council
11	Bengston	John	US
12	Bennett	John	AIA
13	Bjarnadóttir	Sesselja	Iceland
14	Blomberg	Elinor	Sweden
15	Boario	Sarah	US
16	Bock	Nikolaj	EU
17	Bristow	Dan	Canada
18	Brooks	Samantha	USA

19	Bruns	Patti	ACAP Secretariat
20	Bytningsvik	Jenny	Norway
21	Campbell	Darius	Invited Guest
22	Carson	Marcus	Sweden
23	Castellanos	Gilbert	US
24	Christensen	Tom	Kingdom of Denmark
25	Condino	David	USA
26	Coon	Cathy	US
27	Copley	Maureen	Canada
28	Dam	Maria	Denmark
29	Danks	Fiona	UNEP World Conservation Monitoring Centre
30	Dashko	Konstantin	Russia
31	Degteva	Anna	AWRH
32	Desportes	Geneviève	North Atlantic Marine Mammal Commission
33	Diederich	Casey	USA
34	Dunphy-Daly	Meagan	USA
35	Edjung	Gunilla	Sweden
36	Eidsness	Dana	USA
37	Eikeland	Else Berit	Norway
38	Elisenberg	Anja	Norway
39	Enomoto	Hiroyuki	Japan
40	Eriksson	Omar Frits	Denmark
41	Fægteborg	Mads	ICC Greenland
42	Ferri	Katharine	Canada
43	Fidel	Maryann	Aleut International Association
44	Finmanh	Hodayah	USA
45	Flatman	Andrew	Arctic SDI
46	Forsius	Martin	AMAP Chair
47	Fraser	Drummond	Canada
48	Fries	Tom	ACS
49	Fuglestad	Jon L.	AMAP
50	Fugmann	Gerlis	Norway
51	Fuller	Tracy	US
52	Gaalaas	Siv Christin	Norway
53	Gadal	Sebastian	France
54	Gamble	James	Aleut International Association
55	Goedkoop	Willem	Sweden
56	Graczyk	Piotr	Poland
57	Grémillet	David	France
58	Grønli	Ole Magnus	Arctic SDI
59	Guðmundsdóttir	Soffía	PAME Secretariat
60	Haapala	Henna	Finland
61	Hämäläinen	Johanna	ACS
62	Hansen	Geir Hoevik	Norway
63	Harper	Susan	Canada
64	Haugan	Marthe	Norway
65	Hayes	Trish	Canada
66	Hindrum	Reidar	CAFF Chair
67	Hoel	Alf Haakon	Norway

68	Høgestøl	Astrid	Norway
69	Hreinsson	Hjalti	PAME Secretariat
70	Huber	Patrick	USA
71	Husamuddin	Admadzai	NEFCO
72	Hussain	Salman	UNEP
73	Iartceva	Kseniia	ACS
74	Isokallio	Kristiina	Finland
75	Israelsson	Ann-Sofi	Sweden
76	Ivlev	Vladimir	Russian Federation
77	Jensson	Helgi	Iceland
78	Johannessen	Trond	Arctic SDI
79	Johannesson	Magnus	ACS
80	Joo	Rachel	Canada
81	Jordbakke	Hege	Norway
82	Jørgensen	Nina Mari	Norway
83	Jungho	Nam	Republic of Korea
84	Justin (Jong Deog)	Kim	Republic of Korea
85	Kalhok Bourque	Sarah	Canada
86	Kanayurak	Nicole	Inuit Circumpolar Council
87	Kellerman	Adi	Denmark
88	Kikuchi	Takashi	Japan
89	Klepikov	Alexander	Russia
90	Klinggaard	Thomas	Denmark
91	Klint	Mikala	Denmark
92	Knudsen	Kjell	Norway
93	Kosonen	Antti	Arctic SDI
94	Krantz	Jeanette	Sweden
95	Kroglund	Marianne	Norway
96	Kruemmel	Eva	ICC Canada
97	Kuperberg	J. Michael	USA
98	Kupiainen	Kaarle	Finland
99	Kutaeva	Natalia	Russia
100	Kyrkjeeide	Kåre	Arctic SDI
101	Larsen	Jan René	AMAP
102	Larusson	Kári	CAFF Secretariat
103	Lee	Yoo Kyung	South Korea
104	Linklater	Joe	Gwich'in Council International
105	Lodge	David	US
106	Lundeberg	Tove	Sweden
107	Mähönen	Outi	Finland
108	Mäkinen	Anita	Finland
109	Marissink	Mark	Sweden
110	Mathiesen	Svein	Association of World Reindeer Herders
111	McLanahan	Elizabeth	USA
112	Meldgaard	Anne	Arctic Council Secretariat
113	Mellum	Roy	Arctic SDI
114	Merculieff	Larry	Aleut International Association
115	Mikaelsson	Åke	Sweden
116	Mikhailov	Andrei	Russia

117	Moenster	Tina	Greenland
118	Mundy	Phil	USA
119	Murray	Maribeth S.	AINA
120	Nakamura	Newton	UNEP
121	Nakano	Akiko	Japan
122	Newton	Steve	Canada
123	Nordström	Linnea	Arctic Council Secretariat
124	Olsen	Marianne	Norway
125	Olsen	Morten S.	Denmark
126	Omnia	Elle Merete	Arctic Council Indigenous Peoples' Secretariat
127	Oppenheimer	Peter	USA
128	Page	Brian	USA
129	Palmér	Owe	Arctic SDI
130	Pálsdóttir	Olga	CAFF Secretariat
131	Paquin	Bob	Canada
132	Parker	Buck	CCU
133	Payne	John	US
134	Pogodaev	Mikhail	Northern Forum
135	Portefaix	Jean-Michel	France
136	Pouplier	Peter	Arctic SDI
137	Rasch	Peter	Denmark
138	Reidhead	William	WWF International
139	Reiersen	Lars-Otto	AMAP
140	Reissell	Anni	Invited Guest
141	Reppe	Bjørn	Norway
142	Retter	Gunn-Britt	Saami Council
143	Robbins Gisclair	Becca	Circumpolar Conservation Union
144	Robstad	Bjørn Willy	SCPAR
145	Romanov	Alexander	Russian Federation
146	Røsæg	Erik	Norway
147	Ruslan	Butovsky	Russian Federation
148	Saito	Seiichi	Japan
149	Sarraf	David	Canada
150	Sauve	Renee	PAME Chair
151	Schmid	Lorna	US
152	Seppälä	Timo	Finland
153	Sharakmatova	Victoria	Russian Association of Indigenous Peoples of the North
154	Sheard	Whit	CCU
155	Shepherd	Marjorie	Canada
156	Shestakov	Alexander	WWF Arctic
157	Shin	Hyoung Chul	Korea
158	Shin	Hyoung Chul	South Korea
159	Skjoldal	Hein Rune	Norway
160	Smith	Scott	USA
161	Sommerkorn	Martin	WWF
162	Sonne	Frank	Denmark
163	Speer	Lisa	CCU
164	Staffansson	Jannie	Saami Council

165	Steenhuisen	Frits	The Netherlands
166	Stickman	Michael	Arctic Athabaskan Council
167	Stotts	James	ICC-Alaska
168	Strøm	Hallvard	Norway
169	Taylor	Jason	US
170	Tesar	Clive	WWF Arctic
171	Theisen	Fredrik-Juell	Norway
172	Thurston	Dennis	USA
173	Tremblay	Luc	Canada
174	Tsaturov	Yuri	Russia
175	Turi	Ole-Anders	Saami Council
176	Turple	Justin	Canada
177	Uchida	Masaki	Japan
178	Ursin	Heli	Arctic SDI
179	Vaaja	Nina	ACS
180	van der Walt	Carol	UK
181	Vandysheva	Natalia	Arctic SDI
182	Vignati	Elisabetta	DG Joint Research Centre
183	von Quillfeldt	Cecilie	Norway
184	Vongraven	Dag	Norway
185	Weidmann	Magnus	Norway
186	Welling	Leigh	US
187	Westman	Ulrik	ACAP Chair
188	Wheeler	Helen	Norway
189	Wiese	Inger Johanne	Norway
190	Williams	Dee	US
191	Wilson	Simon	AMAP
192	Yefimenko	Alona	Indigenous Peoples Secretariat

Annex 2: Standardized geospatial Data Management and sharing: Project Arctic SDI (ACAP)

As part of the Joint Working Group (WG) meeting held in Tromsø on the morning of September 16th, ACAP worked with Arctic SDI to develop a breakout session titled, *Standardized Geospatial Data Management and Sharing*. The session was facilitated by Arctic SDI Lead Secretariat and National Contact Point, Lorna Schmid (US). Other Arctic SDI experts acted as “table leads” for the small group discussions composed of delegates from ACAP, AMAP, CAFF and PAME. The session began with two short presentations: one by Lorna Schmid that explained what an Arctic spatial data infrastructure (Arctic SDI) is and how it could be used to map working group information, and the second by US ACAP delegate Patrick Huber, who gave an example of how black carbon case studies were being mapped using Arctic ERMA.

Delegates were then presented with four questions meant to examine the challenges, opportunities and next steps related to geospatial data management and sharing. Discussion was lively and delegates provided many different points of view, not only from a “working group” perspective, but more generally as Arctic experts.

The main discussion points can be summarized as follows:

1. What challenges exist related to storing, access and updating geospatial data?
 - There is a general need for greater awareness and access to data being produced by WGs.
 - Coordinating data sharing requires a common standard/protocol, including an information policy, and sharing of best practices.

- The need for base maps, both marine and terrestrial, that are accessible and open for use, while at the same providing metadata to help ensure data is fit for layering and reused in an appropriate way.
 - This leads to questions of map data ownership, maintenance and updating, all of which would need to be addressed in a standard way.
 - WGs recognized the challenge of capturing qualitative data, for example TLK, in maps.
 - The cost of producing, storing and maintaining geospatial data is a consideration.
2. What opportunities could be created for Arctic WGs by developing a common, long-term geospatial data management strategy?
- By having one protocol, that includes an information strategy and best practices, WGs would have the opportunity to contribute data in a consistent way.
 - This would allow for greater awareness of cross-cutting issues, and take advantage of the various expertise within the WGs.
 - By using a common strategy, duplication of efforts may be reduced as similar types of activities would be easy to identify.
 - The opportunity to reach out beyond the AC, for example to the EU, BEAC, and SAON, becomes simplified if data is shared in a consistent fashion.
 - While developing an information sharing protocol for the AC, it is important to use forums and expertise already available to us, like Arctic SDI and SAON.
3. What are the next steps for building a successful Arctic SDI?
- Arctic SDI should undertake outreach with all WGs to ensure a common understanding.
 - Need for an expert group(s) with representation from all WGs to develop standards, best practices and a user guide. This should include coordinating with relevant external bodies, such as Arctic SDI and SAON.
 - Develop trust between mapping agencies and stakeholders, including WGs, expert groups, and project owners.

Overall Break-Out Session Conclusions:

- Arctic SDI could be used as a tool to enhance coordination across Arctic Council Working Groups.
- Developing standards must be a collaborative process that is user needs driven.
- One protocol for capturing information should include an information policy along with best practices and a user guide.
- There is a need to establish experts group(s) to capture and share data in a coherent way across WGs.

Annex 3: Climate Change: Project - AACA (AMAP)

Highlights: The AACA session had 37 participants that were organized into three different breakout groups, each headed by a member of the AACA leadership team. Each group included a diverse array of expertise from the eight circumpolar-Arctic countries as well as the Permanent Participants and observer countries.

Each team provided input related to the four major questions that were asked; two general, overarching questions about cooperation and coordination, and joint goal sharing; the other two were more specific questions regarding specific goals and objectives and related challenges that may arise during the development of joint WG activities. Overall, participation was lively, energetic and extremely constructive. It was clear to all of the session leadership that there is a strong desire by

AC community members to find ways to constructively work across the existing WGs in order to address specific issues that transcend their current work portfolios. Below is a summary of the outcomes that transcended all three of the breakout groups with respect to the four questions addressed:

1. Can the various working groups develop a joint strategic process that allows them to effectively discuss and prioritize these complex issues and subsequently formulate, plan and execute joint work plans and product development- while preserving the integrity of their own, specific working group priorities, goals and objectives?

Response: There is a need for a more systematic approach and related mechanisms for integrating projects within and across the AC. For example, a goal- or solution-based approach within the AC could lead to integrated work across the WGs. In other words, long-term strategic planning should be the basis for Arctic Council and WG activities; conducted in a joint and coordinated manner so that the overarching issues and related objectives are both shared and considered as top priorities by all of the Working Groups. Additional, WG specific priorities and related tasks should then be identified and cross-walked to the AC level activities in order to maximize both human capital and fiscal resources.

2. How can the Arctic Council and its working groups build capacity for participation of experts, both in assessments of the state of knowledge and the production of new knowledge?

Response: The Arctic Council *writ large* and its suite of WGs need to revise their definition of experts so as to include capacities currently left outside of the collective AC community. This is necessary in order to expand both the breadth of knowledge available to the community and the pool of relevant experts that would conduct the types of AC-level tasks identified in Question 1. For example, AC working groups now need to fully recognize the added value of traditional knowledge with regard to effective decision-making while also understanding that there is already a declining level of institutional knowledge within the AC WGs that immediately requires effective and immediate participation of young people (both scientists and decision-makers as well as lay-people) to grow the next generation of experts, including any and all types of WG participants. This cadre of young experts should also include participants from PPs and observer country representatives. At the same time, we need to work with academia to create new scientific experts – allowing the establishment of a “knowledge pipeline”; one that rewards their participation rather than penalizing them for not exclusively producing traditional scientific literature at the expense of the derivative products that are typically more directly relevant to all forms of decision-making.

As an additional but related issue, the AACA session participants also agreed across the three breakout sessions that there needs to be a more effective set of mechanisms for the identification, description and ultimate sharing and tracking of the experts across the Arctic Council and its WGs and other forms of expert groups if cross-WG efforts are to be successful.

3. Question 3: What kinds of information are the current AACA Regional Assessments collecting that are relevant to the other WGs and the Arctic Council as a whole?

Response:

- We need mechanisms for improved project Integration (author overlap suggests earlier integration between projects and WGs)
- AACA is addressing cutting edge aspects. This makes it difficult to identify, entice and reward authors
- AACA results should be relevant and important to ALL WGs. More effort is needed from AACA and the WGs to improve connections.

- The process can be as important as the end result. The ways in which results are captured and expressed that can serve as an integration lens across WGs. For example, AACA can help to explore what is needed for PAME – what is needed in order to assess infrastructure development
4. Question 4: Since most marine assessments are in “blue” water, and most terrestrial assessments do not include the marine environment, are there specific types of information within the coastal zone that are critical towards other AC WGs’ objectives, and which are currently not collected or well understood?

Response: The Coastal zone is complex and generally not well understood. It is however relevant as the place where many Arctic people live and work. It is also the area with the greatest level of biodiversity. Populations, infrastructure and economics are often influenced, focused or controlled by relevant coastal issues, topics and drivers. At the same time, while coastal zones are the geospatial integrator of many related impacts; our work within this sector is extremely fragmented due to the very discipline-centric focus of our organizations. The various WGs can and should be the integrating mechanisms for bringing together the vast expertise found not in just a single WG but in all of the AC WGs. Simply put, the coastal zone is the very ideal location for beginning and testing AC-scale joint WG activities.

Annex 4: Biodiversity reporting and assessment: CBMP and its State of the Arctic Biodiversity Reports (CAFF)

This Annex presents common or key elements identified during the breakout session led by CAFF. Participants were asked to consider two general questions on cooperative actions within the Arctic Council and two more specific questions pertinent to the session theme.

1. How can both the monitoring of biodiversity and the application of its findings be better mainstreamed into the work of the Arctic Council, and how can the other working groups become more involved and improve the profile of biodiversity in their work?

Responses

- There is a need to share work plans with other WGs early in the development process to ensure a common strategy i.e. jointly develop collaborative action plans
- Back to back meetings between the WGs might be helpful in facilitating progress on cross-cutting issues

2. Limited resources lead to limited capacity for country experts to participate. What can be done to improve this situation and how can we improve synergies between working groups to reduce expert fatigue and the perception of overlap?

Responses

- Develop web-communication tools which transcend WG boundaries
- Ensure the existing scientific cooperation are structured to benefit both scientists and the Arctic Council
- Create common ownership from different WGs – by creating an inter-steering group to keep track of overlap of cross-cutting issues

3. How can the findings of the State of the Arctic Marine Biodiversity report be best conveyed to key audiences?

Responses

- Create a group of messengers to communicate with relevant sectors to inform and capture their needs
 - Communication capacity should be strengthened in all the WGs e.g. national communication points for WGs
 - Key issues need to be fixed in National Governments to ensure funding and resources
 - Look at the success of the ABA and apply similar approach
4. How can the CBMP through its products be used to advance Ecosystem Based Management in the Arctic?

Responses

- Continue to develop the Arctic Biodiversity Data Service as a means to facilitate data discovery and access
- To apply a question driven approach

Annex 5: Area-based Management: Project - Arctic MPA Network (PAME)

Participation under this theme was good with approximately 40 participants engaging in small group discussions (approx. 10). The breakout session included a good mixture of representatives from: the four working groups; governmental, non-governmental, indigenous organizations, and Council Observers; and, from a range of disciplines.

The participants focused discussions on cooperative actions that would generally happen at a Council level, and more specifically cooperative actions that would advance the pan-arctic MPA network project. The following represents some common or key elements that arose during this session.

Cooperative/collaborative Council work is needed to:

- Develop an explicit Arctic Council target and roadmap to achieve a pan-Arctic network
- Establish a cross-Working Group MPA expert group accountable to SAOs
- Designate/create a primary lead to ensure coordination and progress at the Arctic Council Secretariat level, supported by identified MPA leads in each Working Group
- Develop common communications on MPA network development, note in particular for community outreach/engagement
- Facilitate communication of relevant Council work (e.g. Ecosystem Approach Expert Group workshops) using such tools as a joint calendar/bulletin
- Ensure the work of the MPA and EA experts groups are taken into account by the Task Force for Arctic Marine Cooperation and any potential new collaborative mechanism

Cooperative/collaborative project work is needed to:

Organization, Pre-conditions

- Identify and promote the value of arctic marine ecosystems, and the benefits of MPAs and MPA network planning; work related to the Economics of Ecosystems and Biodiversity could be helpful in this regard
- Ensure the full suite of area-based measures are considered and there is a common understanding of terminology, note need for clarity of “other effective conservation measures”
- Ensure science-based decision-making

- Create a directory of experts, and ensure a direct link to the work of the Ecosystem Approach Expert Group
- Ensure a systematic approach to data (e.g. portal) and promote interoperability

Technical Tasks

- Identification of important areas, including as it relates to traditional use
- Develop a circumpolar map of these areas
- Review all Council reports and analyse them for relevance to the MPA network project
- Ensure needs for MPA network development (e.g. data, risk/threat analysis, etc.) are incorporated into planned assessment work, and results from ongoing work (e.g. AACA) informs network development
- Incorporation of adaptation and resilience considerations into network development
- Conduct threat analysis and risk assessment on existing MPAs and identified vulnerable areas
- Conduct connectivity analysis and regional assessments of representivity to aid network development, including in transboundary situations
- Conduct research, incorporating TLK, on projections of species distributions
- Develop indicators to determine status and trends of MPAs
- Develop conservation measures that include both long-term commitments, such as would be captured in signed agreements, and more flexible measures offering temporary protection (e.g. seasonal conditions of operations for migratory species)

Data, Reporting, Outreach

- Ensure observational networks for sustainable, credible monitoring and evaluation information of the arctic marine environment/MPA network, note in particular the role of communities
- Foster regional outlooks and online reporting of environmental and activity status and trends
- Identify and access relevant internal and external data sources, note in particular Traditional Knowledge and relevant data/initiatives of OSPAR, CBD, and ICES, and industry which may be especially pertinent for information on the central Arctic Ocean
- Incorporate MPA data into shipping information (e.g. nautical charts, notices)