



PAME II-2020 Agenda 10.2

Proposed timeline to develop the 2021-2023 PAME Work Plan and PAME section for the SAO Report to Ministers

Aim of the PAME II-2020 meeting:

- ✓ To discuss and initiate the development of the 1st draft PAME Work Plan 2021-2023 items (short version) for inclusion into the 2021 SAO Report to Ministers (4 pages) and follow the guidance as provided by the Icelandic Chairmanship (Attachment I).
 - Start developing a preliminary list of proposed project proposals for the PAME Work Plan (2019-2021). Such a list will be further refined for the PAME I-2021 final approval. The inclusion of projects on such a list does not prejudice any subsequent decision or approval on them.
- ✓ Agree to a timeline to develop and finalize the PAME work plan 2019-2021 (short/4 pager version and long version).

Note: The long version will be published as a stand-alone document in similar manner as previous PAME work plans with project plans of new proposed projects (template in Attachment I) annexed to the plan.

Background:

The AC Chairmanship has provided WGs with **20 Nov as the 1st deadline** to submit its 1st drafts of work plans and input to the SAO Report to Ministers. This process will, as usual, be a process with several milestones during the upcoming fall, winter and spring months. The two main documents we need to deliver are the PAME Work Plan 2021-2023 and PAME achievements 2019-2021, both for inclusion into the SAO Report to Ministers. Please note that the structure and length of each section should remain similar to the one approved in the 2019 SAO Report to Ministers. I have attached the PAME section from 2019 as a guidance (Attachment II.)

Following is a proposed timeline to develop the 1st drafts:

PAME Work Plan 2021-2023:

PAME welcomes all draft projects proposals for consideration in the PAME 2021-2023 Work Plan and requests that any revisions to the draft project proposals presented at PAME II-2020 be circulated by 1 November 2020 for comments by 1 December 2020, unless otherwise specified.

- ✓ PAME Chair and Secretary to prepare a 1st draft of the PAME 2021-2023 Work Plan, based on the discussions at this Meeting and the proposed activities as listed in Annex I (*to be prepared at PAME II-2020*) **by 19 October.**
- ✓ PAME members to provide comments and indications/confirmations of leads for the continuation of existing PAME activities, proposals for new projects/activities, and lead responsibilities **by 13 November.**
- ✓ PAME Chair and Secretary to submit the revised draft PAME 2021-2023 Work Plan to the Arctic Council process **by 20 November** deadline as provided by the Arctic Council Chairmanship.
- ✓ PAME members to provide comments to the 30 November version **by 30 December 2020.**

Report on 2019-2021 Achievements:

- ✓ PAME Chair and Secretary to distribute the 1st draft of the PAME 2019-2021 achievements for the SAO Report to PAME members **by the 19 October** with a deadline for comments **by 13 November.** The 1st draft will be submitted to the Arctic Council Chairmanship by the 20 November 2020 deadline.
- ✓ The final draft of PAME contributions to the SAO Report and the final list of PAME 2021 Ministerial deliverables will be distributed in **January 2021** for comments and final approval at PAME I-2021.

ATTACHMENT I: Development of New Projects for inclusion into PAMEs Work Plan (long version)

Development of new projects is based on ministerial mandates and the prioritization of ongoing activities and a project plan needs to be developed to be annexed to the PAME Work Plan.

Inclusion/involvement/contribution by Permanent Participants. The following check-list should be used by Arctic Council Working Groups when developing new project proposals. Working Groups will report out on the information in the checklist when they update their project entries in the Arctic Council's project-tracking database following their twice-yearly Working Group meetings.

- ✓ Have Permanent Participants been engaged in the development of the project proposal?

- Yes
- No

If no, why? (Please describe in 2-3 lines)

If yes, please describe any role that Permanent Participants will have in the project. (Please describe in 2-3 lines)

- ✓ Will the use of TLK lead to better project outcomes?

- Yes
- No

If yes, explain how TLK will be used in the project. (Please describe in 2-3 lines)

If no, provide an explanation why TLK is not applicable or feasible for this project. (Please describe in 2-3 lines)

Outline for New Project Work Plans

All new projects being incorporated in the *PAME Work Plan 2017-2019* and beyond will need to have confirmed lead(s) and a project work plan.

Below is an outline of the main components which should be filled out for all new/proposed PAME projects.

Project Title and Project Summary

- ✓ Include 2-3 short and precise paragraphs which summarize the project in a language suitable for possible public release/information on the PAME homepage.

Key Objective(s)

- ✓ Develop key objectives and keep in mind the mandate of PAME, e.g. the implementation of the *Arctic Council's Arctic Marine Strategic Plan (2015-2025)* and the nature of the product or outcome (ultimate approval/welcome/note processes).

Scope

- ✓ The coverage and context of the project, relevance to other PAME activities and/or other Arctic Council projects/working groups' activities.

Main Components and Implementation

List of Tasks/Activities:

- ✓ Describe the conceptual framework and provide step-by-step detail
- ✓ Identify themes and/or other issues
- ✓ Planned conferences/workshops/project meetings
- ✓ Inclusion/involvement/contribution by Permanent Participants (as per checklist above)
- ✓ Synergies and collaboration with activities of the other Arctic Council working groups and/or other partners and stakeholders.
- ✓ Outline plans for consultations and/or communicating the project findings and results; think of users and benefits as well. Name the interest groups, or type of reports, websites, etc.

Timeline and Major Milestones:

- ✓ Include a timeline that defines the proposed completion of all activities included in the project. List any milestones and/or critical decision points and plans for conferences and/or project specific meetings outside the biannual PAME Meetings.

Budget:

- ✓ To include financial considerations and a working budget for the required resources per project activity.

Main outcomes

- ✓ Interim products e.g. products of the milestones, if any and the final product.

Project Team Structure/Lead Countries

- ✓ Include names, titles and contact information.

For larger projects – provide an outline of the project management and advisory structure and proposed roles.

ATTACHMENT II: PAME Section in the SAO Report to Ministers, Rovaniemi 2019

3.5 Protection of the Arctic Marine Environment (PAME)

Mandate

PAME is the focal point of the Arctic Council's activities related to the protection and sustainable use of the Arctic marine environment and provides a unique forum for collaboration on a wide range of activities on the protection and sustainable use of the Arctic marine environment. Its mandate is to:

address marine policy measures and other measures related to the conservation and sustainable use of the Arctic marine and coastal environment in response to environmental change from both land and sea-based activities, including non-emergency pollution prevention control measures such as coordinated strategic plans as well as developing programs, assessments and guidelines, all of which aim to complement or supplement efforts and existing arrangements for the protection and sustainable development of the Arctic marine environment.

3.5.1 Achievements 2017-2019

Over the last two years, PAME's work has proceeded in accordance with its biennial work plan, as approved by the Arctic Council in 2017. PAME cooperates actively with the other Arctic Council WGs to contribute to improved efficiency and effectiveness of the Arctic Council. Further, PAME works substantively with Arctic inhabitants, including indigenous peoples, to collaborate on a wide range of activities and topics on the Arctic marine environment.

Summary of achievements 2017-2019

In follow up to the [2017 Fairbanks declaration](#) (i.e., paragraphs 1, 3, 5, 6, 8, 10, 11, 17, 25, 28 and 32), PAME has, inter alia, undertaken the following work over the course of 2017-2019.

Follow-up to the 2009 AMSA and other Shipping Report Recommendations

PAME, aided by its Shipping Expert Group, advanced a number of projects and initiatives to promote safe and sustainable shipping in the Arctic which included:

- Collaboration with international organizations on Arctic related activities of common interest;
- The Arctic Shipping Best Practice Information Forum (established in 2017), which supports effective implementation of the IMO's Polar Code, including its first two meetings and the launch of its web portal in May 2018 (www.arcticshippingforum.is);
- Joint submission of the *Regional Reception Facilities Plan (RRFP) – Outline and Planning Guide for the Arctic* to IMO's Marine Environment Protection Committee (MEPC) 74 in 2019; and,
- The finalization of two informational papers related to heavy fuel oil (HFO), one of which was co-sponsored by all Arctic States and submitted to the IMO on 31 January 2018.

PAME also executed the official launch of the Arctic Ship Traffic Data (ASTD) database in January 2019; completed a report with EPPR on a Compendium of Arctic Shipping Accidents (CASA), and completed the *Underwater Noise in the Arctic – State of Knowledge Report*; and started the process

of developing a non-binding Memorandum of Understanding (MoU) with the Arctic Regional Hydrographic Commission which will continue into the next work plan period.

PAME made continued efforts towards a harmonized and effective implementation of the Polar Code, in addition to progress on *Developing an Approach/Framework for more Systematically Engaging with Observers on PAME's Shipping Related Work*, which will continue with at least one workshop in 2019.

Protection from Invasive Species

PAME and CAFF have established a Joint Arctic Invasive Alien Species Strategy and Action Plan (ARIAS) Implementation Coordinating Group (ICG) and approved its Terms of Reference (refer to CAFFs Achievements).

Framework for a Pan-Arctic Network of Marine Protected Areas (MPAs)

PAME held its third and fourth workshops¹, hosted by Finland in September 2017 and by Canada in March 2019 on MPA networks with the aim to integrate findings into the Arctic MPA-network Toolbox, a practical, hands-on resource for MPA programs and partners for advancing the design and implementation of MPA networks.

Ecosystem Approach to Management (EA)

PAME continues to follow national and international EA developments and integrate the principles of EA into assessments and management recommendations. This contributes to the follow-up to the recommendations in the 2013 Ecosystem-Based Management in the Arctic Report, building on previous work on Large Marine Ecosystems. The joint EA EG coordinates activities with participation from other Arctic Council WGs. The 6th EA workshop held in Seattle in January 2018 focused on the EA Guidelines and Integrated Ecosystem Assessment, and the EA EG developed *Guidelines for Implementing an Ecosystem Approach to Management of Arctic Marine Ecosystems*. The EA EG also developed a plan for a 2nd International EA Conference in Bergen, Norway in 2019, with a focus on the issue of scale integration in EA implementation. PAME continues the joint effort by the International Council for the Exploration of the Sea (ICES)/North Pacific Marine Science Organization (PICES)/PAME WG on Integrated Ecosystem Assessment for the Central Arctic Ocean (WGICA) and notes the completion of the report on *Integrated Ecosystem Assessment of the Central Arctic Ocean: Ecosystem Description and Vulnerability Characterization*.

Arctic Offshore Resource Exploration and Development

The Resource Exploration and Development Expert Group (REDEG) completed the *Meaningful Engagement of Indigenous Peoples and Local Communities in Marine Activities (MEMA) Part II* report. The MEMA online database is accessible on the PAME homepage at www.memadatabase.is and is publicly available as a resource for those interested in engagement of indigenous peoples and local communities.

Arctic Marine Pollution

PAME completed the *Desktop Study on Marine Litter, including microplastics, in the Arctic* (Phase I). The main task was to collect all relevant and existing literature and scientific studies on marine litter in the Arctic. The aim was to better understand the sources and drivers of marine litter, the

¹ See Marine Protected Areas (MPAs) workshops website: <https://pame.is/index.php/projects/marine-protected-areas>.

pathways and distribution, the interactions with and impacts on Biota, and monitoring and responses. This is the first compilation of marine litter covering the circumpolar Arctic but is by no means comprehensive. It helps to improve the understanding of the status and impacts of marine litter, and in particular plastic litter and microplastics, in the Arctic region. A marine litter expert group was established to assist in this work, in addition to its collaboration with other Arctic Council WGs. A workshop was convened in June 2018 in Iceland in support of this project.

Arctic Marine Strategic Plan (AMSP) 2015-2025 Implementation Plan

The PAME Secretariat produced the 2nd AMSP implementation report, which records status on relevant AMSP Strategic Actions for the period 2017-2019 and identifies follow-up activities that are reflected in the PAME WP 2019-2021 and other WGs' WPs, as per their respective mandates. The AMSP Implementation Plan provides a mechanism to systematically track progress and status of its 40 Strategic Actions. This 2nd report was developed in close collaboration with other Arctic Council WGs to ensure transparent and systematic cross-working group progress, provide a status reporting mechanism for all WPs, as relevant, and contribute to collaboration on cross-cutting marine-related issues.

Coordination and collaboration with other Arctic Council WGs

PAME actively pursues cooperation with other Arctic Council WGs and TFs to contribute to improved efficiency and effectiveness of the Council. PAME collaborated with all WGs on the development of the 2nd AMSP implementation Progress Report. AMAP and CAFF continue to be engaged in the joint EA EG, and PAME continues to make efforts to strengthen the communication between the EA EG co-chairs and the relevant WGs.

PAME provided input to CAFF on the "Actions for biodiversity" tracking tool and to EPPR on the *Status report on implementation of the framework plan on oil pollution prevention*. PAME collaborates closely with CAFF on MPA and invasive species activities and all Arctic Council WGs on the development of the *Desktop Study on Marine Litter, including microplastics, in the Arctic*. PAME has invited ACAP, AMAP and the EGBCM to submit short summaries of their work related to black carbon, especially as it pertains to shipping.

List of PAME deliverables to the Rovaniemi Ministerial meeting

PAME's activities for SAO and Ministerial approval/welcome:

- Underwater Noise in the Arctic: A State of Knowledge report;
- Desktop study on Marine Litter, including Microplastics, in the Arctic (Phase I);
- Guidelines for Implementing an Ecosystem Approach to Management of Arctic Marine Ecosystems;
- Meaningful Engagement of Indigenous Peoples and Local Communities in Marine Activities (MEMA) Part II Findings for Policy Makers (full report); and,
- 2nd reporting on progress/implementation of the 2015-2025 Arctic Marine Strategic Plan; and,
- PAME 2019-2021 Work Plan.

3.5.2 PAME Work Plan 2019-2021

Introduction

The PAME 2019-2021 WP was developed in accordance with: PAME's mandate; priorities identified and recommendations made within Arctic Council approved reports; direction provided from

Ministerial declarations; follow-ups on recommendations from Arctic Council projects and the AMSP (2015-2025), which outlines the overall direction of the Arctic Council for the protection of the Arctic marine environment; and policy follow-up on the scientific and other relevant assessments of the Arctic Council. Additional project proposals may be developed within the scope of this WP between 2019-2021, subject to PAME approval, confirmed lead/co-lead commitment and financing.

Many projects have in-kind support from Arctic States and PPs. Additional support is requested through grant applications and state contributions.

[List of individual projects and activities](#)

Marine Protected Areas

Project/activity: Modelling Arctic Oceanographic Connectivity to further develop PAME's Marine Protected Areas Toolbox

Lead: Sweden

Rationale and overall objective: Ongoing climate change may facilitate increased access to the Arctic region, and potential new economic opportunities, but may also bring potential threats to the Arctic marine and coastal environments. These changes could benefit from more integrated approaches to Arctic marine management, including the consideration of MPA networks designed to aid in the conservation and sustainable use of the Arctic environment.

Main activities: Development of models as a tool to help decision makers in designing MPA networks and identifying possible optimal networks of (multiple) MPAs; calculation of optimal network and barriers; coordination meetings and collaboration with other Arctic Council WGs as relevant, in particular with CAFF and its Circumpolar Biodiversity Monitoring Program (CBMP).

Timeline: 2019-2021

Estimated budget: 163,000 USD (lead)

Project/activity: Arctic Protected and Important Areas

Leads: PAME and CAFF Secretariats

Rationale and overall objective: Both WGs will work jointly to update the 2017 Arctic Protected Areas Indicator Report (APAI).

Main activities: The APAI data will be compared to the data for the Arctic in the Protected Planet database, managed by the United Nations Environment-World Conservation Monitoring Centre (UNEP-WCMC). The purpose of this comparison is to determine differences between the two databases and update each database accordingly.

Timeline: 2019-2021

Estimated budget: In-kind support from PAME and CAFF Secretariats

Project/activity: Develop two Factsheets on Marine Protected Areas (MPAs) under change

Co-leads: Finland, United States

Rationale and overall objective: Develop two factsheets on MPAs under change with the aim to leverage and synthesize factual information from the Arctic Council's work on this topic and communicate to decision makers and the public; and contribute to cross-working groups cooperation on common topics.

Main activities: The 1st factsheet will synthesize factual information on MPAs under change and the role of MPAs in building resilience. The 2nd factsheet will synthesize factual information on impacts

of these changes on indigenous peoples. PAME will consider translations of the fact sheets as resources permit.

Timeline: 2019-2021

Estimated budget: 170,000 USD (co-leads)

Project/activity: Expansion and refinement of the MPA-Network Toolbox

Lead: MPA Expert Group Partners: CAFF, WWF, CCU

Rationale and overall objective: To continue enhancing PAME's work on a Pan-Arctic Network of Marine Protected Areas and contribute to some of the near-term actions listed in the Framework for a Pan-Arctic Network of MPAs and the AMSP strategic action number 7.2.10.

Main activities: Expand the MPA Network Toolbox based on the outcomes of the 4th MPA Workshop held on 19-21 March 2019 in Cambridge Bay, Nunavut, Canada, on Exploring ways to support Indigenous/Local involvement in, and Indigenous/Local led, marine protection in the circumpolar Arctic Ocean.

Timeline: Ongoing/continuation from previous WP.

Estimated budget: In-kind support from PAME and CAFF Secretariats

Arctic Marine Shipping

Project/activity: Black Carbon Emissions from Shipping Activity in the Arctic and Technology Developments for their Reduction

Lead: Iceland; co-lead: Finland

Rationale and overall objective: To strengthen harmonization and foster dialogue and cooperation between the Arctic Council member states, PPs and Arctic Council Observers on research on various fuel and exhaust gas treatment methods as possible means by which to reduce the amount of harmful gases emitted by vessel engines.

Main activities: To compile data on black carbon emissions from shipping activity in Arctic waters using PAME's Arctic Ship Traffic Database (ASTD) database to better understand the distribution and magnitude of these emissions in the region; and foster dialogue and sharing of information among PAME Members, industry, experts, and others as appropriate on technology developments, including information on cost-efficiency methodology and other relevant factors, for the reduction of black carbon emissions from shipping in the Arctic. The final project proposal may consider as appropriate, relevant work under the IMO, and may be revised accordingly, in light of complementarity, by the projects' correspondence group, which is composed of the Russian Federation, Finland, the United States and the Kingdom of Denmark.

Timeline: 2019-2021

Estimated budget: 105,000 USD (co-leads)

Project/activity: Arctic Shipping Status Reports

Leads: United States, PAME Secretariat

Rationale and overall objective: To provide a snapshot on Arctic shipping by utilizing PAME's ASTD database.

Main activities: Develop user-friendly, illustrative informational factsheets on Arctic shipping to highlight important developments in Arctic shipping activities and disseminate them online, e.g. as story maps.

Timeline: 2019-2021

Estimated budget: 85,000 USD (co-leads/in-kind)

Project/activity: Environmental toxicity and fate of light and intermediate fuel oils when spilled in cold waters

Lead: Norway; co-lead: Finland;

Rationale and overall objective: To gather knowledge and explain the large variation in environmental toxicity of light and intermediate fuel oil. This is a joint project proposal by PAME and EPPR.

Main activities: PAME anticipates finalizing and approving this project proposal intersessionally in coordination and consultation with EPPR.

Timeline: 2019-2021

Estimated budget: TBC

Project/activity: Arctic Marine Tourism: Development in the Arctic and Enabling Real Change

Lead: Iceland; co-lead: Canada

Rationale and overall objective: This project will follow up on recommendations contained in the [Arctic Marine Tourism Project – Best Practice Guidelines document \(AMTP 2015\)](#).

Main activities:

- Compile data on tourism vessels in the Arctic using PAME's ASTD database to better understand recent developments, identify gaps in data, and explore the feasibility to map the use and carriage of Automatic Identification System (AIS) by vessels not obligated to do so by IMO regulations; and,
- Summarize existing site-specific guidelines for near-shore and coastal areas of the Arctic visited by passengers of marine tourism vessels and pleasure crafts.

The final product will be a summary report with recommendations on next steps, for Ministerial approval in May 2021, and an online repository of information collected for the purposes of the project.

Timeline: 2019-2021

Estimated Budget: 110,000 USD (lead, partly in-kind)

Project/activity: PAME-ARHC Memorandum of Understanding

Leads: United States, Canada

Rationale and overall objective: To formalize the relationship between PAME and the Arctic Regional Hydrographic Commission (ARHC) through the development of a non-binding Memorandum of Understanding (MOU). The purpose of the MOU would be to foster greater communication between the two bodies and enhance coordination and cooperation on projects of mutual interest.

Main activities: Develop a non-binding MOU in close collaboration with ARHC

Timeline: 2019-2021

Estimated budget: In-kind

Project/activity: Underwater Noise in the Arctic: Understanding Impacts and Identifying Mitigation Strategy Options - Phase I

Co-leads: Canada, WWF

Rationale and overall objective: Obtain a better understanding and estimate the current underwater noise emissions incidentally generated by commercial shipping in the Arctic, while using information

from PAME's ASTD database, and collaborating with CAFF as appropriate to advance implementation of AMSA Report Recommendation II (G).

Main activities (Phase I):

- Obtain a better understanding and estimate the current underwater noise emissions (or 'noiseprint') from shipping in the Arctic;
- Identify areas where underwater noise from shipping and areas of heightened ecological or cultural significance overlap as identified by the Arctic Council; and,
- Based on the results obtained, and recognizing the limitations inherent to high-level analyses, investigate possible mitigation strategy options to reduce the impact of underwater noise incidentally generated by shipping in the Arctic. Expert input and traditional knowledge and local knowledge will be used to inform any such options.

Timeline: Phased approach with phase one for the 2019-2021 period.

Estimated budget: In-kind

Project/activity: Compendium of Shipping Accidents in the Arctic (CASA): follow-up

Lead: United States (joint project with EPPR)

Rationale and overall objective: Develop a compendium of shipping accidents in the Arctic for the period 2005-2017 and an overview report to update the corresponding information contained in the 2009 Arctic Marine Shipping Assessment (AMSA) Report.

Main activities: Incorporate the CASA information using GIS mapping tools into PAME's ASTD database and conduct a further analysis and report to identify accident causes and potential options for reducing the risk of such accidents.

Timeline: 2019-2021 (continued from previous WP)

Estimated budget: In-kind

Project/activity: HFO Phase IV (b) – Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO

Co-leads: United States, AIA, CCU (joint project with SDWG) (ongoing/continued from previous work plan)

Rationale and overall objective: Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO.

Main activities: To develop a report summarizing the information collected in a field survey in 2018 and 2019 about on-shore use of heavy fuel oil (HFO) by indigenous peoples and local communities, as well as the extent to which such peoples and communities rely on ships that burn HFO to deliver supplies and provisions. Consideration of a report to the 7th session of the IMO's sub-Committee on Pollution Prevention and Response (PPR) by one or more Arctic States.

Timeline: 2019-2021

Estimated budget: In-kind

Project/activity: Collect and Summarize Information on Arctic States' Safe and Low-Impact Marine Corridor Initiatives

Co-leads: Canada, Iceland, AIA

Rationale and overall objective: Collect information on best practices for safe and low-impact shipping corridors in the Arctic and contribute to enhanced marine navigation safety

Main activities: Collect and summarize information on safe and low-impact marine corridor initiatives and programs in the Arctic region and submit a final report to PAME.

Timeline: 2019-2021 (continued from previous WP)

Estimated budget: In-kind

Project/activity: A Framework for More Systematically Engaging with Observers on Shipping Related Matters

Co-leads: United States, Republic of Korea, Italy, Poland, Northern Forum (tbc)

Rationale and overall objective: Identify options for leveraging Observer interest, expertise and capabilities.

Main activities: Develop an approach for more systematically engaging with Observers on PAME's shipping-related work and identify opportunities for Observers to contribute to and/or support such work. PAME will convene one or more workshops during the two-year biennium to advance this project.

Timeline: 2019-2021 (continued from previous WP)

Estimated budget: In-kind

Project/activity: Update of PAME's Shipping Priorities and Recommendations

Co-leads: United States, Canada

Rationale and overall objective: To finalize updates of the Ministerial-approved 2009 AMSA Report Recommendations for consideration and adoption by the Arctic Council.

Main activities: Preparation of a report that explains and provides a rationale for the proposed changes.

Timeline: 2019-2021 (continued from previous WP)

Estimated budget: In-kind

Project/activity: Further Development of the Arctic Ship Traffic Database (ASTD)

Co-leads: United States, Norway

Rationale and overall objective: Further refinement of information contained in the ASTD.

Main activities: To further augment and refine the information contained in the ASTD as well as enhance its analytical and report generating capabilities. The ASTD was publicly launched on 7 February 2019 and the project will continue to strengthen and debug the database in response to empirical experience and user feedback.

Timeline: 2019-2021 (continued from previous WP)

Estimated budget: as per the Cooperative Agreement among the Arctic States Regarding Arctic Ship Traffic Data Sharing (2017).

Project/activity: The Arctic Shipping Best Practice Information Forum

Co-leads: Iceland, United States, Canada

Rationale and overall objective: To foster increased use of the Arctic Shipping Best Practices Information Forum webportal.

Main activities: Convene annual meetings of participants and continue the development and expansion of the Forum's web portal (arcticshippingforum.is). The webportal includes links to key information related to the IMO's Polar Code and serves as a resource hub of information, guidance and guidelines that aid decision makers involved in Arctic marine navigation and those affected by

maritime operations related to the Polar Code. This is in accordance with the Terms of Reference (ToR) for the Arctic Shipping Best Practice Forum (2017).

Timeline: Two annual meetings during the 2019-2021 period (continued from previous WP)

Estimated budget: In-kind

Project/activity: Develop an Overview of Arctic States' and Observer States' Interpretation of the Polar Code

Lead: Norway

Rationale and overall objective: The adoption of the Polar Code was a first step towards ensuring safe and sustainable shipping in the Arctic. In order to ensure the success of the Polar Code there is a need to work towards facilitating, where applicable, consistent implementation and enforcement of the Code.

Main activities: Based on input from the Arctic States as well as Observer states, a comprehensive overview of maritime administrations' interpretations of the Code will be developed. This exercise will contribute to the establishment of a 'common ground' for interpretation and give an overview of remaining challenges.

Timeline: 2019-2021.

Estimated Budget: In-kind

Protection from Arctic Invasive Species

Project/activity: Implementation Plan for the ARIAS Strategy and Action Plan

Leads: PAME Chair, will engage with the CAFF Chair and existing Implementation Coordinating Group (ICG) members to propose a new approach for ARIAS implementation. Implementation actions will be led by different Arctic States, PPs, WGs and other Arctic Council subsidiary bodies.

Rationale and overall objective: To reduce the threat of invasive alien species by developing and implementing common measures for early detection, reporting, identifying and blocking pathways of introduction, and sharing best practices and techniques for monitoring, eradication and control.

Main activities: Implementation of the ARIAS Strategy and Action Plan

Timeline: The ICG to develop project proposals intersessionally for CAFF and PAME to consider including in their respective 2019-2021 work plans.

Estimated Budget: In-kind

Arctic Marine Pollution

Project/activity: Regional Action Plan on Marine Litter in the Arctic

Leads: Canada, Kingdom of Denmark, Finland, Iceland, Norway, Sweden, United States, AIA, OSPAR

Rationale and overall objective: To develop a Regional Action Plan on Marine Litter in the Arctic (RAP-ML) addressing both sea and land-based activities, focusing on Arctic-specific marine litter sources and pathways that will play an important role in demonstrating Arctic States' stewardship efforts towards reducing the negative impacts of marine litter, including microplastics, to the Arctic marine environment. The RAP-ML may be updated in subsequent bienniums to address new and emerging information and priorities; therefore, the structure needs to be realistic and adaptable.

Main activities: Collaboration with other Arctic Council WGs on marine litter activities to ensure that this work is adequately reflected in the first version of the Regional Action Plan.

Timeline: First version of the RAP-ML during the 2019-2021 period.

Estimated Budget: 220,000 USD.

Project/activity: Communication and Outreach Activities (In connection with drafting the RAP-ML)

Leads: same as in the development of the RAP-ML

Rational and overall objective: Development of outreach and communications material in support of the RAP-ML project

Main activities:

- Marine Litter workshop/conference;
- Plastic in a bottle;
- Project video;
- Arctic marine litter competition; and,
- Marine Litter graphics site on the PAME website for outreach purposes

Ecosystem Approach to Management

Project/activity: Convening of the 2nd International Science and Policy Conference on Implementation of the Ecosystem Approach to Management in the Arctic in Bergen, Norway 2019

Leads: Norway and the United States in close collaboration with the EA expert group

Rationale and overall objective: Continue to integrate the ecosystem approach into assessments and management recommendations through follow-up to the 2013 EBM marine-related recommendations, taking into account previous work on Large Marine Ecosystems (LMEs), and new and ongoing EA activities of cross-cutting nature. The title of the conference is The Ecosystem Approach to Management of Arctic Marine Ecosystems: Integrating Information at Different Scales in the Framework of EA Implementation.

Main activities: Topics to be addressed include Integrated Ecosystem Assessment, Ecological Quality Objectives, Marine Protected Areas, National EA Implementation by Arctic States, and the Central Arctic Ocean. While the focus is on EA implementation in the Arctic, the topic of scale integration is general and universal.

Timeline: 2019-2021

Estimated budget: In-kind

Project/activity: 7th EA Workshop

Leads: Norway and the United States in close collaboration with the EA expert group

Rationale and overall objective: Continue to integrate the ecosystem approach into assessments and management recommendations through follow-up to the 2013 EBM marine-related recommendations, taking into account previous work on Large Marine Ecosystems (LMEs), and new and ongoing EA activities of cross-cutting nature.

Main activities: To convene the 7th EA workshop in 2020 with focus on element No. 5 of the EA framework: Value the cultural, social, and economic goods and services produced by the ecosystem.

Timeline: 2019-2021

Estimated budget: In-kind

Project/activity: Report on Development in Defining or Setting Ecological Objectives

Leads: Norway and the United States in close collaboration with the EA expert group

Rationale and overall objective: Continue to integrate the ecosystem approach into assessments and management recommendations through follow-up to the 2013 EBM marine-related recommendations, taking into account previous work on Large Marine Ecosystems (LMEs), and new and ongoing EA activities of cross-cutting nature.

Main activities: Report on developments in defining or setting ecological quality objectives in the context of EA implementation in national and international processes.

Timeline: 2019-2021

Estimated budget: In-kind

Project/activity: Integrated Ecosystem Assessment (IEA) of the Central Arctic Ocean

Leads: Norway, United States, ICES, PICES in close collaboration with the EA expert group

Rationale and overall objective: Provide scientific advice on issues such as the prospect for future fisheries in the Central Arctic Ocean and sensitivity and vulnerability to shipping activities.

Contribute to the implementation of the EA in the Central Arctic Ocean.

Main activities: Continue emphasis on development of Integrated Ecosystem Assessment (IEA). Continue to report on developments within ICES/PICES/PAME Working Group on Integrated Ecosystem Assessment (WGICA) as well as other ICES activities on IEA, the meetings of scientific experts on fish stocks in the Central Arctic Ocean, and any other relevant activities.

Timeline: 2019-2021

Estimated budget: In-kind

Resource Exploration and Development

Project/activity: MEMA Information Handbook for Engagement with Indigenous Peoples and Local Communities

Leads: United States, Canada, AIA, ICC, Saami Council in close collaboration with the Resource and Exploration Expert Group (REDEG). PAME has invited SDWG to participate in this project.

Rationale and overall objective: Follow-up to the *Meaningful Engagement of Indigenous Peoples and Local Communities in Marine Activities* (MEMA) project.

Main activities: To develop an information handbook or reference guide as a practical tool for engagement with indigenous peoples and local communities.

Timeline: 2019-2021

Estimated budget: In-kind

Project/activity: Update/Status Report on Current Offshore Oil and Gas Activities by Arctic States

Lead: United States in close collaboration with the REDEG

Rationale and overall objective: To describe current oil and gas activities of the Arctic States based on States' submissions of information including on relevant legislation, regulations and practices.

Main activities: To prepare an update/status report on current offshore oil and gas activities by Arctic States. To this end, REDEG will develop a template to facilitate States' submissions.

Timeline: 2019-2021

Estimated budget: In-kind

Strategic Framework Documents

Project/activity: AMSP Implementation Status Report 2019-2021

Leads: PAME HoDs, PAME Secretariat, in collaboration with the other Arctic Council WGs

Rational and overall objective: To track progress on implementation of the AMSP 40 Strategic Actions and report on its status.

Main activities: Develop the 3rd AMSP Implementation Status Report in collaboration with other Arctic Council WGs for the period 2019-2021 for submission to the Arctic Council Ministerial meeting in 2021.

Timeline: 2019-2021

Estimated budget: In-kind

Administration

The PAME International Secretariat is based in Akureyri, Iceland. The Secretariat has a staff of three: 1) the Executive Secretary; 2) Executive Assistant; and 3) project manager. A Ministerial agreement (1998) provides the framework for voluntary contributions to the operation of the PAME Secretariat. Contributions are provided by six of the eight Arctic States in support of the Secretariat. PAME cooperates closely with CAFF to share fixed Secretariat overhead costs. Canada has chaired, and the United States has co-chaired the PAME WG during 2017–2019 period. PAME's Vice-Chair (United States) will continue to serve as Acting Chair until the position is filled. PAME has held four WG meetings, two MPA network expert workshops, two Arctic Shipping Best Practices Information Forum meetings, and two ASTD workshops, in addition to a number of meetings of the PAME EGs during the Finnish Chairmanship of the Arctic Council.

Communication and outreach

The lead of PAME's overall communications activities is the PAME Secretariat. PAME develops necessary project-related communications, which include brochures, promotional materials, websites, video production, event hosting, presentations at key events, and press inquiries. PAME participates in relevant international symposia, meetings and other appropriate venues to communicate PAME's activities. PAME's work plan includes information outreach and efforts to increase cooperation and collaboration with international and regional organizations to include the liaising and exchange of information with relevant organizations and programs (e.g. UNEP Regional Seas Programme), and other regional programs. PAME's homepage serves as the main outreach and communication tool (www.pame.is).

Outputs of PAME's activities for information include:

- Arctic Shipping Best Practice Information Forum Status Report, Webportal and Press Release;
- Report on the environmental, economic, technical and practical aspects of the use by ships in the Arctic of alternative fuels;
- Arctic Ship Traffic Data Project Status Report, Database and Press Release (United States);
- Regional Reception Facilities project titled: Proposal for a new output to amend MARPOL to allow the establishment of regional arrangements in the Arctic for joint submission by all Arctic States to the 74th Session of IMO's Marine Environment Protection Committee (MEPC);
- MEMA database;
- Progress report on the EA-EG 2017-2019 work plan;
- Integrated Ecosystem Assessment Report for the Central Arctic Ocean, pending its completion; and,
- Various communication and outreach products.

