

RECORD OF DECISIONS AND FOLLOW-UP ACTIONS

PAME II-2019 (10-12 September 2019)

Reykjavik, Iceland

Opening of the Meeting

PAME thanks Iceland for hosting PAME-II 2019 and notes with appreciation the welcoming remarks from Dr. Jón Atli Benedikssson, Rector of the University of Iceland; Ambassador. Einar Gunnarsson, Chair of the Senior Arctic Officials; and Helga Jónsdóttir, PAME Head of Delegation for Iceland.

Information and various updates (Agenda Item 3)

PAME takes note of:

- ✓ *Outcomes from the Arctic Council Ministerial meeting, 6-7 May 2019;*
- ✓ The upcoming Circumpolar Biodiversity Monitoring Program (CBMP) workshop, 5-7 November 2019, in Nuuk and significant opportunity for collaboration with many PAME projects;
- ✓ The update on the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (CAO Fishing Agreement);
- ✓ The summary of Iceland's 2019-2021 Chairmanship program and priorities of relevance to PAME's work, including the International Symposium on Plastics in the Arctic and Sub-Arctic Region, 21-23 April 2020, in Reykjavik (www.arcticplastics2020.is) and the proposed Arctic Ocean Ministers meeting; and
- ✓ Our Ocean Conference, 23-24 October 2019, in Oslo, Norway and a side event by Iceland's Chairmanship on Marine Litter/Plastics on 23 October 2019.

PAME thanks the representative of Germany, Anja Sommerfeld, for her presentation on the Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAiC expedition).

PAME thanks Associate Professor Ingibjörg Jónsdóttir of the University of Iceland for her presentation on the changing sea-ice conditions off Iceland.

PAME thanks the representative of the Nordic Environmental Finance Corporation (NEFCO), Annukka Valkeapää, for her update on the Arctic Council Project Support Instrument (PSI) and will explore potential funding opportunities for PAME projects based on PSI priorities.

PAME thanks Dr. William D. Halliday, Wildlife Conservation Society, Canada, for his presentation on "Mapping Underwater Noise Footprints for Ship Traffic in the Canadian Arctic".

Framework for a Pan-Arctic Network of Marine Protected Areas (MPAs) (Agenda item 4)

PAME thanks Canada for a summary of the 4th MPA workshop on "Exploring ways to support Indigenous/Local involvement in, and Indigenous/Local led, marine protection in the circumpolar Arctic Ocean", 19-21 March 2019, in Cambridge Bay, Nunavut, Canada. PAME looks forward to the Workshop Report, to be circulated prior to PAME I-2020, and invites members to provide feedback on best ways to utilize the outcomes from this workshop and integrate these findings into ongoing PAME work, which may include the MPA Network Toolbox and the MEMA Handbook.

PAME thanks Sweden for the update on the project, "Modelling Arctic oceanographic connectivity to further develop PAME's MPA Network Toolbox" and requests the Secretariat issue a call for nominated experts to serve in a scientific reference group advising on this project by 27 September. PAME notes Sweden will provide guidance on needed expertise for the scientific reference group and requests PAME members to respond to the Secretariat's call for experts with nominations by 11 October. PAME recognizes the importance of collaboration with CAFF on this project. Project leads will present preliminary results at PAME I-2020.

PAME welcomes the update from the co-leads (Finland and USA) on developing Factsheets related to MPAs and Indigenous Peoples' Lives in a changing climate. PAME requests the Secretariat to issue a call for nominated experts to serve in a reference group advising on this project by 27 September. PAME requests its members and welcomes members from relevant Arctic Council working groups to respond to the call for experts with nominations provided to the Secretariat by 11 October. Project leads will submit a first draft of the first Factsheet for review prior to PAME I-2020.

PAME takes note of unforeseen delays in the PAME and CAFF Secretariats' work with UN Environment Programme WCMC to update the Arctic Protected Areas Indicator Report and looks forward to receiving an update on progress at PAME I-2020.

Protection from Invasive Species (Agenda item 5)

PAME welcomes and encourages a discussion between the CAFF and PAME Chairs on next steps for the implementation of the Arctic Invasive Alien Species (ARIAS) action plan and will inform PAME I-2020 on any results.

Arctic Marine Shipping Assessment (Agenda Item 6)

Theme I: Enhanced Arctic Maritime Safety

Linking with International Organizations (I(A))

PAME welcomes the successful outcomes of the 3rd Annual meeting of the Arctic Shipping Best Practice Information Forum (the Forum) and acknowledges the contributions made by its participants to the effective implementation of the IMO Polar Code.

- ✓ PAME invites the Forum Coordinating Committee to begin planning for the 4th annual meeting, tentatively scheduled for 9-10 May 2020, immediately preceding the 102nd Session of the IMO's Maritime Safety Committee;
- ✓ PAME invites the Forum Coordinating Committee to prepare a draft Information Paper about the Forum for possible submission by one or more Arctic States to the 75th Session of the IMO's Marine Environment Protection Committee (30 March-3 April 2020);
- ✓ PAME thanks the Forum participants who responded to the survey on how to improve the efficiency of the Forum and welcomes continued engagement by all Forum participants.

PAME approves in principle the draft PAME-Arctic Regional Hydrographic Commission (ARHC) MoU (Appendix A to PAME (II)/19/6.1/b) and instructs the USA and Canada to inform the ARHC of such approval. PAME invites the ARHC to inform the project co-leads if it proposes any further changes to the draft MoU. If there are no further changes, PAME invites the project co-leads to inform the SAOs at the first opportunity and obtain their concurrence with the aim of signing and finalizing the MoU thereafter. If the ARHC proposes further changes, the projects co-leads are requested to circulate them intercessionally to PAME member governments and to seek approval of those changes.

PAME invites the IMO Secretariat to submit to PAME I-2020 information on IMO issues and developments of interest to PAME.

PAME invites the International Council for the Exploration of the Sea (ICES) to submit information as soon as practicable on its 'Working Group on Shipping Impacts in the Marine Environment (WGSHIP)', including with respect to potential linkages with the Arctic Council and PAME's shipping-related work.

PAME invites the Netherlands to make a presentation at PAME I-2020 on its Arctic interests, including shipping.

AMSA I (B) - IMO Measures for Arctic Shipping

HFO Phase IV (b) — Collect, Report and/or Review Information about On-Shore use by Indigenous Peoples and Local Communities of HFO — PAME welcomes the final field survey report prepared by AIA. PAME invites its members to submit as soon as practicable and no later than PAME I-2020 any additional information they may have on the reliance by Arctic indigenous peoples and local communities on HFO, particularly any evidence that these groups do in fact rely on HFO and if so in what manner. PAME instructs the project co-leads to continue to coordinate with SDWG on this joint project as necessary and appropriate.

PAME members are reminded of the invitation by the IMO for impact assessments on the use and carriage of heavy fuel oil as fuel by ships in Arctic waters to be submitted to the 7th session of IMO's Sub-committee on Pollution Prevention and Response (PPR 7)(17-21 February 2020) and welcomes circulation of their submission to PAME I-2020 for information in connection with the above mentioned HFO PAME project.

PAME acknowledges the submission by the USA of a literature review (PAME(II)/19/6.2/a) concerning reliance by Indigenous Peoples and Local Communities on HFO. PAME invites members to review this document and inform the USA of any significant errors or omissions by 15 December 2019.

PAME invites Finland and Iceland to submit to PAME I-2020 an update of the project titled "Black carbon emissions concerning shipping activity in the Arctic and technology development for their reduction", taking into account relevant developments at PPR 6 and MEPC 74. PAME invites its members by 15 October 2019 to identify relevant experts to participate in the project.

PAME invites those Arctic and Observer States that have not yet submitted information to Norway on how they interpret the Polar Code to do so by 1 December 2019 using the template created by Norway. PAME invites Norway to provide a status report and preliminary summary of information received to PAME I-2020.

PAME invites each Arctic State and Observer State to submit to PAME I-2020 information on Polar Ship Certificates that have been issued by or on behalf of their maritime administrations. Such information is to include if possible, the type of ship, gross registered tonnage and ice class.

PAME thanks the Russian Federation for its presentation on "Polar Code Compliance: Concentration Inspection Campaigns (CIC) vs. Harmonized Verification Programs (HAVEP)." in which advantages of HAVEP in Arctic waters due to more flexible and pragmatic approach were emphasized.

PAME invites the Kingdom of Denmark, the Russian Federation and Finland to provide information to PAME I-2020 on the Paris MoU Polar Code Inspection Campaign developments as a basis for further discussion on how PAME could support the potential campaign. PAME takes note of the proposal of the Russian Federation to support a similar campaign under the Tokyo MoU by interested Arctic States.

PAME welcomes the decision by Finland to begin the process to ratify the Cape Town Agreement related to the safety of fishing vessels, and notes the convening of the "Ministerial Conference on Fishing Vessel Safety and IUU Fishing" to be held at Torremolinos, Spain, 21-23 October 2019.

Uniformity of Arctic Shipping Governance (I(C))

PAME welcomes the final report by Canada, Iceland, and AIA titled "An Overview of Low-Impact Shipping Corridors and other Shipping Management Schemes in the Circumpolar Arctic" and notes that the report will be transmitted to EPPR for any appropriate additional follow-up.

Strengthening Passenger Ship Safety in Arctic Waters I(D)

PAME notes the status report submitted by Canada, Iceland, and the United Kingdom (PAME(II)/19/6.4) on the project "Arctic Marine Tourism Project: Development in the Arctic and enabling real change" and invites by 15 October 2019 the identification of relevant experts to participate in the project. PAME also invites:

- ✓ the project co-leads to submit a status report to PAME I-2020; and
- ✓ its members to submit to PAME I-2020 any information on site-specific guidelines for marine-based tourism in the Arctic region.

Theme II: Protecting Arctic People and the Environment

Addressing Impacts on Marine Mammals (II(G))

- ✓ PAME notes with appreciation the draft Statement of Work for 'Developing Acoustic Intensity Maps for Shipping in the Circumpolar Arctic' prepared by the project co-leads (Canada and WWF). PAME invites the co-leads to submit an update to PAME I-2020 on the project.
- ✓ PAME invites one or more Arctic States to serve as co-lead with WWF on a proposed project concerning greywater discharges by vessels in the Arctic that could be approved intercessionally or as part of PAME's 2021-2023 work plan. PAME invites a presentation at PAME I-2020 by a relevant expert and the submission of any additional information on the topic.

Theme III: Building the Arctic Marine Infrastructure

Addressing the Infrastructure Deficit (III(A))

PAME notes the Port Reception Facilities Project Status Report submitted by the Russian Federation and the USA (PAME(II)/19/6.6). PAME invites the IMO contact points from each Arctic State to continue to work collectively and within their national IMO delegations, intersessionally by correspondence, to draft such submissions related to the amendment to MARPOL and draft action plan, in accordance with IMO's organization of work and to update PAME as necessary.

Arctic Marine Traffic Systems (III(B))

PAME notes with appreciation the presentation made by the Arctic Shipping Traffic Data (ASTD) expert group on developments since the launch of the ASTD System in February 2019.

- ✓ PAME invites the Secretariat in coordination with the project co-leads and the ASTD expert group to circulate a survey requesting suggestions for new ASTD data layers to PAME members and all other Arctic Council subsidiary bodies;
- ✓ PAME decides to review the ASTD Framework Agreement according to its paragraph 6.6 at PAME I-2020 and recommends that the ASTD expert group and project co-leads suggest any appropriate or necessary amendments;
- ✓ PAME invites the project's co-leads and ASTD expert group to explore opportunities for informing the SAOs and other Working Groups of the ASTD System;
- ✓ PAME invites the project's co-leads and the ASTD expert group to develop a simple "How to use the ASTD System" or "Frequently Asked Questions" with the goal of facilitating wider use of the System; and
- ✓ PAME invites the ASTD expert group to compile all suggestions for additions to the ASTD System, including new data layers and to develop budget cost estimates for these proposed additions. The ASTD expert group will submit a summary to PAME I-2020.

PAME invites the Arctic Shipping Status Report (ASSR) Project co-leads (USA and PAME Secretariat) to collect potential report topic ideas from the PAME Shipping Expert Group by 15 October 2019, develop a test report using the process set forth in PAME (II)/19/6.7/b, and circulate the test report for consideration and approval at PAME I-2020.

PAME invites its members to inform the USA by 15 December 2019 of any errors or omissions in the data spreadsheet attached to the Compendium of Arctic Ship Accidents (CASA) Report (PAME (II)19/6.7/c). PAME requests that the USA continue to coordinate with EPPR on this joint project as necessary and appropriate and invites the USA to submit an update to PAME I -2020.

Engagement of Observer States PAME's Shipping-Related Activities

PAME notes with appreciation the workshop summary report for the 'Systematic Engagement with Observers Project' (PAME (II)/19/6.8) and the progress made on the project. With an eye towards developing a draft framework for more systematically engaging with Observers, PAME invites the project co-leads (USA, Poland, Republic of Korea, Italy, Northern Forum) to:

- ✓ divide and rank by feasibility the catalogue of ideas, suggestions, and recommendations into those that may feasibly be pursued by PAME member governments, and those that may feasibly be pursued by Observers;
- ✓ identify the catalogued items by feasibility and develop a summary with an explanatory notation on how each selected item could be pursued;
- ✓ explore the development of a "PAME 101 for Observers"; and
- ✓ submit a status report to PAME I-2020.

Update on PAME's Shipping Priorities and Recommendations

With the objective of securing SAO and Ministerial approval in 2021 of updates to the 2009 AMSA Report Recommendations (the AMSA refresh project), PAME invites:

- ✓ the project's co-leads (USA and Canada) to prepare a short project summary;
- ✓ the Secretariat to distribute that summary along with the draft matrix to all Arctic Council subsidiary bodies and to PAME members for final review and comment by 15 March 2020;
- ✓ the project's co-leads to submit a summary of comments received along with an updated matrix to PAME II-2020.

Resource Exploration and Development (Agenda item 7)

Meaningful Engagement of Indigenous Peoples and Local Communities in Marine Activities (MEMA) follow-up

- ✓ Co-leads include Canada, USA, ICC, AIA, Saami Council and Northern Forum.
- ✓ PAME notes the work to develop a "Handbook" or reference tool(s) for Indigenous Peoples and local communities. The "Handbook" is to be based on the MEMA database and Part II report. Co-leads consider this to be a communications exercise and have engaged a communication specialist to scope out user needs such that the tool(s) are designed to meet those needs. PAME notes two meetings were held on 8-9 September 2019 to engage with PPs and others from PAME and SDWG on potential users and their needs. Next steps will be informed by the meeting outcomes, with work to continue intersessionally.

- ✓ Co-leads will explore possible linkages with MPA and EA work on meaningful engagement in marine areas with Indigenous Peoples and Local Communities.
- ✓ PAME welcomes the information provided by Finland that the Arctic Council received the Global Award of the International Association for Impact Assessment (IAIA) at their annual conference in Brisbane Australia at the end of April. The award was given for promoting cooperation and the coordination on issues of sustainable development and environmental protection in the Arctic.

Oil and gas activities

PAME notes the work to collect information on current oil and gas activities and relevant post 2010 legislation, regulations and practices. States are encouraged (again) to submit this information based on the survey circulated as soon as possible. This will be compiled into a report or white paper and a possible fact sheet.

PAME requests REDEG to explore the possibility of identifying offshore oil and gas fields for inclusion in the ASTD System in conjunction with the ASTD expert group.

Other

PAME requests the Secretariat to reach out to EPPR on their work related to floating nuclear power plants.

Ecosystem Approach to Management (Agenda item 8)

PAME welcomes the report from the Second International Science and Policy Conference on Implementation of the Ecosystem Approach to Management in the Arctic - 'The Ecosystem Approach to Management of Arctic Marine Ecosystems: Integrating information at different scales in the framework of EA implementation' - held in Bergen, Norway, 25-27 June 2019. The conference was attended by 55 participants, with good representation by members of indigenous communities and organizations. PAME notes that the conference report will form the basis for a status report on EA implementation in the Arctic to be prepared by the end of the current work plan period.

PAME welcomes the initial planning of a 7th EA workshop in 2020 on element No. 5 of the EA framework, 'Value the cultural, social, and economic goods and services produced by the ecosystems', and notes the objectives and scope as outlined in the draft workshop prospectus (Annex I). Venue and time are still to be determined.

PAME welcomes the plan to prepare the 'Report on development in defining or setting Ecological Objectives' with two main parts: concepts related to ecological objectives, and experiences gained from practical application of ecological objectives. An extended outline will be prepared by the EA co-leads by 15 December 2019, and a first draft will be prepared with input from PAME members and the EA expert group in 2020. EA co-leads plan to prepare a final draft for approval by PAME I-2021 as a potential deliverable for the 2021 Ministerial.

PAME welcomes the information on the work of the joint ICES/PICES/PAME Working Group for Integrated Ecosystem Assessment of the Central Arctic Ocean (WGICA) and notes that the first IEA report will be shared with PAME prior to being published as a Cooperative Research Report following peer review and technical editing by ICES. PAME also notes the plan to

produce a second version IEA report with more emphasis on impacts of human activities on the CAO ecosystem to be completed in 2021.

PAME notes the upcoming meeting of the Provisional Scientific Coordinating Group under the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean and opportunities for collaboration.

PAME welcomes efforts to strengthen the communication between the EA expert group co-chairs and the relevant working groups by attending their respective working group meetings to conduct outreach, to inform about progress/status, and to seek inputs, as relevant.

Arctic Marine Pollution (Agenda item 9)

PAME thanks Magnús Jóhannesson for his overview on his role as a Coordinator on Marine Litter and Plastics during the Iceland's chairmanship with the aim to coordinate and facilitate work on this topic within the Arctic Council including the planning of the "International Symposium on Plastics in the Arctic and Sub-Arctic Region" 21-23 April 2020 in Reykjavik, Iceland.

PAME welcomes the draft outline as a general guide to begin the development of a Regional Action Plan (RAP) on Marine Litter in the Arctic, co-led by Canada, the Kingdom of Denmark, Finland, Iceland, Norway, Sweden, USA, AIA, and OSPAR, and invites PAME members to submit source documents for draft RAP development by 27 September.

Project leads will circulate a first draft of the RAP for review on 15 December to all PAME members and the Marine Litter-RAP Expert Group, and requests Expert Group comments prior to PAME I-2020.

PAME notes that the Marine Litter-RAP Expert Group plans to meet for one full day directly prior to PAME I-2020.

PAME notes with appreciation the marine litter communication and outreach activities implemented by its Secretariat, in particular the launching of the 1_{st} GPS tracking "message in a bottle" which will take place on 12 September by the Iceland's Minister for the Environment and Natural Resources in collaboration with the Icelandic Coast Guard and Verkís engineering firm.

PAME thanks Wouter Jan Strietman, the Netherlands, for his presentation on the Arctic Marine Litter Project "Knowing the sources to find solutions".

PAME thanks the Secretariat for leading the development of an AMSP Implementation Status Report for 2019- 2021. The PAME Secretariat will circulate the 1st draft for review at PAME I-2020.

PAME Administration and Next Meeting

PAME thanks Elizabeth McLanahan, PAME Vice-Chair, for Chairing this meeting and welcomes Paula Kankaanpää from Finland as the new PAME Chair.

PAME requests its Chair/Vice-Chair to contribute to the upcoming SAO meeting (19-21 November 2019 in Hveragerði, Iceland) in addition to submitting a two-page PAME progress report as requested by the Arctic Council Chairmanship.

PAME invites its delegations to include experts on shipping, oil and gas/resource exploration and development, ecosystem approach, MPA, marine litter and invasive species in their delegations to the PAME I-2020 meeting.

The PAME Chair will inform HoDs and PPs on requests to present on PAME's work in other for a and make best efforts to share the presentations in advance to allow an opportunity for comments/input.

PAME notes the proposal by Canada on the following two issues: rotation of hosting of PAME Working Group meetings and Chairing/Vice-Chairing PAME. The PAME Secretariat will circulate PAME's historical information on hosting/chairing and the practices of other Arctic Council working groups in this regard, with the aim to take a decision at PAME I-2020.

PAME will further consult on hosting PAME I-2020. Suggested dates for delegations to consider for PAME I-2020 are the 1st or 2nd week of February to meet the 30 day deadline prior to the SAO meeting (24-26 March 2020).

ANNEX I-draft 7th EA Workshop Prospectus

Joint Ecosystem Approach Expert Group - PAME, AMAP, CAFF, SDWG

7 EA Workshop on Values and valuation of the cultural, social and economic goods and services produced by the ecosystem

Venue and time (TBD):

Workshop objectives:

- 1. Explore the relation between the fundament of cultural and social values and the issue of valuation of ecosystem goods and services in the Arctic.
- 2. Consider the compatibility and approaches to deal with monetary and other non-monetary values (e.g. cultural and spiritual).
- 3. Identify next steps for work on the element of valuation as one of the six elements in the Ecosystem Approach framework.

Background:

The Joint Ecosystem Approach (EA) Expert Group (EA-EG) has held 6 workshops in 2011-2018 on various aspects of development of EA to the management of Arctic marine ecosystems and two international conferences on EA implementation in the Arctic (Fairbanks, Alaska, August 2016, and Bergen, Norway, June 2019). To guide the development and implementation of the EA to Arctic marine ecosystems, the joint EA-EG prepared an EA framework that was used as a basis for the report 'Status of Implementation of the Ecosystem Approach to Management in the Arctic' in 2017, and 'Guidelines for Implementing an Ecosystem Approach to Management of Arctic Marine Ecosystems' that were welcomed by Arctic Council ministers in Rovaniemi in May 2019.

'Value the cultural, social and economic goods and services produced by the ecosystem' is one of the six elements of the EA framework. There has been limited work done so far by the EA-EG on this element. Taking the full economic picture of human developments into account, including the downside in the form of costs associated with environmental degradation and loss of biodiversity, is an important part of what has been called 'greening of the economy'. On the other hand, there are spiritual (religious) and cultural values that perhaps should not be equated with money, but which nevertheless need to be brought into the 'equation' when options for future development are considered.

The basic value systems may differ substantially between Indigenous Peoples and 'western' societies, which needs to be recognized up front. There is a relation between the basic values one holds as a society, and the way one goes about valuing the ecosystem. If the ecosystem is one's 'home' or 'garden', and if one depends on it through subsistence harvest for nutritional, cultural, and spiritual well-being, one is likely to value 'ecosystem goods and services' in a different manner from those who regard nature as a commodity to be used for economic development.

At the workshop we aim to explore the relationship between value systems and the issue of valuation to provide a better understanding of the fundament for the further work on this element. We will explore options for valuation of ecosystem goods and services by examining approaches and methods that have been proposed or used elsewhere, both nationally and internationally. Based on this, the workshop will consider next steps regarding this element to strengthen the effective implementation of EA in the Arctic.