

# DRAFT PAME PROGRESS REPORT TO MINISTERS, KIRUNA 2013. 8th Arctic Council Ministerial Meeting, Kiruna, Sweden, 15th of May 2013.

2013

## Protection of the Arctic Marine Environment (PAME)

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# **DRAFT PAME PROGRESS REPORT TO MINISTERS, KIRUNA 2013**

**8<sup>th</sup> Arctic Council Ministerial Meeting, Kiruna, Sweden, 15<sup>th</sup> of May 2013**

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## I. PAMEs Mandate

The PAME Working Group was established by the Arctic Council Ministers in Nuuk, Greenland in September 1993. PAMEs mandate is to address policy and other measures related to the protection of the Arctic marine and coastal environment from both land and sea-based activities. These measures include coordinated strategic actions, programmes, reports, assessments and guidelines, complementing existing international and regional arrangements.

PAME members include National Representatives of the 8 Arctic Council States: Canada, Denmark (including Faroe Islands and Greenland), Finland, Iceland, Norway, Russian Federation, Sweden and United States. Indigenous groups' organizations, termed "Permanent Participants" also participate in PAME, as well as representatives from several observer countries and organizations. Thus, PAME provides a unique forum for collaboration on a wide range of activities directed towards protection of the Arctic marine environment.

## II. Direction from Nuuk Ministerial Declaration

The 2011 Arctic Council Ministerial Meeting in Nuuk Greenland endorsed PAME's 2011-2013 activities with specific reference to the following paragraphs:

- ✓ Decide that the Arctic Council should continue to work towards solutions to address emerging challenges in the Arctic utilizing a wide range of approaches,
- ✓ Decide to establish an expert group on Arctic ecosystem-based management (EBM) for the Arctic environment to recommend further activities in this filed for possible consideration by the SAOs before the end of the Swedish chairmanship,
- ✓ Decide to establish a Task Force, reporting to the SAOs, to develop an international instrument on Arctic marine oil pollution preparedness and response, and call for the Emergency Prevention, Preparedness and Response (EPPR) and other relevant working groups to develop recommendations and/or best practices in the previonition of marine oil pollution,
- ✓ Urge the completion as soon as possible of work at the International Maritime Organization to develop a mandatory polar code for ships,
- ✓ Welcome the progress achieved with the Arctic Ocean Review (AOR) project which considers existng global and regional measures that are relevant for the Arctic marine environment, and look forward to the delivery of the fnal report of the AOR project in 2013, in particular the options and opportunities for strengthening global and regional efforts for the conservation and sustainable use of hte Arctic marine environment,
- ✓ Adopt the recommendations in the SAO Report to Ministers and instruct SAOs to review and adjust, if needed, the mandates of the Arctic Council working groups and task forces and their work plans for 2011-2013

## III. Main Achievements of PAME during the 2011-2013 Period

### Arctic Marine Strategic Plan (AMSP 2004) – Implementation Status

Several of the specific PAME Working Group initiatives and activities have been aimed at implementing the AMSP 2004. Based on the work and input of PAME and the other Arctic Council working groups AMAP, CAFF, EPPR and SDWG it is noteworthy that all the strategic actions have been successfully completed or are progressing according to plan and are expected to conclude within this or the next workplan period. Based on this, PAME in cooperation with the other Arctic Council working groups is developing a process to update and expand, as relevant, the AMSP 2004 to improve a coordinated and integrated ecosystem approach to the marine management.

Updating of the AMSP will take place during the 2013-2015 period, as a result of a number of relevant deliverables for the 2013 Arctic Council Ministerial meeting that should be taken into account in this work.

The timeline for the updating of AMSP has been adjusted to ensure that full account is taken of such inputs with the 1<sup>st</sup> step to launch a workshop with the aim to communicate and collaborate with other Arctic Council working groups in Spring of 2013.

#### **Follow-up of the Arctic Marine Shipping Assessment Report (AMSA 2009)**

PAME is following up the recommendations from the AMSA 2009 Report and prepared an AMSA 2011-2013 Progress Implementation Report reflecting the progress on all 17 AMSA recommendations promoting the safety and environmental awareness of current and future Arctic shipping activity. The recommendations are aligned under three themes: Enhancing Arctic Marine Safety; Protecting Arctic People and the Environment; and Building the Arctic Marine Infrastructure. The AMSA 2011-2013 Progress Implementation Report notes that significant and ongoing progress is being made in implementing the recommendations.

Arctic Council Member's State representatives with expertise in shipping (in particular with respect to the work of the International Maritime Organization (IMO)) have been invited to meetings of PAME in an effort to support and promote the continuum of relevant work within the Arctic Council and IMO. There has been a significant increase in participation and collaboration on relevant measures to reduce the environmental impacts of shipping in Arctic waters.

**Recommendation I(A) - Linking to Other International Organizations:** PAME continues to monitor, and as necessary or appropriate, to report on developments with respect to Arctic initiatives, actions, or activities of other international and regional organizations including the IMO, the International Mobile Satellite Organization (IMSO), the World Meteorological Organization (WMO), the Arctic Regional Hydrographic Council (ARHC), the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), and the International Whaling Commission.

**Recommendation I(B) – IMO Measures for Arctic Shipping:** As it relates to the IMO Polar Code: PAME continues to support the expeditious development of the mandatory IMO Polar Code noting the extension of the proposed completion date to 2014, and has invited all PAME member governments to ensure that their IMO delegations have all relevant scientific environmental data, in particularly the data from the AMSA Recommendation II(C) Report for their consideration. The environmental chapter is an essential part of the Polar Code and its timely completion and the significance of PAME's work is recognized. PAME has urged Permanent Participants, observers, and other interested parties to timely share with their respective member government IMO representatives, data that will aid in the further development of the Polar Code.

Mitigating Environmental Risks Associated with the Use and Carriage by Vessels of Heavy Fuel Oil (HFO) in the Arctic - Phase II Project continues to move forward, with a contract issued to Det Norske Veritas(DNV) for completion of a final report to be submitted to the PAME I-2014 (Spring 2014) meeting. It is expected that the report will identify and recommend for member government consideration measures that could be pursued at the IMO and perhaps elsewhere to mitigate the risks associated with the use and carriage by vessels of HFO in the Arctic.

**Recommendation I(D) - Strengthening Passenger Ship Safety in Arctic Waters:** Work is ongoing at IMO on several initiatives to improve passenger ship safety and PAME continues to monitor and as appropriate support these developments. Two PAME member governments compiled a list of existing international, national, industry and NGO best practices standards related to safe and environmentally sound passenger ship operations in Arctic waters (with a report submitted to the IMO in 2011) and PAME has strongly encouraged the cruise ship industry to adopt, implement, share and improve best practices for such operations. PAME has invited representatives from the Association of Arctic Expedition Cruise Operators (AECO) and the Cruise Lines International Associations (CLIA) to present their respective views and information on these topics at PAME meetings.

PAME continues to strongly encourage the passenger ship industry to augment existing and/or develop new best practices for operations in the Arctic to enhance safety and environmental protection. With a view to learning about the relevance of shipping insurance influencing safe operation of passenger ships in the Arctic, PAME heard from a representative of the shipping insurance industry (International P & I Group) on factors that go into setting insurance premiums for Arctic cruises. PAME is also actively exploring options for increasing maritime domain awareness for safety and environmental protection purposes through the identification of national systems for monitoring and tracking vessel traffic in the Arctic as well mechanisms

for increased sharing information generated by such systems among PAME governments. A representative of exactEarth, a Canadian-based provider of satellite-based ship traffic information, also made a presentation to PAME.

***Recommendation II(A) – Survey of Arctic Indigenous Marine Use:***

AIA has informed PAME on progress on their project on building marine based subsistence mapping capacity in Arctic coastal communities and has invited Member States, Permanent Participants and others as relevant to provide progress reports on projects of similar nature and of relevance to this recommendation.

***Recommendation II(C) - Areas of Heightened Ecological and Cultural Significance:*** AMAP, CAFF and SDWG submitted the final AMSA II(C) Report identifying areas of heightened ecological and cultural significance within the Arctic to the PAME I-2013 meeting for its consideration and use.

***Recommendation II(D) - Specially Designated Marine Areas:*** PAME member governments finalized a tender to retain a consultant to prepare a report under AMSA Recommendation II(D) that will, based on the II(C) Report, make recommendations for measures to protect one or more regions within the high seas portions of the Arctic Ocean from negative impacts of international shipping activities. Based on this information, PAME member governments will then consider whether to pursue protection measures individually or jointly at the IMO.

PAME also continues to encourage member governments to update and keep current information in IMO's Global Integrated Shipping Information System (GISIS) database on their port waste reception facilities and through their respective national standards organization to assist the International Organization for Standardization (ISO) with the development of international standards specifically addressing the unique technical challenges related to Arctic shipping.

***Recommendation II(G) – Addressing Shipping Impacts on Marine Mammals*** -PAME received from a member government detailed information on the work of IMO, the International Organization for Standardization (ISO), and the International Whaling Commission related to impacts of shipping on marine mammals along with options for a number of initiatives that may be pursued to mitigate or reduce the adverse impacts on marine mammals of ship strikes and underwater noise incidentally generated by commercial shipping.

***Recommendation II(H) – Reducing Air Emissions*** - PAME has considered reports submitted regarding IMO's work on black carbon. Information gathered as part of the HFO Phase II Report described previously might contribute to a better understanding of the role Arctic shipping plays in black carbon emissions.

***AMSA III(A) – Addressing the Infrastructure Deficit:*** A paper on the World Meteorological Organization's Voluntary Observing Ship (VOS) Scheme was submitted for PAME's consideration. The VOS Scheme is an international arrangement by which ships plying the various oceans and seas of the world are recruited by National Meteorological Services to take and transmit meteorological and oceanographic observations that aid in safe and environmentally sound navigation. PAME has encouraged member governments and industry associations to increase their level of participation in the World Meteorological Organization's VOS Scheme and promote participation by vessels flying their flag. Letters have been sent to the shipping industry (e.g., International Chamber of Shipping, Cruise Lines International Association, Baltic and International Maritime Council (BIMCO), and AECO) to encourage participation by their members in the VOS Scheme. The PAME Secretariat has also posted information on the VOS Scheme to the PAME Web site. PAME has received information on the Arctic Maritime and Aviation Transportation and Infrastructure Initiative (AMATII) project and has proposed to provide information on Arctic port waste reception facilities for inclusion in the project.

***AMSA III(B) - Arctic Marine Traffic Systems:*** PAME is actively exploring options for increasing real time or near real-time Arctic maritime domain awareness through the identification of national systems for monitoring and tracking vessel traffic in the Arctic. Such information can be used to increase safe and environmentally sound Arctic shipping. Member governments have submitted information to PAME on such systems as well as how such information may be made available to other member governments. Seven member governments already participate in the Maritime Safety and Security Information System, an internet-based system through which ship and shore-based Automated Identification System (AIS) information is

shared. A representative of exactEarth, a commercial provider of satellite-based ship traffic information, also made a presentation to PAME on how such information can support maritime domain awareness and Arctic marine traffic systems.

### **Arctic Ocean Review Project (AOR)**

The overall objective of the Arctic Ocean Review (AOR) is to provide guidance to Arctic Council Ministers on strengthening governance in the Arctic through a cooperative, coordinated, and integrated approach to the management of the Arctic marine environment. The AOR will also play an important role in demonstrating Arctic States' stewardship efforts in this area. The AOR is not a new assessment, but presents a review of the status and trends of pressures on the arctic marine environment, an analysis of the relevant instruments, and opportunities towards strengthening the conservation and sustainable use of the Arctic marine environment.

The AOR Report, including its recommendations, was developed through extensive consultations with other Arctic Council working groups, permanent participants, observers, and other experts through sharing of work in progress and the convening of three Expert Workshops in support of the development of the AOR Report. Workshop summary reports have been prepared to record the range of views discussed, including those that may be outside the Terms of Reference for the AOR project, but could be further considered for future work by the Arctic Council, as relevant. The AOR Report, including its recommendations went through intergovernmental review process among the Arctic Council Member States and Permanent Participants by weekly teleconferences during the months of Nov 2011-Mar 2012.

### **Ecosystem Approach to Management (EA) project**

PAME continued to advance the work towards implementation of the ecosystem approach to assessment and management by taking into account the previous work on the Large Marine Ecosystems (LMEs) and the summary of Observed Best Practices for Ecosystem-based Ocean Management (as a part of the 2009 Best Practices in Ecosystem Based Oceans Management in the Arctic project) and the work of the EBM Task Force.

- One workshop was held in 2012 which focused on the issue of integrated assessment of the conditions (status, trends and impacts) of LMEs in the Arctic. The workshop participants agreed that the Arctic LMEs were the primary units and scale for applying the EA to management of arctic marine ecosystems. The workshop participants also noted that integrated assessment is a core element of the EA to management and that the need for such assessments is primarily at the scale of regional ecosystems (LMEs) where they form an essential component of the scientific work needed to support the EA to management.
- PAME representatives have also participated in the work of the EBM Expert Group to ensure synergies with the EA work of PAME. PAME has prepared a concept paper on the Ecosystem Approach to Management to the Arctic Council and a short brochure on the EA based on the concept paper. Furthermore PAME approved the revisions to the map of 17 Arctic LMEs and supporting text on the boundary issues.
- The next EA workshop is planned to be held in June 2013 to discuss data management, availability, integration, and communications as essential to implement the ecosystem approach to management. Arctic Council working groups working on marine-related issues will take an active involvement in its planning.

### **Follow up on the 2009 Offshore Oil and Gas Guidelines (OOGG 2009)**

***Health, Safety and Environmental Management Systems for Arctic Offshore Oil and Gas Operations (HSE Project)***. The failure of HSE management system elements was found to be a root cause common to Deepwater Horizon and other major accidents. The project started in March 2012 with a compilation of HSE Management Systems used by Arctic (some) countries and included in the AOOOGG 2009. Selected common elements were examined in an Arctic context.

Two expert workshops were held to gather information to use in the project development. The HSE Management Systems Workshop in June 2012 was coordinated with the EPPR RP3 workshop where joint sessions on offshore oil and gas were held. Subsequently, a Safety Culture workshop was held in September 2012 and explored common root causes for major industrial systems failure accidents related to a lack of a

positive Safety Culture. Two workshop reports were prepared. The project team is summarizing findings from the workshops, Deepwater Horizon investigations, regulatory systems reviews, and assessment of management systems in place in the Arctic. Recommendations are being developed based on these findings and a (draft) report is anticipated in (late 2013 / early 2014).

**Arctic Oil and Gas Management, Regulation and Enforcement Web-Based Information Resource (MRE Project):** The website will provide indexed access to specific information on national websites related to management, regulation, and enforcement of Arctic offshore oil and gas activities. Member states have supplied links and explanatory information. The website will include background documents from of the HSE project and workshop reports. The website will be launched public in early May. The web resource will be periodically updated.

#### **Collaboration with other working groups and communications**

PAME continues to actively communicate with the other working groups of the Arctic Council on the need to collaborate on related projects to ensure synergies. AMAP, CAFF, EPPR and SDWG have participated at PAME's meetings.

EPPR has provided an update on relevant AMSA follow-up including AMSA II(F) – Oil Spill Prevention as it relates to Update on the Recommended Practices for Arctic Oil Spill Prevention Project (RP3) and on AMSA III (C) – Circumpolar Environmental Response Capacity Safety Systems in Implementation of Economic and Infrastructural Projects. Furthermore, the PAME Oil and Gas contact group has collaborated with the EPPR on the RP3 project and the HSE project to ensure synergies with both efforts.

AMAP, CAFF and SDWG have worked on the AMSA follow-up for Recommendations II(C) on Areas of Heightened Ecological and Cultural Significance.

Representatives from all Arctic Council working groups were invited to participate in the two AOR workshops during the Phase II process (Sep 2011 and Sep 2012) in an effort to provide an opportunities for all working groups to provide inputs and comments as work proceeded with the AOR Phase II Report.

Arctic Council working groups working on marine-related issues (AMAP, CAFF and SDWG) have been invited to participate in the PAME-led Ecosystem Approach (EA) Expert Group on the ecosystem approach to management and will jointly work on the planning of the EA Spring 2013 Workshop.

PAME will commence work on the Arctic Marine Strategic Plan (AMSP) as per PAMEs Work Plan 2013-2015 and seek contributions from other working groups working on marine-related issues. Such a consultative process will start with a workshop with all relevant working group experts. Such a workshop is proposed to take place back-to-back with the Spring 2013 EA Workshop.

## **IV. PAME Deliverables for the 2013 Ministerial Meeting**

#### **List of deliverables to the 2013 Ministerial:**

- ✓ AOR Report including Recommendations
- ✓ AMSA 2011-2013 Progress Report
- ✓ HSE and Safety Culture Workshop reports and launch of the MRE website.
- ✓ Revised Arctic LME map with explanatory text for approval and the EA brochure
- ✓ PAME 2013-2015 Work Plan

## **V. PAME input to “SAOs Recommend to Ministers “**

Arctic marine activities are likely to expand considerably as a result of increased resource demand and improved marine access which will increase risks to the environment and communities. Strengthened efforts are thus important to develop adequate and timely national and international measures, such as regulations, to reduce the risks and the potential negative impacts of shipping, oil and gas development and other activities in Arctic waters. Scientific research carried out in the Arctic region is increasing the knowledge base in relation to the extent of the changes, the drivers of change and anticipated consequences for ecosystems and human activities in the Arctic.

Existing and emerging challenges to the health of the Arctic marine environment warrant a more integrated ecosystem based approach to ocean management which will contribute to better informed decisions on conservation and sustainable use of the marine environment related to shipping, oil and gas development, fisheries, coastal zone development, and other ocean-related activities. Such approaches benefit Arctic ecosystems and its residents, in particular indigenous people who rely directly on the marine environment for food and their economic, social and cultural well-being. Through past and planned activities and projects, the Arctic Council has an opportunity to provide international leadership on the global sustainable development agenda through adoption of the ecosystem based management approach to the Arctic marine environment, consistent with existing legal frameworks.

**SAOs recommend that Arctic Council Ministers:**

**Welcome** the AMSA Progress Implementation Report 2011-2013 on follow-up to the 2009 Arctic Marine Shipping Assessment (AMSA) Report, **note** that significant progress continues to be made on implementing its 17 Recommendations, and **encourage** continued strengthening of this work in cooperation with other Arctic Council working groups and relevant international bodies (e.g., IMO, WMO, IHO, IALA, IWC);

**Recognize** the important ongoing work at the IMO on a mandatory Polar Code and **encourage** Member Governments to continue and intensify their collaboration with respect to the development of the code. **Urge** its expeditious completion in conjunction with continued implementation of the AMSA Report recommendations to support safe and environmentally sustainable Arctic Shipping;

**Encourage** the timely completion of the Arctic HFO project to identify possible measures to mitigate the environmental risks associated with the use and carriage by vessels of heavy fuel oil in the Arctic and the AMSA II(D) project on Specially Designated Marine Areas to recommend measures that may be pursued at IMO by member governments, either individually or jointly, to protect one or more areas of the high seas of the Arctic Ocean from negative impacts of international shipping activities;

**Approve** Arctic Ocean Review final report including its recommendations and **request** PAME to develop appropriate follow up actions for approval by the Senior Arctic Officials;

**Note** that existing and emerging challenges to the health of the Arctic marine environment warrant a more integrated ecosystem based approach to ocean management to ensure the conservation and sustainable use of the marine environment related to shipping, oil and gas development, fisheries, coastal zone development, and other ocean-related activities;

**Welcome** the progress made by the PAME led Expert Group on the ecosystem approach to management and **approve** the revised map of the Arctic LMEs, including the explanatory text on the revised boundaries;

**Request** the PAME led Expert Group on the ecosystem approach to management, to cooperatively integrate the application of this approach within the Arctic Council work, and **encourage** all relevant Working Groups to engage to the development of the new Arctic Marine Strategic Plan (AMSP 2004) which is based on this approach, **recognizing** the increased emphasis on the ecosystem based management (EBM) as the foundation of the Arctic Councils' work;

**Acknowledge** the HSE Management Systems and Safety Culture workshop reports and **note** the informative discussions and their contributions to the project on Health, Safety and Environmental Management Systems for Arctic Offshore Oil and Gas Operations (HSE Project);

**Welcome** the Management Regulation and Enforcement Web Based Information Resource (MRE webpage) as a useful tool for accessing information on member states offshore oil and gas systems and activities.

**Approve** the 2013-2015 PAME Work Plan