



**KOPRI**  
극지연구소

# **PAME WORKING GROUP MEETING REPORT NO: PAME I-2009**

30 SEPTEMBER - 2 OCTOBER 2009  
OSLO, NORWAY

**PAME**  
Protection of the Arctic Marine Environment



ARCTIC COUNCIL



**PROGRAM FOR THE  
PROTECTION OF THE ARCTIC MARINE ENVIRONMENT**



**DRAFT Working Group Meeting Report  
No: I-2009**

**30 September – 2 October, 2009  
Oslo, Norway**

## TABLE OF CONTENT

<b>AGENDA ITEM 1: OPENING OF THE MEETING .....</b>	<b>1</b>
<b>AGENDA ITEM 2: INTRODUCTION AND ADOPTION OF THE AGENDA .....</b>	<b>1</b>
<b>AGENDA ITEM 3: INFORMATION FROM THE CHAIR AND SECRETARIAT .....</b>	<b>1</b>
PRESENTATION ON THE ASSESSMENT OF ASSESSMENTS (AOA) .....	2
<b>AGENDA ITEM 5: ARCTIC OCEAN REVIEW PROJECT (AOR) .....</b>	<b>3</b>
RECORD OF DECISIONS AND FOLLOW-UP ACTIONS .....	4
<b>AGENDA ITEM 6: ARCTIC MARINE SHIPPING ASSESSMENT FOLLOW-UP.....</b>	<b>4</b>
RECORD OF DECISIONS AND FOLLOW-UP ACTIONS .....	5
<b>AGENDA ITEM 7: FOLLOW UP ON THE 2009 OFFSHORE OIL AND GAS GUIDELINES.</b>	<b>6</b>
RECORD OF DECISIONS AND FOLLOW-UP ACTIONS .....	6
<b>AGENDA ITEM 8: ECOSYSTEM APPROACH.....</b>	<b>7</b>
RECORD OF DECISIONS AND FOLLOW-UP ACTIONS .....	7
<b>AGENDA ITEM 9: REGIONAL PROGRAMME OF ACTION (RPA 2009) FOLLOW-UP .....</b>	<b>8</b>
RECORD OF DECISIONS AND FOLLOW-UP ACTIONS .....	8
INFORMATION ON THE IMPLEMENTATION PROGRESS OF THE GEF/RUSSIAN NPA-ARCTIC (RUSSIA) .....	8
<b>AGENDA ITEM 11: SUMMARY OF MEETING DECISIONS AND FOLLOW-UP ACTIONS</b>	<b>9</b>
<b>AGENDA ITEM 12: ANY OTHER BUSINESS AND END OF THE MEETING.....</b>	<b>9</b>
RECORD OF DECISIONS AND FOLLOW-UP ACTIONS .....	9

## LIST OF ANNEXES

### ANNEX I

List of Participants

### ANNEX II

List of Documents

### ANNEX III

Agenda

### ANNEX IV

Arctic Ocean Review (AOR) Project Plan

### ANNEX V

Matrix for AMSA follow-up

### ANNEX VI

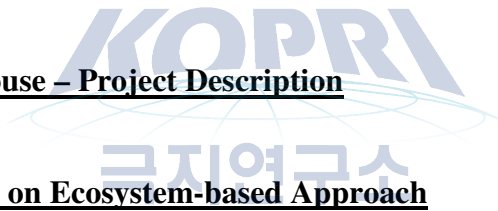
Questionnaire regarding the EIA Process

### ANNEX VII

RPA Clearing House – Project Description

### ANNEX VIII

Group of Experts on Ecosystem-based Approach



## **Agenda Item 1: Opening of the Meeting**

The Protection of the Arctic Marine Environment (PAME) Working Group met 30 September – 2 October 2009 at the facilities of the Norwegian Pollution Control Authority (SFT) in Oslo, Norway. The list of participants attending the Meeting is in Annex I.

The Meeting was opened with a warm welcome by Signe N  mdal, Director of the Department of Climate and Industry of SFT followed by thanks and appreciation by the outgoing PAME Chair, Mr. Chris Cuddy to the PAME participants for their contributions towards finalizing the PAME products as submitted and approved by the 2009 Arctic Council Ministerial meeting. The Meeting was chaired by the incoming PAME Chair Mr. Atle Fretheim.

## **Agenda Item 2: Introduction and Adoption of the Agenda**

A list of documents submitted for consideration at the Meeting is in Annex II. All power-point presentations will be sent out separately and are available within the password protected area of the PAME homepage.

This Meeting focused on initiating the PAME Work Plan 2009-2011 as approved by the 2009 Arctic Council Ministerial meeting with the aim to reach agreement on work planning on the following PAME projects:

- The Arctic Ocean Review Project - (leads: Canada, Norway, Iceland and USA (joined the project intersessionally))
- Follow up on the Arctic Marine Shipping Assessment (2009) – (prepared by Norway)
- Follow up on the 2009 Arctic Offshore Oil and Gas Guidelines - (lead: USA)
- Continuation on the work on Ecosystem Approach/LMEs - (leads: Norway and USA)
- Regional Programme of Action (RPA) – Follow up activities (prepared by Canada)

The Meeting was structured into breakout sessions with the aim to further develop and finalize project plans to reflect discussions in the plenary and allow for continuation of work among respective leads and other participants for final Meeting approval and decision on the way forward.

*The Meeting adopted the agenda as presented in Annex III with the addition of presentation on the Assessment of Assessments (AoA) process into Agenda Item 3.*

## **Agenda Item 3: Information from the Chair and Secretariat**

The outgoing PAME Chair, Mr. Chris Cuddy gave a short summary of the main outcomes from the 2009 Ministerial meeting noting in particular that the ocean agenda is at the forefront with the approval of the Arctic Marine Shipping Assessment (AMSA) 2009 Report including its recommendations on enhancing Arctic marine safety, protecting Arctic people and environment and building Arctic marine infrastructure. The Ministers also approved the revised 2009 Arctic Council Offshore Oil and Gas Guidelines and the revised 2009 Arctic Council Regional Programme of Action for the Protection of the Arctic Marine Environment from Land-based Activities (RPA). Furthermore, the Arctic Council Ministers welcomed the PAME progress Report on the Ecosystem Approach to Arctic Marine Assessment and

Management 2006-2008 and encouraged PAME, in close collaboration with AMAP and CAFF, to further develop the LME approach through pilot projects.

He further informed the Meeting of the two new task forces of the Arctic Council on Short Lived Climate Forcers (SLCF) and on Search-and-Rescue of which both are currently being chaired by the USA.

The incoming PAME Chair summarized the outcome of the Arctic Council Working Group Chairs Meeting held in Copenhagen 8 September 2009 to include plans by the Chair of the Arctic Council to convene an Arctic venue at the COP 15 United Nations Climate Change Conference in Copenhagen from 7-18 December 2009. Further details on this Arctic venue are forthcoming and will be communicated to PAME when they become available. PAME Chair further informed of plans to convene a Deputy Ministers meeting in the beginning of May 2010 which would be constructed in a similar manner to an ordinary Arctic Council meeting but possibly focusing on only one topic. Details will be discussed at the upcoming SAO meeting 12-13 November 2009. Cooperation with the other Arctic Council working groups was stressed.

### **Presentation on the Assessment of Assessments (AOA)**

Mr. Gunnar Sander from the Norwegian Polar Institute was invited to this Meeting to give a presentation on the Assessment of Assessments (AoA). This is the start-up phase of a regular process for global reporting and assessment of the state of the marine environment. The Arctic Council has decided that it will provide a regional contribution to this (Arctic Marine Strategic Plan para 7.1.4). (Presentation as a separate file and on the PAME homepage).

The World Summit on Sustainable Development in 2002 agreed “to establish by 2004 a regular process under the UN for global reporting and assessment of the state of the marine environment, including socio-economic aspects, building on existing regional assessments”. This was endorsed by the UN General Assembly (UNGA) in 2002. In 2005, UNGA launched a preparatory phase. The mandate broadly was to 1. Gather information and review existing “building blocks” for a regular process 2. Propose how UN can conduct a regular process.

An Expert Group set up in 2006 has examined existing marine assessments, evaluated how assessments can be designed to gain influence and has given governments a set of options for the regular process. The final report was officially launched in August 2009. It includes a Summary for Decision-Makers and is available on the “Regular Process” website: <http://www.unga-regular-process.org>. The results were discussed in UN in August – September 2009. A final resolution will be passed by UNGA in December 2009 as a part of the annual ocean resolution.

Mr. Sander particularly highlighted the following issues for PAME:

- The recommendation is to develop “fully integrated assessments” as a response to the ecosystem-approach. This means integrating 1) all industry sectors / human activities causing pressures on the marine environment, 2) all ecosystem components and 3) environmental, economic and social aspects.
- The global reporting must build on regions, whatever their delimitation may end up being. PAME therefore should ensure that marine assessments are developed also at the



level of the “Arctic Ocean”, not only LMEs and lower levels. Scaling of data and assessment results will be important.

- The process has reviewed assessment activities in the Arctic Ocean, particularly the work done within the Arctic Council (see annex IV of the report). The conclusion is that the Arctic has a good capacity for assessments and has demonstrated many good assessment practices. However, no integrated marine assessments exist so far for the Arctic Ocean, but many good building blocks are available from Arctic Council assessments with marine components.
- A first cycle of the regular process will be conducted between 2010 and 2014. This should be reflected in PAME’s long term planning if it wants to deliver a regional contribution.

### **Agenda Item 5: Arctic Ocean Review Project (AOR)**

The Meeting discussed the AOR project plan as prepared and distributed prior to the meeting by the leads: Canada, Iceland, Norway and the United States. AMAP expressed the need to discuss how input from other Arctic Council working groups would be achieved. Some participants such as IUCN, France and the European Environment Agency expressed a clear desire to engage in this project. IUCN informed the Meeting of its possible contribution through the convening of a conference/workshop which could be, among other things, focused on Observers’ input to this project and noted their launching of a similar project which could be useful to AOR and EA projects. IUCN raised the question if the Ecosystem Approach work within PAME would be incorporated into the AOR project. ICC noted the need to consider SDWG in this work, in particular as it related to relevant issues on the community level and the EPPR representative expressed relevance of this project to their work.

Participants agreed that the nature of the AOR project was to conduct a review of existing measures and identify any potential gaps, and should not be construed as a call for a new legal regime. Participants noted that a good degree of relevant material related to Arctic Ocean governance can be found within Arctic Council member states and working groups and the AOR may be useful in validating existing assessment work. The importance of other relevant material outside the circumpolar Arctic was also noted. It was expressed that the Phase I should strive to be more than a simple compilation. Participants expressed the need for urgency to proceed as the AOR project process and consultations do take time. How to most effectively include new developments and measures in light of rapid change and economic development was also discussed. Participants noted the need to limit its coverage and set priorities and the usefulness of 1996 PAME report was emphasized in this regard. Engagement of other Arctic Council working groups is important in this work and it is necessary that the project leads define and communicate information needs early in this work. Such engagement could be done through the convening of a workshop of experts with other Arctic Council working groups. The possible timing and location of such engagement was discussed in relation to the next meeting of Arctic Council Chairs and Secretariat which will be convened in Copenhagen on March 1, 2010 and it was proposed that the AOR leads would explore the possibility of meeting with the other Arctic Council working groups on March 2, 2010.

Engagement of expertise outside of the Arctic Council and the need for regional fora was also discussed. The leads emphasized that The Phase II of the project would require an intergovernmental review process, especially when developing the final report and possible recommendations to Ministers in 2013.

The AOR project plan was revised as per comments and suggestions by participants followed by its approval by the Meeting. The Russian Federation offered to become one of the leads on this project and the participants readily agreed. The Meeting decided to establish an AOR Working Group<sup>1</sup> representing the member states.

The AOR Working Group will contribute to the organization of the technical workshop and international conference, and the production of various documents and solicit input from Permanent Participants and other Arctic Council Working Groups as per the AOR Project Plan Work.

The Meeting noted the urgent need to develop an Outreach/Communication plan for this project.

### **Record of Decisions and Follow-up Actions**

*The Meeting agreed to the following:*

- *Approved the revised AOR Work Plan as presented in Annex IV.*
- *Welcomed the offer by the Russian Federation to become one of the co-leads to now include Canada, Norway, Iceland, Russia and the United States.*
- *Countries to confirm representatives on the AOR Project Group<sup>2</sup> by 2<sup>nd</sup> of Nov. 2009.*

### **Agenda Item 6: Arctic Marine Shipping Assessment follow-up**

The AMSA was finalized shortly before the 2009 Ministerial meeting in Tromsø, hence no follow-up activities could be developed into projects and **included** to the PAME Work Plan 2009-2011 at that time. The PAME Work Plan, Obj I, Action 1 states that: “*Activities to be added based on the outcomes/findings of the approved AMSA and as agreed by SAOs/Ministers in 2009*”.

Intersessionally, Norway initiated a proposed matrix approach on ways to follow up the recommendations of the AMSA 2009 Report to facilitate the discussions at this Meeting. PAME members were asked to indicate possible leading role and/or propose follow-up activities to the matrix of the 17 AMSA recommendations based on their respective national priorities, within the following categories:

1. Actions to be followed up and carried out by PAME
2. Action to be followed up by PAME - but carried out by other AC working groups.
3. Actions to be followed up in internal national policies

The matrix with the 17 AMSA Recommendations was prepared as a tool to aid in deciding which activities could be placed into the PAME Work Plan.

---

<sup>1</sup> The SAO Meeting 12-13 Nov. 2009 requested that the name „AOR Working Group“ be changed to read „AOR Contact Group“.

<sup>2</sup> Change the „AOR Project Group“ to read „AOR Contact Group“ as per footnote 1) above.



The Meeting reviewed the 17 AMSA Recommendations based on the above mentioned categories and indicating the most appropriate leads and relevant partners. Actions to be followed up/implemented by PAME as identified in the AMSA Matrix are recommendations I(A), I(B), I(C), I(D), II(D) and II(G). These actions are currently under review and consultations within respective Arctic Council countries, with a view to include in the current or 2011-2013 PAME Work Plan. Further details and progress on leads and possible project planning will be discussed at the next PAME meeting.

Permanent Participants of the Arctic Council will be invited to participate in the AMSA follow-up activities in due time and strong and active participation by other Arctic Council working groups was stressed, in particular AMAP, CAFF, and SDWG. Furthermore, the need to prepare an information/outreach tool kit in communicating the AMSA 2009 Report was expressed, in particular for the Arctic Council communities. EPPR informed the Meeting that this group was in the progress of preparing AMSA follow-up activities. USA is chairing the task force on Search and Rescue and noted relevance to recommendation (IE) and will provide information on this activity in due time.

The PAME Secretariat informed the Meeting that the 2nd print of the AMSA 2009 Report would be ready for distribution by the end of October.

### **Record of Decisions and Follow-up Actions**

*The Meeting agreed to the following:*

- *Approved the Matrix for follow-up of AMSA recommendations as presented in Annex V, dividing the follow-up actions of the 17 AMSA recommendations into the following three categories, indicating the most appropriate leads and working with relevant partners:*
  - *Actions to be followed up/implemented by PAME as identified in the AMSA Matrix are recommendations I(A), I(B), I(C), I(D), II(D) and II(G)*
  - *Actions to be followed up/implemented by other Arctic Council working groups are AMSA recommendations I(E), II(C), II(F) and III(C). The PAME Chair to communicate this to the relevant working groups chairs for their consideration and for the recommendations to be included in either their respective current or future work programme*
  - *Actions to be followed up within national implementation processes/policies with possible future requests for reporting on national activities, if needed, are AMSA recommendations II(A), II(B), II(E), II(H), III(A), III(B) and III(D)*
- *PAME Member States are urged to consult with their respective AMSA experts and to confirm/indicate their commitments to lead/co-lead any of the above mentioned six PAME follow-up recommendations by 2nd of November*
- *Agree that those PAME follow-up recommendations, not incorporated into the PAME Work Plan 2009-2011, be considered for the PAME Work Plan 2011-2013*
- *PAME Secretariat to prepare an information/outreach tool kit to include generic overheads and brochure to be used by PPs and others in communicating AMSA 2009 Report.*

## **Agenda Item 7: Follow up on the 2009 Offshore Oil and Gas Guidelines**

During the updating process of the Offshore Oil and Gas Guidelines the question arose as to whether the Arctic Council should update or develop guidelines specifically for Arctic Offshore Oil and Gas Environmental Impact Assessments (EIAs).

As a result of these informal discussions, PAME has included in its Work Plan 2009-2011 an action item to formally discuss the need for and possible development of specific guidelines for Arctic Offshore Oil and Gas EIAs led by the United States. Since the last consideration of developing such guidelines in 1997, the Arctic Council has published the Arctic Marine Strategic Plan as well as the Oil and Gas Assessment (OGA).

All Arctic countries have an EIA or equivalent process in place. The Offshore Oil and Gas Guidelines 2009 have a section devoted to EIAs, as well as, an appendix that summarized the EIA process for all individual Arctic Coastal States. The Oil and Gas Assessment also has descriptions of the EIA processes in Arctic countries and found that they are critical and are applied across the Arctic.

The Meeting discussed the need to develop a set of guidelines for EIA in the Arctic for Offshore Oil and Gas Activities. This discussion followed the recommendations for action in the AMSP section 7.2.3 by examining and discussing the adequacy of AC Guidelines in light of the OGA and section 7.2.6 by identifying potential areas, as appropriate, where new guidelines and codes of practice for the marine environment are needed.

The PAME meeting agreed that each member state would provide an expert contact to the lead country, the United States which would then follow-up by sending out a questionnaire to identify existing EIA legislation, procedures and practices for Arctic Offshore Oil and Gas activities. A draft of this questionnaire as prepared during the Meeting is provided in Annex VI. The lead on this activity will report to the next PAME meeting on progress and make recommendation on the way forward, if countries reach the conclusion on the need to develop EIA Guidelines.

### **Record of Decisions and Follow-up Actions**

*The Meeting agreed to the following:*

- *Each Country to provide an expert contact to the lead of the sub-group, Mr. Tim Holden/USA by 1<sup>st</sup> of Nov 2009*
- *A brief questionnaire to identify existing EIA legislation, procedures and practices for Arctic Offshore Oil and Gas activities to be sent out by the lead, Mr. Tim Holden/USA to respective expert contacts as per above.*
- *Draft questionnaire to be circulated for comments and to be agreed upon by the sub-group.*
- *Each expert contact to coordinate national response to the agreed questionnaire.*
- *Lead to report to the next PAME meeting and to make recommendation on the way forward*

## **Agenda Item 8: Ecosystem Approach**

The 2004 Arctic Marine Strategic Plan (AMSP) refers to the following commitments towards the ecosystem approach, which has been the basis for the work of PAME's group of experts on ecosystem-based management and LMEs;

*(i) Identify the large marine ecosystems of the Arctic based on the best available ecological information (AMSP Strategic Action 7.4.1.);*

*(ii) Identify elements that can serve as key environmental and socioeconomic indicators of the state of Arctic marine ecosystems and thus guide effective decision-making (AMSP Strategic Action 7.4.2);*

*(iii) Promote pilot projects that demonstrate the application of an ecosystem approach to management (AMSP Strategic Action 7.4.3)*

Differences in circumstances and contexts have to be taken into consideration as ecosystem-based oceans assessments and management is context sensitive. There is not one single method for ecosystem-based assessments and management. A number of different practices and understandings of the concept appear to work. As a result PAME has decided to broaden the work of the LME-group of experts and rename it to a Group of Experts on Ecosystem-based Assessments and Management. Three elements are central to the further work of this Group:

1. Use the LMEs as the appropriate scale for integrated management where the focus is on the status of the ecosystem (which is to be kept in good or acceptable state);
2. Assess the status of the ecosystems as a basis for advice for management actions;
3. Harmonize existing assessment work in the AC for this purpose, and establish clear links with relevant national and international activities and management structures, which will be the users of the assessment; and in doing so taking into consideration new development within this field.

The overall objective of the work of the expert group is to develop our understanding of how the ecosystem approach can be put to actual use in oceans assessments and management. The key issue is to address the needs of those agencies which are responsible for the protection and sustainable use of marine ecosystems. This expert group will liaise, as necessary with other experts associated with the activities of other Arctic Council Working Groups including AMAP, CAFF and SDWG, and draw on the experience of other relevant fora.

Member States have been asked to nominate experts for the Group of Experts on Ecosystem-based Assessment and Management. An update and status of its work will be presented at next PAME meeting.

The work on Ecosystem Approach within PAME is led by Norway and the United States.

### **Record of Decisions and Follow-up Actions**

*The Meeting agreed to the following:*

- *Approved the ToR for the Group of Experts on Ecosystem-based Assessment and Management and the work plan for this group for 2009-2011 as provided in Annex VII.*

- *PAME countries to nominate experts for the group and send it to the lead countries by 2<sup>nd</sup> of Nov. 2009.*
- *The expert group to agree, as soon as possible, on the implementation of the Work Plan.*

## **Agenda Item 9: Regional Programme of Action (RPA 2009) follow-up**

The Regional Programme of Action for the Protection of the Arctic Marine Environment from Land-based Activities (RPA) was adopted by Arctic Ministers in 1998, as a regional approach to implementing the UNEP Global Programme of Action. In 2006, PAME was tasked by Arctic Ministers to review, update and expand the RPA to respond to the rapidly changing circumstances in the Arctic. The updated RPA was approved by Arctic Ministers in 2009.

Objective II of the PAME 2009-2011 Work Plan identifies two activities to assist with continuing the implementation of the RPA and PAME decided to proceed with the modified PAME Work Plan item Obj II, Action 2 (ii) i.e.:

*Further develop the PAME website to include a Clearing House mechanism providing access to RPA related information and best practices held by Arctic Council and other organizations. LEAD: PAME Chair / Secretariat*

The RPA Clearing House is intended to provide web-based access to information and data (for e.g. documents, websites, relevant fora, networks, etc.) and to demonstrate and profile Arctic States' stewardship efforts related to land-based activities. The aim is to create a systematic way to outreach to Arctic Council Working Groups, Permanent Participants, observers and other stakeholders.

The PAME Secretariat was tasked to develop a work plan for this work in collaboration with the IPS Secretariat which offered to assist in the design of a Clearing House. This work will be structured under the following categories - contaminants (e.g. POPs, heavy metals), habitat alteration / destruction (e.g. shoreline erosion and coastal development) and climate change adaptation. Work will proceed in a stepwise approach with Phase I as a pilot project to be developed over a period of 2-3 years to be modest in scale and success will be evaluated at end of term.

### **Record of Decisions and Follow-up Actions**

*The Meeting agreed to the following:*

- *Decision to proceed with the modified PAME Work Plan item Obj II, Action 2 (ii) as identified in Annex VIII.*
- *Request the PAME Secretariat to develop a work plan as per the project description in Annex III and welcome the offer by IPS to collaborate with the PAME Secretariat in this work.*

### **Information on the implementation progress of the GEF/Russian NPA-Arctic (Russia)**

Dr. Ivan N. Senchenya, Project Manager of the UNEP/GEF project - Russian Federation: Support to the National Programme of Action for the Protection of the Arctic Marine Environment (GEF/UNEP project - NPA-Arctic) provided the Meeting with the status and

progress on its implementation (presentation as a separate file and available on the PAME homepage) as it relates to the following:

- Preparation and adoption of a Strategic Action Programme (SAP-Arctic);
- Completion of a set of Pre-Investment Studies (PINS);
- Development and implementation of Environmental Protection System (EPS), consistent with the SAP;
- Demonstration projects

He informed the Meeting that the SAP-Arctic has been endorsed by the Maritime Board under the Government of the Russian Federation, PINS will be finalized to the end of this year, EPS component, which major output are the report to the Government of the Russian Federation on gaps in legislation and a concept of the federal law “On special regime of nature use and environmental protection in the Arctic”. Next steps would include among other remediation of oily contaminated military base in Arkhangelsk region (near White Sea), implementation of other demonstration and pilot projects as well as and round-table discussions, workshops in regions and preparation of new phase of the Project.

Further information on this Project is at: <http://www.npa-arctic.ru/>

*The Meeting welcomed the update on the GEF/UNEP Russian NPA-Arctic Project and noted the importance of this Project for the protection of the Arctic marine environment.*

### **Agenda Item 11: Summary of Meeting Decisions and Follow-up Actions**

Summary of Meeting Decisions and Follow-up Actions are identified in *italics* at the end of each agenda item section.

### **Agenda Item 12: Any Other Business and end of the Meeting**

Participants discussed the timing of the PAME I-2010 meeting and the AOR meeting with other Arctic Council working groups and noted the possibility for these meetings to be convened back-to-back with the meeting of Arctic Council Chairs and Secretariat in Copenhagen, March 1, 2010. It was proposed that the AOR leads would explore the possibility of convening a meeting with the other Arctic Council working groups on March 2, 2010 and that the timing of the next PAME meeting would preferably be from March 3-5, 2010.

### **Record of Decisions and Follow-up Actions**

*The Meeting agreed to the following:*

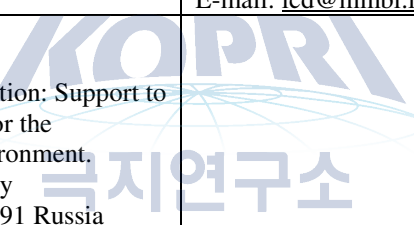
- *The PAME vice-chair over the next two year period is Elizabeth McLanahan from the United States*
- *The next PAME Meeting is tentatively scheduled for 3-5 March 2010 with alternative dates during the week of 8-12 March 2010. Location to be confirmed.*
- *PAME Chair/Secretariat to send request to the Chairman of the SAOs that the AOR Project be included on the agenda of the upcoming SAO meeting 12-14 November 2009*

## ANNEX I – LIST OF PARTICIPANTS

<i>PAME Secretariat</i>	
<p><b><u>Chris Cuddy – Outgoing PAME Chair</u></b>                      Assistant Commissioner                      Northern Pipeline Agency                      Room 412A, 615 Booth St                      K1A 0E4, Ottawa, Canada</p> <p>Tel: +1 613 995 4297                      Email: <a href="mailto:Christopher.Cuddy@NRCan-RNCan.gc.ca">Christopher.Cuddy@NRCan-RNCan.gc.ca</a></p>	<p><b><u>Atle Fretheim – Incoming PAME Chair</u></b>                      Assistant Director General                      Ministry of the Environment                      Oslo, Norway</p> <p>Tel: +47 22 24 53 10                      Fax: +47 22 24 95 63                      Email: <a href="mailto:atle.fretheim@md.dep.no">atle.fretheim@md.dep.no</a></p>
<p><b><u>Soffia Gudmundsdottir</u></b>                      Executive Secretary                      PAME International Secretariat                      Borgir                      Nordurslod                      600 Akureyri                      Iceland</p> <p>Tel: +354 461 1355                      Fax: +354 462 3390                      Email: <a href="mailto:pame@pame.is">pame@pame.is</a></p>	<p><b><u>Olga Pálsdóttir</u></b>                      Administration                      PAME International Secretariat                      Borgir                      Nordurslod                      600 Akureyri                      Iceland</p> <p>Tel: +354 462 3350                      Fax: +354 462 3390                      Email: <a href="mailto:olga@caff.is">olga@caff.is</a></p>
<i>CANADA</i>	
<p><b><u>Renee Sauve</u></b>                      Director                      International Oceans and Biodiversity Policy                      Fisheries and Oceans Canada                      200 Kent Street                      Ottawa, ON K1A 0E6</p> <p>Tel: +1 613 9916740                      Fax: +1 613 990 9574                      Email: <a href="mailto:Renee.Sauve@dfo-mpo.gc.ca">Renee.Sauve@dfo-mpo.gc.ca</a></p>	<p><b><u>Maureen Copley</u></b>                      Senior Advisor, Offshore Waters                      Land and Water Management Directorate                      Northern Affairs Organization                      Indian and Northern Affairs Canada                      Water Resources                      10 Wellington Street                      Gatineau, QC K1A 0H4</p> <p>Tel. +1 819 997 0780                      Fax. +1 819 997 7683                      Email: <a href="mailto:Copleym@ainc-inac.gc.ca">Copleym@ainc-inac.gc.ca</a></p>
<p><b><u>Debbie Martin</u></b>                      Chief                      Conservation Priorities                      Environment Canada                      351 St. Joseph Blvd                      Gatineau, QC K1A 0H3</p> <p>Tel: +1 819 953 1451                      Fax: +1 819 953 0402                      E-Mail: <a href="mailto:Debbie.Martin@ec.gc.ca">Debbie.Martin@ec.gc.ca</a></p>	<p><b><u>Angela Ledwell</u></b>                      International Policy Analyst                      International Oceans and Biodiversity Policy                      Fisheries and Oceans Canada                      200 Kent Street                      Ottawa, ON K1A 0E6</p> <p>Tel: +1 613 993 1857                      Fax: +1 613 990 9574                      Email: <a href="mailto:Angela.Ledwell@dfo-mpo.gc.ca">Angela.Ledwell@dfo-mpo.gc.ca</a></p>
<p><b><u>Giles Norman</u></b>                      Director                      Canadian Centre for the Arctic Region                      Embassy of Canada                      Wergelandsveien 7 - N-0244                      Oslo, Norway</p> <p>Tel: +47 22 99 53 00                      Fax: +47 22 99 53 00                      Email: <a href="mailto:giles.norman@international.gc.ca">giles.norman@international.gc.ca</a></p>	



<b>DENMARK/GREENLAND/FAROE ISLANDS</b>	
<p><b><u>Kjeld Frank Jørgensen</u></b>            Nature Division            Danish Ministry of the Environment            Agency for Spatial and Environmental Planning            Haraldsgade 53</p> <p>Tel: (+45) 72 54 48 65            Email: <a href="mailto:kjeldf@blst.dk">kjeldf@blst.dk</a></p>	<p><b><u>Jette Vester</u></b>            Government of Greenland            Ministry for Domestic Affairs, Nature and            Environment            P.O. Box 1614            3900 Nuuk            Greenland</p> <p>Tel: +299 346706            Fax: +299 325286            Email: <a href="mailto:jeve@gh.gl">jeve@gh.gl</a></p>
<b>FINLAND</b>	
<p><b><u>Maija Pietarinen</u></b>            Ministry of the Environment            P.O. Box 33            Kasarmikatu 25            FIN-00023, Helsinki</p> <p>Tel: +358 9 1603 9736            Fax +358 9 1603 9717            Email: <a href="mailto:Maija.Pietarinen@ymparisto.fi">Maija.Pietarinen@ymparisto.fi</a></p>	<p><b><u>Kristiina Isokallio</u></b>            counsellor            Ministry of the Environment            P.O. Box 33            Kasarmikatu 25            FIN-00023, Helsinki</p> <p>Email <a href="mailto:kristiina.isokallio@ymparisto.fi">kristiina.isokallio@ymparisto.fi</a></p>
<b>NORWAY</b>	
<p><b><u>Ingrid Berthinussen</u></b>            Senior Advisor            Norwegian Pollution Control Authority (SFT)</p> <p>Tel: +47 22 57 34 83            Email: <a href="mailto:ingrid.berthinussen@sft.no">ingrid.berthinussen@sft.no</a></p>	<p><b><u>Alf Håkon Hoel</u></b>            University of Tromsø (UiT)/Norwegian Polar            Institute (NP)            Tel: +47 77 64 55 42            Email: <a href="mailto:hoel@npolar.no">hoel@npolar.no</a></p>
<p><b><u>Tone Sjørgård</u></b>            Senior Advisor            Norwegian Pollution Control Authority (SFT)</p> <p>Tel: +47 22 57 34 83            Email: <a href="mailto:tone.sjorgard@sft.no">tone.sjorgard@sft.no</a></p>	<p><b><u>Cecile von Quillfeldt</u></b>            Senior Advisor            Norwegian Polar Institute (NP)</p> <p>Tel: +47 79 02 26 12            Email: <a href="mailto:quillfeldt@npolar.no">quillfeldt@npolar.no</a></p>
<p><b><u>Jens Koefoed</u></b>            Norwegian Maritime Directorate</p> <p>Tel: +47 52 74 51 80            Email: <a href="mailto:jens.koefoed@sjofartsdir.no">jens.koefoed@sjofartsdir.no</a></p>	<p><b><u>Geir Høvik Hansen</u></b>            Norwegian Maritime Directorate</p> <p>Tel: +47 52 74 51 58            Email: <a href="mailto:geir.hovikhansen@sjofartsdir.no">geir.hovikhansen@sjofartsdir.no</a></p>
<p><b><u>Irene Bauer</u></b>            Ministry of the Environment</p> <p>Tel: + 47 22245987            E-mail: <a href="mailto:Irene.bauer@md.dep.no">Irene.bauer@md.dep.no</a></p>	<p><b><u>Gunnar Sander</u></b>            Norwegian Polar Institute</p> <p>Tel: +47 77 75 06 59            Email: <a href="mailto:gunnar.sander@npolar.no">gunnar.sander@npolar.no</a></p>

<b>RUSSIA</b>	
<p><b><u>Zavidonskaya Edda</u></b> Expert of the Department of International Cooperation Ministry of Natural Resources and Environment of the Russian Federation</p> <p>Email: <a href="mailto:zavidonskaya_edda@mnr.gov.ru">zavidonskaya_edda@mnr.gov.ru</a></p>	<p><b><u>Alexey Vladimirov</u></b> Consultant Ministry of Natural Resources and Environment of the Russian Federation Department of State Policy and Management in the Sphere of Environmental Protection and Ecological Safety 4/6, B. Gruzinskaya st., Moscow, 123995, D-242, GSP-5</p> <p>Tel: +7 (499) 124-61-13 Fax: +7 (499) 254-43-10 Email: <a href="mailto:alex.vladimirov@mail.ru">alex.vladimirov@mail.ru</a> or <a href="mailto:avladimirov@mnr.gov.ru">avladimirov@mnr.gov.ru</a></p>
<p><b><u>Roman G. Mikhalyuk</u></b> International Communications Department Southern Scientific Centre of the Russian Academy of Sciences 41 Chekhov Street 344006 Rostov-on-Don, Russia</p> <p>Tel.: +7 (863) 266-64-26 Fax: +7 (863) 266-56-77 Email: <a href="mailto:icd@mmbi.krinc.ru">icd@mmbi.krinc.ru</a></p>	<p><b><u>Professor Gennady G. Matishov</u></b> Director Murmansk Marine Biological Institute of the Russian Academy of Sciences (MMBI RAS) 17 Vladimirskaia Street 183010 Murmansk, Russia</p> <p>Tel.: (+7)(8152)253963 Fax: (+7)(8152)253994 E-mail: <a href="mailto:icd@mmbi.info">icd@mmbi.info</a></p>
<p><b><u>Dr. Ivan N. Senchenya</u></b> Project Manager UNEP/GEF project - Russian Federation: Support to the National Programme of Action for the Protection of the Arctic Marine Environment, National Pollution Abatement Facility 19 Leninsky prospect, Moscow 119991 Russia</p> <p>Tel.: +7 495 7304097, 9553114 Email: <a href="mailto:senchenya@npaf.ru">senchenya@npaf.ru</a></p>	
<b>SWEDEN</b>	
<p><b><u>Ann-Sofi Israelson</u></b> Swedish Environmental Protection Agency International secretariat</p> <p>Tel:+46 8 698 1270 Email: <a href="mailto:ann-sofi.israelson@naturvardsverket.se">ann-sofi.israelson@naturvardsverket.se</a></p>	<p><b><u>Anna Blomdahl</u></b> Swedish Ministry of Enterprise</p> <p>Email: <a href="mailto:anna.blomdahl@enterprise.ministry.se">anna.blomdahl@enterprise.ministry.se</a></p>
<b>UNITED STATES</b>	
<p><b><u>Elizabeth S. McLanahan</u></b> International Affairs Specialist NOAA Office of International Affairs Herbert C. Hoover Building, Room 6224, MS 5230 14th and Constitution Avenue, NW Washington, DC 20235</p> <p>Tel: +1 202 482 5140 Fax: +1 202 482 4307 Email: <a href="mailto:Elizabeth.McLanahan@noaa.gov">Elizabeth.McLanahan@noaa.gov</a></p>	<p><b><u>Peter H. Oppenheimer</u></b> Senior Counselor for International Law Office of General Counsel National Oceanic and Atmospheric Administration U.S. Department of Commerce 1401 Constitution Ave., NW - HCHB 7837 Washington, D.C. 20230</p> <p>Tel: +1 (202) 482-0032 Fax: +1 (202) 371-0926 Email: <a href="mailto:Peter.Oppenheimer@noaa.gov">Peter.Oppenheimer@noaa.gov</a></p>

<p><b><u>Tim Holder</u></b>  Minerals Management Service  U.S. Department of the Interior  Branch of Environmental Assessment  381 Elden Street  Herndon, Virginia, 20170-4817</p> <p>Tel: +1 (703) 787-1000  Email: <a href="mailto:Tim.holder@mms.gov">Tim.holder@mms.gov</a></p>	<p><b><u>Kenneth Sherman</u></b>  Director  USDOC/NOAA/NMFS  Narragansett Laboratory  28 Tarzwell Drive  Narragansett, RI 02882  United States</p> <p>Tel: +1 401 782 3211  Email: <a href="mailto:ksherman@mola.na.nmfs.gov">ksherman@mola.na.nmfs.gov</a></p>
<i>AIA</i>	<i>ICC Alaska</i>
<p><b><u>Jim Gamble</u></b>  Assistant Director  Aleut International Association  333 W. 4th Ave., Suite 301  Anchorage, AK 99501</p> <p>Tel: +1 907-33-ALEUT (332-5388)  Fax: +1 907-332-5380  Email: <a href="mailto:aia@alaska.net">aia@alaska.net</a></p>	<p><b><u>James Stotts</u></b>  429 L. Street  Anchorage, Alaska 99501</p> <p>Tel: +1 (907) 344-6286  Email: <a href="mailto:jimmy@iccalaska.org">jimmy@iccalaska.org</a></p>
<i>Gwich'in Council International</i>	<i>IPS Secretariat</i>
<p><b><u>Joe Linklater</u></b>  Chairman GCI  P.O. Box 3106 Inuvik, NT X0E 0T0</p> <p>Tel: +1 867-777-3782  Fax: +1 867-777-3783  Email: <a href="mailto:jlinklater@vgfn.net">jlinklater@vgfn.net</a></p>	<p><b><u>Erik Gant</u></b>  Acting Executive Secretary Erik Gant  Indigenous Peoples Secretariat (IPS)</p> <p>Tel: +45 32 83 3790  Email: <a href="mailto:erik.gant@arcticpeoples.org">erik.gant@arcticpeoples.org</a></p>
<i>EPPR Working Group</i>	<i>AMAP Working Group</i>
<p><b><u>Ole Kristian Bjerkemo</u></b>  EPPR Vice Chair  Norwegian Coastal Administration</p> <p>Tel +47 33 03 48 18  Email: <a href="mailto:ole-kristian.bjerkemo@kystverket.no">ole-kristian.bjerkemo@kystverket.no</a></p>	<p><b><u>Odd Rogne</u></b>  Senior Advisor AMAP &amp; IPY IPO  Th. Kittelsensvei 1  0379 Oslo, Norway  Tel: +47 977 18315  Email: <a href="mailto:oddr@hotmail.com">oddr@hotmail.com</a></p>
<i>Arctic Council Secretariat</i>	
<p><b><u>Nina Buvang Vaaja</u></b>  Head of Secretariat  Arctic Council Secretariat  Polarmiljøsenderet  N-9296 Tromsø, Norway</p> <p>Tel: +47 777 50143  Cell: +47 9170 9793  Fax: +47 777 50140  Email: <a href="mailto:Nina.Buvang.Vaaja@arctic-council.org">Nina.Buvang.Vaaja@arctic-council.org</a></p>	
<i>Circumpolar Conservation Union (Observer)</i>	
<p><b><u>Doug Norlen</u></b></p> <p>Tel: +1-202-465-1650  Email: <a href="mailto:dnorlen@pacificenvironment.org">dnorlen@pacificenvironment.org</a>;</p>	<p><b><u>John Bennett</u></b></p> <p>Tel: +1-917-403-9849  Email: <a href="mailto:bennettandassoc@aol.com">bennettandassoc@aol.com</a>;</p>

<i>France – Observer Country</i>	
<p><b><u>Daniel Silvestre</u></b> In charge of maritime subjects Ministry of transport</p> <p>Email: <a href="mailto:daniel.silvestre@developpement-durable.gouv.fr">daniel.silvestre@developpement-durable.gouv.fr</a></p>	<p><b><u>Christophe Sammartano</u></b> In charge of energetic matters Ministry of Foreign Affairs</p> <p>Email: <a href="mailto:christophe.sammartano@diplomatie.gouv.fr">christophe.sammartano@diplomatie.gouv.fr</a></p>
<i>Poland – Observer Country</i>	
<p><b><u>Jan Piechura</u></b> Institute of Oceanology Polish Academy of Sciences (IOPAS) Sopot, Poland</p> <p>Email: <a href="mailto:piechura@iopan.gda.pl">piechura@iopan.gda.pl</a></p>	<p style="text-align: center;"><i>WWF</i></p> <p><b><u>Dr. Patrick LEWIS</u></b> Programme Officer: Immediate Threats WWF International Arctic Programme Kristian Augusts gt. 7A P.O.Box 6784 St. Olavs Plass 0130 Oslo, NORWAY</p> <p>Tel: +47 213 79 369 Email: <a href="mailto:plewis@wwf.no">plewis@wwf.no</a></p>
<i>The Netherlands</i>	
<p><b><u>Mrs Yvonne Stassen</u></b> Embassy of the Kingdom of the Netherlands 0244 OSLO NORWAY</p> <p>Tel: +47 23 33 36 24 Fax: +47 23 33 36 01 Email: <a href="mailto:annemieke.dijs@minbuza.nl">annemieke.dijs@minbuza.nl</a></p>	<p style="text-align: center;"><i>Italy – Observer Country (ad-hoc)</i></p> <p><b><u>Stefano Aliani</u></b> CNR Institute Marine Science, Section of La Spezia Forte S.Teresa I-19036 Pozzuolo di Lerici, La Spezia La Spezia, Italy</p> <p>Tel +39 0187978311 Fax +39 0187970585 Email: <a href="mailto:stefano.aliاني@ismar.cnr.it">stefano.aliاني@ismar.cnr.it</a></p>
<i>European Environment Agency</i>	
<p><b><u>Nikolaj Bock</u></b> Special Advisor on International Affairs Executive Directors Office European Environment Agency Kongens Nytorv 6 1050 Copenhagen K Denmark</p> <p>Tel: +45.33.36.71.00 Direct: +45.33.36.71.03 Fax: +45.33.36.72.72 Email: <a href="mailto:Nikolaj.Bock@eea.europa.eu">Nikolaj.Bock@eea.europa.eu</a></p>	<p style="text-align: center;"><i>IUCN</i></p> <p><b><u>Tom Laughlin</u></b> Deputy Head of the Global Marine Program IUCN USA &amp; Caribbean Multilateral Office 1630 Connecticut Avenue NW, Third Floor Washington, DC 20009 USA</p> <p>Tel: +1.202.387.4826 Fax: +1.202.287.4823 Email: <a href="mailto:Thomas.LAUGHLIN@iucn.org">Thomas.LAUGHLIN@iucn.org</a></p>

## **ANNEX II – LIST OF DOCUMENTS**

### **Agenda Item 1 – Opening of the meeting**

### **Agenda Item 2 – Introduction and Adoption of the Agenda**

- Draft Agenda with timeline

### **Agenda Item 3 – Information from the Chair and Secretariat**

#### *Background documents:*

- PAME Work Plan 2009-2011
- SAO Report to 2009 Ministerial Meeting
- 2009 Tromsø Declaration
- Danish Chairmanship Program 2009-2011

### **Agenda Item 4 – Transfer of the PAME Chairmanship from Canada to Norway**

### **Agenda Item 5 – Arctic Ocean Review Project**

- Arctic Ocean Review (AOR) Project Plan

#### *Background documents:*

- PAME 1996 Report
- Circumpolar Marine Workshop Nov/Dec 1999

### **Agenda Item 6 – Arctic Marine Shipping Assessment**

- Integrated work plan for the AMSA follow up
- AMSA follow up matrix

#### *Background documents:*

- AMSA Report 2009

### **Agenda Item 7 – Follow up on the Arctic Offshore Oil and Gas Guidelines (2009)**

- OOGG – EIA Project Summary

#### *Background documents:*

- 2009 Offshore Oil and Gas Guidelines

### **Agenda Item 8 – Ecosystem Approach**

- Draft Proposal for an Integrated Work Plan for review of ToRs, draft ToRs and draft Work Plan for 2009-2011

### **Agenda Item 9 – Regional Programme of Action (RPA)**

#### *Background documents:*

2009 Regional Programme of Action for the Protection of the Arctic Marine Environment from Land-based Activities

### **Agenda Item 10 – Continuation on the reporting/outcomes from the working sessions**

### **Agenda Item 11 – Summary of Meeting Decisions and Follow-up Actions**

### **Agenda Item 12 – Any other business**

#### **General Information**

- Logistics (meeting location and hotels)
- PAME Operating Guidelines
- List of Participants

## ANNEX III – MEETING AGENDA

### WEDNESDAY, September 30

#### 09:00-09:45

- Item 1:** Opening of the Meeting (TBD)
- Item 2:** Introduction and Adoption of the Agenda (PAME Chair)
- Item 3:** Information from the Outgoing Chair and the Secretariat
- Outcomes/Guidance from the Ministerial meeting in April 2009
  - Administration and Operational aspects of PAME Activities: PAME Work Plan 2009-2011 - Danish chairmanship and cooperation with Arctic Council WGs and activities
  - Outcomes from the meeting of Chairs and Secretaries 8<sup>th</sup> of September

#### 09:45-10:00

- Item 4:** Transfer of the PAME Chairmanship from Canada to Norway

#### 10:30-12:00

- Item 5:** Arctic Ocean Review Project (Canada/Norway/Iceland)
- Outline on project planning/timeline as provided by the leads
  - Tour de Table and next steps

#### 13:00-15:00

- Item 6:** Arctic Marine Shipping Assessment (Norway/USA/others?)
- Terms of reference/work plan for follow up on AMSA as provided by the leads
  - Countries interested in co-leading with Norway and USA to inform the meeting
  - Discussion on ways and means to communicate the AMSA
  - Tour de table and agreement on next steps

#### 15:30-17:00

**Plenary breaks into 2 Breakout Sessions:** Two separate breakout groups led by respective lead countries, with the participation of others interested. The goal is to address comments and revise project plans as per discussions at the meeting. Following breakout groups are planned and will report back to the meeting on Thursday afternoon:

- The Arctic Ocean Review Project (Canada/Norway/Iceland)
- The Arctic Marine Shipping Assessment (2009) follow up (Norway/USA)

## RECEPTION BY HOST



## THURSDAY, October 1

### 09:00-09:30

- Item 7:** Follow up on the 2009 Arctic Offshore Oil and Gas Guidelines (USA)
- Outline on project planning/timeline as provided by the lead country
  - Tour de Table and next steps

### 09:30-11:00

- Item 8:** Ecosystem Approach (Norway/USA)
- Terms of reference/work plan as provided by the leads
  - Cooperation with other working groups (e.g. CAFF)
  - Tour de table and agreement on next steps

### 11:00-12:00

- Item 9:** Regional Programme of Action (RPA)
- Reporting by leads on the RPA update (Canada/Iceland) – Priority actions and follow up of the 2009 RPA
  - Information on the implementation progress of the GEF/Russian NPA-Arctic (Russia)
  - Options to address/highlight Coastal Zone Management and adaptation to climate change (background paper by the PAME Chair and Secretary)

### 13:00-15:00

**Plenary breaks into 2 Breakout sessions:** Two separate breakout groups led by respective lead countries, with the participation of others interested. The goal is to address comments and revise project plans as per discussions at the meeting. Following breakout groups are planned and will report back to the meeting:

- Work on Ecosystem Approach/LMEs (Norway/USA)
- The Regional Programme of Action (RPA) (Canada/Iceland)

### 15:30-17:00

**Plenary resumes:** Reporting on the outcomes by respective leads from the previous breakout sessions on the following activities.

- The Arctic Ocean Review Project
- The Arctic Marine Shipping Assessment (2009) follow up
- The Arctic Offshore Oil and Gas Guidelines (2009) follow up
- Work on Ecosystem Approach/LMEs

## FRIDAY, October 2

### 09:00-12:00

**Item 10:** Continuation on the reporting/outcomes from the working sessions, if needed

**Item 11:** Summary of Meeting Decisions and Follow up Actions (Chair & Secretariat)

- The PAME Progress Report to the SAO meeting 12-13 November 2009 (Chair)
- Main Records of Decisions from the meeting (Chair)
- Next PAME meeting (timing and location)
- Reporting on other upcoming related meetings, if needed

**Item 12:** Any other business and closing of the Meeting



## ANNEX IV: Arctic Ocean Review (AOR) Project Plan

*The Arctic Ocean Review (AOR) is a multi-phased project that will result in a review of the global and regional measures that are in place for the protection of the Arctic marine and coastal environment, and options to address any gaps or weaknesses. This project will address both sea and land-based activities influencing the state of the central Arctic Ocean and its marginal seas, and will result in a phase I report on existing measures (2011) and a final report with recommendations (2013) for endorsement by the Arctic Council Ministers.*

### **1. Introduction**

The Arctic marine environment is subject to increasing pressures, resulting from climate change and pollution on the one hand, and from economic activities on the other. The Arctic Council is at the forefront of these emerging issues through the development of various in-depth reports and assessments, such as the State of the Arctic Environment Report, Arctic Climate Impact Assessment, Arctic Marine Shipping Assessment, and Arctic Oil and Gas Assessment among others. Because of the work of the Arctic Council, the pressures to the Arctic marine environment can be better understood and are higher on the international agenda than in recent years. It is therefore timely to undertake a review of global and regional measures (voluntary and mandatory) that are relevant to the conservation and sustainable use of the Arctic Ocean, as well as activities of the Arctic Council in order to clearly demonstrate Arctic states' stewardship efforts to the global community.

The AOR is encouraged by:

- The Arctic Marine Strategic Plan, adopted by the Arctic Council in 2004, provides the foundation for both the Arctic Council and PAME's mission and objectives. It specifically requires PAME to "Periodically review the status and adequacy of international/regional agreements and standards that have application in the Arctic marine environment, new scientific knowledge of emerging substances of concern, and analyze the applicability of a regional seas agreement to the Arctic" (Strategic Action 7.3.4).
- The Danish Chairmanship of the Arctic Council (2009-2011) proposes to identify "Megatrends in the Arctic" based on key past and upcoming Arctic Council reports and assessments. The intention of this report is to provide a broad picture of needs and possibilities for environmental protection, prevention of human health effects, and the sustainable development of the Arctic region. The AOR could significantly contribute to the environmental portion of this compilation report.
- The common objectives and priorities for the Norwegian, Danish and Swedish chairmanships of the Arctic Council (2006-2013) has given high priority to the theme of integrated management, as well as ensuring a sustainable and ecosystem-based approach to resource development in the Arctic.
- Objective II of the PAME Work Plan 2009-2011 asks PAME to "Determine the adequacy of applicable international/regional commitments and promote their implementation and compliance".
- Commitments by the global community to sustainable development and protection of marine biodiversity and the marine environment through the application of the ecosystem approach and integrated coastal and ocean management.

## **2. Objectives**

The overall objective of the AOR is to provide guidance to Arctic Council Ministers as a means to strengthen governance in the Arctic through a cooperative, coordinated, and integrated approach to the management of Arctic marine environment. The AOR will also play an important role in demonstrating Arctic States' stewardship efforts in the Arctic Ocean.

### **Phase I Objectives (2009-2011):**

- Compile information on global and regional measures that are relevant to the conservation and sustainable use of the Arctic Ocean;
- Survey the status and trends in the Arctic marine environment in cooperation with other working groups of the Arctic Council;
- Disseminate compiled information through communication products/tools, and conduct outreach to both communicate efforts and obtain input;
- Prepare a compilation document that will review global and regional measures that are relevant to the conservation and sustainable use of the Arctic Ocean and identify and highlight potential weaknesses. (This document will form the basis of discussion for the technical workshop); and,
- Develop a status report for Arctic Council Ministers.

### **Phase II Objectives (2011-2013):**

- Take into account major new developments;
- Analyze potential weaknesses and impediments in global and regional instruments and measures to achieving environmental, economic and socio-cultural outcomes;
- Outline options to address potential weaknesses; and,
- Produce a final AOR Report to Arctic Council Ministers that will: summarize potential weaknesses in the global and regional instruments and measures for management of the Arctic Ocean; outline options to address these weaknesses; and, make agreed recommendations to help ensure a healthy and productive Arctic Ocean in light of current and emerging trends.

## **3. Scope and Approach**

The AOR will not initiate a new assessment, but will produce a report on the global and regional measures in place for the conservation and sustainable use of the Arctic Ocean. The report will also include recent and ongoing activities of the Arctic Council. It may be necessary for the lead countries to revisit the scope and approach at a later date and whether the activities of other organizations need to be included. In its first phase (2009-2011), the project will survey the status and trends in the Arctic marine environment, which will require close cooperation with other working groups of the Arctic Council. A special effort will be made to ensure that the report will take into account a variety of relevant initiatives.

Based on a thorough understanding of the status and trends, phase I will then review relevant, existing global and regional instruments and measures (voluntary and mandatory) that apply to the Arctic marine environment, in particular with regard to the conservation and sustainable use of the Arctic Ocean.

Phase II (2011 – 2013) will further develop the work conducted in phase I with an emphasis on areas where the Arctic Council can effectively add value to the existing mechanisms of governance for the Arctic marine environment. An important question here is how the

members of the Arctic Council can further develop and build on existing mechanisms that have proven to be effective.

#### **4. Project Management**

The AOR will be led by Canada, Iceland, Norway, Russia, and the United States. Project leadership will be provided by lead countries' Heads of Delegation (HoD) to whom a Project Manager will report (see project structure - Annex A).

PAME HoD will be asked to provide points of contact within their respective governments to form the Project Working Group. This working group will contribute to the organization of the technical workshop and international conference, and the production of various documents and solicit input from Permanent Participants and other Arctic Council Working Groups.

#### **5. Outcomes**

- Outreach/Communication Strategy;
- Report summarizing the status, context, and instruments and measures relevant to the conservation and sustainable use of the Arctic Ocean. (This will include input from a workshop – captured in a workshop report);
- Communication products demonstrating Arctic Ocean stewardship efforts;
- Report – analyzed potential weaknesses; and,
- Recommendations to Arctic Council Ministers – guidance to policy-makers.

Phase I will entail a workshop (Fall 2010) to address the status of the Arctic marine environment and the potential weaknesses identified through reviewing global and regional measures that are relevant to the conservation and sustainable use of the Arctic Ocean. Based on the outcomes of this workshop, and other material, a report will be presented to Arctic Council Ministers in 2011, including an outline for phase II.

In its second phase, an international conference will be arranged in 2011, as a follow-up to the technical workshop held in phase I, and will provide the basis for the work on areas for further involvement on the part of the Arctic Council, as well as modalities for such work. A final AOR Report will be presented to Arctic Council Ministers in 2013, which will include recommendations for their endorsement.

## **6. Main Components, Timeline and Major Milestones**

### **Phase I: 2009-2011 – Information gathering and Outreach**

The first phase of this project will be comprised of scoping, outreach, communication and compiling information about global and regional instruments and measures related to the conservation and sustainable use of the Arctic Ocean. It will be done in close coordination with Permanent Participants and the Working Groups of the Arctic Council. Deliverables for Phase I will be a status report to Arctic Council Ministers and communications products for outreach purposes (see AOR Phase I Milestones - Annex B).

<b>Timeline</b>	<b>AOR Phase I</b> <i>Project Working Group in close cooperation with Lead Countries and PAME Secretariat</i>	<b>AOR Technical Expert Workshop</b> <i>Lead Countries and PAME Secretariat</i>
<b>YEAR 2009</b>		
<b>Ongoing throughout phase I</b>	Disseminate compiled information through communication products/tools Lead countries with the Project Manager will be responsible for soliciting input from relevant stakeholders and communicating the details of the AOR using existing national and regional forums.	
<b>Aug 31</b>	Finalize AOR Project Plan for submission prior to PAME I-2009	
<b>Sept 8</b>	Project Manager to provide lead countries with first draft of AOR Table of Contents (ToC).	
<b>Sept 15</b>	PAME Secretariat to send draft ToC to PAME HoDs and PPs.	
<b>Sept 30 – Oct 2 (PAME I-2009)</b>	PAME to approve AOR Project Plan and draft ToC.	
<b>October 19</b>	Send letter of invitation from the PAME Chair to AC working groups and PPs to request relevant information. Project Manager to send letter to PAME members and observers to request relevant information. Lead countries to review first draft of Outreach/Communication Strategy	
<b>Nov 1</b>	Lead countries to finalize Outreach/Communication Strategy PAME Heads of Delegation to confirm representatives on AOR Project Group.	
<b>Nov 12-13 SAO Meeting</b>	PAME Chair to update SAOs on the AOR and seek guidance/input if needed.	



<b>Dec 15</b>	Project Working Group to provide first draft of the compilation document to lead countries and PAME Secretariat.	
<b>YEAR 2010</b>		
<b>Jan 15</b>	Conference call between Project Working Group and lead countries to discuss and revise first draft of the compilation document	
<b>Feb</b> Arctic Council Working Group Chairs/ Secretariats meeting (TBC)	Project Manager to consult with Working Group Chairs and Secretariats in preparation for technical workshop.	
<b>Mid-Feb</b>	Revised draft of the compilation document to be distributed to PAME HoDs, PPs, and AC working groups	First draft of workshop agenda, letter of invite, list of participants, themes etc. by lead countries (workshop partially verifying the compilation and linkages to the AC working groups)
<b>Mar 2</b>	Project Manager to meet with experts from the Working Groups.	
<b>Mar 12-16</b> PAME I-2010 Meeting (TBC)	Revised 1st draft AOR and the Workshop content/logistics	Lead countries to present workshop content/logistics
<b>Apr 12-16</b> SAO Meeting		
<b>May</b>	Project Working Group to provide second draft of compilation document to lead countries	Leads to finalize workshop package
<b>Jun 1</b>	Send revised second draft of compilation document to PAME HoDs and PPs.	PAME Secretariat to send workshop package (letter of invite, draft annotated agenda, etc)
<b>Sept</b>	Project Working Group to provide the third draft of AOR – for distribution to the PAME II-2010 meeting	
<b>Sept/Oct</b> PAME II-2010 Meeting (TBC)	PAME to provide input on the third draft of the compilation document.	AOR Technical Expert Workshop (status and trends). To be held back-to-back with the PAME

		II-2010 meeting)
<b>Nov</b> SAO Meeting (TBC)	Third draft of the compilation document and workshop outcomes to be presented by PAME Chair.	Project Working Group to draft workshop report and summary of outcomes.
<b>Nov-Jan 2011</b>	Project Working Group to prepare final draft of the compilation document to be submitted 1 month prior to PAME I-2011	Lead countries to approve workshop report and send to PAME, PPs and workshop participants.
<b>Year 2011</b>		
<b>Jan/Feb</b> PAME I-2011 Meeting (TBC)	PAME to approve final report for Phase I	Lead countries to present workshop outcomes.
<b>Mar</b>	Finalize phase I AOR Report including guidance/description of Phase II AOR.	
<b>Apr</b> Arctic Council Ministerial	PAME Chair to present final Phase I AOR Report and AOR Workshop Report	

#### Phase II (2011-2013): Analysis of information and Reporting to the Arctic Council

The second phase of this project will follow-up on the information collected in phase I by analyzing potential weaknesses in global and regional measures in place for the conservation and sustainable use of the Arctic Ocean, including Arctic Council activities, and outline options to address these weaknesses. The major deliverable for phase II will be a final report to Arctic Council Ministers that will summarize potential weaknesses and the options to address them, as well as recommendations for endorsement by Arctic Council Ministers to help ensure a healthy, productive and safe Arctic Ocean in light of current and emerging trends.

<b>Timeline</b>	<b>AOR Phase II</b>	<b>AOR Conference</b>
	<i>Project Working Group in close cooperation with Lead Countries and PAME Secretariat</i>	<i>Lead Countries and PAME Secretariat</i>
<b>Year 2011</b>		
<b>May</b>	Project Working Group to draft AOR Project Plan Phase II and consult with lead countries.	
<b>June-July</b>	Project Working Group to finalize AOR Project Plan Phase II.	
<b>August</b>	PAME Secretariat to send AOR Project Plan Phase II to PAME and PPs.	
<b>Sep/Oct 2011</b> PAME II- 2011 (TBC)	PAME to approve AOR Project Plan for Phase II.	

<b>Oct 2011- Apr 2012</b>	Project Working Group and leads to address drivers and needs.	
<b>Oct - Nov</b>		Project Working Group to develop agenda for international conference and consult with lead countries.
<b>Dec</b>		Project Working Group to finalize conference agenda.
<b>Year 2012</b>		
<b>January</b>		PAME Secretariat to send conference package
<b>Apr (TBC)</b>		AOR International Conference (possibly back-to-back with a SAO meeting).
<b>Apr- Dec</b>	Continue analysis, develop findings and recommendations	
<b>Year 2013</b>		
<b>Apr</b>	Arctic Council Ministerial meeting: Final AOR Report with findings and recommendations	



## **7. Financial Considerations**

Consistent with the over-all Arctic Council approach, the AOR will be financed through voluntary contributions from member states. As this project does not require the collection of new data and is being implemented over a 4 year period, the total cost and cost per year are expected to be fairly modest. The proposed stepwise approach with SAO approval required for each phase will facilitate financial planning and budgets.

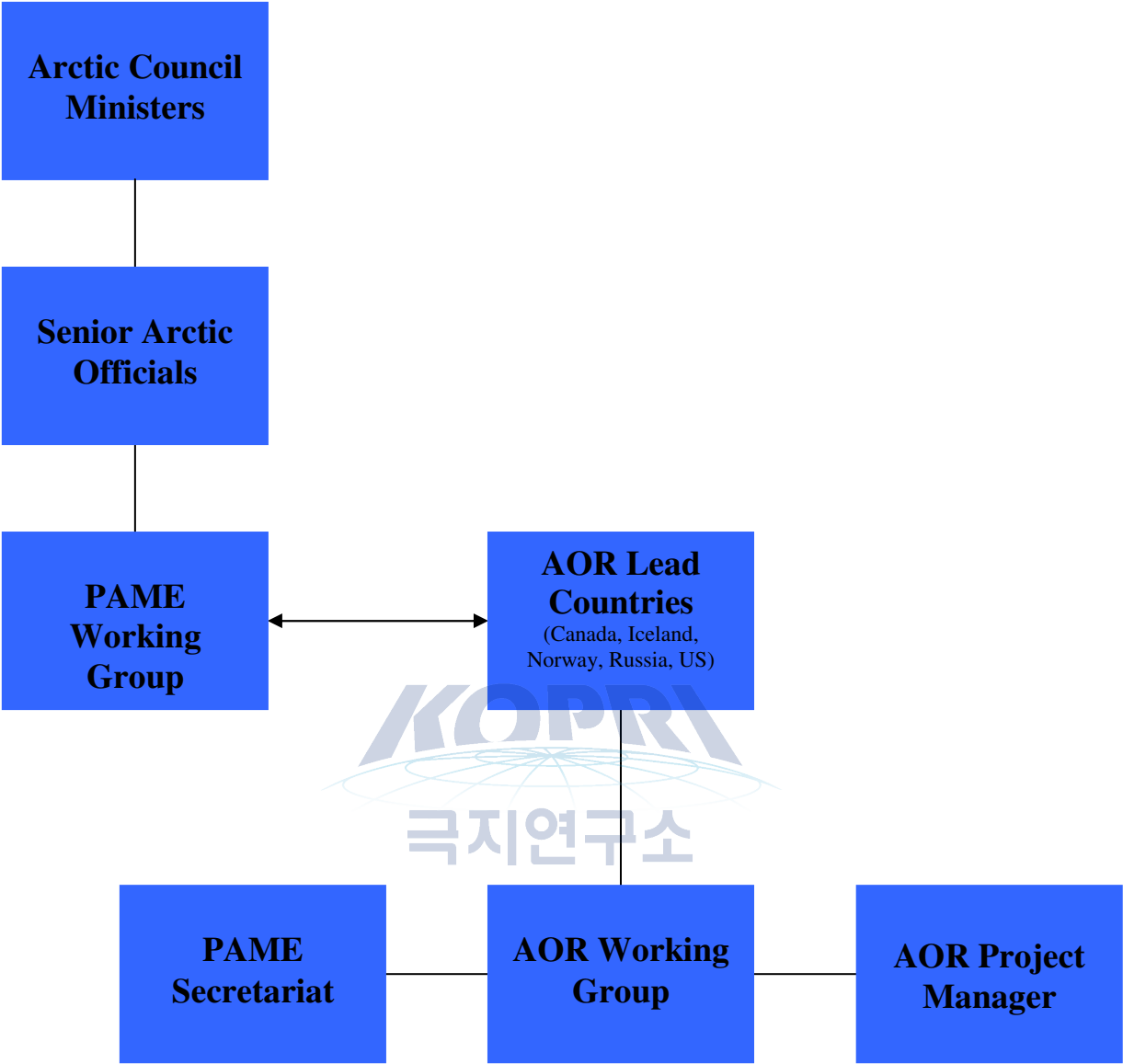
Lead countries will carry the main costs of staff time with other countries providing in-kind support. The cost for Permanent Participants to participate will need to be determined in consultation with them. The PAME Secretariat will provide administrative support from its normal annual budget.

Given this is a multi-year, multi-phased project, it is difficult at this stage to propose a budget for phase II, however, it is expected to be similar to phase I.

### Budget for Phase I (2009-2011)

<b>ACTION / ITEM</b>	<b>Responsibility</b>	<b>COST (Approx.) *cost in USD</b>
Overall project coordination and research, including: <ul style="list-style-type: none"> <li>➤ Compile a list of all ocean-related initiatives of the Arctic Council and other relevant fora since 2002; and,</li> <li>➤ Consult with Working Group Chairs and Secretariats in preparation for the technical workshop.</li> </ul>	Project Manger and Project Assistant	\$40,000 (TBC)
Information package including an overview brochure profiling all initiatives/measures and a fact sheet on each activity.	PAME Secretariat and lead countries	\$20,000
Technical workshop	Iceland (TBC)	\$40,000
Printing and layout of the phase I report .	PAME Secretariat and lead countries	\$20,000
Support for Permanent Participants to participate in the project and workshops.	TBC	\$20,000 (TBC)
<b>TOTAL</b>		<b>\$140,000 (TBC)</b>

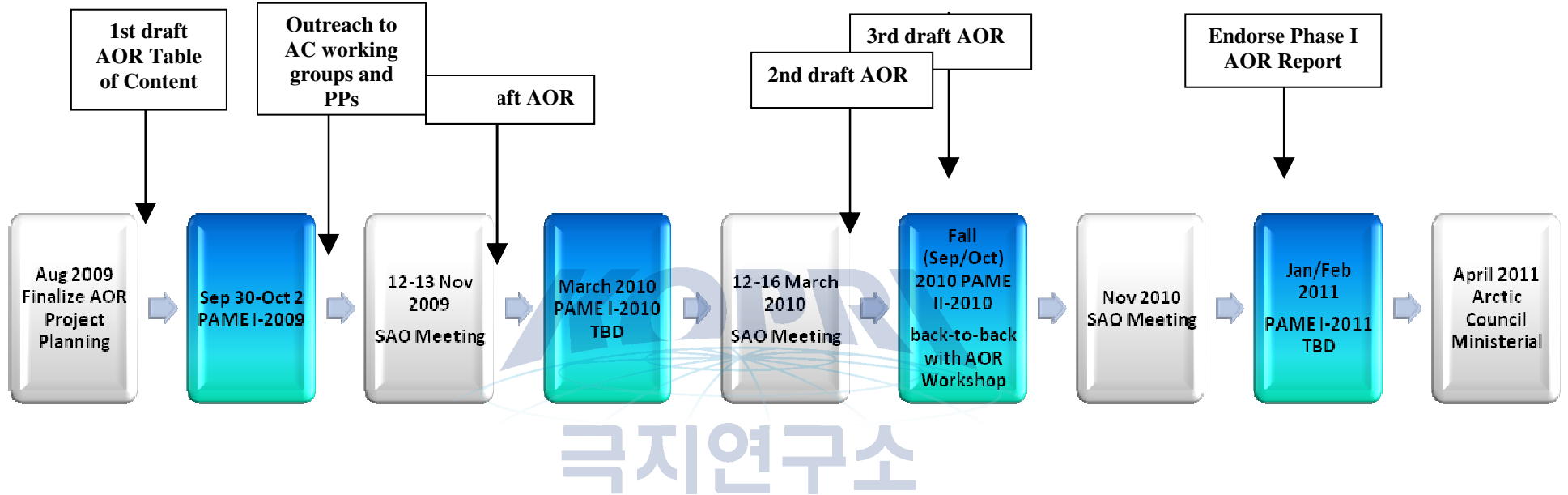
**ANNEX A – Project Management Structure**



## Project Contact List:

<b>Project Co-Leads</b> <i>*Co-leads will designate contact person to the Project Manager</i>	<u>Canada:</u> Renée Sauvé Renee.Sauve@dfo-mpo.gc.ca
	<u>Iceland:</u> SesseljaBjarnadottir Sesselja.Bjarnadottir@umh.stjr.is
	<u>Norway:</u> Ingrid Berthinussen Ingrid.Berthinussen@sft.no
	<u>Russia:</u> Aleksey Vladimirov alex.vladimirov@mail.ru
	<u>United States:</u> Elizabeth Mclanahan Elizabeth.Mclanahan@noaa.gov
<b>PAME Secretariat</b>	Soffía Guðmundsdóttir pame@pame.is
<b>Project Manager</b>	Alf Hakon Hoel ahhoel@gmail.com
<b>Project Assistant</b>	TBD
<b>Project Working Group</b>	<u>Canada:</u> TBD
	<u>Denmark:</u> TBD
	<u>Finland:</u> TBD
	<u>Iceland:</u> TBD
	<u>Norway:</u> TBD
	<u>Russia:</u> TBD
	<u>Sweden:</u> TBD
<u>United States:</u> TBD	

**ANNEX B: Major Milestones – Phase I 2009-2011**






**ANNEX V: Matrix for AMSA follow-up**

**Identified measures in the AMSA-report and method of follow up**

AMSA Recommendations	Follow-up Required at the global, regional or national level	Method of Follow-up by PAME
<b>I) Enhancing Arctic Marine Safety</b>		
<p><b>A. Linking with International Organizations:</b> That the Arctic states decide to, on a case by case basis, identify areas of common interest and develop unified positions and approaches with respect to international organizations such as: the International Maritime Organization (IMO), the International Hydrographic organization (IHO), the World Meteorological Organization (WMO) and the International Maritime Satellite Organization (IMSO) to advance the safety of Arctic marine shipping; and encourage meetings, as appropriate, of member state national maritime safety organizations to coordinate, harmonize and enhance the implementation of the Arctic maritime regulatory framework.</p>	<p>Cooperate as appropriate in the:</p> <ul style="list-style-type: none"> <li>• International Maritime Organization (IMO);</li> <li>• International Hydrographic Organization (IHO);</li> <li>• World Meteorological Organization (WMO);</li> <li>• International Maritime Satellite Organization (IMSO and,)</li> <li>• Any other relevant organization.</li> </ul>	<p>PAME to identify areas of common interest and develop to the extent possible unified positions and approaches to improve the Arctic maritime regulatory framework.</p>

<p><b>B. IMO Measures for Arctic Shipping:</b> That the Arctic states, in recognition of the unique environmental and navigational conditions in the Arctic, decide to cooperatively support efforts at the International Maritime Organization to strengthen, harmonize and regularly update international standards for vessels operating in the Arctic. These efforts include:</p> <p>---Support the updating and the mandatory application of relevant parts of the <i>Guidelines for Ships Operating in Arctic Ice-covered Waters</i> (Arctic Guidelines); and,</p> <p>---Drawing from IMO instruments, in particular the Arctic Guidelines augment global IMO ship safety and pollution prevention conventions with specific mandatory requirements or other provisions for ship construction, design, equipment, crewing, training and operations, aimed at safety and protection of the Arctic environment.</p>	<ol style="list-style-type: none"> <li>1) Update and as appropriate make mandatory the <i>Guidelines for Ships Operating in Arctic Ice-covered Waters</i>,</li> <li>2) Augment global IMO ship safety and pollution prevention conventions with specific mandatory requirements, or other provisions, aimed at safety and protection of the Arctic environment.</li> <li>3) Especially consider the identification of, environmental risks and options for, avoiding or minimizing those risks regarding the use and carriage of heavy fuel oil, aiming at establishment of appropriate international regulations.</li> </ol>	<ol style="list-style-type: none"> <li>1) PAME to encourage co-operation and the development of unified positions to the extent possible among Arctic states</li> <li>2) PAME to encourage co-operation and the development of unified positions to the extent possible among Arctic states</li> <li>3) PAME to encourage co-operation and the development of unified positions to the extent possible among Arctic states</li> </ol> <p><i>Canada, Denmark and Norway preliminarily indicated lead country roles.</i></p>
<p><b>C. Uniformity of Arctic Shipping Governance:</b> That the Arctic states should explore the possible harmonization of Arctic marine shipping regulatory regimes within their own jurisdiction and uniform Arctic safety and environmental protection regulatory regimes, consistent with UNCLOS, that could provide a basis for</p>	<p>Explore the possible harmonization of Arctic marine shipping regulatory regimes and uniform Arctic safety and environmental protection regulatory regimes, consistent with UNCLOS, that could provide a basis for protection measures in regions of the central Arctic Ocean beyond coastal state jurisdiction for</p>	<p>PAME to initiate a process or processes to explore this further. Legal discussion to be accompanied by technical discussions as appropriate. Arctic states to provide appropriate legal and technical expertise. No lead identified at this stage-</p>

<p>protection measures in regions of the central Arctic Ocean beyond coastal state jurisdiction for consideration by the IMO.</p>	<p>consideration by the IMO.</p>	
<p><b>D. Strengthening Passenger Ship Safety in Arctic Waters:</b> That the Arctic states should support the application of the IMO's <i>Enhanced Contingency Planning Guidance for Passenger Ships Operating in Areas Remote from SAR Facilities</i>, given the extreme challenges associated with rescue operations in the remote and cold Arctic region; and strongly encourage cruise ship operators to develop, implement and share their own best practices for operating in such conditions, including consideration of measures such as timing voyages so that other ships are within rescue distance in case of emergency.</p>	<p>1) Support the application of the IMO's <i>Enhanced Contingency Planning Guidance for Passenger Ships Operating in Areas Remote from SAR Facilities</i>; and,</p> <p>2) Strongly encourage tour operators to develop, implement and share their own best practices for operating in such conditions.</p> 	<p>PAME to invite maritime safety authorities to participate in this discussion and encourage them to identify possible measures to increase passenger ship safety in Arctic waters. PAME to identify lead country(ies)</p> <p>Identify increased safety through appropriate IMO measures, lead countries should be encouraged to bring proposals to the appropriate bodies of IMO, and to report progress and outcome to PAME as appropriate.</p>
<p><b>E. Arctic Search and Rescue (SAR) Instrument:</b> That the Arctic states decide to support developing and implementing a comprehensive, multi-national Arctic Search and Rescue (SAR) instrument, including aeronautical and maritime SAR, among the eight Arctic nations and, if appropriate, with other interested parties in recognition of the remoteness and limited resources in the region.</p>	<p>Establishment of a task force to develop and complete negotiation by the next Ministerial meeting in 2011 of an international instrument on cooperation on search and rescue operations in the Arctic</p>	<p>PAME to contribute to the Arctic Council SAR task force and EPPR as appropriate.</p>

<b>II. Protecting Arctic People and the Environment</b>		
<p><b>A. Survey of Arctic Indigenous Marine Use:</b> That the Arctic states should consider conducting surveys on Arctic marine use by indigenous communities where gaps are identified to collect information for establishing up-to-date baseline data to assess the impacts from Arctic shipping activities.</p>	<p>1) Consider conducting surveys on Arctic marine use by indigenous communities; and,</p> <p>2) Where gaps are identified, collect information for establishing up-to-date baseline data to assess the impacts from Arctic shipping activities</p>	<p>PAME to encourage national governments, in collaboration with PPs, to implement this recommendation as it relates to their country.</p> <p>PAME to follow up with SDWG and CAFF to consider options for the Arctic Council to carry out activities to implement this recommendation.</p>
<p><b>B. Engagement with Arctic Communities:</b> That the Arctic states decide to determine if effective communication mechanisms exist to ensure engagement of their Arctic coastal communities and, where there are none, to develop their own mechanisms to engage and coordinate with the shipping industry, relevant economic activities and Arctic communities (in particular during the planning phase of a new marine activity) to increase benefits and help reduce the impacts from shipping.</p>	<p>1) Determine if effective communication mechanisms exist with Arctic coastal communities; and,</p> <p>2) Where there are none, develop mechanisms to engage and coordinate with the shipping industry, relevant economic activities and Arctic communities (in particular during the planning phase of a new marine activity) to increase benefits and help reduce the impacts from shipping.</p>	<p>This is national responsibility and no follow up is required by PAME.</p>
<p><b>C. Areas of Heightened Ecological and Cultural Significance:</b> That the Arctic states should identify areas of heightened ecological and cultural significance in light of changing climate conditions and increasing multiple marine use and, where appropriate, should encourage implementation of measures to protect these</p>	<p>1) Identify areas of heightened ecological and cultural significance in light of changing climate conditions and increasing multiple marine use; and,</p> <p>2) Where appropriate, encourage the implementation of measures to protect these areas from the impacts of Arctic marine shipping, in coordination with all</p>	<p>PAME to approach AMAP and CAFF and ask for their advice regarding identification of areas of heightened ecological and cultural significance-</p>

<p>areas from the impacts of Arctic marine shipping, in coordination with all stakeholders and consistent with international law.</p>	<p>stakeholders and consistent with international law.</p>	
<p><b>D. Specially Designated Arctic Marine Areas:</b> That the Arctic states should, taking into account the special characteristics of the Arctic marine environment, explore the need for internationally designated areas for the purpose of environmental protection in regions of the Arctic Ocean.</p>	<p>Explore the need for internationally designated areas for the purpose of environmental protection in regions of the Arctic Ocean.</p> <p>This could be done through the use of appropriate tools, such as “Special Areas” or Particularly Sensitive Sea Areas (PSSA) designation through the IMO and consistent with the existing international legal framework in the Arctic.</p>	<p>Based on C and other sources of information PAME to encourage co-operation and the development of common or shared proposals to the extent possible among Arctic states for submission to IMO.</p> <p><i>Denmark and/or Norway may co-lead</i></p>
<p><b>E. Protection from Invasive Species:</b> That the Arctic states should consider ratification of the IMO <i>International Convention for the Control and Management of Ships Ballast Water and Sediments</i>, as soon as practical. Arctic states should also assess the risk of introducing invasive species through ballast water and other means so that adequate prevention measures can be implemented in waters under their jurisdiction.</p>	<p>1) Consider ratification of the IMO <i>International Convention for the Control and Management of Ships Ballast Water and Sediments</i>, as soon as practical; and,</p> <p>2) Assess the risk of introducing invasive species through ballast water and other means so that adequate prevention measures can be implemented in waters under Arctic States’ jurisdiction.</p>	<p>This is national responsibility and no follow up is required by PAME</p> <p>PAME to follow up on this recommendation through the AOR</p>
<p><b>F. Oil Spill Prevention:</b> That the Arctic states decide to enhance the mutual cooperation in the field of oil spill prevention and, in collaboration with industry, support research and technology transfer to prevent release of oil into Arctic waters, since prevention of oil spills is the</p>	<p>Enhance the mutual cooperation in the field of oil spill prevention and, in collaboration with industry, support research and technology transfer to prevent release of oil into Arctic waters for environmental protection.</p>	<p>Responsible for follow up: EPPR</p>

highest priority in the Arctic for environmental protection.		
<b>G. Addressing Impacts on Marine Mammals:</b> That the Arctic states decide to engage with relevant international organizations to further assess the effects on marine mammals due to ship noise, disturbance and strikes in Arctic waters; and consider, where needed, to work with the IMO in developing and implementing mitigation strategies.	<p>1) Engage with relevant international organizations to further assess the effects on marine mammals due to ship noise, disturbance and strikes in Arctic waters; and,</p> <p>2) Consider, where needed, to work with the IMO in developing and implementing mitigation strategies.</p>	PAME to approach AMAP and CAFF to achieve their further assessment of the effects on marine mammals due to ship noise, disturbance and strikes in Arctic waters, and where needed work within IMO to develop and implement mitigation strategies through the use of lead countries,
<b>H. Reducing Air Emissions:</b> That the Arctic states decide to support the development of improved practices and innovative technologies for ships in port and at sea to help reduce current and future emissions of greenhouse gases (GHGs), Nitrogen Oxides (NOx), Sulfur Oxides (SOx) and Particulate Matter (PM), taking into account the relevant IMO regulations.	Support the development of improved practices and innovative technologies for ships in port and at sea to help reduce current and future emissions of greenhouse gases (GHGs), Nitrogen Oxides (NOx), Sulfur Oxides (SOx) and Particulate Matter (PM), taking into account the relevant IMO regulations.	The follow up would be through industry, national governments and international organizations, e.g. IMO.
<b>III. Building the Arctic Marine Infrastructure</b>		
<b>A. Addressing the Infrastructure Deficit:</b> That the Arctic states should recognize that improvements in Arctic marine infrastructure are needed to enhance safety and environmental protection in support of sustainable development. Examples of infrastructure where critical improvements are needed include: ice navigation training; navigational charts; communications systems; port services, including reception	<p>Recognize that improvements in Arctic marine infrastructure are needed to enhance safety and environmental protection in support of sustainable development, including:</p> <ul style="list-style-type: none"> <li>• ice navigation training;</li> <li>• navigational charts;</li> <li>• communications systems;</li> <li>• port services, including reception</li> </ul>	National follow up point.

<p>facilities for ship-generated waste; accurate and timely ice information (ice centers); places of refuge; and icebreakers to assist in response.</p>	<p>facilities for ship-generated waste;</p> <ul style="list-style-type: none"> <li>• accurate and timely ice information (ice centers);</li> <li>• places of refuge; and,</li> <li>• Icebreakers to assist in response.</li> </ul>	
<p><b>B. Arctic Marine Traffic System:</b> That the Arctic states should support continued development of a comprehensive Arctic marine traffic awareness system to improve monitoring and tracking of marine activity, to enhance data sharing in near real-time, and to augment vessel management service in order to reduce the risk of incidents, facilitate response and provide awareness of potential user conflict. The Arctic states should encourage shipping companies to cooperate in the improvement and development of national monitoring systems.</p>	<p>1) Support continued development of a comprehensive Arctic marine traffic awareness system to improve monitoring and tracking of marine activity; enhance data sharing in near real-time; and, augment vessel management service in order to reduce the risk of incidents, facilitate response and provide awareness of potential user conflict.</p> <p>2) Encourage shipping companies to cooperate in the improvement and development of national monitoring systems.</p>	<p>PAME to encourage its member states to implement this recommendation.</p>
<p><b>C. Circumpolar Environmental Response Capacity:</b> That the Arctic states decide to continue to develop circumpolar environmental pollution response capabilities that are critical to protecting the unique Arctic ecosystem. This can be accomplished, for example, through circumpolar cooperation and agreement(s), as well as regional bilateral capacity agreements.</p>	<p>Continue to develop circumpolar environmental pollution response capabilities.</p>	<p>Primary responsibility is: the EPPR. PAME to consider this recommendation in the AOR project.</p>
<p><b>D. Investing in Hydrographic,</b></p>	<p>Significantly improve, where appropriate,</p>	<p>National responsibility.</p>



<p><b>Meteorological and Oceanographic Data:</b> That the Arctic states should significantly improve, where appropriate, the level of and access to data and information in support of safe navigation and voyage planning in Arctic waters. This would entail increased efforts for: hydrographic surveys to bring Arctic navigation charts up to a level acceptable to support current and future safe navigation; and systems to support real time acquisition, analysis and transfer of meteorological, oceanographic, sea ice and iceberg information.</p>	<p>the level of and access to data and information in support of safe navigation and voyage planning in Arctic waters.</p>	
---	--	--



## ANNEX VI: Questionnaire regarding EIA processes within the offshore oil and gas industry

**Country: [insert name of country]**

To be described	Identify	Description
Legal base	Laws Regulations Guidelines Letters to the industry Any others	
Responsible authority for the EIA process		
Who is responsible for carrying out the EIA? Who pays for it?		
Stakeholders taking part	Other ministries or agencies Regional or local authorities Local people in the area NGOs	
Public consultation	Who are allowed or expected to comment?	
Time frames/time schedules		
Transparency	Which documents are open to the public? How are they made public?	
Other aspects	How is traditional knowledge taken into account? Do the authorities plan to change or update the legal framework or the procedures?	

## ANNEX VII: RPA Clearing House – Project Description

The Regional Programme of Action for the Protection of the Arctic Marine Environment from Land-based Activities (RPA) was adopted by Arctic Ministers in 1998, as a regional approach to implementing the UNEP Global Programme of Action. In 2006, PAME was tasked by Arctic Ministers to review, update and expand the RPA to respond to the rapidly changing circumstances in the Arctic. The updated RPA was approved by Arctic Ministers in 2009.

### PAME Work Plan (2009-2011)

Objective II of the PAME 2009-2011 Work Plan identifies two activities to assist with continuing the implementation of the RPA:

- (i) Contribute to the 2011 GPA Review through correspondence / network group to work in advance of the next GPA review conference. **LEAD: PAME Chair / Secretariat**
- (ii) ***Further develop the PAME website to include a Clearing House mechanism providing access to RPA related information and best practices held by Arctic Council and other organizations. LEAD: PAME Chair / Secretariat***

### Rationale for Clearing House

- The RPA Clearing House is intended to provide web-based access to information and data (for e.g. documents, websites, relevant fora, networks, etc.).
- Demonstrates and profiles Arctic States' stewardship efforts related to land-based activities.
- Systematic way to outreach to Arctic Council Working Groups, Permanent Participants, observers and other stakeholders.

### Considerations

- 1) **Financial:** funded through existing contributions to Secretariat.
- 2) **Secretariat Capacity:** to receive information and post materials on Clearing House.
- 3) **Technical Capacity:** capability of current PAME site to take on Clearing House function (may need outside technical support).
- 4) **Multilateral - GPA Clearing House** - need to track GPA Clearing House renewal progress to ensure RPA alignment and avoid duplication; possible web link from RPA to GPA.
- 5) **Define Niche** – who is the target audience / end user? (informs content, design, etc.)
- 6) **Building Awareness** – promote tool to potential users; possible web link from GPA to RPA.

### Scope

- **Project Lead:** To be managed by PAME Secretariat; additional support welcome from states, permanent participants, etc.
- Structured according to RPA (GPA) categories - contaminants (e.g. POPs, heavy metals) and habitat alteration / destruction (e.g. shoreline erosion and coastal development) + climate change adaptation.
- Stepwise approach:

- Phase I - pilot project to sunset within 2-3 years; modest in scale; evaluate success at end of term.
  - Phase II – continuation with possible enhanced capability (e.g. more interactive, responsive to queries for information); to be carried out if pilot phase is deemed successful.
- Based on voluntary submissions of materials; success based on contributions from PAME members.
  - Evaluation of success – to be determined by range and extent of information submitted by PAME members; hits to site.

**Path forward**

- Secretariat to elaborate project description and develop work plan.
- Partners – IPS has offered to collaborate with Secretariat in design of Clearing House.



## **ANNEX VIII: Group of Experts on Ecosystem-based Approach**

### **ToRs and Work Plan for 2009-2011**

**Agreed 2 October 2009**

#### **ToRs for the Group of Experts on Ecosystem-based Assessments and Management**

##### **Background**

The Arctic Council has agreed to use the Ecosystem Approach (EA) as a principle in its work. The ecosystem approach is an approach to assessments and management and has been described as a strategy for integrated management of resources and the environment, to achieve the dual objectives of sustainable use and conservation of biodiversity (CDB COP Decision V/6). For example, in a European policy context (OSPAR, HELCOM, EC), the following definition of EA has been used:

*The comprehensive integrated management of human activities based on the best available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystem integrity.*

The 2004 Arctic Marine Strategic Plan (AMSP) refers to the following commitments towards the ecosystem approach, which has been the basis for the work of PAMEs group of experts on ecosystem-based management and LMEs;

- (i) Identify the large marine ecosystems of the Arctic based on the best available ecological information (AMSP Strategic Action 7.4.1.);*
- (ii) Identify elements that can serve as key environmental and socioeconomic indicators of the state of Arctic marine ecosystems and thus guide effective decision-making (AMSP Strategic Action 7.4.2);*
- (iii) Promote pilot projects that demonstrate the application of an ecosystem approach to management (AMSP Strategic Action 7.4.3)*

Differences in circumstances and contexts have to be taken into consideration as ecosystem-based oceans assessments and management is context sensitive. There is not one single method for ecosystem-based assessments and management. A number of different practices and understandings of the concept appear to work. As a result PAME has decided to broaden the work of the LME-group of experts and rename it to a Group of Experts on Ecosystem-based Assessments and Management.

##### **Objective**

The overall objective of the work of the expert group is to develop our understanding of how the ecosystem approach can be put to actual use in oceans assessments and management. The key issue is to address the needs of those agencies which are responsible for the protection and sustainable use of marine ecosystems.

##### **Scope**

The LME group of experts has been expanded to consider the broader aspects of ecosystem-based assessment and management practices pertinent to the Arctic region. Three elements are central to the further work of the group i) Use the LMEs as the appropriate scale for

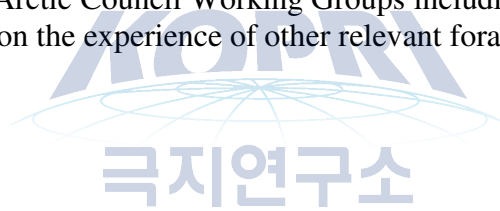
integrated management where the focus is on the status of the ecosystem (which is to be kept in good or acceptable state); ii) Assess the status of the ecosystems as a basis for advice for management actions; iii) Harmonize existing assessment work in the AC for this purpose, and establish clear links with relevant national and international activities and management structures, which will be the users of the assessment; and in doing so taking into consideration new development within this field.

### **Composition of the Expert Group**

- A group invites membership from all PAME countries.

### **Work form**

- At the first meeting in each Work Plan period, a chair is to be chosen for the period of the work plan. The responsibility of the chair is to chair meetings, draft minutes from the meetings and give status reports from the groups work to PAME.
- All projects should be based on the task/scope given the group, developed and agreed upon within the group before they are added to the groups work plan.
- The work plan is to be agreed upon by PAME and added to PAMEs work plan.
- Workshops should be held to solicit the experiences and views of the actual users of ecosystems based oceans assessments and management.
- The group should, as necessary, liaison with other experts associated with the activities of other Arctic Council Working Groups including AMAP, CAFF and SDWG, and draw on the experience of other relevant fora.



## **Work Plan for the Expert Group on Ecosystem-based Assessments and Management 2009-2011**

The expert working group will in 2009 – 2011 execute the following tasks;

- i. **Review the working map of Arctic LMEs. There is need for some further discussion on some boundaries, possibly at a workshop.**

### **WP no 1(iv) and 1(v)**

- ii. **Review the Arctic component of the AOA with the view towards a long term contribution to the Regular Process of the Global report on assessment of the marine environment.**

### **WP no 1(i) and 1(vi)**

- iii. **Consider climate variability and forcing on the status and trends and where possible the implications for ecosystem-based management of arctic LMEs through a special symposium.**
- iv. **Develop a process to facilitate a Regular Assessment of the Arctic LMEs, coordinating with the Regular Process, closely tied to the existing management structures in countries and cooperatively as appropriate and communicate this to PAME and relevant stakeholders.**
- v. **On the basis of identified needs of management agencies, where possible develop guidelines for integrated, ecosystem-based assessment and management of the Arctic. [To follow up at the appropriate time]**

### **WP no 1(i)**

- vi. **Develop and implement pilot projects to operationalize the 5 module LME assessment and management approach.**
  - **US/Canada (Beaufort Sea LME)**
  - **US/Russian Federation (West Bering Sea LME)**

### **WP no 1(iii) and 1(vi)**

- vii. **Develop a bi-annual work plan, coinciding with the bi-annual PAME work plan, based on the above.**