Session VI 10:30: Panel Presentation on next steps in implementing the Ecosystem Approach in the Arctic

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Note: Panel members have been analyzing the presentations on Day 1 and Day 2 to gather the answers to the questions and to formulate next steps. Panels and interested others will meet on the evening of Day 2 to compare notes and to plan the sessions on Day 3.

To advise the Council on next steps, it is necessary to do so in view of the status of implementation of EA in the Arctic. The Panel starts by addressing national intentions with respect to EA. The questions then follow the steps leading to EA implementation that have been addressed by the Joint AMAP/CAFF/PAME EA-Expert Group in a framework for implementation. The framework consists of six elements that are not necessarily sequential: 1) Identify the geographic extent of the ecosystem; 2) Describe the biological and physical components and processes of the ecosystem, 3) Set ecological objectives that define sustainability of the ecosystem, 4) Assess the current state of the ecosystem, 5) Value the cultural, social and economic goods produced by the ecosystem, 6) Manage human activities to sustain the ecosystem. The six elements are assumed to be sufficient to characterize implementation of EA for the purposes of this evaluation.

Status of implementation – questions to guide discussion

National commitments and implementations

- Does the national government have a stated commitment of implementing EA?
- Is there a specific 'EA' legal instrument or policy document(s) that mandates and specifies the use of EA?
- Have mechanisms been established at national government level to facilitate increased coordination and cooperation across industry sectors and across the different government agencies and within the different government institutions (ministries, agencies, etc.)?
- Are there national plans specifically designed to implement EA in the Arctic?

Next steps? Are there further steps necessary to understand national commitments of the Arctic states and other concerned entities to implementation of EA in the Arctic?

1) Identify the geographic extent of the ecosystem

The AC adopted the boundaries of the <u>Arctic Large Marine Ecosystems</u> at Kiruna (2013) as the areal definition of the extent of the Arctic's major ecosystems. It is the intent of the Council that LMEs be used for applying EA at national, bilateral and multilateral levels.

- Are there terrestrial equivalents to the LME that need to be recognized and adopted by the Arctic Council?

Next steps:

- How do we integrate smaller-scale features (ecological and human use) within the framework of LME?
- What are the relationships between EA and Marine Spatial Planning?
- How can MSP contribute to implementation of EA?

2) Describe the biological and physical components and processes of the ecosystem

- How confident are we in understanding the physical components of the Arctic?
- How confident are we in understanding the biological (including human) components of the Arctic?
- How confident are we in understanding how the physical processes related and unrelated to climate change are related to the biological components?

Next steps:

3) Set ecological objectives that define sustainability of the ecosystem

- Does the Arctic Council need to adopt guidelines for setting ecological objectives?
- Are there currently any models of the holistic and integrated set of ecological objectives, and is there a need to develop such a set?
- How are ecological objectives connected to management objectives?

Next steps:

4) Assess the current state of the ecosystem

- Is there a regular assessment of ecosystem status (including human impacts) prepared to support EA?
- Are there plans to develop an IEA to support EA?
- What could be building-blocks in the form of existing or planned thematic or sectoral assessments that could be used in producing an IEA?

- What are the geographical scope and limitation of the IEA at the scale of LME how are smaller scale (within LME) and larger scale (e.g. pan-Arctic) information taken into account and used when producing an IEA?
- How do we assess integrated and cumulative effects?
- How do we use and integrate information from natural and social sciences and traditional knowledge?

Monitoring in Support of Integrated Ecosystem Assessment

- Is there a coordinated and integrated monitoring program at the level of LMEs that can support implementation of EA in the Arctic? (Adequately describing ecosystems, Informing IEA, providing benchmarks for measuring attainment of ecological objectives)
- How could monitoring activities coordinated under the AC (e.g. AMAP, CBMP) contribute to monitoring of LMEs as part of the EA to management?
- Is there a need for further development of monitoring plans and activities to support implementation of EA?

Next steps:

5) Value the cultural, social and economic goods produced by the ecosystem

- Have processes or plans for economic valuation of ecosystem goods and services been applied in the Arctic?
- What is the distinction and relation between economic and other values such as cultural and spiritual?
- How do we include monetary and non-monetary values when defining ecological objectives?

Next steps:

6) Manage human activities to sustain the ecosystem

- Is there an advice process for 'translating' information on ecosystem status and impacts (from IEA) into management requirements and options?
- Is there a mechanism for coordination and cooperation across management sectors?
- Are management measures guided by a coherent and common set of ecological objectives?

Next steps: