

## **Chairmans' Statement on the Fourth Meeting of Scientific Experts on Fish Stocks in the Central Arctic Ocean**

The issue of the international management of fisheries in the central Arctic Ocean (CAO) has been addressed at a series of meetings of governments beginning with an initial meeting held in Oslo, Norway in June 2010, and continuing through the most recent meeting of managers held in Iqaluit, Nunavut Territory, Canada in July 2016. Of particular relevance to these meetings has been the interest by the governments in the development of a joint program of scientific research and monitoring to inform future potential fisheries in the CAO. This led to an initial scientific meeting held in Anchorage, AK, USA in June 2011. The general conclusion of that meeting was that there was no urgency, but given the limited scientific knowledge of the CAO there was a need to establish baseline data. Additional scientific meetings were held in Tromsø, Norway (October 2013) and Seattle, USA (April 2015). Participants at these meetings developed a status & gaps report, a partial inventory of research & monitoring, and a draft framework for a Joint Program of Scientific Research & Monitoring.

Government representatives met in Washington, DC, USA in December 2015 to further discuss management of potential CAO fisheries. These participants provided additional guidance on the development of a Joint Program of Research and Monitoring to address the following questions (which represent a refinement of questions raised in the 3<sup>rd</sup> scientific workshop held in April 2015):

- What are the distributions and abundances of species with a potential for future commercial harvests in the central Arctic Ocean?
- What other information is needed to provide advice necessary for future sustainable harvests of commercial fish stocks and maintenance of dependent ecosystem components?
- What are the likely key ecological linkages between potentially harvestable fish stocks of the central Arctic Ocean and adjacent shelf ecosystems?
- Over the next 10-30 years, what changes in fish populations, dependent species, and the supporting ecosystems may occur in the central Arctic Ocean and the adjacent shelf ecosystems?

To answer these questions, the representatives agreed to three Terms of Reference (ToR) for the fourth scientific meeting:

ToR 1: Complete the synthesis of knowledge

ToR 2: Develop a draft Joint Scientific Research and Monitoring Plan to address the four questions

ToR 3: Provide a Framework for the Implementation Plan

In response to the manager's request, Norway hosted the Fourth Scientific Meeting on CAO Fish Stocks in Tromsø, Norway during 26-28 September 2016. In total, 29 participants attended the meeting representing 10 governments (Canada, People's Republic of China, European Union, the Kingdom of Denmark in respect of Greenland,

Iceland, Japan, the Republic of Korea, the Kingdom of Norway, Russian Federation, and United States of America) and interested bodies, including the Arctic Council (PAME/CAFF), PICES, ICES, and the Pacific Arctic Group (PAG). The participating scientists and others were all familiar with Arctic science, surveys and modeling, and the science necessary to support management and conservation of marine living resources.

With respect to ToR1, prior to the meeting, participants collected existing data and analyses of the CAO available from science organizations of the parties. This data call allowed for the completion of the synthesis and integration of analysis of “where we are now” and identified the priorities for research and monitoring gaps. Thus, on Day 1 a draft synthesis report was tabled and discussed. Suggestions for the collection of additional information were provided and will be incorporated into the final draft synthesis report.

The primary objective of the meeting was, however, to focus on developing a Joint Scientific Research and Monitoring Plan (Plan) to address the four questions. A draft version of the Plan was prepared prior to the meeting to elicit discussion. This draft Plan built upon the outcomes of the previous three scientific meetings and considered the need for additional modeling of ecosystem relationships for areas of the CAO with physical and biological data relating to commercial fish species. During the meeting, participants broke into three groups (Mapping and Monitoring, Ecosystem Considerations, Scenarios to deal Climate Changes) to further develop the draft Plan. Meeting participants spent most of Day 2 and the morning of Day 3 in the discussion of these three topics.

Participants at the meeting used the discussion of the Research and Monitoring Plan to develop the list of considerations for implementation of the Plan (ToR3). The desire here was to provide guidance to a 2017 workshop (or workshops) which will develop an implementation strategy for the Plan showing staged development of research and monitoring that addresses gaps in abundance, distribution and other information required to provide advice about the potential for sustainable harvest of commercial species in the CAO.

Meeting participants significantly expanded upon the original draft Plan, and these materials will be combined with materials in the draft Plan to produce a complete draft. This draft Plan will be provided to the meeting’s participants for their review by correspondence.

This draft will then be tabled for discussion at the next meeting by the ten governments on management of CAO fisheries scheduled for November 2016 in the Faroe Islands. It will be finalized prior to the 2017 scientific workshop(s) (which will be charged with developing draft Implementation Plans for Research and Monitoring).