



**ICES**  
**CIEM**

International Council for  
the Exploration of the Sea  
Conseil International pour  
l'Exploration de la Mer

Council Meeting 2017

October 2017

Del Doc 7.1.3.2

Agenda item 7.1.3

## Arctic

Council is invited to take note of the following information related to ICES work in the Arctic, and to:

- *Discuss how to establish links with scientific partners outside the ICES Member Countries, and especially China, Korea, and Japan – in relation to ICES work in the Arctic, e.g. invitations back-to-back with other events (Climate Change symposium jointly with PICES, July 2018, 2018 ASC in Hamburg, session during Council 2018, or other events)*
- *Decide to prepare a mandate in order for ICES to take part and contribute to the 2<sup>nd</sup> Arctic Science Ministerial, in Berlin on 25-26 October 2018 (the four themes from the 1st Arctic Science Conference should constitute the starting point).*
- *Agree that delegates take contact with the ministries, dealing with science and the Arctic, potentially aided through a letter from ICES, on our work in the Arctic. The organizing committee of the 2<sup>nd</sup> Arctic Science Ministerial consists of representatives from the European Commission, the Republic of Finland (linked to, but not part of the Arctic Council activities; Aleksi Härkönen, SAO Chair) and Federal Republic of Germany (Volker Rachold, Director of the new German Arctic Office in Potsdam, previous director of the International Arctic Science Committee/IASC)*

### Arctic issues

ICES continues to engage with relevant partners to ensure our competences and strengths can add value to scientific activities in the Arctic.

#### Arctic Council

The Arctic Council's Task Force on Arctic Marine Cooperation

At the 10th Ministerial meeting in Fairbanks, Alaska on 11 May 2017, Ministers decided to extend the mandate of the Task Force for another two years, under the Finnish Arctic Council chairmanship. The task force is co-chaired by Finland, USA, and Iceland.

Reference was made to the need to look into a possible new subsidiary body and elaborate recommendations for complementary enhancements of existing Arctic mechanisms, for presentation at the ministerial meeting in 2019.

Among the areas specifically highlighted by the ministers are:

- Arctic MPA – toolbox

- Climate change
- Ocean Acidification
- Marine Debris/micro plastics
- Invasive alien species

2017 Fairbanks Ministerial Declaration is available online.<sup>1</sup>

The 2017 Ministerial meeting also adopted the Agreement on Enhancing International Arctic Scientific Cooperation<sup>2</sup>, (e.g.; Entry and exit of persons, equipment, and material; Access to research infrastructure and facilities, Access to research areas, Access to data)

#### Scientific experts on fish stocks in the central Arctic Ocean<sup>3</sup> (FiSCAO)

- Oslo Declaration 2015 (Interim Measures to deter unregulated fishing in the ABJN in the Central Arctic Ocean, get more knowledge, and an extended process)
- legally binding agreement (5+5countries/EU) under discussion

FiSCAO met September 26 to 28, 2016, in Tromsø to develop information supporting diplomatic negotiations on controlling commercial fishing on the High Seas of the central Arctic Ocean.

The meeting discussed a Research and Monitoring Plan (ToR2), and the following four components developed:

- 1) Mapping and Monitoring,
- 2) Reference Points and Indicators,
- 3) Modelling and Scenarios, and
- 4) Coordination.

The first three components provides guidance to a workshop (the 5<sup>th</sup> scientific meeting). This 5<sup>th</sup> meeting will develop an implementation strategy for the Plan, showing staged development of research and monitoring that addresses gaps in abundance, distribution, and other information providing advice about the potential for sustainable harvest of commercial species in the CAO.

Further defining the Coordination structure for the scientific enterprise should be part of the 5<sup>th</sup> Scientific Meeting on Fish Stocks in the Central Arctic Ocean.

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<sup>1</sup> [https://oaarchive.arctic-council.org/bitstream/handle/11374/1910/EDOCS-4339-v1-ACMMUS10\\_FAIRBANKS\\_2017\\_Fairbanks\\_Declaration\\_Brochure\\_Version\\_w\\_Layout.PDF?sequence=8&isAllowed=y](https://oaarchive.arctic-council.org/bitstream/handle/11374/1910/EDOCS-4339-v1-ACMMUS10_FAIRBANKS_2017_Fairbanks_Declaration_Brochure_Version_w_Layout.PDF?sequence=8&isAllowed=y)

<sup>2</sup> <https://www.state.gov/e/oes/rls/other/2017/270809.htm>

<sup>3</sup> Kingdom of Norway, the Russian Federation, the United States of America, Canada, the Kingdom of Denmark, the People's Republic of China, the Republic of Korea, Japan, Iceland and the European Union

There has been general agreement that existing scientific bodies working in the subarctic and Arctic could provide the support for this effort, though there is no agreement on which of these bodies (i.e., PICES, ICES, Arctic Council) should be the host. Still, there has been no suggestion of the need to create a new body.

Eskild Kirkegaard will represent ICES at the 5th meeting of Scientific Experts on Fish Stocks in the Central Arctic Ocean planned for 24-26 October, Ottawa, Canada.

See Council meeting document CM 2017 Del-doc 7.1.3.1, proposing a mandate for ICES in the Arctic, specifically for participation in the 5th meeting of Scientific Experts on Fish Stocks in the Central Arctic Ocean.

#### Observer status

ICES application for observer status in the Arctic Council was finally approved at the Council's 10<sup>th</sup> ministerial meeting in May (original application submitted 2013).

Read more: <http://ices.dk/news-and-events/news-archive/news/Pages/ICES-becomes-Arctic-Council-observer.aspx>

Regarding the proposed MoU between ICES and the Arctic Council (Annex 1 contains a draft MoU), the Senior Arctic Officials (SAOs) were asked to explore the possibility of establishing formal cooperation mechanisms, such as MoUs, and report back to the ministerial meeting in 2019.

#### 2<sup>nd</sup> Arctic Science Ministerial

ICES receives a number of invitations to partake in meetings associated with the Arctic Council, and other Arctic organizations. While it is important to communicate and, thus get a better understanding of the ICES activities it is equally important to offer specific services of ICES in specific fields. This also needs to take into accounts needs of the Arctic Council, and other Arctic organizations. The 2<sup>nd</sup> Arctic Science Ministerial will take place in Berlin, on 25- 26 October. The meeting will start with a status on the thematic issues agreed during the 1<sup>st</sup> Arctic Science Conference, held in Washing DC in 2016, scientific advances as well as new science commitments.<sup>4</sup> This will feed into the ministerial segment the following day, and will constitute the basis for a joint statement, about status of activities and future commitments and deliverables, see attachment 2.

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<sup>4</sup> The four themes of the first Arctic Science Ministerial were:

1. Arctic-Science Challenges and Their Regional and Global Implications
2. Strengthening and Integrating Arctic Observations and Data-Sharing
3. Applying Expanded Scientific Understanding of the Arctic to Build Regional Resilience and to Shape Global Responses
4. Empowering Citizens through Science Technology, Engineering, and Mathematics (STEM) Education Leveraging Arctic Science

**DRAFT DRAFT DRAFT**  
**Memorandum of Understanding**  
**BETWEEN**

**THE INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA**

**AND**

**THE ARCTIC COUNCIL**

**WHEREAS** ICES is an intergovernmental organisation established in 1902, and in accordance with the Convention of 1964 has the mission to promote and encourage research and investigations for the study of the sea particularly those related to the living resources thereof and to publish or otherwise disseminate the results of research and investigations. On the basis of marine research, ICES provides scientific information and advice to Contracting Parties, and the regulatory Commissions with which cooperative relationships have been established. ICES also coordinates data collection regarding the marine environment and living resources, hosts data bases, and provides knowledge products in the service of the scientific community and scientific advice;

**WHEREAS** the Arctic Council is an intergovernmental forum promoting cooperation, coordination and interaction among the Arctic States, Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular on issues of sustainable development and environmental protection in the Arctic.

**WHEREAS** the ICES and the Arctic Council have certain common goals and objectives with regard to conservation of the marine environment and ecosystems and the sustainable use of marine living resources in the Arctic

**HEREBY** enter into this Memorandum of Understanding (MOU) to further these common goals and objectives within their respective mandates.

1. The purpose of this MoU is to provide a framework of cooperation and to facilitate collaboration between ICES and the Arctic Council to further their shared goals and objectives in relation to the conservation of the marine environment and ecosystems and the sustainable use of marine living resources in accordance with their respective mandates.

2. In particular, ICES and the Arctic Council will seek to collaborate on:
  - A. strengthening the evidence base for the application of the ecosystem approach to management of marine activities, including provision of scientific knowledge and identification of scientific research needs;
  - B. development of methods and tools to make the ecosystem approach operational, including development of ecosystem assessments, trend analyses, priority anthropogenic pressures, provision of spatial data across various data sources, and data and knowledge gathering in relation to cumulative effects of pressures; and
  - C. such other areas of cooperation as may be mutually agreed.
3. ICES and the Arctic Council will:
  - A. share information relating to the areas of cooperation set forth in paragraph 2;
  - B. keep each other apprised of relevant work they are undertaking in those areas;
  - C. seek to participate in appropriate ways each other's programs and projects relating to those areas; e.g., by identifying subject matter experts to participate in relevant meetings;
  - D. consider the possibility of joint programs and projects, including the hosting of joint training activities and information sessions.
4. ICES and the Arctic Council will each identify through their respective Secretariats one or more focal points to coordinate cooperation under this MoU.
5. Nothing in this MoU imposes financial obligations upon either ICES or the Arctic Council.
6. This MoU may be amended by the mutual agreement of ICES and the Arctic Council.

- 7. This MoU may be terminated by ICES or the Arctic Council six months after giving notice of an intention to terminate the MoU.
- 8. This MoU shall remain in effect for 4 years if not terminated sooner in accordance with paragraph 7.

**IN WITNESS WHEREOF**, the duly authorized representatives of the Partners affix their signatures below.

**For the International Council for the  
Exploration of the Sea**

**For the Arctic Council**

President, Dr.Cornelius Hammer

Chair of the  
Arctic Council,

Date:

Date:



Ministry of  
Education  
and Culture



## Concept Note for convening the Second Arctic Science Ministerial

*The officers of the European Commission, the Republic of Finland and the Federal Republic of Germany – which are members of the Second Arctic Science Ministerial Organising Committee – have jointly prepared this document.*

### 1. Background

Scientific collaboration is vital to observing, monitoring and understanding the rapid changes taking place in the Arctic. Warming in the Arctic is about double the world average. Impacts have a global reach and represent a challenge of great concern and urgency. Communities and ecosystems around the Arctic are already experiencing the impacts of global change – science will contribute to minimizing the risks, finding methods of resilience and adaptation, and form a vital basis for decision-making.

The scale and pace of research must increase in order to develop predictive capabilities that inform decision and policy making processes. Existing national and international observing and research efforts are impressive, but they are not able to meet the demand for comprehensive and integrated information in the Arctic. There is a need to enhance cooperation and collaboration in Arctic science.

The first Arctic Science Ministerial (ASM1) was hosted by the White House in 2016. Science Ministers from 25 governments and the European Union and representatives from Arctic Indigenous peoples' organizations gathered to discuss collective efforts to increase the international scientific collaboration in the Arctic.

The ASM1 was organised around four themes:

1. Arctic-Science Challenges and Their Regional and Global Implications
2. Strengthening and Integrating Arctic Observations and Data-Sharing
3. Applying Expanded Scientific Understanding of the Arctic to Build Regional Resilience and to Shape Global Responses
4. Empowering Citizens through Science Technology, Engineering, and Mathematics (STEM) Education Leveraging Arctic Science

The declared long-term objective was to deepen international collaboration to enable nations to address large-scale research questions and increase the pace of discovery.

### 2. Rationale

The ASM1 was unanimously considered a success and proved to be key in the advancement of sustainable research and observation programmes. It highlighted, inter alia, the fact that the Arctic is still underrepresented in our global observing efforts and capabilities, and provides ample opportunities to enhance our global data gathering efforts.

Its broad format represented Arctic Science on an international scale including the contributions of Arctic and non-Arctic countries active in Arctic science. It included the valuable contributions of Arctic indigenous communities, which contributed through their traditional knowledge as well as through current data and observations towards an enhanced knowledge of the state of the environment in the Arctic region.

The impressive result of ASM1 was a Joint Statement of Ministers and a commitment of participants to

deliverables under the four themes chosen for the Washington Conference.

The deliverables and conclusions include identifying relevant Arctic Science challenges, strengthening and integrating Arctic observation through data sharing with the aim of an integrated observing array, applying scientific understanding to build resilience and shape global responses and the empowerment of citizens through STEM education leveraging Arctic science. The event was followed up by coordinated activities among the participants and regular teleconferences under US leadership to ensure a strong commitment towards the aims and deliverables.

In response to this valuable exercise and achievements of the US-administration under ASM1, focussing on Arctic Science, the European Commission, the Republic of Finland and the Federal Republic of Germany agreed to co-host the second Arctic Science Ministerial (ASM2) in the autumn of 2018. The Ministerial will not be an Arctic Council event, but connection is ensured by one of the ASM2 organisers, Finland, holding the chairmanship of the Arctic Council between May 2017 and May 2019. This connection is particularly important with regard to the Arctic Council's Agreement on Enhancing International Arctic Scientific Cooperation which will be signed by the Arctic Council Member States at the Ministerial Meeting in May, 2017. This legally binding agreement identifies various measures to increase the effectiveness and efficiency in the development of scientific knowledge regarding the Arctic.

The four themes discussed at the ASM1 and the relevant deliverables will be subjects of the Ministerial discussion in 2018 together with new themes that the organisers and the scientific community will identify as prominent.

All the delegations present at the ASM1 will be invited along with other governments engaging in Arctic Science. The participation of indigenous communities from the Arctic region is considered a priority. Their traditional knowledge and understanding of their natural environment is an essential element which contributes significantly to scientific understanding. Representatives of different Arctic community organizations from various Arctic countries around the world will be invited to take part in the Ministerial.

### **3. Structure of the event and expected objectives**

The ASM2 will take place over two days.

On the first day, an Arctic Science Conference will showcase the latest achievements in relation with the deliverables agreed under the thematic areas defined by the Washington White House Conference in 2016. Scientific advances presented in the ASM1 deliverables, as well as a necessary future commitment, will be the core of the discussion, open to many different Arctic stakeholders, policy-makers, NGOs, media. These discussions will prepare the ground for the high-level segment that will take place the second day.

A reception will be held in the evening of the second day. This event will provide an opportunity for Ministers and their delegations to meet representatives of the broader Arctic scientific and stakeholder community.

The format of the ASM2 will be decided by the co-organisers, taking into account lessons learned from ASM1. The discussion will focus on specific themes which reach across national boundaries and provide opportunities to advance understanding of, and ability to respond to major societal challenges in the Arctic.

The release of a Joint Statement will be one of the main objectives of the Ministerial meeting together with a report on the actions implemented in the previous two years and an updated list of "deliverables" that will generate results in the following years.

### **4. Date and Venue**

The Second Arctic Science Ministerial will be held in Berlin, Germany, on 25th and 26th October 2018.