



Ministry of  
Education  
and Culture



Bundesministerium  
für Bildung  
und Forschung

## 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.