

Arctic Council Senior Arctic Officials Plenary, 1-2 November 2018
Short report from the Second Arctic Science Ministerial
on behalf of the EU, Germany and Finland

The Second Arctic Science Ministerial took place on 25 and 26 October 2018 in Berlin, Germany. It was co-hosted by the European Union (*led by Directorate General RTD of the European Commission*), Germany and Finland.

25 Governments and the EU participated. They were joined by the representatives of the Indigenous Peoples' organisations, which are Permanent Participants in the Arctic Council, and by representatives from ten international organisations engaged in Arctic science.

The Second Arctic Science Ministerial was organised over two day with a Science Forum on 25 October and the Ministerial meeting on 26 October 2018. The Ministerial meeting focused on three themes where an improved and better-coordinated international scientific effort can provide clear opportunities to advance the understanding of the impact of rapid Arctic changes and to respond to major societal challenges in the Arctic and globally:

1. Strengthening, Integrating and Sustaining Arctic Observations, Facilitating Access to Arctic Data, and Sharing Arctic Research Infrastructure;
2. Understanding Regional and Global Dynamics of Arctic Change;
3. Assessing Vulnerability and Building Resilience of Arctic Environments and Societies.

The Joint Statement of Ministers was one of the main outcomes of the meeting.

The Science Forum brought together 280 scientists and science managers to discuss the most urgent steps to advance Arctic research. In total, 260 projects ranging from smaller efforts to very large and comprehensive programmes have been submitted as contributions to the Second Arctic Science Ministerial and are compiled in the Summary Report to the Ministerial that is currently being drafted and will be finalised in the coming weeks. The Science Forum output addressed ao. the challenge, expressed in many presentations, that the recently released IPCC report has clearly identified the Arctic as a major challenge. Stabilising the global average temperature at an increase of +1.5°C would be markedly different as compared to an increase of +2°C (*temperature increases above +1.5 °C poses disproportional risks in the Arctic*). The Arctic is a warning for the world for things to come and it requires our utmost attention. We need to understand what is happening in and to the Arctic, both in respect to climate change as well as to the social and economic changes taking place simultaneously. In the face of these changes, we must act now. The Forum also pointed out that since the first White House Arctic Science Ministerial in 2016 substantial progress has been made in several fields. International research collaboration in the Arctic has increased and many different national and international Arctic observation programmes, including those by and/or joint with indigenous peoples. The shared use of infrastructure such as icebreakers and polar stations is advancing. However, many unknowns remain and we still do not have reliable predictions of the impending changes.

The Ministerial meeting opened with a video prepared by Germany setting the scene for the Arctic research challenges, highlighting that Arctic Science is a global responsibility, the need for recognition of the urgency of providing new and more reliable knowledge, and the importance of working together, ensuring involvement of Indigenous Peoples and local populations as well as of capacity building and training.

Chancellor Angela Merkel addressed the Ministerial meeting via a video address. The three co-hosts gave welcoming addresses, followed by a summary of the previous day's discussions by the Chair of the Science Forum.

The Ministerial meeting consisted of three substantive sessions. The first session -- dedicated to Arctic observations, data and research infrastructures -- was chaired by the EU Commissioner Carlos Moedas. In the 12 statements presented in this session, these salient points stand out:

- The strong commitment of the EU presented by Commissioner Moedas to work in the Arctic as part of our broader commitment on climate change, and his announcement of a coordinated action with the US on Arctic observations where the EC will invest 15M€ in 2020, as part of a broader investment plan of the value of about 70M€ in 2019-2020;
- This announcement was complemented by the US announcement of the same coordinated action with the EU in which the NSF will invest 30M\$ starting from 2019, and of their support to the EU infrastructure projects INTERACT and ARICE;
- A broad convergence on increasing commitment expressed by all other countries, namely Belgium, Italy (*announcing a new Polar Institute and funding*), Portugal, Republic of Korea, Russia, Spain and Sweden;
- The request of three Indigenous Peoples organisations of the recognition of the specificity of Indigenous knowledge, and a call to all countries for co-creation of scientific activities in partnership with Indigenous peoples and for delivering results of relevance for their decision-making processes.

The second session -- dedicated to Arctic science -- was chaired by the German Minister Anja Karliczek. Among the 9 country statements, these salient points stand out:

- The strong engagement of Germany that has promoted and funded the MOSAiC programme in which the German icebreaker Polarstern will be left being blocked in the ice in order to drift for one full year with the ice movement across the central Arctic Ocean. This new major “adventure” will allow collecting unprecedented datasets that will be extremely useful for climate change and biodiversity research;
- China made some major announcements of new Arctic activities, in particular for studying the impact of Arctic changes on extreme events in the Northern hemisphere and the interaction with the Tibetan plateau. They also announced the construction of a new very powerful research icebreaker, and the collaboration with several countries and in the MOSAiC programme;
- Japan mainly talked of the achievements of their multi-annual ARcS programme that will also share resources with Horizon 2020 projects, with main interest on the impact of Arctic changes on climate and extreme events. They also announced the probable construction of a new research icebreaker and the expansion of their research station at Svalbard;
- Other interventions were from Austria, the Kingdom of Denmark (*as Depository gave an update the adherence to the Arctic Council agreement on scientific cooperation*), France (*underlining France's key role in the context UN climate change negotiations*), the Netherlands (*supporting MOSAiC and having evident priorities on sea level rise*), Poland (*highlighting their Arctic literacy EU-funded project EDU-Arctic and their interest in improving predicting capabilities of extreme events*), and Switzerland (*expanding their Greenland base and their new expedition circumnavigating Greenland in 2019*).

The third session -- on science for building resilience -- was chaired by the Finnish Minister Sanni Grahn-Lasonen. Eight governments and three Arctic Indigenous Peoples organisations presented a statement in this session. The most important issues can be summarised as follows:

- Finland, in its role of current chair of the Arctic Council, presented its actions in relation of the climate change focus of its Arctic Council chairmanship, in which adaptation and the use of several strands of knowledge for adaptation, including knowledge of indigenous peoples and local communities, play a relevant role.

- Norway indicated that mitigation is the most important adaptation policy and stressed the need of improved predictions for better Arctic climate services.
- Iceland, which discussed how to deal with unpredictability and uncertainty due to climate change – saying also that they rely on knowledge of local communities, and announced their priorities for the future Arctic Council Icelandic chairmanship (2019-2021), focused on sustainable development;
- The three Indigenous Peoples organisations (Athabaskans, RAIPON and Saami) who made some very evident examples of what is changing in the Arctic and how this impact on Arctic wildlife and people's livelihoods, and on the need to co-produce solutions making use of science and of Indigenous knowledge.
- There were also the interventions of UK, Canada (*great increase of research budget*), Faroe Islands, Greenland (*focus on education*), Singapore (*particular interest in issues related to sea level rise*).

The closing session saw the signature of the Joint Statement of Ministers. The Joint Statement includes also recommendations for joint actions related to the three themes of the Ministerial. The listed actions reflect the high number of inputs received by all the participants in the Second Arctic Science Ministerial.

The event was closed by three conclusive messages of the co-organisers, followed by the announcement and approval of the joint candidature of Japan (*local host*) and Iceland (*co-organiser and Chair of the Arctic Council*) to organise the Third Arctic Science Ministerial in 2020 in Japan.

Link: www.arcticsscienceministerial.org