



ARCTIC
SDI Arctic Spatial
Data Infrastructure

Enabling Access to Arctic Location Based Information



Kartverket

Arctic SDI is based on voluntary commitments by the National Mapping Agencies from 8 countries that border the Arctic Circle

There is a signed MoU towards cooperative development of an Arctic SDI.

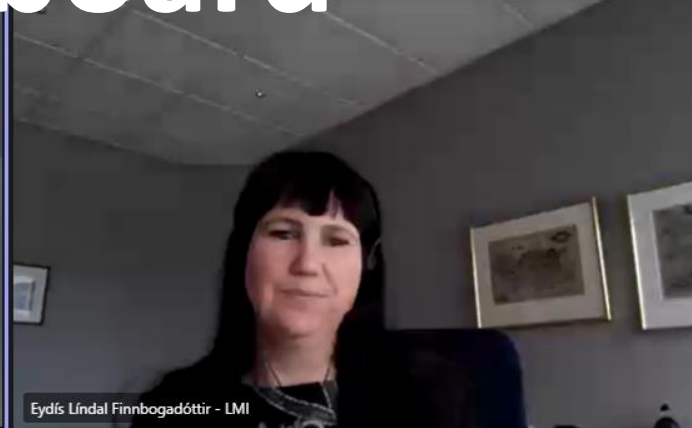
Endorsed by the Arctic Council

- Earth Sciences Sector of the Department of Natural Resources Canada
- Danish Agency for Data Supply and Efficiency
- National Land Survey of Finland
- National Land Survey of Iceland
- Norwegian Mapping Authority
- Federal Service for State Registration, Cadastre and Mapping of the Russian Federation
- Swedish Mapping, Cadastral and Land Registration Authority
- U.S. Geological Survey

Arctic SDI

The Arctic SDI is a collaborative partner-based effort of the National Mapping Agencies Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and USA – to lead and guide the development of an *Arctic Spatial Data Infrastructure* and – to provide open access to a coherent and authoritative Arctic reference map and thematic Arctic data

Arctic SDI board



Russian Chairmanship Architecture

- 1) Economic cooperation
- 2) Human resources
- 3) Environmental protection and climate change
- 4) Indigenous Peoples of the Arctic
- 5) Sustainable navigation and infrastructure
- 6) Emergency prevention
- 7) International scientific cooperation in the Arctic
- 8) Arctic youth
- 9) Arctic tourism
- 10) Arctic culture and sports



Arctic Council Working Groups

ACAP ARCTIC CONTAMINANTS
ACTION PROGRAM

PAME
Protection of the Arctic Marine Environment

CAFF
Conservation of Arctic Flora and Fauna



Sustainable Development
Working Group

EPPR Emergency Prevention,
Preparedness and Response

AMAP
Arctic Monitoring and
Assessment Programme



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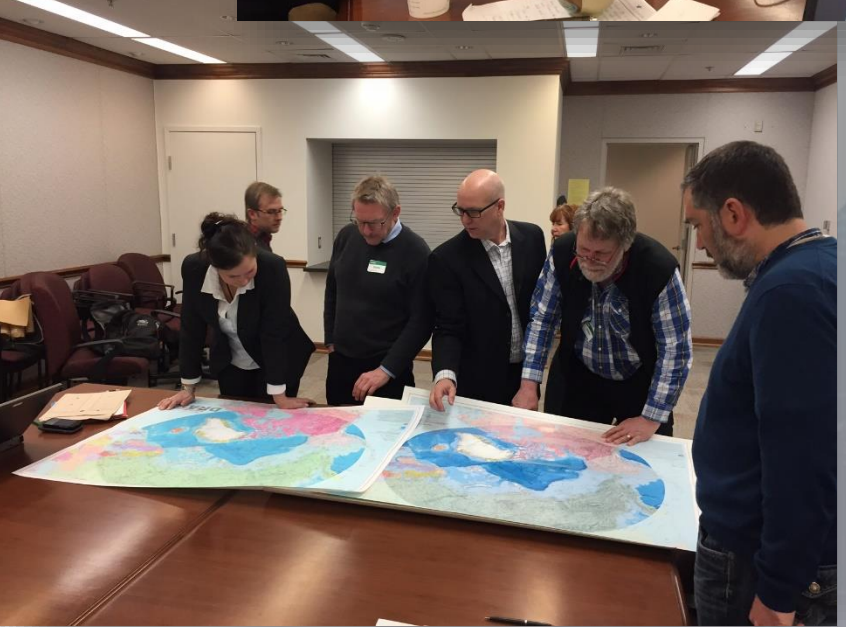
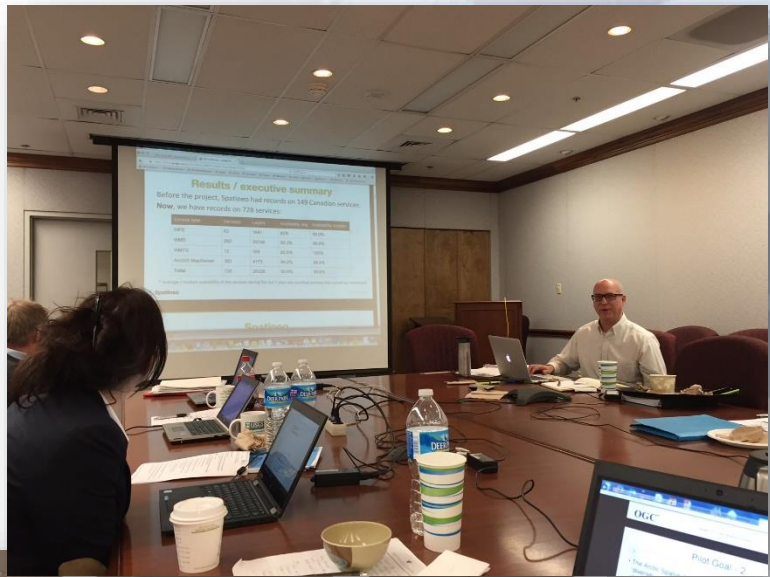
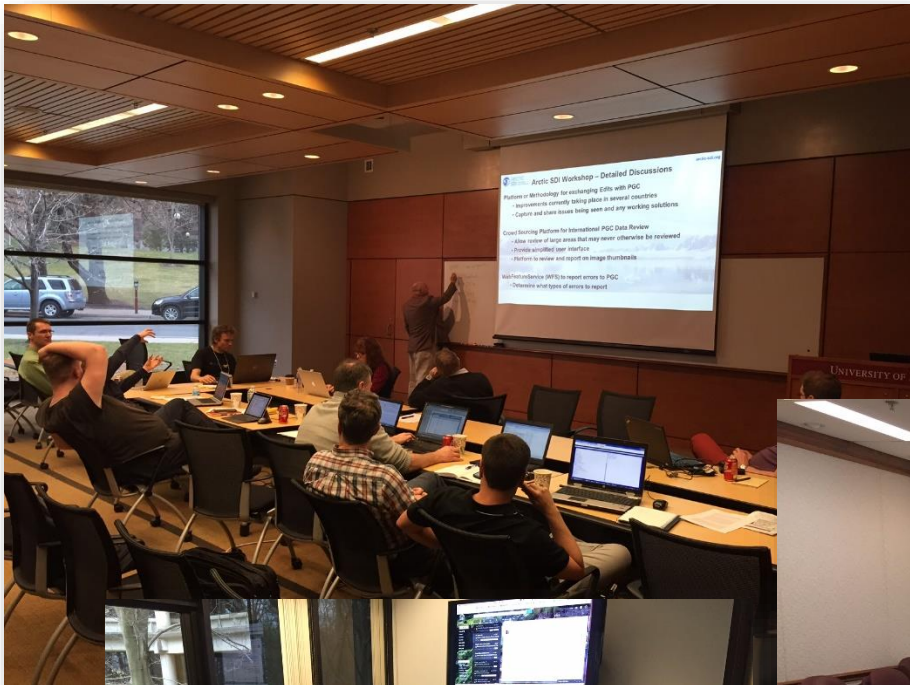
Common operational picture



**Monitoring,
Management,
Emergency preparedness
Decision making**



ASDI WG and NCP





GUIDELINES FOR DATAPROVIDERS

The Guidelines for Data Providers were designed to help your organization publish data assets.

The guidelines provide recommendations on how to facilitate access to and reuse of data assets. Open data sharing gives access to a wealth of interoperable data and information from diverse sources. This allows spatial integration and analysis that help gain knowledge and answer complex societal questions.

These guidelines also provide a list of questions to ask when contracting the creation of a report and associated data, while ensuring that the new data is standardised and accessible for future reuse.

READ MORE

- Introduction
- Organizations and responsibilities
- Data Stewardship

DATA PROCUREMENT

Responsibility of data purchaser

To consider when a
new dataset is to be
ordered

DATA CREATION

Responsibilities of data producer

To consider when
designing and
creating new
datasets

DATA MANAGEMENT

Responsibilities of data owner

To consider when
datasets and services
are updated and
decommissioned

DATA DISTRIBUTION

Responsibilities of data distributors

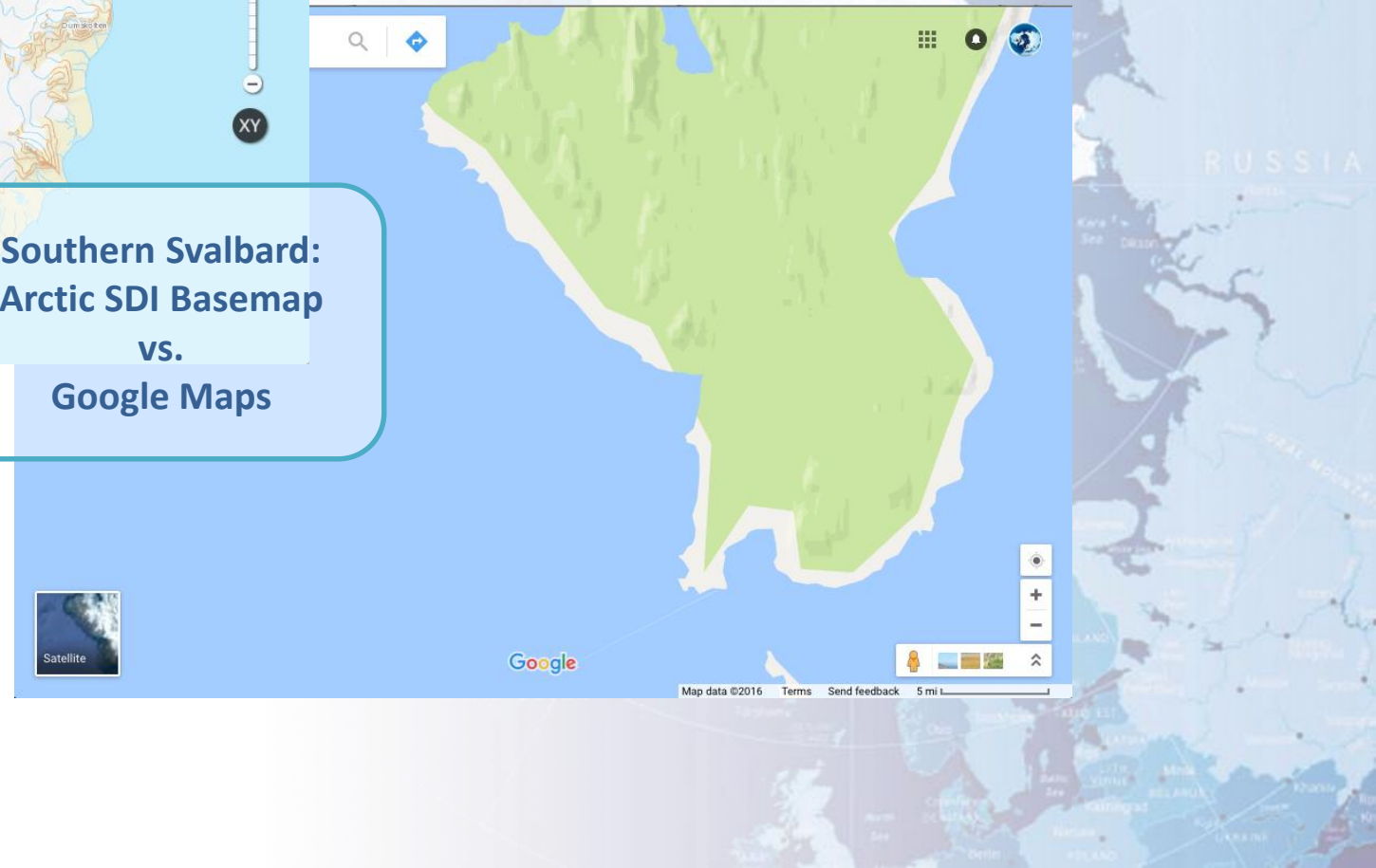
How to distribute
your data according
to Arctic SDI
principles



Arctic SDI provides an
Authoritative Reference Basemap
Provided Directly from the
8 Arctic National Mapping Agencies

**Southern Svalbard:
Arctic SDI Basemap
vs.
Google Maps**

**Arctic SDI provides
access to all forms of
authoritative data**





Arctic Spatial Data Infrastructure

SEARCH

MAP LAYERS

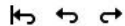
SELECTED LAYERS 4

MY DATA

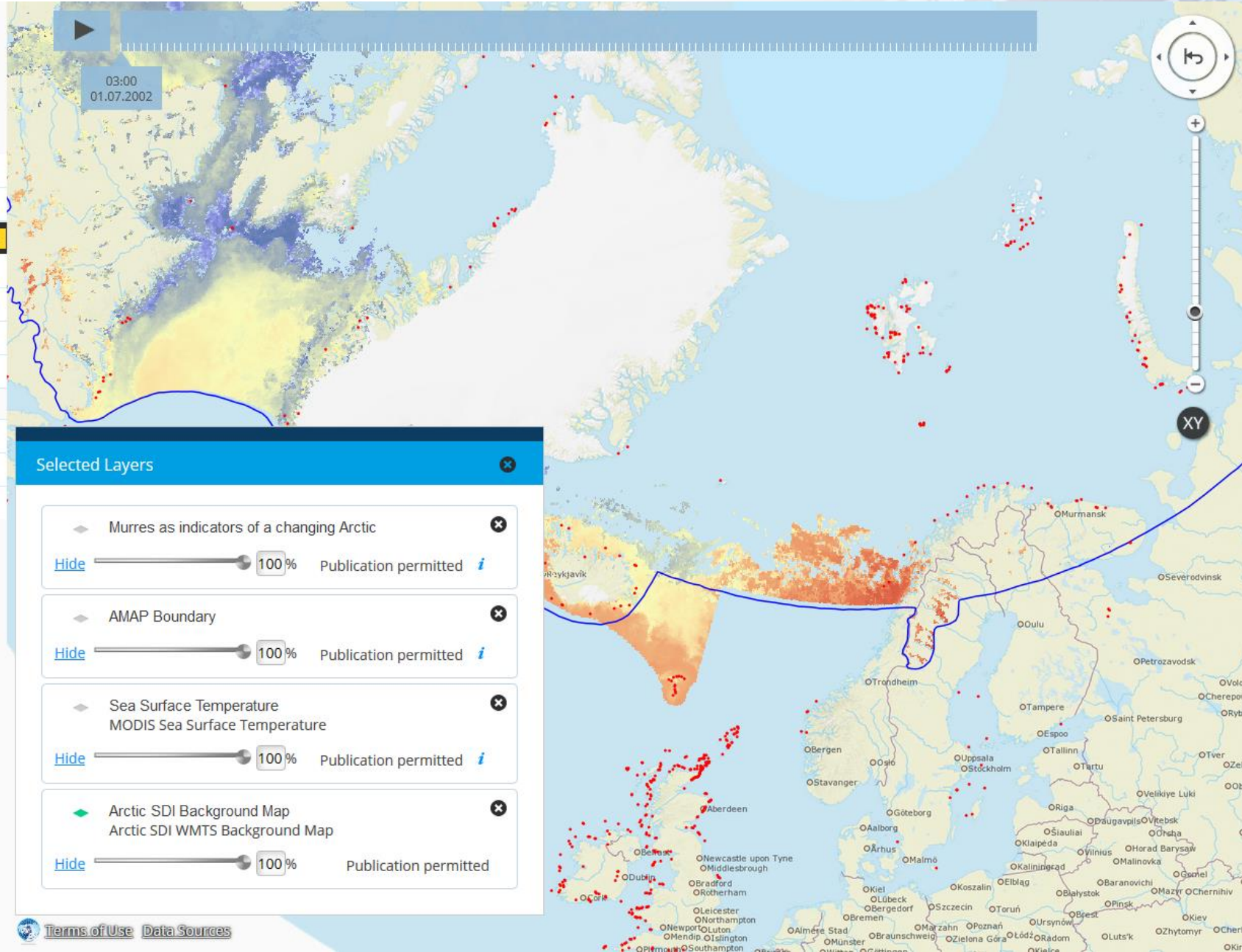
MAP PUBLISHING

MAP LEGENDS

USER GUIDE



[Logout](#)



Selected Layers

Murre as indicators of a changing Arctic

Hide

100 %

Publication permitted

AMAP Boundary

Hide

100 %

Publication permitted

Sea Surface Temperature
MODIS Sea Surface Temperature

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100 %

Publication permitted

Arctic SDI Background Map
Arctic SDI WMTS Background Map

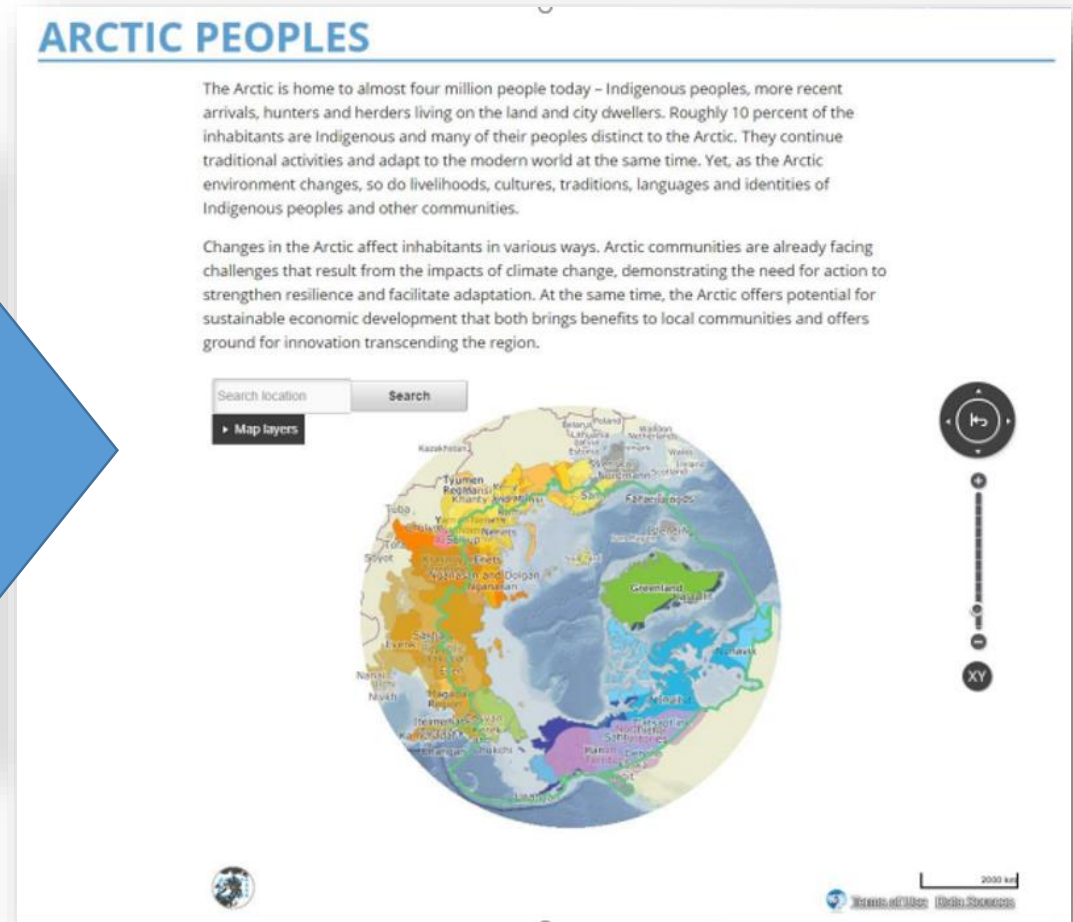
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Publication permitted

Arctic SDI Geoportal

Eksempel på bruk av «embedded map»



Arctic Council Data Policy

Bakgrunn

The 2020 request from SAO to the Arctic Council (AC) Secretariat and the working groups

“to start exploring how cooperation can be strengthened with Arctic SDI at the operational level to ensure data is accessible, open and widely shared”.

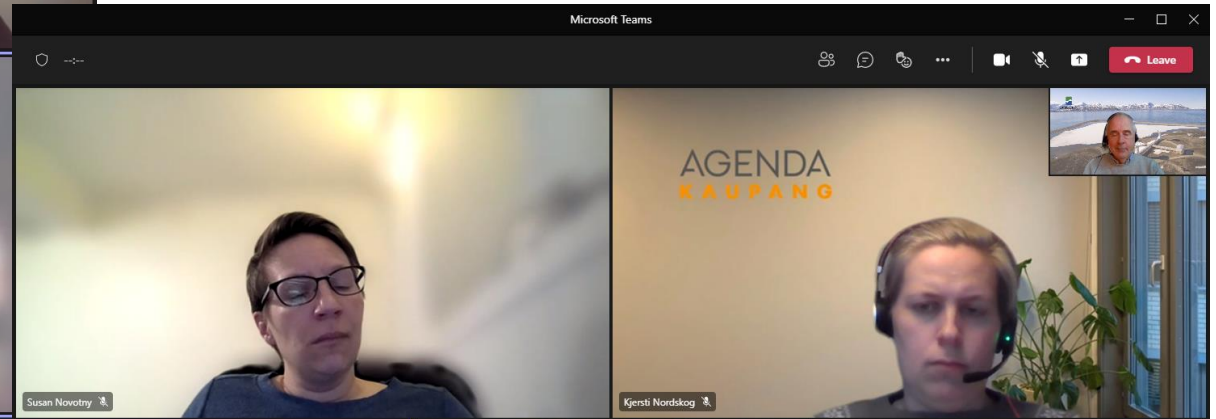
The May **2021 Arctic Council Ministerial Declaration** (52):

“recognize that adequately responding to rapid changes in the Arctic environment requires access to [...] reliable data to facilitate understanding and informed decision making, welcome progress on implementing guiding principles on management of and access to data and facilitate that data, generated by the council, is findable, accessible, interoperable, reusable, and widely shared.”

The May 2021 **Arctic Council Strategic Plan** (63):

“the Arctic Council will [...] encourage public access to, and sharing of, Arctic relevant data, including through implementation of the Agreement of enhancing International Arctic Scientific Cooperation” (63).

Arctic Council Data Policy – consultation with WG



Possible topics to be covered by a data policy:

- Data Management principles and processes to be included in the Working Group Operating Guidelines
- Data management plans for expert groups/projects
- principles for management of data about and collected by the Arctic Indigenous peoples, including the issue of intellectual property rights
- Common platform and tools to host, maintain and share data
- Access across the secretariats to data management advice and expertise, including maintenance of metadata and cartographic support and training
- Harmonization of data management across the working groups (respecting the differences - one size do not fit all).
- Considerations on how to facilitate the implementation of the [2017 Agreement on Enhancing International Arctic Scientific Cooperation](#)
- Alignment to the FAIR, TRUST and CARE data principles

Interim agreement

In accordance with the Joint Statement on Arctic Council Cooperation this is the status for the Arctic SDI cooperation in light of Russia's flagrant violation of the core principles of sovereignty and territorial integrity, based on international law:

- Our representatives will not travel to Russia for meetings of the Arctic SDI
- Additionally, we are temporarily pausing participation in all meetings of the Arctic SDI, pending consideration of the necessary modalities that can allow us to continue the Arctic SDI work in view of the current circumstances.
- On the Arctic SDI website you can find the following text: "The Arctic SDI is pausing all official meetings until further notice"
- Internal Arctic SDI archive and shared documents were secured. An interim work space will be created for the continuation of informal work between us.
- National efforts to advance ongoing projects internally, data collection, and informal contact related to ongoing projects that does not require the direction of the Board, National Contact Points or working groups continues in selected activities as long as it does not involve participation of the Russian Federation.
- Modalities to allow the continuation of the Arctic SDI work will be prepared following an expected joint statement on the continuation of the work of the Arctic Council