



**ARCTIC
SDI** Arctic Spatial
Data Infrastructure

Make Arctic data Accessible and reusable

Roadmap to open and cost effective data management policy

2nd Arctic Biodiversity Congress 2018

Make Arctic data accessible and reusable
Roadmap to open and cost effective data management policy

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Make Arctic data accessible and reusable

Roadmap to open and cost effective data management policy

Why the issue of data managing policies in the context of the Arctic Council ?

- Stakeholders needs to understand the nature of data infrastructure
- Stakeholders needs to understand their roles and responsibilities



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Roadmap to open and cost effective data management policy

- The political demands – fast reaction to changes
- The public demands – open and easy access to data

You need to share your data

You need to leverage your data towards potential users

- Use standards and and API's – both for data and for sharing
- When using reference data - Use authoritative sources

Make it possible for others to find, use, reuse and combine data !



Make Arctic data accessible and reusable
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How easy is it to

- Search and find data ?
- Distribute your data ?

Do we know our roles and responsibilities ?

Do we know what to ask for ?



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- Use international standards both for data and for sharing (distribution)
- Metadata – make it easy to find and understand
- When using reference data and thematic data – find and use reliable authoritative sources



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Roadmap to open and cost effective data management policy

Will guidance and tools be of any assistance?

- On what standards to be followed
- Input to Term of Reference
- On reliable authoritative data sources



Roadmap to open and cost effective data management policy

- Digitalized data
- Easy access to data in general
- Easy access to specific data sets
- Data to be interoperable
- Guidance and tools

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The purpose of this session

- Data Infrastructure – focus on Spatial Data
- The infrastructure elements: Data, Services and Governance
- The services and role of Arctic SDI



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This session will also show examples of

- The Arctic Geoportal – readily available data, services and tools (Arctic SDI)
- Data presentation and sharing in practice – Arctic Biodiversity Data Service (CAFF)
- Data presentation and sharing in practice – Global Biodiversity Information Facility (GBIF)
- Arctic Marine Data as an example (ARMSDIWG)



Who is the Arctic SDI – Government Agencies:

- National Resources **Canada**
- Agency for Data Supply and Efficiency, **Denmark**
- 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 and Land Registration Authority
- **United States** Geological Survey



Arctic SDI

- Board – General Directors
- Partnering with Norwegian Polar Institute and IHO / Arctic Regional Hydrographic Commission
- Endorsed by Arctic Council Senior Arctic Officials
- Reporting biannually to the Arctic Council



What is in the pipeline

Arctic Council Secretariat and the Working Groups:

- New maps with administrative and thematic borders
- Specific small scale projects with CAFF, Wetlands data and Earth Observation data
- more Marine Data from IHO/ARHC





Guidelines & Best Practices

- **Guidelines for Data Providers**
- **Manual for Spatial Data Infrastructure for the Arctic**

International alignment

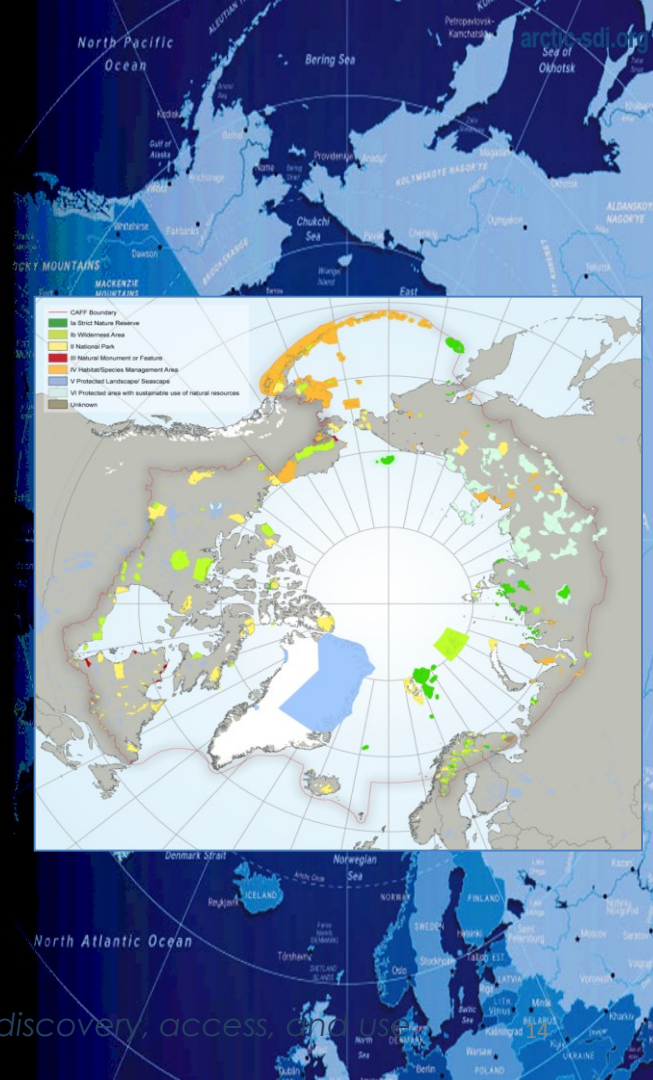
UN-GGIM

ISO

OGC

IHO

Increased efficiency and improved discovery, access, and use





Strategic Documents

Who and What is the Arctic SDI?

- [2015-2017 Biennial Report](#): Highlights from the US Chairmanship
- [Arctic SDI Fact Sheet 2016](#)

Governing Documents

- [Signed Memorandum of Understanding](#)
 - English, French, and Russian version
- [Arctic SDI Governance](#) v2.0

Arctic SDI Strategic Plan Documents

- [Strategic Plan 2015-2020](#)
- [Implementation Plan](#)
- [Roadmap](#)

Arctic Spatial Data Pilot

- [Open Geospatial Consortium Spatial Data Pilot](#) with data intensive scenario based videos and a Final Engineering Report

Pan-Arctic Digital Elevation Model

- [ArcticDEM – Arctic SDI Board Position Statement](#)
 - [Polar Geospatial Center ArcticDEM Documentation](#)

Arctic SDI Documentation

- [SDI Manual for the Arctic with Glossary of Terms](#)
 - Guidance and information management good practices on commonly accepted SDI operational policies and standards.
 - Audiences: strategic decision makers, data providers, distributors and end users of Arctic data
- [Arctic SDI Glossary of Terms](#)
 - A living glossary providing terms, acronyms, definitions and sources
- [Arctic SDI Evaluation](#)
 - [Arctic SDI Evaluation Report](#)
 - [Arctic SDI Evaluation Framework](#)
 - [Arctic SDI Evaluation and Benchmarking presentation](#)



Arctic SDI Historical Framework

- [Arctic-SDI-Framework-Document_V2 0](#)

Arctic SDI Video on YouTube



arctic-sdi.org

Arctic SDI Fact Sheet



GEOSPATIAL DATA – A TOOL FOR BETTER INFORMED DECISIONS AND MORE EFFICIENT ADMINISTRATION IN THE ARCTIC

Improved access to geospatial data can help us better to predict, understand and react to changes in the Arctic. Responses to the impact of climate change and human activities in the Arctic requires accessible and reliable data to facilitate monitoring, management, emergency preparedness and decision making.

Important data sets are produced and distributed by many stakeholders – public and private sector – and most of it can be geographically referenced. A spatial data infrastructure provides tools for data distributors to ensure that their geospatial data is easier for users to access, validate and combine with other data.

The Arctic SDI provides such an infrastructure and its development is facilitated by the National Mapping Agencies of the eight Arctic countries.

The Arctic SDI Geoportal and the initial Arctic SDI Reference Map – the basic building blocks in the Arctic Spatial Data Infrastructure are available

• The Arctic SDI Geoportal providing a web map viewer for use by any interested user to access the Reference Map. More details are available at arctic-sdi.org



Arctic SDI Geoportal in the

Find us at the Poster Session this
afternoon !

Questions ?

