



**ARCTIC
SDI** Arctic Spatial
Data Infrastructure

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 Web Map Service covering the Arctic Region and its Metadata Catalogue Service. Available services will be expanded in the future.

Visit: <http://geoportal.arctic-sdi.org>

- The Reference Web Map Service – one of the cornerstones in the infrastructure – providing access to a coherent and authoritative Arctic reference map brought together from National Mapping Agency data.



Arctic SDI Geoportal in the global context

- Is aligned with the global, regional and national geodata context – eg. UN-GGIM, GEOSS, INSPIRE, NSDI and CGDI
- Adheres to Open Data principles, including facilitation of open and interoperable data based on OGC and ISO standards, specifications, architecture and software
- Capitalizes on previous spatial data infrastructure work and the evolution of standards.



Strategy for Arctic Council stakeholder dialogue and development of the Arctic SDI 2015 - 2020

- Dialogue with Arctic Council stakeholders identifying needs, requirements and possible contributions
- Develop the Arctic SDI and its map and metadata services providing access to additional reference geodata and thematic data
- Pursue Open Data standards, emerging technologies and industry best practices to remain relevant and interoperable
- Develop governance and guidelines on standards, technical components and services.

The Arctic SDI cooperation

The Arctic SDI governance model is based on cooperation on prioritized activities where, as agreed to in the Arctic SDI Memorandum of Understanding, activities are developed and managed through the voluntary commitment of each agency. You can learn more about the Arctic SDI at the website: <http://arctic-sdi.org/>.

History of the Arctic SDI

The Arctic SDI concept was introduced in 2007 and the Arctic Council Senior Arctic Officials unanimously gave formal support to the Arctic SDI initiative in 2009. The signing of a Memorandum of Understanding (MOU) in 2014 led to demonstrable progress toward building the first elements of the Arctic SDI and approving a new governance model as well as the Strategic Plan 2015 - 2020.



The role of the 8 National Mapping Agencies of the Arctic countries

- Provide stakeholders access to a coherent and authoritative Arctic reference map through the publication of selected data from their respective holdings
- Lead and guide the development of an Arctic SDI to further spatial data infrastructure best practices.



website: arctic-sdi.org

Arctic SDI participating National Mapping Agencies

- Canada Centre for Mapping and Earth Observation, Natural Resources Canada
- Danish Geodata Agency
- 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