ARCTIC SDI BOARD MEETING MINUTES

Skype 16. June 2020

Board Members:

Finland, Arvo Kokkonen, Director General National Land Survey of Finland

Canada, Eric Loubier, Director General, Canada Centre for Mapping and Earth Observation, Strategic Policy and Results Sector, Natural Resources Canada

Denmark, Kristian Møller, Director General, Danish Agency for Data Supply and Efficiency

Iceland, Eydís Líndal Finnbogadóttir, Director General, National Land Survey of Iceland

Norway, Johnny Welle, Director General, Norwegian Mapping Authority

Russia, Vyacheslav Spirenkov, Director of Federal Cadaster Chamber, Federal Service for State Registration, Cadastre and Mapping

Sweden, Anders Sandin, Director, Swedish Mapping, Cadastre and Land Registration Authority

USA, Kevin Gallagher, Associate Director U.S. Geological Survey

Secretariat, NCP's and Working Group Leads: Gunnar H. Kristinsson, Heli Ursin, Timo Arnio, Andrey Mukhin, Cameron Wilson, Simon Riopel, Peter Pouplier, Lorna Schmid, Kåre Kirkjeeide, Fredrik Persäter, Peter Bodley

Video of Arctic SDI shared

Welcome and approval of the agenda

Eydís Líndal Finnbogadóttir welcomed the members to the Board meeting and there was a short introduction from all board members. Agenda was approved.

Update from Executive Board Meeting

The Chair went through the main decisions made at the Executive Board meeting in Helsinki in February. The Executive Board is composed of past, present and future members. Russia, Iceland and Norway will be the next Executive Board.

- Open Licensing Policy for the Basemap
- Embedded Map Pilot with AC
- Updated website
- Arctic DEM 2nd generation
- Importance of data WG
- Strategic Plan 2020-2025

Arctic SDI Chairmanship report

The focus points of Iceland chairmanship was:

- To finish some of the projects that's already started during last few years
- To provide methods to use Arctic DEM as national data to build Digital elevation model of Arctic Glaciers and estimate the changes
- To update the strategy of Arctic SDI
- To see increase in access to spatial data from Arctic regions and increased use of the Arctic SDI base map and gazetteer.

The redesigned web page provides all necessary information about Arctic SDI. Guidelines for Data Providers have also been launched as a web page.

The Arctic SDI Geoportal has also reached maturity and has been running smoothly while new functions have been added and necessary updates made.

The importance of the Technical Working group and it's sub-group has been growing as these groups are responsible for the data we want to provide access to, our own data or data from other relevant sources. It was therefore decided to add more commitment to the Data Working group but unfortunately the CoronaVirus pandemic has had impact on the work and delayed it.

Data Stewardship is a key to ensuring digital access to an increasing volume of data in reports published by the Arctic Council Working Groups. We had planned to show you some good results of the Pilot Project while in Tromsö, but as some other things in 2020, it had to be postponed.

A SAO participation this year was planned this year but was postponed but hopefully Arctic SDI will be able to be on the agenda at their meeting in the autumn. Notes request to Arctic Council on Information Management practices request. Will bring the request forward again in the Autumn.

Iceland has endorsed the ArcticDEM project during the country's chairmanship of the Arctic Council. The status of that project is that methods have been created of using DEM data to monitor glacial volume changes and is still to be developed further. A report will be presented at the end of the chairmanship period.

One of the main tasks for Arctic SDI these last months, and what's been most time consuming, has been creating a new strategy for 2020-2025. The NCP's are thanked for their hard work on delivering this new strategy in time.

Iceland is half way in it's chairmanship of the Arctic SDI project and it seems that we will be able to get results in our focus areas and move Arctic SDI one step closer to it's Vision and Mission before our term is over.

Prioritized Activities
Gunnar H Kristinsson presented Activities closed in 2019-2020

Business Processes Activities: highlights Guidelines for Data Providers

KPI statistics presented:

- 2019: 36 .000 guests, 83.000 visits
- 2019: ~ 25.000 monthly pages viewed by real users
- Most popular is pages are About… and Map Gallery (~100 - 200 monthly visits)
- Most popular documents downloaded are Manual for the Arctic, Arctic SDI Fact sheet and and Strategy plan (~50 - 60 monthly)

GeoPortal Activities summarized:

- Four major new releases of OSKARI with new functionality and stability updates. Some functionality has been specifically developed for Arctic SDI
- The tool for visualizing statistical data linked with geospatial data has been taken into production
- Embedded Maps and Geoportal was demonstrated to the Arctic Council Secretariat
- Geoportal video: https://youtu.be/Ytf3ahdvMms

KPIs:

- 27 relevant and validated NMA reference datasets are available through the Geoportal
- 138 relevant and validated external datasets are available through the Geoportal
- 104 applications are using the Arctic SDI and its Geoportal

NMA Services

- Sourced data and created interim service to support the Arctic Council Secretariat Embedded Map Pilot
- Sweden and Finland are developing pilot projects in the use of Vector Tile map services in Arctic SDI
- Work to create a download service for the Gazetteer service so that the data can be made available for offline use
    - Pending licensing terms

KPIs:

- **Geoportal**
    - 5,801 visits,
    - Approx. 480 visits per month
- **Gazetteer**
    - 95100 requests,
    - Approx. 7900 per month
- **Metadata Catalogue**
    - Total calls: 7058
    - Average calls per month 588

External Data

- Developing the Arctic Council Data Stewardship Pilot with AC working groups and the Arctic scientific community
- Collaborating with ARMSDIWG to Identify and evaluate marine data for use by Arctic SDI.
- Integrated Marine data into the Arctic SDI Gazetteer service.
- Working on the development of a Pan-Arctic Wetlands Inventory Map with CAFF
- Investigation and leveraging of suitable satellite imagery to be included in the Geoportal
- Arctic SDI high level data flows diagram and architecture were completed
- Working on the creation of a 2nd generation Arctic DEM including national elevation data
- Developed an evergreen catalogue of Arctic Spatial Web services and data holdings and this catalogue is being harvested regularly into the Arctic SDI Metadata Catalogue.
- Presented and hosted a workshop during the Polar Data Forum III

KPI – Number of data providers publishing metadata in the Arctic SDI Metadata Catalogue

- 11 (incl. Arctic SDI)
- Total number of metadata records in catalogue: 3492
- Total number of harvested record in catalogue: 3486

Communication, Outreach and Value Creation

- New website design published in December 2019 with updated content especially about the Arctic SDI Services
- Active participation in UN-GGIM side event together with ARMSDIWG and OGC Marine WG
- The new Arctic SDI Strategic Plan 2020-2025 and the Roadmap & Implementation Plan was developed
- Guidelines for Data Providers published on the Arctic SDI Website in December 2019. The guidelines demonstrate what to ask for (Terms of Reference) when demanding data as part of an assignment.
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ENDORSEMENT: The Board endorsed that Arctic SDI scale up the Vector Tile Project for our Basemap data. We will bring our experts together in a virtual meeting to contribute to the direction of the pilot.

Arctic SDI Strategy 2020-2025 and Closeout of the 2015-2020 Strategy

In 2015 the Arctic SDI Board approved a Strategic Plan 2015-2020 which provided a high-level overview of the background, organization and philosophy of the Arctic SDI.

In 2018 the Board decided that: "The strategy should be renewed during 2019-2020". Lead by Canada, Denmark, Sweden, USA. Strategy reflects our maturity. Lorna presenting.

New Vision and Mission were approved on Board meeting 2019

Vision: Facilitate reliable and interoperable access to geospatial information in support of social, economic and environmental monitoring and decision-making in the Arctic.

Mission: To promote the cooperation and use of the Arctic Spatial Data Infrastructure, enabling sharing of Arctic location-based data, while pursuing data management best practices and value creation.

2020-2025 Strategic Plan and Roadmap & Implementation Plan provide a higher level approach to build on work to develop our reputation as a reliable organization in the Arctic and focus on striving to create shared value and engage with identified key partners and stakeholders.

Development of the new strategy has been guided by the Board request to reduce the number of documents by combining the implementation and roadmap documents and focus on content rather than format.

Five objectives with associated actions that will guide our work (with 22 actions).

1. Promote Data and Services Availability
2. Promote Interoperability
3. Strengthen Engagement
4. Amplify Communication Channels
5. Further Governance and Business Processes.

A continuation of the work we have been doing and taking it to the next level.

6 objectives, 38 objectives, 20 operational, 11 completed, and 7 transferred to 2020 activities. Demos briefly 2015-2020 Roadmap Closeout Table (metadata catalogue, evergreen catalogue, etc.)

Joint effort (co-writing) from Sweden, Denmark, Canada and US with key input, knowledge and approval from all NCPs and WG leads

The Board members were all very supportive of the work done by the NCP's and aknowledged the effort made by the contributors.

Request to the Board: Approve New Arctic SDI Strategic Plan 2020-2025, Roadmap and Implementation Plan and 2015-2020 Strategic Plan Closeout

DECISION: Board approves New Arctic SDI Strategic Plan 2020-2025
DECISION: Board approves Roadmap and Implementation Plan
DECISION: Board approves 2015-2020 Strategic Plan Closeout

RECOMMENDATION: The board recommends more focus on user and business needs and to put more focus on outreach activities, deliverables and clear and simple messages

For board decision and endorsement

The DEM experts and NCP's recommends the following stepwise approach:

1. Update the Arctic SDI Metadata Catalogue with the NMA's elevation data
2. Document use cases of 2nd generation DEM data
3. Create an index layer on the Arctic SDI Geoportal of the NMA's DEM data layers
4. Pilot to analyze border issues when migrating to a WCS protocol (USA and Canada)
5. Prepare national DEM data and begin WMS distribution:
6. Enabling the NMA WMS services to provide service in the 7 polar projections
7. Establishing 2 common cartographic specifications: colour-ramp styling and Shading.
8. Investigate the requirements for distributing the Arctic DEM as a cascaded and cached service.

When coordinating and implementing each step it is acknowledged that the possibility for using the DEM will be different nationally and the ability to deliver the recommended steps will vary in time frame and between the NMA's.

Request to the Board: To approve the next steps towards a 2nd generation Arctic DEM for the Arctic in a stepwise approach reflecting the different national possibilities for using and developing the Arctic DEM in the participating countries

DECISION: Board approves the next steps towards a 2nd generation Arctic DEM for the Arctic in a stepwise approach reflecting the different national possibilities for using and developing the Arctic DEM in the participating countries. It is acknowledged that the possibility for using the DEM will be different nationally and the ability to deliver the recommended steps will vary in time frame and between the NMA's.

Recommendation: Use a new name instead of Arctic DEM 2nd gen. Send to WG to propose a clear name.

It is proposed that the methodology used to create a Canadian Wetlands Map be applied to the Pan-Arctic. The Canada-wide wetland inventory map has a spatial resolution of 10 m derived from a classification using multi-year optical/SAR data composite with an overall accuracy approaching 80%. The Pan-Arctic Wetland Inventory Map project would be led from Canada with ground truth inputs from each country to occur over 3 phases.

The main customer is CAFF and under CAFF there is a Wetland expert group. Canada is working with them to find out about their needs etc.

Request to the Board: To endorse the development of a Pan-Arctic Wetland Inventory Map.

DECISION: The Board endorses developing the governance and processes to develop a Pan-Arctic Wetlands Inventory Map

A pan-Arctic wetlands map would provide a valuable dataset and the Arctic SDI Board endorses work to support user requests for this data and facilitate discussions with domain experts on the governance, processes and development steps necessary to create a Pan-Arctic Wetland Inventory Map.

The ARMSDIWG Chair approached the Arctic SDI National Contact Points to suggest an adjustment to the Statement of Intent to ensure it reflects endorsement at equivalent levels between our organizations.

"The Arctic National Mapping Agencies of the Arctic SDI Board and the Member State Representatives of the Arctic Regional Hydrographic Commission (ARHC) are committed to

maintain a collaborative partnership in order to provide both the terrestrial and marine foundations in a regional SDI. The collaboration will facilitate bringing land and marine data together in an infrastructure that connects users across domains to the spatial data valued to support research, planning, and decision making in the Arctic."

The changes are that ARMSDIWG is a working group and can not be a partner. ARHC needs to be the partner and has replaced ARMSDIWG in the statement.

Request to the Board: To endorse an updated Joint Statement of Intent with the Arctic Regional Hydrographic Committee

DECISION: The Board endorses an updated Joint Statement of Intent with the Arctic Regional Hydrographic Committee

The Arctic SDI National Contact Points and Working Group Leads are proposing to develop a Joint Statement of Intent with the Arctic Data Committee.

Request to the Board: To approve the development a Joint Statement of Intent with the Arctic Data Committee.

DECISION: The Board approves the development a Joint Statement of Intent with the Arctic Data Committee

Board meeting plan

- Board Meeting 2021 will be in Russia
  - Date: June 3 - 4 , 2021
  - Venue: St. Petersburg
- Executive Board Meeting will be in Iceland
  - February 2021
    - Russia will take over as Lead Secretariat

Approval of Arctic SDI Board Decisions

DECISION: Board approves New Arctic SDI Strategic Plan 2020-2025
DECISION: Board approves Roadmap and Implementation Plan
DECISION: Board approves 2015-2020 Strategic Plan Closeout

DECISION: Board approves the next steps towards a 2nd generation Arctic DEM for the Arctic in a stepwise approach reflecting the different national possibilities for using and developing the Arctic DEM in the participating countries.
It is acknowledged that the possibility for using the DEM will be different nationally and the ability to deliver the recommended steps will vary in time frame and between the NMA's.

DECISION: A Pan-Arctic wetlands map would provide a valuable dataset and the Arctic SDI Board endorses work to support user requests for this data and facilitate discussions with domain experts on the governance, processes and development steps necessary to create a Pan-Arctic Wetland Inventory Map.

DECISION: The Board endorses an updated Joint Statement of Intent with the Arctic Regional Hydrographic Committee

DECISION: The Board approves the development a Joint Statement of Intent with the Arctic Data Committee

RECOMMENDATION: Use a new name instead of Arctic DEM 2nd gen. Send to WG to propose a clear name. DECISION:

RECOMMENDATION: The board recommends more focus on user and business needs and to put more focus on outreach activities, deliverables and clear and simple messages

ENDORSEMENT: The Board endorsed that Arctic SDI scale up the Vector Tile Project for our Basemap data. We will bring our experts together in a virtual meeting to contribute to the direction of the pilot.

Board Meeting 2021 Russia

- Date: June 3rd – 4th
- Venue: St. Petersburg

Executive Board Meeting Iceland

- February 2021