

# Arctic Spatial Data Infrastructure (Arctic SDI)

Pan-Arctic Cooperation among Ten Mapping Agencies

[www.arctic-sdi.org](http://www.arctic-sdi.org)

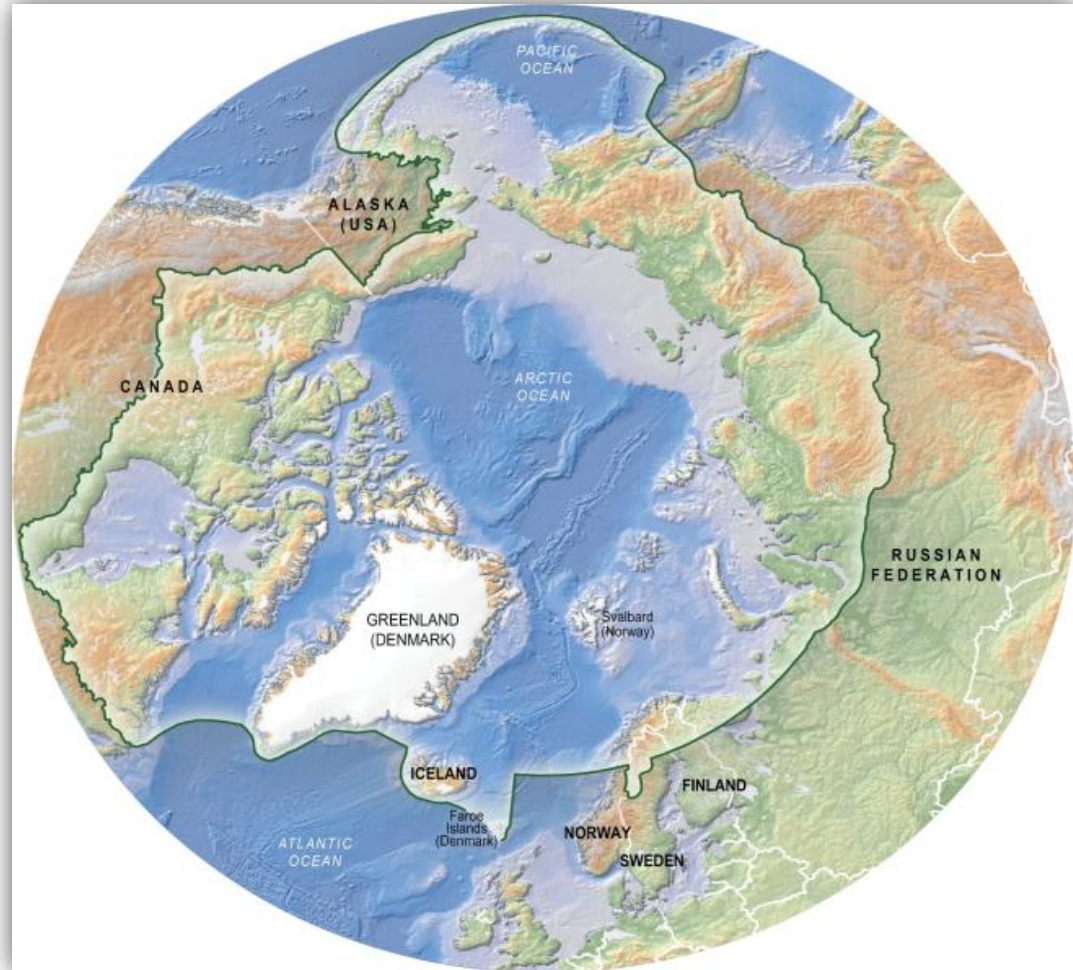
24.02.2012

Magnús Guðmundsson  
Director General  
National Land Survey of Iceland



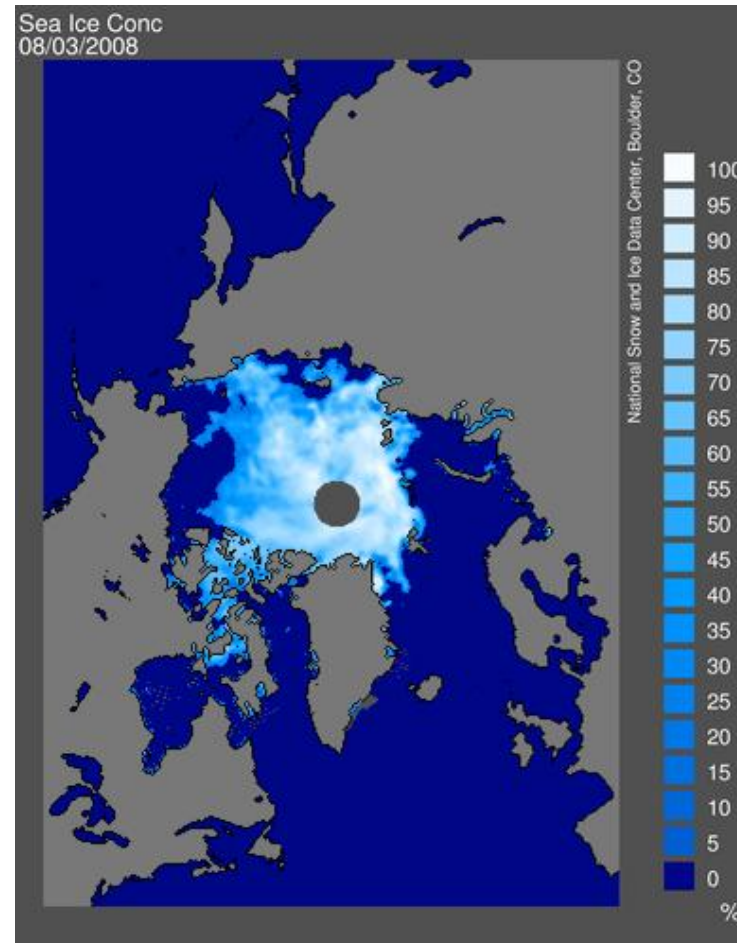
# The Arctic

- 1/6 of the earth's landmass
- More than 30 million km<sup>2</sup>
- 24 time zones
- Over hundred languages



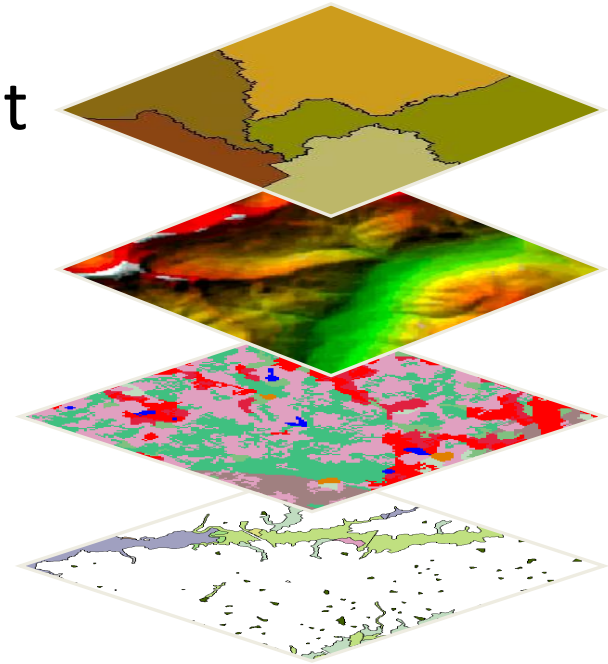


# Monitoring the environment



# Why Arctic SDI ?

- Wide array of spatial data around the Arctic
- Datasets are distributed throughout many organisations often not integrated or coordinated
- Arctic SDI would allow for more robust management and manipulation of data for both research and management purposes.



# Participating Organisations in the Arctic SDI:

- Norwegian Mapping and Cadastre Authority
- National Land Survey of Iceland
- National Land Survey of Sweden
- Centre for Topographic Information, Canada
- National Survey and Cadastre, Denmark (Faroe Islands)
- The Government of Greenland
- National Land Survey of Finland
- The Federal Service for State Registration, Cadastre and Mapping, Russia
- US Geological Survey, USA
- Conservation of Arctic Flora and Fauna (CAFF)  
Working Group of the Arctic Council



# Arctic SDI support

- Arctic SDI discussions have been ongoing for a number of years
- The Arctic SDI initiative received, after a request from the Nordic Mapping Agencies, the formal support of the Arctic Council at its Senior Arctic Officials (SAO) meeting in November 2009
- Support of all the eight Arctic Council countries i.e. Canada, Denmark (Faroes, Greenland), Finland, Iceland, Norway, Russian Federation, Sweden and the United States
- The Nordic Council of Ministers and Greenland have provided funding to help insure the successful completion of the project



# PROJECT FRAMEWORK

- Project phases -

## Arctic SDI

Structuring Phase  
2010/2011



Establishing Phase  
2011/2012



Operational Phase  
2012/2013

# Arctic SDI

## - Vision -

**An Arctic SDI – based on sustainable co-operation between mandated national mapping organisations – which will provide for access to spatially related reliable information over the Arctic to facilitate monitoring and decision making**



**Arctic Council Working Groups and  
other Scientific Communities**

**Governmental Authorities**

**Data**



**Analysis**



**Decision**

**Environmental  
& other political  
issues**



**Arctic SDI**

**Arctic SDI  
Portal**

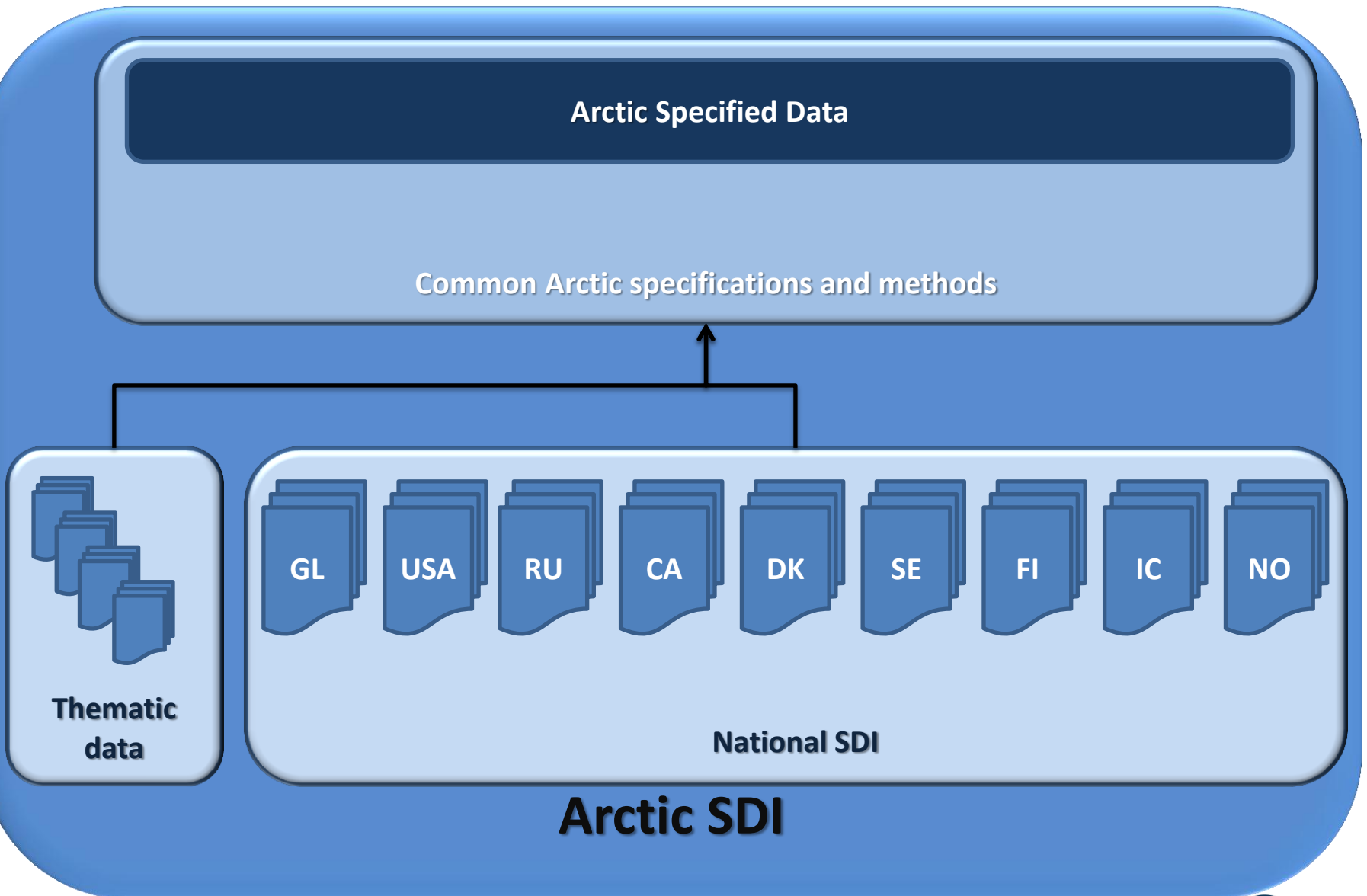
**Media, Public &  
Education**



**Thematic  
data**

**NMA national  
reference data**

# Arctic SDI draft Arcitecture



# Arctic SDI : Expected results

- Access to relevant and updated geographical reference data and thematic information covering the entire circumpolar region
- Possibilities for governmental authorities and decision makers to always have access to receive relevant and updated information
- Daily use of the project's web map services in schools and universities in the Arctic and elsewhere
- Possibilities for media to receive relevant and updated information
- Possibilities to foster cooperation with industry on Arctic issues

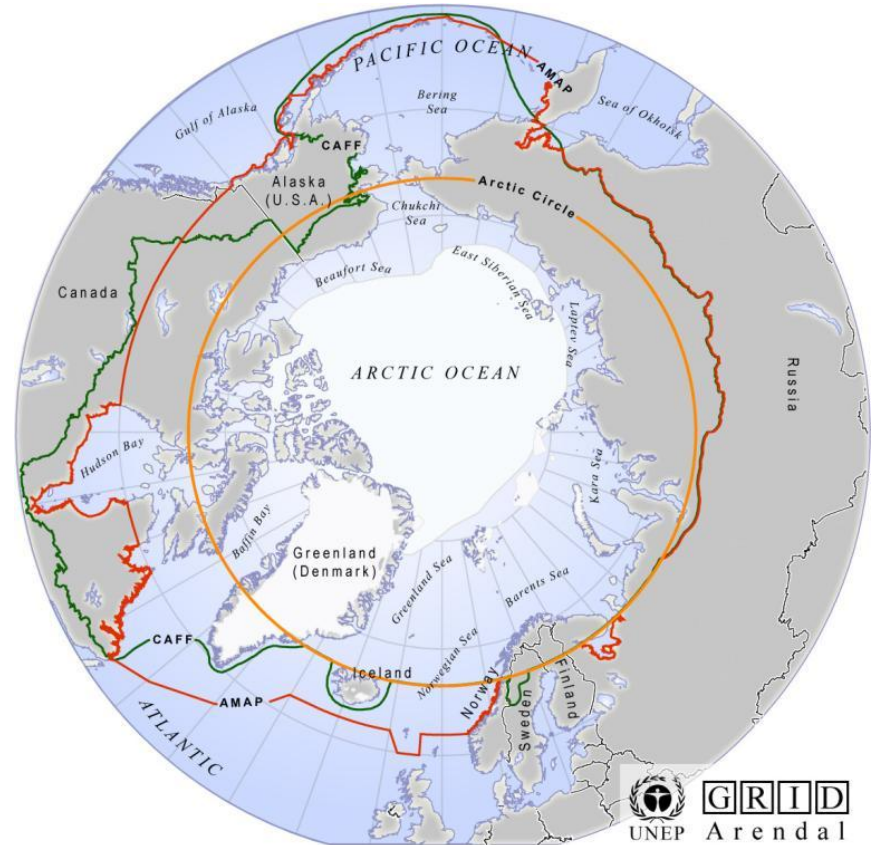


# Area and reference map scale

The Arctic SDI will cover the Arctic regions of the involved participating countries, as **defined by the countries themselves.**

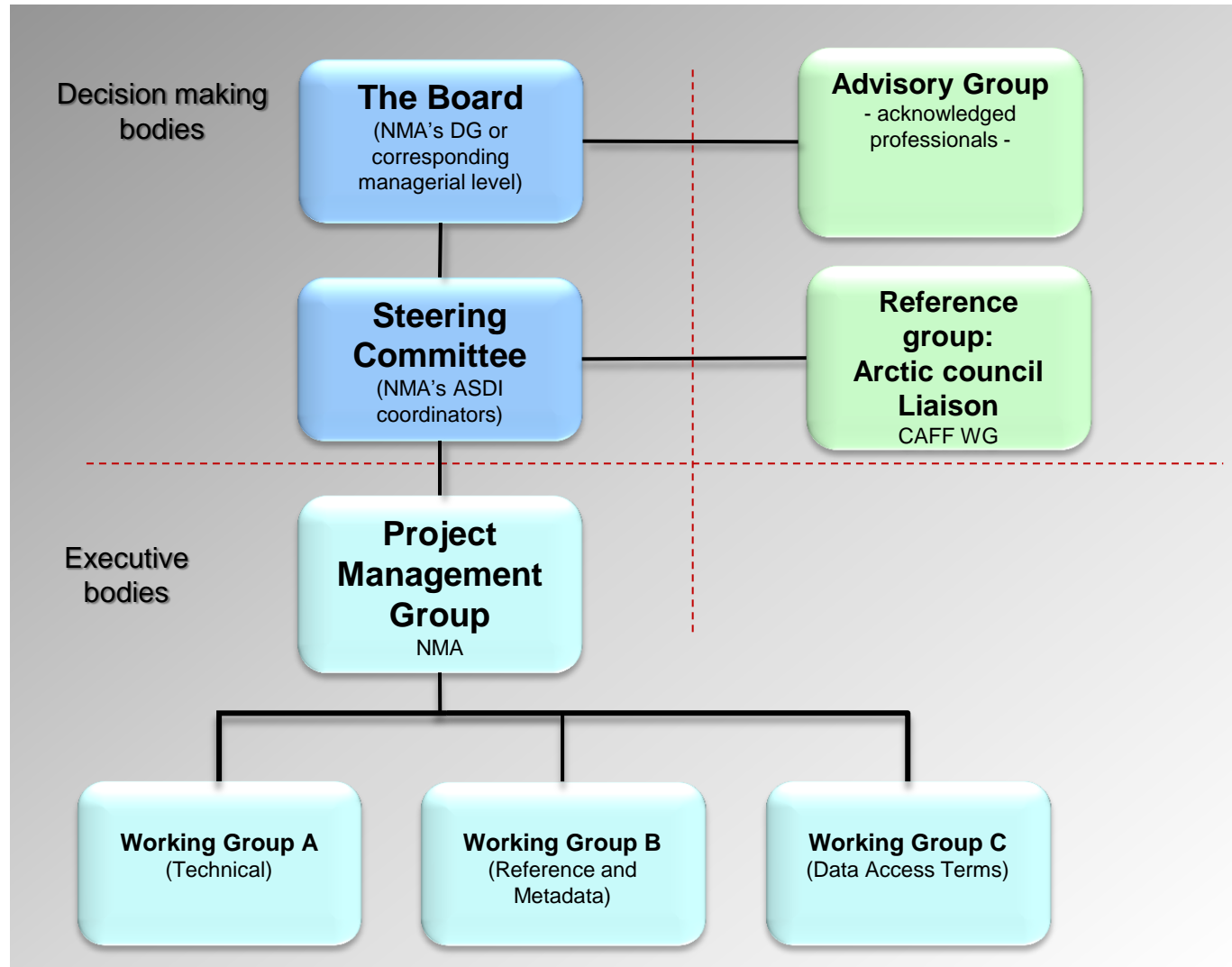
## Scale

It is envisioned that the Arctic SDI will be in the range of **1: 200 000**  
**– 1:1 000 000**





# Project Organisation



# Status of Arctic SDI project

- **Project Management Group** is taking care of daily work (1,5 man year, Norway and Sweden)
- **The Steering Committee** is up and running, meeting in Reykjavík in April 2011 and Moscow in September 2011 and in Copenhagen 21-22. Februar 2012
- The **Project plan** and **Project Organisation** were approved in April 2011
- Two **Working groups** were started in September 2011
- **Advisory Group** is active
- Establishment of the **MoUs between the National Mapping Agencies** in is in process
- **The Board** of the Project will meet on 30<sup>th</sup> March 2012 in Iceland (Directors Generals)
- **Support** from European Environmental Agency and EuroGeographics

