

Date: October 19, 2015

MEMORANDUM

FROM: Cameron Wilson, National Contact Point Canada

SUBJECT: Arctic Council Spatial Information Management White Paper

OBJECTIVE: The objective of the white paper is to help conceptualize, document, frame and facilitate Information Management SDI best practice discussions with Arctic Council.

BACKGROUND:

The Arctic SDI Strategy and Operational Policy working groups identified the need for Arctic SDI operational policies to influence the development of Arctic Council Information Management (IM) policies (see Appendix A).

The Arctic SDI Implementation Plan 2015-2020¹ lists key performance indicators (see Appendix A) to be measured over the time period: 2015 to 2020. One of those is listed as “**Arctic SDI Operational Policies influence on the development of Arctic Council information management policies.**”

When operational, Arctic SDI is expected to improved Arctic Council information management² (IM) practices through the adoption of commonly accepted SDI operational policies and technical standards³.

This project will fulfill the reference to “best data management practices” as indicated in the Arctic SDI Mission Statement⁴.

PROJECT OVERVIEW:

The project will propose a Spatial IM Framework, draw from existing works⁵. The framework will answer governance needs and will guide future developments of Arctic SDI components (framework data, standards, policies, technologies and collaboration).

The Framework will then be applied by testing its integration into Arctic Council IM Life Cycle. The testing report will be used to communicate the results of the integration.

¹ Arctic SDI Implementation Plan June 2015, http://arctic-sdi.org/wp-content/uploads/2014/08/Arctic-SDI-Implementation-Plan_June-20125.pdf

² Definition: “A discipline that directs and supports effective and efficient management of information in an organization, from planning and systems development to disposal or long-term preservation” (2003) Treasury Board of Canada Secretariat: http://www.tbs-sct.gc.ca/cioscripts/gloss/gloss-alpha_e.asp?SubjectID=28&who=/im-gi/#L.

³ ARCTIC SDI Framework Document June 2015, http://arctic-sdi.org/wp-content/uploads/2014/08/20150825-Arctic-SDI-Framework-Documents_V2-0.pdf

⁴ “The Arctic Spatial Data Infrastructure mission is to promote cooperation and development of a Spatial Data Infrastructure that enables discovery, visualization, access, integration and sharing of Arctic geospatial data, while pursuing best data management practices”

⁵ Permanent Committee for Geospatial Data Infrastructure of the Americas (PC-IDEA) (2013). Chapter 10 Measuring and Monitoring Impacts and Benefits in “[Spatial Data Infrastructure \(SDI\) manual for the Americas](#)”; http://www.fao.org/spati/intro_en.asp; “[Victoria’s Spatial Information Management Framework and Directory of resources](#)”

SCOPE

The contractor will:

- Consult with Arctic Council working groups, national mapping agencies⁶ (NMAs) and Arctic SDI stakeholders to understand and utilize their IM guidelines and best practices.
- Assess any legislative requirements for IM of Arctic Council and NMAs' geospatial information.
- Assess geospatial considerations in NMAs' current information management policy.
- Conduct environmental scan for current IM best practices in geospatial data, including best practices in an Open Data environment.
- Investigate and recommend business models for spatial IM, especially those that promote cooperation and sharing responsibility and costs.
- Ensure recommendations align or harmonize with current NMAs policies, frameworks and guidelines.
- Suggest appropriate policy instruments.

ADDITIONNAL REFERENCES

Gómez, I.-D., & Arias, L.-P. (2010). *The evolution of the National Spatial Data Infrastructure in Colombia: a high level strategy to support policy formulation and spatial information management in the context of the Colombian Space Commission*. From GSDI 10 Conference Proceedings: www.gsdi.org

Permanent Committee for Geospatial Data Infrastructure of the Americas Working Group on Planning. (2012). [*Diagnosis on relevant topics of geospatial information management and development of Spatial Data Infrastructures \(SDI\) in countries of the Americas*](#). A PC-IDEA report, Rio de Janeiro.

Victorian Spatial Council. (2009). [*Victoria's Spatial Information Management Framework and Directory of resources*](#), [*Spatial Information Management Framework*](#).

⁶ Treasury Board of Canada Secretariat: [Standard on Geospatial Data](#), [Standard on Metadata](#), [Policy on Information Management](#), [Policy on Information Management](#), [Directive on Information Management Roles and Responsibilities](#), [Directive on the Management of Information Technology](#), [Directive on Open Government](#), [Guideline for Employees of the Government of Canada: Information Management \(IM\) Basics](#); Canada - Geomatics Accord; To be included : INSPIRE, NSDI, SDI Russian Federation

APPENDIX A – Key Performance Indicators

From: ARCTIC SDI Implementation Plan 2015-2020, page 3, http://arctic-sdi.org/wp-content/uploads/2014/08/Arctic-SDI-Implementation-Plan_June-20125.pdf

“Key Performance Indicators

Several key performance indicators will be measured over the time period from 2015 to 2020 to gauge the effectiveness of the implementation of the *Arctic SDI Strategic Plan 2015-2020*, as well as the effectiveness of the Arctic SDI itself. The methods used to measure each key performance indicator will be detailed in a separate *Arctic SDI Key Performance Indicators Document* developed in the Strategy Working Group and coordinated with all other Working Groups. These will be measured, assessed and tracked yearly over the 2015-2020 timeframe with regular reports to the Arctic SDI Board.

Key performance indicators will include qualitative or quantitative metrics on:

- User satisfaction of authoritative reference and thematic data and services
- Relevance of Arctic SDI reference and thematic data to users
- The use of the Arctic SDI Geoportal, web services and metadata
- Known applications based on the Arctic SDI and their relevance
- **Arctic SDI Operational Policies influence on the development of Arctic Council information management policies”**