Canadian Polar Data Network (CPDN)
Governance Charter

Introduction and Mission

1. History of the Network

The Government of Canada's Program for the International Polar Year (IPY) issued a request for proposals in June 2010 to establish the IPY Data Assembly Centre Network (DAC Network). Two years of funding were provided to store and manage the data produced from the Canadian IPY program (see *Canadian IPY Data Policy, 2007-2008* for background on the IPY program and requirements for data management) with an explicit mandate to ensure the availability of these data for current and future generations. A funding envelope of $2 million over two fiscal years was available for this initiative.

The call for proposals listed the following objectives for the DAC Network:
- *Accept thematic datasets in the originator's format and ensure that they are accompanied by complete metadata to allow for future use.*
- *Provide secure storage of the data and information as received and provide inventory and access to these data online.*
- *If possible, incorporate data into established archives of departments/data centres/research libraries, etc.*
- *Support other IPY data assembly centres in the network by providing a back-up function to IPY data.*
- *Nominate point of contact from the data centre to participate on an IPY Data Centre Committee.*
- *Maintain the archive post-IPY in a low maintenance mode.*

Successful applicants were informed in July 2010. At the end of the project period in March 2012, the DAC Network was functioning with the common purpose of preserving and providing access to Canadian data collected as part of the IPY.

As of March 31, 2012, the DAC Network consisted of the following member institutions:
- The University of Alberta Libraries (UAL)
- The University of Waterloo, Canadian Cryospheric Information Network (CCIN)
- Ontario Council of University Libraries (OCUL), Scholars Portal
- Government of Canada, Fisheries and Oceans Canada (DFO), Integrated Science Data Management
- Government of Canada, National Research Council, Canada Institute for Scientific and Technical Information (CISTI)

Aboriginal Affairs and Northern Development Canada (formerly Indian and

Northern Affairs Canada) continues to be an ex-officio member in the Network.

With the completion of IPY funding for the DAC Network at the end of March 2012, the Network changed its name to the Canadian Polar Data Network (CPDN) to represent its current and future mission and goals.

2. Mission and Purpose

The ongoing and evolving mission of the CPDN is to provide a sustainable research data management infrastructure, encompassing preservation and access, for polar (Arctic and Antarctic) science research and monitoring initiated from and taking place in Canada.

Preservation, for purposes of this Charter, means ensuring the long-term viability of digital materials through geographically dispersed servers, protective measures against data loss, and forward format migration.

Access is defined as providing discovery-level metadata, at a minimum, and preferably full access to all electronic data holdings associated with those metadata where no access restrictions are in place.

3. Need for Preservation and Long-term Access

Recognizing that the true value of scientific data is often realized long after it has been collected, it is essential to ensure long-term preservation and sustained access to Canadian research data. All data deposited with the CPDN must be archived in a simple, reusable, digital form and be accompanied by descriptive, technical and preservation metadata.

The Network respects and will preserve the intellectual and cultural property rights associated with the data in its repository.

Several government departments and agencies have been designated by federal legislative documents (for example, the Oceans Act) to collect data for the purpose of understanding the environment and its living resources and ecosystems. As part of their mandates, these government departments and agencies have been collecting and preserving a significant amount of data in the polar regions. The CPDN will establish linkages (through its membership or otherwise) with existing permanent data archival divisions within the Government.

Data in scope but outside the Government data archival divisions will be a priority for the CPDN.

4. Operating Principles

The CPDN is guided by the following operating principles:

- We are a Canadian network providing secure preservation of and access to multi-sector, multi-discipline polar data.

- We are a standards-based network that will evolve to meet the needs of the communities we serve and support.
- We recognize all true costs of research data management and will maintain sufficient capacity to provide the support required to preserve and provide sustained access to polar data.
- We promote recognition of the true cost of sustainable data curation.
- We promote the sharing of best practices for responsible lifecycle management of data of all types and willingly engage with other communities to develop further networks.
- We strive toward interoperability and barrier-free exchange with other data repositories and networks, both in Canada and abroad.
- We will strive to establish interoperability with existing long-term infrastructures (governmental or otherwise); as much as possible, the CPDN will avoid creating infrastructures that would overlap significantly with existing archives and that could lead to unnecessary duplication of data.
- In our practices, we honor the legal and ethical conditions around the creation of the data and work to protect sensitive data and traditional knowledge.
- We are a Network of equal partners contributing to the continued success of the Network; a member institution will provide ample notification of any changes in their participation in the Network to minimize disruptions to the Network.
- We recognize the importance of succession planning for a preservation network such as ours and will maintain procedures to cope with changes in membership or the dissolution of the Network.

5. Membership

a. Membership Composition
Any interested organization able to meet the membership requirements (see Section 5.b) is eligible to participate in the CPDN. There must be a minimum of two regular members for the CPDN to function. There is no maximum number of members; however, the addition of new members to the CPDN must be paced to allow for their successful integration into the Network.

Membership categories include:

- Partner Member - An institutional node in the Network directly responsible for the resourcing and operation of data preservation, access and stewardship activities as supported by the Network.
- Associate Member - A member that does not deal directly with the technical details of data collection, curation, distribution and preservation, but contributes funding or other support to Partner Member nodes. An Associate Member may participate in technical, metadata and other planning committees and discussions.
- Affiliate Member - A member interested and supportive of the

3

endeavor but that does not contribute direct funding or other material support and does not have representation on the Steering Committee. An Affiliate Member may serve as a coordinating agent across other networks and consortia that have common interests and goals.

Member Category	Responsibilities	Decision-making powers
Partner	Provide essential continuous core services and infrastructure	Membership in Steering Committee, Technical Committee
Associate	Provide peripheral, value-added resource support	Membership in ancillary Working Groups
Affiliate	Vested interests, advocacy, community voices	Advocate their priorities to the Network

As of 15 January 2013, the CPDN has the following members:

Partner Members
- The University of Alberta Libraries
- The University of Waterloo, Canadian Cryospheric Information Network
- Ontario Council of University Libraries, Scholars Portal
- Government of Canada, Fisheries and Oceans Canada, Integrated Science Data Management
- Government of Canada, National Research Council, Canada Institute for Scientific and Technical Information

Associate Members
- Government of Canada, Aboriginal Affairs and Northern Development Canada

b. Requirements for Membership

Partner Membership
- Partner institutions must be able to provide, set up, or maintain ongoing core services or infrastructure that meets the technical specifications required by the Network as defined in the Network's Technical Specifications document.
- Member institutions must express a long-term commitment to the Network, with the understanding that a minimum commitment is three (3) years.
- All Partner members will sign a Memorandum of Understanding that

includes a statement of their contribution to the operation of the Network.

Associate Membership
- Associate Members may be admitted under one of the following criteria:
    - Provision of funding to support the ongoing activities of the CPDN, or
    - Provision of non-data, non-monetary support in the form of software development or value-added services for a fixed period of time (e.g., acting as a coordinating agent for a specific dataset).
- An Associate Member will join the Network via a written agreement defining the nature of their relationship with the Network.

Affiliate Membership
- Affiliate Members are organizations sharing common interests and priorities with the Network that advocate for polar interests and research, and provide a voice supportive of the Network's goals and activities. Affiliate members are expected to promote the development and success of the Network.

Members may also be clients of the Network. A client may be an organization or an individual who provides a data contribution to the Network that falls within the criteria set forth in the Collection Policy.

c.   Applications for Membership
The Network will consider written applications for membership from any institution that has a stake in scientific data management. New members will be reviewed and approved by the Steering Committee as applications are submitted.

d. Withdrawing from the Network

Partners
Partner Members agree to participate in the Network for a minimum initial term of three years. If a Partner wishes to withdraw from the Network, they must provide a minimum of eighteen months' written notice to the Chair of the Network Steering Committee. Upon withdrawal from the Network, the withdrawing member's content or services must be transferred to other members of the Network, through a process to be agreed upon by the withdrawing member and the Network, as represented by the Steering Committee. Once the transfer of content is complete, the withdrawing member must delete any content from their infrastructure that is of a sensitive nature.

Associates
Associate Members can withdraw within the terms of their agreement with

the Network.

Affiliates
Affiliate Members must notify the Network in writing of their intent to withdraw.

Failure to Comply
The Steering Committee may, at its discretion, revoke the membership of any Member organization.

6. Finances and Budget

a. Oversight
The Steering Committee will be responsible for developing and maintaining a current Business Plan (cost analysis) for the operation of the Network. While costs by Partner Members may be *in kind* contributions, real costs are incurred by the Network. The Business Plan will identify and quantify these costs and endeavour to reduce their impact by seeking external funding through Associate Members or other sources.

b. Business Plan
The Business Plan will address these cost considerations:
- Ingest of metadata and data preparation, deposit, and normalization
- Preservation
- Data dissemination and access
- Preservation backbone infrastructure
- Governance and administration

The Business Plan will address the relative financial needs and funding structure of each Partner institution in order to develop Network norms for joint sharing of funding.

c. Financial model
CPDN is not a legal entity and as such has no central financial authority. Each Partner organization retains responsibility for financing its own operation within the Network, with the understanding that all Members will work together for the success of the whole.

d. External funding
Partner Members will bring new funding opportunities to the Network. Proposals and applications for funding from external sources will proceed as a unified body, with full disclosure and involvement of all Partners. The Steering Committee will approve all applications for funding, be they joint or individual, including the allocation of funding amounts for each applicant and the possible identification of a lead applicant(s).

7. Organization and Governance
The Network will be governed by a Steering Committee that oversees its

general operation. A Technical Committee will function as a sub-group of the Steering Committee. Working groups will be formed and dissolved as needed.

a. Steering Committee
The Steering Committee consists of one voting representative from each Partner member. Representatives shall be chosen by their Partner members and their term of service shall be a minimum of two years; representatives may be reappointed to subsequent annual terms by the Partner member. The Steering Committee is responsible for the oversight and review of policy, governance, membership, budget, goals and objective-setting for the Network. The group will be governed by consensus on all issues, following the norms of consensus government until an acceptable decision is reached. A Chairperson will be elected from amongst the Partner representatives, for a one-year, renewable term.

b. Technical Committee
The Technical Committee advises the Steering Committee on matters relating to technical requirements, standards, and network capacity. The Committee shall consist of individuals from Partner institutions and will nominate a Chair that reports to the Steering Committee. The term of service is a minimum of one year; representatives may be reappointed to subsequent annual terms.

8. Communication
Because of the geographic distribution of CPDN members, communications will generally take place via teleconference meetings and email. Meetings of the Steering Committee will take place at least quarterly and will be called by the Chair. If possible, an annual face-to-face meeting will be held.

A CPDN website will be used to communicate openly with the public with provisions for closed-member access to a wiki or a similar sharing platform for use in Network meeting and planning processes.

9. Services and Operations

a. Content Oversight
The Steering Committee is responsible for the membership, Collection Policy, and overall scope of the data archived with the Network. Data ownership and licensing permissions are governed by the Data Deposit Agreement, which must be present at the time of ingest and packaged within all Archival Information Packages. The Steering Committee reserves the right to review and remove any stored files, including but not limited to content that has been submitted without proper clearance. If challenged, the Network will respond by following the steps outlined in its Archiving and Access Policy.

b. Disaster Recovery
As part of the Archiving and Access Policy, the Technical Committee will

develop a Disaster Recovery Plan that defines how the Network infrastructure will reliably and easily restore access to preserved content that is no longer available at a designated Node.

10. Modifications and Amendments

Any Partner Member may propose an amendment to the Governance Charter through the Steering Committee. Amendments must receive unanimous support from the Steering Committee to be accepted. No amendment may void the conditions of Withdrawing from the Network by Partner Members (section 5.d).

This document should be reviewed by the Steering Committee on an annual basis to ensure its applicability.

Related Documents and Policies that will be created and maintained by the Network:
- Memorandum of Understanding
- Data Deposit Agreement
- Technical Specifications
- Collection Policy
- Archiving and Access Policy, including Disaster Recovery Plan/Succession Planning
- Business Plan