

# NATIONAL DATA SERVICE (NDS) AND NATIONAL DATA SERVICES CONSORTIUM (NDSC)

## ELEMENTS OF AN INTERIM CHARTER

### Preamble

This interim charter is designed to provide guidance for the operations of the National Data Service (NDS) and the National Data Services Consortium (NDSC) during the initial development and launch phases.

As an emerging network of individuals, organizations, and consortia, this charter is designed to signal the shared vision of success and define a process where communication, coordination, and decision making are specified on an emergent basis, to match the requirements for the work taking place. A key feature of this approach is that elements of the NDS and NDSC have flexibility in structuring their operations – provided they address key functional requirements as specified in this document. In this sense, NDS and NDSC are employing an experimental, continuous learning approach to the social structure, complementary to continuous learning with the technology.

This is a living document that can be adjusted by a majority of the NDS Steering Committee, in consultation with the NDSC general membership.

### Overarching Vision

A successful National Data Services Consortium (NDSC) will advance the frontiers of discovery and innovation by enabling open sharing of data and increase collaboration within and across fields and disciplines. Success will be achieved through coordinated and concentrated efforts, developing an open environment of *federated, interoperable, and integrated* national-scale services. Researchers, scholars and policy makers, teams and large collaborations will provide guidance to NDS and NDSC will help them to efficiently, conveniently, securely, and sustainably store, curate, share, publish, access, discover, verify, attribute, visualize, and operate on of all forms of scholarly and research data.

### Interim Specification of Membership, Communications, Coordination, and Decision Making

During the current launch phase there are six primary types of activities for which operating guidelines need to be provided for membership and for ensuring effective communication, coordination and decision-making. These are:

- The NDS Consortium
- The NDS Steering Committee
- The NDS Executive Director, Project Manager, and Operations Team
- The Architecture and Infrastructure Development Teams
- The Domain Coordinating Committees
- Current Pilot Projects

In development are two additional elements – NDS Share and NDS Labs.

The degree of specification will vary for these elements – so that only the minimum critical structure is specified – no more and no less. Also, the specification may vary between the two current development teams and the two current coordinating committees, as well as among the four current pilot projects. As new types of activities are added, additional operating guidelines will be specified. The aim is to experiment and add to the structure on a “pull” basis, responsive to the evolving scope of activities.

### **Template for Interim Operations**

In the spirit of agile development and innovation, the steering committee, operations team, development teams, coordinating committees, and working groups all have flexibility to specify their operations as appropriate for their work. In general, however, such specifications should include the following:

- Purpose/mission
- Overall structure and composition
- Frequency and location of meetings (including virtual)
- Decision-making (e.g. consensus, voting, etc.)
- Mechanisms and commitments for inclusion, transparency, communications, and documentation
- Intended duration (e.g. ongoing or with target completion date)
- Deliverables

A template will be provided to each of these entities in order to have their operating specifications in a consistent format.

### **NDS Consortium**

At present, the consortium is defined as current and past participants in NDS workshops.

An interim membership committee will be formed to develop categories of membership (for example, these could be individual, organizational, and consortia members) with a specified value proposition associated with the specified categories of membership, along with an application process. There may be an “opt in” form of membership that is generally open, so long as people or organizations indicate alignment with NDS Vision, goals, and objectives – the aim is to be broadly inclusive, but to also ensure constructive engagement and overall progress.

The roles and responsibilities of the NDS Consortium include:

- Constructive engagement in advancing the NDS vision, goals, and objectives
- Transparency and inclusiveness in decision making
- Appropriate balance between deliberation and action
- Agile approach to existing and new technologies
- Appropriate balance between general purpose services and discipline/community-specific services
- Appropriate balance between security and openness
- Integrating innovation in social systems with innovation in technical systems
- Overarching commitment to creating value and mitigating harm

The many types of stakeholders relevant to the NDS are spelled out at the end of this document.

## **NDS Steering Committee**

The interim steering committee will continue to guide NDS with respect to:

- Communicating the shared vision
- Coordinating pilot projects
- Clarifying relations among consortia and across stakeholders
- Enabling development of grant proposals
- Supporting coordinating committees
- Convening meetings
- Communicating progress

The composition of the interim steering committee presently includes the NDS interim executive director, the NDS interim project manager, the chairs or co-chairs of the interim development teams, the chairs or co-chairs of the interim coordinating committees, and an appropriately diverse representation of stakeholder types.

An interim membership committee will be tasked with defining the composition of the regular (non-interim) steering committee. Then, once NDS consortium membership is defined, the first general assembly meeting of the membership will be presented with the proposed composition for approval – ideally on a consensus basis, with a 2/3 vote if a vote is needed. Then the first steering committee members will be elected for the designated roles. The roles and responsibilities of the steering committee will continue as outlined above for the interim steering committee, with additional roles and responsibilities to be specified as the need emerges.

## **The NDS Executive Director, Project Manager, and Operations Team**

The NDS interim executive director, interim project manager, and interim operations team are responsible for the daily operations of the National Data Service, operating with direction and priorities from the NDS steering committee. Since these individuals are operating based on contributed resources, the scope of their work is defined in consultation with the organization(s) covering their salary and benefits. Once NDS has its own funding, the steering committee and these individuals will jointly assess their continuation in these roles and additional staffing decisions commensurate with funding and operational requirements.

## **The Architecture and Infrastructure Development Teams**

The NDS Architecture Development Team is responsible for the development and evolution of the layered architecture needed for service delivery. The steering committee provides check and balance on strategic priorities set by this team.

The NDS Infrastructure Development Team is responsible for the development and operations of the technology infrastructure needed for service delivery. This team is responsible for utilizing existing tools and technologies where available and appropriate, as well as establishing pilot projects to address gaps where there are not adequate tools and technologies. The steering committee provides check and balance on strategic priorities set by this team.

Decision-making and communication within each development team is to be structured based on what is functional for that team. Development teams are required to provide a brief statement of their operating guidelines – both as essential information for others and as input into the identification of leading practices for communication and decision-making.

## **The Domain Coordinating Committees**

The domain coordinating committees are responsible for the specification of user requirements in their domain and the engagement of the broader domain community. At present there are MDF and an Astronomy coordinating committees.

These coordinating committees work with the architecture and infrastructure development teams to specify tools and services that are general purpose and those that are discipline/community-specific. Decision-making and communication within each coordinating committee is to be structured based on what is functional for that committee. Coordinating committees are required to provide a brief statement of their operating guidelines – both as essential information for others and as input into the identification of leading practices for communication and decision-making.

## **Pilot Projects**

The pilot projects provide focused development of new tools and services, integration of existing tools and services, and wire-frame or more advanced demonstrations of capability.

Decision-making and communication within each pilot project is to be structured based on what is functional for that pilot project. Pilot projects are required to provide a brief statement of their operating guidelines – both as essential information for others and as input into the identification of leading practices for communication and decision-making.

## **Types of Stakeholders**

Key types of stakeholders relevant to NCS include, but are not limited to:

- Individual scientists, scientific teams, and large-scale science projects
- Universities and colleges
- Government agencies (international, national, state, local)
- Consortia and initiatives centered on open data
- Data Centers, including Federally Funded Research and Data Centers (FFRDCs)
- Advanced computing infrastructure providers
- Professional societies and associations
- Standard setting organizations
- Software developers
- Commercial organizations
- Scholarly publishers
- Libraries, museums, and archives
- K-12 education
- Citizen scientists

## **Adoption of this document**

This document is to be reviewed and adjusted by the participants in the first and second meetings of the National Data Service and invitees who could not attend but who are on the distribution list.

## NDS Communication, Coordination, and Structure Template

**Purpose/Mission:**

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**Overall structure and composition:**

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**Frequency of meetings:**

- 

**Location of meetings (including virtual):**

- 

**Decision-making (e.g. consensus, voting, etc.):**

- 

**Mechanisms and commitments for ...**

**Inclusion:**

- 

**Transparency:**

- 

**Communications:**

- 

**Documentation:**

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**Intended duration (e.g. ongoing or with target completion date):**

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**Deliverables:**

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