



## NTIA Draft Plan for Providing Public Access to the Results of Federally Funded Research

The National Telecommunications and Information Administration (NTIA) is taking steps to make its scientific data and publications readily available and accessible by the public, as directed in an August 2022 memorandum from the Office of Science and Technology Policy. The NTIA Public Access Plan applies to the results of research funded wholly or in part by NTIA, presented in peer-reviewed scholarly publications and as open source software and research data. This document outlines NTIA's plan for implementing requirements to manage public access to scientific data, software, and publications originating from and to be disseminated directly from the Institute for Telecommunication Sciences (ITS), the laboratory of NTIA.

ITS manages the telecommunications technology research programs of NTIA and performs science and engineering research that provides the technical foundation for NTIA's policy development and spectrum management activities and enhances scientific knowledge and understanding in cutting-edge areas of telecommunications technology. ITS also serves as a principal Federal resource for solving the telecommunications concerns of other Federal agencies.



## Institute for Telecommunication Sciences Public Access Plan for Open Science

### 1. PURPOSE

The NTIA ITS Public Access Plan for Open Science (Plan) is intended to enable NTIA's commitment to ensure that, to the greatest extent and with the fewest constraints possible and consistent with law and the objectives set out below, the direct results of NTIA ITS's federally funded scientific research are made freely available to the public, in publicly accessible repositories. These results include all peer-reviewed scholarly publications, NTIA ITS-developed software, and scientific data (including data associated with NTIA ITS peer-reviewed publications) arising from unclassified research and programs funded wholly or in part by the federal government. The NTIA ITS Public Access Plan for Open Science promotes the following objectives:

- Affirm NTIA ITS's commitment to providing free public access to scientific research results;

- Support governance of and best practices across NTIA ITS for managing peer-reviewed scholarly publications, digital scientific data, and NTIA ITS -developed software;
- Ensure effective access to and reliable preservation of NTIA ITS peer-reviewed scholarly publications, NTIA ITS-developed software, and digital scientific data for use in research, development, education, and scientific discovery by depositing them in appropriate repositories, including data repositories that align with the Office of Science and Technology Policy's (OSTP's) guidance on "Desirable Characteristics of Data Repositories for Federally Funded Research"<sup>1</sup>; and
- Support evidence-based decision making to maximize effective and efficient use of spectrum

## 2. SCOPE

The NTIA ITS Public Access Plan for Open Science applies to NTIA ITS peer-reviewed scholarly publications, NTIA ITS-developed software, NTIA ITS digital scientific data associated with peer-reviewed publications including book chapters and peer-reviewed conference proceedings as appropriate, and "scientific data" as defined in the OSTP memo as

the recorded factual material commonly accepted in the scientific community as of sufficient quality to validate and replicate research findings. Such scientific data do not include laboratory notebooks, preliminary analyses, case report forms, drafts of scientific papers, plans for future research, peer-reviews, communications with colleagues, or physical objects and materials, such as laboratory specimens, artifacts, or field notes.<sup>2</sup>

The NTIA ITS Plan does not apply to trade secrets, commercial information, or other materials necessary to be held confidential by a researcher until they are published, or similar information that is protected under law; and personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

NTIA ITS will protect confidentiality and personal privacy and will recognize proprietary interests, business confidential information, and intellectual property rights, avoiding significant negative impact on intellectual property rights, innovation, and U.S. competitiveness.

Implementation of the NTIA ITS Plan is prospective and does not apply to NTIA ITS-developed software created, NTIA ITS peer-reviewed scholarly publications written, and datasets generated prior to the effective date of policies resulting from this plan. However, NTIA ITS will endeavor to make legacy publications and associated metadata publicly available and ensure their preservation.

## 3. APPLICABILITY

The NTIA ITS Plan applies to all NTIA ITS employees and contractors who develop software, collect or develop data, and/or publish peer-reviewed material and data as part of their employment, including full- and part-time employees, temporary government employees, and special government employees.

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<sup>1</sup> <https://doi.org/10.5479/10088/113528> (Accessed March 2023)

<sup>2</sup> Dr. Alondra Nelson, Ensuring Free, Immediate, and Equitable Access to Federally Funded Research, Executive Office of the President (EOP), the Office of Science and Technology Policy (OSTP) (August 25, 2022), p. 4 note 6. See also, John P. Holdren, Increasing Access to the Results of Federally Funded Scientific Research, Executive Office of the President (EOP), the Office of Science and Technology Policy (OSTP) (Feb. 22, 2013).

## 4. REQUIREMENTS

To the extent feasible and consistent with law, agency mission, resource constraints, U.S. national, homeland, and economic security, and the objectives listed below, NTIA ITS intends to make freely available to the public, in publicly accessible repositories, simultaneously with or prior to publication of associated manuscripts, all NTIA ITS-developed software and data associated with peer-reviewed publications arising from unclassified research and programs funded wholly or in part by the federal government.

Subject to the same conditions and constraints listed above, NTIA ITS will also promote the deposit of scientific data that is not associated with peer-reviewed scholarly publications but is expected to be useful to interested parties arising from unclassified research and programs, funded wholly or in part by the federal government, free of charge unless otherwise excepted, in publicly accessible databases.

Federal researchers must follow federal laws and OMB policies that govern federal agencies' information management practices and protect certain types of data,<sup>3</sup> to the extent that the scientific data created by, collected by, under the control or direction of, or maintained by the federal researchers is subject to those laws and policies. Some data may be shareable with a subset of the general public. To maximize appropriate sharing of data, systems will permit restricted public access to some data.

Publicly accessible versions of narrative, software, and data publications will be machine-readable and accessible through assistive devices to the extent possible and in compliance with Section 508 of the Americans with Disabilities Act. Publicly available metadata associated with both narrative, software and data publications, intramural and extramural, will include all author and co-author names, affiliations, sources of funding, date of publication, and unique persistent identifiers (PIDs) for all authors, institutions/organizations, and funders as available. Metadata associated with research outputs will include digital object identifiers (DOIs) and be publicly accessible and referenceable. Capabilities of NTIA ITS systems to store PIDs and DOIs will evolve over time.

All proposals or plans for activities that will generate scientific data using federal funding will be required to (1) construct and adhere to a Data Management Plan (DMP) that describes how scientific data generated through the course of the proposed work will be shared and preserved or (2) explain why data sharing and/or preservation are not within the scope of this plan.

- Reasonable costs for data preservation and access may be included in project plan budgets for contracts and Inter-Agency Agreements (IAA). Project DMPs will be reviewed as part of the technical evaluation process. Project teams must specify the data repository or repositories they expect to use. Such repositories must be aligned with OSTP guidance.

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<sup>3</sup> For example, the Paperwork Reduction Act, E-Government Act, Freedom of Information Act, Federal Information Security Management Act, Privacy Act, Health Information Technology for Economic and Clinical Health Act, Information Quality Act, Foundations for Evidence-Based Policymaking Act, Confidential Information Protection and Statistical Efficiency Act, Federal Policy for the Protection of Human Subjects, Federal Records Act, and OMB guidance under OMB M-13-13 and subsequent open data policies (e.g., those to be promulgated under the OPEN Government Data Act and Pub. L. No. 115-435), OMB Circular A-130, and other laws and policies that require federal agencies to protect trade secrets, confidential commercial information, personally identifiable information, and other information which is protected under law or policy.

- NTIA ITS project leaders will be required to ensure project staff compliance with the requirements of DMPs, including those for preservation and discoverability. NTIA ITS supervisors will ensure that DMPs are considered in the context of employees' performance plans and evaluations.
- Non-compliance with requirements by staff may have performance-review consequences.

Authors of peer-reviewed publications are required to submit to the NTIA ITS publication repository metadata and their copies of final peer-reviewed journal manuscripts within the scope of this plan once the manuscript is accepted for publication. In lieu of the author's version of the final peer-reviewed manuscript, NTIA ITS will also accept the final published article, as formatted by the journal, provided the journal allows this.

The NTIA ITS plan further requires that all scholarly publications authored or co-authored by ITS employees or contractors which have been peer-reviewed and accepted for publication in accordance with the current edition of the ITS Publications Handbook,<sup>4</sup> be made freely available and publicly accessible by default without any embargo or delay after publication.

Upon request and consistent with OMB requirements, NTIA will report to OSTP the status of implementation of this public access plan and associated policies as well as the numbers of scholarly publications, software applications, and data resulting from federal funding being made available to the public.

## 5. AUTHORITY

NTIA ITS authority to require broad public access to the results of federally funded research stems from multiple sources, including, but not necessarily limited to, those below.

- Office of Science and Technology Policy (OSTP) Memorandum for the Heads of Executive Departments and Agencies of August 22, 2023, *Ensuring Free, Immediate, and Equitable Access to Federally Funded Research*, establishes the governing principles for NTIA ITS management of scientific data. <https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf> (Accessed March 2023.)
- Title II of the Foundations for Evidence-Based Policymaking Act of 2018 ([Pub. L. 115–435 enacted January 14, 2019](#)), the OPEN Government Data Act, codified at [44 U.S.C. §3506](#). <https://www.congress.gov/bill/115th-congress/house-bill/4174/text> (Accessed March 2023)
- OMB, Circular A-130, Managing Information as a Strategic Resource, 28 July 2016. [https://www.whitehouse.gov/wp-content/uploads/legacy\\_drupal\\_files/omb/circulars/A130/a130revised.pdf](https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/circulars/A130/a130revised.pdf) (Accessed March 2023)
- Executive Office of the President, Executive Order 13642, Making Open and Machine Readable the New Default for Government Information, 9 May 2013. <https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf> (Accessed March 2023)

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<sup>4</sup> ITS Editorial Review Board, "ITS Publications Handbook Volume I: Policies (Third Edition)," U.S. Department of Commerce, National Telecommunications and Information Administration, NTIA Handbook HB-14-504, March 2014. <https://its.ntia.gov/publications/2752.aspx>.

- Executive Office of Management and Budget (OMB) Memorandum M-13-13 Open Data Policy — Managing Information as an Asset dated May 9, 2013, requires that agencies collect or create information in a way that supports downstream processing and dissemination (e.g., use of machine-readable and open formats and extensible metadata).  
<https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf> (Accessed March 2023)
- The National Science and Technology Council, *Desirable Characteristics of Data Repositories for Federally Funded Research*, May 2022. <https://doi.org/10.5479/10088/113528> (Accessed March 2023)
- Executive Office of the President, OSTP Memorandum, Increasing Access to the Results of Federally Funded Scientific Research, 22 February 2013. <https://rosap.ntl.bts.gov/view/dot/34953> (Accessed March 2023)
- Executive Office of the President, OMB Memorandum M-10-06, Open Government Directive, 8 December 2009. <https://obamawhitehouse.archives.gov/open/documents/open-government-directive> <https://obamawhitehouse.archives.gov/open/documents/open-government-directive> (Accessed March 2023)
- Memorandum for the Heads of Executive Departments and Agencies — Transparency and Open Government, Executive Office of the President, January 21, 2009, requires that be transparent, participatory, and collaborative. <https://www.govinfo.gov/content/pkg/FR-2009-01-26/pdf/E9-1777.pdf> (Accessed March 2023)
- 47 U.S.C. §§901-904, National Telecommunications and Information Administration Organization Act. <https://www.govinfo.gov/app/details/USCODE-2021-title47/USCODE-2021-title47-chap8&collectionCode=USCODE> (Accessed 2023)

The NTIA ITS Plan and resulting policies do not rescind any other Department of Commerce or NTIA policies or guidance and do not alter or supersede existing law or regulations.

## 6. ROLES AND RESPONSIBILITIES

### 6.1 The NTIA ITS Director

Controls and manages the NTIA ITS Public Access Policy for Open Science.

### 6.2 The NTIA ITS Publications Officer

- Curates metadata for published NTIA ITS scholarly publications;
- Manages creation and maintenance of persistent identifiers for NTIA ITS Technical Series Publications;
- Provides consultation and educational materials for NTIA ITS employees on managing scholarly publications and providing public access to results of federally funded research, including use of the publications inventory and the NTIA ITS peer review process, as applicable, for results of federally funded research that are intended for public dissemination;
- Facilitates search and access to metadata for final published articles or NTIA ITS Technical Series Publications for the public; and
- Supports NTIA ITS division responsibilities, as applicable (see Sections 6.5 and 6.6).

### **6.3 The NTIA ITS Data Officer**

- Curates metadata for NTIA ITS publicly released scientific research data;
- Manages creation and maintenance of persistent identifiers for NTIA ITS publicly released scientific research data;
- Works with the NTIA ITS Director and NTIA ITS divisions to ensure implementation and operation of the data inventory;
- Provides consultation and educational materials for NTIA ITS employees on managing data and providing public access to results of federally funded research, including use of the data inventory and the NTIA ITS data review process, as applicable, for results of federally funded research that are intended for public dissemination;
- Develops data citation methods to facilitate attribution to NTIA ITS scientific data sets;
- Facilitates search and access to metadata for NTIA ITS data; and
- Supports NTIA ITS division responsibilities, as applicable (see Sections 6.5 and 6.6).

### **6.4 The NTIA ITS Software Officer**

- Curates metadata for NTIA ITS open source software repositories;
- Manages creation and maintenance of persistent identifiers for NTIA ITS open source software repositories;
- Provides consultation and educational materials for NTIA ITS employees on managing software and providing public access to results of federally funded research, including use of the software inventory and the NTIA ITS software review process, as applicable, for results of federally funded research that are intended for public dissemination;
- Facilitates search and access to metadata for NTIA ITS open source software repositories; and
- Supports NTIA ITS division responsibilities, as applicable (see Sections 6.5 and 6.6).

### **6.5 Division Chief**

- Implements the NTIA ITS-approved NTIA ITS Plan to manage public access to results of federally funded research within his/her division;
- Reviews scholarly publications, software, and data prior to making it publicly available and authorizes release;
- Ensures that his/her division prioritizes the discoverability and publication of applicable project datasets based on stakeholder needs and resources required;
- Provides oversight for implementation of the NTIA ITS Plan by projects within the division;
- Evaluates the effectiveness of project teams within the division in meeting the objectives of this plan; and
- Ensures employees under his/her supervision meet employee-level requirements of NTIA ITS plans to manage public access to results of federally funded research.

### **6.6 Project Leader**

- Ensures activities under his/her direction are in compliance with NTIA ITS plans to manage public access to results of federally funded research;

- Ensures that Statements of Work attached to NTIA ITS agreements with other agencies or organizations include requirements for managing scholarly publications, software, and data in a manner that is consistent with the NTIA ITS directives for managing public access to results of federally funded research; and
- Ensures that DMPs are prepared and executed as specified by the NTIA ITS Plan to manage public access to results of federally funded research and that metadata for NTIA ITS data is provided to the appropriate repository or other publicly available repositories, as applicable.

## 6.7 Project Team Member

Complies with the NTIA ITS Plan to manage public access to NTIA ITS-developed software, NTIA ITS digital scientific data, and NTIA ITS peer-reviewed publications:

- If NTIA ITS digital scientific data or NTIA ITS-developed software are identified as available to the public on the NTIA ITS website, provides data in open formats via publicly available repositories or upon request and to the extent feasible, directly to the requestor, free of charge unless otherwise excepted; and
- Provides NTIA ITS-developed software and NTIA ITS digital scientific data associated with peer-reviewed publications dated October 1, 2025 and later to the appropriate repository as soon as practicable following sponsor delivery or publication.

## 7. IMPLEMENTATION

This plan provides a framework for identifying, managing, and preserving the results of federally funded research to make them publicly accessible as peer-reviewed publications, open source software, and digital data. NTIA ITS guiding principles for implementation include the following:

- Create flexible approaches and infrastructure to accommodate a wide range of results of scientific research as well as a diversity of stakeholders including funded researchers, universities, libraries, publishers, industry, civil society, and any other users of NTIA ITS research results. Policies, processes, and infrastructure that provide meaningful access to the results of federally funded research for this full range of stakeholders will be developed.
- Optimize search, archival, and dissemination features to encourage innovation in accessibility and interoperability while ensuring long-term stewardship of the results of federally funded research.
- Plan for change as the types and volume of scientific information produced by NTIA ITS expand. Extensible and evolvable solutions that can accommodate new needs on an ongoing basis are required. NTIA ITS will track and respond to continuing changes in digital technologies when planning to make research results publicly accessible.
- Provide appropriate leadership to promote and enhance the NTIA ITS reputation for high-quality output, willingness to work in partnership, and responsiveness to stakeholders.

### 7.1 Policy

NTIA ITS will adopt a systematic approach to implement a Public Access Policy for Open Science that includes the following:

- Public discovery and download of peer-reviewed publications will be made available free of charge as soon as practicable, upon approval of publication in accordance with applicable laws.
- Data and code associated with the manuscript will be made available free of charge as soon as practicable, upon publication of the paper in accordance with applicable laws.
- Public discovery and download of standalone datasets and code will be made available free of charge as soon as practicable, upon approval of publication in accordance with applicable laws.
- Attribution of publications to authors, journals, and original publishers will be provided.
- Persistent identifiers in metadata and in research outputs themselves will be provided.
- Effective data management planning and data sharing for all federally funded activities that produce scientific data will be implemented.
- Clear guidance and access to appropriate education and training materials will be provided to all NTIA ITS staff, contractors, and federally funded extramural researchers to help them comply with NTIA ITS policies.

## 7.2 Scientific Publications

NTIA ITS has long had a public access system for peer-reviewed publications that enables the submission of metadata and final, peer-reviewed manuscripts or final publications that includes the following functionalities:

- Allows authors to submit and manage manuscripts directly with ITS Publications office for inclusion in the NTIA ITS public access system.
- Accepts manuscripts in a variety of formats compatible with the current state-of-the-art in repository architecture.

For publications dated October 1, 2025 and later, the NTIA ITS public access system will accept any additional files of figures, tables, data files, or supplementary information included with the manuscript.

The NTIA ITS repository of full-text peer-reviewed NTIA ITS publications leverages well-established search, archival, and dissemination features. The NTIA ITS publication repository:

- Enables the storage, organization, and management of metadata and contents of peer-reviewed publications and associated data collected or submitted under the NTIA ITS Public Access Policy for Open Science;
- Uses an architecture and follows industry standards that facilitate open government, integration, machine readability in non-proprietary or widely distributed archival formats, and promotes interoperability and accessibility;
- Has the capacity to integrate peer-reviewed scholarly publications with appropriate scientific databases;
- Is accessible from NTIA and ITS websites; and
- Enables NTIA ITS to monitor compliance with its Public Access Policy for Open Science

## 7.3 Scientific Data and Software

To the extent feasible and consistent with applicable law and policy, agency mission, resource constraints, U.S. national, homeland, and economic security, and the objectives listed above, digitally formatted scientific data or NTIA ITS-developed software resulting from unclassified research supported



wholly or in part by Federal funding will be stored and publicly accessible to search, retrieve, and analyze.

The NTIA ITS plan for providing public access to scientific research output consists of three components: data management plans (DMPs), a data inventory, and a platform to provide public access infrastructure. Work began with a pilot implementation developed according to the guidance provided in the Project Open Data component of OMB memorandum M-13-13. This pilot was initiated with a review of NTIA ITS reference data and the selection of an appropriate pilot set representative of the diversity of data types and domains across NTIA ITS. Persistent identifiers and metadata have been provided for some of this reference data, and the work is continuing. Lessons learned in this pilot will inform the development of the data inventory, described below.

Generation of data management plans has also begun, providing documentation of plans for storage, archival, and accessibility for multiple types of NTIA ITS scientific research output. At a minimum, data management plans (DMPs) must contain a summary of activities that generate data, a summary of the data types generated by the identified activities, a plan for storage and preservation of the data, and a plan describing whether and how data generated will be reviewed and made available to the public.

The data inventory is a catalog of the datasets that are generated via IAA and NTIA ITS-sponsored research to enable researchers to link those datasets to the scientific literature, other datasets, etc. The metadata describing the scientific data contained in the catalog will include, at a minimum, the common core metadata schema in use by the federal government, found at <https://resources.data.gov>. The JavaScript Object Notation (JSON) file for the current public listing of datasets and NTIA ITS-developed software is planned to be provided at <http://www.its.ntia.gov/data/index.cfm> (not yet established). At time of writing, two NTIA ITS datasets are currently available via data.gov, including a complete listing of NTIA ITS Standard Reference Data (SRD), which has been critically evaluated using documented procedures under the requirements of the Standard Reference Data Act.<sup>5</sup> The data inventory serves not as a repository of study data but as an index containing information that describes a dataset (i.e., metadata) and information about where and how to access the data.

The final component will use the information gained in the first two phases to put in place production-level infrastructure and populate it with persistent identifiers and metadata for all publicly available NTIA ITS data. This component is expected to enable interoperability with other federal agencies. This production infrastructure will be subject to continuing evaluation, refinement, and revision. NTIA ITS will assess the long-term needs for preservation of scientific data in fields that the agency supports and outline options for developing and sustaining repositories for scientific data in digital formats, taking into account the efforts of public- and private-sector entities.

All NTIA ITS project plans will include requirements for data management planning consistent with the goals of this plan.

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<sup>5</sup> Pub. L. 90-396, July 11, 1968, *updated* by American Innovation and Competitiveness Act, section 108, Pub. L. 114-329, January 6, 2017.

## 7.4 Outreach and Education

NTIA ITS will provide guidance and training regarding NTIA ITS plans to provide public access to the results of federally funded scientific research and their implementation to NTIA ITS staff and contractors as well as to collaborators outside NTIA ITS who are working on federally funded scientific research. This guidance and training will be updated as necessary to meet new requirements, as appropriate.

## 8. METRICS, COMPLIANCE, AND EVALUATION

NTIA ITS will develop metrics that evaluate compliance with the NTIA ITS Public Access Policy for Open Science. Possible metrics include:

- Number of papers (i.e., publications submitted from NTIA ITS projects) made available to the public per year;
- Percentage of papers for which datasets or NTIA ITS-developed software were made available;
- Number of datasets and NTIA ITS-developed software sets added to the data inventory per year;
- Number of datasets and NTIA ITS-developed software sets made public per year; and
- Percentage of staff in compliance with requirements.

NTIA ITS will use data from the NTIA ITS publication repository, other reference sources, IAAs, and project reports to determine compliance. Compliance with this plan and prospective policies will be enforced through annual performance reviews at both staff and management levels.

## 9. PUBLIC-PRIVATE PARTNERSHIP

NTIA ITS may utilize services provided by Zenodo<sup>6</sup>, which is an existing and accepted public-private partnership. Zenodo provides a simple means of implementing DOIs for research outputs published through the GitHub platform, currently used as an access system for code and data.

## 10. INTERAGENCY COORDINATION

NTIA ITS will coordinate with other agency partners through the following mechanisms.

- National Science and Technology Council (NSTC) Subcommittee on Open Science (SOS) and multiple associated working groups convened by OSTP to enable interagency coordination in responding to the requirements of the February 2013 and August 2022 public access memos.
- NSTC Subcommittee on Research Security convened by OSTP to enable interagency coordination in responding to the requirements of NSPM-33.
- Commerce Data Governance Board and its multiple working groups to share best practices in research data management and assure that data assets are properly catalogued in the Department of Commerce's data inventory and data.gov .

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<sup>6</sup> <https://zenodo.org>

## 11. PUBLIC NOTICE

NTIA ITS will publish a generalized announcement of the public access plan in the Federal Register soliciting comment from federally funded researchers, universities, libraries, publishers, users of federally funded research results, civil society groups and the general public. NTIA ITS will post its final Plan on the NTIA ITS website.

## 12. UPDATE AND RE-EVALUATION OF PLAN

The plan will be evaluated annually and updated as necessary until the NTIA ITS Public Access Policy for Open Science is implemented.

## 13. TIMELINE FOR IMPLEMENTATION

Key milestones are outlined in each implementation category below for addressing the August 2022 OSTP memo's Section 3 and 4 requirements for NTIA ITS's Plan. This timeline lists plan preparation milestones and policy milestones. Plan preparation is a first step in the process and plans may evolve prior to publication of the policy.

### 13.1 Policy

Fiscal Year	Due Date	Policy Milestone
FY23	August 2023	Submit draft plan to OSTP addressing Section 3 requirements
FY25	December 2024	Update and publish directives addressing Section 3 requirements
FY25	December 2024	Post plan for public review
FY25	December 2024	Submit draft plan to OSTP addressing Section 4 requirements
FY26	December 2025	Effective date for new directives addressing Section 3
FY27	December 2026	Update and publish directives addressing Section 4
FY27	December 2026	Post plan for public review
FY28	December 2027	Effective date for new directives addressing Section 4

### 13.2 Infrastructure

Fiscal Year	Due Date	Infrastructure Milestone
FY23	August 2023	Data Management Plan (DMP) template drafted
FY24	November 2023	Initial pilot data inventory system operational per OSTP Memorandum for the Heads of Executive Departments and Agencies of August 22, 2023
FY24	February 2024	Initial draft of NTIA ITS extensible metadata schema for scientific data

Fiscal Year	Due Date	Infrastructure Milestone
FY24	May 2024	<ul style="list-style-type: none"> <li>• Procedure and process documented for internal editorial review</li> <li>• Procedure and process documented for posting publications to public-serving content management system</li> <li>• Procedure and process documented for internal review of software to be posted publicly</li> <li>• Procedure and process documented for posting data and software to public-serving repository</li> </ul>
FY24	July 2024	Develop metadata index for access system(s)
FY24	August 2024	Submit update to OSTP and OMB specifying approaches for making appropriate metadata public
FY24	September 2024	Demonstrate data inventory concept to relevant stakeholders
FY25	November 2024	Develop data-type index for access system(s)
FY25	December 2024	Data citation recommendations made
FY25	February 2025	Data inventory operational
FY26	October 2025	Access system(s) operational

### 13.3 Processes

Fiscal Year	Due Date	Process Milestone
FY25	October 2024	Data Management Plans required for all federally funded research
FY25	February 2025	Metadata for publicly available datasets entered into data inventory (and datasets shown in data.gov as appropriate)

### 13.4 Resources

NTIA ITS has identified base funding resources within its Tech Transfer and Research Infrastructure budget to ensure initial implementation, scale-up, and continued operation of the NTIA ITS system to make publications and data publicly available.

## 14. DOCUMENT HISTORY

Submitted to OSTP, 24 August 2023

Draft approved by OSTP and OMB, DD Month YYYY

Draft posted online, DD Month YYYY

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