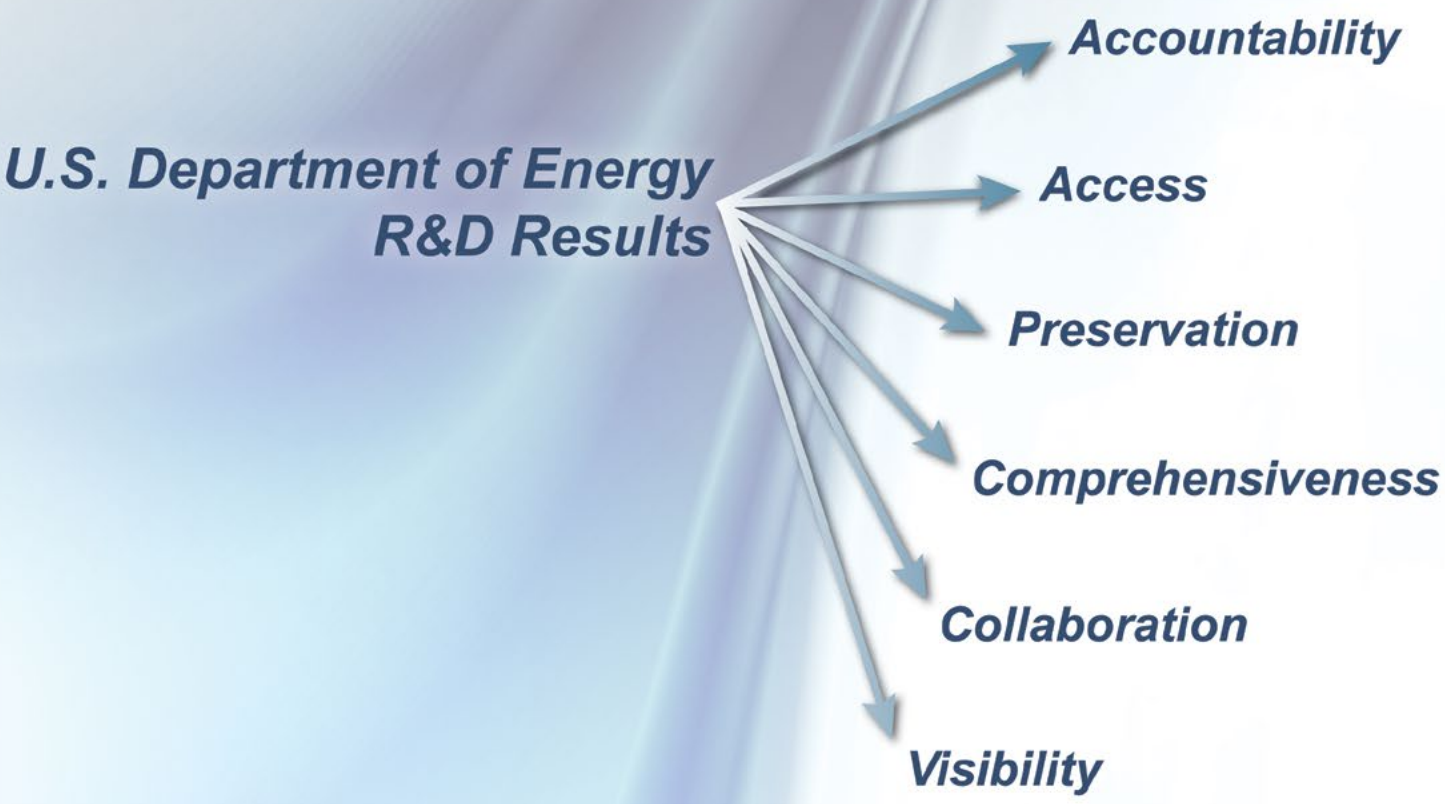
Office of Scientific and Technical Information

2015–2019 Strategic Plan



U.S. DEPARTMENT OF ENERGY | Office of Science | Office of Scientific and Technical Information

Message from the Director

As the Office of Scientific and Technical Information (OSTI) approaches its 70th anniversary (having been established with the Atomic Energy Commission in 1947), our energy, enthusiasm, and commitment to America's science and technology future are as bright-eyed and vibrant as ever. This future includes energy security, environmental stewardship, nuclear security and safety, and leadership in science, technology, and innovation.

OSTI has a renewed focus on providing comprehensive access to the results of the Department of Energy (DOE) research and development (R&D) investments. Specifically, we have streamlined the portfolio of our public-facing web products to make it easier to find DOE's R&D results. A major aspect of quality in federal scientific information collections and portals is comprehensiveness; that is, that they reflect the complete R&D output of DOE. To that end, we have re-balanced OSTI resources to put more emphasis on comprehensiveness across all forms of scientific and technical information (STI) we acquire from DOE's research efforts.

Committed to innovation and creativity, this strategic plan focuses on DOE R&D results by organizing its goals around the sequential and process-oriented nature of OSTI's business. Specifically, Goal 1 focuses on the acquisition of STI through a variety of techniques. Goal 1 is ultimately what makes DOE accountable to the public for the outcomes of its R&D investment. It drives the quality and comprehensiveness of everything OSTI has to offer in our dissemination products. Goal 2 focuses on the long-term preservation of DOE R&D results, a 70-year collection of nearly 1.5 million STI papers and electronic files. Goal 3 focuses on the unique world of DOE classified, controlled, and sensitive R&D results and OSTI's work in providing secure information acquisition, preservation, and dissemination services to the DOE and National Nuclear Security Administration (NNSA) communities. Goal 4 reflects the "face" of OSTI that most of the public sees, which is the "output" or dissemination of DOE unclassified R&D results. Goal 5 is intentionally heterogeneous. On the one hand, it covers the well-defined infrastructure and business processes that are essential to Goals 1 through 4. On the other, it is open-ended and committed to flexibility as opportunities for new collaborations and business lines emerge. These may include cost-reimbursable projects for DOE and other federal agencies, or, with DOE's support, new mission responsibilities.

An extremely exciting element of this plan is implementation of public access to the peer-reviewed scholarly publications resulting from DOE R&D funding. DOE's lab and grantee scientists produce around 25,000 peer-reviewed accepted manuscripts per year, which are published as articles in leading scientific journals. Working with the DOE author community, as well as in collaboration with publishers and other stakeholders, OSTI will provide free, public access to these papers after a brief administrative interval. This broadened access will serve to accelerate scientific advancements and commercial innovation.

This plan is intended to give us strategic focus and discipline, but it is fluid and dynamic and will be adapted and updated as unforeseen conditions and opportunities arise. Above all, we are committed to serving DOE and the American public, and we will listen, respond, and act in their interest.

Brian Hitson
Director

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Vision

The Office of Scientific and Technical Information (OSTI) will fulfill a critical U.S. Department of Energy (DOE) mission to ensure long-term preservation of and access to the results of DOE research and development (R&D) investments. Across the full spectrum of DOE R&D programs, OSTI will provide accountability for all DOE scientific and technical information—in its many forms—through electronic, efficient, and user-friendly tools and technology.

Mission

To advance science and sustain technological creativity by making R&D findings available and useful to DOE researchers and the public.

Goals

Goal 1

Accountability for DOE Unclassified R&D Results—Collection, Acquisition

Comprehensiveness and the acquisition of emerging or previously unavailable DOE scientific and technical information (STI) are focal points for OSTI over the next five years. OSTI intends to continuously improve comprehensiveness by identifying gaps in the submissions of text-based STI and closing those gaps. One of the major accomplishments will be the acquisition of metadata and links to full-text articles and accepted manuscripts resulting from DOE research funding. In the past, the full text of most scholarly articles has only been available to those with subscription access to the journals publishing those articles. In addition to text-based STI such as technical reports and conference papers, multimedia and datasets represent non-text forms of STI that are currently announced, though in limited quantity, in OSTI's databases. Expanding coverage and increasing access to multimedia and datasets are also areas where OSTI will focus efforts.

Strategic Objective 1.1

Implement the Acquisition Aspects of DOE Public Access Plan for Scholarly Publications

In support of the U.S. government initiative to increase public access to the results of federally-funded scientific research, OSTI will establish the DOE Public Access Gateway for Energy and Science (DOE PAGES[Beta]), a product with accompanying processes to ensure long-term preservation and public access at the appropriate time to full-text scholarly publications resulting from DOE funding. Leveraging the existing DOE Scientific and Technical Information Program (STIP) and Clearinghouse for the Open Research of the United States (CHORUS) infrastructures (along with other collaborations, such as SHARE–the SHared Access Research Ecosystem) as they develop, OSTI will secure the ingest of DOE-affiliated accepted manuscripts, maintain an archive for these full-text documents, and provide access to the best available version to ensure public access into the future.

Strategic Objective 1.2

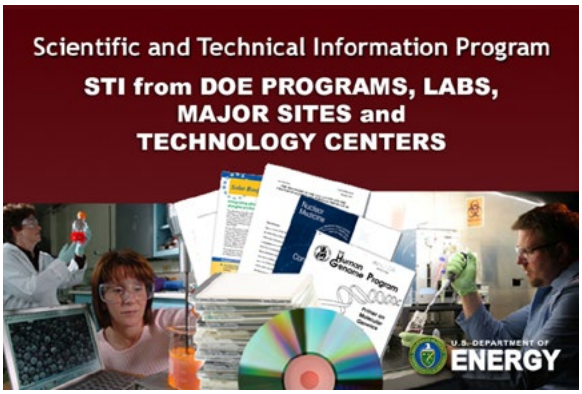
Target Comprehensive Electronic Submission of Technical Reports and Other Text-based Forms of STI

The growth, complexity, and geography of organizations across the DOE complex require a correspondingly diverse and agile STIP to effectively account for the results of DOE R&D investments. Recently, STIP has improved by engaging more active program office representation, and it will continue to adapt to new research and funding mechanisms. Working with the STIP community, OSTI will identify and analyze apparent gaps in STI submissions, with the goal of institutionalizing practices to promote comprehensive availability of unclassified R&D results.

Strategic Objective 1.3

Increase Volume of Searchable Multimedia Forms of STI

Working with the STIP and others across the DOE complex, OSTI will ensure regular, timely submission and a greater volume of indexable multimedia STI. STI content in videos, webinars, and audio files is becoming increasingly common and provides exciting prospects for future researchers and historians. In addition, the conventional notion of an "article" is shifting, particularly as multimedia is embedded in traditional text products and other advanced "containers" of STI, creating interactive content.



Strategic Objective 1.4

Increase Acquisition, Registration, and Usability of DOE R&D Datasets

The OSTI Data ID Service assigns Digital Object Identifiers (DOIs) to the Department's datasets and enables researchers to link their publications to the underlying data. In addition to leveraging visibility and retrievability, this service helps to ensure that critical datasets will be available for use by future scientists. OSTI intends to educate DOE organizations across the complex as to the multi-faceted value of data citation and to greatly increase the number of datasets registered over the next five years. OSTI will also explore ways to better serve the data community. One of those envisioned ways is the integration of DOE Data Centers into the realm of STIP communications and activities.

Goal 2

Long-term Preservation of DOE R&D Results

The short-term plan over the next five years will ensure the long-term positioning over decades to come of reliable and accessible DOE scientific and technical information, or R&D results. This goal focuses on maximizing partnerships throughout the DOE complex to increase availability of legacy content in industry standard electronic formats and to ensure implementation of best practices for preservation of public access to DOE scientific and technical information (STI). During this time, OSTI will lay the groundwork for curation and protection of DOE information through inevitable technology shifts and potential incidents or disasters.

Strategic Objective 2.1

Increase Digitization of Legacy Holdings through Partnership and Collaboration

Partnerships and other collaborative efforts targeting digitization of legacy holdings are key to meeting this objective. Roughly two-thirds of past DOE R&D output is not available in an electronic format. To reduce duplicative efforts and move an organized preservation effort forward across the complex, OSTI will take the lead in coordinating this preservation. OSTI will leverage the digitization efforts at other organizations and combine them with OSTI's efforts, thereby maximizing Departmental resources, ensuring common standards, and increasing long-term preservation of DOE R&D results.

Strategic Objective 2.2

Support Preservation through Migration and Interoperability

Technology in data storage, archiving, and preservation has changed dramatically over the past two decades and continues to change at a rapid pace. To ensure preservation of DOE R&D results throughout time, OSTI must take the lead in identifying and proactively adopting new technologies and transitioning away from obsolete or fading technologies. Both action and mindful preparedness will be necessary to ensure that the Department's collection achieves flexible migration and successful interoperability.

Strategic Objective 2.3

Preserve DOE STI Hosted in a Distributed Environment through Dark Archiving

OSTI will employ dark archiving practices as a Departmental backup and storage area to house the working copy of resources. In addition to ensuring long-term preservation, this will allow for facilitation of processing internal requirements and business rules, such as improved searchability by allowing full-text indexing. OSTI plans to work with DOE sites and other institutions to implement and validate dark archiving of institution-hosted full-text documents. The dark archive will ultimately provide long-term, permanent access to any distributed DOE STI no longer available through its original source.

Strategic Objective 2.4

Ensure Preservation of Unclassified DOE R&D Results through Validated Testing of Disaster Recovery and Contingency Plan Elements

To ensure that OSTI can continue to collect, manage, and provide access to DOE R&D results in the event of a disaster or contingency, OSTI operates a strategy to ensure both preservation and availability including onsite top-of-the-line storage, offsite backup tape storage, and a disaster recovery (DR) site. This DR site is a hot site, also known as a real-time duplicate of the original site, equipped with partial services. Monitoring and management of the DR site's infrastructure in the same manner as the servers and services located at the main OSTI data center will continue.

OSTI will explore new ways to streamline its technical infrastructure, with the goal of maximizing efficiency while achieving improved levels of storage capacity, systems performance, fail-safe redundancy, and cyber security. The underlying hardware and software infrastructure must provide both stability in the production environment and the capacity to support rigorous testing, hosting of needed applications, and faster processing. The infrastructure supporting OSTI's business and mission functions is in a state of constant change, due in part to equipment life cycles, adoption of emerging technologies to increase efficiencies, and implementation of ever-increasing cyber security requirements. To ensure that this constantly evolving information technology (IT) environment will not negatively impact the ability to execute recovery plans, a regular interval testing strategy and methodology will be programmatically integrated into existing change management processes.

Over the next five years, OSTI will implement a new strategy to improve recovery times and ensure preservation of unclassified DOE R&D results. OSTI will develop and implement an additional array of recovery tests to validate that the systems and subsystems supporting OSTI's STI products can be recovered from offsite backup media. The strategy, tests, and plans to map and prepare for various possible contingencies and disasters will be outlined in the OSTI Disaster Recovery and Contingency Plans.

Goal 3

Collection, Protection, Preservation, and Secure Access to Classified DOE R&D Results, Unclassified Controlled Nuclear Information (UCNI), and Controlled Unclassified Information (CUI)

OSTI has the responsibility to collect, preserve, and protect DOE and NNSA classified R&D information and Unclassified Controlled Nuclear Information (UCNI) in accordance with all applicable laws, regulations, and national security requirements. OSTI has a shared commitment to the Department's unique responsibility of a) identifying nuclear weapons-related information that must be protected to prevent adversaries from developing weapons of mass destruction, b) assisting in non-proliferation initiatives, and c) protecting overall national security interests. A partner-focused Classified Scientific and Technical Information Program (STIP) will enhance the comprehensiveness and acquisition of emerging or previously unavailable classified and UCNI Scientific and Technical Information (STI). Over the next five years, OSTI will provide unique and secure STI management solutions utilizing innovative technical and information security concepts to assure authorized access that incorporates appropriate clearance, coordinated approvals, and required need-to-know elements.

Strategic Objective 3.1

Achieve Comprehensive Electronic Submission of Classified and UCNI STI

In the next five years, OSTI will focus on implementing a more partner-focused OSTI Classified STIP, which will encompass participation and support from a multitude of stakeholders across the DOE complex, including the major NNSA design laboratories and production facilities and DOE and NNSA headquarters program and site offices. OSTI will strive to continuously improve collection comprehensiveness by identifying gaps in the submissions of classified STI. STI products comprise various digital media types, including technical reports, conference reports and presentations, journal articles, theses, and workshop reports. The submission of classified and UCNI STI to OSTI introduces unique considerations including national security, authorization, need-to-know, as well as adherence to numerous regulations and requirements. A major accomplishment for this OSTI objective will be the acquisition of metadata and associated STI products resulting from DOE and NNSA research funding.

Strategic Objective 3.2

Deploy Secure, Need-to-Know-Based Search and Retrieval for Classified and UCNI STI

In support of the Department's strategic national security objectives, OSTI maintains an extensive collection of classified and UCNI information and is committed to protecting this information according to all national security requirements. The application of strict protection mechanisms, including need-to-know, are paramount to protect the Department's classified and UCNI information. Access and protection of information will be integrated into a comprehensive need-to-know-based search product for classified and UCNI STI.

Strategic Objective 3.3

Ensure Preservation of Classified R&D Information and UCNI through Validated Testing of Disaster Recovery and Contingency Plan Elements

To ensure that OSTI can continue to collect, manage, and provide access to classified R&D information and UCNI in the event of a disaster or contingency, the OSTI Classified Disaster Recovery and Contingency Plan will be updated to include a full array of tests which validate that systems and subsystems supporting OSTI's classified STI products can be recovered from offsite backup media.

The infrastructure supporting OSTI's classified business and mission functions is in a state of constant change, due in part to equipment lifecycles, adoption of emerging technologies to increase efficiencies, and implementation of ever-increasing cyber security requirements. To ensure that this constantly evolving IT environment will not negatively impact the ability to execute recovery plans, regular testing will be programmatically integrated into existing change management processes and will be run at regular intervals.

Strategic Objective 3.4

Develop Specialized Information Tools and Services to Support NNSA and DOE

A key strength of OSTI is the utilization of its broad information management and technology experience to further support the diverse needs of the NNSA and DOE community. Specific NNSA initiatives include the Product Realization Integrated Digital Enterprise (PRIDE) and Enterprise Secure Network (ESN) which focus on enhanced configuration management capabilities, an issue recently identified as vitally important in a 2014 DOE Inspector General report. OSTI possesses broad subject matter and historical expertise with respect to its diverse and extensive classified collection spanning over 70 years. The classified collection encompasses a multitude of subject areas including a) weapons (all areas), b) reactor technology, c) fuel cycle technology, and d) isotope separation, as well as a range of other subject areas and major historical programs, such as the Manhattan Project. OSTI has a long and successful history of collaborating with various DOE and NNSA stakeholders to define standards, support enhanced policy, and implement technologies to enhance protection and access to sensitive information.

Strategic Objective 3.5

Review, Catalog, Mark, and Disseminate Classified and UCNI STI according to DOE and National Requirements

OSTI serves a diverse set of stakeholders while balancing security and openness to ensure proper access to STI information. The originators of information products are required to conduct a comprehensive review before submission to OSTI to ensure accurate access limitations and associated markings. Product metadata submissions are enhanced by OSTI with Quality Assurance (QA) review and addition of abstracts, descriptors, and need-to-know assignment, and serve as the keystone data for product searching and identification. Classified information requires classification reviews to ensure proper classification based on current DOE directives, regulations, and Executive Orders. Sites are required to conduct these reviews and ensure proper markings prior to submission to OSTI. OSTI is required to determine if a classification or UCNI review is warranted prior to dissemination to authorized requesters when a) documents are generated prior to current requirements including DOE Weapon Data Order (Sigma) and 10 CFR 1017 (UCNI), b) documents may have been improperly declassified under the CCRP or other declassification efforts, c) Mandatory Declassification Review (MDR) requests and FOIA requests are made, d) OSTI information is generated in classified subject areas including documents, email, database reports, MDR, and FOIA responses, and e) documents are improperly marked. In instances where reviews are required, OSTI conducts (within its authority) and coordinates with appropriate site classification and UCNI personnel to ensure that reviews, cataloging, need-to-know assignments, and document markings are all accurate and consistent, providing an overall framework to ensure proper information security.

Strategic Objective 3.6

Life-Cycle Management of Controlled Unclassified Information (CUI)

OSTI maintains an extensive collection of CUI. OSTI is committed to managing and protecting this information according to all national and Departmental requirements. The submission of CUI to OSTI introduces unique considerations including security requirements, authorization, need-to-know, as well as adherence to numerous regulations and policies. In striking the balance between security and openness, OSTI works diligently with external DOE organizations to continuously distinguish between information that must be protected for security or other reasons and information that is openly available.

In addition to collecting, preserving, and protecting classified information, OSTI has the responsibility for information that is unclassified but still considered sensitive. Examples of unclassified but sensitive information include commercial and proprietary information, privileged information, personal information, law enforcement information, and additional categories of information such as Export Controlled Information covered by statute or Executive Order. Within DOE, Official Use Only currently encompasses the majority of unclassified but sensitive information, although the term CUI, now defined by Executive Order (E.O.) 13556, is gaining more common usage and will eventually be the government-wide uniform program to identify and protect sensitive but unclassified information. A major accomplishment for this OSTI objective will be the acquisition of CUI metadata and associated STI products resulting from DOE research funding.

Goal 4

Maximum Use of and Visibility for DOE R&D Results

OSTI will support DOE goals and objectives to ensure advancement of America's leadership in science and energy, particularly through maximizing use of and visibility for DOE's R&D results. OSTI will explore new ways needed to increase the visibility of DOE scientific and technical information (STI) through both its products and its communication activities. OSTI will increasingly integrate the scope, diversity, and depth of available content and broaden approaches researchers and the public take to use DOE R&D results. By leveraging current and emerging partnerships to increase awareness of and support for DOE's R&D, OSTI will showcase innovative DOE methods for increasing public access.

Strategic Objective 4.1

Ensure High Visibility and Use of the DOE Public Access Model—DOE PAGES^{Beta}

The White House Office of Science and Technology Policy (OSTP) 2013 memorandum requiring agencies to provide, after a period of time, free public access to the full text of government-funded scholarly research is a major event in information and publishing history. OSTI will ensure the value and cohesiveness of DOE's science and energy R&D programs, as stated in the DOE 2014–2018 Strategic Plan, by *"increasing no cost public access to Departmental research, especially journal literature and scientific data, to accelerate discovery through the sharing of scientific knowledge."* (Goal 1, Strategic Objective 3, Page 11.) Ensuring high visibility of this new resource, highlighting the unprecedented impact this can have across research communities, and ensuring that the access policies and embargo periods are clearly defined and explained are part of the responsibilities OSTI will meet as it launches the Public Access Gateway for Energy and Science (DOE PAGES^{Beta}).

Strategic Objective 4.2

Benchmark National Library of Energy^{Beta} and Constituent Products as "Best in Class" from Government, Academia, and Industry

Over the next five years, OSTI will disseminate DOE R&D results through leading-edge products. While not exhaustive, in addition to DOE PAGES^{Beta}, OSTI is committed to the following core products and the role they play:

- **National Library of Energy^{Beta}** (NLE^{Beta}) is a virtual library and open government resource to allow American citizens to search the entire DOE complex (without having to know the organizational structure) to find information about energy and technology, energy market information, nuclear security and environmental management, and scientific and R&D results. NLE^{Beta} virtually integrates information from Energy.gov (the DOE website) and all DOE program offices, national laboratories, and other facilities.

- **SciTech Connect** is a portal to free, publicly-available technical reports, bibliographic citations, journal articles, conference papers, books, multimedia, and data information sponsored by DOE and its predecessor agencies through a grant, contract, cooperative agreement, or similar type of funding mechanism from the 1940s to today.
- **DOE Data Explorer** is a portal to datasets and data collections sponsored by DOE. This collection was developed as a way to guide users to publicly-available DOE-sponsored data, and consists of non-text information including numeric files, figures or data plots, images, and multimedia.
- **ScienceCinema** is a collection of videos produced by the DOE national laboratories, other DOE research facilities, and the European Organization for Nuclear Research (CERN). Using innovative, state-of-the-art audio indexing and speech recognition technology from Microsoft Research, ScienceCinema allows users to search for specific words and phrases spoken within video files to deliver precision searching already common in text-based databases.

Other products will be used to augment this collection by featuring specialized information types and sources. OSTI will evaluate all products in terms of uniqueness and value to the public or its specialized audience. OSTI will strive for excellence in development, implementation, and placement of core DOE information products at the forefront of government, academia, and industry. OSTI will engage with core user groups to improve search interface and functionality and will integrate new and beneficial technologies into search products.

Strategic Objective 4.3

Leverage Partnerships to Promote and Support DOE R&D Priorities

During the next five years, OSTI will advance DOE R&D priorities by continuing partnerships with DOE programs, other federal agencies, international entities, and public and private connections to maximize availability of STI. Employment of metrics, new tools, methods, and technologies among these partners will strengthen dialogue, increase overall awareness of capabilities, and broaden support for expanded STI access efforts. Quantitative measures and analysis of STI ingest and output will be utilized to best promote and support DOE R&D.

Strategic Objective 4.4

Establish Communications as a Driver of Visibility

Over the next five years, OSTI will implement a strategic communications program that will expand OSTI's key stakeholders' awareness of its DOE STI products, enhance their appreciation of the extensive range and types of DOE R&D results that OSTI makes available, and thereby lead them to increase their usage of DOE OSTI R&D offerings. The OSTI communications program will emphasize the wide range, usefulness, and currency of the R&D results it collects, preserves, and makes accessible. Focusing on DOE R&D results and how the public can efficiently access those results, OSTI communications will work to drive the visibility of—and increase the traffic to—its collections of DOE STI and other STI of value to DOE-affiliated researchers.

OSTI will work to bolster outreach to OSTI's key stakeholders, both STI providers and consumers. These include researchers affiliated with DOE; DOE and its program, field, site and procurement offices, national laboratories, and research facilities; research universities and libraries; scientific professional societies; other federal science agencies and international science organizations; and other STI community partners.

OSTI will communicate through a variety of means, including the OSTI website; OSTI news items including news releases, announcements, the OSTI.gov Newsletter, blogs, social media, listserv email; and outreach products such as brochures, flyers, posters, videos, displays, and presentations.

Goal 5

Strong Foundations, Partnerships, and Agility

The ambitions and vision reflected in Goals 1 through 4 can only be realized through OSTI's workforce and infrastructure. Goal 5 is a commitment to provide the leadership, human resources, technology and physical infrastructure, and business processes as a solid foundation to support Goals 1 through 4.

Beyond its foundational purpose, Goal 5 is also an acknowledgement that OSTI's past and future success is built around a commitment to partnership—within DOE, with other federal agencies, with international partners, with the private sector and academia, and with OSTI's local community in Oak Ridge, Tennessee.

Finally, Goal 5 is an acknowledgement that Goals 1 through 4 are not omniscient; we do our best to forecast conditions and opportunities for the next five years, but realistically, our ability to foresee past the next 18–24 months is limited. Goal 5 is a symbolic placeholder for the potential new business lines, collaborations, and innovations OSTI could undertake. Of course, any new efforts we initiate will complement (rather than compete with) our core mission responsibilities, and these efforts will only be undertaken with the support of DOE or with the financial support of cost-reimbursable funding.

Because of the heterogeneous and somewhat speculative nature of Goal 5, its structure differs from Goals 1 through 4. In place of that structure, the following tenets or components are offered:

- Leadership and organizational structure that clearly defines vision and performance expectations and facilitates efficient operations and camaraderie.
- Frequent and effective internal and external communications that reinforce organizational direction and cohesiveness.
- A technology and cyber infrastructure that serves both OSTI's programmatic requirements and internal business needs.
- A physical infrastructure that provides a safe, secure, efficient, and healthy environment for OSTI's workforce and information assets.
- A diverse and talented federal workforce committed to public service and the OSTI mission.
- Contractors invested in and committed to OSTI's success.
- Active, entrepreneurial cost-reimbursable services that meet the specialized needs of OSTI customers and are compatible with the OSTI mission.
- Symbiotic partnerships with other DOE organizations, other federal agencies, international partners, academia, and the private sector to complement OSTI's resources and capabilities.

Glossary

10 CFR 1017

Refers to Part 1017 under Title 10: Energy of the Code of Federal Regulations, *Identification and Protection of Unclassified Controlled Nuclear Information.*

Accepted Manuscript

The final peer-reviewed manuscript which includes the same content as the published article.

AEC

Atomic Energy Commission, a predecessor agency to the Department of Energy.

CHORUS

Clearinghouse for the Open Research of the United States, a partnership conceived by publishers to increase public access to peer-reviewed publications from federal agencies.

www.chorusaccess.org

Dark Archiving

In reference to data storage, an archive that cannot be accessed by any users and functions as a repository for information that can be used as a fail-safe.

DOE

The U.S. Department of Energy, governmental agency whose mission is to ensure America's security and prosperity by addressing its energy, environmental and nuclear challenges through transformative science and technology solutions.

www.energy.gov

DOE O 241.1B

Official DOE directive with the purpose to ensure that STI is appropriately managed as part of the DOE mission to enable the advancement of scientific knowledge and technological innovation.

DOE Data Explorer

A portal to collections of publicly available, DOE-sponsored data and other non-text information.

www.osti.gov/dataexplorer/

DOE PAGES[Beta]

The U.S. Department of Energy's Public Access Gateway for Energy and Science, a portal to scholarly publications, including peer-reviewed journal articles and accepted manuscripts, resulting from DOE-funded research.

www.osti.gov/pages/

DOI

Digital Object Identifier, a persistent identifier using a character string to uniquely identify an electronic document.

www.doi.org

Enterprise Secure Network

DOE Enterprise Secure Network system, classified network connectivity between a number of DOE and NNSA sites.

ERDA

Energy Research and Development Administration, a predecessor agency to the U.S. Department of Energy.

Executive Order 13556

Establishes an open and uniform program for managing information that requires safeguarding or dissemination controls pursuant to and consistent with law, regulations, and Government-wide policies, excluding information that is classified under Executive Order 13526 of December 29, 2009, or the Atomic Energy Act, as amended.

Export Controlled Information

Information protected by federal laws and regulations that restrict the flow of certain materials, devices, and technical information related to such materials and devices outside the United States.

Hot site

Duplicate of the original site of the organization, with full computer systems as well as near-complete backups of user data.

NLE^{Beta}

National Library of Energy^{Beta}, a search tool designed to make it easier for American citizens to find and access information from across the DOE complex nationwide, without knowing DOE's organizational structure.

www.osti.gov/nle/

NNSA

National Nuclear Security Administration, a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science.

nnsa.energy.gov

Official Use Only

Category of sensitive unclassified information whose release to the wrong person could damage Governmental, commercial, or private interests.

OSTI

Office of Scientific and Technical Information, the DOE office that collects, preserves, and disseminates DOE-sponsored R&D results that are the outcomes of R&D projects or other funded activities at DOE laboratories and facilities nationwide and grantees at universities and other institutions.

www.osti.gov

OSTP

Office of Science and Technology Policy, established by Congress in 1976 with a broad mandate to advise the President and others within the Executive Office of the President on the effects of science and technology on domestic and international affairs.

www.whitehouse.gov/administration/eop/ostp

PRIDE

Product Realization Integrated Digital Enterprise, NNSA-sponsored program to develop and deploy a modernized, integrated suite of enhanced information technology (IT) capabilities to securely deliver weapon product life-cycle information to users across sites.

R&D

Research and development.

SC

Office of Science, a program office within the U.S. Department of Energy.

science.energy.gov

SciTech Connect

An OSTI search product, providing semantic and advanced search capabilities for U.S. Department of Energy funded Scientific and Technical Information.

www.osti.gov/scitech/

ScienceCinema

An OSTI search product for scientific and technical information multimedia, providing speech mapping search technology.

www.osti.gov/sciencecinema/

Semantic Search

A search technique known as keyword-to-concept mapping. Used by OSTI products such as SciTech Connect, keyword-based queries are searched and concept-mapped queries are returned—as in a taxonomy; a search term is mapped to other associated terms, including narrower and related concepts.

SHARE

SHared Access Research Ecosystem (SHARE), a higher education and research community initiative to ensure the preservation of, access to, and reuse of federally-funded research outputs.

www.arl.org/focus-areas/shared-access-research-ecosystem-share

Sigma

The "Sigma categories" are subsets of nuclear weapons information classified under the Atomic Energy Act grouped by subject matter.

STI

Scientific and technical information.

STIP

Scientific and Technical Information Program, a collaboration from across the DOE complex working to ensure that the results of DOE-funded research and development (R&D) and other science and technology activities are identified, disseminated, and preserved.

www.osti.gov/stip/