

DATE: July 29, 2010

TO: DIRECTIVES POINTS OF CONTACT

FROM: KEVIN T. HAGERTY, DIRECTOR  
OFFICE OF INFORMATION RESOURCES, MA-90

SUBJECT: CONCURRENCE— DOE O 241.1B, *Scientific and Technical Information Management*

A redlined/strikeout showing cumulative revisions to the draft directive has been posted to RevCom for concurrence.

Draft DOE O 241.1B was posted for review and comment in March 2010. The author has responded to all comments and incorporated accepted comments into the directive. To review the draft and submit concurrence, please login to RevCom at <https://www.directives.doe.gov/rcLogin.html>.

**Reviewing Instructions:**

**This is not an opportunity to submit new comments.**

**Only** comments with specific objections to the changes in the directive will be addressed.

Headquarters directives points of contact have until **August 12, 2010**, to review the redlined/strikeout and compile and submit comments/concurrence/nonconcurrence through RevCom.

Reviewers in the field are asked to meet assigned internal organizational deadlines.

After reviewing the redline/strikeout, follow the case below that corresponds to your situation.

<b>If you:</b>	<b>Then:</b>
submitted a major comment and agree with the incorporation of your comments,	go into RevCom and concur.
submitted a major comment and do not agree with the incorporation of your comments,	go into RevCom, submit your nonconcurrence, and justification.
did not comment, but the incorporation of others' comments may have an adverse impact on your organization's mission,	go into RevCom and justify how this directive will have an adverse impact on your organization's mission.
did not comment and are still satisfied with the directive,	no action is necessary.

**ORDER**

**DRAFT  
DOE O 241.1B**

Approved: XX-XX-2010

# **SCIENTIFIC AND TECHNICAL INFORMATION MANAGEMENT**

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

## SCIENTIFIC AND TECHNICAL INFORMATION MANAGEMENT

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1. PURPOSE. The U.S. Department of Energy (DOE) produces scientific and technical information (STI) in the course of performing research and development (R&D) and other science and technology activities. The purpose of this directive is to ensure that STI is appropriately managed **as part of the DOE mission to enable the advancement of scientific knowledge and technological innovation.**~~s to be fully accessible to the research community, industry, and the general public while ensuring the protection of classified or controlled unclassified STI where warranted.~~ Therefore, the objectives of this order are to:
  - ~~a. ensure that STI is identified, processed, disseminated, and preserved in a manner that supports transparency and accessibility;~~
  - b.a.** establish DOE requirements and responsibilities to ensure that Departmental STI is appropriately identified, disseminated, preserved, and accessible to policy makers, the scientific community, and the public within the boundaries of law, regulations, Executive orders, other DOE requirements, and program needs and resources; and
  - ~~e. available to policy makers, the scientific community and the public to the broadest extent possible within the boundaries of law, executive requirements, and program needs and resources; and~~
  - ~~d.b.~~ **c** safeguard classified, unclassified controlled nuclear information (UNCI), and **u**Controlled **u**nclassified **i**nformation (CUI) by following marking, handling, and control requirements to enable the holder to manage and protect the information in accordance with laws, regulations, **Executive orders**, and other **directives** DOE requirements.

~~This directive applies to STI that contains findings, analyses, or results related to R&D or other scientific and technological endeavors; is generated by work funded by DOE or performed at DOE facilities; and is deemed by the performer to be useful outside the originating organization. STI produced in various forms media including, but not limited to, textual, graphical, numeric, audiovisual, multimedia, and digital data and is disseminated; technical reports; conference papers and presentations; journal citations and published articles; theses and dissertations; patents; scientific and technical software; and other forms and formats of information. This directive applies to STI that contains findings, analyses, or results related to R&D or other scientific and technological endeavors; is generated by work funded by DOE or performed at DOE facilities; and is considered useful to others outside the originating organization.~~

~~The majority of STI is publicly releasable, with a small percentage requiring controlled access. Transparency, open access, and exchange accessibility of STI support the continued availability and advancement of a sound science and technology base to help~~

~~guide and inform the nation's critical public policy decisions; advance the national, economic, and energy security of the U.S.; help ensure that scientific data is never distorted or concealed; facilitate the accomplishment of DOE mission objectives; and maximize the public value of such efforts. The majority of DOE-funded STI is publicly releasable, with a small percentage requiring controlled access.~~

2. CANCELLATION. DOE O 241.1A, *Scientific and Technical Information Management*, dated 4-9-01. Cancellation of the above Order does not, by itself, modify or otherwise affect any contractual obligation to comply with the Order. Canceled Orders that are incorporated by reference in a contract remain in effect until the contract is modified to delete the references to the requirements in the canceled Orders.

3. APPLICABILITY.

- a. Departmental Applicability. This Order applies to all Departmental elements, at Headquarters and the field, that either fund projects that generate STI or oversee ~~the contractors for~~ facilities where work is done which could generate STI.

The Administrator of the National Nuclear Security Administration (NNSA) must assure that NNSA employees comply with their responsibilities under this directive. Nothing in this directive will be construed to interfere with the NNSA Administrator's authority under section 3212(d) of Public Law (P.L.) 106-65 to establish Administration-specific policies, unless disapproved by the Secretary.

- b. DOE Contractors. Except for the equivalencies/exemptions in paragraph 3.c., the Contractor Requirements Document (CRD) ~~or the statement of work~~ sets forth requirements of this Order ~~that which~~ will apply to contracts that include ~~either the CRD or these requirements as part of the statement of work~~.

The CRD, ~~Attachment 1~~, must be included in all contracts ~~for the management and operation (M&O) of DOE-owned or -leased facilities and in site/facility management contracts~~ that require or involve performance of tasks and activities that generate or could generate STI in connection with the performance of DOE-funded projects or work performed at a DOE-owned or -leased facility. ~~The Contractor Requirements Document (CRD), Attachment 1, must be included in all contracts for the management and operation (M&O) of DOE-owned or -leased facilities and in site/facility management contracts.~~

~~For all contracts other than M&O or site/facility management contracts, including R&D contracts, which perform tasks and activities that generate or could generate scientific and technical information (STI) in connection with the performance of DOE-funded projects, the statement of work must include STI reporting or any special instructions for applying use of the CRD.~~

- c. Equivalencies/Exemptions for DOE O 241.1B.

- (1) Equivalency. In accordance with the responsibilities and authorities assigned by Executive Order 12344, codified at Title 50 United States Code (U.S.C.) sections 2406 and 2511 and to ensure consistency through the joint Navy/DOE Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors (Director) will implement and oversee requirements and practices pertaining to this Directive for activities under the Director's cognizance, as deemed appropriate.
- (2) Exemption. In accordance with the Delegation of Authority 00-033.00B, BPA is exempt from this Order.

4. REQUIREMENTS. This Order applies to STI that contains findings, analyses, or results related to R&D or other scientific and technological endeavors; is generated by work funded by DOE or performed at DOE facilities; and is deemed by the originator to be useful beyond the originating organization. Transparency and accessibility of STI support the continued advancement of a sound science and technology base to help guide and inform the nation's critical public policy decisions; advance the national, economic, and energy security of the U.S.; facilitate the accomplishment of DOE mission objectives; and maximize the public value of such efforts. STI is produced in various media including, but not limited to, textual, graphical, numeric, audiovisual, multimedia, and digital data and is disseminated as technical reports; conference papers and presentations; journal articles; theses and dissertations; patents; scientific and technical software; and other forms and formats of information. The majority of DOE-funded STI is publicly releasable, with a small percentage requiring controlled access.
  - a. STI must be emphasized as a key outcome and record of the work conducted so that STI is planned, budgeted, produced, disseminated, and preserved. ~~to enable full use of such information by all customer segments, including the research and development community, policy makers, U.S. industry, and the general public.~~
  - b. To fulfill Departmental statutory responsibilities, the results of scientific and technical activities must be made available by announcing and/or providing various types of STI in acceptable electronic formats to DOE's central coordinating office, the Office of Scientific and Technical Information (OSTI, www.osti.gov) for subsequent ~~preservation, announcement, and appropriate availability, and preservation, including STI identified in records prior to project, program, or site closures.~~ (See Attachment 32, STI Products Types-Made Available Through DOE STI Program.)
  - c. STI must be reviewed ~~for public release~~ as appropriate ~~for public release~~. STI that is potentially classified must be reviewed for classification. STI that is potentially controlled unclassified information (CUI, e.g., nonproliferation, national security, export control, intellectual property, or protected personally identifiable information) must be reviewed to identify such information. ~~ied; STI that contains either classified, unclassified controlled nuclear information, or controlled unclassified information must be marked in accordance with~~

Departmental directives. Prior to providing the STI to OSTI, an STI Releasing Official must ensure that ~~and~~ appropriate announcement and availability restrictions ~~must be have been~~ applied in accordance with statutory, regulatory, Executive order, and/or other Departmental requirements.

- d. Headquarters and field elements must appoint a formal STI point of contact (e.g., a Technical Information Officer) to coordinate STI with OSTI, to participate in DOE's Scientific and Technical Information Program (STIP), and to serve as or designate an STI Releasing Official(s).
  - e. Headquarters' elements, including NNSA, that either fund research or set policies affecting STI must delegate a senior official to address STI policy issues as needed.
  - f. Prior to dissemination, STI must be clearly marked to distinguish information being published by the agency which represents an official DOE position from information resulting from DOE-funded R&D or related activities.
  - g. DOE-funded STI must include attribution to the sponsoring program. Wording indicating program sponsorship should include DOE, the DOE program office and that program office's subprogram(s) funding the research. Examples include: DOE Office of Science (SC), Office of Basic Energy Sciences (BES); DOE Office of Energy Efficiency and Renewable Energy (EERE), Solar Energy Technologies Program; ~~DOE Office of Environmental Management (EM), Office of Technology Innovation and Development; or~~ DOE Office of Nuclear Energy (NE), Fuel Cycle Research and Development Program; ~~DOE Office of Fossil Energy (FE), Office of Clean Energy Systems; or National Nuclear Security Administration (NA).~~
5. RESPONSIBILITIES.

- a. Director, Office of Science.
  - (1) Provides overall leadership and policy direction for DOE STI management as required by Federal laws, Executive orders, regulations, and DOE directives.
  - (2) Ensures that DOE's STI Program is carried out consistent with DOE mission and legal requirements.
- b. Director, Office of Scientific and Technical Information (OSTI), within the Office of Science.
  - (1) Works to ensure appropriate transparency of and ~~open~~ access to DOE's STI ~~to advance science and technology as well as and~~ preservation of a permanent DOE STI repository.

- (2) Leads the Department's Scientific and Technical Information Program (STIP), which includes designated STI points of contact representing Departmental elements (Headquarters and field) and site/facility management contractors who work collaboratively to achieve DOE requirements for the management of STI and to address specific programmatic or cross-cutting STI management issues.
  - (3) In collaboration with stakeholders, establishes STI requirements and responsibilities to ensure optimal availability of Departmental STI to the varied customer segments, within applicable laws, regulations, Executive orders, and other Departmental requirements.
  - (4) Makes DOE-funded STI searchable via web technologies by maintainings information management systems and web-based databases to enable full use of DOE-funded STI and providing a suite of web products and services for publicly releasable STI (see www.osti.gov) and systems to provide access to as well as systems to manage protected categories of STI as appropriate.
  - (5) Manages domestic, interagency, and international STI exchanges to ensure DOE and U.S. access to national and global scientific and technical advances and to enable global access to DOE STI.
  - (6) Supports program-specific STI management efforts by offering special support services upon request to DOE organizations that provide funding to cover incremental costs of the requested service(s).
- c. Heads of Departmental Elements at Headquarters, including NNSA.
- ~~(7)~~(1) Ensure that the objectives and requirements of this Order are incorporated into their program planning, management, contract administration, oversight, and performance-based management activities.
  - ~~(8)~~(2) Ensure that program-issued documents or other types of STI (see Attachment 32) are appropriately reviewed and released and made available in acceptable electronic formats to OSTI, with corresponding Announcement Notices (ANs, see Attachment 43).
  - ~~(9)~~(3) Instruct initiators of procurement requests for M&O and site/facility management contracts to specify whether the CRD for this Order applies in the award resulting from the procurement request and any special instructions for applying the CRD.
  - ~~(10)~~(4) Instruct initiators of procurement requests for R&D or other contracts not covered under c.(3) above other than site/facility management contracts to specify the required scientific and technical deliverables, the form of delivery, and the requirement for the accompanying AN (i.e.,

“Announcement of DOE Scientific and Technical Information”) in the statement of work or any special instructions for applying the CRD.

~~(11)~~(5) Instruct initiators of procurement requests for financial assistance instruments to specify the required scientific and technical deliverables, the form of delivery, and the requirement for the accompanying AN (i.e., “Announcement of DOE Scientific and Technical Information”) **within the award terms and/or** on the Federal Assistance Reporting Checklist.

~~(12)~~(6) Designate senior officials to address STI policy issues as needed.

~~(13)~~(7) For programs that fund projects that generate STI or staff offices that affect STI policies, appoint and officially inform OSTI of the formal STI points of contact (i.e., Technical Information Officer) to participate in the Department’s Scientific and Technical Information Program (STIP), coordinate STI management activities, and serve as or designate an STI Releasing Official(s).

d. Heads of Departmental Elements in the Field, including NNSA Site Office Managers.

- (1) Ensure that the objectives and requirements of this Order are incorporated into their contract administration, oversight, and performance-based management activities.
- (2) Appoint and officially inform OSTI of formal STI points of contact (i.e., Technical Information Officer) to participate in the Department’s Scientific and Technical Information Program (STIP) and serve as or designate an STI Releasing Official(s).

e. Technical Information Officers.

- (1) Serve as the DOE element representatives to STIP and ensure that STI objectives and requirements are incorporated into strategic planning, management information plans, life-cycle procedures **from project initiation to close-out**, and contract language as appropriate.
- (2) Coordinate with contractor STI managers and have adequate familiarity with STI activities to discern contractor compliance with the CRD portion of this directive.
- (3) Coordinate the implementation of appropriate **sensitivity**-review and release procedures by DOE elements, DOE contractors, and financial assistance recipients as appropriate.
- (4) Serve as Releasing Officials or coordinate designation and official notification to OSTI of Releasing Official(s), to ensure that DOE office or financial assistance--generated STI and AN**snnouncement Notices** are



appropriately reviewed and appropriate markings applied prior to release to OSTI or Web posting.

- (5) Make available to OSTI ~~the all~~ STI as defined in Attachment 2 and ANs for each STI item ~~resulting from research and development R&D and other scientific and technical endeavors~~, after ensuring that such STI has undergone appropriate institutional review. See Attachment ~~32~~ for ~~types of~~ STI products ~~to be~~ announced and/or provided to OSTI and Attachment 4 for ANs and required metadata.
- (6) Through STIP, participate in policy development and implementation, ~~and~~ ensure that local implementation procedures put in place by DOE and DOE contractors are consistent with requirements herein, and ~~be knowledgeable of~~ ~~are appropriate per~~ STI Program best practices (www.osti.gov/stip) ~~in order to implement appropriate local procedures.~~

f. Directors of DOE and NNSA Offices of Procurement and Assistance Management.

- (1) Issue guidance on including performance objectives and measures for STI in performance-based M&O, site/facility management, and ~~research and development R&D~~ contracts.
- (2) Issue guidance for financial assistance awards that addresses the identification and delivery of STI products.

g. Heads of Contracting Activities.

- ~~(14)~~(1) Ensure that the CRD for this Order, when instructed by the initiators of procurement requests, is applied to existing M&O contracts for DOE-owned or -leased facilities, in site/facility management contracts to the extent set forth in the contract, and to relevant new major site/facility management contracts.
- ~~(27)~~(2) Ensure that ~~specifications are the statement of work is~~ included in R&D or other contracts ~~not covered by g.(1) above~~ regarding required scientific and technical deliverables, the form of delivery, and the requirements for the accompanying ~~Announcement Notice~~ or any special instructions for applying ~~use of~~ the CRD are included, when instructed by the initiators of the procurement request.
- ~~(28)~~(3) Ensure that performance measures for STI management are included in performance-based contracts, as appropriate.
- ~~(29)~~(4) Ensure that contractors and financial assistance recipients under their cognizance complete the ~~Announcement Notice~~ and the scientific and technical deliverables specified in the award are provided to OSTI.

6. DEFINITIONS. See Attachment 2.DEFINITIONS:

- a. ~~Scientific and Technical Information. Findings and technological innovations resulting from research and development (R&D) efforts and science and technology work of scientists, researchers, and engineers, whether contractor, grantee, or Federal staff. STI also conveys the results of demonstration and commercial application activities as well as experiments, observations, simulations, studies, and analyses. STI is found in many forms and formats including textual, graphical, numeric, multimedia, and digital data, technical reports, scientific/technical conference papers and presentations, theses and dissertations, scientific and technical computer software, journal manuscripts and citations, workshop reports, program documents, patents, and other forms or formats of technical data. (See Attachment 2, STI Types Made Available Through DOE STI Program.) STI may be controlled as classified or Controlled Unclassified Information (including export controlled or personally identifiable information), or the STI may be unclassified with no control requirements. DOE-funded STI originates primarily from research and other activities performed by site/facility management contractors, direct DOE-executed prime procurements, DOE-operated research activities, and financial assistance recipients, in addition to DOE employees.~~
- b. ~~Announcement Notices. A set of metadata is defined for specific types of STI for use in describing an STI product for announcement and availability. (See Attachment 3, DOE Announcement Notices: STI Metadata Requirements.) The Announcement Notice is transmitted electronically to OSTI for STI products and includes review and release information, enabling announcement and access as appropriate via online databases.~~
- c. ~~Departmental Element. A first tier organization at Headquarters and in the field. First tier at Headquarters encompasses heads of the major Headquarters line programs, i.e., Program Secretarial Officers. First level field element refers to first level organizations located outside the Washington Metropolitan area and encompasses Operations Offices, Site Offices, field Offices, and Regional Offices. Additional information is noted in the Correspondence Style Guide as directed by the Office of the Executive Secretariat, [http://www.management.energy.gov/documents/ES\\_Style\\_Guide\\_2007.pdf](http://www.management.energy.gov/documents/ES_Style_Guide_2007.pdf).~~
- d. ~~Releasing Official. An individual designated with responsibility for ensuring that STI has undergone appropriate sensitivity reviews and that subsequent recommendation to OSTI is made via established systems regarding release of STI in the public domain (i.e., unlimited announcement) or the application of DOE approved access limitations, as well as other Public Law, Executive Orders, and similar legislative and/or legal requirements.~~

a. ~~Definitions for other STI management terms and acronyms used throughout this Order, options for submission of Announcement Notices and corresponding STI, and descriptions of Departmental online STI databases can be found on the STI Program website, [www.osti.gov/stip](http://www.osti.gov/stip).~~

7. REFERENCES. The following selected statutory references provide authority for the Department's scientific and technical information management program.

- a. ~~Public Law (P.L.) 83-703~~, Atomic Energy Act of 1954, ~~as Amended, Public Law (P.L.) 83-703~~, establishes a program for the dissemination of unclassified scientific and technical information and for the control, dissemination, and declassification of Restricted Data, subject to appropriate safeguards, so as to encourage scientific and industrial progress (42 U.S.C. Sec. 2013, 2051, and 2161).
- b. ~~P.L. 89-487~~, Freedom of Information Act, ~~P.L. 89-487, (5 U.S.C. 552 et seq.)~~, provides for public access to Federal agency records, which would include records containing scientific and technical information created with Federal funding (~~5 U.S.C. 552 et seq.~~).
- c. ~~P.L. 93-438~~, Energy Reorganization Act of 1974, ~~P.L. 93-438~~, provides responsibilities for developing, collecting, distributing, and making scientific and technical information available for distribution (42 U.S.C. Sec. 2161, 5813, 5817).
- d. ~~P.L. 95-91~~, Department of Energy Organization Act of 1977, ~~P.L. 95-91~~, provides for maintaining a central source of information and disseminating information (42 U.S.C. Sec. 5916, 7112).
- e. ~~P.L. 106-65~~, Title XXXII, National Nuclear Security Administration Act, ~~as Amended, P.L. 106-65, as amended~~, establishes a separately organized agency within the Department of Energy in 2000.
- f. ~~P.L. 109-58~~, Energy Policy Act of 2005, ~~P.L. 109-58~~, Section 982, "The Secretary, through the Office of Scientific and Technical Information, shall maintain with the Department publicly available collections of scientific and technical information resulting from research, development, demonstration, and commercial applications activities supported by the Department."
- g. ~~P.L. 110-69~~, America COMPETES Act of 2007, ~~P.L. 110-69~~, Section 1009, calls for Federal agencies that conduct scientific research to develop agency specific policies and procedures regarding the public release of data and results of research.
- h. Presidential Memorandum for the Heads of Executive Departments and Agencies, Subject: Transparency and Open Government, January 21, 2009,

[http://www.whitehouse.gov/the\\_press\\_office/Transparency\\_and\\_Open\\_Government/](http://www.whitehouse.gov/the_press_office/Transparency_and_Open_Government/).

- i. Presidential Memorandum for the Heads of Executive Departments and Agencies, Subject: Scientific Integrity, March 9, 2009, [http://www.whitehouse.gov/the\\_press\\_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-3-9-09/](http://www.whitehouse.gov/the_press_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-3-9-09/).
- j. Presidential Memorandum for the Heads of Executive Departments and Agencies, Subject: Open Government Directive, December 8, 2009, [http://www.whitehouse.gov/omb/assets/memoranda\\_2010/m10-06.pdf](http://www.whitehouse.gov/omb/assets/memoranda_2010/m10-06.pdf).
- ~~— Memorandum for the Heads of Executive Departments and Agencies from Director, Office of Management and Budget, and Director, Office of Science and Technology Policy, Subject: Science and Technology Priorities for the FY 2011 Budget, August 4, 2009, communicating agency responsibilities including the development of publicly accessible datasets to better document Federal science and technology investments, [http://www.whitehouse.gov/omb/assets/memoranda\\_fy2009/m09-27.pdf](http://www.whitehouse.gov/omb/assets/memoranda_fy2009/m09-27.pdf).~~
- k. DOE O 200.1A, *Information Technology Management*, dated 12-23-08, <https://www.directives.doe.gov/directives/current-directives/200.1-BOrder-a/view>.
- l. DOE O 206.1, *Department of Energy Privacy Program*, dated 1-16-09, <https://www.directives.doe.gov/directives/current-directives/206.1-BOrder/view>.
- m. DOE O 412.1A, *Work Authorization System*, dated 4-21-05, <https://www.directives.doe.gov/directives/current-directives/412.1-BOrder-a/view>.
- ~~l.n. — Letter to Dr. John H. Marburger, III, Director, Office of Science and Technology Policy, from Samuel W. Bodman, Secretary of Energy, August 22, 2008, communicating agency policies regarding the release of scientific research results, <http://www.osti.gov/stip/DOEreponse-Marburger082208.pdf>.~~
- m.n. DOE O 413.2B, *Laboratory Directed Research and Development*, dated 45-19-06, <https://www.directives.doe.gov/directives/current-directives/413.2-BOrder-b/view>.
- o. DOE O 452.7, *Protection of Use Control Vulnerabilities and Designs*, dated 5-14-10, <https://www.directives.doe.gov/directives/current-directives/452.7-BOrder/view>.

- p. DOE M 457.1-1, *Control of Improvised Nuclear Device Information*, dated 8-10-06, <https://www.directives.doe.gov/directives/current-directives/457.1-DManual-1/view>.
- q. DOE M 470.4-4A, *Information Security Manual*, dated 1-16-09, <https://www.directives.doe.gov/directives/current-directives/470.4-DManual-4a/view>.
- r. DOE O 471.1B, *Identification and Protection of Unclassified Controlled Nuclear Information*, dated 3-01-10, <https://www.directives.doe.gov/directives/current-directives/471.1-BOrder-b/view>.
- s. DOE O 471.3, *Identifying and Protecting Official Use Only Information*, dated 4-9-03, <https://www.directives.doe.gov/directives/restrict/471.3-BOrder/view>.
- t. DOE M 471.3-1 *Manual for Identifying and Protecting Official Use Only Information*, dated 4-9-03, <https://www.directives.doe.gov/directives/current-directives/471.3-DManual-1/view>.
- u. DOE O 475.2, *Identifying Classified Information*, dated 84-28-07, <https://www.directives.doe.gov/directives/restrict/475.2-BOrder/view>.
- v. DOE O 481.1C, *Work for Others (Non-Department of Energy Funded Work)*, dated 1-24-05, <https://www.directives.doe.gov/directives/current-directives/481.1-BOrder-c/view>.
- w. DOE O 483.1, *DOE Cooperative Research and Development Agreements*, dated 1-12-01, <https://www.directives.doe.gov/directives/current-directives/483.1-BOrder/view>.
- x. DOE M 483.1-1, *DOE Cooperative Research and Development Agreements Manual*, dated 1-12-01, <https://www.directives.doe.gov/directives/current-directives/483.1-DManual-1/view>.
- y. DOE O 484.1, *Reimbursable Work for the Department of Homeland Security*, dated 8-17-06, <https://www.directives.doe.gov/directives/current-directives/484.1-BOrder/view>.
- z. DOE O 5610.2, **Chg 1**, *Control of Weapon Data*, dated 9-2-86, <https://www.directives.doe.gov/directives/current-directives/5610.2-BOrder/view>.
- ~~aa. DOE M 483.1-1, DOE Cooperative Research and Development Agreements Manual, dated 1-12-01,~~

- ~~<https://www.directives.doe.gov/directives/current-directives/483.1-DManual-1/view>~~
- aa. DOE Acquisition Guide, Chapter 35.1, Scientific and Technical Reporting, [http://www.management.energy.gov/policy\\_guidance/1354.htm](http://www.management.energy.gov/policy_guidance/1354.htm).
  - bb. DOE Acquisition Guide, Chapter 42.4, Contract Closeout, <http://www.management.energy.gov/documents/42pt4ContractCloseOut.pdf>.
  - cc. DOE Guide to Financial Assistance, <http://management.energy.gov/documents/GuidetoFinancialAssistance.pdf>.
  - dd. Department of Energy Research and Development Records Schedule, N1-434-96-9, N1-434-07-01, and N1-434-08-02, Revision 2, June 2008; Appendix A, [http://cio.energy.gov/documents/RD\\_revised.pdf](http://cio.energy.gov/documents/RD_revised.pdf).
  - ee. DOE Open Government Plan, dated June 2010, Version 1.2, [http://www.energy.gov/open/documents/FINAL\\_DOE\\_OGPVer1-2b\\_07July2010.pdf](http://www.energy.gov/open/documents/FINAL_DOE_OGPVer1-2b_07July2010.pdf)
  - ff. Classified National Security Information, Executive Order 13526 (32 CFR Parts 2001 and 2003), <http://www.whitehouse.gov/the-press-office/executive-order-classified-national-security-information>.
8. CONTACT. Questions concerning this Order should be addressed to the Office of Scientific and Technical Information at: 865-576-1194.

BY ORDER OF THE SECRETARY OF ENERGY:

DANIEL B. PONEMAN  
Deputy Secretary

**CONTRACTOR REQUIREMENTS DOCUMENT**  
**DOE O 241.1B, *SCIENTIFIC AND TECHNICAL INFORMATION MANAGEMENT***

Regardless of the performer of the work, the contractor is responsible for complying with the requirements of this CRD. The contractor is responsible for flowing down the requirements of this CRD to subcontractors at any tier to the extent necessary to ensure the contractor's compliance with the requirements.

In the performance of Department of Energy (DOE) contracted obligations, each contractor is required to manage scientific and technical information (STI) ~~created or obtained~~ produced under the contract as a direct and integral part of the work and ensure its broad availability to all customer segments by making STI available to DOE's central STI coordinating office, the Office of Scientific and Technical Information (OSTI). ~~Transparency, open access, and exchange of STI support the continued availability and advancement of a sound science and technology base to help guide and inform the nation's critical public policy decisions; advance the national, economic and energy security of the U.S.; help ensure that scientific data is never distorted or concealed; facilitate the accomplishment of DOE mission objectives; and maximize the public value of such efforts. The requirements set forth in this CRD pertain to all contracts for the management and operation (M&O) of DOE-owned or leased facilities and contracts for site/facility management.~~

~~Refer to Attachment 2 for the definition of STI as applicable to this CRD. STI is found in many forms and formats including textual, graphical, numeric, and digital data, technical reports, scientific/technical conference papers and presentations, theses and dissertations, scientific and technical computer software, journal citations and articles, patents, and other forms of technical data derived from R&D, demonstration, commercial applications, and other science and technology activities. Such STI products include STI funded by DOE, resulting from work performed at a DOE facility, or; developed under Work for Others (unless specifically excluded in the agreement under which the work is done) and/or Cooperative Research and Development Agreements, or received in the conduct of DOE business. STI that is deemed by the contractor to be useful beyond the originating site (that is, intended to be published or disseminated at any level) is reportable to OSTI, whether or not the STI is publicly releasable., whether the STI is publicly releasable, Controlled Unclassified Information, or classified—and thus undergoes an appropriate level of institutional review.~~

Contractors must accomplish the following:

1. Appoint and officially inform the DOE 's Office of Scientific and Technical Information (OSTI) of the STI point of contact who will represent their organization in the Department's STI Program (STIP) and serve as the STI Releasing Official~~s~~ or designate Releasing Official(s) responsible for ensuring that all STI and Announcement Notices (ANs) are appropriately reviewed and marked accordingly prior to announcement and/or submission~~release~~ to OSTI~~or to web posting~~.
- ~~4.2.~~ Implement a site program to identify, prioritize, and mMake available to DOE OSTI those STI products (e.g., see Attachment 3) that the originating site deems useful beyond



its boundaries (i.e., STI products that are project deliverables and are intended for publication or dissemination), whether the STI is publicly releasable, controlled unclassified information, or classified, after those products ~~all scientific and technical information (STI) resulting from research and development and other scientific and technical endeavors that~~ have undergone appropriate institutional review in accordance with statutory, regulatory, Executive order, -and/or Departmental requirements. Specifically:

- a. Provide OSTI an electronic ~~Announcement Notice~~ for each STI product. ~~Regardless of product type, whether full STI product is submitted to OSTI or posted at the contractor web site, or available through commercial sources cited in the metadata—see Attachment 4: DOE Announcement Notices and STI Metadata Requirements. The STI Program website (www.osti.gov/stip) provides instructions and examples on options for electronic Announcement Notices.~~
  - b. Ensure that each ~~full-text~~ STI product is in an electronic format suitable for automated indexing systems. ~~Refer to www.osti.gov/stip for eElectronic format options—see www.osti.gov/stip.~~
  - c. Ensure that each ~~full-text~~ STI product is either submitted to OSTI or, if publicly releasable and posted at ~~a the contractor~~ website, that the AN ~~provides the unique persistent identifier URL is provided in the Announcement Notice for the each corresponding STI item or provides other availability information—as described at www.osti.gov/stipwww.osti.gov/stip/electronicsti).~~
  - ~~d.d.—Ensure that multimedia forms of STI are made available to OSTI by providing an Announcement Notice (AN) and either submitting the product or providing unique product URL in the AN metadata if posted at contractor web site.~~
  - ~~e.Ensure that numeric and other digital data collections are made available to OSTI by providing only an Announcement Notice with a persistent locator (e.g., a Digital Object Identifier) for the corresponding collection, consistent with instructions at www.osti.gov/stip.~~
  - ~~f.Ensure that scientific and technical software is made available to OSTI by providing an Announcement Notice and either submitting the software package, indicating alternative availability at a designated DOE Specialized Information Analysis Center, or providing the unique URL if downloadable as open source software, as described in software procedures at www.osti.gov/stip.~~
- 11.3. Review STI generated under the contract to ~~dDetermine appropriate appropriate~~ release and handling ~~by reviewing STI generated under the contract~~ and apply any necessary statutory or program-driven announcement and/or availability restrictions, including those related to nonproliferation, national security, export control, intellectual property, protected Personally Identifiable Information and, privacy. ~~;~~ In addition, apply to the STI product any restrictive markings required, include any required legal disclaimers, and, for STI products resulting from DOE-funded work, identify the sponsor as follows: U.S.



Department of Energy, [name of DOE program office], [name of DOE subprogram].as well as other markings required, legal disclaimers, and program sponsorship.

- 2.4. Inform OSTI when STI previously announced or submitted to OSTI has been modified, such as changes to access limitations or content corrections. Also, ~~or~~ when permanently removing STI from a websites for which a persistent link was provided to OSTI ~~from contractor web sites~~, inform OSTI in order to ensure continued appropriate availability and preservation by DOE OSTI. ~~OSTI~~.
5. In implementing a site STI management program, refer to ~~Apply the requirements of this CRD to subcontracts at any tier and to user agreements to the extent necessary to ensure the contractors' compliance with the requirements.~~ Reference and use associated best practices and National Archives and Records Administration (NARA)-approved DOE Programmatic Records Schedules, ~~s-~~Such as specifically Department of Energy Research and Development Records Schedule, N1-434-96-9, N1-434-07-01, and N1-434-08-02, Revision 2, June 2008. This schedule includes Appendix A, R&D Technical Reports or Other Forms of STI Submitted to the Office of Scientific and Technical Information (OSTI). ([http://www.cio.energy.gov/documents/rd\\_revised.pdf](http://www.cio.energy.gov/documents/rd_revised.pdf)).

NOTE: The DOE STI Program website ([www.osti.gov/stip](http://www.osti.gov/stip)) ~~is available for~~ provides information to assist ~~ance~~ in implementing the requirements of this Contractor Requirements Document. The website includes instructions and examples based on best ~~business~~ practices that are developed in coordination with the DOE and contractor STI community.

~~b.b. — Department of Energy Research and Development Records Schedule, N1-434-96-9, N1-434-07-01, and N1-434-08-02, Revision 2, June 2008. This Schedule includes Appendix A, R&D Technical Reports or Other Forms of STI Submitted to the Office of Scientific and Technical Information (OSTI). ([http://www.cio.energy.gov/documents/RD\\_revised.pdf](http://www.cio.energy.gov/documents/RD_revised.pdf)).~~

## DEFINITIONS

1. Announcement Notice (AN). A set of metadata defined for a specific type of STI for use in describing an STI product for announcement and availability. (See Attachment 43, DOE Announcement Notices and STI Metadata Requirements.) The AN is transmitted electronically to OSTI for STI products and includes review and release information, enabling announcement and searchable online access as appropriate.
2. Controlled Unclassified Information (CUI). Certain unclassified information requiring safeguarding and dissemination controls mandated by statute or policy. Examples of such information within DOE include Official Use Only (OUO), Export Controlled Information (ECI), Unclassified Controlled Nuclear Information (UCNI), unclassified Naval Nuclear Propulsion Information (U-NNPI), and protected Personally Identifiable Information (PII). Within DOE other terms have been used, such as Unclassified Controlled Information (UCI) and Sensitive Unclassified Information (SUI), to refer to information that warrants protection as CUI. (Note: Current Government-wide efforts are under way to standardize CUI markings. Refer to [www.osti.gov/stip](http://www.osti.gov/stip), which will be updated for most current information.)
- 4.3. Departmental Element. A first-tier organization at Headquarters and in the field. First-tier at Headquarters encompasses heads of the major Headquarters line programs, e.g., Program Secretarial Officers. First-level field element refers to first-level organizations located outside the Washington Metropolitan area and encompasses Operations Offices, Site Offices, Field Offices, and Regional Offices. Additional information is noted in the Correspondence Style Guide as directed by the Office of the Executive Secretariat, [http://www.management.energy.gov/documents/ES\\_Style\\_Guide\\_2007.pdf](http://www.management.energy.gov/documents/ES_Style_Guide_2007.pdf).
4. Metadata. Data that describe the attributes of a document or other type of STI product, used for announcement and retrieval. In addition to basic descriptive bibliographic information such as title, author, publication date, research performer or originating site, a minimum set of metadata fields are required to facilitate identification and ensure appropriate announcement, such as access restrictions or release authorization. Additional optional metadata fields are used to optimize retrieval via web-based products.
5. Releasing Official. An individual designated with responsibility for ensuring that STI has undergone appropriate sensitivity reviews and that subsequent recommendation to OSTI is made via established systems regarding release of STI in the public domain (i.e., unlimited announcement) or the application of DOE-approved access limitations, as well as ensuring compliance with other ~~Public Law, Executive Orders, regulations, and similar legislative and/or legal requirements~~—statutory, regulatory, Executive order, and/or other Departmental requirements. The Releasing Official is either ~~may be~~ a Federal employee responsible for Federally produced or assistance awardees' STI or is a major facility contractor responsible for their STI.

6. Specialized Information Analysis Center. A formally structured organizational unit specifically (but not necessarily exclusively) established for the purpose of acquiring, selecting, storing, retrieving, evaluating, analyzing, and synthesizing a body of information in a clearly defined specialized field or pertaining to a specified mission with the intent of compiling, digesting, repackaging, or otherwise organizing and presenting pertinent information in a form most authoritative, timely, and useful to a society of peers and management.
  
7. Scientific and Technical Information. Information products deemed by the originator to be useful beyond the originating site, in any format or medium, which contain findings and technological innovations resulting from research and development (R&D) efforts and scientific and technological work of scientists, researchers, and engineers, whether Federal employee, contractor, or financial assistance recipient, grantee, or Federal staff. STI also conveys the results of demonstration and commercial application activities as well as experiments, observations, simulations, studies, and analyses.

STI is produced is found in many forms and formats in various media, including textual, graphical, numeric, multimedia, audiovisual, and digital data, and is published in a range of products such as technical reports, scientific/technical conference papers and presentations, theses and dissertations, scientific and technical computer software, journal articles, manuscripts and citations, workshop reports, program documents, patents, published scientific research datasets, and other forms or formats of technical data. (See Attachment 32, STI Product Types Made Available Through DOE STI Program.) STI may be controlled as classified, unclassified controlled nuclear information (UCNI), or controlled unclassified information (including export controlled or protected personally identifiable information), or the STI may be unclassified with no control requirements. DOE-funded STI originates primarily from research and other activities performed by site/facility management contractors, direct DOE-executed prime procurements, DOE-operated research activities, and financial assistance recipients, in addition to DOE employees.

Definitions for other STI management terms and acronyms used throughout in this Order; options for submission of Announcement Notices and corresponding STI, and descriptions of Departmental online STI databases can be found on the STI Program website, [www.osti.gov/stip](http://www.osti.gov/stip).

**STI PRODUCTS TYPES-MADE AVAILABLE THROUGH DOE STI PROGRAM**

Scientific and technical information (STI) is produced and published in various ~~forms-media~~ and formats, ~~thus the submission requirements procedures for submission vary depending on the type of STI.~~ This table lists ~~the types of STI~~ products for which procedures have been defined for submission to ~~that DOE OSTI currently accepts and makes searchable.~~

The ~~STI~~ types of ~~types~~ STI accepted by OSTI, and the associated announcement methods ~~requirements~~ for each ~~STI~~ type, will continue to ~~may~~ evolve as information technology and innovation advance within the Department. Therefore, for the most up-to-date instructions, formats, and examples of STI product types, refer to the STI Program website ([www.osti.gov/stip/stitypes](http://www.osti.gov/stip/stitypes)).

~~which may be produced during the performance of R&D or other science and technology activities and, therefore, should be made available to DOE's STI Program. Notes are provided about the general procedures for Announcement Notices (AN) and product submission based on STI type and format. This listing reflects the spectrum of current STI types, but it is recognized that STI types and associated procedures may evolve as information technology and innovation advance within the Department. Therefore, for the most up-to-date instructions and examples of specific STI types, refer to the STI Program website (www.osti.gov/stip), which will be routinely updated to reflect options in procedures for a variety of STI types.~~

NOTE: STI submitted to OSTI requires an accompanying ~~AN=~~ Announcement Notice (AN) with the product or, in certain cases, an AN only.; ~~FT=~~ Full text

<b>STI PRODUCTS TYPE</b>		<b>REQUIRED TO SUBMIT PRODUCT TO Full Product to OSTI? (Y/N)</b>
Books/monographs		Yes
Conference, symposium, lecture, or similar event papers, presentations, or proceedings	Copyrighted	No, AN only <del>or restricted access-FT</del>
	Not copyrighted <del>Not copyrighted</del>	Yes
<del>Dissertations</del>		<del>Yes</del>
<del>e-prints</del>		<del>No</del>
Journal articles	Copyrighted (reprint)	No, AN only
	Author's manuscript	Yes
<del>Lectures, demos, presentations etc, especially those in multi-media</del>		<del>Yes or URL</del>

<b>STI PRODUCTS-TYPE</b>	<b>REQUIRED TO SUBMIT PRODUCT TO Full Product to OSTI? (Y/N)</b>
Patents	N, AN only <del>Yes</del>
Program documents <del>having STI content</del> (e.g.±e., published by HQ)	Yes
<del>Published s</del> Scientific research datasets/collections	No, <del>URL-AN</del> only
Scientific and technical computer software ( <del>including software manuals or user guides</del> )	Yes ( <del>or AN only if certain criteria met*</del> ) <del>if hosted by specified SIAC or OSS*</del>
<del>Software manuals</del>	<del>Yes</del>
Technical reports, <del>including</del> workshop reports, and topical reports	Yes
Theses/dissertations	Yes
e-prints	N
<del>Workshop reports</del>	<del>Yes</del>

\* See software options at [www.osti.gov/stip/stitypes](http://www.osti.gov/stip/stitypes) for additional information.

**DOE ANNOUNCEMENT NOTICES AND:  
 STI METADATA ELEMENTS**

Announcement Notices (ANs) are required for ~~submission~~ submitting or announcing STI of ~~scientific and technical information (STI)~~ to OSTI in order to ensure proper handling, announcement and dissemination, in accordance with DOE statutory responsibilities. Several ANs are available for use, depending on the type of STI as well as type of originator:

- AN 241.1 – For DOE Labs, Major DOE Facilities and Program Offices
- AN 241.3 – For Financial Assistance Recipients or Grantees (e.g. at universities)
- AN 241.4 – For S&T Software
- AN 241.5 – For UCNI and Classified STI
- AN 241.6 – For Published Scientific Research Datasets

Transmission options and instructions for ANs are provided on the STIP website at [www.osti.gov/stip/announcementnotices](http://www.osti.gov/stip/announcementnotices).

Several metadata elements are common to all ANs, while others are specific to the type of STI, ~~in Departmental web-based systems~~. The basic ~~requirements~~ required for metadata fields are listed below. ~~For; however there are variations based on format or STI type. Sites are also encouraged to include other optional/non-mandatory data fields in the Announcement Notice when possible. For~~ a complete listing of ~~metadata~~ Announcement Notices, ~~data~~ fields with descriptions, options, and additional information such as ~~as automated default values, use of available when using~~ the DOE Energy Link (e-link) system, and best practices for various types and formats of STI, please reference the STI Program website, <http://www.osti.gov/stip>.

<b>Required Metadata Elements</b>	
<ul style="list-style-type: none"> <li>• Report/Product Number</li> <li>• Title</li> <li>• Author(s)</li> <li>• STI Product Type</li> <li>• DOE Contract/Award Number(s)</li> <li>• Originating Research Organization</li> <li>• Sponsoring DOE Program Office*</li> <li>• Issue Date/Date of Publication</li> <li>• Intellectual Property/Distribution Limitations (i.e., Access Limitations)</li> <li>• Medium (e.g., format and related technical requirements)</li> <li>• Publisher Name and Location or Availability (if DOE cannot provide access, e.g., if commercial publisher is the source)</li> <li>• Uniform Resource Location (URL) for products which are site-hosted</li> <li>• Releasing Official Information</li> </ul>	<p><b>Additional metadata for S&amp;T software and/or datasets:</b></p> <ul style="list-style-type: none"> <li>• Description</li> <li>• Legal Notices and Disclaimers</li> <li>• Hardware and Software Requirements (e.g., operating system, compiler/version, related/auxiliary software and type(s) of files)</li> <li>• <b>Related Information (e.g., relation to a specific journal article or technical report, when applicable)</b></li> <li>• <b>Contributing Organizations</b></li> <li>• <b>Software or Data Contact</b></li> </ul> <p><b>Additional metadata for classified STI:</b></p> <ul style="list-style-type: none"> <li>• <b>Accountable STI Product (Y/N)</b></li> </ul>

\*For DOE-funded work, identify sponsor at the subprogram level to ensure proper attribution. If funded by work for others (other agencies), agency-level identification is adequate.