

DATE: April 3, 2012  
TO: DIRECTIVES POINTS OF CONTACT  
FROM: KEVIN T. HAGERTY, DIRECTOR  
OFFICE OF INFORMATION RESOURCES

SUBJECT: Draft DOE O 415.1, *Information Technology Project Management*

The draft directive has been posted on RevCom for review and comment. The Order provides program and project management direction for the acquisition and management of IT projects, investments, and initiatives.

## **INSTRUCTIONS**

Headquarters DPCs have until **May 3, 2012**, to submit to the OPI consolidated comments received from subject matter experts and/or field DPCs using the Department's RevCom system (<http://www.revcom.doe.gov>).

### **HQ DPCs**

- may set separate deadlines for field offices using the RevCom "Version" link.
- must obtain approval from their secretarial officers or designees before submitting official organization comments.

Extensions to the commenting period will be granted only with the permission of the office of primary interest and only for the requesting organization.

### **Comments:**

Please identify comments as "Major" or "Suggested." Major comments should be identified as addressing issues serious enough to preclude or significantly hamper the Department's ability to—

- accomplish policy objectives and missions,
- comply with applicable laws, rules, and regulations, or
- fulfill contractual obligations and formal commitments.

*The first issue for consideration is whether this directive should apply to your organization. If it should not apply, enter that information with justification in the "Overall Comments."*

**OPI:** The office of primary interest must respond to all comments submitted by Headquarters DPCs.

Please address questions on the content of the draft directive to Denise Hill (IM-40) at 202-586-5848; [Denise.Hill@hq.doe.gov](mailto:Denise.Hill@hq.doe.gov).

Questions on the directives program should be directed to Camille Beben (MA-90) at 202-586-4014 [camille.beben@hq.doe.gov](mailto:camille.beben@hq.doe.gov).

**ORDER**

**DRAFT  
DOE O 415.1**

Approved: XX-XX-XXXX

# **Information Technology Project Management**

---



**U.S. DEPARTMENT OF ENERGY**  
Office of the Chief Information Officer



## Information Technology Project Management

---

### 1. PURPOSE

- (1) To provide the Department of Energy (DOE) Elements, including the National Nuclear Security Administration (NNSA), with Information Technology (IT) program and project management direction for the acquisition and management of IT projects, investments, and initiatives with the goal of delivering projects on the original performance baseline, including within budget, on schedule, and fully capable of meeting mission performance, safeguards and security standards
  - a. To establish multi-directional communications and align decision making within the Office of the Chief Information Officer (OCIO) and across all DOE Elements for DOE enterprise-wide IT projects which impact multiple DOE Elements.
  - b. To establish a DOE-wide ability to quickly and accurately report what projects are in process within DOE, reduce duplication of effort, and the Total Cost of Ownership (TCO) for DOE enterprise-wide IT projects.

### 2. CANCELLATION None.

### 3. APPLICABILITY

- (1) Except for the equivalencies and exemptions in Section 4 Requirements, The scope of IT assets covered by this Order includes but is not limited to investments and projects (based on a sliding scale of factors):
  - (a) With Total Project Cost (TPC) cost equal to or more than \$25Million (M);
  - (b) With a potential impact on more than one DOE Element; or
  - (c) Systems which may impact more than one DOE Element Projects having a TPC between \$5M and less than \$25M must have a tailored set of controls that balances schedule, cost, and quality to derive the tailored set of artifacts to increase the probability of project success.
- (2) IT investments and projects not required to comply with this Order directly, still require formal IT project management, implemented through a standardized and graded approach, as specified and approved by the sponsoring/funding organization.
- (3) Equivalencies/Exemptions for DOE O 415.1. Equivalencies and exemptions to this Order are processed in accordance with DOE 0251.1C, Departmental Directives Program. The following equivalencies and exemptions are included in this Order. Equivalency. In accordance with the responsibilities and authorities assigned by Executive Order 12344, codified at 50 USC sections 2406 and 2511 and to ensure consistency through the joint Navy/DOE Naval Nuclear Propulsion

Program (NNPP), the Deputy Administrator for Naval Reactors (NR) will implement and oversee requirements and practices pertaining to this Order for activities under the Director's cognizance, as deemed appropriate.

- (4) Equivalency. Consistent with Secretarial Delegation Order Number 00-033.00B to the Administrator and Chief Executive Office (CEO) of Bonneville Power Administration (BPA), this Order does not apply to BPA.
- (5) Exemption This Order does not apply to Financial Assistance Awards (FAA) (grants and cooperative agreements) covered under 10 Code of Federal Regulations (CFR) Part 600.
- (6) Exemption. Office of Science User Facilities (see definition in Attachment 4) .
- (7) Exemption. DOE Elements that meet all of the following criteria may demonstrate alignment with specific requirements of this Order with authorization by the DOE OCIO. The intent of this exemption is to delegate authority to the DOE Elements with the following:
  - (a) Established IT Project Management Offices (PMO) with clear visibility into ongoing IT projects and with adequate project management requirements, processes and procedures defined to enable continued project success.
  - (b) Established IT governance policies and procedures that are consistently used throughout the DOE Element with demonstrated success.
  - (c) Demonstrated record of completing IT projects not to exceed 10% of the original cost baseline for the original approved scope of work approved at Detailed Design Review (CD-2), within the project schedule and with the original functionality.
    - DOE elements with an exemption are still responsible for reporting and coordinating projects that impact multiple DOE elements
- (8) Exception. Non-IT investments or projects (e.g., construction projects), having a TPC equal to or greater than \$25M, that may include an IT element(s) or require the integration of IT. These non-IT assets should follow the direction of DOE Order (O) 413.3B.
- (9) For DOE Elements that are eligible for the exemption, the Deputy Secretary for OCIO as appropriate must take affirmative action and approve the exemption through an action memorandum from the OCIO or designated authority. This exemption may be rescinded if the OCIO determines that the DOE Element is unable to maintain the exemption requirements.

- (10) The delegating official of the sponsoring/funding organization of an IT asset that does not require compliance with this Order must notify and coordinate the oversight of the IT asset with the DOE Corporate IT PMO to ensure alignment with DOE overall objectives.
- (11) The requirements within this Order specifically include:
- (a) Development, Modernization, and Enhancements (DME) IT systems and software development with potential impact on multiple DOE Elements;
  - (b) Large scale Steady-State (SS) investments and projects;
  - (c) High priority investments and projects; and
  - (d) New Commercial Off The Shelf (COTS) product acquisitions which may impact more than one DOE element or adversely impact DOE enterprise systems.
- (12) The Administrator, National Nuclear Security Administration (NNSA) will ensure that NNSA employees and contractors comply with their respective responsibilities under this Order. Nothing in this Order 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.
- (13) DOE Contractors except for the equivalencies and exemptions in paragraph 4, the CRD sets forth requirements of this Order that will apply to contracts that include the CRD. The CRD must be included in IT program/project management and services contracts.
- (14) Non-IT investments or projects (e.g., construction projects), having a TPC equal to or greater than \$25M, that may include an IT element(s) or require the integration of IT. These non-IT assets should follow the direction of DOE Order (O) 413.3B.
- (15) As the laws, regulations, and DOE directives clause of IT program/project management and services contracts states, regardless of the performer for the work, site/facility management contractors with the CRD incorporated into their contracts are responsible for compliance with the requirements of the CRD.

#### 4. REQUIREMENTS

- (1) This order is established for all DOE Elements to implement and all DOE Federal employees including IT Project Manager (ITPMs) who are to apply the requirements of this Order and any related Guides to the IT investments and projects they are responsible for managing:

## CHAPTER II. GENERAL.

- (2) To allow the DOE OCIO to determine Departmental-wide IT-related metrics as required under its Delegation and to permit a validation of the exemptions sought under item (4) above, DOE Elements shall:
  - (a) Report project information related to milestones and performance (i.e. cost, schedule, scope, and risk management) on all applicable projects into the DOE Corporate IT PMO reporting tool and update this information on a monthly basis. Note: Use of and reporting on EVMS is based on project type.
  - (b) Submit all applicable IT project costs, schedule and performance information to the DOE Corporate IT PMO as directed for projects that meet the financial threshold or that impact more than one DOE Element.
- (2) Follow the general requirements on IT Projects listed in the Appendix A must be followed. Other appendices and attachments with the exception of Attachment 1 are included as supporting or explanatory information.
- (3) Establish the project scope and expected goals of the IT Program, Project, and Investment.
- (4) Align the IT investment to the Departmental and/or Organizational Strategic Plan and objectives.
  - (a) Establish clearly defined metrics and business value-based objectives
- (5) Define the roles and responsibilities to govern and execute the IT investment.
- (6) Develop a project plan that includes a baseline that adheres to a phased approach (from concept to the transition to steady state operations) for implementation of the IT investment. The project plan must include an acquisition strategy that describes the level of Federal/M&O interaction and, describes the acquisition plan (e.g., buy or build, where the source of funding comes from, and specify the reviews needed in the context of the acquisition-related milestones). Furthermore, the project plan must include supplemental documents such as a project schedule and sub-management plans that provide the methodologies for executing various project management practices.
- (7) Monitor and control the IT investment through project management practices, which includes monthly reporting to the Acquisition Executive(s) and ITPM, as appropriate, on project plans and status.
- (8) Ensure compliance with the Department and other Federal directives on Capital Planning and Investment Control (CPIC), Enterprise Architecture, and reporting as appropriate.

(9) Tailor projects as needed.

(10) Requirements for Implementation

Implementation of the requirements contained in this Order must be defined in an implementation plan within six months of the issuance of this Order with a phased approach to full implementation within a year. ITPMs of IT Projects that began prior to the issuance of this Order may continue to adhere to the requirements that established the project and must coordinate with the DOE Corporate IT PMO on reporting and monitoring.

(5) EXECUTION AND IMPLEMENTATION OF DOE INFORMATION TECHNOLOGY PROJECT MANAGEMENT: See Appendix A.

(6) RESPONSIBILITIES: See Appendix B.

(7) CONTRACTOR REQUIREMENTS DOCUMENT: See Attachment 1.

(8) COMPARISON of 413.3B to 415 STAGE GATE REVIEWS: See Attachment 2.

(9) REFERENCES: See Attachment 3.

(10) DEFINITIONS: See Attachment 4.

(11) CONTACT: For assistance, contact the Office of the Chief Information Officer, Denise Hill, Denise.Hill@hq.doe.gov, 202-586-5848.

BY ORDER OF THE SECRETARY OF ENERGY:



## **APPENDIX A**

### **EXECUTION AND IMPLEMENTATION OF DOE INFORMATION TECHNOLOGY PROJECT MANAGEMENT**

#### 1. Objective

The Department's ultimate objective of DOE Order (O) 415.1, Information Technology Project Management, is to provide requirements for the acquisition and management of IT investments and projects and increase the overall success rate of project completion. The directive will assist in reducing risk and the total cost of IT expenditures by eliminating duplications of effort; instituting IT life cycle best practices and establishing methodologies for inter-organizational sharing of information and resources to achieve more effective and efficient results from invested resources.

#### 2. Background

Information Technology serves a critical role in helping DOE carry out its complex and evolving strategic and tactical objectives. DOE O 415.1 enables DOE to manage IT assets with an enterprise perspective to ensure that the overall IT portfolio achieves maximum alignment with DOE strategic goals and maximum return on DOE's IT investment.

Enterprise IT Governance is critical in reforming Federal IT to reduce waste and improve performance. It will improve line-of-sight between project teams and senior executives, increase the precision of ongoing measurement of IT program health, and improve the quality and timing of interventions to keep projects on track. These improvements will improve the efficiency of project oversight and better manage programs in distress.

#### 3. DOE Life Cycle Management Framework

The Department's Life Cycle Management (LCM) is the DOE framework to enhance IT project management through rigorous application of sound investment and project management principles and industry best practices. The LCM framework provides a project management methodology that guides the activities of each of the stakeholders throughout the life cycle with interdependencies within the areas of EA, cyber security, IT capital planning, and acquisition. The LCM is comprised of six phases, each with at least one Critical Decision (CD) which serve as phase gates approved by the Acquisition Executive (AE) at the Department-level or Program Site Office (PSO)-level.

Figure 1 illustrates the requirements for the typical implementation of the LCM for IT projects and investments.\*add footnote "See Roles and Responsibilities section for AE role in approving CDs"

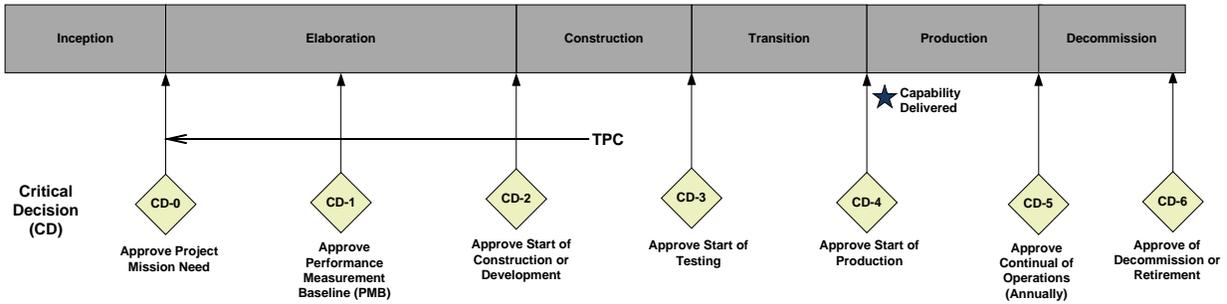


Table 1 describes the CDs and their respective key activities and outcomes.

**Table 1: Description of LCM Framework Phases**

Critical Decision	Description
<b>CD-0, Approve Project Mission Need</b>	<p><b>Key Activities:</b></p> <ul style="list-style-type: none"> <li>Identify the business need</li> <li>Conduct an architectural review, in coordination with the Enterprise Architecture governance body</li> <li>Develop high level business and functional requirements, Rough Order of Magnitude (ROM) cost and schedule, and preliminary business and technical risks to incorporate into the Project Charter and preliminary Project Management Plan (PMP)</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>Approval of initial project cost and schedule estimates</li> <li>Selection to the IT investment portfolio as a Major or Non-Major IT investment, if applicable</li> <li>Designation of an AE</li> <li>Designation of ITPM</li> <li>Receipt of initial funding</li> <li>Issuance of Project Charter</li> </ul>
<b>CD-1, Approve Performance Measurement Baseline (PMB)</b>	<p><b>Key Activities:</b></p> <ul style="list-style-type: none"> <li>Complete development of the full PMP to include refinement of project cost, schedule and performance baselines as necessary</li> <li>Develop detailed business, functional and technical requirements, alternatives analysis including an analysis of development methodologies and Independent Baseline Review</li> <li>Award contracts if needed</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>Complete project planning and requirements to determine planning and project baselines</li> <li>Validation of project baseline</li> <li>Approval of requirements</li> <li>Award of required contracts</li> </ul>
<b>CD-2, Approve Start of</b>	<p><b>Key Activities:</b></p> <ul style="list-style-type: none"> <li>Develop the high-level designs based on the approved business, business process reengineering, functional, and technical requirements</li> </ul>

Critical Decision	Description
<b>Development</b>	<ul style="list-style-type: none"> <li>• Develop a Requirements Traceability Matrix (RTM) and Test Plan</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>• Completion and approval of design and readiness for system development</li> </ul>
<b>CD-3, Approve Start of Testing</b>	<p><b>Key Activity:</b></p> <ul style="list-style-type: none"> <li>• Develop code and other deliverables required to build the product</li> </ul> <p><b>Outcome:</b></p> <ul style="list-style-type: none"> <li>• Completion of all coding and associated documentation; user, operator, and maintenance documentation, and test planning</li> </ul>
<b>CD-4, Approve Start of Production</b>	<p><b>Key Activity:</b></p> <ul style="list-style-type: none"> <li>• Test and audit the Business Product’s design, coding, and documentation</li> </ul> <p><b>Outcome:</b></p> <ul style="list-style-type: none"> <li>• Completion of acceptance testing and readiness for training and implementation</li> <li>• Project acceptance by AE</li> </ul>
<b>CD-5 Approve Continual of Operations (Annually)</b>	<p><b>Key Activities:</b></p> <ul style="list-style-type: none"> <li>• Train users and operators</li> <li>• Execute the Implementation Plan, including any phased implementation</li> <li>• Operate and maintain the production system and conduct annual operational analyses</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>• Successful establishment of production capability</li> <li>• Completion of the Post-Implementation Review</li> <li>• Successful operation of the asset against current cost, schedule, and performance benchmarks</li> </ul>
<b>CD-6, Approve of Decommission or Retirement</b>	<p><b>Key Activity:</b></p> <ul style="list-style-type: none"> <li>• Retire the asset when operational analysis indicates that it is no longer cost-effective to operate the asset</li> </ul> <p><b>Outcome:</b></p> <ul style="list-style-type: none"> <li>• Deliberate and systematic decommissioning of the Business Product with appropriate consideration of data archiving and security, migration of data or functionality to new assets, and incorporation of lessons learned over the investment life cycle</li> </ul>

4. Critical Decision Approval Authority and Reporting Requirements.

Critical Decisions will be approved differently for Enterprise-wide IT projects, Program Secretarial Offices, and Local Facility/Office projects. The CD approval authority requirements are identified in Table 2.

**Table 2: Critical Decision Approval Authority Requirements**

Type of IT Project	Critical Decision Authority
<b>Enterprise-Wide</b>	DOE CIO DOE Chief Operating Officers Board Further delegation is allowed.
<b>Program Secretarial Office (PSO)</b>	AE (Designated by Program Secretarial Officer) Further delegation is allowed.
<b>Local Facility/Office</b>	To Be Determined by Program Secretarial Officer responsible for Local Facility/Office

5. Requirements for Approval of Critical Decisions.  
CD-0, Approve Project Mission Need.

The Inception Phase begins with the identification of a business need for which a technological solution is required. The Inception Phase may be triggered because of business process improvement activities, changes in business functions, advances in IT, or may arise from external sources such as public law or the general public. CD-0 is the critical decision at the end of the Inception Phase.

The two primary objectives of CD-0 are to:

- a. Determine if this asset proposal is worth pursuing (is there a good chance that the asset will be approved and funded? Does this asset proposal warrant investing in?).
- b. Determine if the project has been clearly defined and has the supporting organizational structure to proceed with full planning.

The CD-0 will assess whether the following Exit Criteria for the Inception Phase are met:

- A Business Sponsor has been identified and confirmed (someone who will champion the asset, define the business needs and asset requirements, and secure funding).
- Approval of this asset is highly probable. The decision is based on the following factors: acceptable risk/return; high-priority business need/mandate; and no more preferable alternative (use/modify existing application, not addressable through business process reengineering or other non-IT solution).
- Asset description is sufficient to permit development of an acceptable Project Charter and Preliminary PMP.

- The scope of the project has been adequately described in the Project Charter and that high-level requirements meet the business need.
- The project organizational structure is scaled to support the project and the proposed resources are qualified.
- The Preliminary PMP adequately defines how the project will be executed, monitored and controlled and includes high-level estimates of the baselines.
- The high-level analysis demonstrates that the outcomes will be aligned with the target EA
- All applicable security and privacy standards have been considered in sufficient detail as part of the Project Charter. Federal Information Processing Standards (FIPS)-199 categorization and an initial assessment of system application boundary are established.

Table 3 lists the requirements needed to attain approval for CD-0.

<b>Table 3 CD-0 Approve Project Mission Need Requirements</b>	
<b>Prior to CD-0</b>	<b>Approval Authority</b>
Identify a business need or performance gap and justify the use of IT as a solution.	
Conduct a preliminary Enterprise Architecture review.	
Secure initial funding for planning and procurement activities.	
Develop the <b><u>Project Charter</u></b> and associated <b><u>Business Case</u></b> and Acquisition strategy.	
Develop the Preliminary <b><u>PMP</u></b> .	
Charter the Integrated Project Team (IPT).	
Selection into the IT Portfolio and designation as a Major or Non-Major investment.	
Approve appointment of the <b><u>ITPM</u></b> .	

<b>Post CD-0 Approval</b>	
Submit all CD documents to DOE Corporate IT PMO (IM-40).	
Initiate Quarterly Project Reviews (QPRs) with the AE or their designee and the OCIO.	
Proceed with formal project planning and design used to develop alternative concepts and functional requirements.	
<p>NOTES:</p> <ul style="list-style-type: none"> <li>c. Documents and reports are intended to be stand-alone and should not be combined.</li> <li>d. Where no approval authorities are noted, authorities are established through other directives or the Program Offices (e.g., Functions and Requirements Assignment Matrix).</li> </ul>	

e. CD-1, Approve Performance Measurement Baseline (PMB).

CD-1 is the first of two Critical Decisions within the Elaboration Phase. The CD-1 is a formal inspection of the entire IT asset and its Performance Measurement Baseline (PMB) initially developed for the IT project. Successful formal inspection will result in governance approval of the scope, cost, and schedule for the IT asset.

CD-1 will assess whether the following Exit Criteria are met:

- The full scope of the IT asset has been adequately described in the Project Charter and the high-level requirements meet the business need.
- The PMP and component plans are fully scaled and details all the appropriate components that address the needs of the IT asset. This includes the definition of appropriately scaled reviews and deliverables.
- All Deliverables for the remainder of the life cycle of the IT asset have been defined and documented in the Tailoring Strategy Agreement.
- The Acquisition Strategy, as documented in the Acquisition Plan, has been approved by the CO and there is obligated money for contract awards. All applicable contract clauses have been considered.
- The risk limits of the Business Sponsor have been defined and risks of highest impact have been sufficiently addressed with either mitigation or contingency plans.

Table 3.1 lists the requirements needed to attain approval for CD-1.

<b>Table 3.1 CD-1, Approve Performance Measurement Baseline Requirements</b>	
<b>Prior to CD-1</b>	<b>Approval Authority</b>
Approve an <b><u>Acquisition Strategy</u></b> . Perform an <b><u>Alternatives Analysis</u></b> .	
Approve <b><u>PMP</u></b> . The <b><u>Tailoring Strategy</u></b> , if required, can be included in the PMP or placed in a separate document.	
Approve the <b><u>Risk Management Plan</u></b> and <b><u>Risk Register</u></b> .	
Create the <b><u>Work Breakdown Structure (WBS)</u></b> , <b><u>Integrated Master Schedule (IMS)</u></b> with milestones and Software Quality Assurance Plan.	
Approve the initial <b><u>Cost and Schedule Baseline</u></b> .	
Create a preliminary <b><u>System Security Plan</u></b> and <b><u>Privacy Impact Assessment</u></b> .	
<b>Post CD-1 Approval</b>	
Submit all CD documents to DOE IM-40.	
Continue QPRs with the AE or their designee and the OCIO.	
Initiate monthly Earned Value Management (EVM) reports to the AE or their designee and the OCIO.	
Initiate appropriate CPIC reporting.	
Proceed with formal project planning and design used to develop functional requirements.	
NOTES:	
f. Documents and reports are intended to be stand-alone and should not be	

combined unless necessary.

- g. Where no approval authorities are noted, authorities are established through other directives or the Program Offices (e.g., Functions and Requirements Assignment Matrix).

h. CD-2, Approve Start of Construction or Development.

CD-2, the second and last CD within the Elaboration Phase, is a formal review of the high-level architectural design to achieve confidence that the design satisfies the system requirements and is in conformance with the EA and prescribed design standards, to raise and resolve any critical technical and/or project-related issues, and to identify and mitigate project, technical, security, and/or business risks affecting subsequent life cycle activities.

CD-2 will assess whether the following Exit Criteria are met:

- Requirements have been grouped and sufficiently detailed so that they can be tested once the product is developed.
- No outstanding concerns among stakeholders regarding design adequacy or feasibility.
- Design is adequately documented to allow effective and efficient development.
- Contingency/Disaster Recovery Plan is adequately documented to provide clear procedures and responsibilities.
- Project Processes and Risks are expected to result in the successful completion of the project.
- Security and Records Management documents are as complete and accurate as possible.

Table 3.2 lists the requirements needed to attain approval for CD-2.

<b>Table 3.2 CD-2, Approve Start of Construction or Development Requirements</b>	
<b>Prior to CD-2</b>	<b>Approval Authority</b>
Approve updates to <b><u>PMP</u></b> , <b><u>Risk Management Plan</u></b> , <b><u>Risk Register</u></b> , <b><u>Tailoring Strategy</u></b> , <b><u>Cost Scope and Schedule Baseline</u></b> , <b><u>Software Quality Assurance</u></b> , <b><u>System Security Plan</u></b> and <b><u>Privacy Impact Assessment</u></b> developed in earlier phases.	
Develop <b><u>Requirements Specification</u></b> and <b><u>Requirements Traceability Matrix</u></b> .	

Develop <u>System Design</u> .	
Develop any <u>Inter/Intra-Agency Agreements</u> as necessary.	
Develop <u>Test Plan</u> and <u>preliminary Test Cases</u> .	
Prepare a <u>Contingency/Disaster Recovery Plan</u> .	
Develop <u>System of Record Notice</u> .	
Coordinate cyber security activities and reviews	
Coordinate Records Management activities in accordance with applicable Records Management policy and guidelines.	
<b>Post CD-2 Approval</b>	
Submit all CD documents to DOE IM-40.	
Continue QPRs with the AE or their designee and the OCIO.	
Continue monthly EVM reports to the AE or their designee and the OCIO.	
Continue CPIC reporting.	
Proceed with formal construction activities.	
<p>NOTES:</p> <ul style="list-style-type: none"> <li>i. Documents and reports are intended to be stand-alone and should not be combined unless necessary.</li> <li>j. Where no approval authorities are noted, authorities are established through other directives or the Program Offices (e.g., Functions and Requirements Assignment Matrix).</li> </ul>	

k. CD-3, Approve Start of Testing.

CD-3, occurring at the end of the Construction Phase, evaluates whether the IT asset (or an element of an IT asset) has been acquired, developed, or configured properly and should proceed to the Transition Phase.

CD-3 will assess whether the following Exit Criteria for the Construction Phase are met:

- IT Solution satisfies the requirements established and refined during the Elaboration Phase.
- Test Plan(s) ensures that all test cases will be properly evaluated and executed, and system tested to ensure requirements are met.
- Security plans, risk assessments, and Records Management documents and schedules are complete and in compliance with regulatory requirements.

Table 3.3 lists the requirements needed to attain approval for CD-3.

<b>Table 3.3 CD-3, Approve Start of Testing Requirements</b>	
<b>Prior to CD-3</b>	<b>Approval Authority</b>
Approve updates to <b><u>PMP, Risk Management Plan, Risk Register, Tailoring Strategy, Cost and Schedule Baseline, System Security Plan, Privacy Impact Assessment, and Contingency/Disaster Recovery Plan</u></b> developed in earlier phases.	
Update <b><u>Requirements Document</u></b> and <b><u>Requirements Traceability Matrix</u></b> .	
Coordinate cybersecurity activities in accordance with applicable cybersecurity policy and guidelines.	
Create <b><u>Operations and Maintenance Manual</u></b> and other artifacts required for the support the system after it has been put into production.	
Approve completed <b><u>Test Plan</u></b> .	
Develop <b><u>System of Record Notice</u></b> .	
Develop <b><u>Training Plan, Training Materials, User Manual and</u></b> other artifacts as required to prepare the business for the new system.	
<b>Post CD-3 Approval</b>	

Submit all CD documents to DOE IM-40.	
Continue QPRs with the AE or their designee and the OCIO.	
Continue monthly EVM reports to the AE or their designee and the OCIO.	
Continue CPIC reporting.	
Proceed with transition activities preparing the system and business for release into operations.	
<p>NOTES:</p> <p>l. Documents and reports are intended to be stand-alone and should not be combined unless necessary.</p> <p>m. Where no approval authorities are noted, authorities are established through other directives or the Program Offices (e.g., Functions and Requirements Assignment Matrix).</p>	

n. CD-4, Approve Start of Production.

CD-4, occurring at the end of the Transition Phase, evaluates whether the IT asset (or an element of an IT asset) is ready for release into the production environment for sustained Operations and Maintenance (O&M) support and should proceed to the Production Phase.

CD-4 will assess whether the following Exit Criteria for the Transition Phase are met:

- IT Solution is ready for production and notification of the new solution is provided to all users and stakeholders who are affected.
- No major outstanding concern among stakeholders regarding implementation and asset is formally accepted by the system owner.

Security and authorization to operate documents are complete and the system is considered Certified and Accredited.

Table 3.4 lists the requirements needed to attain approval for CD-4.

o.

**Table 3.4 CD-4, Approve Start of Production Requirements**

<b>Prior to CD-4</b>	<b>Approval Authority</b>
Approve updates to <u>PMP</u> , <u>Risk Management Plan</u> , <u>Risk Register</u> , <u>Tailoring Strategy</u> , <u>Cost and Schedule Baseline</u> , <u>System Security Plan</u> , <u>Privacy Impact Assessment</u> , and <u>Contingency/Disaster Recovery Plan</u> developed in earlier phases.	
Update the <u>Requirements Traceability Matrix</u> .	
Approve <u>Implementation Plan</u> .	
Obtain Authority to Operate and coordinate cybersecurity activities in accordance with applicable cybersecurity policy and guidelines.	DAA
Approve <u>Security Risk Assessment</u> and <u>System Security Plan</u> .	DAA
Approve <u>Operations and Maintenance Manual</u> and other artifacts required for the support the system after it has been put into production.	Operations and Maintenance Organization
Approve <u>Contingency/Disaster Recovery Plan</u> .	
Approve of Service Level Agreement(SLA)/Memorandum of Understanding (MOU)s.	
Review <u>Test Results</u> .	
Update <u>System of Record Notice</u> .	
Update <u>Training Plan</u> , <u>Training Materials</u> , <u>User Manual</u> and other artifacts as required to prepare the business for the new system.	
<b>Post CD-4 Approval</b>	
Submit all CD documents to DOE IM-40.	

Continue QPRs with the AE or their designee and the OCIO until project closeout.	
Continue monthly EVM reports to the AE or their designee and the OCIO until project closeout.	
Continue CPIC reporting as required.	
Proceed with releasing the system into operations.	
Create <b><u>Lessons Learned</u></b> regarding project execution.	
Create <b><u>Post Implementation Review Report</u></b> .	
At project close-out, submit a <b><u>Project Closeout Report</u></b> as well as a final copy of all documents to DOE IM-40.	
Maintain security <b><u>Compliance and Authorization</u></b> and comply with ongoing cybersecurity requirements.	
<p>NOTES:</p> <p>p. Documents and reports are intended to be stand-alone and should not be combined unless necessary.</p> <p>q. Where no approval authorities are noted, authorities are established through other directives or the Program Offices (e.g., Functions and Requirements Assignment Matrix).</p>	

r.

s. CD-5, Approve Continual of Operations.

The Production Phase marks the full deployment/transition of the IT solution into the production environment and converts it into sufficient operations and maintenance of the IT solution to ensure it delivers value. CD-5 assesses the system on an annual basis (from the anniversary date of when the system was deployed into production) in the areas of EA, capital planning, acquisition, and cyber security. It ensures that the system still meets specific business needs, aligns to the strategic goals, is compliant, and fully functional.

Steady State Investments:

Projects in the Steady State stage have already completed the requirements of CD-0 through CD-4. During CD-5, project reporting is managed through the Capital Planning and Investment Control process to provide performance reviews of steady state investments, detailing financial and technical performance of the investment during the previous quarter:

- Report to the attention of the Department’s OCIO any investment showing a 10% or greater negative cost and performance variance.
- Conduct annual operational analyses of all steady state IT investments. Operational analyses must address all four factors of the investment: customer results, strategic and business results, financial performance, and innovation.

Conduct an annual operational analysis and provide a report of the annual operational analysis to the Department’s Office of the CIO.

Note: \* CD-5 assessments should continue to be performed on an ongoing basis until it is determined that the IT asset should proceed to the Decommission Phase. Upon determination that it should be decommissioned, a Decommission Plan must be developed and managed as a new project, CD-5 should focus on whether the IT asset should proceed to the Decommission Phase.

Table 3.5 lists the requirements needed to attain approval for CD-5.

<b>Table 3.5 CD-5, Approve Continual of Operations Requirements</b>	
<b>Prior to CD-5</b>	<b>Approval Authority</b>
Approve an <b><u>Annual Operating Analysis</u></b>	
If required prepare a <b><u>Decommission Plan</u></b> .	
If required, obtain continued Authority to Operate and coordinate cybersecurity activities in accordance with applicable cybersecurity policy and guidelines.	DAA
If required, update the <b><u>Privacy Impact Assessment</u></b> .	
If required, perform <b><u>Records Management</u></b> audit.	
<b>Post CD-5 Approval</b>	

Submit all CD documents to DOE IM-40.	
Continue CPIC reporting as required.	
Maintain security <b><u>Compliance and Authorization</u></b> and comply with ongoing cybersecurity requirements.	
<p>NOTES:</p> <p>t. Documents and reports are intended to be stand-alone and should not be combined unless necessary.</p> <p>u. Where no approval authorities are noted, authorities are established through other directives or the Program Offices (e.g., Functions and Requirements Assignment Matrix).</p>	

v. CD-6, Approve of Decommission or Retirement.

CD-6 is conducted to ensure that the IT solution has been completely and appropriately decommissioned, thereby ending the life cycle of the IT asset.

CD-6 will assess whether the following Exit Criteria for the Decommission Phase are met:

- Data archiving, security, and data and systems migrations are complete.
- If appropriate, has the migration of data and the function to a new IT solution been well planned.
- Final phase-end review has been conducted.

All project documentation has been reviewed and appropriately updated.

Table 3.6 lists the requirements needed to attain approval for CD-6

<b>Table 3.6 CD-6, Approve of Decommission or Retirement Requirements</b>	
<b>Prior to CD-6</b>	<b>Approval Authority</b>
Prepare a <b><u>Decommission Justification Form</u></b> .	
System data and records migrated to replacement system or Project Archives.	
If required, obtain continued Authority to Operate and coordinate cybersecurity activities in accordance with applicable cybersecurity policy and guidelines.	DAA

<b>Post CD-6 Approval</b>	
Submit all CD documents to DOE IM-40.	
Continue CPIC reporting as required.	
Final disposition of system assets.	
<p>NOTES:</p> <ul style="list-style-type: none"> <li>w. Documents and reports are intended to be stand-alone and should not be combined unless necessary.</li> <li>x. Where no approval authorities are noted, authorities are established through other directives or the Program Offices (e.g., Functions and Requirements Assignment Matrix).</li> </ul>	

- y. Application of Requirements for Unique Projects or Circumstances.
- z. Although most DOE projects will follow the requirements outlined in this Order, there are some differing project situations where customizing the process is beneficial:
  - aa. Highly Specialized IT Projects.
  - bb. Highly specialized IT (as defined in Attachment A) assets...
  - cc. Projects Requiring IT Procurements.
  - dd. Most IT projects typically perform procurements (labor or materials) throughout the life cycle of a project or as required. Typically, the acquisition of contractor support occurs after approval of CD-0 and prior to CD-1. DOE projects at the PSO-level should notify their appropriate stakeholders within 45 days for any proposed IT service procurement or acquisition equal to or greater than \$25M within 60 days of procurement. DOE projects at the PSO-level should inform DOE CIO of proposed IT service procurement or acquisition equal to or greater than \$50M within 60 days prior to the initialization of the procurement process.
  - ee. Agile IT Projects.

- ff. Modern IT Projects should balance the use of Agile processes with the more traditional waterfall processes according to which methods best suit the needs of their project and project environment. This balancing may require tailoring of the critical decisions and project artifacts. This tailoring needs to take into account both the project's needs to most optimally meet their project goals within their risk tolerance, as well as the needs of the organization to effectively govern IT projects within the greater business, policy, security, enterprise risk and cost efficiency needs.
- gg. For the purposes of this order, an Agile project is one that:
- hh. Releases new versions of the system into production every 6 months or less,
- ii. May adopt an emergent/evolutionary approach to requirements and design definition,
- jj. Utilize time-boxed iterations where the complete battery of design, testing, validation and verification are performed repeatedly throughout the project,
- kk. Maintain a reduced level of documentation, relying on smaller, faster releases with user feedback as the primary validation mechanism instead of intermediate document and process reviews.
- ll. Agile projects should plan on performing initial reviews for each of the critical decisions prior to their initial software release and performing incremental reviews as necessary prior to subsequent releases. These initial reviews can either include the entire scope and design of the entire project, or a detailed design for just the first release, with a less detailed roadmap for the entire scope or anticipated entire scope of the project.
- mm. Subsequent system releases may combine CD 2-4 approvals into a single incremental CD-4 for each individual release. Alternately, for lower risk projects, the incremental CD-4 review may be deferred all together in exchange for an annual CD-5 review coordinated with the project's funding cycle.
- nn. Projects that adopt the just-in-time requirements style of emergent system design as compared to the big design up front system design require additional oversight to ensure that business representatives have taken ownership of the product backlog, and prioritize the system requirements in such a way as to deliver the most valuable features first and the less valuable features later.
- oo. The business owners of agile projects need to convert their business cases into incremental business cases, identifying the mission value each release/set of releases should bring. Without a fixed scope to determine when an agile project ends, the decision to end an agile project should be driven by a comparison between the incremental business value of the next release(s) and how it compares

to the business value that could be delivered with those funds elsewhere in the portfolio.

- pp. Projects that are required to report EVM metrics and use story-point or similar feature size calculations to monitor their progress against project objectives need to ensure that their reported EVM metrics accurately reflect how many features are achieved each iteration as compared to planned features.

Baseline Management.

- qq. Performance Measurement Baseline Deviation (PMB).

A performance measurement baseline deviation occurs when the approved TPC, production (go-live) date, or performance and scope parameters cannot be met. This includes any disaggregation of scope in an effort to establish a smaller discrete project (or projects) for the immediate or at a later date. The ITPM must promptly notify management whenever project performance indicates the likelihood of a PMB deviation. When a deviation occurs, the approving authority must make a specific determination whether to terminate the project or to establish a new PMB by requesting the ITPM to submit a BCP.

Additionally, any PMB deviation decisions must be reported to the DOE OCIO.  
[Insert threshold for BCP impact that requires DOE CIO approval]

- rr. Performance Measurement Baseline Changes.

A PMB change represents an irregular event which should be avoided to the maximum extent.

- ss. Directed Changes.

Directed changes are caused by DOE policy directives (such as those that have force and effect of law and regulation), regulatory, or statutory actions and are initiated by entities external to the Department, to include external funding reductions. Directed changes are reviewed and verified by the DOE OCIO and OMB and follow the appropriate baseline management processes.

- tt. Change Control.

uu.

- vv. Change control, as defined in the PMP, ensures that project changes are identified, evaluated, coordinated, controlled, reviewed, approved/disapproved, and documented in a manner that best serves the project. One key goal of change control is to ensure that PMB thresholds are not exceeded. Approval authority for changes depends upon the estimated impact(s) of the change and can range from the contractor to the AE, usually with the involvement and support of a Change Control Board (CCB). The CCB membership, authorities, thresholds, and procedures should be detailed or referenced within the PMP or in a separate Baseline Change Control Plan.



## **APPENDIX B**

### **RESPONSIBILITIES**

A standardized project management approach for IT assets within DOE must be based on best practices and lessons learned. This standardized approach must: fully implement the provisions of DOE Secretary Delegation Order No. 00-031.00A, which delegates to the Chief Information Officer the responsibility of oversight and reporting on IT projects and investments across the DOE enterprise to;

- Establish a DOE Enterprise culture that recognizes the need to invest in DOE enterprise-wide IT projects while, controlling cost, and schedule with the greatest potential of meeting DOE mission objectives on budget, on schedule and with the functionality required;
- Strengthen line-management accountability for successful IT project management results; and
- Develop effective IPTs to assist the ITPM in planning, programming, budgeting, and successfully acquiring capital assets.

#### 1. DOE Chief Information Officer

- a. Serve as the DOE senior manager responsible and accountable for Implementing the provisions of the Delegation Order in a collaborative manner that:
  - 1) Enables IT projects covered under this Order are effectively managed and reported on in a timely manner; and
  - 2) Acknowledges the autonomy and authority of DOE Elements and fosters a core competency for supporting DOE enterprise-wide IT initiatives..
- b. Champion DOE IT project and asset planning, coordination and cooperation in an effort to improve the efficiency and effectiveness of IT across all DOE Elements.
- c. Oversee the development and implementation of IT project policies, standards and guidelines that align with DOE mission as well as legislative and regulatory policies and procedures.
- d. Identify special interest projects and ensure appropriate senior executive-level reviews are provided for those projects.
- e. Establish and chair a DOE Corporate IT Project Investment Board.
- f. Establish and maintain a DOE-wide process for certifying and approving IT Project Managers.
- g. Approve exemptions as defined in Paragraph 3.c. (3).
  - (1) Promote EA as defined in DOE Order 200.1A.

- h. Promote Information Technology Strategic Planning.
  - (1) Develop and maintain the DOE Information Resources Management (IRM) Strategic Plan, and corresponding EA, that delineates the strategic direction of Program Secretarial Office programs, projects and organizational IT portfolio.
  - (2) Provide advice and assistance to the Secretary, Deputy Secretary, and other senior management on Department-wide IT Governance and related issues.
  - (3) Coordinate with Heads of DOE Elements including the NNSA HQ to ensure that IT investments are moving in the direction of HQ strategic efforts and various Strategic Plan are in alignment.
- i. Identify critical DOE IT investments and ensure they are tracked in the Strategic Plan.
  - (1) Review the results of internal and external compliance assessments and provide transparency across the agency.
  - (2) Ensure that IT assets are acquired and information resources are managed consistent with statutory, OMB and Departmental requirements and priorities.
  - (3) Ensure the development and management of an optimal IT portfolio that best supports programmatic needs.
- j. Promote Capital Planning and Investment Control as defined in DOE Order 200.1A..
  - (2) Ensure the integration and alignment of the CPIC process and tools with IT Project Management, EA, and other management processes
  - (3) Provide a means for senior management to monitor IT investments in terms of cost, schedule, and requirements.

## 2. Deputy Chief Information Officer

- a. Participate in the governance process, specifically with EA governance bodies, including the Architecture Review Board and Enterprise Architecture Working Group.
- b. Support Federal, Departmental and E-Government initiatives.
- c. Hold line management accountability for applicable IT program and capital asset projects execution and implementation of policy.
- d. Ensure coordination and collaboration within the OCIO including Capital Planning, Enterprise Architecture, Cybersecurity and Energy IT Services.
- e. Address and resolve issues associated with the capture and reporting of cost, scope and performance status of IT projects governed by this Order.

- f. Conduct systematic reviews of high-value, high-risk and/or special interest IT projects as necessary to ensure the DOE expends its resources effectively and efficiently on IT assets.

3. DOE Corporate IT PMO

- a. Provide independent review/oversight on IT projects subject to this Order and report directly to the Deputy Chief Information Officer (DCIO).
- b. Support the development, implementation and maintenance of policies and procedures necessary to implement this Order.
  - 1) Collect, analyze and disseminate lessons-learned and “best practices”;
  - 2) Provide assistance and oversight to DOE line project management organizations managing IT projects covered by this Order.
- c. Provide IT business value through collaboration among DOE Elements.
- d. Exercise delegated decision-making authority relating to IT project execution and performance reporting.
- e. Assist senior management on issues related to project management performance, including notification and implementation of corrective actions when required.
- f. Ensure coordination and collaboration within the OCIO organization including Capital Planning, Enterprise Architecture, Cybersecurity and Energy IT Services
  - 1) Implement processes to consolidate and report on IT Project status.
- g. Ensure coordination and collaboration with DOE elements on IT Project Management, evaluation of new technology, technology acquisition, corporate technology solutions and lessons-learned.
- h. Identify, communicate and collect enterprise-wide data on opportunities sharing of IT assets across all DOE Elements.
- i. Participate in the governance process, specifically with EA governance bodies, including the Architecture Review Board and Enterprise Architecture Working Group.
- j. Support DOE elements in establishing IPTs for IT projects impacting multiple DOE elements.
- k. Hold line accountability for applicable IT Management program and IT capital asset projects’ execution and implementation of policy.
- l. Develop, implement and maintain a DOE-wide IT Project Manager Certification and Training program.

- m. Implement and maintain a DOE-wide IT tracking system for all projects subject to this order to ensure DOE expenditures on IT assets are transparent to all DOE internal stakeholders.
- n. Coordinate and conduct systematic reviews of high-value, high-risk and/or special interest IT projects as necessary to ensure the DOE expends its resources effectively and efficiently on IT assets.

4. DOE Under Secretaries, NNSA Administrator/Heads of Field Elements

- a. Maintain stewardship of Federal IT resources and ensure they are used efficiently and effectively to achieve intended program results.
  - 1) Ensure projects have established and monitored performance measures that align with the DOE and Program mission.
- b. Take systematic and proactive measures to establish cost-effective and appropriate internal controls.
  - 1) Ensure that all ITPMs have the appropriate qualifications required based on the size and complexity of the project to manage successful completion of the project.
- c. Ensure IT organizations within your control are properly informed of this Order and instructed to identify and report on IT projects governed by this Order as required.
- d. Notify the DOE CIO of any established PMOs and processes which meet the provisions for Exemption contained in the Order along with an appropriate justification if requested.
- e. Ensure all Strategic Plans are in alignment with the DOE Strategic Plan to enable clear visibility and reduction on duplicative reporting. Maintain and use the EA and Capital Planning to support strategic planning, budget formulation and execution, capital planning as defined in DOE O 200.1A.
- f. Ensure Program Offices establish additional process-specific quality requirements to be implemented under a Quality Assurance Program (QAP) for the control of suspect/counterfeit items (S/CIs), and nuclear safety software as defined in DOE Order 414.1D.
- g. Notify contracting officers of contracts affected by the requirements of this Order.

5. Program Managers and Heads of Field Organizations

- a. Direct initial project planning and execution roles for projects assigned by senior management.

- 1) Ensure that line managers are responsible for successfully developing, executing, and managing projects within the approved project baseline. Delegation of authority from one line manager to a lower-level line manager must be documented and consistent with DOE delegation authorities and the qualifications of the lower-level line manager.
  - 2) Although the authority and responsibility for decision-making may be delegated to a lower-level manager, the senior manager remains accountable for the decisions made by subordinate managers.
- b. Establish the initial IPT in advance of the designation of an ITPM when required.
  - c. Oversee development of project definition, technical scope and budget to support mission need.
  - d. Assign ITPM as appropriate and Project Managers with the training, experience and skills necessary to meet the requirements of the project objectives, budget and schedule.
  - e. Oversee the project line-management organization and ensure the line project teams have the necessary experience, expertise and training in IT life cycle management, including budget and schedule performance management.
  - f. Develop project performance measures and monitor and evaluate project performance throughout the project ensuring compliance with DOE standards, security requirements and other mandates.
  - g. Report the cost, schedule and performance on a monthly basis for all IT projects governed by this Order to the OCIO Corporate IT Project Management Office.
  - h. Identify and correct all reportable problems, including cost, schedule and functionality requirements in a timely and effective manner.
  - i. Affected site/facility management, support services and systems development contractors are responsible for flowing down the requirements of the CRD to subcontractors at any tier to the extent necessary to ensure IT program/project management and services contractors' compliance with the requirements.

6. Contracting Officer

- a. Once notified, contracting officers are responsible for incorporating this Order into the affected contracts via the laws, regulations, and DOE directives clause of the contracts. Requirements identified as solely a Federal function will not be incorporated into contracts.

7. DOE Integrated Project Teams

- a. Perform as the primary governing body for DOE enterprise IT projects
- b. Support efforts to maximize the value of IT assets and buying power; streamline the IT total acquisition lifecycle; and reduce the total cost of ownership
- c. Make recommendations on reduction of duplication and sharing IT across DOE.
- 1) Facilitate the development and execution of DOE enterprise IT initiatives while maintaining the cost, schedule and functional performance requirements.
- 2) Ensure IT project alignment with the DOE CPIC, EA and cybersecurity requirements in accordance with DOE O 200.1A.

8. DOE Chief Architect (see DOE O 200.1A)

- a. Identifies opportunities for improving the integration of EA and CPIC processes to mature and enhance IT project management.

9. Chief Health, Safety and Security Officer [see DOE O 414.1D 7 for applicability as appropriate]

10. Acquisition Executives

- a. Each designated AE is guided by the specific limits of their delegated authority (see DOE/NNSA Senior Procurement Executive for contract award and modification execution authority). There can only be one designated AE per project.
- 1) Approve CDs for projects including CD-2, performance baseline approval and its associated funding profile.
- 2) Appoint and chair Acquisition Advisory Boards to provide advice and recommendations on key project decisions.
- 3) Approve the appointment of the ITPM. Ensure that the ITPM has the appropriate qualifications, competencies, and communication and leadership skills prior to designation by interviewing the proposed ITPM for each project. When the ITPM is not a designated career federal civil

servant (i.e., contracted project manager) or is under an Intergovernmental Personnel Act (IPA) Agreement, the SAE must endorse their appointment.

- 4) For nuclear facilities, designate the Design Authority at CD-1.
- 5) Monitor the effectiveness of ITPMs and their support staff.
- 6) Approve project changes in compliance with change control levels identified in PEPs, to include all BCPs and funding profile changes that impact the PB.
- 7) Conduct quarterly project reviews.
- 8) Explicitly address integration of safety into design and construction for Hazard Category 1, 2, and 3 nuclear facilities as a key consideration in QPRs and approval of project CDs.
- 9) Direct IPRs be conducted.

**ATTACHMENT 1**  
**CONTRACTOR REQUIREMENTS DOCUMENT**  
**DOE O 415.1, Information Technology Project Management**

---

This CRD establishes the requirements for DOE IT contractors with access to DOE information systems. Contractors must comply with the requirements listed in the CRD.

The contractor will ensure that it and its subcontractors cost-effectively comply with the requirements of this CRD.

Regardless of the performer of the work, the contractor is responsible for complying with and flowing down the appropriate requirements of this CRD to subcontractors at any tier, to the extent necessary to ensure the contractor's compliance with the requirements. In doing so, the contractor must not unnecessarily or imprudently flow down requirements to subcontractors. That is, the contractor will ensure that it and its subcontractors cost-effectively comply with the requirements of this CRD and incur only those costs that would be incurred by a prudent person in the conduct of competitive business.

The contractor, using a graded approach, must develop a project management approach for Information Technology (IT) investments that:

- a. Fosters IT investments that support DOE program and mission goals
- b. Describes the management methods, organization, control systems and documentation for projects
- c. Monitors and controls projects through project management practices

For federally directed Information Technology (IT) investments with a total project cost of \$25million or more, the contractor must follow program direction for project management.

Contractors, other than M&O Contractors of Laboratories or Plans, must also follow the requirements in Attachments 2 and 3 for IT investments.

## ATTACHMENT 2

# Comparison of 413 to 415 Stage Gate Reviews.

---

ww.

<b>413.3b Critical Decisions</b>	<b>415.1 Critical Decisions</b>
<p><b>CD-0, Approve Mission Need</b></p> <p>Approval of CD-0 formally establishes a project and begins the process of conceptual planning and design used to develop alternative concepts and functional requirements. Additionally, CD-0 approval allows the Program to request PED funds for use in preliminary design, final design and baseline development.</p>	<p><b>CD-0, Approve Project Mission Need</b></p> <p>The purpose, proposed solution and anticipated costs are sufficient for further investment into the project.</p>
<p><b>CD-1, Approve Alternative Selection and Cost Range</b></p> <p>CD-1 approval marks the completion of the project Definition Phase and the conceptual design. Approval of CD-1 provides the authorization to begin the project Execution Phase and allows PED funds to be used.</p>	<p><b>CD-1, Approve Performance Measurement Baseline (PMB)</b></p> <p>Initial project plan, schedule and cost are sufficient to begin active work on the project.</p>
<p><b>CD-2, Approve Performance Baseline</b></p> <p>CD-2 approval marks the approval of the performance baseline and requires the completion of preliminary design. It is the first major milestone in the project Execution Phase. Approval of CD-2 authorizes submission of a</p>	<p><b>CD-2, Approve Start of Construction or Development</b></p> <p>The software requirements and design are mature enough to begin active development of the solution. Software projects usually combine CD-2 and CD-3.</p>

<p>budget request for the TPC</p>	
<p><b>CD-3 Approve Start of Construction or Execution</b></p> <p>CD-3 provides authorization to complete all procurement and construction and/or implementation activities and initiate all acceptance and turnover activities. Approval of CD-3 authorizes the project to commit all the resources necessary, within the funds provided, to execute the project.</p>	
	<p><b>CD-3, Approve Start of Testing</b></p> <p>The system is of sufficient quality to begin the process of reading the production environment and training of stakeholders.</p>
<p><b>CD-4, Approve Start of Operations or Project Completion</b></p> <p>CD-4 approval marks the achievement of the completion criteria (i.e., KPPs) defined in the PEP (or in the PRD, for NNSA projects), and if applicable, subsequent approval of transition to operations.</p>	<p><b>CD-4, Approve Start of Production</b></p> <p>The project may begin use in production.</p>
	<p><b>CD-5, Approve Continuation of Operations (Annually)</b></p>

	Annually the system is assessed to ensure it is worth the continued investment in it.
	<b>CD-6, Approve Decommission or Retirement</b>  Ensures the system has been completely and appropriately decommissioned.

## **ATTACHMENT 3**

### **CHAPTER III. REFERENCES**

This Attachment provides information and/or requirements associated with DOE O 415.1 as well as information and/or requirements applicable to contracts in which the associated CRD (Attachment 1 to DOE O 415.1) is inserted.

1. DOE, Secretary Delegation Order No. 00-031.00A which delegates to the CIO the responsibility of oversight and reporting on IT projects and investments across the DOE enterprise.
2. The Clinger-Cohen Act of 1996, (Public Law 104-106, Division E) which is designed to improve the way the federal government acquires, uses and disposes IT.
3. OMB Memorandum M-11-29, Chief Information Officer Authorities, August 8, 2011 which changes the role of Agency CIOs to encompass true portfolio management for all IT. CIOs are required to deliver IT solutions that support the mission and business effectiveness of their agencies and overcome bureaucratic impediments to deliver enterprise-wide solutions.
4. U.S. Chief Information Officer, 25 Point Implementation Plan to Reform Federal Information Technology Management, December 9, 2010 which fosters the elimination of barriers that inhibit effectively managing IT programs throughout the Government Agencies.
5. The Government Performance and Results Act of 1993 (GPRA), (Public Law 103-62) which requires government agencies to focus on obtaining measureable results and developing multiyear strategic plans, annual performance plans, and annual performance reports.
6. The Federal Information Security Management Act (FISMA) of 2002 is a United States federal law enacted in 2002 as Title III of the E-Government Act of 2002 (Pub. Law. 107-347, 116 Stat. 2899) and requires each federal agency to develop, document, and implement an agency-wide program to provide information security for the information and information systems that support the operations and assets of the agency.
7. The Federal Acquisition Streamlining Act of 1994, Title V (FASA V).
8. The Paperwork Reduction Act of 1995, (Public Law 104-13).
9. The Government Paperwork Elimination Act of 1998, (Public Law 105-277, Title XVII).
10. The E-Government Act of 2002, (Public Law 107-347).
11. The Government Information Security Reform Act (GISRA - 2000).

12. The President's Management Agenda, Office of Management and Budget, Fiscal Year 2002 addressing Strategic Management of Human Capital, Competitive Sourcing Improved Financial Performance, Expanded Electronic Government, Budget, and Performance Integration.
13. Executive Order 13011, Federal Information Technology, FR 61-140, July 19, 1996 which among a number of other critical requirements, established clear accountability for information resources management activities by creating agency CIOs with the visibility and management responsibilities necessary to advise the agency head on the design, development, and implementation of those information systems.
14. OMB Circular A-130, Management of Information Resources, dated November 28, 2003. This Circular establishes policy for the management of Federal information resources. OMB includes procedural and analytic guidelines for implementing specific aspects of these policies as appendices.
15. OMB Circular A-11, Preparation, Submission and Execution of the Budget, dated November 12, 2010.
16. OMB Circular A-109, Major Systems Acquisitions, Dated April 5, 1976.
17. OMB Circular A-123, Management Accountability and Control, dated December 21, 2004, which provides guidance to Federal managers on improving the accountability and effectiveness of Federal programs and operations by establishing, assessing, correcting and reporting on internal controls, including internal controls over financial reporting as described in Appendix A to the Circular.
18. OMB Circular A-127, Financial Management Systems, dated January 9, 2009 which prescribes policies for developing, operating, evaluating, and reporting on financial management systems.
19. OMB Circular A-130, revised, Management of Federal Information Resources, dated 11-30-00, which establishes policy for the management of Federal information resources.
20. OMB Memorandum M-00-07, Incorporating and Funding Security in Information Systems Investments, dated February 28, 2000
21. OMB Memorandum M-97-02, Funding Information Systems Investments, dated October 25, 1996
22. Government Accountability Office (GAO) Report – GAO-11-826, OMB Needs to Improve Its Guidance on IT Investments, dated September 29, 2011.
23. DOE O 413.1B, Internal Control Program, dated 10-28-2008 establishes the basis for managing capital asset acquisition and management.
  - xx. DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets, dated November 29, 2010.

- yy. DOE G 413.3-2, Quality Assurance Guide for Project Management, dated June 27, 2008 provides acceptable approaches for implementing the Quality Assurance requirements and criteria of DOE O 413.3A related to the development and implementation of a Quality Assurance Program for the project.
  - zz. DOE O 414.1D, Quality Assurance, dated April 25, 2011 is to ensure that DOE, including NNSA, products and services meet or exceed customers' requirements and expectations.
  - aaa. DOE O 243.1A, Records Management Program, dated 11-7-2011 establishes the requirements and responsibilities for making and preserving records that furnish the information necessary to protect the legal and financial rights of the Government and persons directly affected by DOE activities.
24. DOE O 205.1B, Department of Energy Cybersecurity Management Program, dated 5-16-2011 establishes requirements and responsibilities for a Departmental Cybersecurity Program.
  25. DOE CIO Memorandum, Enterprise Architecture Guidance, dated January 9, 2007.
  26. Office of Science Definition of a User Facility Memorandum, dated January 6, 2012

## ATTACHMENT 4

### DEFINITIONS

This Attachment provides information and/or requirements associated with DOE O 415.1 as well as information and/or requirements applicable to contracts in which the associated CRD (Attachment 1 to DOE O 415.1) is inserted.

The Glossary of Terms listed in the following table provides definitions to the terms used in this Information Technology Project Management Order 415.1.

Term	Definition
<b>Acquisition Strategy (AS)</b>	From DOE O 413: A high-level business and technical management approach designed to achieve project objectives within specified resource constraints with recognition of key project risks and the strategies identified to handle those risks. It is the framework for planning, organizing, staffing, controlling, and leading a project. It provides a master schedule for activities essential for project success, and for formulating functional strategies and plans.
<b>Architecture Review Board (ARB)</b>	From DOE O200.1A: The principal body charged with coordinating, reviewing and evaluating the implementation of the DOE EA. Serves as the (HQ) primary body to oversee the development and use of the Department-wide Enterprise Architecture. This board is responsible for leading and defining the Enterprise Architecture (EA) strategic goals and objectives, by helping to develop, maintain, and govern the overall EA requirements across the organization.
<b>Artifacts</b>	Documents created in the process of making sound business decisions regarding IT investments including, but not limited to, alternatives analysis, benefit cost analysis, risk management plan, security plan, work breakdown structure, etc. They are also included as supporting documents for Exhibit 300s.
<b>Baseline</b>	From DOE O 413: A quantitative definition of cost, schedule and technical performance that serves as a base or standard for measurement and control during the performance of an effort; the established plan against which the status of resources and the effort of the overall program, field program(s), project(s), task(s), or subtask(s) are measured, assessed and controlled. Once established, baselines are subject to change control discipline.
<b>Business Case</b>	A business case is part of a project's mandate. Although it may be crafted by many people, the business case is owned by the executive sponsor. The business case addresses, at a high level, the business need that the project seeks to meet. It includes the reasons for the project, the expected business benefits, the options considered (with reasons for rejecting or carrying forward each option), the expected costs of the project, a GAP analysis and the expected risks

Term	Definition
<b>Business Value</b>	The most important factor is the alignment between IT and business processes, organization structure, and strategy. At the highest levels, this alignment is achieved through proper integration of enterprise architecture, business architecture, process design, organization design, and performance metrics.
<b>Capital Planning and Investment Control (CPIC)</b>	From DOE O 200.1A: A systematic approach to managing the risk and returns of IT investments for a given mission. The CPIC process is an integrated, structured methodology to managing IT investments, which ensure that IT investments align with the overall Strategic Plan and mission in support of business needs while minimizing risks and maximizing returns throughout the investment's lifecycle. CPIC uses a systematic selection, control, and continual evaluation process to ensure that an investment supports the overall mission and business needs.
<b>Chief Information Officer (CIO)</b>	The CIO is responsible for overseeing the IT investment portfolio.
<b>Commercial Off-the-Shelf (COTS)</b>	COTS refer to a product available in the commercial market place. COTS products are sold to the general public in the course of normal commercial business operations at price based on established catalog or market prices (Federal Acquisition Regulations). COTS products are delivered with pre-established functionality, although some degree of customization is possible.
<b>Contract</b>	A contract is a mutually binding agreement that obligates the seller to provide the specified product and obligates the buyer to pay for it.
<b>Contracting Officer (CO)</b>	The CO has the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the contracting officer acting within limits of their authority as delegated by the contracting officer. The contracting officer and/or his representative is accountable for preparing solicitation documents with technical support from the IT Project Manager and acting on behalf of the Head of the Contracting Activity.
<b>Contractor Requirements Document (CRD)</b>	From DOE O 413: The DOE document that identifies the requirements that the prime contractor's project management system must satisfy (Attachment 1).
<b>Corporate IT Project Investment Board</b>	Generic Name used to describe the Governance Board for the Capital Planning function of IT investments and implemented processes to ensure that projects support business needs and meet users' requirements through an established process of selection. The Board includes members from relevant areas of responsibility such as the CIO, CFO, CTO and organization Directors.

<b>Term</b>	<b>Definition</b>
<b>Cybersecurity</b>	The protection of information systems against unauthorized access to or modification of information, whether in storage, processing, or transit, against loss of accountability for information and user actions, and against the denial of service to authorized users, including those measures necessary to protect against, detect, and counter such threats
<b>Cybersecurity Management</b>	In general, oversight, direction, and enforcement of measures or actions taken to counter or offset cyber security risks. A counter measure is an action, device, procedure, or technique that reduces a threat, vulnerability, or an attack by eliminating or preventing it, by minimizing the harm it can cause, or by discovering and reporting it so that corrective action can be taken.
DOE Elements	From DOE O 251.1C: The definition for Departmental Elements is Headquarters elements or first tier organizations as listed in the Correspondence Style Guide, Office of the Executive Secretariat.
<b>Delegating Official (DO)</b>	The DO has the authority for approval of information technology projects to ensure that the proposed expenditures on information technology are consistent with established policies, processes, budget, and related requirements.
<b>Demonstrated Success</b>	Those IT projects that have been developed through a defined information system life cycle with consistent results of project completion within the original project schedule, within budget and meeting the functionality requirements originally specified.
<b>Development, Modernization, and Enhancement (DME)</b>	DME means the program cost for new investments, changes or modifications to existing systems to improve capability or performance, changes mandated by the Congress or agency leadership, personnel costs for investment management, and direct support. For major IT investments, this amount should equal the sum of amounts reported for planning and acquisition plus the associated FTE costs reported in the OMB Exhibit 300.
<b>Departmental Directives Program</b>	Equivalencies and exemptions to this Order are processed in accordance with DOE 0251.1C, Departmental Directives Program
<b>E-Government initiatives</b>	Short for <a href="#">electronic government</a> From DOE O 200.1A: Electronic systems and networks that provide the public with access to or interaction with Government entities, services, information, and products without preference in a manner that acknowledges constitutional intent for privacy, security, and, if warranted, anonymity.
<b>Enterprise Architecture (EA)</b>	From DOE O 200.1A: A business-driven plan that describes the current state, future vision, and transitional states of an operation. This is presented in terms of: strategy and performance; business; applications and services; technology; data; and security, all at the end of a two-to-five year planning horizon.

Term	Definition
<b>Enterprise Architecture Board</b>	The EAB is a generic term to describe the Program Office or HQ body that focuses on the strategic, tactical, and operational aspects of developing the EA. .
<b>Enterprise Architecture Working Group (EAWG)</b>	From DOE O 200.1A: The principal body for DOE and Program Secretarial Office Enterprise Architecture integration initiatives.
<b>Enterprise Governance</b>	The set of standards, practices, and guidelines exercised by a governance body(s) with the goal of providing strategic direction, ensuring that objectives are achieved, ascertaining that risks are managed appropriately and verifying that the organization’s resources are used responsibly.
<b>Enterprise IT Project</b>	IT Projects that are greater than 25M or have a potential impact on more than one DOE Element.
<b>Framework</b>	A suite of structural elements or units that create a theoretical foundation for the project management process.
<b>Government Accountability Office (GAO)</b>	The U.S. Government Accountability Office is the investigative arm of the Congress (Legislative branch).
<b>Governance Process</b>	Relates to decisions that define <i>expectations</i> , approval gateways, or verification of performance. It consists of either a separate process or part of management or leadership processes and relates to consistent management, cohesive policies, guidance, processes and decision-rights for a given area of responsibility.
<b>Implementation Plan</b>	This is the plan or method that describes how the project will be carried out. The plan encompasses all the processes involved in getting new product or service in place and operating properly in its environment, including installation, <a href="#">configuration</a> , running, testing, and making necessary changes.
<b>Information</b>	Any communication or representation of knowledge such as facts, data, or opinions in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms.
<b>Information Resources</b>	From DOE O 200.1A: Includes personnel, equipment, funds, and information technology.
<b>Information Resources Management (IRM)</b>	From DOE O 200.1A: The oversight of the acquisition and use of information resources to accomplish agency missions and to improve agency performance.
<b>Information System</b>	From DOE O 200.1A: A combination of information, computer, and telecommunications resources and other information technology and personnel resources that collects, records, processes, stores, communicates, retrieves, and displays information.

Term	Definition
<b>Information Technology (IT)</b>	From DOE O 200.1A: Any equipment or interconnected system or subsystem of equipment used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by an Executive agency. For purposes of the preceding sentence, equipment is used by an Executive agency whether the equipment is used directly or by a contractor under a contract with the Executive agency that requires the use of such equipment or requires the use to a significant extent of such equipment in the performance of a service or the furnishing of a product. Information technology includes computers, ancillary equipment, software, firmware, and similar procedures, services, and resources.
<b>IT Project Manager (ITPM)</b>	An individual in the headquarters organizational element responsible for managing a project and its assigned activities. They ensure that all the projects are properly phased, funded over time, and that each project manager is meeting their key milestones. They are the project's advocate, ensure proper resourcing and facilitate the execution process. They predict programmatic risks and put mitigation strategies in place so that projects are not affected.
<b>Initiative</b>	Created by an organization in response to a driver or internal directives and defines the scope of the organizational work efforts performed.
<b>Integrated Project Team (IPT)</b>	A multi-disciplinary team led by a program manager responsible and accountable for planning, budgeting, procurement to achieve its cost, schedule and performance goals. Team skills should include: budgetary, financial, Integrated Project Planning & Management, procurement, technical, architecture, earned value management, security, and other staff as appropriate.
<b>Internal Controls</b>	A process effected by an organization's structure, work and authority flows, people and management information systems, designed to help the organization accomplish specific goals or objectives. It is a means by which an organization's resources are directed, monitored, and measured
<b>IT Project Manager Certification –</b>	The FAC-P/PM is the project management certification level defined by the Federal Acquisition Institute (FAI). This certification represents an increase in mandatory project manager certification requirements focusing on acquisition competencies.
<b>IT Asset</b>	For the purpose of this Directive, an IT asset is used interchangeably with an IT Investment or IT Project.
<b>IT Investment</b>	An organizational investment employing or producing IT or IT-related assets. Each stakeholder has or will incur costs for the investment, has expected or realized benefits arising from the investment, has a schedule of project activities and deadlines, and has or will incur risks associated with engaging in the investment.
<b>IT Portfolio</b>	The combination of all IT assets, resources, and investments owned or planned by an organization in order to achieve its strategic goals, objectives and mission.

Term	Definition
<b>IT Project</b>	A temporary planned endeavor funded by an approved information technology investment; thus achieving a specific goal and creating a unique product, service, or result. A project has a defined start and end point with specific objectives that, when attained signify completion.
<b>IT Project Management Office (IT PMO)</b>	Department or group that define and maintain the standards or process generally related to Project Management within the organization. The PMO strives to standardize and introduce the economies of repetition in the execution of projects. The PMO is the source of documentation guidance and metrics on the practice of project management and execution
<b>IT Project Manager Certification process</b>	Process for certifying that Project Managers possess the training, skills and experience based on industry best practices and recognizing the multiple cost, risk and criticality issues involved to manage a project within cost, scope, and schedule to meet DOE mission needs.
<b>Life Cycle</b>	The stages through which information passes, typically characterized as creation or collection, processing, dissemination, use, storage, and disposition.
<b>Maintenance</b>	Is an activity necessary to keep an asset functioning as designed during its operations and maintenance phase of an investment. Maintenance costs include costs needed to sustain an IT asset at the current capability and performance levels including: corrective hardware/software, voice and data communications maintenance; replacement of damaged or obsolete IT equipment; and associated overhead costs. Where appropriate, maintenance activities that follow agency defined project management methodologies should be managed and reported as projects and reported in Section B of the Exhibit 300B. Examples of maintenance projects include operating system upgrades, technology refreshes, and security patch implementations.
<b>Milestone</b>	From DOE O 413.3B: Any significant or substantive point, time or event of the project. Milestones typically refer to points at which large schedule events or series of events have been completed, and a new phase or phases are set to begin.
<b>Milestone Review (MR)</b>	Phase-driven go/no-go decision points where LCM activities are reviewed to ensure that appropriate OMB and NNSA requirements are observed. An investment cannot proceed to the next LCM phase without a “go” decision by the appropriate governance body.
<b>Nuclear Safety Software</b>	Defined in DOE O 414.1D
<b>Objective</b>	Defines the principal areas of concern within the overall goal. They may also provide quantitative measures of future performance and may list several “Strategic Targets” that provide additional quantification of Agency objectives.

<b>Term</b>	<b>Definition</b>
<b>Office of the Chief Information Officer (OCIO)</b>	From DOE O 200.1A: Responsible to ensure that IT is acquired and information resources are managed consistent with statutory, regulatory, and Departmental requirements and priorities.
<b>Operation</b>	The day-to-day management of an asset in the production environment and include activities to operate data centers, help desks, operational centers, telecommunication centers, and end user support services. Operational activities are reported through Section C of the Exhibit 300B. Operations costs include the expenses associated with an IT asset that is in the production environment to sustain an IT asset at the current capability and performance levels including: Federal and contracted labor costs; and costs for the disposal of an asset.
<b>Preliminary Project Assessment</b>	A process conducted within the inception phase of the project life cycle.
<b>Process</b>	A permanent or semi-permanent collection of measurable, auditable, and repeatable activities that result in an output.
<b>Project Baseline</b>	The original approved plan (for a program, project, a work package, or an activity), plus or minus approved scope changes. Usually used with a modifier (e.g. program baseline, cost baseline, schedule baseline, performance measurement baseline).
<b>Project Costs</b>	When applied to the expenses incurred in the execution and completion of a project, is comprised of all direct, indirect, general, and administrative costs incurred. These costs include, but are not limited to, personnel, equipment, software, supplies, contracted, space occupancy, intra-agency services from within the agency, inter-agency services from other Federal agencies, other services that are provided by State and local governments, and Judicial and Legislative branch organizations.
<b>Project Execution</b>	The point at which action to begin project tasks is taken.
<b>Project Performance</b>	The overall measurement of a whether a project has met objectives and requirements of scope, cost and schedule. A periodic measurement during the monitoring and controlling phases of a project that consists of those processes performed to observe project execution so that potential problems can be identified in a timely manner and corrective action can be taken, when necessary, to control the execution of the project. The key benefit is that project performance is observed and measured regularly to identify variances from the project management plan.
<b>Quality Assurance Program</b>	In project management, an inspection of the accomplished work to ensure its alignment with the project scope. In practice, projects typically have a dedicated quality control team which focuses on this area

Term	Definition
<b>Requirements</b>	A singular documented need of what a particular product or service should be or perform. It is a statement that identifies a necessary attribute, capability, characteristic, or quality of a system in order for it to have value and utility to a user. Business requirements describe in business terms what must be delivered or accomplished to provide value. Functional requirements describe the functionality that the system is to execute.
<b>Risk</b>	From DOE O 413: Factor, element, constraint or course of action that introduces an uncertainty of outcome, either positively or negatively that could impact project objectives.
<b>Risk Management Plan</b>	From DOE O 413: Documents how the risk processes will be carried out during the program.
<b>Science User Facility</b>	Federally sponsored research facility available for external use to advance scientific or technical knowledge under the conditions defined in the Office of Science Definition of a User Facility memorandum dated January 6, 2012
<b>Service Recipient</b>	Is an agency organizational unit, programmatic entity, or chargeable account that receives information processing services from IPSO. A service recipient may be either internal or external to the organization responsible for providing information resources services, but normally does not report either to the manager or director of the IPSO or to the same immediate supervisor.
<b>Solution</b>	A comprehensive architectural response to a business problem. Solutions address all layers of EA - strategy, business, data, applications and technology/security.
<b>Sponsoring/funding Organization</b>	The DOE organization responsible for providing the necessary funding to support the project and project activities.
<b>Stakeholder</b>	Individuals and organizations that are actively involved in the program, or whose interests may be positively or negatively affected as a result of program execution or completion. They may also exert influence over the program and its results.
<b>Steady-State (SS)</b>	Steady-State means maintenance and operation costs at current capability and performance level including costs for personnel, maintenance of existing information systems, corrective software maintenance, voice and data communications maintenance, and replacement of broken IT equipment. For major IT investments, this amount should equal the amount reported for maintenance plus the associated FTE costs reported in the OMB Exhibit 300.
<b>Strategy</b>	A strategy is a statement controlling what the business intends to do to achieve its goals and objectives.
<b>System</b>	An interconnected set of information resources organized for the collection, processing, maintenance, transmission, and dissemination of information, in accordance with defined procedures, whether automated or manual.

Term	Definition
<b>Tailoring</b>	From DOE O 413.3B: An element of the acquisition process and must be appropriate considering the risk, complexity, visibility, cost, safety, security, and schedule of the project. Tailoring does not imply the omission of essential elements in the acquisition process or other processes that are appropriate to a specific project's requirements or conditions.
<b>Task</b>	A task is part of a set of actions, which accomplish a job or assignment in a fixed interval of time.
<b>TechStat</b>	As referenced in the Federal CIO's 25 Point Implementation Plan to Reform Federal Information Technology Management, a TechStat is a face-to-face, evidence-based review of an IT investment. A TechStat is triggered when an agency determines that a project is underperforming, using data from the IT Dashboard and other sources. In the session, the agency CIO and other members of an agency's leadership team meet for one focused hour. They review a briefing that highlights the management of the investment, examines program performance data, and explores opportunities for corrective action. TechStat sessions conclude with clear next steps formalized in a memo and tracked to completion.
<b>Total Cost of Ownership (TCO)</b>	An analysis used to gauge the viability of any capital investment. An enterprise may use it as a product/process comparison tool. TCO directly relates to an enterprise's asset and/or related systems total costs across all projects and processes, thus giving a picture of the profitability over time.
<b>Total Project Cost (TPC)</b>	TPC encompasses all lifecycle cost (from Inception to Decommission) of the IT asset across all fiscal years (past, current, and future). The elements of cost include direct materials, direct labor and expenses. (incl. personnel, sub-contracts, supplies, equipment, etc.)