



Order

**Subject: PBGC's Information Technology Solutions Life Cycle
Methodology (ITSLCM)**

Directive Number: IM-05-7

Effective Date: 2/2/10

Originator: OIT

**Stephen E. Barber
Chief Management Officer**

1. **PURPOSE:** The Pension Benefit Guaranty Corporation (PBGC) requires that all federal and contract employees adhere to the Information Technology Solutions Life Cycle Methodology (ITSLCM) for delivering and managing the delivery of new and existing Information Technology (IT) solutions.
2. **CANCELLATION:** This updates IM 05-7 dated April 4, 2007 in order to add a PAL link for the electronic version and change the Process Management Committee to the OIT ITSLCM Program Lead.
3. **SCOPE:** The ITSLCM applies to all PBGC federal and contract employees (across all PBGC departments and offices), leading or participating in delivering and managing the delivery of IT solutions – from new solutions, to modernizing, enhancing, maintaining and operating existing solutions, through disposition of the solutions.
4. **AUTHORITIES:**

Below are the Federal authorities that directly influence the establishment of this Order:

- a. Clinger-Cohen Act (Information Technology Management Reform Act - ITMRA) – *July 16, 1996*
- b. OMB Circular A-11 – Parts 2, 3, and 7:
 - (1) Preparation and Submission of Strategic Plans, Annual Performance Plans, and Annual Program Performance Reports
 - (2) Planning, Budgeting, Acquisition and Management of Capital Assets
 - (3) Exhibit 300 and Exhibit 52 submissions
- c. OMB - Office of E-Government and Information Technology – Improving Information Technology (IT) Project Planning and Execution – *August 2005*

- d. Federal Acquisition Regulation (FAR) – Part 34-Major System Acquisition, subpart 4.2-Earned Value Management System – *July 2006*
- e. OMB Circular A-130, Management of Federal Information Resources, Appendix III, Security of Federal Automated Information Resources, November 28, 2000.
- f. OMB Guidance on Section 208 of the E-Government Act of 2002 (Public Law 107-347, 44 U.S.C. Ch 36) on implementing the privacy provisions of the E-Government Act

5. **BACKGROUND:**

Based on the Clinger-Cohen Act of 1996, the Office of Inspector General identified an audit recommendation for PBGC to establish a Systems Development Life Cycle (SDLC) methodology as one of its FY2000 corporate objectives. On March 30, 2001, PBGC's SDLC methodology was first issued.

In March 2002, the SDLC was renamed to the Systems Life Cycle Methodology (SLCM) to reflect an overall systems life cycle approach, rather than just focusing on development efforts. In late FY2002, a Business Planning Framework was established that defined the relationship between Strategic Planning and Corporate Initiatives to meet PBGC's goals and objectives. The SLCM was redefined against the business process model, and was approved on July 2, 2003. On October 7, 2005 the SLCM Corporate policy was approved.

In August 2005, OIT commenced an effort to modify the SLCM to incorporate industry best practices from Software Engineering Institute's (SEI) Capability Maturity Model ® Integration (CMMI®), and the Project Management Institute's Project Management Body of Knowledge (PMBOK®). In March 2006, SLCM v2006.1 was released to include the first set of CMMI® industry best practices: Requirements Development (RD) and Requirements Management (REQM) processes.

In January 2007, the SLCM v2006.1 was renamed to ITSLCM. It incorporates several process improvement suggestions, a complete IT investment framework, Project Management Life Cycle (PMLC) and Solutions Delivery Life Cycle (SDLC) processes, procedures, and templates using best practices from CMMI® and PMBOK®. The SDLC is based on a waterfall model and can accommodate COTS and/or custom projects. This model can be used to concurrently perform activities across multiple phases, while phase completion is sequential. The ITSLCM framework does not preclude adding other models (e.g. iterative) in future releases.

6. **DEFINITIONS:**

- a. **Business Case:** A documented solution proposed to fill a business need, links to the corporate strategic plan and outcomes or statutory and regulatory mandates, provides evidence of feasibility and viability with acceptable level of risk, defines return on investment/benefits, and provides alternatives to solving the business problem.

- b. **Change Control Board (CCB):** A formal entity established, owned, led, and managed by the business unit (department users of the solution) with participating stakeholders to review, approve, or reject proposed change requests for incorporation into specified releases throughout the life cycle of an IT solution.
 - c. **IT Solution:** An Information Technology (IT) investment (custom developed, COTS or infrastructure component) that is deployed into production to meet a business need.
 - d. **Project:** A time-bound (temporary) endeavor undertaken to create a unique product, service, or result, and has a definite beginning and a definite end and is distinctive from other products or services.
 - e. **Program:** A group of related projects managed in a coordinated way to obtain benefits and control not available from managing the projects individually.
 - f. **Stakeholder:** A PBGC contractor or federal employee who has a business need and has a vested interest for a specific IT Solution, who may be positively or negatively impacted by the IT solution.
7. **POLICY:** It is the policy of the PBGC that all federal and contract employees, leading, participating delivering, or managing the delivery of IT solutions adhere to the ITSCLM. Proposed exemptions to the applicability of the ITSCLM will be reviewed and approved by the Chief Information Officer (CIO).

8. **ROLES AND RESPONSIBILITIES:**

All PBGC federal and contract employees, who lead or participate in delivering and managing the delivery of IT solutions, have a related role associated with the ITSCLM. Roles and responsibilities are defined in the context of supporting adherence to this order.

Description of the columns in the below table are:

- Role:** Function performed by a group, team, committee or an individual.
- Purpose:** Primary reason for performing the assigned role.
- Responsibility:** Duties or activities performed to successfully achieve the role’s purpose.
- Authority:** Mechanism by which the role is established or empowered.
- Accountability:** Higher entity or position to which a role is liable for the outcome.

Role	Purpose	Responsibility	Authority	Accountability
Executive Management Committee (EMC)	Provide corporate level scope, cost and schedule governance and approval	<ul style="list-style-type: none"> • Establish, maintain, and publish Corporate Strategic Plan and ensure IT programs and projects align with Corporate Outcomes • Review, evaluate, prioritize, and approve business cases and funding, aligned with the 	Corporate Strategic Plan and Mission	Agency Director

Role	Purpose	Responsibility	Authority	Accountability
		Corporate Strategic Plan <ul style="list-style-type: none"> • Conduct periodic reviews of project status to address risks, issues, and funding needs 		
Chief Information Officer (CIO)	Provide IT program-level scope, cost and schedule governance and approval	<ul style="list-style-type: none"> • Establish, maintain, and publish IT Strategic Plan aligned with the Corporate Strategic Plan and ensure IT programs and projects align with IT Strategic Outcomes 	IT Strategic Plan	Agency Director
Internal Controls Committee (ICC)	Ensure that key internal controls are appropriate for the project and are not changed without ICC approval.	<ul style="list-style-type: none"> • Maintain and publish a list of internal controls that impact the business • Provide input to the CFO and ICC as to the adequacy of the controls including deletions, additions, and modifications 	ICC Charter	Chief Financial Officer
Project Sponsor OR Sponsoring Chief or Department Director	Provide primary sponsorship, guidance and governance of project scope, cost and schedule	<ul style="list-style-type: none"> • Define the overall business need, vision, outcome, key success indicators, scope, cost and schedule for the project • Authorize the project by approving the project charter • Coordinate funding and business issues with impacted Chiefs and Department Directors • Provides final approval of scope, cost and schedule changes or decisions • Lead and designate project Steering Committee (SC) members, frequency of meetings, and decision making process 	Project Charter	EMC

Role	Purpose	Responsibility	Authority	Accountability
		<ul style="list-style-type: none"> • Designate Business User Representative(s) (BUR) • Establish a Change Control Board (CCB) for their business area and designate a CCB lead and participants 		
<p>Impacted Chiefs</p> <p>OR</p> <p>Department Directors</p>	Manage inter-departmental business impacts and risks	<ul style="list-style-type: none"> • Designate a project SC member • Coordinate with Project Sponsor to define inter-departmental scope, cost and schedule impacts • Designate BUR(s) 	Project Charter	EMC
Steering Committee (SC)	<p>Provide sustaining sponsorship, guidance and governance to the project</p> <p><i>Meet weekly until weekly meetings are no longer required, then bi-weekly or monthly (as appropriate) to review project progress</i></p>	<ul style="list-style-type: none"> • Review and monitor project progress to address project issues and risks and commit resources necessary for successful project completion • Participate in decision making process for approving scope, cost and schedule changes, including change requests from the Change Control Board (CCB) • Authorize projects to proceed to the next ITSLCM phase or terminate project • Address inter-departmental coordination issues, including designation of special teams to solve specific issues 	Project Charter	Project Sponsor
Change Control Board (CCB)	Manage or control (approve or reject) changes	<ul style="list-style-type: none"> • Establish processes and procedures for managing change requests • Work with project teams 	CCB Charter	<p>Project Sponsor</p> <p>Steering Committee</p>

Role	Purpose	Responsibility	Authority	Accountability
	<i>Meet regularly (as defined by the business unit) to review change requests</i>	to conduct analysis and impact of change requests <ul style="list-style-type: none"> • Approve or reject change requests that do not impact scope, cost or schedule • Maintain a list of change requests for future releases • Report change requests status to SC, specifically those that impact scope, cost or schedule 		
Business User Representative (BUR)	Manage business and user needs and impacts	<ul style="list-style-type: none"> • Prepare and present the business case for a proposed project or corporate initiative along with designated Federal Project Manager • Provide subject matter expertise on business functions and user needs with user group members and other BURs • Primary change agent for users by coordinating and managing impacts to project stakeholders • Provide subject matter expertise and participants for defining Business Process Modeling/Engineering (as-is/to-be) and requirements gathering • Coordinate participation in user acceptance testing and provide final sign-off • Lead the planning and delivery of user training and roll-out of the IT solution to users 	Project Charter	Project Sponsor Steering Committee

Role	Purpose	Responsibility	Authority	Accountability
Stakeholders	Provide subject matter expertise and support to BUR and Federal Project Manager	<ul style="list-style-type: none"> • User Group members identify and manage impacts to business unit (User Group) • Non-User Group members identify and manage impacts to IT solutions (including infrastructure such as networks, storage, telecom, servers, other IT solutions/systems, security, operations, etc.) • Submit change requests and participate in CCB • Participate in requirements, user acceptance testing and sign-off 	Project Charter	<p style="text-align: center;">BUR</p> <p style="text-align: center;">Federal Project Manager</p>
Federal Program Manager	Manage program scope, cost and schedule across multiple projects to achieve the program's strategic business objectives	<ul style="list-style-type: none"> • Manage a collection of projects within a defined program • Coordinate scope, cost and schedule of activities between inter-related projects, including program risks, issues, and dependencies • Define and establish a 12 to 18-month program release schedule in alignment with Enterprise Architecture (EA) and Corporate Strategic Plan • Develop and establish program-level ITSLCM Tailoring and Compliance Plan • Deliver program level SC and other management reporting • Ensure all program ITSLCM artifacts are 	Project Charter	<p style="text-align: center;">Project Sponsor</p> <p style="text-align: center;">Deputy Chief Information Officer(s)</p>

Role	Purpose	Responsibility	Authority	Accountability
		<p>completed and approved in accordance with the approved program schedule and with quality</p>		
<p>Federal Project Manager</p>	<p>Project management, monitoring, controlling and reporting</p>	<ul style="list-style-type: none"> • Manage project integration, scope, cost, time, quality, procurement, human resources (business and IT), communications, risks & issues • Support BUR in the preparation/presentation of business cases, providing level of effort estimates and evaluating viable alternatives for IT solutions • Support the BUR by providing resources for developing and documenting Business Process Modeling/ Engineering and requirements gathering • Perform all project management life cycle (PMLC) processes and procedures from project initiation, to planning, to execution, monitoring and control, to close-out • Establish an approved Project Charter • Develop and establish a project ITSLCM Tailoring and Compliance Plan and lead project team in using the ITSLCM • Lead all project planning activities, including forming and maintaining 	<p>Project Charter</p>	<p>Steering Committee</p> <p>Federal Program Manager</p>

Role	Purpose	Responsibility	Authority	Accountability
		<p>an Integrated Project Team (IPT) to perform all tasks and activities on the project</p> <ul style="list-style-type: none"> • Ensure all project ITSLCM artifacts are completed and approved in accordance with the approved project schedule and with quality • Ensure IT solution is in compliance with EA • Prepare for and deliver project progress reports and metrics (Earned Value), such as SC briefings and other management briefings • Lead weekly/bi-weekly (as appropriate) project team meetings to ensure coordination and completion of tasks and activities 		
<p>Integrated Project Team (IPT)</p>	<p>Core Team – Primary Federal and/or Contractor staff dedicated to the execution of project activities</p> <p><i>Normally meets weekly</i></p>	<p>Core Team</p> <ul style="list-style-type: none"> • Participate in planning, monitoring, and execution of project activities • Perform all activities in support of successful execution and completion of project • Create, maintain, and publish quality ITSLCM project deliverables and meet project milestones • Identify risks and issues to Project Manager • Report actual activities worked and completed • Coordinate and communicate 	<p>Project Charter</p> <p>Project Management Plan</p>	<p>Federal Project Manager</p>

Role	Purpose	Responsibility	Authority	Accountability
	<p data-bbox="418 695 625 978">Extended Team - Support Federal and/or Contractor staff indirectly support the Core Team</p> <p data-bbox="418 1058 532 1121"><i>Meets as needed</i></p>	<p data-bbox="683 254 1003 317">dependencies within IPT members</p> <ul data-bbox="659 331 1011 653" style="list-style-type: none"> • Comply with ITS LCM, Change and Configuration Management (CCM) policies and procedures, compliance with EA, and adherence to IT Security policies, processes and procedures <p data-bbox="659 695 873 726"><u>Extended Team</u></p> <ul data-bbox="659 737 1011 1871" style="list-style-type: none"> • User group members or business function subject matter experts who support the BUR(s) • Support for tailoring and compliance with ITS LCM, CCM policies and procedures, compliance with EA, and adherence to IT security policies, processes and procedures • Support to ensure quality of all project deliverables • Support release management and engineered infrastructure between the Common Development Environment (CDE), Integrated Test Center (ITC), Production & Continuity of Operations (COOP) • Support testing of impacted solutions • Transition IT solution to IT Operations and Maintenance (O&M) for IT service delivery and support 		

9. **PROCEDURES**

a. **Publication of ITSLCM Processes and Related Artifacts**

The ITSLCM and all related artifacts, such as supporting processes, procedures and templates are published in the OIT's Process Assets Library (PAL) portal community. The PAL is version-controlled and contains the most recent and approved release of the ITSLCM-related artifacts. PBGC federal and contract employees shall access this repository to obtain the current ITSLCM process information and templates.

b. **ITSLCM Tailoring**

In order to accommodate varying IT solution project sizes and types, the OIT has established guidance for tailoring the ITSLCM, such as what artifacts are required for project completion. Procedures for tailoring the ITSLCM are established in the ITSLCM Tailoring and Compliance Plan Guidance document.

c. **ITSLCM Modification Suggestions and Releases**

OIT encourages ITSLCM users to provide valuable feedback in order to continuously improve and streamline the ITSLCM. All suggestions for future modifications or Process Improvements (PIs) shall be submitted via the PAL portal community, which is open to all PBGC Federal and Contractor staff. The OIT ITSLCM Program Lead then reviews, prioritizes, and approves changes for subsequent ITSLCM scheduled releases. Future releases will be coordinated with PBGC departments and users prior to release. The OIT is responsible for modifying the ITSLCM, scheduling releases, and delivering training as necessary.

Reference: Information Technology Solutions Life Cycle Methodology (ITSLCM)