



Pension Benefit Guaranty Corporation
1200 K Street, N.W., Washington, D.C. 20005-4026

DATE: 10/7/2005

TO: All Department Directors
Senior Executive Staff

FROM: Rick Hartt
Chief Technology Officer

SUBJECT: Systems Life Cycle Methodology (SLCM) Corporate Policy Approval

Effective immediately, the Systems Life Cycle Methodology is a PBGC Corporate Policy and applies to all new and existing Information Systems and Information Technology across all PBGC departments and offices.

It is the policy of the PBGC that all information system acquisition, development, enhancement and maintenance projects (including infrastructure) adhere to the Corporate SLCM, as defined in this and related PBGC documents.

This policy was reviewed, appropriate clarification was provided and comments were incorporated. The revised policy standardizes and formalizes much needed business practices and controls, many of which have been implemented on projects over the past two years. The Office of Information Technology will proceed with implementation of this policy, effective immediately.

Please feel free to contact me, Jon Baake, or Vidhya Nicholson with any questions you may have concerning this policy.

ATTACHMENTS:
SLCM Policy Document
SLCM Process Flow Document

Subject: PBGC Systems Life Cycle Methodology

1. Purpose.

This PBGC Policy replaces the SDLC (Systems Development Life Cycle) Policy issued on March 30, 2001, and redefines the Corporate methodology for acquiring, developing, enhancing, and maintaining information systems and information technology at PBGC.

2. Background.

Based on an audit recommendation from the Corporation's Office of Inspector General, and the Clinger-Cohen Act of 1996, PBGC identified SDLC methodology as one of its FY2000 corporate objectives. On March 30, 2001, the Corporation's SDLC methodology was first issued. It was required for all new system development efforts going forward, and for major enhancements to existing system development projects beginning May 2001.

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. It expanded the scope to include all acquisition, development, and enhancement efforts related to information systems; it provided a mechanism to link corporate standards and initiatives to projects, based on Federal legislation requiring strategic planning and performance measuring; and it provided access to the SLCM through PBGC's intranet.

In late FY 2002, a Business Planning Framework was established that defined the relationship between Strategic Planning and Corporate Initiatives that meets the agency's goals and objectives. The SLCM was redefined against the business process model, and was approved on July 2, 2003. It promotes system alignment with the Corporate Strategic Plan by including Corporate initiatives such as Enterprise Architecture, Security, Independent Verification and Validation, and Capital Planning and Investment Control; it provides increased emphasis on, and understanding of, the Corporate IT project portfolio; and it fosters greater accountability for information systems projects through decision points that heighten project visibility, including: required phase reviews, key decision points, artifact reviews by subject matter experts, and key artifact signoff by the PBGC Chief Technology Officer (CTO) and appropriate Federal stakeholders at PBGC.

3. Scope.

This policy applies to all new and existing Information Systems (IS) and Information Technology (IT) across all PBGC departments and offices.

4. Policy.

It is the policy of the PBGC that all information system acquisition, development, enhancement, and maintenance projects (including infrastructure) adhere to the Corporate SLCM, as defined in this and related PBGC documents.

5. Responsibilities.

a. Chief Technology Officer (CTO) shall:

- (1) Manage IT assets to meet Corporate goals**
- (2) Establish and chair the Information Technology Investment Review Committee**
- (3) Serve jointly with one or more business area executives as project executive sponsors for projects affecting multiple business units across the corporation**
- (4) Designate OIT staff members to fill project steering group positions**
- (5) Approve key project artifacts and milestone reviews**
- (6) Leverage lessons learned**
- (7) Assign a Federal staff member as project manager**
- (8) Review and grant approval of requests for waiver of SLCM compliance**

b. Chief Financial Officer (CFO) shall:

- (1) Serve as the executive sponsor for all major projects within assigned areas of business responsibility, unless delegated to the department director most affected by the system**
- (2) Participate in oversight on financial systems and mixed systems projects during the System Life Cycle Methodology**
- (3) Ensure compliance with applicable financial management standards, policies, and internal control practices including those promulgated by Department of Treasury, Government Administrative Office (GAO), Office of Management and Budget (OMB), and Financial Accounting Standards Board (FASB)**
- (4) For financial systems, review and sign off at appropriate decision points throughout the system life cycle (such as “to be” design, functional specifications, and user acceptance test)**
- (5) Assign a Federal staff member as Business User Representative**

- (6) For financial systems, review and approve cost goals of IT projects and programs presented in the OMB Exhibit 300s

c. Chief Operating Officer (COO) shall:

- (1) Serve as the executive sponsor for all major projects within assigned areas of business responsibility, unless delegated to the department director most affected by the system
- (2) Through participation in the Operations Integration Board, engage in the critical decision-making milestones for IT projects in assigned business areas
- (3) Through representatives on the Information Technology Investment Review Committee, determine IT portfolio priorities, scope, and funding levels
- (4) Assign a Federal staff member as Business User Representative

d. Chief Administrative Officer (CAO) shall:

- (1) Through the Process Change Consulting Group (PCCG):
 - (a) Assess the appropriateness of the performance measures and goals cited in the Business Cases
 - (b) Evaluate the reasonableness of the performance measures estimates provided, and report on variances between the actual performance results and those estimated in Business Cases
- (2) Through the Budget Department, regarding Business Cases:
 - (a) Coordinate with project managers in completing and updating required OMB Exhibit 300s
 - (b) Support Business Case development through the application of appropriate economic analysis methodologies; validate budget, cost, and benefit estimates; and review the cost/benefit analysis for accuracy, completeness, and consistency
 - (c) Support the development and executive-level review of the OMB Exhibit 300s to ensure consistency with OMB guidance
- (3) Through the Procurement Department:
 - (a) Approve acquisition plans
 - (b) Manage the acquisition process and aid the management of program and project risk

- (12) **Provide training and orientation to departments regarding their roles and responsibility under the SLCM**
 - (13) **Assess whether business case cost, benefit, performance, risk, and alternatives analysis is updated at each SLCM milestone**
- h. Federal Project Manager and project contractor staff shall:**
- (1) **Prepare and present the Business Case for a proposed project or corporate initiative with designated Business User Representative**
 - (2) **Prepare a Project Risk Assessment; assess, manage, and mitigate project risk**
 - (3) **Once approved, plan and lead the project, and produce the outputs of the project**
 - (4) **Collect metrics on project cost, effort, completion, and status**
 - (5) **Create, maintain, and publish a project schedule**
 - (6) **Create, maintain, and publish a Communication Plan**
 - (7) **Create, maintain, and publish an Issues Tracking Log**
 - (8) **Track issues and ensure resolution**
 - (9) **Collect and define business and system processes and business and technical requirements**
 - (10) **Prepare and deliver SLCM artifacts consistent with Project Tailoring Document**
 - (11) **Update Business Case cost, benefit, performance, risk, and alternatives analysis at each SLCM milestone**
- i. PBGC Information Technology Investment Review Committee (ITIRC) shall:**
- (1) **Review presentations of Business Cases for proposed initiatives and provide guidance for improvement**
 - (2) **Review a project's risk assessment**
 - (3) **Evaluate Business Cases against Corporate mission, goals and objectives**
 - (4) **Ensure that the appropriate level of Independent Verification and Validation (IV&V) testing is planned and budgeted in the Business Case and project plan**
 - (5) **Approve Business Cases based on their ranking against Capital Planning and Investment Control to include requirements, scope, outcomes, budget, and priority and make funding level recommendations**
 - (6) **Issue approval notices and provide funding recommendations for approved projects**
 - (7) **Address emerging IT issues on an on-going basis**

- j. PBGC Operations Integration Board (OIB) shall:**
 - (1) Receive monthly briefings on IT projects as recommended by the ITIRC**
 - (2) Review go/no-go decisions at key project milestones**

- k. Business User Representatives (example: Business Representative, System Accountant, or other position title designated by the Department Director to perform this role) shall:**
 - (1) Prepare and present the Business Case for a proposed project or corporate initiative with designated Federal Project Manager**
 - (2) Act as agents for project customers**
 - (3) Participate and coordinate the participation of others in business requirements gathering and participate in project reviews**
 - (4) Provide information and subject matter expertise on the business process**
 - (5) Test for user acceptance and provide final user sign-off**
 - (6) Participate in system training, conversion, and implementation**

- l. OIT Configuration and Change Managers shall:**
 - (1) Review and approve project's Change Management Plan**
 - (2) Acknowledge receipt of code in repository before release to the Integration Testing Center**
 - (3) Ensure compliance with Change Management guidance**
 - (4) Ensure compliance with Configuration Management guidance**

- m. OIT Infrastructure Engineering staff shall:**
 - (1) Participate in project reviews**
 - (2) Review logical data models and provide feedback**
 - (3) Work with Infrastructure Administration (IA) on deployment of physical data models and building of physical database**
 - (4) Work with project teams to establish performance baselines and monitor new solutions**
 - (5) Review and approve "to-be" infrastructure-related artifacts**

- n. OIT Enterprise Architects shall:**
 - (1) Verify that the Business Case maps to Enterprise Architecture (EA) Domains and Models**
 - (2) Participate in project reviews**

- (3) Maintain enterprise target architecture, data model, and business process model**
 - (4) Work with project system architects to ensure compliance with the target architecture, data model, and process model**
- o. OIT Quality Assurance shall:**
 - (1) Participate in project reviews**
 - (2) Prepare the IV&V Test Plan, conduct the test, and record the test results**
 - (3) Review and approve other test plans and other test results**
 - (4) Ensure satisfactory testing**
 - (5) Report the test results to the Project Steering Group, CTO, and ISSO. For financial or mixed financial systems, also report test results to the CFO**
- p. Information Systems Security Officer (ISSO) shall:**
 - (1) Ensure system Security Certification and Accreditation (C&A) is completed, if required**
 - (2) Ensure compliance with existing security policies, regulations, and practices**
 - (3) Attend milestone review meetings for Business Requirements, System Design, and Technical Design**
 - (4) Review and approve Security Plan, C&A Plan, and C&A Test Report**
- q. OIT Infrastructure Administration staff shall:**
 - (1) Participate in project reviews**
 - (2) Support infrastructure-related tasks for coordination, communication, and production capacity impact**
 - (3) Support infrastructure-related tasks for coordination, communication, and creation of CDE (Common Development Environment)**
 - (4) Support infrastructure-related tasks and review and approve "to-be" infrastructure-related artifacts**
 - (5) Ensure that infrastructure-related tasks address Continuity of Operations (COOP) implementation and approve COOP-related artifacts**
 - (6) Review performance baselines with project teams and monitor new solutions**
 - (7) Review deployment strategy and perform acceptance of operational responsibility for new solutions**
 - (8) Review and approve "as-is" infrastructure-related artifacts**

6. Procedures.

a. Business Case Review and Approval

Business cases are prepared based on the guidance provided each year by the ITIRC and presented for proposed projects or corporate initiatives that support the agency's mission, and meet its strategic goals and objectives. The Corporation's Enterprise Architecture blueprint and standards must be taken into consideration and satisfied for a Business Case to be approved. Business cases are evaluated for feasibility, viability, cost-benefit, and risk, and are prioritized based on how well they satisfy Capital Planning and Investment Control (CPIC) criteria, as set forth by the Information Technology Investment Review Committee. Of those Business Cases that qualify, funding is granted based on the Corporation's available or requested budget.

b. OMB Exhibit 300s

The ITIRC will identify the major programs and systems projects required to prepare an OMB Exhibit 300 artifact. Exhibit 300s will be reviewed and approved by the ITIRC and schedule and cost variances will be reported at specific times throughout the year as required. Exhibit 300 guidance is developed jointly by the PBGC OIT and Budget Department.

c. Applicability

The PBGC's SLCM applies to all IT projects across all PBGC departments. From the time an information system project or information technology project is approved and funded, Department Directors and project managers are expected to comply with the PBGC's SLCM.

d. Compliance with PBGC's SLCM

Approved and funded business cases are entered into the Corporation's project portfolio system, and assigned an SLCM methodologist. The SLCM methodologist meets with the project team to review the Project Risk Assessment and project scope. A Project Tailoring Document is produced which identifies a project's required tasks for SLCM compliance. The Project Tailoring Document identifies and approves exceptions to deliverables and milestones based on the purpose, activities, and projected outcome of the project. The SLCM methodologist also answers questions of framework process steps; provides basic guidance on producing artifacts that meet SLCM compliance; provides basic guidance on SLCM project

management methods and measurement tools; reviews project plan, schedule, and artifacts for appropriate content and requirements traceability; evaluates and signs off on project SLCM compliance; and identifies and reports on areas of non-compliance.

e. Updates to the SLCM

PBGC's OIT-Project Management Office (PMO) is responsible for maintaining the SLCM, including updates to the methodology. Proposed new requirements from OIT staff, departments, and business representatives must be communicated to the OIT PMO Manager. The OIT PMO Manager will ensure that the requirements are entered into the SLCM change process, where it is captured, reviewed, and if appropriate, approved and scheduled for release.

f. Questions

For questions regarding this policy, please contact PBGC's OIT-PMO Manager.