

PM-STD-01-02

PBGC OIT: Design and COTS Configuration Document Standard

| | |
|-----------------------------|--|
| Purpose | To define a consistent set of information that must be contained in the Information Technology Solutions Life Cycle Management's (ITSLCM) Design and COTS Configuration Document deliverable. |
| Scope | The Design and COTS Configuration Document Standard refers to the designing of an IT solution (Design Document), the configuring of COTS products (Configuration Document – [not configuration management]) or externally hosted IT solutions. It documents the information required to communicate architectural and system designs to the integrated program team (IPgT), integrated project team (IPT), and appropriate governance boards. |
| Authority/References | Information Technology Solutions Life Cycle Management Framework |
| Approving Body | Governance Coordination Board (GCB) |
| Owner | IT & Business Modernization Department (IT&BMD)/Project Management Division (PMD) |
| Collaborator | ITIOD's SDD Team, IT&BMD's PSD, CSD & and FMSD Division Managers, Chief Architect, SAISO |
| Implementer | Not Applicable |
| Standard Type | Operational – The standard pertains to actions that are primarily implemented in the enterprise and executed by people (as opposed to systems) in the operations phase of an information system, IT project, program, or initiative. |
| Control Number | xxx |
| Standard | <p>It is essential for members of the Integrated Project Team (IPT) and/or Integrated Program (IPgT) to participate in and contribute to the development and review of the Requirements Document deliverable. IPT/IPgT members including, but not limited to, representatives from Enterprise Architecture (EA), Enterprise Information Security (EIS), IT Infrastructure Operations IT Assets and Technology Requirements Management and IT Business Change Management Divisions, Release Management, Records Officer, and business stakeholders, should ensure the documented requirements adequately encompass applicable PBGC standards, business processes, federal and local mandates and laws, and relevant policies, directives, and regulations from the area(s) they represent.</p> <p>The Design and COTS Configuration Document must contain, at a minimum, the information/items below:</p> |

PBGC OIT: Design and COTS Configuration Document Standard

Revision History – Include revision number, content changes, date of change, and author.

System Overview - Provide a general description of the complete system design architecture for COTS (or externally hosted solution) or custom developed solution. Include a discussion of the basic design approach and organization. This section documents technical and relatively static components.

- **Assumptions** - List of assumptions (e.g. availability of a hardware/software platform, or developments in technology).
- **Constraints** - List of conditions or constraints outside the control of the project that limits the design alternative. (e.g. domain technologies, enterprise general specifications, standards, guidelines imposed on the solution and strategic decisions, public and international laws and regulations, technology base, human availability, recruitment, and selection).
- **Dependencies** - Describe where the solution would interface with other systems.

Technical Standards – Include a list of the PBGC technical IT standards. Identify which were used in the development of the Requirements Document and which were not. Include justification as to why any technical IT standards were not used.

If the IT Solution is a COTS or Externally Hosted IT solution, follow the instructions listed in this standard for the **COTS Configuration Document**.

If the IT Solution is a Custom Developed IT solution, follow the instructions listed in this standard for the **Design Document**.

COTS Configuration DOCUMENT

Note: Use vendor provided documents as appropriate.

Functional Design - The functional design addresses what modules are being used in the IT solution and how they support the implementation of requirements.

- **Design Components** – Describe the specific, functional behavior of the IT solution's components.
- **Integration Design** – Describe how the solution interfaces with other IT solutions.
- **Reporting** – Describe the design and functionality of the IT solution's reports.

Service/Interface Design — The service/interface design highlights the interfaces with databases and other dependent applications and software.

Data Design – The data design highlights any conversion/migration that may be required for the solution.

PBGC OIT: Design and COTS Configuration Document Standard

Configuration — This section highlights the configuration of COTS software or externally hosted solutions to meet PBGC's needs.

- **Security Architecture** – Provide a description and logical view of the IT solution's security, processes, disciplines, and the rules and relations among those elements necessary to effectively secure the IT solution being developed.
- **Communication Architecture** – Provide a logical view of the IT solution's communication, processes, and disciplines and the rules and relationships among those elements necessary to effectively communicate among elements of the IT solution.
- **Performance** – Describe any related processes, including a detailed description of specific performance requirements, and how they are associated with specific IT solution functionality/deliverables.

DESIGN DOCUMENT

Functional Design - The functional design addresses what the solution will do. Flowcharts and diagrams may be used to describe how the design will support the implementation of the requirements (Flowchart; Architectural Diagram).

- **Design Components** – Describe the specific functional behavior of the IT solution's components.
- **Integration Design** – Describe how the IT solution interfaces with other IT solutions.
- **Reporting**- Describe the design and functionality of the IT solution's reports.
- **User Interface Design** - Describe the user's experience and interaction with the IT solution.
- **System Performance** - Describe the specific performance requirements and how they are associated with specific project functionality/deliverables, such as cycle time, size of transaction, speed per transaction, test requirements, minimum bug counts, speed, end-user requirements, etc.

Database Design - The database design highlights the logical and physical database model, data migration, conversion, etc.

Technical Design - Include a description and logical view of the hardware, processes, disciplines and the rules and relationships among those elements necessary to effectively implement the IT solution being developed. Provide a descriptive and logical view of the software, processes, disciplines, and the rules and relationships among those elements necessary to effectively build the IT solution being developed.

- **Security Architecture** – A description and logical view of the system security, processes, disciplines, and the rules and relationships among those elements necessary to effectively secure the IT solution being developed.

PM-STD-01-02

PBGC OIT: Design and COTS Configuration Document Standard

| | |
|---------------------------|--|
| | <ul style="list-style-type: none"> • Communication Architecture - A logical view of the IT solution’s communication, processes, disciplines, and the rules and relationships among the components necessary to effectively support the communications of the IT solution being developed. • System Performance - Include a description of specific performance requirements and how they are associated with specific project functionality/deliverables (i.e. cycle time, speed per transaction, test requirements, minimum bug counts, speed, reliability, utilization, end-user requirements). <p>Approvals – Include signature(s) and date(s) of appropriate business, OIT, and Integrated Project Team approval authorities.</p> |
| Metrics | For future use |
| Owner Signature | Cheryl Ringel, PMD Manager |
| Approval Signature | Velma Briscoe, GCB Chair |