

PM-STD-01-03

PBGC OIT: Requirements Document Standard

Purpose	To define a consistent set of information that must be contained in the Information Technology Solutions Life Cycle Management Framework’s Requirements Document deliverable.
Scope	To document the IT solution’s defined functional, operational, and service requirements needed to meet the business need.
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	IT Infrastructure Operations Department (ITIOD) 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

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Standard

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.

The Requirements Document must contain, at a minimum, the information/items listed in this standard.

Revision History – Document the revision number, content changes, date the changes were made, and author of the changes.

Executive Summary – Provide a brief overview of the project, which addresses the business area(s), people, and process(es) that are impacted by the implementation of the IT solution and documents the scope of the Requirements Document deliverable .

Assumptions – List of assumptions (e.g. availability of a hardware/software platform, pending legislation, court decisions that have not been rendered, or developments in technology).

Constraints – List of conditions or constraints, outside of the control of the project, that limit the design alternatives, including:

- Enterprise constraints (e.g. domain technologies, enterprise general specifications, standards, or guidelines imposed on the solution and strategic decisions)
- External constraints (e.g. public and international laws and regulations, technology base, human availability, recruitment, and selection)

Project dependencies and impacts - Identify projects, IT solutions (applications, systems, etc.), processes, departments, and infrastructure that impact or are impacted by the IT solution. Address impacts to internal, management, and audit controls. Outline project dependencies and relationships. The dependencies and impacts may be required input for other project documentation.

System Diagram – Include a high level diagram that depicts the “To-Be” internal and external application/system/IT solution interactions.

System Interfaces – Include a list of incoming and outgoing interfaces to/from the application/system/IT solution.

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

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justification as to why any technical IT standards were not used.

Business Process and Detailed Requirements – List the detailed requirements (i.e. functional requirements). Detailed requirements relate the associated business processes to what the system should be able to do. If there are no related business processes, state the reasons why (e.g. bug fixes, Infrastructure projects, etc.).

- **Business Process** – Include a list of defined name(s) and number(s) of the business process from the “As-Is” and/or in the “To-Be” Business Process Model.
- **Process Function/Sub-Function** – Include a list of defined major activities and sub-activities within the business process. A further decomposition of a function and/or sub-functions is completed in the high level and detailed requirements section.
- **High Level Requirement** – Provide a detailed description of the requirement. High level requirements are decomposed into detailed requirements, until the lowest level of meaningful activity is reached. Include Service Level Agreement requirements and list anything deemed out of scope to further clarify the requirement.
- **Detailed Requirements** – Decompose the high level requirement(s). Define the requirements in a manner that enables the reader to see broad concepts decomposed into layers of increasing detail and are unambiguous, atomic, and testable.
- **Global Requirements** – List the general/common function requirements not specific to any one business process.

IT Security Requirements – Document requirements necessary for the IT solution to adhere to PBGC Enterprise Information Security Standards. Refer to the Enterprise Information Security Office for guidance.

Data Requirements – List the requirements specific to the structure and behavior of the solution’s data. The data requirements utilize applicable PBGC standards and capture logical data elements, relationships, changes to enterprise data model (if any), data conversion requirements, data quality requirements, and data capture/storage requirements. Refer to the Enterprise Information Security Office for guidance on media encryption, audit controls, system control, etc.

Report Requirements – List the necessary reporting requirements (e.g. operational reports, process reports, management reports, etc.).

Operational Requirements - Document the non-functional, detailed requirements. Specify the attributes and characteristics of the IT solution/system unrelated to the functional use to assess the operation of the IT solution/system.

- **Infrastructure Requirements** - Define the infrastructure requirements. Refer to the technical IT standards and members of the Integrated Project Team for information regarding performance and security (e.g. scalability, interoperability, reporting, data

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capacity, reliability, availability, reliability, recoverability, etc.).

- **Performance/Capacity Requirements** – Define performance requirements in quantitative terms that the software must meet, including response times for queries, page loads, expected number of transactions per day/hour, etc.
- **Section 508 Compliance Requirements** – Define requirements for adhering to Section 508 Compliance federal mandate.
- **Records Management** – Define requirements for adhering to the National Archives and Records Administration (NARA)’s Records Management (e.g. the length of time the data must be retained) as applicable to PBGC.

Additional categories – Add additional information, if necessary, based upon project need.

Appendix A – Include a Requirements Traceability Matrix (RTM). At a minimum, the RTM should include the requirement, the requirement ID, and should provide traceability through design/configuration and test. The appendix may also reference any documents that are deemed related to the contents of this document.

Approvals – Include signature(s) and date(s) of appropriate business, OIT, and Integrated Project Team approval authorities.

Key Requirement Characteristics

- Traceable – Each requirement must have a unique identifier to link from the source through requirements, design and test.
- Atomic – Each requirement should not contain conjunctions and must reference one and only one thing.
- Unambiguous – Each requirement should be written in clear, plain language to avoid misinterpretation and promote a single, common interpretation.
- Testable – Each requirement must be verified against quantitative criteria.
- Complete – Each requirement must be fully stated in one place and include all information.
- Consistent – Each requirement should not contradict other requirements in the document or other related documents.
- Correct – Each requirement must be accurate.
- Feasible – Each requirement must be implementable within the constraints of the project.

Metrics	For future use
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