

Florida Department of Environmental Protection

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Project Management Standard Contractor-Managed Information Technology (IT) Projects

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Purpose

The purpose of this standard is to establish project planning and management requirements for projects that are wholly managed by information technology (IT) consulting firms or contractors. This standard shall be incorporated by reference into all IT procurement documents (request for quotes, contracts, purchase orders, etc.) where external contractors are providing IT project management services.

Scope

This standard applies to all IT projects, or projects that have a significant IT component that are wholly managed by IT consulting firms or contractors.

This standard does not provide explicit methodologies and processes for managing IT projects. Individual companies should have their own internal project management methodology and processes with which they are familiar. Project management processes may also differ depending on the specific IT product being developed. Therefore, this standard addresses only the baseline requirements that the Department of Environmental Protection (DEP) must receive, as the customer receiving the deliverables and services produced from a project.

Standard

This standard adopts by reference the Project Management Institute's (PMI[®]) A Guide to the Project Management Body of Knowledge (PMBOK[®] Guide) — Sixth Edition (Project Management Institute, 2017). The PMBOK[®] is recognized by both the American National Standards Institute (ANSI) and the International Institute of Electrical and Electronics Engineers (IIEE) as an international standard for project management.

The State of Florida's Division of State Technology (DST) promulgated <u>Florida Rule 60GG-1</u>. This rule specifies requirements for project management based upon the risk and complexity assessment DST has developed. The Rule is incorporated in this standard by reference.

For projects that are wholly managed by IT consulting firms, the firm's internal project management standard may supersede this standard. However, the use of an external project management standard must be addressed specifically in the associated contract language, must be mutually agreed to by DEP and the consulting firm as documented in contractual documents, and must comply with <u>Florida Rule 60GG-1</u> as determined by DEP's Office of Technology and Information Services (OTIS) Portfolio Management Services Section (PMSS).

A project's Risk and Complexity is measured using the DST's Risk and Complexity Analysis (RCA) spreadsheet guidance. The results of the analysis yield a categorization of the "RCA level" of the project. The result is a value between 1 and 4, with 1 being the lowest level of risk and complexity and 4 being the highest. DEP will perform the RCA analysis, and detail the result in the project charter and request for bid documents. The higher categorization levels will necessitate more requirements throughout the project lifecycle.

The following sections identify standard project management deliverables that shall be included in any contract. Additional project management deliverables may be required, depending on the type, size, scope, risk, and complexity of the project. These project management deliverables are in addition to any product-specific deliverables being produced from the contract. For example, software requirements specifications, system design documents and test plans are typical product deliverables resulting from a software development project.

Initiation

The DEP PMSS will address all initiation activities required. Contracted project will begin with Planning Phase activities.

Planning

RCA Level 1 & 2 Project Management Requirements

- Project Management Methodology Contractor must supply a summary of its Project Management Methodology to DEP for review and approval prior to contract execution. The summary must include, at a minimum, a sample copy of project management deliverables as well as those items that specifically address the business requirements. Any contractor-specific project management methodology must be consistent with the PMBOK[®].
- Project Management Plan provided as part of the bid process and updated as the first deliverable before any work is begun. The Project Management Plan and all associated documents shall become a part of the formal contract. This plan shall address the following elements at a minimum:

- a. **Scope of Work** describe in detail what is in-scope and what is out-of-scope for the project. Identify assumptions and constraints.
- b. **Project Goals and Objectives** document the specific goals and objectives that the project is meant to accomplish.
- c. **Project Performance Measures** document the performance measures related to ongoing project progress. Describe how those measures will be monitored and reported on throughout the project lifecycle. At a minimum, these measures shall relate to scope, schedule, and budget performance areas. Additionally, document any project performance measures that will be used to determine if the stated project objectives have been met by the close of the project. These measures should be specific, measurable, and attainable within the project scope, time and budget.
- d. List of Project Deliverables document a complete list of project deliverables, the specific deliverable acceptance criteria, who is responsible for approval, and review / acceptance process (including, roles and responsibilities). Deliverables must include both project management and product-specific deliverables.
- e. **Communications** document the responsibility, frequency, type and audience for ongoing project communications. This area shall include project status reporting, identify stakeholders that receive communication, frequency of meetings and all other types of project communications. Detail what, when, and how information will be collected and reported.
- f. **Change Management** document how change requests shall be initiated, documented, assessed for project impacts, escalated, approved, executed, and tracked. This area shall also include what changes must be processed through the contractual change order process.
- g. Project Schedule Management document how the project schedule will be managed and maintained and identify the project's critical path. Project schedules shall be baselined at project start and then continually managed throughout project. If a change event results in approved changes to the schedule, the schedule must be re- baselined accordingly.
- h. Budget Management document how budgetary changes shall be addressed and how the project budget shall be monitored and managed throughout the project. The project budget shall include specific fiscal year cost totals over the life of the project and the overall total cost of the project. Any changes to the original budget baseline shall be managed through the documented change management process.
- Quality Management document how quality will be managed, deliverables are produced, and what elements define quality in the project deliverables as well as project execution. Detail what specific quality processes shall be used to monitor and confirm the quality of project deliverables.
- j. **Risk and Issues Management** document a risk and issue management plan and process. Describe how risks and issues will be monitored, maintained, and acted

upon throughout the project. All projects shall identify, document (list, evaluate, prioritize, actions, assign responsibility), manage and report on risks and issues continuously throughout the project.

- k. Human Resource (HR) Management identify the number of required project resources, their skills, and identify when they will be needed during the project. Projects shall clearly identify the roles and responsibilities of both the contractor staff and DEP during the project lifecycle. The Contractor must provide a qualified project manager to all project-based contracts. Specific experience and required roles for all project team members must be negotiated prior to contract execution and specifically included in the contract. The HR management plan must also address the process whereby team members will be replaced if needed.
- Organizational Chart a project organizational chart must be included in the Project Management Plan. The chart must identify the named individual, the role they are filling and the time frame or project phases during which each individual/role will be required. Additionally, identify stakeholders and the responsibilities for decision making and escalation.
- m. Spending Plan document current fiscal year planned expenditures and actual expenditures by month and fiscal year to date. Include other expenditure detail as required for the Project Status Report.
- Procurement Management if procurements are required by the project, document any products or services needed, identify the specific products and services to be purchased.
- o. **Organizational Change Management** document the impact of delivering the project's products to the user organization and the individual users.
- 3. **Project Schedule** provide a Project Schedule that includes: scope of work, tasks, effort, resources, begin and end dates (task and project), baselined, .mpp and .pdf formats.
- 4. Requirements Traceability Matrix document the links between high-level design and requirements with detailed requirements, detailed design, test plans, and test cases. The Requirements Traceability Matrix should ensure that all requirements are identified and correctly linked throughout the project.
- 5. Florida Cybersecurity Standards coordinate with DEP regarding compliance with <u>Florida Rule 60GG-1</u>. The Contractor Project Manager and project team are not responsible for completing activity, but for ensuring that the activity takes place.
- 6. Planning Gate R&C Assessment coordinate with DEP PMSS regarding completion of assessment at planning end. The Contractor is not responsible for conducting this activity, but to ensure that the activity takes place. Planning Gate R&C Assessment must occur concurrent with the delivery of the Project Management Plan deliverable.

RCA Level 3 & 4 Additional Project Management Requirements

Projects that are designated an RCA Level 3 or 4 by DEP through the use of the DST RCA assessment will have the following requirements in addition to those required for RCA Level 1 and 2.

Project Management Plan for the project must also include:

- a. Work Breakdown Structure document the hierarchical and incremental decomposition of the project into phases, deliverables, and work packages. Identify all the tasks required to deliver the total project scope of work to produce each deliverable. Tasks must be decomposed into subtasks until they can be estimated, observed, and evaluated.
- b. Resource Plan document the resources required to complete the project and how these resources will be acquired. Human resources are detailed in the Human Resource Management above. Equipment and materials – identify types, quantities, purpose, and specify the method(s) for acquiring equipment of materials.
- c. **Schedule Management** in addition to level 1 and 2 requirements, specify the responsibilities, timeframes, and methods to manage, update and report progress, including Earned Value Analysis, throughout the project.
- Budget Management must also include a description of the funding sources(s) (DEP will provide) for the project and a breakdown of the project costs by major expense category.
- e. **Spending Plan** detail the monthly planned (baselined) and actual expenditures (by expenditure or expenditure category) for each fiscal year.
- f. **Communications Plan** capture the distribution method of communications. Document the reporting of variances in schedule, cost, scope, and emerging risks and issues. Document the location of the project repository. Include documentation for decision tracking and action item tracking.
- g. **Quality Management Plan** detail the processes and procedures for quality, including: planning, assurance, and control.
- h. **Procurement Management** additional detail for procurements must include the appropriate purchasing methods, rules, and statutes.
- i. **Organizational Change Management** document the readiness of the user organization and individual users to accept changes; and describe and plan the action(s) necessary to facilitate changes.
- PMP[®] Certified Project Manager The Project Manager must be PMP[®] certified. The PMP[®] Certified Project Manager is authorized by the Agency to lead the entire project team in the completion of the full project scope throughout the project lifecycle. This project manager must be an Agency employee or contractor (individual) of the Agency.

Execution

All RCA Level Project Management Requirements

- Operations and Maintenance Plan develop an O&M Plan that documents the process to gain concurrence from those responsible for the operation and maintenance on their readiness to support the release into the DEP production computing environment. Factors that should be considered before deploying parts or the entire result of the project include: budget, staffing, technology, and operations.
- 2. **Project Management Plan** as necessary, update Project Management Plan documents.

Monitoring and Controlling

RCA Level 1 & 2 Project Management Requirements

- Project Change follow the change control process(s) documented in the Change Management Plan. Maintain a change tracking log that includes: description, impact (scope, schedule, and cost), owner, and status. Include the change log in the Status reporting and discuss at status meetings. Additionally, for significant change requests, coordinate with DEP PMSS regarding completion of R&C assessment. The Contractor is not responsible for conducting the R&C assessment, but for ensuring the assessment takes place.
- Project Schedule update schedule at least bi-weekly to reflect the actual progress toward completion of scheduled tasks, milestones, and deliverables. If the percentage of overdue tasks is equal to or greater than 10% then communicate the variance and explanation to project key stakeholder(s).
- 3. **Project Cost** monthly, identify both positive and negative variances between planned and actual. If the percentage variance of costs is equal to or greater than 10% then communicate the variance and explanation to project key stakeholder(s).
- 4. **Project Scope** monitor and manage scope through Change Management documented in the Project Management Plan.
- 5. **Project Quality** monitor and manage quality per the Project Management Plan.
- 6. **Risks and Issues** use documented risk and issue management to continually log items and control them.
- Florida Cybersecurity Standards coordinate with DEP regarding continuing compliance with <u>Florida Rule 60GG-1</u>. The Contractor Project Manager is not responsible for completing this activity, but for ensuring that the activity takes place. Substantial change to the project should trigger an analysis.
- 8. **Requirements Traceability Matrix** review and amend the matrix to capture progressive detail of the requirements.
- 9. Lessons Learned capture lessons learned from project team and other stakeholders throughout the project.
- 10. **Status Report** report project status at least weekly.

- a. **Status report General** Project name, project manager, begin date, planned end date, reporting period dates, overall status indicator, overview of progress.
- b. Status and completion % deliverables, milestones, major tasks.
- c. **Project Risks and Issues** description, status.
- d. **Scope changes** description, status disposition.
- e. **Spending Plan** identify baselined planned vs actual expenditures, major upcoming expenditures.
- f. **Other Information** may be identified to monitor and control project.

RCA Level 3 & 4 Additional Project Management Requirements

- Project Schedule use Schedule Performance Index (SPI) to assess schedule variance. If SPI analysis indicates a trend toward a variance equal to or greater than 10% (SPI score <= 0.90 or >= 1.10), communicate the variance explanation to the project's key stakeholders.
- Project Cost use Cost Performance Index (CPI) to assess schedule variance. If CPI analysis indicates a trend toward a variance equal to or greater than 10% (CPI score <= 0.90 or >= 1.10), communicate the variance explanation to the project's key stakeholders.
- 3. **Decision Tracking** maintain a decision tracking log that includes decision description, approval authority, date of entry, due date, actual date of decision, project impact (scope, schedule, cost), and status.
- 4. Action Tracking maintain an action item log that includes action item description, owner, date assigned and due, and status.
- 5. **Status Report** must also include Schedule Performance Index (SPI), Cost Performance Index (CPI), as well as updated current Spending Plan.

Closeout

All RCA Level Project Management Requirements

1. **Project Closeout Report** – document the project's accomplishments against the project budget, scope, and schedule. Include a discussion of the lessons learned.

DEP is responsible for the Post Implementation Review (R&C levels 3&4), archiving project documents, and ensuring O&M plan is properly executed.

Deviation from Use

Any deviation from use of this standard shall be approved by the DEP contract manager and documented in the associated DEP contract or direct order.

Definitions

1. IT Project – a temporary endeavor, having a defined start and end date and resulting in a unique product or service dealing with an IT subject area. Projects have distinct teams of

resources created specifically to conduct project tasks and generate deliverables. Repetitive operational or ongoing maintenance activities are generally not considered projects. Examples of IT projects include:

- Design, development, and implementation of a software application
- Purchase and installation of a commercial software product
- Systems hardware and network installations, modifications or upgrades
- Planning, analysis, and feasibility studies for IT projects
- 2. **Project Management Institute (PMI©)** an international non-profit membership association for professional project managers. PMI is a standards-setting body for the project management profession.
- 3. Project Management Body of Knowledge (PMBOK[®]) a compendium of project management fundamentals and best practices that apply to a variety of project types (software development, construction, engineering, etc.). The PMBOK[®] is an internationally recognized standard published by the Project Management Institute.
- 4. American National Standards Institute (ANSI) a United States non-profit standardssetting body that oversees the creation, promulgation and use of thousands of norms and guidelines for a variety of industries, including information technology.
- 5. International Institute of Electrical and Electronics Engineers (IIEE) an international, nonprofit organization that is a leading developer of standards related to telecommunications, information technology and power generation products and services.

Responsible Authority:

The Portfolio Management Services Section of the DEP Office of Technology and Information Services (OTIS) is responsible for establishing and maintaining this standard.

Bibliography

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- Project Management Institute. (2017). A Guide to the Project Management Body of Knowledge (PMBOK[®] Guide) — SixthEdition, ANSI/PMI 99-001-2013. Newton Square, PA: Project Management Institute/ANSI.

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