

# COMMONWEALTH OF VIRGINIA



**Information Technology Resource Management (ITRM)**

## **PROJECT MANAGER SELECTION AND TRAINING STANDARD**

**Virginia Information Technologies Agency (VITA)**

## Reviews

- This publication was reviewed and approved by the Director of the Policy, Practice and Architecture Division.
- Online review was provided for agencies and other interested parties via the VITA Online Review and Comment Application (ORCA).

## Publication Version Control

Questions related to this publication should be directed to the Director of VITA's Policy, Practice, and Architecture (PPA) Division. PPA notifies Agency Information Technology Resources (AITRs) at all state agencies, institutions and other interested parties of proposed revisions to this document.

This following table contains a history of revisions to this publication.

<b>Version</b>	<b>Date</b>	<b>Revision Description</b>
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ITRM Standard CPM 111-02	01/03/2011	Administrative changes—no review required. Align Standard with Commonwealth Project Governance Assessment terminology.

# Preface

## Publication Designation

ITRM Project Manager Selection and Training  
Standard CPM 111-02

## Subject

Project Manager Selection and Training

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ITRM Project Manager Selection and Training  
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## Scheduled Review:

This standard shall be reviewed on an annual basis.

## Authority

*Code of Virginia*, §2.2-225 (Powers and duties of the Secretary of Technology (SoTech))

*Code of Virginia*, §2.2-2007 (Powers of the CIO)

*Code of Virginia*, § 2.2-2010 (Additional powers of VITA)

## Scope

This standard is applicable to all Executive Branch state agencies and institutions of higher education (hereinafter collectively referred to as "agencies") that are responsible for the management, development, purchase and use of information technology resources in the Commonwealth of Virginia. This standard does not apply to research projects, research initiatives or instructional programs at public institutions of higher education.

## Purpose

This standard establishes direction and technical requirements which govern the acquisition, use and management of information technology resources by executive branch agencies.

## General Responsibilities

### ***Secretary of Technology (SoTech)***

Reviews and approves statewide technical and data policies, standards and guidelines for information technology and related systems recommended by the CIO.

### ***Chief Information Officer of the Commonwealth (CIO)***

Develops and recommends to the Secretary of Technology statewide technical and data policies, standards and guidelines for information technology and related systems.

### ***Virginia Information Technologies Agency (VITA)***

At the direction of the CIO, VITA leads efforts that draft, review and update technical and data policies, standards, and guidelines for information technology and related systems. VITA uses requirements in IT technical and data related policies and standards when establishing contracts; reviewing procurement

requests, agency IT projects, budget requests and strategic plans; and when developing and managing IT related services

### ***Information Technology Advisory Council (ITAC)***

Advises the CIO and Secretary of Technology on the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems.

### ***Executive Branch Agencies***

Provide input and review during the development, adoption and update of statewide technical and data policies, standards and guidelines for information technology and related systems.

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# 1. INTRODUCTION

## ***1.1 Purpose of the Information Technology Resource Management Project Manager Selection and Training Standard***

The purpose of the Information Technology Resource Management Project Manager Selection and Training Standard (PMST Standard) is to:

- provide a method for identifying Project Managers qualified to manage Commonwealth IT projects;
- describe the required skills, training and experience Commonwealth Project Managers need to have in order to be considered qualified to manage Commonwealth IT projects; and,
- identify the steps a project sponsor must take in selecting a qualified Project Manager to manage a Commonwealth IT project.

Qualification of a Project Manager is not synonymous with certification. For the purposes of this Standard, a Project Manager is considered qualified if through skills, training and experience the Project Manager fulfills conditions that indicate they have the capacity to effectively manage an IT project in the context of the Commonwealth 's IT investment management framework.

## ***1.2 Adherence to Commonwealth Standards of Conduct***

As representatives of state agencies with authority and responsibility to manage significant Commonwealth resources, Commonwealth IT Project Managers are must conduct themselves in a manner deserving of public trust. Specifically, IT Project Managers qualified to manage Commonwealth IT projects are expected to adhere to the Employee Standards of Conduct outlined on pages 2 and 3 of the Commonwealth Standards of Conduct. The Commonwealth Standards of Conduct can be found on the Human Resources Policy section of the Department of Human Resource Management (DHRM) website at <http://www.dhrm.state.va.us/>.

## ***1.3 Commonwealth Project Management***

The Commonwealth Project Management (CPM) methodology defines the required agency processes and documentation for all IT projects in the Commonwealth of Virginia. The use of CPM increases Commonwealth IT project success by promoting sound investment decisions, ensuring management commitment and oversight, implementing a best practice based project management methodology, and defining processes that measure and evaluate project value and success throughout the project lifecycle.

All Commonwealth IT Project Managers are required to follow the CPM methodology as established in the Commonwealth Project Management Standard (PM Standard.)

## ***1.4 ITIM***

Information Technology Investment Management (ITIM) is a management process that provides for the pre-selection (identification), selection, control, and evaluation of business-need-driven IT investments across their lifecycles. ITIM uses structured processes to minimize risks, maximize return on investments, and support Commonwealth agency

decisions to maintain, migrate, improve, retire, or obtain IT investments. ITIM is the basis for the Commonwealth's approach to technology management as described in the Commonwealth Technology Management Policy (CTM Policy).

All Commonwealth IT investments must successfully pass through the ITIM Pre-select (Identification) and Select Phases before they are considered projects. A Project Manager is officially selected and assigned to the project during the CPM Initiation Phase.

## **1.5 Project Manager Selection and Training Stakeholders**

Project Manager Selection and Training stakeholders are the groups or individuals who have responsibility for Project Manager Selection or Project Manager Training activities, decisions, governance, or oversight. Each stakeholder has an important role in ensuring that Project Managers have the skill, training, and experience needed to effectively manage IT projects in the Commonwealth.

### **1.5.1 Secretary of Technology**

Commonwealth Technology Management is governed by the Secretary of Technology, who sets technology strategy and reviews and prioritizes major technology investments, including project development and associated procurements proposed by Commonwealth executive branch Agencies and institutions of higher education. The Secretary also approves Project Initiation and termination for high risk and high complexity projects, associated requests for proposal, contracts and procurements, and the two-year statewide plan for technology. Decisions regarding termination of high risk and high complexity IT projects at institutions of higher education will be made in consultation with the institution's board of visitors.

### **1.5.2 Commonwealth Chief Information Officer (CIO)**

The Commonwealth Chief Information Officer (CIO), as established in the *Code of Virginia*, is an appointee of the Governor, and leads the Virginia Information Technologies Agency (VITA.) On behalf of the Governor and Secretary of Technology, the CIO ensures that agency IT investments are developed and placed in operation using a disciplined, well-managed, and consistent process.

The role of the CIO in Project Manager Selection and Training is to direct the development of the Project Manager Selection and Training Standard, to review Project Manager qualifications, and approve the selection of Project Managers assigned to Category 1, 2 and 3 IT Projects as defined in the PPM Standard. The CIO may also grant a temporary waiver from the Project Manager qualification requirements if the project sponsor agrees that the Project Manager will meet the qualification requirements by a specific date.

### **1.5.3 Commonwealth Project Management Division (PMD)**

Under the direction of the CIO, the Project Management Division (PMD) implements an enterprise strategy for the effective and efficient management of information technology investments.

The role of PMD in Project Manager Selection and Training is to develop the Project Manager Selection and Training Standard for the CIO, provide cost-effective qualification training for and oversee the training and selection of Commonwealth IT Project Managers. PMD may also prepare a decision brief recommending that the CIO grant a temporary waiver from the

Project Manager qualification requirements if the project sponsor agrees that the Project Manager will meet the qualification requirements by a specific date.

#### **1.5.4 Commonwealth Agencies**

Commonwealth agencies are the business owners of IT projects in the Commonwealth, and typically have supervisory responsibility over the IT Project Managers assigned to the projects that the agency sponsors.

The role of agencies in Project Manager Selection and Training is to select qualified IT Project Managers in compliance with the criteria identified in the Project Manager Selection and Training Standard. Agency Project Manager candidate supervisors must validate the candidate's experience, training, and certification entries in the Project Manager Qualification Record.

#### **1.5.5 Commonwealth IT Project Managers**

Commonwealth IT Project Managers are individuals assigned by an agency to manage a temporary endeavor undertaken to create a unique IT product, service, or result. IT Project Managers are responsible and accountable for the performance of IT projects in the Commonwealth, and are evaluated based on their ability to use project resources to achieve project objectives.

The role of Commonwealth IT Project Managers in Project Manager Selection and Training is to be qualified to manage IT projects in the Commonwealth by meeting the minimum skill, training, and experience requirements as identified in this Standard. Project Managers seeking to become qualified Commonwealth IT Project Managers must complete a Project Manager Qualification Record.

## **2. PROJECT MANAGER QUALIFICATION**

### ***2.1 Definition of Project Manager Qualification***

Commonwealth Project Manager qualification is the assessment of a Project Manager's skill, training, and experience. Project Managers are qualified for specific projects based on the project's scope and cost.

### ***2.2 Project Categories***

For the purposes of governance and oversight, projects that have an estimated cost in excess of \$250,000 are considered Commonwealth-level projects and are categorized in one of four categories, based on their CPGA assessment of Risk and Complexity, as defined in the PM Standard.

- Category One Projects are High Risk/High Complexity projects;
- Category Two Projects are High Risk/Medium Complexity, High Risk/Low Complexity or Medium Risk/High Complexity projects;
- Category Three Projects are Medium Risk/Medium Complexity, Medium Risk/Low Complexity or Low Risk/High Complexity projects; and,
- Category Four Projects are Low Risk and either Medium or Low Complexity.

Projects that have an estimated cost less than \$250,000 are considered Agency-level projects.

PMD, on behalf of the CIO, verifies that the project sponsor has selected a qualified IT Project Manager for their IT project based on the categories listed above.

### ***2.3 Qualifications for Agency-level Projects***

For Agency-level Projects the Project Manager candidates must:

1. have 1500 hours of successful project team experience, which includes any position on a project team; and,
2. have exhibited team building and leadership potential.

For Agency-level Projects the project sponsor will give preference to selecting Project Manager candidates who:

1. have passed the Core Processes test;
2. have experience or special qualifications in a functional or technical field related to the project's scope; or,
3. have completed Commonwealth Project Management Overview Training;
4. have at minimum an Associate's Degree in a management or technology discipline related to the project.
5. have successfully performed as the Project Manager for at least one Agency-level IT Project

### ***2.4 Qualifications for Category 4 Projects***

For Category 4 Projects the Project Manager candidates must:

1. have at least 2,000 hours of successful project management experience as a member of the management team on a Commonwealth IT Project, as a Project Manager on a Category 4 IT Project, or as a member of a team employing project management best practices in IT operations and maintenance activities. Membership on the management team is defined as serving in a position of authority and directly participating in the management of a project;
2. have completed Commonwealth Project Management Overview Training;
3. have completed Commonwealth Technology Portfolio Training;
4. have passed the Core Processes test, or have either the Certified Associate in Project Management (CAPM) or the Project Management Professional (PMP) certification from the Project Management Institute; and,
5. have exhibited effective team building, leadership, and communication skills.

For Category 4 Projects the project sponsor will give preference to selecting Project Manager candidates who:

1. have passed the Facilitating Processes test;
2. have experience or special qualifications in an applicable functional or technical field;
3. have the Project Management Professional (PMP) certification from the Project Management Institute, or a comparable or higher level certification;
4. have at minimum a Bachelors Degree in a management or technology discipline related to the project; or,
5. have successfully performed as the Project Manager for at least one Commonwealth IT Project.

## ***2.5 Qualifications for Category 1, 2 and 3 Projects***

For Category 1, 2 and 3 Projects the Project Manager candidates must:

1. have 4,500 hours of successful project management experience as a member of the management team or as a Project Manager on multiple Commonwealth IT Projects. Membership on the management team is defined as serving in a position of authority and directly participating in the management of a project;
2. have completed Commonwealth Project Management Overview Training;
3. have completed Commonwealth Technology Portfolio Training;
4. have passed both the Core and Facilitating Processes tests, or have certification as a Project Management Professional from the Project Management Institute; and,
5. have successfully performed as the Project Manager for at least one project with a total cost over \$250,000.

For Category 1, 2 and 3 Projects the project sponsor will give preference to selecting Project Manager candidates who:

1. have completed advanced project management training on a subject including, but not limited to:
  - a. Advanced Risk Management;
  - b. Advanced Project Metrics and Statistical Analysis;
  - c. Systems Development;
  - d. Enterprise Architecture;
  - e. Financial Management for Projects and Programs;
  - f. Organizational Dynamics and Organizational Change Management; or,
  - g. Strategic Planning;

2. have experience or special qualifications in an applicable functional or technical field;
3. have at minimum a Bachelors Degree in a management or technology discipline related to the project; or,
4. have successfully performed as the Project Manager for at least one Category 1, 2 and 3 Project.

## ***2.6 Project Manager Qualification Record***

The Project Manager Qualification Record (PMQR) presents a cumulative and concise summary of basic events in the IT Project Manager's career. The PMQR provides a means for the IT Project Manager to document their experience, training, and certification for meeting Commonwealth qualification requirements, and for the IT Project Manager's supervisor to validate the entries. The PMQR also serves as the basis for reporting information on the qualification of an IT Project Manager to run Commonwealth IT Projects, and provides Project Sponsors with background information to assist them in Project Manager selection. Based upon a schedule established by PMD, the IT Project Manager will update their PMQR annually. Records not updated by the required deadline will be placed in inactive status.

IT Project Managers, their Supervisors, and upon request Project Sponsors can access Project Manager Qualification Records through the Project Manager Development Program section of the PMD website at <http://www.vita.virginia.gov/oversight/projects/>.

## **3. PROJECT MANAGER TRAINING**

Project Manager Training is the structured education of Commonwealth IT Project Managers in the processes, tools, and terminology used in managing projects. Commonwealth Project Managers are required to maintain accurate documentation of all their project management related training in their individual Qualification Record.

In general, there are two types of training, mandatory training and optional training. Mandatory training is required for all Project Managers and is directed toward Commonwealth specific information. Optional training is taken as necessary to acquire knowledge or develop skills that the Project Manager candidate needs to pass the knowledge test or to manage a unique project.

### ***3.1 Mandatory Commonwealth Project Management Overview Training***

Mandatory Commonwealth Project Management Overview Training classes are designed to acquaint the Project Manager with the Commonwealth Project Management (CPM) methodology, the context in which Commonwealth IT projects are governed, the specific processes and procedures associated with IT project governance and oversight, and the Project Manager qualification requirements administered under the Commonwealth IT Project Manager Development Program.

The Mandatory Commonwealth Project Management Overview Training classes cover the following subjects:

- Commonwealth Project Management (CPM) Overview;
- CPM Framework - Policy, Standard, and Guidelines;
- Commonwealth Project Manager Qualification;
- Commonwealth Project Management Activities; and,
- Project Management Resources.

The objectives set for Project Managers taking the Mandatory Commonwealth Project Management Overview Training classes are to:

- Distinguish between and apply the Policy, Standards and Guideline (PSG) approved by the ITIB;
- Navigate the Commonwealth project management Web site and tools;
- Understand how to properly document a project through close out to include a post implementation review;
- Understand the governance and oversight roles of the ITIB, CIO and PMD; and,
- Apply the Project Manager Development Program (PMDP) to their individual project management development.

### ***3.2 Mandatory Commonwealth Technology Training***

Mandatory Commonwealth Technology Portfolio (CTP) Training classes are designed to instruct Project Managers on the IT Investment Management (ITIM) Process that the CTP supports, the method for gaining access to the CTP, and the use of CTP navigation and forms during each phase of the CPM lifecycle. The classes are intended for all Project Managers who want to qualify to manage Commonwealth IT projects.

The Mandatory Commonwealth Technology Portfolio Training classes cover the following subjects:

- Overview of the ITIM Process;
- Obtain a CTP Account;
- CTP Organization, Navigation, and Basic Functionality;
- Relation of the CTP to the ITIM Phases; and,
- Review of CTP Forms related to CPM Lifecycle.

The objectives set for Project Managers taking the Mandatory Commonwealth Technology Portfolio Training classes are to:

- Understand the process required to obtain a CTP account;
- Identify and review the ITIM and CPM information compiled on the project prior to Project Manager assignment; and,
- Use the CTP to manage a project through each of the CPM Phases.

## 4. PROJECT MANAGER QUALIFICATION TESTING

The Commonwealth Project Management Division (PMD) administers Project Manager qualification testing through the Project Manager Development Program (PMDP). Depending on the type of qualification, once a Project Manager has completed mandatory Project Manager training, mandatory CTP training, and has:

- taken and passed one or both of the two Project Manager qualification exams;
- received the Certified Associate in Project Management (CAPM) certification; or,
- received the Project Management Professional (PMP) certification,

PMD will verify the exam score or certification and notify the Project Manager, and the Project Manager's supervisor, if qualification has been achieved.

There are two Project Manager qualification exams: the Core Processes Test and the Facilitating Processes Test. Test questions are derived from the training standards and address required project management knowledge for one or more of the topic areas within the processes tested.

The tests are provided over the Internet using a secure on-line testing system. The tests are open book and timed. Each test is broken down into sections called topic areas. The topic areas are the same as the topics identified in the Core Processes and Facilitating Processes Knowledge Standards described in this standard. The Project Manager candidate's agency or company pays fees associated with testing to the test provider.

Project Manager candidates register to take the test online or via a link to the testing registrar provided on the Project Manager Development Program section of the PMD website at <http://www.vita.virginia.gov/oversight/projects/>. Project Manager candidates are required to take the test while at their workplace, and to read and agree to an honor code before taking the test. Upon completion of the test, the candidate's supervisor will validate the candidate's testing by reporting the dates and times the candidate took the tests to PMD. PMD will not consider testing completed until the supervisor report has been received. The Project Manager candidate's organization is authorized to require the test be taken in a more stringent test environment than specified by this standard.

The Project Manager candidate must achieve a passing score in each topic area and an overall passing score to meet the qualification standard. If a Project Manager candidate fails to achieve a passing score in a topic area, the Project Manager candidate is required to retake only that portion of the test. If a Project Manager candidate fails a topic area test twice, the candidate may be required to attend training prior to retaking the test.

The Project Manager Qualification Tests cover the Core Processes and Facilitating Processes Knowledge Standards described below.

### ***4.1 Core Processes Knowledge Standards***

Core Processes are project activities that must be performed in the same sequence on most projects, and may be repeated several times during the project. The Core Processes Knowledge Standards identify the minimum competencies that should be possessed by all Commonwealth Project Managers concerning these activities. Ten related competencies are presented under the following headings:

### **4.1.1 Project Initiation and Solution Analysis**

The Project Manager candidate will be able to:

- Ensure that the project has been approved by identifying the project's approved Project/Business Alignment Form, identifying the project's approved Investment Business Case, confirming that the project description matches the description in the Agency IT Strategic Plan, and confirming that the project has received Planning Approval. The candidate must be able to ensure that the Project Charter and Project Proposal accurately reflect information from these sources;
- Apply the CPM methodology for Project Initiation Phase activities to the project, including analysis of the business problem, development of multiple viable solutions; comparison of the solutions, recommendation of a specific solution, and preparation of the project proposal and project charter; and
- Understand how the project charter is used, what project charter approvals are required, and how information in the project charter is used in subsequent phases in the CPM methodology.

### **4.1.2 Cost Benefit Analysis, Return on Investment Analysis, and Earned Value Analysis**

The Project Manager candidate will be able to:

- Determine if a technically viable solution is economically sound and cost effective by selecting an appropriate technique and calculating Cost Benefit and Return on Investment for that potential solution;
- Measure project performance by comparing the project's Earned Value to its Planned Value (for schedule performance) and its Actual Cost (for cost performance); and
- Effectively communicate the results of these analyses through reports or documents providing the data, conclusions, and recommendations.

### **4.1.3 Scope Definition**

The Project Manager candidate will be able to:

- Compose a statement that describes the project scope, given the business problem, business objective, project description, approved project solution, and project constraints. The scope statement will address the "who, what, where, when, and why" of a project and will define the sum of the products and services provided by a project; and
- Use a Work Breakdown Structure to describe the scope of the project's work.

### **4.1.4 Work Breakdown Structure**

The Project Manager candidate will be able to:

- Develop and appropriately display a three-level Work Breakdown Structure; and,
- Understand how to use the Work Breakdown Structure to define the project scope and how the Work Breakdown Structure is used in developing resource, schedule, budget, and performance plans.

### **4.1.5 Organizational Breakdown Structure**

The Project Manager candidate will be able to:

- Develop and appropriately display an Organizational Breakdown Structure; and,
- Understand how to use the Organizational Breakdown Structure to define tasks and assign resources to the project team and its components.

#### **4.1.6 Activity Definition and Sequencing**

The Project Manager candidate will be able to:

- Develop an Activity Definition and Sequencing Worksheet that defines activities and tasks, and puts them in the proper sequence for the project by decomposing the Work Breakdown Structure into manageable parts, given the Agency's environmental factors, the Agency's assets, the project scope statement, and the Project Management Plan;
- Use the decomposed Work Breakdown Structure to develop a project Activity List; and,
- Apply the appropriate diagramming method to identify the relationships and dependencies between project activities, and develop an Activity Definition and Sequencing Worksheet that organizes the activities in the order in which they need to be executed.

#### **4.1.7 Resource Planning**

The Project Manager candidate will be able to:

- Identify needed resources for the project, i.e., the people who possesses the skills required to perform the work (labor resources), as well as the tools, equipment, facilities, and other resources needed by the project team, given the Organizational Breakdown Structure and Work Breakdown Structure; and,
- Develop a Resource Plan that schedules when each needed resource will be utilized, and assigns each resource to a set of activities in the Activity Definition and Sequencing Worksheet.

#### **4.1.8 Schedule Development**

The Project Manager candidate will be able to:

- Develop a project schedule given a Work Breakdown Structure, an Activity Definition and Sequencing Worksheet, and a Resource Plan;
- Understand the impact of additional planning (such as risk planning) on the schedule and how to modify and adjust the schedule during the remainder of the project planning effort; and,
- Understand how to baseline the project schedule.

#### **4.1.9 Budget Planning**

The Project Manager candidate will be able to:

- Develop a project budget given a Project Charter, Project Proposal, Project Schedule, Work Breakdown Structure, an Activity Definition and Sequencing Worksheet, and a Resource Plan;
- Understand the impact of additional planning (such as risk planning) on the budget and how to modify and adjust the budget during the remainder of the project planning effort; and,
- Understand how to baseline the project budget.

#### **4.1.10 Performance Planning**

The Project Manager candidate will be able to:

- Develop a project performance plan that identifies performance goals for each objective and what performance metrics will be used to measure project performance. The performance plan will identify how the measurements will be taken or calculated, when the measurements will be made, and what standard will be used to define successful accomplishment of the performance goals, given a Project Charter, a Project Proposal, a Resource Plan, a Project Schedule, and a Project Budget.
- Define deliverables and establish appropriate acceptance criteria.

### ***4.2 Facilitating Processes Knowledge Standards***

Facilitating Processes are project activities that are performed intermittently throughout the project to support the Core Processes, depending on the nature of the project. The Facilitating Processes Knowledge Standards identify the minimum competencies that should be possessed by all Commonwealth Project Managers concerning Facilitating Process activities. Eight related competencies are presented under the following headings:

#### **4.2.1 Risk Planning**

The Project Manager candidate will be able to:

- Identify and evaluate risk using a standard risk analysis process;
- Prioritize risk based on probability of occurrence and impact;
- Develop mitigation strategies and identify changes that can be made in the project plan to decrease the probability of risk occurrence or impact;
- Estimate risk mitigation cost; and,
- Develop input to the project budget related to mitigation or contingency funding.

#### **4.2.2 Communications Planning**

The Project Manager candidate will be able to:

- Conduct an analysis of stakeholder information needs; and,
- Develop a communications plan to meet stakeholder information needs that identifies how information is obtained, presented, and delivered, who will perform specific communication tasks, and how the project will retain and dispose of project records.

#### **4.2.3 Quality Management Planning**

The Project Manager candidate will be able to:

- Understand the purpose and principles of quality management;
- Differentiate between product testing, project audits, and independent verification and validation; and,
- Develop a quality management plan that provides an overview, a schedule, responsibilities, and resources for product testing, project audits, and independent verification and validation.

#### **4.2.4 Procurement Planning**

The Project Manager candidate will be able to:

- Understand the requirements for documenting procurements that are a part of a Commonwealth IT project;
- Identify the different methods the Commonwealth uses for procuring products, goods, and services (such as Invitations for Bid and Requests for Proposal);
- Identify the most appropriate method for procuring a given product, good, or service;
- Develop a schedule of procurement activities; and,
- Integrate the procurement schedule with the project schedule.

#### **4.2.5 Change Control and Configuration Management**

The Project Manager candidate will be able to:

- Understand the purpose of change control and configuration management;
- Identify items that should be placed under change control or configuration management; and,
- Develop a plan for managing and documenting change, including a defined process for change control and configuration management, item identification, naming and version conventions, storage and handling, and assignment of individual responsibilities.

#### **4.2.6 Project Execution and Control**

The Project Manager candidate will be able to:

- Understand the responsibilities of a Project Manager during project execution;
- Identify key control issues and techniques to manage them; and,
- Use typical measurements and calculations to evaluate project progress.

#### **4.2.7 Project Reporting**

The Project Manager candidate will be able to:

- Analyze the project's risk mitigation and performance status and report on that status;
- Understand the reporting requirements for Commonwealth IT projects; and,
- Develop and present a project status report for stakeholders.

#### **4.2.8 Project Closeout**

The Project Manager candidate will be able to:

- Identify the tasks that are required of all Commonwealth IT Projects during the CPM Project Closeout Phase;
- Develop a Closeout Report that communicates project closeout activities, including verification of Project Sponsor acceptance of project deliverables, establishment of operational products or services, confirmation that the project has satisfied the project purpose described in the Project Charter, and documentation of lessons learned or best practices; and,
- Conduct a post implementation review and report on the findings.

## 5. PROJECT MANAGER SELECTION

Selecting a Project Manager well-suited to manage an IT project is the most important action a Project Sponsor can take to ensure the IT project's success. In some cases, the Project Sponsor will temporarily assign a Project Manager to an IT project prior to the beginning of the Project Initiation Phase. The temporary Project Manager may subsequently manage the entire project; however, a Project Manager is not *officially* selected for an IT project until the Project Manager Selection steps outlined below are complete.

Qualification and selection of a Project Manager is required prior to the submission of the Project Charter and supporting documents seeking Project Initiation Approval.

The Project Manager must be either an employee of the Commonwealth or a consultant employed by the Commonwealth and qualified in accordance with the Project Manager Selection and Training Standard. The level of that qualification will vary by Project Category.

### ***5.1 Identify Project Manager Capabilities Needed for a Successful Project***

Based on the information gathered in the Investment Business Case, Project Business Alignment form and the CPGA Pre-Select Investment Analysis, the Project Sponsor documents the behavior, skills, training, and experience that will be needed to successfully manage the project in a job description.

### ***5.2 Form a Project Manager Candidate Pool***

The Project Sponsor takes the following steps to form a pool of Project Manager candidates from which the Project Manager will be selected.

1. **Collect Candidates**—The Project Sponsor collects a list of qualified Project Manager candidates whose behavior, skill, training, and experience potentially meet or exceed the requirements documented in the job description. The Project Sponsor may list only agency Project Managers if those Project Managers are considered qualified candidates. Candidate qualification and references must be checked.
2. **Form Candidate Pool**—The Project Sponsor reduces the number of Project Manager candidates to only those qualified Project Managers who give the project an excellent opportunity for success. The Project Sponsor may form the Project Manager Candidate Pool using only agency Project Managers who are considered qualified candidates.

If a Project Manager is temporarily assigned to the project, and is in the Project Manager candidate pool, the temporary Project Manager may not manage this step.

### ***5.3 Interview Project Manager Candidates***

The Project Sponsor will interview the candidates in the Project Manager Candidate Pool. The interview questions should be designed to identify which candidate gives the project its best opportunity for success. If confidential project information must be shared with the candidate in order to conduct an effective interview, the candidate must sign a non-disclosure agreement.

All key project stakeholders should have an opportunity to participate in the interview process. The PMD Project Management Specialist assigned to the agency must be notified of any interview with a Project Manager who will be assigned to a Category 1, 2 or 3 IT Project. The PMD Project Management Specialist assigned to the agency must participate in candidate interviews in order to confirm the Project Manager's qualifications, and to better support the Project Manager once they are selected.

If a Project Manager is temporarily assigned to the project, and is in the Project Manager Candidate Pool, the temporary Project Manager may not participate in this step as an interviewer.

#### ***5.4 Select a Project Manager***

Based on the behavior, skill, training, and experience of the interviewed candidates, the quality of the candidates' references, and the results from the candidate interviews, the Project Sponsor selects the qualified Project Manager that gives the project the best opportunity for success. For Category 1, 2 or 3 IT Projects, the CIO must approve the selection of the Project Manager.

If a Project Manager is temporarily assigned to the project, and is in the Project Manager candidate pool, the temporary Project Manager may manage the selection process.

#### ***5.5 Receive Project Manager Selection Approval***

The Project Manager is appointed by the Project Sponsor and approved by the Secretary of Technology or the Chief Information Officer, who approves that selection as part of Project Initiation Approval.

Once the Project Manager selection is approved, the Project Sponsor ends the Project Manager Selection process and facilitates the transition of the Project Manager into the assigned project management role.