COMMONWEALTH OF VIRGINIA

Information Technology Resource Management (ITRM)

INFORMATION TECHNOLOGY (IT)
PROGRAM MANAGEMENT STANDARD

Virginia Information Technologies Agency (VITA)

Comparison of Projects and Programs

Projects	Programs
•Small, simple structure •Typical: Executive Sponsor & Project Manager	•Multiple program roles, including an Executive Sponsor, Steering Committee & Program Manager •Multiple Project Managers
•Leadership & Governance relatively tactical, •Centered around delivery of some set of components	•Leadership & Governance is strategic •Program is typically linked to the organizational strategy •Focus is delivering business benefits
•Size: Small, in terms of people and funding	•Size: Large, in terms of people and funding
•Single work plan and schedule encompasses entire body of work & major milestones for the whole project	•Planning encompasses entire program; it is “layered” and linked across multiple component project dependencies

Source: Gartner, May 2010

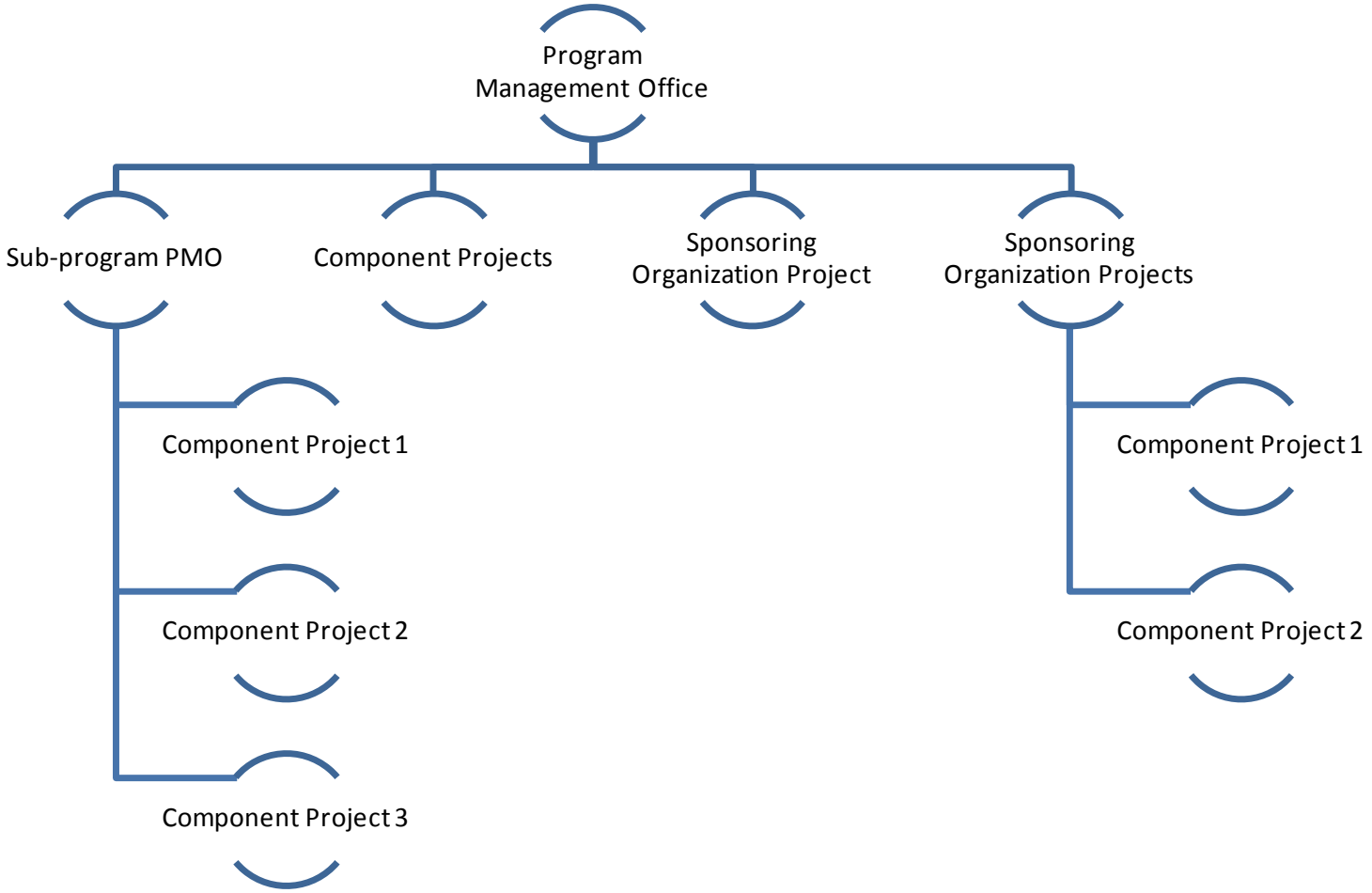
Definition of an IT Program

- The **coordinated** planning, management and execution of a
  - group of **related IT projects**
  - organized within a **common management structure** to
  - **achieve** specific organizational **goals** and **benefits**
  - not attainable by managing the projects **individually**.
- Programs may include elements of related work outside of the scope of the component projects.

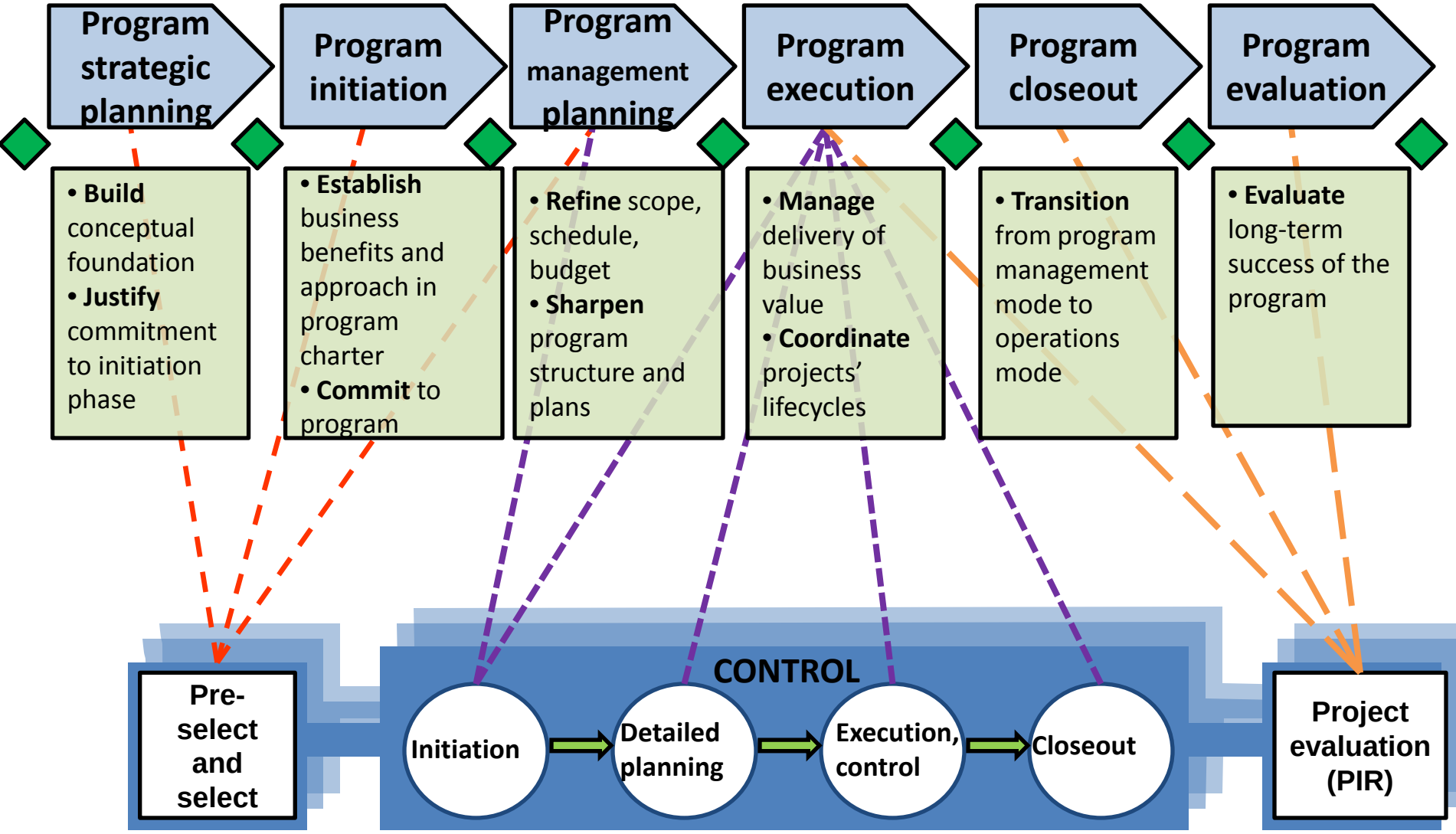
Tip: A program is **NOT** simply an overly large project!

(derived from PMBOK 4th EDITION and Gartner)

Program and Project-level Entities



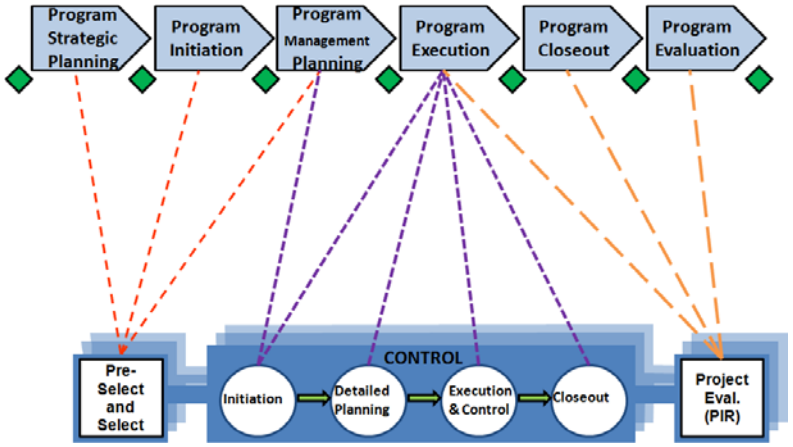
IT Program Lifecycle



Component projects lifecycle

The PgM Standard Describes Each Phase

- Purpose of the phase
- Phase start status
- Phase objective
- Inputs
- Activities
- Outputs
- Phase end status
- Documentation requirements
  - CTP
  - Supplementary documentation
- Approval hierarchy



Program Strategic Planning

Agency/Secretary Strategic Plan & ITSP

PROGRAM ACTIVITIES
- Road Map
- Business Justification
- Alignment
- ID Component Projects

DELIVERABLES (*artifacts*)
- Program Inclusion in ITSP
- Program Investment Business Case
- Component Projects IBCs
  - (can start as early as this phase – IPP or IBC)

Program IBC (or possibly IPP)

IT Program Documentation Requirements

Program Strategic Planning

Program Document	Use of Commonwealth Technology Portfolio (CTP) form*	Notes	Potentially Consolidate Project Documentation at Program Level?
REQUIRED: Project Business Alignment	Mandatory. Fill out form completely.	Complete form as much as possible; additional detail should be captured as needed in the uploaded Program Investment Business Case document from template.	No, however much of the alignment and justification for a component project can be referenced from the Program level.
REQUIRED: Project Business Alignment Biennium Funding	Mandatory. Fill out form completely.	Complete form as much as possible; additional detail should be captured as needed in the uploaded Program Investment Business Case document from template.	No, however much of the alignment and justification for a component project can be referenced from the Program level.
REQUIRED: CPGA Pre-Select Risk/Complexity Assessment	Mandatory. Fill out form completely.	IT Programs will not be subject to CPGA categories; however this assessment will be useful to begin planning for risk and complexity.	No
REQUIRED: CPGA Investment Business Case	Mandatory. Fill out form completely; capture approvals in CTP	As needed, upload additional IBC documentation from template into CTP; capture additional approvals per PgM Roles Matrix.	No, however much of the alignment and justification for a component project can be referenced from the Program level.
REQUIRED: CPGA PMD Project Evaluation	Required; passing score = 49	PMD internal form.	No
REQUIRED: PMD Recommendation & Approval – Strategic Planning	Required	PMD internal form.	No
	* Use the existing CTP "project" form to document "program" information.	The green boxes denote where approvals are captured.	

Program Initiation

Program IBC

PROGRAM ACTIVITIES

- Establish Program Governance Framework
- Establish Program Management Office
- Establish QRCC
- Next Level – Plans and Planning
- Next Level – ID Component Projects
- Establish dependable funding approach / sourc(es)

DELIVERABLES (*artifacts*)

- Program Charter
- Component Projects IBCs (IPP or IBC)

Program PIA (Program Initiation Approval)

IT Program Documentation Requirements

Program Initiation

Program Document	Use of Commonwealth Technology Portfolio (CTP) form*	Notes	Potentially Consolidate Project Documentation at Program Level?
REQUIRED: Business Case & Alternatives Analysis (BCAA)	Mandatory, but Partial: Enter vital information only; upload supplemental documentation as necessary.	Incorporate general BCAA analysis into Program Charter	No, however much of the business case and alternatives analysis for a project can be referenced from the Program level.
REQUIRED: Cost/ Benefit Analysis	Mandatory, but Partial: Enter vital information only; upload supplemental documentation as necessary.	Incorporate general CBA analysis into Program Charter.	No, however much of the cost and benefit analysis for a project can be referenced from the Program level.
***(Optional):* Project Manager Qualification Form**	Optional	Incorporate Program Manager background/qualifications discussion into Program Charter.	No
REQUIRED: CPGA Project Initiation Approval Risk / Complexity	Mandatory. Fill out form completely.	IT Programs will not be subject to CPGA categories; however this assessment will be useful to begin planning for risk and complexity.	No
REQUIRED: CPGA Charter, with Program Org. Chart	Mandatory, but Partial: Enter vital information only; upload supplemental documentation as necessary. Capture approvals in CTP, and…	Create Program Charter document from template and upload into CTP; capture additional approvals per PgM Roles Matrix.	No, however significant sections of the Project Charter can simply refer to the Program Charter.
REQUIRED: Balanced Scorecard	Required; Modified Delphi	PMD will use the Balanced Scorecard to explore and support a recommendation for CIO approval.	No
	* Use the existing CTP "project" form to document "program" information.	The green boxes denote where approvals are captured.	

Program Management Planning

Program PIA (Program Initiation Approval)

PROGRAM ACTIVITIES

- Discovery
- Refine scope, schedule, and budget
- Create detailed management plans
- Initiate component projects
- Program IV&V - ?

DELIVERABLES (*artifacts*)

- Program Management Plan
- Supporting Management Plans
  - Risk
  - Change Control
  - Quality
  - OCM & Communications

PMP Approval

IT Program Documentation Requirements

Program Management Planning

Program Document	Use of Commonwealth Technology Portfolio (CTP) form*	Notes	Potentially Consolidate Project Documentation at Program Level?
REQUIRED: Post Implementation Review Plan (PIR)	No CTP form exists; the preferred method is to include this topic in the PMP.	Elaborate on program scope & business objectives as part of the Program Management Plan (PMP). Break down Program Business Objectives into project "chunks"; expectation is that each project then breaks it down further; Program manages business value delivered by each project. Describe scope management; benefits realization plan which will be found in the PIR.	No; however each component project should be able to show how its scope and objectives trace back to the overarching program scope and objectives.
REQUIRED: Program Governance and Quality Management Plan (GQM)	Do not use CTP Quality Management form; instead…	Create Program Governance and Quality Management Plan from template; use and upload to CTP.	Yes; Defer to Program-level Plan for governance, IV&V and audit info; each project still needs to develop a test plan (see 2nd tab of CTP form). Plus, the project IAOC may deem it necessary for additional IV&Vs.
REQUIRED: Change & Configuration Management Plan (CCM)	Do not use CTP Change and Configuration Management form; instead…	Create Program Change and Configuration Management Plan from template; use and upload to CTP.	Yes; Enter applicable configuration management information (see 2nd tab of CTP form); projects must still manage their own system configuration, (such as version control) but the scope, schedule, and budget baseline change plan exists at the Program level.
REQUIRED: Communication Management Plan (COMM)	Do not use CTP Communication Plan form; instead…	Create Program Communication Management Plan from template; use and upload to CTP.	Yes; There may be communication tasks assigned at the project level.

IT Program Documentation Requirements

Program Management Planning

Program Document	Use of Commonwealth Technology Portfolio (CTP) form*	Notes	Potentially Consolidate Project Documentation at Program Level?
REQUIRED: Risks and Issues Management Plan (R&I)	Do not use CTP Risk Plan form; instead…	Create Program Risk and Issue Management Plan from template; use and upload to CTP.	Yes; Leverage Program-level artifact; there may be risk management tasks assigned at the project level, i.e., projects must still maintain a risk log.
REQUIRED: Program Architecture Plan (ARC)	No CTP form exists; the preferred method is to include this topic in the PMP.	Create Program System Architecture Plan (includes Solution architecture, security plan and data plan) from template; use and upload to CTP.	Yes; however this is currently not a required document for projects.
***(Optional):* Work Breakdown Structure**	No CTP form exists; the preferred method is to include this topic in the PMP.	Optional as part of the Program Management Plan (PMP). At Program level, something like a WBS may help identify work products and effort at the Program level.	No
***(Optional):* Organization Work Breakdown Structure**	No CTP form exists; the preferred method is to include this topic in the PMP.	Elaborate on program roster, roles, responsibilities and resource allocation as part of the Program Management Plan (PMP). If the PMO is centrally managing the organizational resources, the PMO needs a plan; else, the component projects will manage each of their WBS; something like an OBS may help identify resource constraints at the Program level.	No
REQUIRED: Resource Management Plan (RM)	Do not use CTP Resource Plan form; instead…	Elaborate on program resource analysis and requirements as part of the Program Management Plan (PMP).	No

Program Management Planning

Program Document	Use of Commonwealth Technology Portfolio (CTP) form*	Notes	Potentially Consolidate Project Documentation at Program Level?
(As needed): **Procurement Plan (PRO)**	Optional; preferred method is to include this topic in the PMP.	Elaborate on program procurements as part of the Program Management Plan (PMP).	Yes
(Optional): **Activity Definition & Sequencing Worksheet (AD&SW)**	No CTP form exists; the preferred method is to include this topic in the PMP.	Incorporate this as part of the Program Management Plan (PMP). Something like an AD&SW may help identify project dependencies at the Program level.	No
REQUIRED: Program Implementation and Transition to Operations Management Plan (IMP)	No CTP form exists; the preferred method is to include this topic in the PMP.	Include this topic as part of the Program Management Plan (PMP); use template.	Yes
REQUIRED: Organizational Change Management Plan (OCM)	No CTP form exists; the preferred method is to include this topic in the PMP.	Create Program OCM Plan; (optional use of OCM template on PMD website) and upload to CTP.	Yes; Defer to Program-level plan; there may be OCM tasks assigned at the project level.
	* Use the existing CTP "project" form to document "program" information.	The green boxes denote where approvals are captured.	

IT Program Documentation Requirements

Program Management Planning

Program Document	Use of Commonwealth Technology Portfolio (CTP) form*	Notes	Potentially Consolidate Project Documentation at Program Level?
REQUIRED: Program Financial Management Plan (BDGT)	Mandatory use of CTP Budget Plan form. Upload supplemental documentation as necessary.	Include refined baseline Program Financial Management Plan as part of the Program Management Plan (PMP); maintain budget changes in CTP.	No
REQUIRED: CPGA Project Plan	Mandatory; Complete program 'vital statistic' information in CTP, capture PMD approval in CTP, and…	**Create Program Management Plan (PMP)** from template. Capture additional approvals per PgM Roles Matrix.	No
REQUIRED: CPGA Planning Risk / Complexity Assessment	Mandatory. Fill out form completely.	IT Programs will not be subject to CPGA categories; however this assessment will be useful for assessing risk and complexity.	No
REQUIRED: Change Control Request	Do not use CTP form; instead…	Create Program Change Control Log; use Decision Papers uploaded to CTP. Capture approvals per PgM Roles Matrix.	No
REQUIRED: Project Oversight Plan	Required	PMD internal form.	No
	* Use the existing CTP "project" form to document "program" information.	The green boxes denote where approvals are captured.	

Program Execution

PMP Approval

PROGRAM ACTIVITIES
- Iterative deliveries of component projects*
- Phase/stage **reviews**
- Steering/sponsor direction
- Plans adjustments
- Exercise Change Control & QRCC

DELIVERABLES (*artifacts*)
- Deliveries of component projects
- Program decision papers / Change control
- Program communications
- Program management artifacts
  - Status reports
  - Risks/issues

Final Project Closeout Report Approval

*Projects **initiate**, **execute**, and **closeout** throughout this phase.

IT Program Documentation Requirements

Program Execution

Program Document	Use of Commonwealth Technology Portfolio (CTP) form*	Notes	Potentially Consolidate Project Documentation at Program Level?
REQUIRED: Program Independent Verification & Validation (IV&V) Report	No CTP form exists.	See Program Management Standard for IV&V requirements.	Projects have latitude to be included in Program IV&V, or as needed, to purchase additional, individual IV&V reviews.
REQUIRED: Issue Log	Do not use CTP form; instead…	Create Program Issue Log; use and upload to CTP or other program repository.	Yes; Projects should leverage Program-level Issues Log as appropriate.
REQUIRED: Status Report	Mandatory; Complete program status in CTP, capture approvals in CTP, and…	See Program Management Standard for Program Reporting requirements. A supplemental Program status report may also be used and uploaded into CTP. Capture additional approvals per PgM Roles Matrix.	No
REQUIRED: Change Control Request	Do not use CTP form; instead…	Create Program Change Control Log; use Decision Papers uploaded to CTP. Capture approvals per PgM Roles Matrix.	No
***(Optional):* CPGA O&M Costs Estimate**	Mandatory, but Partial: Enter vital information only; upload supplemental documentation as necessary.	Be careful not to "double count" O&M estimates - since this is a required form for each component project.	Yes; however, do not "double count" O&M estimates - this is a required form for each component project.
	* Use the existing CTP "project" form to document "program" information.	The green boxes denote where approvals are captured.	

Program IV&V Reviews

Requirements:

- First IV&V within 6 months of Program Initiation Approval (PIA)
  - Program might not yet be in Execution Phase
- IV&V should occur every 6 months following the first review until the program's completion
- Review schedule flexible (reviews can be moved to coincide with different phase completions)

Program IV&V reviews ***could*** satisfy component project IV&V requirements ***if*** the review is ***top-to-bottom***, and the POC approves.

Program Closeout

Final Project Closeout Report Approval

PROGRAM ACTIVITIES

- Transition strategy and planning
- Training and mentoring
- Transition execution
- Warranty support

DELIVERABLES (*artifacts*)

- Project Closeout Reports
- Program Closeout Report

Program Closeout Report Approval

Program Closeout			
Program Document	**Use of Commonwealth Technology Portfolio (CTP) form***	**Notes**	**Potentially Consolidate Project Documentation at Program Level?**
REQUIRED: Project Closeout Report	Mandatory; Complete program 'vital statistic' information in CTP, capture approvals in CTP, and…	As necessary, upload supplemental information into CTP and capture additional approvals per PgM Roles Matrix.	No
	* Use the existing CTP "project" form to document "program" information.	The green boxes denote where approvals are captured.	

Program Evaluation

Program Closeout Report Approval

PROGRAM ACTIVITIES
- Conduct interviews and analysis
- Program research
- Draw conclusions
- Make recommendations

DELIVERABLES (*artifacts*)
- Post Implementation Review
- As appropriate, component projects' PIR requirements may be consolidated into the Program PIR

Ongoing Assessment of Business Value & Needs

Program Evaluation			
Program Document	**Use of Commonwealth Technology Portfolio (CTP) form**	**Notes**	**Potentially Consolidate Project Documentation at Program Level?**
REQUIRED: Post Implementation Review	No CTP form exists; instead…	Create Post Implementation Review report; upload to CTP. Capture approvals per PgM Roles Matrix.	Yes
		The green boxes denote where approvals are captured.	

IT Programs: Approval Hierarchy/Sequence

Approvals are numbered in sequence.

(See Notes below)	Component Project Manager	Agency Project IAOC	Agency IT Rep. (AITR)	Agenc(ies) Head	Program PMO[1]	VITA PMD Recommend-ation	Lead POC / SOC	CIO	SoTech
Program Strategic Planning									
Program Investment Business Case			1	2	3[2]	4[3]	5	6	7
Program Initiation									
Program Charter Approval (PIA)				2[4]	1[4]	3	4	5	6
Component Project Selection (IBC)			1	2	3[4]	4[3]	5	6	
Program Management Planning									
Program Management Plan (PMP)				2[4]	1	3	4	5	
Program Execution									
Component Project Charter Approval (PIA)	Per Project Mgt. Standard			1[5]	2[x]	3	4	5	6[6]
Detailed (Component) Project Plan	Per Project Mgt. Standard				2[x]	1			
Program Execution: Status Report					1	2	3	4	5
Component Project Status Report	Per Project Mgt. Standard				1[x]	2	3[x]	4	5
Program Execution: Change Control					1[7]	2	3	4	5
Component Project Change Control	Per Project Mgt. Standard				1[x]	2	3	4	
Program Closeout Report									
Program Closeout Report				2[4]	1	3	4	5	6
Project Closeout Report	Per Project Mgt. Standard				1	2	3	4	5[8]
Program Evaluation									
Program Evaluation (PIR)					1[9]	2[x]	3[4]	4	5
Component Project	Per Project Mgt. Standard				1[9]	2[x]	3[4]		

Program PMO Deliverables

- Program Strategic Planning
  - Program Investment Business Case
  - Establish Program in Agency/Secretariat IT Strategic Plan
- Program Initiation
  - Program Charter
  - Component Projects IBCs (IPP or IBC)
- Program Management Planning
  - Program Management Plan
  - Supporting Management Plans:
    - Risk / Change Control / Quality
    - Organizational Change Management / Communications

Program PMO Deliverables

- Program Execution
  - Decision Papers, Program Change Control Log
  - Status Reports
  - Project Charters, Statuses, Closeout Reports
  - Risk, Issues, Budget, Schedule Management
  - IV&V Reports
- Program Closeout
  - Transition to O&M Plan
  - Program Closeout Report
- Program Evaluation
  - Program Post-Implementation Review

IT Program Roles & Responsibilities

- See IT Program Standard:

- Program Oversight Committee (POC)
- Internal Agency Oversight Committee (IAOC)
- Organizational Change Manager (OCM)
- Program Management Office (PMO)
- Program Sponsor
- Program Manager

- Approval Hierarchies

Independent Verification & Validation

- In an effort to reduce unnecessary duplication and leverage the IT Program Management framework, the following represent the minimum IV&V requirements for a Program:
- At a minimum, the IT Program must conduct one IV&V review within six months of obtaining PIA.
- Thereafter, the IT Program must conduct in-process IV&V reviews every six months for the duration of the Program.
- By utilizing a Program IV&V, the reviews * may * satisfy the IV&V requirements for each of the Component Projects if all of the following conditions apply:
  - The Program IV&V is designed to be comprehensive, covering a) the IT Program, as well as b) each of the component projects that are eligible for IV&V review (see the COV ITRM PM Standard for IV&V requirements for active projects).
  - The Program IV&V is designed to usually coincide with significant program phases.
  - The POC and the project IAOC approve this approach.
- Agencies, project IAOC's, and POC's may choose to purchase additional IV&V of the reviews as desired.

Program Management Standard - Project Management Standard -

- For component projects within a program…
- **All** of the VITA Project Management Standard requirements …
  - Required procedures
  - Required governance
  - Required documentation

  … still apply; (no changes to standard required) however…
- Some project-level documentation can be **consolidated** at the program level that can **satisfy** certain project-level requirements
- Reduces the administrative burden on the IT project manager