



Department of Education Enterprise Program Management Review (EPMR) Framework

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Table of Contents

1	PURPOSE	4
2	AUTHORITIES	4
3	OBJECTIVES.....	4
4	SCOPE.....	5
5	EPMR FRAMEWORK.....	5
6	KEY EPMR ROLES AND RESPONSIBILITIES.....	6
7	EPMR PHASES	7
7.1	BUSINESS NEED PHASE.....	7
	7.1.1 Purpose.....	8
	7.1.2 Key Steps / Actions	8
	7.2 Planning Phase	9
	7.2.1 Purpose.....	9
	7.2.2 Key Steps / Actions	9
	7.3 Sprint & Staging Phase	11
	7.3.1 Purpose.....	11
	7.3.2 Key Steps / Actions	12
	7.4 Operations and Maintenance (O&M) Phase.....	13
	7.4.1 Purpose.....	13
	7.4.2 Key Steps / Actions	13
	7.5 Retirement.....	14
	7.5.1 Purpose.....	14
	7.5.2 Key Steps / Actions	15
	APPENDIX A: GLOSSARY	16
	APPENDIX B: EPMR CHECKLIST.....	20
	APPENDIX C: EPMR USE CASE SCENARIO PROCESS FLOW	25
	APPENDIX D: PROJECT TAILORING PLAN AGREEMENT.....	26
	APPENDIX E: EPMR LIFE CYCLE MANAGEMENT GRAPHICS	27
	APPENDIX F: FEDERAL LEGISLATION, REQUIREMENTS & GUIDANCE FOR INVESTMENT MANAGEMENT.....	33
	APPENDIX G: REFERENCE DOCUMENTS.....	34

1 Purpose

The Enterprise Program Management Review Framework (EPMR) serves as the Department of Education's (ED) Systems Development Life Cycle (SDLC) process for integrated management oversight of Information Technology (IT) investments and projects. Along with Capital Planning and Investment Control (CPIC), EPMR makes up ED's approach to IT Investment Management (ITIM) to provide the Department's overarching IT governance structure that delivers management oversight, helps reduce risks, and improves the successful delivery of IT projects.

The Office of the Chief Information Officer's (OCIO) Enterprise Project Management Branch (EPMB) manages EPMR on behalf of the Chief Information Officer (CIO). The EPMR fulfills requirements of the Federal Information Technology Acquisition Reform Act (FITARA) regarding the CIO's role in planning and program management of IT resources throughout its life cycle. EPMR is ED's authoritative framework used to promote integrated management oversight among stakeholder communities responsible for initiating, reviewing, approving, and monitoring IT investments and projects. The EPMR sets forth requirements and methodologies to guide Program/Project Managers (PMs) in the planning and delivery of the IT projects that deliver systems and services to support ED's business missions.

The EPMR is not intended to convey prescriptive (step-by-step) project management processes, but rather provides a tailorable life cycle management framework consisting of project management concepts that aid PMs in reducing risks and increasing the probability of IT project success. The EPMR is rooted in the Agile project management methodology that provides for the development and delivery of IT systems and services using an incremental development approach that supports delivery within six months.

EPMR fulfills the requirements of ACS Directive OCIO 1-106 Lifecycle Management Framework.

2 Authorities

The authorities for establishing the EPMR governance and associated processes include, but are not limited to, the following:

- Office of Management and Budget (OMB) Circulars A-11 and A-130,
- The Federal Information Security Modernization Act,
- The FITARA Act of 2014,
- The Clinger-Cohen Act of 1996,
- The Government Performance and Results Modernization Act of 2010.

3 Objectives

The EPMR is established to meet the following objectives:

- Provide a comprehensive and effective methodology to guide IT program and project management;

- Promote and support the timely, effective, multi-disciplinary review of IT projects using proven project management principles, techniques, and industry best practices to deliver IT systems or services in a cost-effective manner;
- Enhance the IT governance process through the integration of life cycle management and CPIC requirements associated with ED’s ITIM process; and,
- Ensure compliance with laws and regulations that were promulgated for the improvement of the IT investments and governance.

4 Scope

EPMR applies to all ED Principal Offices (PO). Organizations conducting business for and on behalf of ED through contractual relationships must utilize EPMR or a similar life cycle management construct that aligns with EPMR management oversight processes for phase gate review and approvals.

EPMR applies to all new projects/investments defined as IT solutions or services that are not part of the current inventory and deemed necessary to address a business need or strategic priority of the Department. It also applies to IT modernizations that are defined as systems or services that reside in the IT inventory and are being enhanced to change the form, fit, or function of the investment to deliver improved services. However, it does not apply to routine maintenance (e.g., patches, appropriate versioning or minor enhancements) that do not fall within the context of these definitions.

5 EPMR Framework

The EPMR consists of five phases and supports IT governance through time-phased, structured processes that enable CIO involvement in planning and program management activities during critical life cycle phases of IT projects. It establishes entry and exit criteria for phase gate reviews designed to monitor cost, schedule, technical and performance risks, and gauge the readiness of IT projects to move to various phases of a life cycle prior to delivery of an IT solution. The reviews and approvals embedded in this process are designed to be issue and data focused to assess a project’s readiness to proceed to the next phase and ensure expected outcomes can be achieved.

EPMR complements the CPIC process to provide oversight and controls around the delivery of IT projects that are approved by the Investment Review Board (IRB) as valid business needs. Because EPMR incorporates many CIO and Chief Executive Officer (CXO) functions, it aids in the full implementation of FITARA’s accountability, governance, guidance, and oversight and enables the CIO to regularly engage with PMs and to ensure IT resources are effectively managed across IT investments.

The EPMR phases are listed below:



A detailed description of the EPMR methodology for each phase is provided in Section 7. A visual representation of the methodology can be found in [Appendix E](#), which shows the key stakeholder communities responsible for initiating, reviewing, approving, and monitoring IT projects. Additional [EPMR Guidance](#) can be found on the IT Project Management site on connectED.

EPMR facilitates a standardized approach for project management by providing consistent, repeatable, and mature processes for managing Department IT project delivery through the incorporation of the following:

- Five standard life cycle phases and associated deliverables that can be tailored to fit the needs of specific projects;
- Phase gate reviews and entry/exit criteria to evaluate progress against expected outcomes;
- Incremental/modular development practices that produce useable functionality within six-month intervals;
- IT project management standards to meet cost, schedule, and performance baselines and to reduce risks; and,
- Timely review and reporting on a project’s progress and operational performance throughout the life cycle.

6 Key EPMR Roles and Responsibilities

The key roles and responsibilities within the EPMR are described below:

- **Program/Project Manager (PM)** – The PM is responsible for project or program performance in relation to approved cost, schedule, and performance baselines. The PM maintains information related to project status, control, performance, and risks. PMs are engaged throughout the project life cycle to ensure the project is executing according to established or agreed upon outcomes.
- **Business Owner (BO)** – The BO is responsible for identifying the business needs and performance outcomes/asures of an IT project; obtaining funding for the IT project; and validating that the IT project initially meets, and continues to meet, business requirements.
- **Investment Acquisition Management Branch (IAMB)** – The IAMB, previously Investment Acquisition Management Team, facilitates overarching management and governance of the Department’s IT portfolio, and serves as the entry point for IT business needs entering the EPMR Framework.
- **Enterprise Project Management Office (EPMO)** – The EPMO is overseen by the EPMB and is responsible for establishing enterprise-wide project management principles, standards and templates to assist PMs in navigating EPMR. The EPMO reviews project artifacts to ensure they meet agreed-upon requirements and provided information to inform IT project phase gate decision reviews by the CIO or designee.
- **Enterprise Investment Management Board (EIMB)** – The EIMB is a cross-functional governance board of senior level subject matter experts (SME) (Enterprise Architecture (EA), investment management, program management, information assurance, privacy, records management, IT operations, Section 508 compliance, acquisitions, budget, and, where necessary, human capital management) responsible for conducting the initial review

and evaluation of IT business proposals to assess the validity of IT business needs. It also supports the internal planning processes for how the agency uses IT resources to achieve its objectives. The EIMB works with the IAMB and BOs to ensure proposed technology requests align with departmental and PO mission capabilities, plans and strategic priorities. The EIMB helps educate BOs on information needed to populate forthcoming business cases, acquisition, hosting and records management, strategies, etc.

- Enterprise Review Board (ERB)** – The Enterprise Review Board (ERB) consists of technical SMEs that support EPMR by providing oversight for IT projects through agreed upon milestones, and / or phase-gate reviews. The ERB provides more technical than business considerations and furthers the EIMB’s efforts by bridging the gap from the initial assessment of business needs to assisting PMs navigate technology development and delivery stages of project management. As such, the ERB assists with evaluation / analysis of proposed technologies to inform decisions on hosting, security, integration and other considerations to help acquire and implement IT resources that best meet business needs. The ERB is responsible for performing time-sensitive program management reviews, such as milestone, technical, and production readiness reviews. In this capacity, the board provides approval authority for IT project phase gate reviews on behalf of the CIO and conducts performance management and readiness reviews to ensure projects are prepared to enter and exit appropriate phase gates. The ERB provides technical guidance as needed to help ensure projects are proceeding according to plan; address issues related to requirements, cost, schedule, scope, and performance; or mitigate risks. The ERB also supports the CIO recommendation(s) to the IRB regarding the modification, termination, or pause of IT projects or initiatives.
- Planning and Investment Review Working Group (PIRWG)** – The PIRWG’s role in the EPMR is to review the EIMB recommendations and associated business needs. Based on these reviews, the PIRWG provides recommendations through the CIO to the IRB for business need approval and associated funding.
- Investment Review Board (IRB)** – The IRB is the Department’s senior executive governance body for management and oversight of IT investments. The IRB is responsible for reviewing and approving all IT investments and for assessing their performance in relation to cost, schedule, and business needs. Thus, the IRB determines whether a project is funded and should continue through the IT project life cycle. The IRB determines the level of management oversight required (e.g., at the local level by the PO, or at the enterprise level by the EPMO).

7 EPMR Phases

7.1 Business Need Phase



7.1.1 Purpose

The Business Need Phase coincides with the CPIC Pre-Select Phase, where new investment/project proposals are assessed for entry into the IT Portfolio. The purpose of this phase is to review and validate business needs for potential technology solutions prior to soliciting contract support (e.g., Request for Proposal, Statement of Work, Statement of Objectives) that may result in the Government entering into contract agreements. During this phase, a Business Needs Statement developed by the BO undergoes a series of reviews. These reviews help determine if the proposed need is valid, the best approach for solutioning the need, e.g. whether it can be met by an existing technology solution or through changes to current business processes, and whether funding is required.

Detailed information on this phase is available in the “IT Governance and Investment Management Guidance Supplement: Capital Planning and Investment Control Process Guide”. Templates for required documents can be found on the [connectED IT Project Management site under the Business Need Phase](#).

7.1.2 Key Steps / Actions

IAMB provides guidance for this phase of the EPMR. Typical activities performed during this phase include:

- **Identification of Need** – The BO identifies the business need or performance gap they wish to address and defines the problem they are attempting to solve via a Business Needs Statement. In practice, quite often the business stakeholders define the solution at the start of the project instead of defining the problem statement first. At this stage of the process, the business need should focus on the problem the business owner wishes to solve and not a technical solution.
- **Business Needs Statement** – The BO completes the Business Needs Statement template and forwards it to IAMB via OCIOIAMT@ed.gov. The Business Needs Statement communicates the problem and provides the EIMB and other stakeholders with sufficient information to understand the need(s) or gap(s) and make an informed decision to invest. The Business Needs Statement should include, but is not limited to:
 - business problem, scope of effort, and expected outcome(s);
 - identification of high-level business and functional requirements;
 - budget rough order of magnitude (ROM) (estimated life cycle cost, collaboratively prepared with support from EIMB);
 - business benefit, and / or return on investment.

The completed Business Needs Statement is used in a later phase to guide the development of the full Business Case. IAMB conducts a preliminary review of the Business Needs Statement to ensure sufficient information is provided to facilitate the EIMB review. BOs should engage the IAMB staff for assistance in understanding the requirements and submission process for the Business Needs Statement.

- **EIMB Review** – The Business Needs Statement is subject to an integrated EIMB review to assess the validity of and justification for the business need. The outcome of the board’s assessment is a recommendation to the PIRWG and CIO on a decision to invest. This review

also serves as a governance support body that provides advice, guidance, and direction to BOs on methods to best address the business need and information required to develop a comprehensive Business Case in the Planning Phase of the EPMR.

- **PIRWG Review** – The PIRWG makes recommendations to the CIO regarding the validity of the business need and prioritizes the selection of business needs that best support the Department’s goals and objectives. The PIRWG plays a significant part in assisting the CIO and IRB to fulfill their role in conducting IT planning, programming, and budgeting management of the enterprise IT portfolio through the assessment of proposed and existing investments, ensuring emerging business requirements are responsive to changing technology trends, and the EA roadmap and associated Segment architectures are consistent with the Department’s strategic direction for IT.
- **CIO Review** – The CIO reviews and evaluates all IT business needs to ensure early alignment of IT with the ED’s strategic objectives. The CIO’s review and evaluation generally takes place as a part of the Department’s quarterly assessment of the IT portfolio but may take place more frequently.
- **IRB Review (*Phase Gate*)** – Proceeding from the Business Need Phase to the Planning Phase requires IRB approval of the Business Needs Statement, which is predicated on recommendations from the EIMB and PIRWG and review by the CIO. The IRB is the ultimate arbiter of the business need and approves or disapproves business proposals. The IRB also determines the categorization of any resultant IT investments (major, standard, and non-major) and designates the level of oversight required.

7.2 Planning Phase



7.2.1 Purpose

The Planning Phase is used to identify the proposed business solution based on an evaluation of an analysis of alternatives. This phase is also where the project scope, business requirements and other key project management activities are defined. The PM and BO should work to identify all activities necessary to determine project staffing, project business and technical requirements etc. Important outputs of this phase include an approved business case, project tailoring plan, acquisition strategy, and a project charter / plan that documents agreed upon outcomes.

Templates for required documents can be found on the [connectED IT Project Management site under the Planning Phase](#).

7.2.2 Key Steps / Actions

The EPMO coordinates the activities for this phase of the EPMR. Typical activities performed during this phase include:

- **Kick-off Meeting** – A kick-off between the EPMO and an integrated project team (IPT) should occur shortly after the business need is approved by the IRB. The purpose of the kickoff meeting is to gain a greater understanding of the project’s scope, acquisition and implementation strategies, key milestones / deliverables / outcomes, and timeline in order to inform project tailoring plan requirements and phase gate readiness review meetings. The kickoff meeting also serves to level-set the PM on documentation and / or artifacts that will be necessary to provide the required level of oversight throughout the project life cycle.
- **Business Case** – A comprehensive Business Case is created by the PM in conjunction with the BO. The Business Case defines the scope, impact, and problem to be solved along with the goals, objectives, and expected outcome(s) of the investment. It should include, but is not limited to, an analysis of alternatives and cost benefit analysis, acquisition plan / strategy, and risk management plan.
- **Project Tailoring Plan** – Recognizing that projects are not one-size-fits-all, tailoring allows EPMR requirements, including phase gate reviews and deliverables, to be modified to fit the project. The Project Tailoring Plan provides for documenting and approving those requirements as an agreed-upon set of project artifacts and management reviews required at particular phases or development stages of the project’s life cycle, as indicated by the complexity (e.g., systems interface requirements) and maturity of the proposed IT solution. The Project Tailoring Plan includes the artifacts required by the ERB to effectively oversee IT projects, which in turn supports the CIO’s objective to apply project oversight in a way that promotes flexibility to expedite the delivery of IT services while applying the rigor needed to reduce or eliminate risks that might preclude a project from delivering according to plan. Tailoring is typically determined by the program’s classification (major, standard, or non-major), the level of oversight required, and development methodology (Waterfall or Agile). The PM is responsible for providing all agreed-upon deliverables identified in the Project Tailoring Plan.
- **Acquisition Planning** – Acquisition planning should adhere to Federal Acquisition Regulation standards and take place once a need is identified, and in advance of the fiscal year in which a contract is expected to be awarded. Acquisition planning should follow the [Acquisition Lifecycle Framework \(ALF\)](#) and be supported and informed by the Office of Acquisition Management (OAM), the Office of Small & Disadvantaged Business Utilization (OSDBU), and legal and technical personnel where applicable, to ensure IT acquisitions comply with security requirements in the Federal Information Security Modernization Act and to ensure timely execution of contract award(s).
- **Acquisition Strategy** – The Acquisition Strategy complements the Acquisition Plan and is a comprehensive document that identifies and describes the acquisition approach that will be followed to manage program risks and meet program objectives. All acquisition strategies that contain IT are reviewed and approved by the CIO, or the EIMB as the designee of the CIO, to ensure that IT resources will support the agency’s strategic objectives, that IT investments appropriately deliver value, and that incremental development principles are followed where appropriate. It defines the relationship between the acquisition phases and work efforts, and key program events such as decision points, reviews, contract awards, test activities, production delivery quantities, and operational deployment objectives. The Acquisition Strategy serves as a program baseline that helps guide program execution across the entire program life cycle and must reflect changes that occur during execution. The strategy should be reviewed and updated at every major milestone or phase gate review when

necessary. Cost, schedule, and system performance (or capability) tradeoffs may also be required, and PMs will need to understand and take risks into account to make informed decisions based on the impact such risks would have on achieving desired outcomes within established cost, schedule, and performance parameters. Therefore, systems engineering plays a key role in both planning and executing this strategy. Changes to the Acquisition Strategy must be communicated to the EPMO, and in cases where a project’s cost, schedule or scope vary greatly (more than 25% over cost, 6 months beyond schedule, or a major change in expected capability delivery) must be approved by the CIO or designee.

- **Project Management Plan and other artifacts** – The PM is responsible for completing the Project Management Plan and any other project artifacts as required by the Project Tailoring Plan. These documents are then provided to the EPMO to facilitate ERB’s technical review and phase gate approval.
- **EPMO Review** – The BO or PM submits all required artifacts, as enumerated in the Project Tailoring Plan, to EPMO. EPMO will ensure that the documentation meets requirements before scheduling the ERB milestone or phase gate reviews. Artifacts must be submitted at least 15 days prior to decision review dates.
- **ERB Review (Phase Gate)** – Proceeding to the Sprint & Staging Phase requires ERB approval. ERB members review project artifacts to determine readiness to proceed to the Sprint & Staging Phase.

7.3 Sprint & Staging Phase



7.3.1 Purpose

The Sprint & Staging Phase is the development and implementation of a project’s work product(s). In product development, a sprint is a set period during which specific work must be completed and made ready for review. A sprint is a dynamic, interactive activity that not only includes traditional development of the product, but also includes iterative design, testing, and evaluation.

The Sprint & Staging Phase is comprised of one or more sprints and one or more releases. Each sprint may include sprint planning, sprint backlog alignment and development, testing, a Sprint demo, and a Sprint retrospective. The BO typically should not make requests for changes during a sprint and only the ScrumMaster or PM has the power to interrupt or stop the sprint. A release is comprised of one or more sprints that can be deployed to either a test/staging or production environment, or both. In order to meet Federal requirements for incremental development for all IT investments, there must be agreed upon functionality deployed to a production or non-production environment, e.g., a test or staging environment, at least once every six months.

Note: It is common for projects to deploy releases to production during operations and maintenance (O&M) while additional future releases are working through the Sprint & Staging Phase as they continue to develop the solution.

More information and templates for required documents can be found on the [connectED IT Project Management site under the Sprint & Staging Phase](#).

7.3.2 Key Steps / Actions

The EPMO provides guidance for this phase of the EPMR.

Sprint activities performed during this phase, following the Agile methodology, may include:

- **Sprint Planning** – Each Sprint should begin with a planning meeting to review the product backlog items and gain clarity on what the BO and PM want the team to forecast and deliver. During planning, clarifying questions should be asked to ensure there is no ambiguity on expected outcomes. At the end of the planning meeting, the team will select a sprint goal. Sprint planning should take into consideration how the product backlog items will be built by decomposing the product backlog items into specific work tasks.
- **Sprint Backlog** – The Product Owner (PO) or Scrum master plans each Sprint, beginning with the development of the Sprint backlog. The Sprint backlog captures and documents the requirements to be included in the Sprint and defines the specific tasks that will be performed by the development team to satisfy the requirements. It is essentially the list of tasks that the core Scrum team needs to complete during the sprint in order to turn a selected set of product backlog items into a deliverable increment of functionality. Once the Sprint backlog has been determined, product development can begin. During a sprint, new tasks may be discovered, or existing tasks may be adjusted. However, the EPMO should be kept abreast of major changes that would significantly impact cost, schedule and performance parameters.
- **Sprint Release** – Sprints typically last for 30 days. Releases are required to occur in accordance with the project schedule. Based on OMB requirements, there should be at least one delivery of usable functionality every six months.
- **Sprint Retrospective** – The Sprint Retrospective is an opportunity for the Scrum Team to inspect its work and create a plan for improvements to be enacted during the next Sprint. This occurs after the Sprint is completed and prior to the next Sprint Planning session. EPMO oversight may be required at this stage in the process to ensure deliverables are proceeding according to plans. Touch points for such deliverables should be outlined in the Project Tailoring plan.
- **EPMO Reviews** – The EPMO conducts periodic reviews of submitted documentation to ensure the project requirements, as defined in the Project Tailoring Plan, are met and that the project is meeting requirements such as release at least every six months. Any major changes to Sprint scope that impact outcomes must be discussed with the PO/PM and EPMO. The BO or PM submits all required artifacts, as enumerated in the Project Tailoring Plan, to EPMO. EPMO will ensure that the documentation meets requirements before scheduling the ERB review. Artifacts must be submitted at least 15 days before the projected ERB review date in order to avoid potential production delays.
- **ERB Review (*Phase Gate*)** – Release to production and proceeding to the Operations & Maintenance Phase requires ERB approval. ERB members review the artifacts to determine if the project meets all applicable requirements and coordinate with the BO/PM if more information or clarification is required. The ERB members then make any recommendations, and the ERB provides an approval decision on whether the project is ready to move to the

O&M Phase. EPMO will document all ERB decisions and notify IAMT if the project has been approved for release to production and to move to the O&M Phase.

7.4 Operations and Maintenance (O&M) Phase



7.4.1 Purpose

The O&M Phase ensures the IT investment continues to meet requirements, delivers benefits, and that the business need is still relevant. This phase closes the loop on IT development or modernization projects by comparing projected estimates against actual results in order to assess performance.

Detailed information on this phase is available in the “IT Governance and Investment Management Guidance Supplement: Capital Planning and Investment Control Process Guide”. Templates for required documents can be found on the [connectED IT Project Management site under the O&M Phase](#).

7.4.2 Key Steps / Actions

The IAMB provides guidance for this phase of the EPMR. Typical activities performed during this phase include:

- **Post Implementation Review (PIR)** – The PIR is conducted six to nine months after deployment in order to measure whether investments or projects have delivered on their intended objectives and are performing to the standards identified. The PIR is conducted by the BO / PM in coordination with IAMB. Evaluation criteria include:
 - Baseline performance measures (cost, schedule, performance, and risk);
 - Compliance with EA, Privacy, and Cybersecurity policies;
 - Alignment with Cross Agency Performance (CAP) goals; and
 - Timely delivery of capabilities.
- **Operational Analysis (OA)** – Conducted annually by the BO and submitted to IAMB to measure performance of projects in O&M. The OA considers the stability of cost, schedule, and risk of investments in a steady state and focuses on four core areas of measurement:
 - Customer satisfaction;
 - Strategic and business results;
 - Financial performance; and
 - Innovation.
- Per Federal guidelines, the OA is conducted annually on every major project/investment to ascertain whether the investment is continuing to meet its objectives and whether the investment meets current organizational needs. The OA culminates with a recommendation

to continue, modify, enhance, replace, or retire an investment. An OA template is available to assist the PMs in planning, conducting and reporting the results of an OA.

If it is decided that the investment or project is to be retired, IAMB and the Investment or IT system owner will coordinate to ensure the stakeholders are informed and the required documentation is completed and submitted to EIMB for review. Investment or IT solutions will go through the following reviews:

- **Key Stakeholder Review** – The system’s BO and IPT determine, through the operational analysis process, whether the system continues to support the investment, stakeholders, and business needs or is ready for retirement.
- **EIMB Review** – Once the key stakeholders have determined that the system is ready for retirement, the BO coordinates with IAMB to schedule EIMB review. EIMB provides its recommendation on retiring the investment or project.
- **PIRWG Review** – PIRWG will review the EIMB recommendations and the OA plan. PIRWG’s recommendation on whether the project or investment should move to the Retirement Phase will be forwarded to the IRB for review.
- **IRB Review (*Phase Gate*)** – Proceeding to the Retirement Phase requires IRB approval, which is predicated on recommendations from EIMB and PIRWG and review by the CIO. The IRB will make the final decision whether the investment or project should be retired.

7.5 Retirement



7.5.1 Purpose

The purpose of the Retirement Phase is to ensure the proper retirement of the investment (which may include multiple systems) or project. Retirement of an investment or project marks the end of the life cycle.

Retirement may have significant impact in the areas of funding reallocation, data migration, software licenses, and/or the overall segment or enterprise architecture, which need to be taken into consideration when planning and executing a system retirement. At a minimum, stakeholders should be notified that the investment or project is going away. When the system is finally decommissioned, all relevant system documentation should be properly archived. For more complex systems or for critical business functions, a replacement may need to operate in parallel for a period of time to ensure that the required functionality is in place and performs as expected before the old system is shut down. As operating two systems in parallel will incur additional cost, the cut over to the new system and retirement of the old one should take place as quickly as possible within acceptable risk parameters. System functionalities may also be retired incrementally as new system functionalities are developed and released.

Detailed information on this phase is available in the “IT Governance and Investment Management Guidance Supplement: Capital Planning and Investment Control Process Guide”. Templates for required documents can be found on the [connectED IT Project Management site](#)

[under the Retirement Phase.](#)

7.5.2 Key Steps / Actions

IAMB and EPMO provide guidance for this phase of the EPMP. Activities during this phase include:

- **Retirement Plan and Disposal Checklist** – The System Owner is responsible for creating a retirement plan and initiating an OCIO-aligned disposal checklist to identify potential concerns and issues. The disposition of data, records, and intellectual property must meet IM requirements.
- **System Disposal Request** – The system owner initiates a system disposal request using the Disposal Request Form and schedules a review with EIMB.
- **EIMB Review** – EIMB will validate evidence of the proper retirement of the investment or project to determine whether the retirement meets all ED requirements.
- **Close out** – Documentation is completed, and the system is closed out in EPMO dashboard, eCPIC, and CSAM.
- **Notification** – EPMO notifies ERB members of system retirement.

Appendix A: Glossary

Term	Definition
Business Owner (BO)	The Business Owner (BO) serves as the primary customer and advocate for an IT project and is responsible for identifying the business needs and performance measures to be satisfied by an IT project; validating and endorsing the business process models and requirements documentation for their investments; securing funding for the IT investment; establishing and approving changes to cost, schedule, and performance goals; and validating that the IT investment meets business requirements.
Capital Planning and Investment Control (CPIC)	Capital Planning and Investment Control (CPIC) is a federally mandated IT management and decision-making process that ensures IT investments integrate strategic planning, budgeting, procurement, and management of IT in support of agency mission and business needs. ED's CPIC process is managed by IAMB.
Chief Information Officer (CIO) and Office of the Chief Information Officer (OCIO)	The Chief Information Officer (CIO) and Office of the Chief Information Officer (OCIO) are responsible for advising and assisting the Department in acquiring IT, managing information resources, and complying with best practices in the industry as well as applicable federal laws and regulations, including FITARA.
Enterprise Architecture (EA)	Enterprise Architecture (EA) refers to the explicit description and documentation of the current and desired relationships among business and management processes and IT of an organization. It describes the "current architecture" and "target architecture". An EA includes the rules, standards, and systems life cycle information to optimize and maintain the environment that the agency wishes to create and maintain through its IT portfolio.
Enterprise Investment Management Board (EIMB)	<p>The Enterprise Investment Management Board (EIMB) is responsible for the evaluating IT business proposals and investments to ensure business needs are aligned with ED and PO mission capabilities and strategic priorities. EIMB is comprised of senior-level leaders from the following functional areas:</p> <ul style="list-style-type: none"> • Enterprise Architecture • Information Assurance • Infrastructure • Investment Management • Privacy • Project/Program Management • Records Management • Acquisitions • Budget
Enterprise Project Management Branch (EPMB)	The Enterprise Project Management Branch (EPMB) serves as the CIO's central hub for project documentation, guidance and success metrics, and establishes enterprise-wide project management principles, standards and templates. EPMB is responsible for ensuring that IT projects are successfully managed under the EPMB framework to deliver expected business outcomes in accordance with cost, schedule and performance thresholds. The EPMB Branch Chief chairs the ERB and reports to the ITPS Director.
Enterprise Project Management Office (EPMO)	The Enterprise Project Management Office (EPMO), which is overseen by EPMB, is responsible for assisting PMs in successfully managing IT projects under the EPMB framework. The EPMO is also responsible for establishing project management principles, templates, and standards in accordance with industry best practices for IT project management as well as Federal government requirements.

Term	Definition
Enterprise Program Management Review (EPMR)	Enterprise Program Management Review (EPMR) is the high-level authoritative framework used to promote the integrated management oversight and life cycle review among the Department stakeholder communities.
Enterprise Review Board (ERB)	<p>The Enterprise Review Board (ERB) is a cross-functional governance body that consists of technical SMEs and is responsible for ensuring compliance with IT standards, assisting with selection and analysis of technologies, identifying opportunities for service and component re-use, and helping implement IT capabilities that best meet business needs. The ERB provides oversight and support for IT projects during the planning, development, and delivery stages.</p> <p>The ERB members collectively leverage their industry knowledge and past experiences to assist ED in its governance of IT projects and represent the following functional areas:</p> <ul style="list-style-type: none"> • Enterprise Architecture • Information Assurance • Infrastructure • Investment Management • Privacy • Project/Program Management • Records Management • Budget
Integrated Project Team (IPT)	An integrated project team (IPT) is a multidisciplinary group of people who are collectively responsible for delivering a defined project or product. IPTs are used in complex development programs/projects for review and decision making.
Investment and Acquisition Management Branch (IAMB)	The Investment and Acquisition Management Branch (IAMB), previously Investment Acquisition Management Team (IAMT), is responsible for enterprise level management of the CPIC and IT Investment Management (ITIM) processes. IAMB investment liaisons interact with PMs across the Department to ensure that business needs are properly identified and tracked in the Pre-Select process, which aligns with the EPMR Business Need Phase. IAMB is also responsible for oversight of Planning and Retirement activities. The IAMB carries out various investment and IT portfolio reviews on a regular or ad-hoc basis to help determine the health of investments and to inform recommendations to PIRWG and the IRB related to IT investments and the portfolio as a whole. The IAMB Branch Chief chairs the EIMB and reports to the ITPS Director.
Investment Review Board (IRB)	<p>The Investment Review Board (IRB) is the Department’s senior executive governance body for management and oversight of the IT portfolio. The IRB reviews, selects, and approves all IT investments; provides guidance and direction for IT strategic planning; establishes funding priorities for input into the CIO’s and CFO’s joint review and approval of major IT investments in the IT budget; and serves as the final decision authority on the construct and content of the IT portfolio. Objectives include optimizing the portfolio in support of the Department’s business mission; identifying opportunities to optimize the portfolio through shared services, consolidation or modernization; improving visibility of planned expenditures; and assessing the performance of IT investments in relation to cost, schedule and performance parameters. The IRB is co-chaired by the CIO and its members include:</p> <ul style="list-style-type: none"> • The Deputy Secretary; • The Assistant Secretary for Management; • The Chief Financial Officer; • Budget Service Director; and

Term	Definition
	<ul style="list-style-type: none"> The Chief Operating Officer of Federal Student Aid. <p>The IRB convenes quarterly meetings to review major segments of the IT portfolio. The IRB also designates the level of oversight required by EPMD based on project complexity and importance to the department's mission.</p>
IT Investment	<p>An IT investment is any new or existing information technology idea, effort, program, project, system, service, expenditure, or initiative that pertains to a discrete IT application, technology, or IT management process. IT investments use information technology to directly or indirectly further, improve, or help achieve the Department's mission, goals, priorities, and performance targets. An IT investment covers the entire life cycle of the information technology, from initial concept to termination, and may include one or more IT systems or projects.</p>
IT Investment Management (ITIM)	<p>IT Investment Management (ITIM) is a management process for ongoing identification, selection, control, and evaluation of investments in information systems and resources. Its objectives are to effectively and efficiently link mission needs, information, and technology; integrate with organizational planning, budgeting, procurement, management (financial, human resources, and program), and assessment; coordinate with the Department's current and targeted enterprise architecture; and maximize the value and assess and manage the risks in the selection, control, and evaluation of information resources.</p>
IT Portfolio	<p>IT Portfolio refers to the combination of all IT assets, resources, and investments owned or planned by an organization in order to achieve its strategic goals, objectives, and mission.</p>
IT Program	<p>An IT program is a group of related projects and/ or investments managed in a coordinated way to obtain benefits and control not available from managing projects individually. Programs may include elements of related work outside the scope of discrete projects in the program.</p>
IT Project	<p>An IT Project is a temporary IT endeavor undertaken to accomplish a unique set of outcomes with a defined start and end point that, when attained, signify completion. Projects are composed of activities undertaken for development, modernization, enhancement, retirement, or maintenance of a new or existing IT system, program, or investment asset.</p>
Office of Acquisition Management (OAM)	<p>The Office of Acquisition Management (OAM), formerly CAM, is responsible for acquisition planning according to the Acquisition Lifecycle Framework (ALF).</p>
Planning and Investment Review Working Group (PIRWG)	<p>The Planning and Investment Review Working Group (PIRWG) serves as an advisory board to the CIO and provides oversight and recommendations to the CIO on the strategic direction of the IT portfolio with an emphasis on timeliness, cost, schedule, performance, security, business value, and strategic alignment. The PIRWG is also the IRB's principal working group responsible for providing cross-functional oversight of IT initiatives and assisting POs in improving operating efficiency by best leveraging IT to support departmental and PO mission requirements. The PIRWG uses data-driven analysis to make recommendations to the CIO and IRB on IT investments and associated funding. The PIRWG plays a significant part in assisting the CIO and IRB to fulfill their role in conducting IT planning, programming and budgeting management of the enterprise IT portfolio through the assessment of proposed and existing investments, ensuring emerging business requirements are responsive to changing technology trends, and the EA roadmap and the associated Segment architectures are consistent with the Department's strategic direction for IT.</p>
Phase Gate	<p>A phase gate is a decision point for proceeding from one EPMD phase to the next and</p>

Term	Definition
	where the IT project activities are reviewed to ensure that appropriate EPMR, Department, and OMB requirements are met.
Program/Project Manager (PM)	The Program or Project Manager (PM) is responsible for project or program performance in relation to approved cost, schedule, and performance baselines. The PM maintains information related to project status, control, performance, and risks. PMs are engaged throughout the project life cycle to ensure the project is executing according to established or agreed upon outcomes.
Project Sponsor	The project sponsor is typically a senior management role, responsible for approving or supporting the allocation of resources for a project, defining its goals, assessing its eventual success, and advocating with other senior managers for the project's adoption.

Appendix B: EPMR Checklist

A high-level guide to ensuring IT project success

This checklist is designed to help the Business Owner (BO) and Program/Project Manager (PM) navigate the Enterprise Program Management Review (EPMR) process, which provides a framework for managing and conducting the oversight of IT projects throughout their life cycle. Each of the following EPMR phases has defined activities, responsibilities, reviews, and deliverables.



Detailed information about the [EPMR Framework](#) and all [templates](#) are available on connectED.

For assistance during this phase, contact IAMB (OCIOIAMT@ed.gov).				
	Who	What	Done?	Comments
Business Need	BO	Fills out the Business Needs Statement	<input type="checkbox"/>	
	BO	Emails the completed Business Needs Statement to IAMB (OCIOIAMT@ed.gov)	<input type="checkbox"/>	
	BO	Work with ISSO to follow IAS process for system classification and identifying security requirements	<input type="checkbox"/>	
	EIMB	Reviews business need and makes a recommendation	<input type="checkbox"/>	
	PIRWG	Reviews business need and makes a recommendation	<input type="checkbox"/>	
	IRB	Reviews business need and approves investment	<input type="checkbox"/>	
	BO / IAMB	Ensures system / investment is added to eCPIC	<input type="checkbox"/>	
BO / IAS	Ensures system / investment is added to CSAM	<input type="checkbox"/>		

Business Need

Planning

Sprint & Staging

Operations & Maintenance

Retirement

For assistance during this phase, contact **EPMO** (ePMO@ed.gov).

	Who	What	Done?	Comments
Planning	EPMO	Schedules Planning kickoff meeting	<input type="checkbox"/>	
	PM	Completes the Business Case	<input type="checkbox"/>	
	PM	Completes the Project Tailoring Plan Agreement	<input type="checkbox"/>	
	PM / ISSO	Completes the Security Impact Analysis (SIA)	<input type="checkbox"/>	
	PM	Completes the Acquisition Strategy and Plan, and follows ALF process in coordination with OAM	<input type="checkbox"/>	
	EIMB	Reviews the Acquisition Strategy and Plan	<input type="checkbox"/>	
	PM	Once a contract is in place, schedules a project kickoff meeting with contractors and EPMO	<input type="checkbox"/>	
	PM	Completes the Project Management Plan and any other project artifacts as required by the Project Tailoring Plan for the Planning Phase	<input type="checkbox"/>	
	PM	Submits all project artifacts to EPMO (ePMO@ed.gov) at least 15 working days before the ERB session in which project review is desired	<input type="checkbox"/>	
	EPMO	Reviews submitted documentation to ensure it meets requirements for ERB review	<input type="checkbox"/>	
	PM	Schedules ERB request	<input type="checkbox"/>	
	ERB	Makes recommendations and approves the project to proceed to Sprint & Staging Phase	<input type="checkbox"/>	

Business Need

Planning

Sprint & Staging

Operations & Maintenance

Retirement

For assistance during this phase, contact **EPMO** (ePMO@ed.gov).

	Who	What	Done?	Comments
Sprint & Staging	PM	Executes on the plan laid out in the Project Tailoring Plan Agreement and other planning documents	<input type="checkbox"/>	
	PM	Plans development releases and Sprints to include a first anticipated production release within 6 months	<input type="checkbox"/>	
	PM	Completes all project artifacts as required by the Project Tailoring Plan for the Sprint & Staging Phase	<input type="checkbox"/>	
	PM	Works with ISSO to implement system security controls and complete security artifacts (per templates in CSAM)	<input type="checkbox"/>	
	PM	Contacts EDSOC (EDSOC_PMO@ed.gov) to schedule a Vulnerability Security scan, and works with ISSO and IAS to remediate any high-risk items	<input type="checkbox"/>	
	PM	Ensures all security requirements are met and ATO is approved prior to production release, and works closely with ISSO and IAS team to complete any Risk Acceptance Forms (RAFs) for any deviations, waivers, or PoAMs	<input type="checkbox"/>	
	PM	Submits all project artifacts to EPMO (ePMO@ed.gov) at least 15 working days before the ERB session in which project review is desired	<input type="checkbox"/>	
	EPMO	Reviews submitted documentation to ensure it meets requirements for ERB review	<input type="checkbox"/>	
	PM	Schedules ERB request	<input type="checkbox"/>	
	ERB	Makes recommendations and approves the project to be released to production and proceed to O&M	<input type="checkbox"/>	



For assistance during this phase, contact **IAMB** (OCIOIAMT@ed.gov).

	Who	What	Done?	Comments
O&M	BO / PM	Conducts a Post Implementation Review (PIR) in coordination with IAMB within 6 months after deployment to production	<input type="checkbox"/>	
	BO / PM	Conducts annual Operational Analysis (OA) in coordination with IAMB	<input type="checkbox"/>	
Pre-Retirement	EIMB	Reviews retirement request	<input type="checkbox"/>	
	PIRWG	Reviews retirement request	<input type="checkbox"/>	
	IRB	Reviews and approves retirement	<input type="checkbox"/>	

Business Need

Planning

Sprint & Staging

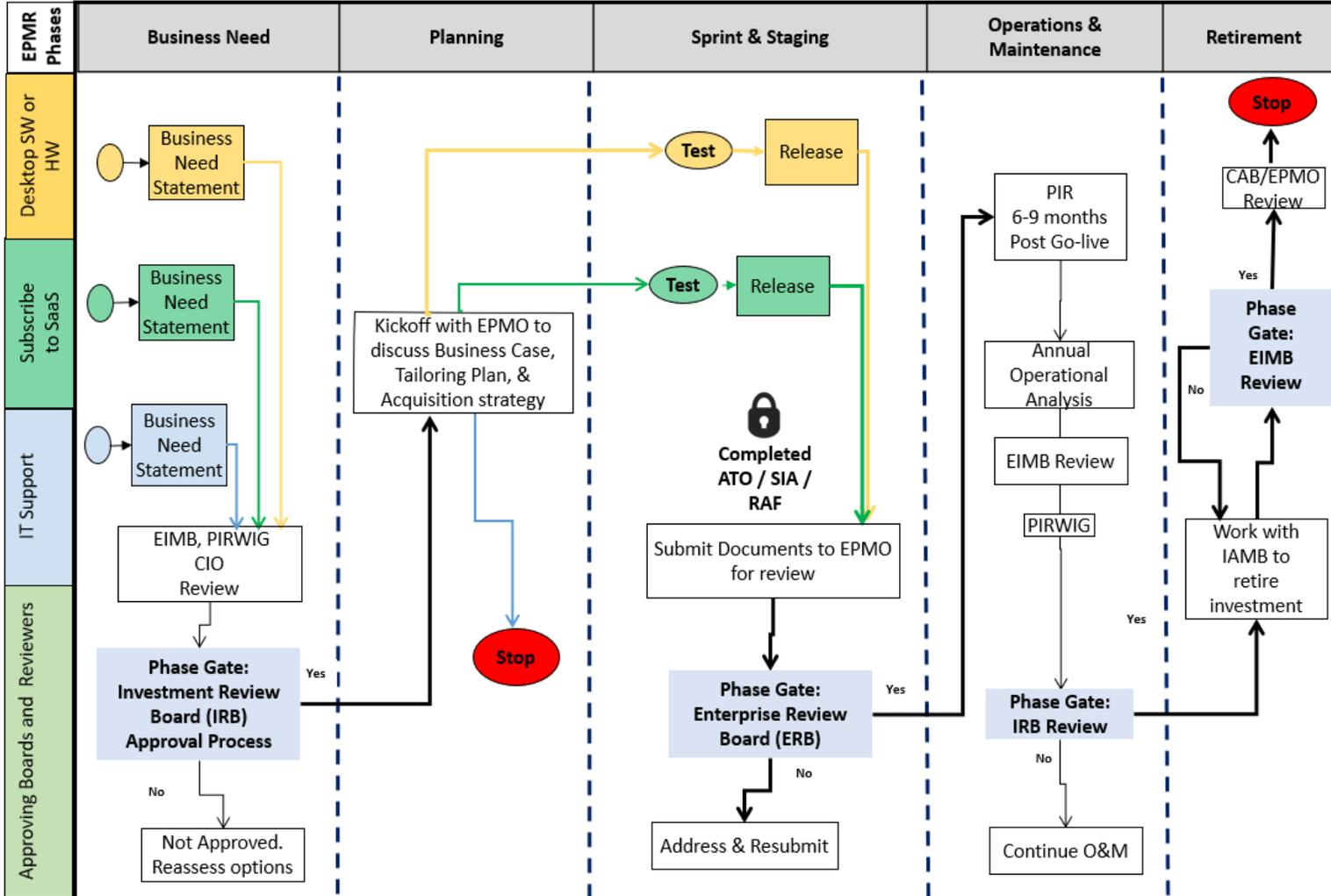
Operations & Maintenance

Retirement

For assistance during this phase, contact **IAMB** (OCIOIAMT@ed.gov).

	Who	What	Done?	Comments
Retirement	PM	Completes all items on the System Retirement Checklist	<input type="checkbox"/>	
	PM	Disposes of the system following all data retention and archival policies	<input type="checkbox"/>	
	EIMB	Reviews completion of disposal plan for investment-level retirement	<input type="checkbox"/>	
	CAB	For PIVOT-hosted systems, reviews technical disposal of the system, components, and assets; updates CMDB	<input type="checkbox"/>	
	PM	For systems not hosted in PIVOT, sends completed system disposal checklist to EPMO		
	EPMO	For systems not hosted in PIVOT, forwards the completed system disposal checklist to ERB		
	BO + IAMB	Ensures system is closed out in eCPIC	<input type="checkbox"/>	
	BO + IAS	Ensures system is closed out in CSAM	<input type="checkbox"/>	

Appendix C: EPMR Use Case Scenario Process Flow



Appendix D: Project Tailoring Plan Agreement

The EPMR and its touchpoints are designed to be tailored to the specifications of the IT project, recognizing that some projects require less documentation to maintain appropriate oversight and control. Considerations include:

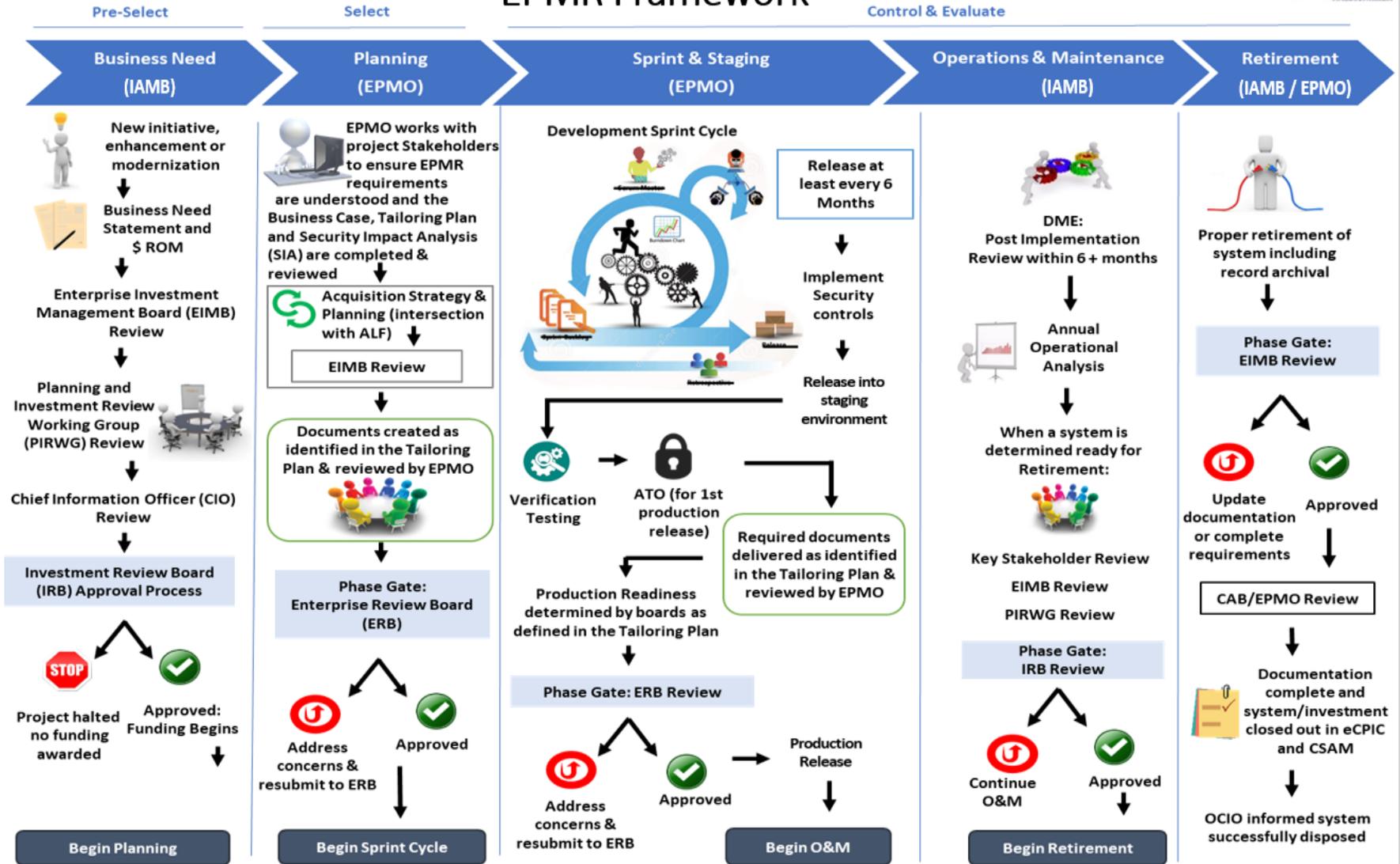
- Project size, risks, scope of impact, type of technologies;
- Cost, acquisition strategy;
- Development methodology.

The Project Tailoring Plan is developed by the Project Manager (PM) and/or Business Owner (BO) in conjunction with the OCIO EPMO Team. EPMO will work directly with the project team to determine the EPMR requirements and to complete the Project Tailoring Plan Agreement. More information, including the minimum set of required artifacts to meet EPMR requirements, is provided in the Project Tailoring Plan template, which can be found with other [templates](#) on the IT Project Management site on connectED.

Appendix E: EPMR Life Cycle Management Graphics



EPMR Framework



Business Need Phase

Initial Customer Engagement



The purpose of the Business Need Phase is to develop and submit the business need statement for justification of a new IT investment, enhancement or modernization.



Business Need Statement:

The Business Owner works with Investment Acquisition Management Team (IAMT) Liaison to complete the Business Needs Statement which includes:

- Problem identification
- Benefits and goals
- Investment scope
- Estimated lifecycle cost
- Risk and issues
- System Classification
- Acquisition approach
- Financial ROM
- Security and Privacy



Business Process Reviewer is IAMT



EIMB Review

Enterprise Investment Management Board (EIMB) evaluates the Business Need. EIMB is comprised of subject matter experts.



PIRWG Review and Recommendation

PIRWIG makes a funding recommendation and forwards the request to the CIO



CIO Review

The CIO makes a recommendation and forwards the request to the IRB



IRB Review

The IRB reviews and approves funding if it deems appropriate.



Project halted.
No funding awarded.



Approved
Project funded

Begin Planning

Planning Phase

Business Process Reviewer is EPMO



The purpose of the Planning Phase is to ensure the PM is aware of EPMR requirements. Important outputs of this phase include an approved tailoring plan and project plan with agreed upon outcomes.



Deliver Documents

Project artifacts and documentation delivered as agreed upon in the tailoring plan.



EPMO Review

EPMO reviews project artifacts for completeness and makes recommendations to the PM.



Phase-Gate: ERB Review

ERB determines if project is ready to continue to the next phase.



Business Case followed by Tailoring Plan Agreement

The Business Case followed by project tailoring contains necessary acquisition, security, and project planning along with any other deliverables.



Acquisition Strategy & Planning

Business owner works with EPMO & intersect with ALF to develop an acquisition strategy, Plan,

Acquisition Planning
(intersection with ALF)

EIMB Review

Acquisition Strategy, Plan, SOW



Address concerns & recommendations

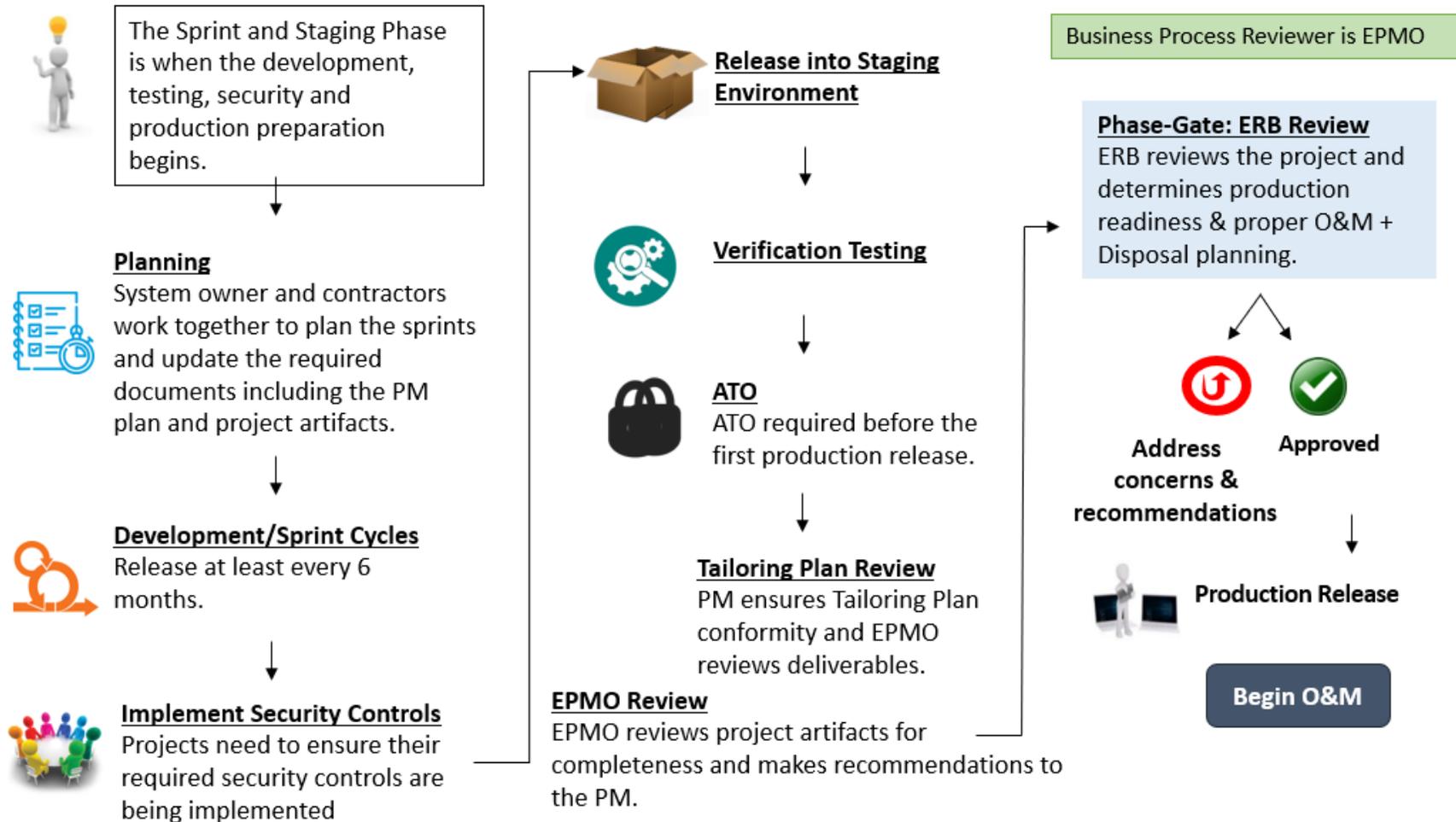


Approved



Begin Sprint & Staging

Sprint and Staging Phase



Operations and Maintenance Phase



The Operations and Maintenance Phase ensures the production system is meeting the business need and agreed upon performance outcomes



Post Implementation Review

Post implementation review (PIR) conducted 3-6 months after system deployment.



Operational Analysis (OA)

Operational Analysis completed annually.



OA Review

Based on the OA, it will be determined by the System Owner, IAMT and the segment owner if the system is ready for retirement.

When a system is determined ready for retirement the following reviews occur:

Business Process Reviewer is IAMT



Key Stakeholder Review

System Owner, IAMT and Segment Owner write the request for retirement .



EIMB Review

EIMB reviews retirement request.



PIRWG Review

PIRWG reviews the request and recommends to IRB.



IRB Review

IRB reviews the request makes the final decision to move the investment to retirement.

Continue O&M and address IRB recommendations if any, return to Key Stakeholder Review.



Approved

Begin Retirement Phase

Retirement Phase

Business Process Reviewer is IAMT/EPMO



The Retirement Phase is to sunset a system and/or investment.



Proper Retirement

Proper retirement including documentation, archive of system and data, and disposal.



Phase-Gate: EIMB Review

EIMB ensures the Investment as a whole is properly retired.

Address concerns & recommendations.



Approved



CAB/EPMO Review

Change Advisory Board (CAB) reviews the final system disposal from the environment and updates the CMDB. Systems hosted outside of PIVOT will submit final completed System Disposal checklist to EPMO.



Close Out

Documentation complete and system/investment closed out in eCPIC and CSAM.



EPMO informs OCIO stakeholders that the system has been successfully retired.

Appendix F: Federal Legislation, Requirements & Guidance for Investment Management

Clinger-Cohen Act of 1996

The Clinger-Cohen Act of 1996 requires agencies to improve mission performance by implementing an ITIM process for selecting, controlling, and evaluating IT investments. Enactment of this legislation and its accompanying regulations requires agencies to establish accountability, reduce duplicative spending, eliminate inefficiencies, and maximize the value of IT investments

Federal Information Technology Acquisition Reform Act (FITARA) of 2014

FITARA aims to assist agencies in establishing management practices that align IT resources with agency missions, goals, programmatic priorities, and statutory requirements, and establish Government-wide IT management controls that will meet FITARA requirements while providing agencies with the flexibility to adapt to agency processes and unique mission requirements. Additionally, FITARA establishes a “Common Baseline” for roles, responsibilities, and authorities, and aims to enable the CIO’s role and involvement in IT-related processes.

Government Performance and Results Act of 1993 (GPRA)

GPRA requires agencies to prepare updateable strategic plans and to prepare annual performance plans covering each program activity displayed in the budget. The performance plans are to establish performance goals in objective, quantifiable and measurable form and performance indicators to be used in measuring relevant outputs, service levels, and outcomes.

Government Performance and Results Modernization Act of 2010 (GPRAM)

GPRMA requires quarterly performance assessments of Government programs for assessing agency performance and improvement, and to establish agency performance improvement officers and the Performance Improvement Council.

OMB Circular A-130 - Management of Federal Information Resources

The Management of Federal Information Resources requires agencies to establish a comprehensive approach to improve the acquisition and management of their information resources by: performing information resources management activities in an efficient, effective, economical, secure, and privacy-enhancing manner; focusing information resources planning to support their missions; implementing an ITIM process that links to and supports budget formulation and execution; and rethinking and restructuring the way work is performed before investing in new information systems.

Appendix G: Reference Documents

- [Lifecycle Management Framework Directive ACS OCIO 1-106](#)
- IT Governance and Investment Management Guidance Supplement: Capital Planning and Investment Control Process Guide
- Information Technology Investment Management (ITIM)
- Enterprise Investment Management Board (EIMB) Charter
- Enterprise Investment Management Board (EIMB) Process
- Enterprise Review Board (ERB) Charter
- Enterprise Review Board (ERB) Process
- [ED Cybersecurity Policy](#)
 - [Cybersecurity Policy Directive ACS OCIO-3-112](#)
- [Records and Information Management Program Directive ACS OM 6-103](#)
- [Enterprise Architecture Guidance and Policies](#)
 - [Lifecycle Management \(LCM\) Directive ACS OCIO 1-106](#)
 - [Department Web Consolidation Directive ACS OCIO 3-110](#)