

# U.S. Department of Education Federal Student Aid



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## Enterprise Operational Change Management Plan

Version 1.2

March 2, 2009

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## Document Version Control

Version	Date	Description
1.0	05/02/2007	Final Release
1.1	11/07/2007	Revised ECCB composition, and areas supported, and meeting frequency. Modified for new document template. Updated references. Changed Executive Management Team (EMT) to Executive Leadership Team (ELT). Updated ECCB Responsibilities. Updated Process Step Value Proposition and definition for Enterprise Event.
1.2	03/02/2009	Revised ECCB composition due to reorganization of Business Operations. Changed references to applications to be for systems and system components. Replaced list of enterprise event examples in appendices D and E with reference to list in Section 1.3. Add timeline guidance for processing ECRs to meet ECCB approval times prior to an ECR's implementation.

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## Section 1. Introduction

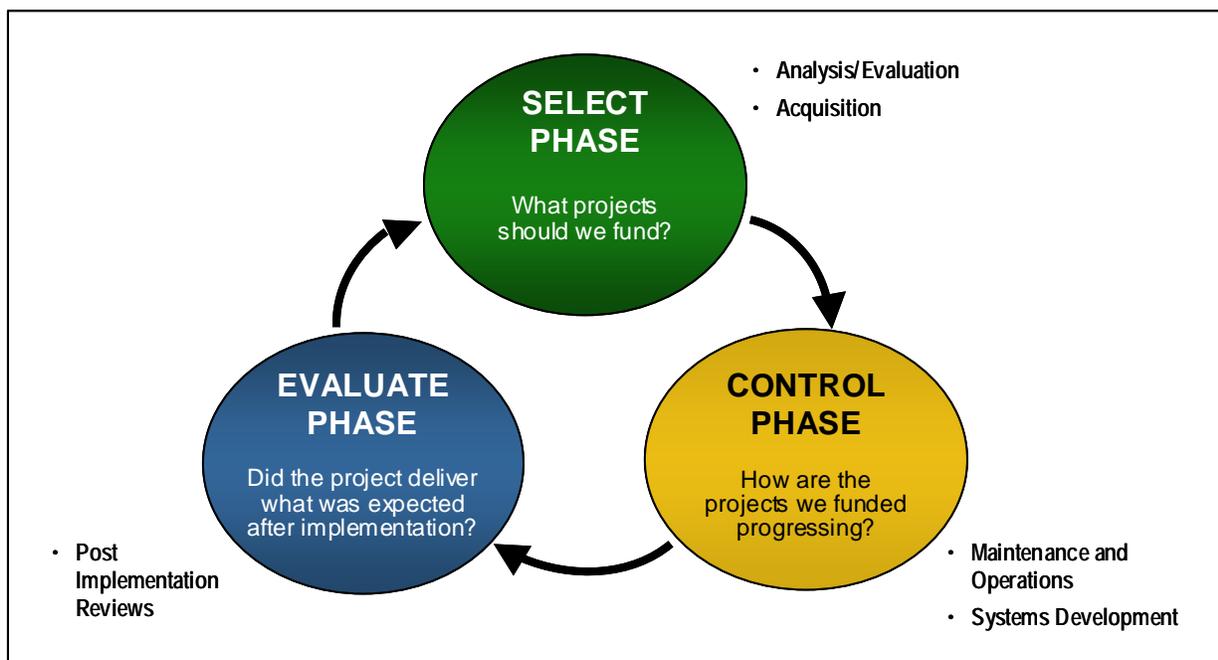
### 1.1. Purpose

The Enterprise Operational Change Management Plan (EOCM) (Plan) defines Federal Student Aid's enterprise operational change management concepts related to operational change management, enterprise events, configuration management and release management. This Plan provides guidance to individuals responsible for, or involved in, enterprise operational change management.

As Federal Student Aid conducts improvement activities, modifications will occur to processes and procedures defined in this Plan to address both configuration management of enterprise artifacts and further integration of enterprise operational changes with release activities of Federal Student Aid student aid delivery systems.

### 1.2. Background

Information technology investment management (ITIM) is a continuous, integrated management process focused on achieving desired business outcomes and provides a mechanism for the continuous selection, control, and evaluation of IT initiatives. From a budgeting perspective, budget formulation occurs during the Select Phase, and budget execution occurs during the Control and Evaluate Phases. Federal Student Aid performs all three of the Office of Management and Budget (OMB) and Government Accountability Office (GAO) prescribed ITIM phases, as depicted in Figure 1-1.



**Figure 1-1: OMB and GAO Prescribed ITIM Phases and Federal Student Aid Activities**

Enterprise Change Management encompasses the complete life cycle of change management across the enterprise, starting with change drivers, such as strategic and organizational plans,

operational issues, and industry and technology advances, that leads to implementation and evaluation of enterprise activities to support continuous improvement for the delivery of Federal Student Aid. To understand the scope of Enterprise Change Management, it is important to categorize Federal Student Aid work activities performed into five types, as follows:

1. Acquisition Planning – functions associated with management of existing contracts or new solicitations
2. Analysis / Evaluation – projects that encompass exploratory efforts, targeted research that results in recommendations, or pilots of new processes or technology
3. Business Operations – support functions associated with running the delivery of services
4. Maintenance and Operations – maintenance and operations of existing systems and system components, including enhancement and migrations
5. Systems Development – implementation of new systems or system components within Federal Student Aid

Enterprise Investment Management activities include analysis/evaluation activities, project selection, budget formulation, capital investment planning and acquisition planning. Analysis/evaluation activities help progress enterprise investment decisions. As a result of Enterprise Investment Management activities, the Enterprise Architecture artifacts updated include policies and standards, sequencing plans and target vision and “to-be” enterprise architecture models.

During EOCM, budget execution occurs within systems development and maintenance/operations projects. EOCM, therefore, applies to Federal Student Aid projects that have received funding and project approval as well as changes that do not require funding but meet the definition and guidelines of an Enterprise Event. As a result of EOCM activities, the Enterprise Architecture artifacts updated include sequencing plans and target vision, “to-be” and “as-is” enterprise architecture models.

Figure 1-2 illustrates the relationship of change drivers to Federal Student Aid project types.

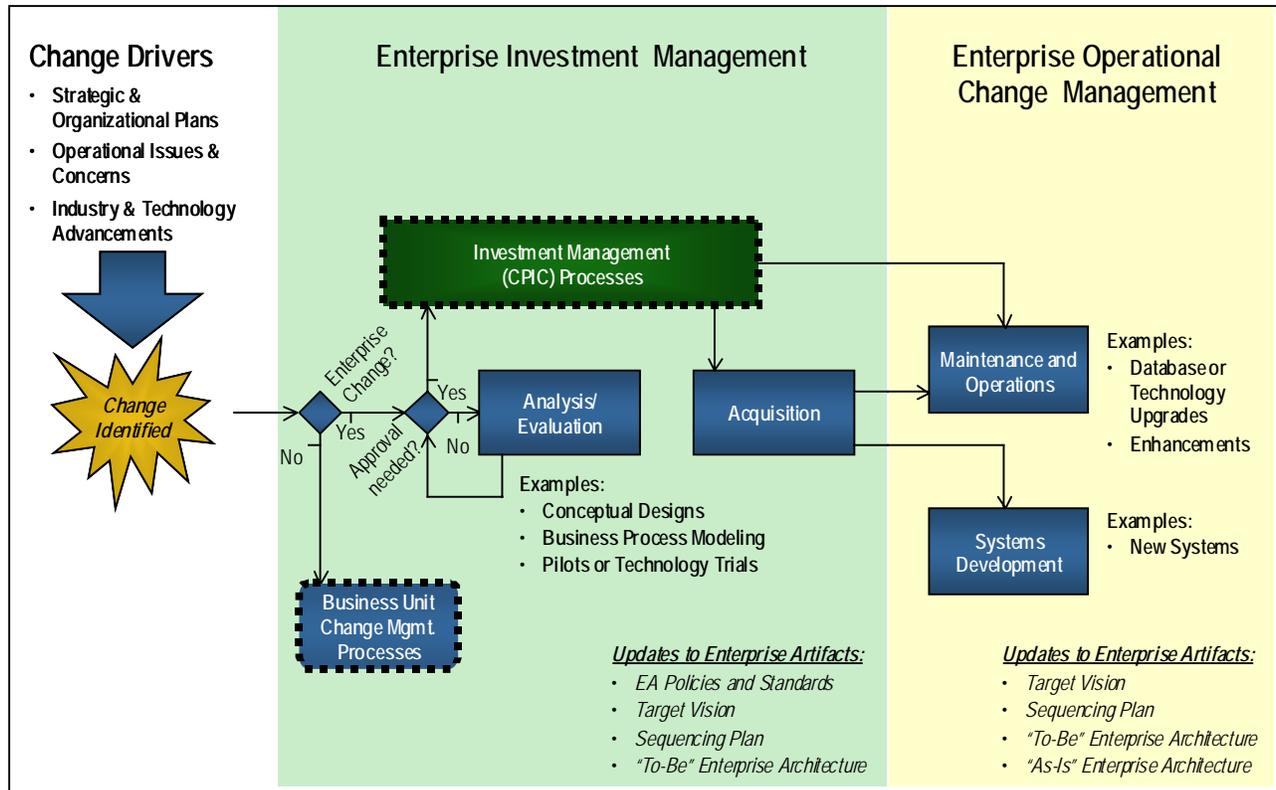


Figure 1-2: Enterprise Change Management

### 1.3. Enterprise Operational Change Management Scope

Federal Student Aid business units, based upon Enterprise Event definition and guidelines, will initiate the EOCM process. An Enterprise Event occurs when a change impacts Federal Student Aid operations across multiple systems or system components, interfaces between systems or system components, enterprise architecture components, or Federal Student Aid-wide business requirements.

Examples include:

- Business rule or data element changes that impact more than one application/system;
- XML schema or Meta-data changes;
- Applications or software used by more than one system or system component, in a “shared services” environment (for example, Integrated Technical Architecture WebSphere products, TeamSite, MicroStrategy, and Enterprise Application Integration);
- Infrastructure or hardware platform modifications;
- Communications system modifications such as router, firewall, or Domain Name System (DNS) changes;
- Security patches;
- Security Policy Changes;

- Software or platform upgrades and refreshes such as new operating systems or Oracle releases;
- New systems or system components migrations into data centers;
- Federal mandates that would impact multiple business rules.
- When a new system/application is developed and requires changes to existing systems or system components for successful implementation.
- When a system requests testing support from another system.

Additionally, Enterprise Events are independent of Federal Student Aid organizations even when systems, system components or interfaces are owned within a single business unit.

The EOCM process does not manage and track changes to business units' releases and operational processes. Change management, configuration management, and release management activities performed by Federal Student Aid business units will not be impacted by this process. For example, release activities that involve the data center operations will stay intact and be managed as they are today, using the Change Control Management Tool. All system or system component changes are to be registered using the CCM tool regardless whether data center staff is involved. The EOCM process usage is mandatory, and entry occurs after a business unit obtains funding and project approval.

An Enterprise Change Control Board (ECCB) is the Federal Student Aid committee authorized to review and approve or reject enterprise changes. ECCB authority is limited by a higher-level authority, such as the Executive Leadership Team.

## **1.4. Objectives**

This Plan provides the framework for implementing the EOCM process. The objectives achieved through the implementation of the process are as follows:

- Provides a consistent, effective approach to managing and monitoring enterprise operational changes with the ability to leverage lessons learned to improve operations across Federal Student Aid
- Ensures consistent review of impacts, risks, and sequencing related to enterprise operational changes, enabling cost savings and reduction of incidents
- Improves Federal Student Aid wide visibility, communication, and coordination of enterprise operational changes
- Ensures linkages to other enterprise processes and management of enterprise artifacts (i.e. Technical Policies and Standards, Federal Student Aid Architecture, and Federal Student Aid Target State Vision)

## **1.5. Document Organization**

The remainder of this Plan is structured as follows:

- Section 2, Organization, identifies and describes the management controls applied in the EOCM processes.

- Section 3, Change Management Process, describes the process assumptions, activities, steps, and roles for identifying, submitting, evaluating, approving, and monitoring Enterprise Change Requests.
- Appendix A – Acronyms and Abbreviations, provides a list of acronyms and abbreviations and their appropriate meanings within the context of this Plan.
- Appendix B – Glossary, defines terminology within the context of this Plan.
- Appendix C – Detailed Process Materials, provides a detailed Operational Change Management Process presentation.
- Appendix D – Enterprise Change Request (ECR) Form, provides a copy of the form used for ECRs, and associated guidance and instructions.
- Appendix E – Impact Analysis Procedures and Job Aids, provides a copy of the job aids used for impact analysis.
- Appendix F – Impact Analysis and Recommendation Report – Annotated Outline, provides an annotated outline template for completing the Impact Analysis and Recommendation Report.

## 1.6. References

This section lists applicable and informational references.

*Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-Making*, GAO, February 1997

*Clinger/Cohen Act of 1996*, formerly the Information Technology Management Reform Act (Public Law 104-106)

*OMB Circular A-123, Management's Responsibility for Internal Control*, OMB, December 21, 2004

Section 508 of the Rehabilitation Act of 1973, as amended, 29 USC §794 (d)

*IT Investment Management Program – Process Guide* Version 4.0, ED OCIO, September 2004

*Lifecycle Management (LCM) Framework*, ED OCIO, December 2, 2005

*ED SFA IT Investment Management – Operating Procedures* Version 2.0, FSA CIO, January 2000

*FSA Investment Planning Process* Version 3, FSA CIO, April 26, 2004

*Memorandum M-97-16, Information Technology Architectures*, CIO Council, June 18, 1997

## Section 2. Organization

This section describes the Federal Student Aid organizational support for EOCM.

### 2.1. Enterprise Change Control Board (ECCB)

The ECCB is the official Federal Student Aid committee authorized to review, approve or reject enterprise operational changes. The ECCB oversees the Enterprise Operational Change Management (EOCM) process and supporting tools and reviews the Enterprise Master Release Schedule. The ECCB shall make a determination of the prioritization of all EOCM requests. The EOCM process is an enterprise-level process that operates in parallel to system/application specific CCBs within Federal Student Aid. This process includes clearly defined intersection points with a generic life cycle to ensure that communication and coordination of Enterprise Events occur across Federal Student Aid. The ECCB shall review change requests and the related impact analysis of each proposed change, make decisions, and communicate those decisions to affected groups and individuals.

The membership of the ECCB is comprised of key functional and technical experts within Federal Student Aid. ECCB members have sufficient authority over business unit CCBs to commit resources to implement approved changes. Advisors provide their inputs to the members and are selected based upon their ability to provide relevant information on benefits and implementation considerations. Figure 2-1 outlines the responsibilities associated with each key role that supports the ECCB with the understanding that individual participants may be active in multiple roles:

Roles	Responsibilities
Enterprise Change Control Board – Chairperson	<ul style="list-style-type: none"> <li>▪ Facilitates ECCB reviews of Enterprise Change Requests (ECRs) and recommendations from impact analysis activities.</li> <li>▪ Calls for ECCB votes to make decisions, including approval or rejection of ECRs.</li> <li>▪ Escalates unresolved issues and ECRs to the Executive Leadership Team (ELT) for resolution.</li> <li>▪ Distribute ECCB information to ELT and their Direct Reports.</li> </ul>
Enterprise Change Control Board – Members	<ul style="list-style-type: none"> <li>▪ Actively participate in recommendation reviews with their business unit to understand and support recommendations to the ECCB.</li> <li>▪ Review/approve ECRs and recommendations from impact analysis activities.</li> <li>▪ Commit resources to implement approved changes within their scope of authority.</li> <li>▪ Each member is responsible to ensure that information from the ECCB meetings is appropriately distributed to their organization and support contractors.</li> <li>▪ Also, each member should ensure that information from their organization is brought to the Board meetings.</li> <li>▪ Actively monitor changes in progress and notify the ECCB of</li> </ul>

Roles	Responsibilities
	issues as they occur. <ul style="list-style-type: none"> <li>▪ Reviews all FSA systems (timing) and manages issues with scheduling of changes and resource constraints.</li> </ul>
Executive Leadership Team	<ul style="list-style-type: none"> <li>▪ As required, review and resolve escalated ECRs.</li> </ul>

**Figure 2-1: ECCB Related Roles and Responsibilities**

### 2.1.1. Voting

All potentially impacted business units have an opportunity to document their concurrence or non-concurrence prior to board decisions within the Impact Analysis & Recommendation Report. If an impacted business unit cannot agree to all programmatic, technical, or funding assumptions and considerations then it is documented within the recommendations and the Enterprise Change Request (ECR) is submitted to the ECCB for resolution.

The ECCB reviews all recommendations associated with the ECR during the course of ECCB meetings. If a recommendation indicates that impacted business units have not reached consensus, then the ECCB discusses possible solutions and determines if it can gain consensus among its members. Consensus results in either: approval, approval with modifications, rejection, or escalation to the Executive Leadership Team for resolution. The following are further details concerning voting, proxies, escalations and appeals:

- A quorum requires a majority of members either present or represented by proxy
- Proxy votes may be submitted in writing or through an alternate representing the ECCB member
- A consensus of the majority of impacted business units is required for a decision
- Any dissenting ECCB member may appeal to the Executive Leadership Team, with the Chairperson representing the ECCB at those discussions, and any ECCB member attending as desired

The ECCB members and the Federal Student Aid organizational areas that they support are listed in Figure 2-2. There is one member for each entry in the ECCB Members column.

ECCB Members	Organizational Areas Supported
Business Operations, Change Management	Business Operations, Change Management
Business Operations, Production	Business Operations, Production
Business Operations, Systems Integration	Business Operations, Systems Integration
Chief Financial Office (CFO)	CFO
Chief Information Office (CIO)	CIO, Ombudsman, Policy Liaison & Implementation, Communications & Administration
Enterprise Performance Management Services (EPMS)	EPMS
Integrated Partner Management	Program Compliance
Student Aid Awareness & Applicant Services	Student Aid Awareness & Applicant Services

**Figure 2-2: ECCB Voting Allocation**

### **2.1.2. ECCB Chairperson**

The ECCB Chairperson will be a 6-month rotating responsibility, chosen from and by the ECCB members. The ECCB Chairperson organizes the ECCB meetings, conducts votes, and may escalate unresolved issues to the Executive Leadership Team. When an ECR is escalated, the ECCB Chairperson, or designated alternate, represents the ECCB at relevant discussions. Any ECCB member may attend the Executive Leadership Team session.

### **2.1.3. Meeting Procedures/Frequency**

The ECCB will meet on a bi-weekly basis to review open ECRs, recommendations from impact analyses, and monitor the status of ECRs in progress. Depending on the volume or urgency of ECRs to be reviewed or monitored, meeting frequency may be adjusted. As documented on the ECR Form in Appendix D, there are three priorities of ECRs: emergency, urgent and routine. Changes to meeting frequency or scheduled dates and times will be administered by the ECCB Chairperson. Emergency meetings may also be scheduled by the ECCB Chairperson to address emergency or urgent ECRs. Such meetings may be held via teleconference or electronic mail.

## **2.2. Resources**

The CIO EOCM Lead is responsible for coordinating EOCM activities. This includes monitoring, oversight, evaluation, and enforcement of policy. To ensure information is available to all Federal Student Aid decision makers, the CIO EOCM Lead is responsible for providing the necessary facilities and electronic tools to document, monitor, and maintain ECCB artifacts and for coordinating and/or facilitating updates to enterprise artifacts.

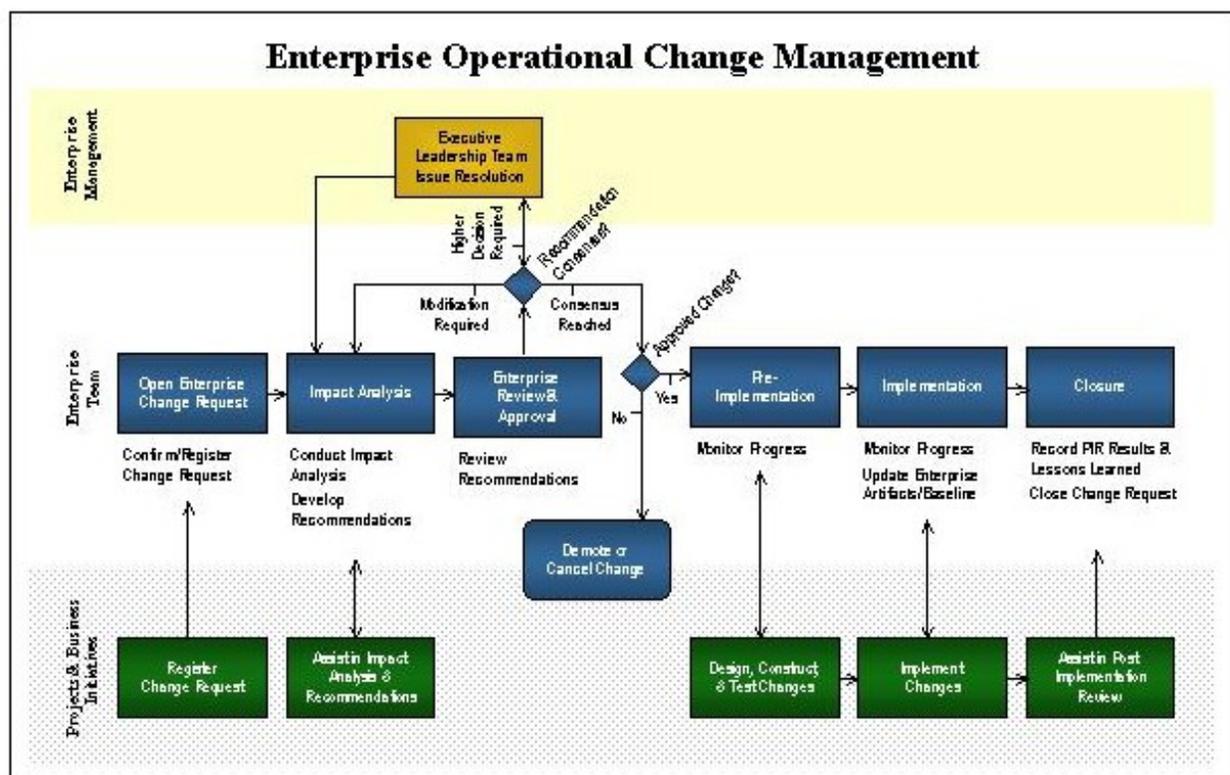
The CIO EOCM Lead schedules meetings, distributes agendas, records board decisions within the minutes. The EOCM Lead distributes minutes to ECCB members and a representative of any affected CCB. Standard templates for posting the agendas, meeting minutes, and other meeting materials will be used.

## Section 3. Change Management Process

This section describes the process and the involvement of Federal Student Aid business units, as Enterprise Events are originated and managed through closure.

EOCM is an enterprise-level process that operates in parallel to business units' life cycle management of Federal Student Aid systems or system components. The EOCM process includes clearly defined intersection points with a generic life cycle to ensure communication and coordination of Enterprise Events occur across Federal Student Aid.

Figure 3-1 is a high-level representation of the EOCM process, that outlines key process steps. Details within each process step, such as decision points, inputs and outputs, are provided in Appendix C – Detailed Process Materials.



**Figure 3-1: Enterprise Operational Change Management - Process Steps**

The EOCM process allows any application/system life cycle methodology to be applied by business units to account for projects undertaken for new and existing Federal Student Aid systems or system components and each project's criticality and complexity. Regardless of the life cycle methodology employed, the following generic phases occur in managing changes to Federal Student Aid systems or system components:

- Requirements Definition
- Systems Analysis
- Design
- Construction

- Test
- Implementation
- Post Implementation

Figure 3-2 maps the EOCM process to a generic life cycle. This mapping is a guide for translating any applied life cycle, such as Department of Education’s Lifecycle Management Framework. Appendix C – Detailed Process Materials, reflects how the EOCM process maps to a generic life cycle.

Process Step	Generic Life Cycle Phase
Open Change Request	After Funding and Project Approval Requirements Definition
Impact Analysis	No earlier than completion of Requirements Definition, no later than completion of Systems Analysis
Enterprise Review & Approval	
Pre-Implementation	Design, Construction and Test
Implementation	Implementation
Closure	Post Implementation

**Figure 3-2: Enterprise Operational Change Management Process Mapping to a Generic Life Cycle**

The following process assumptions are made for EOCM:

- EOCM Process usage is mandatory, and is applicable to new projects that have received funding and project approval as well as changes that do not require funding but that meet the definition of an Enterprise Event. This usually occurs in the later portions of the Requirements Definition stage of a Systems Development Life Cycle.
- During the Requirements Definition stage, business units should review their requirements with other business units that potentially could be impacted prior to opening an Enterprise Change Request (ECR) and not use the EOCM process as a substitute.
- Impact Analysis occurs no earlier than completion of Requirements Definition, no later than completion of Systems Analysis. Impact Analysis results and recommendations are reviewed with each business unit’s Change Control Board (CCB) prior to exiting the Impact Analysis step.
- If a business unit cannot agree to all programmatic, technical, or funding assumptions/considerations then it is documented within the recommendations and submitted to the ECCB for resolution.
- ECCB will review all ECRs and recommendations and escalate unresolved recommendations to the Executive Leadership Team for resolution.
- Pre-Implementation progress reviews include In-Process Reviews (IPRs), Business Operations Reviews, Quarterly Reviews and any other reviews that a project conducts to assess progress.
- Production Readiness Review (PRR) will be tailored to support joint sessions as a result of Change Requests.

### 3.1. Process Step Value Proposition

Each step in the EOCM process provides unique value to various Federal Student Aid organizations. Figure 3-3 identifies the value proposition for each process step in support of meeting the objectives identified in Section 1.3.

Process Step	Why is it Required	Who Requires it
Open Change Request	<ul style="list-style-type: none"> <li>▪ Identify the entity requesting the change</li> <li>▪ Confirm scope of change is related to an enterprise event</li> </ul>	<ul style="list-style-type: none"> <li>▪ General information for all parties</li> </ul>
Impact Analysis	<ul style="list-style-type: none"> <li>▪ Monitor enterprise event interdependencies for synergy, integrity, costs, etc.</li> <li>▪ Reduce future effort &amp; costs through planned, coordinated, and communicated changes that reduce emergency changes and re-work</li> <li>▪ Ensure identification and evaluation of all possible components</li> <li>▪ Determine risks of making or not making change</li> <li>▪ Evaluate and determine timing and sequencing of multiple changes</li> <li>▪ Leverage work going on elsewhere in the enterprise and provide input into Analysis/Evaluation efforts</li> </ul>	<ul style="list-style-type: none"> <li>▪ Initiating project</li> <li>▪ Impacted projects</li> <li>▪ Enterprise team</li> </ul>
Enterprise Review & Approval	<ul style="list-style-type: none"> <li>▪ Gain consensus across enterprise for changes to minimize risk and improve coordination</li> <li>▪ Review all FSA application or system changes to ensure resources are available to support priorities and schedules</li> </ul>	<ul style="list-style-type: none"> <li>▪ Entire enterprise</li> </ul>
Pre-Implementation	<ul style="list-style-type: none"> <li>▪ Monitor pre-implementation activities to respond to issues and ensure there are no enterprise conflicts, related to priorities or schedules</li> <li>▪ Review impacts on other ECRs or system/application changes in the pipeline</li> </ul>	<ul style="list-style-type: none"> <li>▪ Entire enterprise</li> </ul>
Implementation	<ul style="list-style-type: none"> <li>▪ Monitor implementation activities to respond to issues and ensure there are no enterprise conflicts, related to priorities or schedules</li> <li>▪ Review impacts on other ECRs or system/application changes in the pipeline</li> <li>▪ Ensure coordinated timing of enterprise architectures updates</li> </ul>	<ul style="list-style-type: none"> <li>▪ Entire enterprise</li> </ul>
Closure	<ul style="list-style-type: none"> <li>▪ Capture lessons learned</li> <li>▪ If required, capture PIR results</li> </ul>	<ul style="list-style-type: none"> <li>▪ Initiating project</li> <li>▪ Impacted projects</li> <li>▪ Enterprise team</li> </ul>
Cancel / Rollback	<ul style="list-style-type: none"> <li>▪ Terminate request for change without Implementation</li> <li>▪ Support updates in business or management priorities</li> <li>▪ Restore system to pre-implementation state</li> </ul>	<ul style="list-style-type: none"> <li>▪ Initiating project</li> <li>▪ Impacted projects</li> <li>▪ Enterprise team</li> </ul>

**Figure 3-3: Enterprise Operational Change Management - Process Step Value Proposition**

## 3.2. Enterprise Change Request Priorities

There are three priority levels for ECRs. Each priority level will be handled in accordance to procedures established by the ECCB. The following are guidelines for placing a priority on an ECR.

Emergency priority is assigned to:

- Correct an application/system halt (abnormal termination) in the production environment such that Federal Student Aid mission accomplishment is prohibited.
- Correct a hazardous condition that may result in injury to personnel or damage to equipment.
- Effect a change in operational characteristics that, if not accomplished expeditiously, may seriously compromise security or business mission.

Urgent priority is assigned to:

- Effect a change that, if not accomplished, may compromise Federal Student Aid mission effectiveness, contractual commitments or life cycle costs.
- Correct a condition that is affecting an application/system critical to the Federal Student Aid mission.
- Effect a change in operational characteristics to implement regulatory requirements with stringent completion date requirements.

Routine priority is assigned when emergency or urgent implementation is not applicable, required or justifiable.

Timelines to process an ECR are established to ensure that coordination and facilitation of changes across the enterprise will occur prior to any change in production systems or its operating environment. The table below provides the milestone events that ECRs process through; and the timeframes at which these milestones should occur is based upon the priority of the ECR and the expected implementation date into production. Additionally, all ECRs should be reviewed and approved by the ECCB at least 2 weeks prior to any change being implemented against a production system. The entries in the table below refer to the period of time prior to the implementation date.

ECR Milestone	Emergency*	Urgent	Routine
Submit Request	NA	2 months prior	6 months prior
Draft Impact Analysis Report	NA	4 weeks prior	3 months prior
Final Impact Analysis Report	NA	3 weeks prior	8 weeks prior
ECCB Approval	NA	2 weeks prior	4 weeks prior

\*An ECR with an emergency priority will be processed immediately, or shortly after the change is implemented.

**Figure 3-4: Enterprise Change Request Processing Timelines**

## 3.3. Process Step Leadership, Inputs and Outputs

Each step in the EOCM process requires information to process ECRs and results in outputs or deliverables. EOCM process usage is mandatory, and is applicable to new projects that have received funding and project approval as well as changes that do not require funding but that

meet the definition of an Enterprise Event. This usually occurs in the later portions of the Requirements Definition stage of a Systems Development Life Cycle. During the Requirements Definition stage, business units should review their requirements with other business units that potentially could be impacted prior to opening an ECR. The EOCM process should not be used as a substitute for communication among Federal Student Aid business units.

Figure 3-4 provides the key inputs and outputs for each process step. For detailed procedures and job aids to initiate an Enterprise Change Request, see Appendix D – Enterprise Change Request Form. Appendix E – Impact Analysis Procedures and Job Aids, contains the procedures and job aids for completing an Impact Analysis while the template for the Impact Analysis and Recommendation Report is contained in Appendix F – Impact Analysis and Recommendation Report.

Process Step	Who Leads Step	Information Required	Process Output(s)
Open Change Request	Initiating Project / Business Lead	<ul style="list-style-type: none"> <li>▪ Application or System Name</li> <li>▪ Milestone dates for the change</li> <li>▪ Summary of the change</li> <li>▪ Requestor Information (name, contact)</li> <li>▪ Systems or system components, impacted</li> <li>▪ Pre &amp; post dependencies</li> <li>▪ Related change requests</li> </ul>	<ul style="list-style-type: none"> <li>▪ Promotion of the change request</li> <li>▪ Registered/Open Enterprise Change Request</li> </ul>
Impact Analysis	CIO EOCM Lead with assistance from project CCB assigned staff, data center staff, and Enterprise Architecture staff.	<ul style="list-style-type: none"> <li>▪ General Information from Change Request</li> <li>▪ Business &amp; technical requirements</li> <li>▪ "As-is" enterprise architecture information (BRM, SRM, DRM, TRM)</li> <li>▪ Technical standards</li> <li>▪ Data Center Standards and Operations</li> <li>▪ Other related changes planned across enterprise (other Change Requests)</li> <li>▪ Peak periods or other politically important conferences</li> </ul>	<ul style="list-style-type: none"> <li>▪ Impact Analysis Assessment &amp; Recommendation Report: <ul style="list-style-type: none"> <li>- Systems requiring changes</li> <li>- Changes required</li> <li>- Effort hours per change</li> <li>- Recommended timing of changes</li> <li>- Documentation of different options/ alternative solutions/dissension to recommendations and reasoning</li> <li>- Sequencing/dependencies</li> </ul> </li> <li>▪ Meeting agendas &amp; minutes</li> </ul>
Enterprise Review & Approval	ECCB	<ul style="list-style-type: none"> <li>▪ Impact Analysis Assessment &amp; Recommendation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Approval to move forward, or decision to modify change.</li> </ul>
Pre-Implementation	Impacted Project / Business Leads	<ul style="list-style-type: none"> <li>▪ Input from project on current status</li> <li>▪ Change in status, change in impact, or previous impact analysis</li> <li>▪ Update on project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Updates to baseline, as required</li> </ul>
Implementation	Impacted Project / Business Leads	<ul style="list-style-type: none"> <li>▪ Production Readiness Review (PRR) Results and Approval</li> <li>▪ Notification of Release and Release Summary</li> </ul>	<ul style="list-style-type: none"> <li>▪ Updates to baseline, as required</li> </ul>
Closure	CIO EOCM Lead with assistance from Impacted Project / Business Leads	<ul style="list-style-type: none"> <li>▪ Lessons Learned, or if required Post Implementation Review (PIR)</li> <li>▪ Confirmation of Change in Production</li> </ul>	<ul style="list-style-type: none"> <li>▪ Updates to operational baseline records</li> <li>▪ Lessons learned/post implementation review</li> <li>▪ Update enterprise architecture reference layers</li> <li>▪ Comparison of actual impact and effort vs. predicted impact and effort</li> </ul>
Cancel / Rollback	Impacted Project / Business Leads	<ul style="list-style-type: none"> <li>▪ Reason for cancellation / rollback, such as:</li> <li>▪ Management Decision</li> <li>▪ Technical Feasibility</li> <li>▪ Superseding Change</li> </ul>	<ul style="list-style-type: none"> <li>▪ Confirmation of rollback, as required</li> <li>▪ Rollback of enterprise architecture reference layers, as required</li> </ul>

**Figure 3-5: Enterprise Operational Change Management - Process Step Information Flow**

### 3.4. Process Step Roles and Responsibilities

Figure 3-5 lists each process step, the role and participants, and their responsibilities. A more detailed description of Enterprise Review and Approval roles and responsibilities can be found in Section 2.1.

Process Step	Role / Participant	Responsibilities
Open Change Request	Initiating Project / Business Lead	Document and register change requests to the enterprise team. Where possible, Change Requests will be reviewed with potentially impacted Business Units prior to registering an open change request.
	CIO EOCM Lead	Confirm scope of change is related to an enterprise event.
	ECCB	Review open Change Requests to provide guidance and concerns to be addressed during Impact Analysis.
Impact Analysis	CIO EOCM Lead	Lead enterprise-wide Impact Analysis and development of recommendations.
	Impacted Business Unit CCB's assigned staff, data center and Enterprise Architecture staff	Conduct an Impact Analysis of their systems or system components prior to assisting in enterprise-wide Impact Analysis and development of recommendations.
Enterprise Review & Approval	ECCB and Impacted Portions of Enterprise	Review Impact Analysis Assessment & Recommendations. If a consensus is reached, approve, approve with modifications or reject request.
	Executive Leadership Team	Review Impact Analysis Assessment & Recommendations and provide decisions on escalated change requests.
	CIO EOCM Lead	Record decisions made and facilitate updates to enterprise artifacts as required.
Pre-Implementation	ECCB supported by CIO EOCM Lead	Receive progress and maintain status of change request. Review progress to ensure no programmatic, scheduling, or technical issues impact progress.
	Executive Leadership Team	Provide decisions on escalated change requests.
	Impacted Business Units	Design, construct, and test solution. Routinely review progress with other impacted projects/business units and report progress to the ECCB and Enterprise Team. Conduct Production Readiness Review(s) and invite impacted business units if unable to synchronize release schedules.
	CIO EOCM Lead	Facilitate a common or joint Production Readiness Review, when release schedules permit.
Implementation	ECCB supported by EOCM Lead	Receive progress and maintain status of change request. Review progress to ensure no programmatic, scheduling, or technical issues impact progress.
	Executive Leadership Team	Provide decisions on escalated change requests.
	Impacted Business Units	Implement solution. Provide status of efforts to projects/business units and report progress to the ECCB and Enterprise Team.
	CIO EOCM Lead	Update Change Request status. Coordinate updates to "As-Is" Enterprise Artifacts with the appropriate team, as required, to reflect change.
Closure	Impacted Business Units	Provide lessons learned and if required, complete PIR checklist.
	CIO EOCM Lead	Conduct lessons learned sessions and record results.
	ECCB	Review Lesson Learned and/or PIR. Close Change Request.
Cancel/Rollback	Initiating Project/ Business Units and CIO EOCM Lead	Communicate cancellation and any required rollback activities to Impacted Business Units. Archive Change-related artifacts.
	Impacted Business Unit	Confirm completion of cancellation and rollback.

---

Process Step	Role / Participant	Responsibilities
	CIO EOCM Lead	Coordinate rollback to baseline Enterprise Artifacts with the appropriate team, as required. Update and close Change Request.

**Figure 3-6: Enterprise Operational Change Management - Roles and Responsibilities**

## **Appendix A - Acronyms and Abbreviations**

**Appendix A: Acronyms and Abbreviations**

BRM	Enterprise Architecture Business Reference Model
CCB	Change Control Board
CFO	Chief Financial Office
CIO	Chief Information Office
DNS	Domain Name System
DRM	Enterprise Architecture Data Reference Model
EA	Enterprise Architecture
ECCB	Enterprise Change Control Board
ECR	Enterprise Change Request
ED	U.S. Department of Education
ELT	Executive Leadership Team
EOCM	Enterprise Operational Change Management
EPMS	Enterprise Performance Management Services
FMS	Financial Management System
FSA	Federal Student Aid
GAO	Government Accountability Office
IPM	Investment Planning and Management
IPR	In Process Review
IT	Information Technology
ITIM	Information Technology Investment Management
LCM	Lifecycle Management
OMB	Office of Management and Budget
One-ED	One-ED
PIR	Post Implementation Review
PRR	Production Readiness Review
SDLC	Systems Development Life Cycle
SFA	Student Financial Assistance
SLC	Solution Life Cycle
SRM	Enterprise Architecture Service Reference Model
TBD	To Be Determined
TRM	Enterprise Architecture Technical Reference Model
USC	United States Code
VDC	Virtual Data Center
XML	Extensible Markup Language

## **Appendix B - Glossary**

**Appendix B: Glossary**

<b>Term</b>	<b>Definition</b>
<b>Analysis/Evaluation</b>	Projects that encompass exploratory efforts, targeted research that results in recommendations, or pilots of new processes or technology.
<b>Baseline</b>	Established hardware and software configuration that provides a point of reference for system changes.
<b>Capital Planning and Investment Control</b>	The portion of Enterprise Investment Management related to capital investments.
<b>Change Control Board</b>	A review committee that is responsible for defining the change, evaluation, coordination, approval/disapproval and implementation of changes to a Configuration Item after the item has been formally defined and baselined.
<b>Change Management</b>	A set of management disciplines and best practices used to ensure a smooth transition and minimal disruption when process or system changes are introduced in an organization.
<b>Configuration Item</b>	A configuration item can be any of the following components: hardware, software, system documentation, project office documentation, contracts, system interfaces, project office tools, contractor deliverables, networks, websites, desktop components, and databases.
<b>Configuration Management</b>	A discipline applying technical and administrative direction and surveillance to identify and document the functional and physical characteristics of a configuration item, control changes to those characteristics, record and report change processing and implementation status, and verify compliance with specified requirements.
<b>Control Phase</b>	Ongoing management activity within the OMB and GAO prescribed IT Investment Management process designed to monitor the progress of IT initiatives against projected cost, schedule, performance, and expected mission benefits. The Control Phase helps to ensure each project is properly managed.
<b>Enterprise</b>	An organization, in this instance the Federal Student Aid, supporting a defined mission. It includes interdependent resources (people, organizations, technology) that must be integrated for effective operation of the organization.
<b>Enterprise Architecture</b>	The description of information systems and their relationship to the businesses needs and processes of the Federal Student Aid.
<b>Enterprise Change Control Board</b>	The Federal Student Aid enterprise-level decision board that has the authority and responsibility to review, question, and ultimately approve or disapprove changes related to Enterprise Events, managed through the Enterprise Operational Change Management process.
<b>Enterprise Change Management</b>	The set of management practices used to manage change from change inception through implementation across layers and functions of an organization. An IT initiative may require a change or updating to its baseline cost and schedule milestones. Enterprise Change Management is the formalized change control and management practices used for review, authorization, and tracking baseline changes.
<b>Enterprise Change Request</b>	Formally submitted change requests that seek approval of an Enterprise Event, managed through the Enterprise Operational Change Management process.

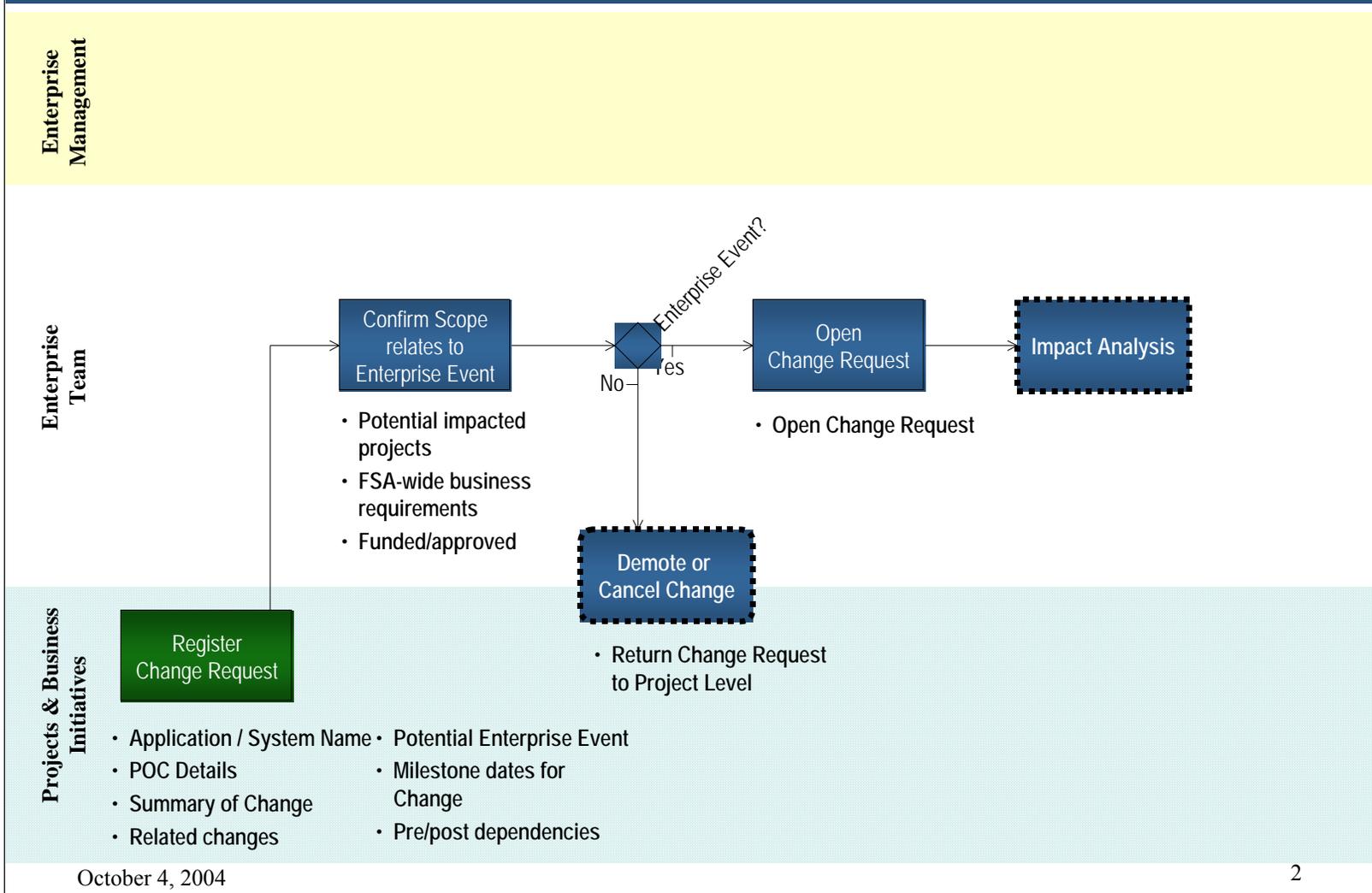
Term	Definition
<b>Enterprise Event</b>	Occurs when a change impacts Federal Student Aid operations across multiple systems, system components or interfaces, including changes to enterprise architecture components, and Federal Student Aid -wide business requirements. Enterprise Events are independent of Federal Student Aid organizations even when systems, system components or interfaces are owned within a single business unit. Reference section 1.3 for examples.
<b>Enterprise Investment Management</b>	Within the Enterprise Change Management process, integrates long range planning with budget and acquisition processes. The Investment Control Planning Council is the executive decision-making body for Federal Student Aid Capital Planning and Investment Control.
<b>Enterprise Management</b>	The Executive Leadership Team is the executive decision-making body for the Federal Student Aid enterprise, within the Enterprise Operational Change Management process.
<b>Enterprise Operational Change Management</b>	The set of management practices used to manage changes from project inception through implementation into an operational environment. An Federal Student Aid enterprise-level process, that operates in parallel to business units' SDLC, providing formalized change control and management practices used for review, authorization, and tracking Enterprise Event changes.
<b>Evaluate Phase</b>	Once IT initiatives are fully implemented, within the OMB and GAO prescribed IT Investment Management process, actual versus expected results are evaluated to (1) assess the initiative's impact on Federal Student Aid strategic performance, (2) identify any changes or modifications to the initiative that may be needed, and (3) revise the investment management processes based on lessons learned.
<b>Information Technology Investment Management</b>	The OMB and GAO prescribed management process for ongoing identification, selection, control, and evaluation of investments in information systems and resources. The process should effectively and efficiently link mission needs, information, and information technology; integrate with organizational planning, budgeting, procurement, management (financial, human resources, and program), and assessment; coordinate with the Federal Student Aid '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.
<b>Life Cycle</b>	The stages of an information system, from development and selection, through implementation, to termination.
<b>Lifecycle Management Framework</b>	The U.S. Department of Education structured approach, outlining required stages, key activities and core deliverables that provides a foundation for aligning existing interrelated processes, such as the Office of the Chief Information Officer's (OCIO) Information Technology Investment Management (ITIM) process, the Office of the Chief Financial Officer's (OCFO) Contracts and Acquisition Management (CAM) process and processes associated with project management, used in delivering information technology (IT) solutions.
<b>Maintenance/Operations</b>	Projects that are operational investments, into existing Information Resources.
<b>Post-Implementation Review (PIR)</b>	Evaluation of the IT initiative after it has been fully implemented to determine whether the targeted outcomes (e.g., strategic and operational performance measures) of the initiative have been achieved. The PIR should also include an evaluation of the effectiveness of the Select - Control - Evaluate process as it relates to the IT initiative.

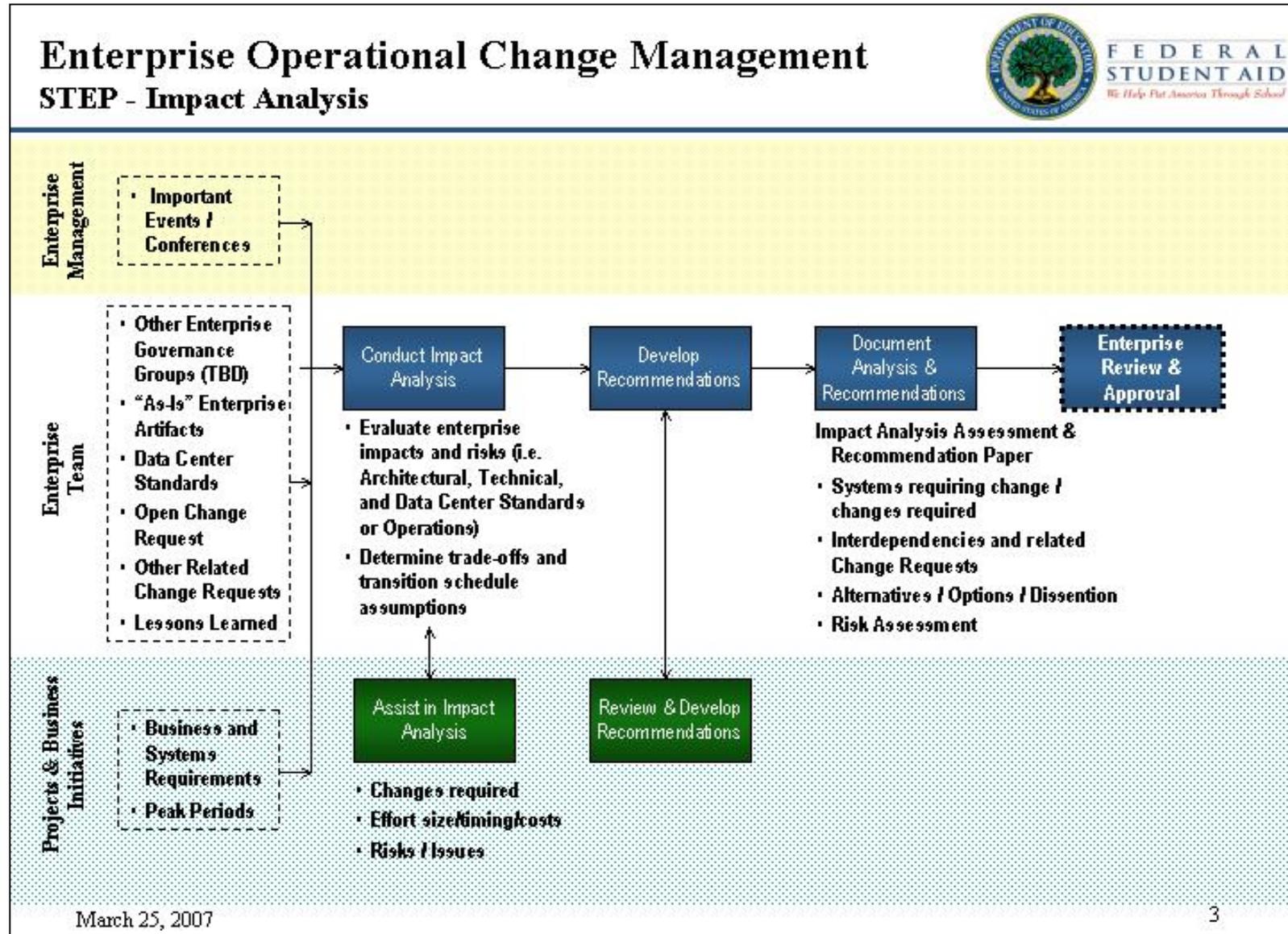
<b>Term</b>	<b>Definition</b>
<b>Production Readiness Review (PRR)</b>	The Federal Student Aid PRR is a tool designed to provide detailed project development information to management and senior leadership in support of the decision process to implement a production system.
<b>Release Management</b>	A process that protects the live environment by ensuring that proper procedures and controls are in place for the release of IT components. The focus is on protecting the production environment and its services by using formal procedures and checks. Release management should be carried out based upon a configuration management database to ensure that IT infrastructure is up to date.
<b>Select Phase</b>	Ongoing management activity within the OMB and GAO prescribed IT Investment Management process designed to determine which IT initiatives to undertake, subject to the availability of funding, and to establish project review schedules. During the Select Phase, the Federal Student Aid links priorities to candidate projects to help make decisions about which initiatives will be funded. The Select Phase ensures that Federal Student Aid funds those IT initiatives that will best support mission needs and that each IT initiative has been adequately analyzed for risks and returns.
<b>Strategic Planning</b>	Strategic planning is a systematic method to anticipate and adapt to expected change. Strategic planning defines the mission, goals and objectives, and strategies of the agency. Federal Student Aid 's strategic plan provides a basis for aligning agency organization and budget structure with missions and objectives. It is a tool for setting the agency's priorities and allocating resources consistent with these priorities. IT strategic planning sets broad direction and goals for managing information and supporting delivery of services to customers and the public and identifies the major IT activities to be undertaken to accomplish the desired agency missions and goals.
<b>System</b>	The discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposal of information.
<b>System Component</b>	A functional unit that publishes and/or processes information with an independent code base that provides specific functionality for a system that is produced through a software development process or a commercial off the shelf (COTS) implementation.
<b>System Development</b>	Projects that are developmental investments, typically following a Life Cycle methodology.
<b>System Development Life Cycle (SDLC)</b>	A structured management approach for systems development from planning through development and operational support to disposal of the system. A proven series of steps, tasks, deliverables, and reviews used to build and maintain quality systems faster, at lower costs and with less risk.

**Appendix C - Detailed Process Materials**

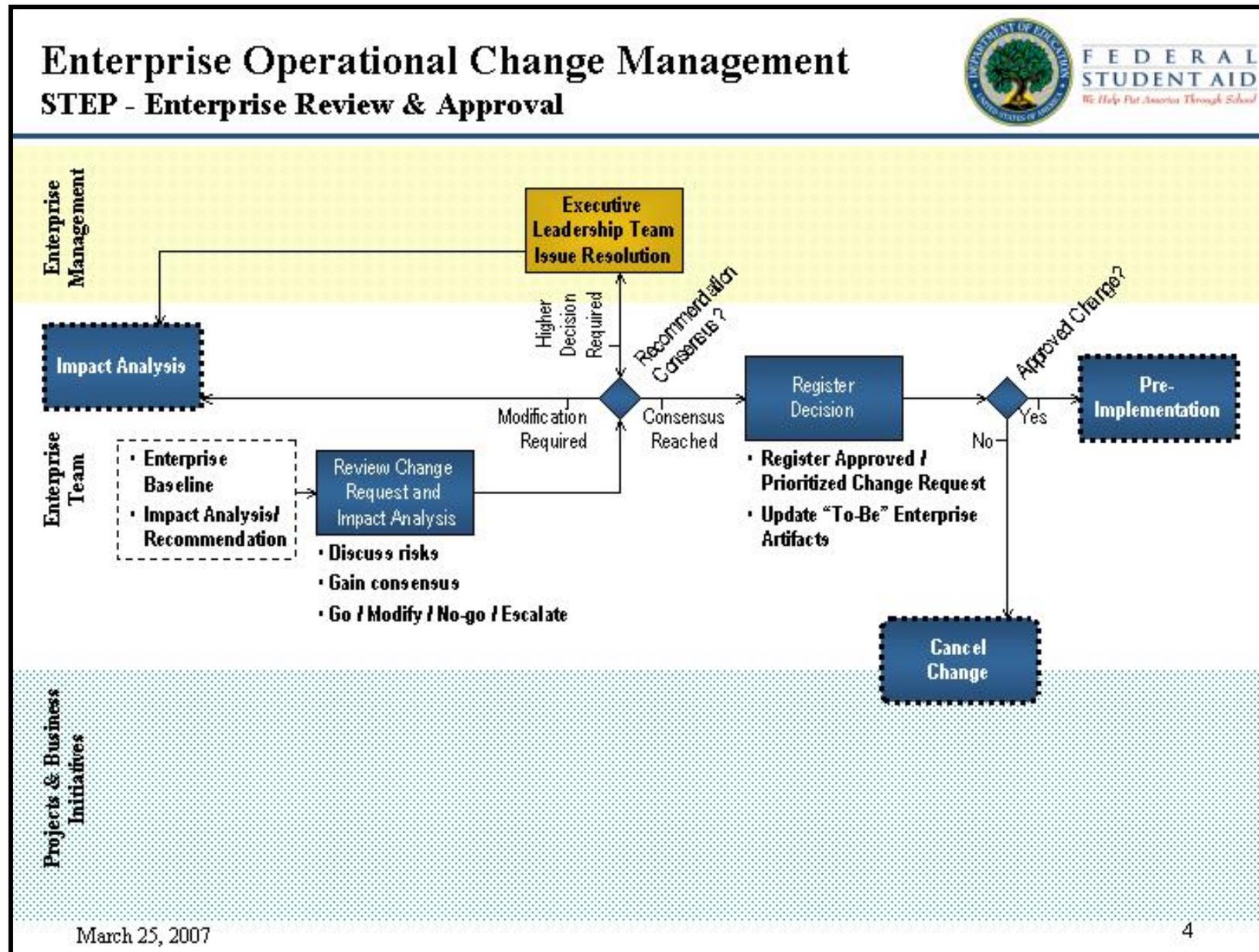
# Enterprise Operational Change Management

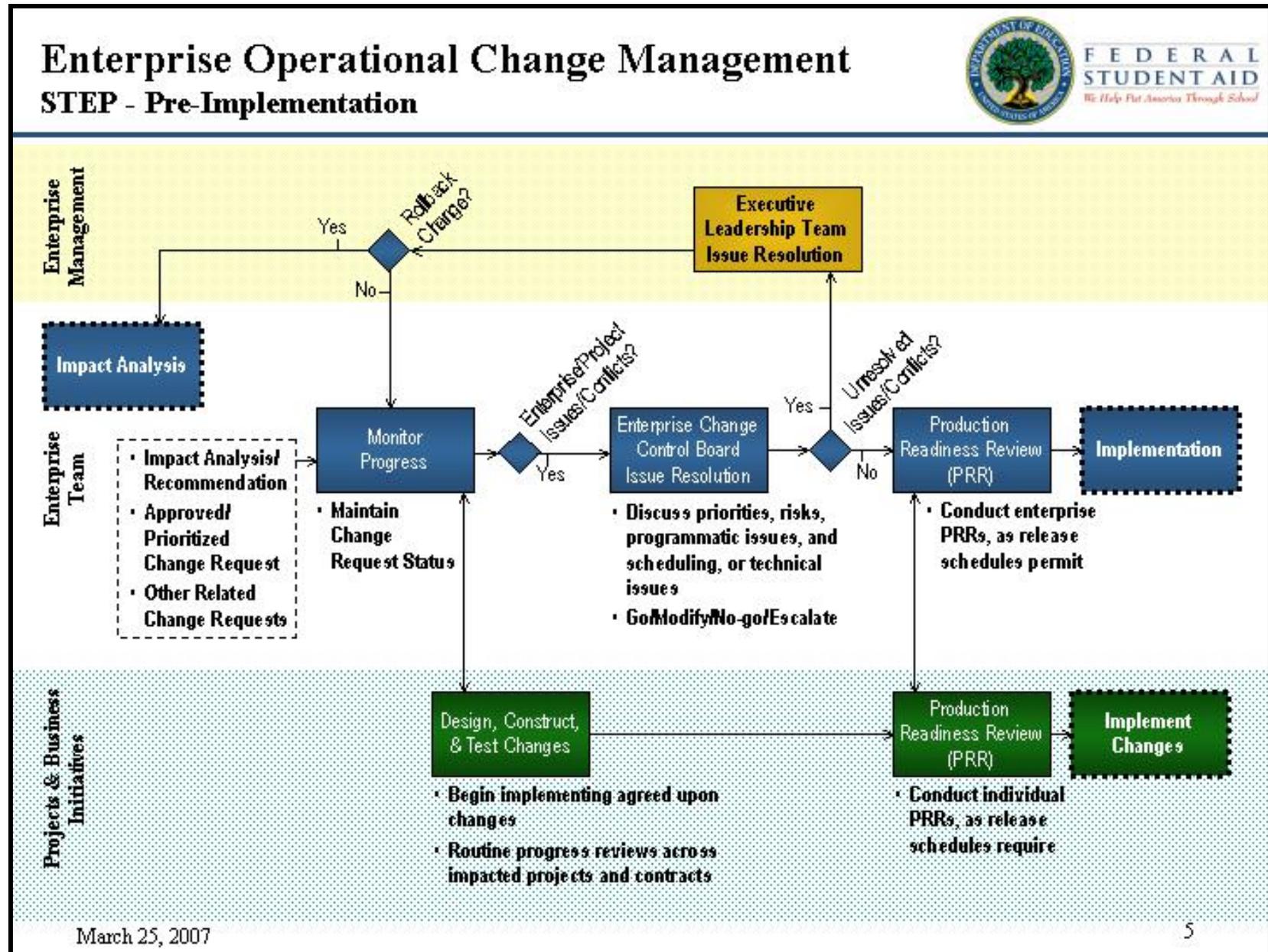
## STEP - Open Enterprise Change Request

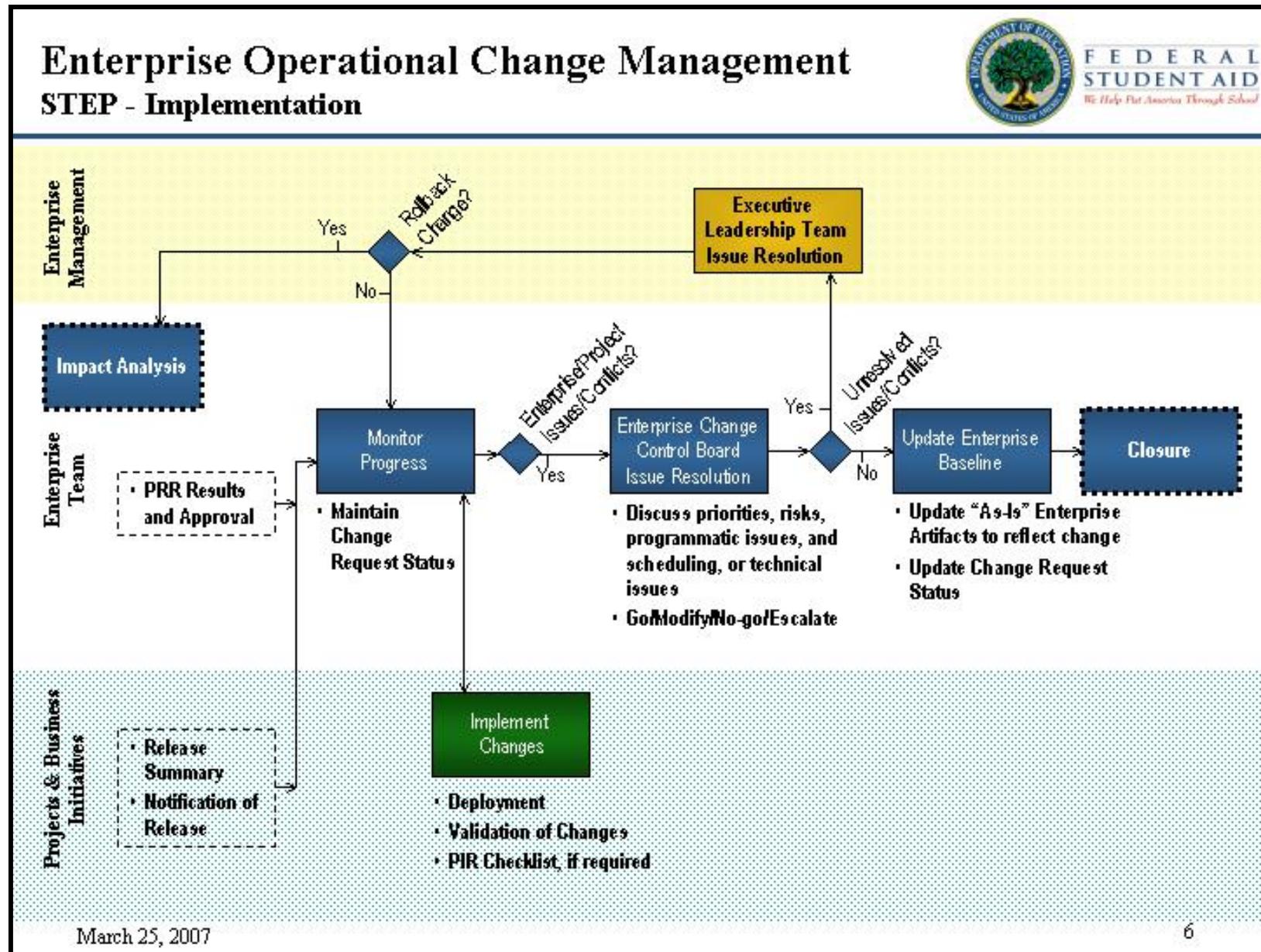




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# Enterprise Operational Change Management

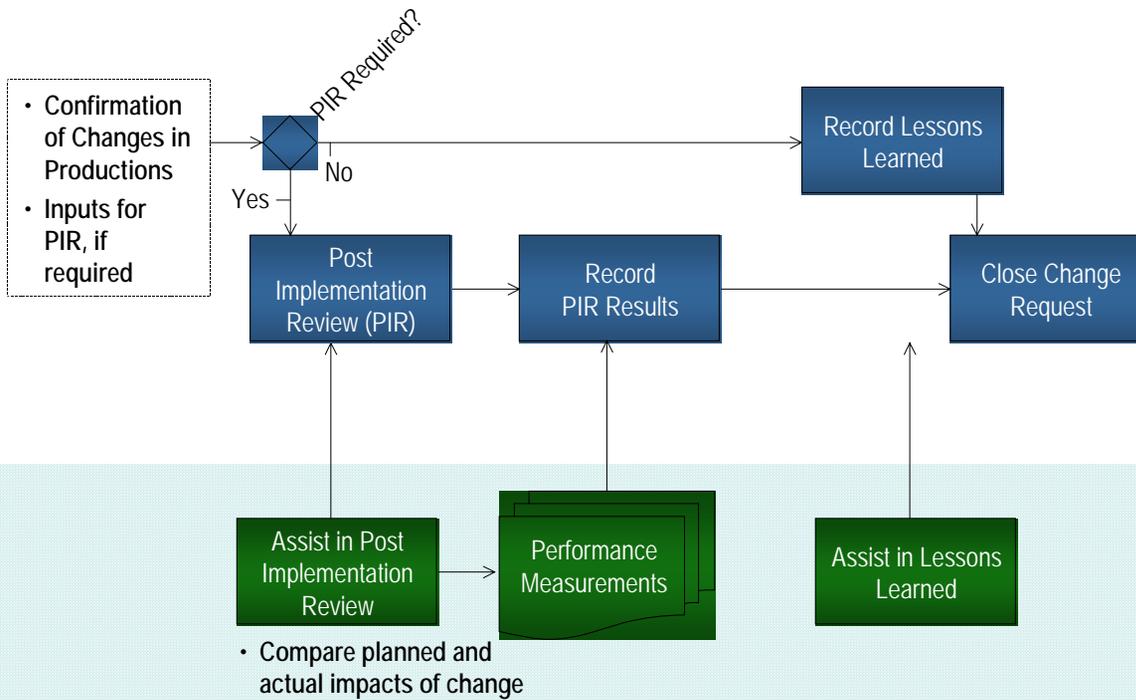
## STEP - Closure



Enterprise Management

Enterprise Team

Projects & Business Initiatives



October 4, 2004

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**Appendix D - Enterprise Change Request Form**

**Guidance:**

Federal Student Aid business units are required to follow the Federal Student Aid Enterprise Operational Change Management process when making changes to their systems that are considered to be Enterprise Events, as defined below. The Federal Student Aid Enterprise Operational Change Management Process is not intended to manage and track changes to business units' releases and operational processes.

An Enterprise Event occurs when a change impacts Federal Student Aid operations across multiple systems, system components or interfaces, including changes to enterprise architecture components, and Federal Student Aid -wide business requirements. Enterprise Events are independent of Federal Student Aid organizations even when systems, system components or interfaces are owned within a single business unit. Examples of Enterprise Events are listed in Section 1.3.

Enterprise Operational Change Management process usage is mandatory, and is applicable to new projects that have received funding and project approval as well as changes that do not require funding but that meet the definition of an Enterprise Event. This usually occurs in the later portions of the Requirements Definition stage of a System Development Life Cycle. During the Requirements Definition stage, business units should review their requirements with other business units that potentially could be impacted prior to opening a Change Request and not use the Enterprise Operational Change Management process as a substitute.

**Form Instructions:**

The Change Request Form is intended to capture Change Requests for the Federal Student Aid Enterprise Operational Change Management Process. Complete non-shaded sections of the form. Within the Change Description, provide a rationale for accepting the change as an Enterprise Event. Enterprise Change Management will confirm that the Change Request relates to an Enterprise Event and assign a Change Request number.

## ENTERPRISE CHANGE REQUEST

<b>General</b>
Change Request Number (assigned after opening):
Change Request Title:
Project/Application/System Name:
Project/Application/System Version/Release Number:

<b>Contact Names</b>	
Request Originator	
Sponsor Name	
Change Control Board Point of Contact	

<b>Change Description</b>
Priority Level:
<input type="checkbox"/> Emergency is assigned to: <ul style="list-style-type: none"> <li>▪ Correct an application/system halt (abnormal termination) in the production environment such that Federal Student Aid mission accomplishment is prohibited.</li> <li>▪ Correct a hazardous condition that may result in injury to personnel or damage to equipment.</li> <li>▪ Effect a change in operational characteristics that, if not accomplished expeditiously, may seriously compromise security or business mission.</li> </ul>
<input type="checkbox"/> Urgent is assigned to: <ul style="list-style-type: none"> <li>▪ Effect a change that, if not accomplished, may compromise FSA mission effectiveness, contractual commitments or life cycle costs.</li> <li>▪ Correct a condition that is affecting an application/system critical to the FSA mission.</li> <li>▪ Effect a change in operational characteristics to implement regulatory requirements with stringent completion date requirements.</li> </ul>
<input type="checkbox"/> Routine is assigned when emergency or urgent implementation is not applicable, required or justifiable. <p>Provide a description of the change with the business reason for the change and the scope of the change.</p>
List any related Change Requests.
List applications/systems or interfaces impacted by this change.
List business areas/external groups impacted by this change.

**ENTERPRISE CHANGE REQUEST (CONTINUED)**

<b>Scheduling Dependencies</b>
Provide the target implementation date of the change.
List events, milestones, applications/systems releases, and Change Requests that precede implementation of this Change Request.
List events, milestones, applications/systems releases, and Change Requests that follow implementation of this Change Request.
List other scheduling assumptions, such as blackout periods, legislative dates, etc.

<b>For Enterprise Team Use Only</b>		
<b>Change Request Number:</b>		
Date ECR Submitted/Registered:		
<input type="checkbox"/> Complete		
Enterprise Event Category:		
<input type="checkbox"/> Business rule or data element changes that impact more than one application/system <input type="checkbox"/> XML schema or Meta-data changes <input type="checkbox"/> Application(s) or software used by more than one system in a “shared services” environment <input type="checkbox"/> Infrastructure or hardware platform modifications <input type="checkbox"/> Communications system modifications such as router, firewall, or DNS changes <input type="checkbox"/> Security patches <input type="checkbox"/> Security policy changes <input type="checkbox"/> Software or platform upgrades and refreshes such as new operating system or Oracle releases <input type="checkbox"/> New applications/systems migrations into data centers <input type="checkbox"/> Federal mandates that would impact multiple business rules <input type="checkbox"/> New system/application is developed and requires changes to existing systems/applications <input type="checkbox"/> System requests testing support from another system <input type="checkbox"/> Other Enterprise Event(s) – explain below		
Other Enterprise Event rationale:		
Disposition Date:		
Disposition:		
<input type="checkbox"/> Open		
<input type="checkbox"/> Reject/Close		
Notes:		



## **Appendix E - Impact Analysis Procedures and Job Aids**

**Guidance:**

Federal Student Aid business units are required to follow the Federal Student Aid Enterprise Operational Change Management Process when making changes to their systems that are considered to be Enterprise Events, as defined below. The Federal Student Aid Enterprise Operational Change Management Process is not intended to manage and track changes to business units' releases and operational processes.

An Enterprise Event occurs when a change impacts Federal Student Aid operations across multiple systems, system components, or interfaces, including changes to enterprise architecture components, and Federal Student Aid -wide business requirements. Enterprise Events are independent of Federal Student Aid organizations even when systems, system components, or interfaces are owned within a single business unit. Examples of Enterprise Events are listed in Section 1.3.

When a system requests testing support from another system, the change should go through the EOCM process.

Enterprise Operational Change Management process usage is mandatory, and is applicable to new projects that have received funding and project approval as well as changes that do not require funding but that meet the definition of an Enterprise Event. This usually occurs in the later portions of the Requirements Definition stage of a Systems Development Life Cycle. Enterprise Operational Change Management process Impact Analysis occurs no earlier than completion of Requirements Definition, no later than completion of Systems Analysis.

**Procedure:**

Figure E-1 provides an overview of the steps to take to complete an Impact Analysis assessment and development of recommendations for an enterprise operational change management request. It also provides references to job aids to assist in activities to complete the procedure.

Step	Actions	Responsible Parties	Job Aids
Conduct Impact Analysis	<ul style="list-style-type: none"> <li>▪ Coordinate analysis meeting with initiating and potentially impacted projects/business units.</li> <li>▪ Complete Impact Analysis of Applications/Systems to determine changes required, effort size, timing, costs, risks and issues.</li> <li>▪ Conduct analysis meeting: identifying completeness of application/system impacts; evaluating enterprise impacts and risks; and determining trade-offs and transition assumptions.</li> </ul>	<ul style="list-style-type: none"> <li>▪ CIO EOCM Lead</li> <li>▪ Potentially impacted business units</li> <li>▪ CIO EOCM Lead with initiating and potentially impacted projects/business units</li> </ul>	Impact Analysis – Application/System/Interface Worksheet
Develop Recommendations	<ul style="list-style-type: none"> <li>▪ Develop recommendations, including sequencing of events, assumptions, constraints, and enterprise assessment.</li> </ul>	<ul style="list-style-type: none"> <li>▪ CIO EOCM Lead with initiating and potentially impacted projects/business units</li> </ul>	Impact Analysis – Enterprise Worksheet
Document Analysis & Recommendations	<ul style="list-style-type: none"> <li>▪ Document Impact Analysis &amp; Recommendation Report</li> <li>▪ Conduct recommendation review to identify completeness of analysis and recommendations, and capture alternatives, options, and any dissension.</li> <li>▪ Update Impact Analysis &amp; Recommendation Report, based upon reviews.</li> </ul>	<ul style="list-style-type: none"> <li>▪ CIO EOCM Lead</li> <li>▪ Enterprise Change Control Board (ECCB) with initiating and potentially impacted projects/business units' CCBs</li> <li>▪ CIO EOCM Lead</li> </ul>	Impact Analysis & Recommendation Report – Outline

**Figure E-1: Procedures for Conducting an Impact Analysis and Developing a Recommendation Report**

**Job Aid Instructions:**

These worksheets are intended to assist the enterprise and business units in capturing and documenting impacts to systems, system components, and/or interfaces as a result of an enterprise event. If a business unit has a standard or template already developed for assessing impacts and recommending courses of action, then the worksheets should be used as a guide to ensure all impacts have been reviewed and considered.

Please review the Impact Analysis Procedure for proper usage of these Job Aids.

**APPLICATION/SYSTEM/INTERFACE WORKSHEET**

Complete one Application/System/Interface Worksheet for each application/system or interface impacted by the Enterprise Operational Change Request, to bring to the analysis meeting.

**ENTERPRISE WORKSHEET**

Complete the Enterprise Worksheet for the Enterprise Operational Change Request (considering all impacted systems or system components), as part of the analysis and recommendation meeting. Add any enterprise impacts from the analysis meeting not recorded within the Change Request to the Enterprise Impacts section.

**ANALYSIS SUPPORTING GUIDANCE**

This is a supplemental job aid, provided for informational purposes, providing topics for consideration during the impact analysis.

**IMPACT ANALYSIS & RECOMMENDATION REPORT**

The following forms the basis for an Impact Analysis & Recommendation Report:

- Systems requiring change – changes required
- Interdependencies and related Change Requests
- Alternatives/Options/Dissension
- Risk Assessment
- Attach any write-ups and correspondence used to develop this recommendation.

See Appendix F for a complete template to document results and recommendations.

## APPLICATION/SYSTEM/INTERFACE WORKSHEET

Change Request Number:	
Change Request Title:	
Impacted Project/Application/System Name:	

<b><i>Impacted Project/Application/System Contact Names</i></b>	
Impact Analysis Participant(s)	
Change Control Board Point of Contact	

<b>High level categorization of change to impacted application/system/interface</b>
<input type="checkbox"/> Small – minor effect on project plans and deliverables/components.
<input type="checkbox"/> Medium – functional/technical change to deliverables/components but little schedule/risk impact.
<input type="checkbox"/> Large – major changes to business or technical objectives and cost/schedule and/or risk.

<b>Change impact specifics</b>
1. Scope – Describe functional/technical changes, including changes to business objectives.
2. Schedule – Analyze the schedule changes required. Assess the duration of any new activities on project completion and the effect of undoing any work that the Change Request renders unnecessary.
3. Technical - Describe changes to underlying technology, such as architecture, interfaces, shared/common data elements, network, and security.
4. Benefits– Provide estimates of expected benefits from the Change Request. Include potential positive/negative impact areas, such as schedule, cost, or other factors.
5. Planning/Risk – It may be necessary to carry out a new, detailed planning analysis of the project for significant changes, examining costs for additional research and development, equipment modification, acquisition or retrofit costs, changes in documentation, any required training, the cost of purchasing new components, and scrapping any old components not needed.
6. Quality – Analyze quality impacts of the Change Request. Assess any impact on commitments made to customers or users concerning availability or features.
7. Contract Administration – Consider the impact on any legal contracts for purchasing of materials or outsourced services.
8. Resources – Determine if the funding and human resources are available to complete changes required by the impacted system within the necessary timeframe.
9. Issues – List any further issues not identified above that would prevent implementation of the Change Request.

---

## ENTERPRISE WORKSHEET

Change Request Number:
Change Request Title:

<b>Enterprise Impacts</b>
Provide estimates of expected costs/benefits from the Change Request. Include potential positive/negative impact areas, such as schedule, cost, or other factors.
List any related Change Requests.
List business areas/external groups impacted by this Change Request.
List enterprise architecture components impacted by this Change Request.
List applications/systems or interfaces impacted by this Change Request.
List common/shared data elements impacted by this Change Request.
List network components impacted by this Change Request, including increases or decreases in traffic volumes, changes to protocol types, routers, firewalls, or DNS.
List security architecture components impacted by this Change Request.
List application(s) or software used by more than one application/system in a “shared services” environment impacted by this Change Request.
List hardware and/or operating systems impacted by this Change Request.
List software or platform upgrades and/or refreshes required by this Change Request.

**ENTERPRISE WORKSHEET**

Check all EAI/ITA applications/systems, in production or development, which would be impacted by this Change Request.

Applications/Systems in ITA infrastructure	EAI Application Interfaces
<input type="checkbox"/> e-Campus Based (eCB)	<input type="checkbox"/> Central Processing System (CPS)
<input type="checkbox"/> EDEExpress Basics	<input type="checkbox"/> Credit Management Data Mart (CMDM)
<input type="checkbox"/> Electronic Master Promissory Note (eMPN)	<input type="checkbox"/> Common Origination & Disbursement (COD)
<input type="checkbox"/> Enterprise Application Integration (EAI)	<input type="checkbox"/> Direct Loan Servicing System (DLSS)
<input type="checkbox"/> eZAudit	<input type="checkbox"/> e-Campus-Based (eCB)
<input type="checkbox"/> FAFSA on the Web	<input type="checkbox"/> EAI Bus Servers
<input type="checkbox"/> FAFSA on the Web Demo	<input type="checkbox"/> eZAudit
<input type="checkbox"/> Financial Partners Portal	<input type="checkbox"/> FAFSA on the Web
<input type="checkbox"/> Financial Partners Data Mart (FPDM)	<input type="checkbox"/> Financial Management System (FMS)
<input type="checkbox"/> FSNat	<input type="checkbox"/> Financial Partners Data Mart (FPDM)
<input type="checkbox"/> Information for Financial Aid Professionals (IFAP)	<input type="checkbox"/> Electronic Master Promissory Note (eMPN)
<input type="checkbox"/> Institution Student Information Record (ISIR) Data Mart	<input type="checkbox"/> Lender Reporting System (LaRS)
<input type="checkbox"/> Lender Reporting System (LaRS)	<input type="checkbox"/> National Student Loan Data System (NSLDS)
<input type="checkbox"/> Ombudsman	<input type="checkbox"/> Ombudsman NSLDS Interface
<input type="checkbox"/> Ombudsman Case Tracking System (OCTS)	<input type="checkbox"/> Postsecondary-Education Participant System (PEPS)
<input type="checkbox"/> PIN	<input type="checkbox"/> PIN
<input type="checkbox"/> Program Guidance	<input type="checkbox"/> Student Aid Internet Gateway (SAIG)
<input type="checkbox"/> Schools Portal	
<input type="checkbox"/> Security Management Tool	
<input type="checkbox"/> Students.gov	
<input type="checkbox"/> Student Aid on the Web	
<input type="checkbox"/> XML Registry	
<input type="checkbox"/> All Applications/Systems	<input type="checkbox"/> All Applications/Systems
<input type="checkbox"/> Other - List below	<input type="checkbox"/> Other - List below

List Other ITA/ETA Applications/Systems.

--	--

List policies or standards impacted by this Change Request:

--

<b>Scheduling Dependencies</b>
List events, milestones, applications/systems releases, and Change Requests that precede implementation of this Change Request.
List events, milestones, applications/systems releases, and Change Requests that follow implementation of this Change Request.
List other scheduling assumptions, such as blackout periods, legislative dates, etc.

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**ENTERPRISE WORKSHEET**

<b>Recommendation Review</b>		
Determine any potential trade-offs, alternatives, or options:		
Dissension:		

<b>For Enterprise Team Use Only</b>		
Date IA Submitted/Registered:		
Notes:		

## ANALYSIS SUPPORTING GUIDANCE

During the impact analysis, the following categories of considerations are provided as a guide for evaluating enterprise impacts and risks:

- Federal Student Aid Mission Effectiveness
- Strategic Alignment
- Organizational Impact
- Risks
- Benefit/Cost Ratio

### 1. Federal Student Aid Mission Effectiveness

Measures the impact of the Change Request on both external and internal customers. It is a measure of the change's ability to improve the performance of maintenance or operations programs. This improvement should be measured in quantitative terms, but not in dollars. Any possible budget impact is captured in the benefit/cost ratio.

However, the same benefits might be measured here in a different manner. For example, improvements might be expressed in terms of accomplishing a task sooner (hours or minutes), delivering a service with fewer mistakes, increasing the availability of a system for customer/partner access (hours per month saved in time for system backups), or similar terms.

#### 1.1. Improved Service to the Public

Assess the expected improvement in service to the public. The more improvement is anticipated in response to a requirement defined by the public, the greater the impact. Considerations for this impact include:

- Change Request appears to provide little or no direct improvement in service to the public. Change Request may make a small improvement in timeliness, quality, or availability, but there is no documented need for such an improvement. The improvement is not quantified.
- Change Request significantly improves service to the public in a mission where need is demonstrated or provides a new type of service to meet changing customer/partner demands. The improvement is quantified.

#### 1.2. Improved Federal Student Aid Internal Program Services

Assess the expected improvements in service to internal customers. For example, the Change Request might improve the timeliness of financial reporting throughout the Federal Student Aid. Considerations for this impact include:

- Change Request does not appear to meet a problem defined by an internal customer. Little improvement in important customer service criteria, such as timeliness, quality, or availability is expected. An improvement is described, but not quantified.
- A significant improvement is expected in areas such as timeliness, quality, or availability, and the improvement is quantified. The improvement also addresses an important problem or area of service improvement defined by the users.

## ANALYSIS SUPPORTING GUIDANCE

### 2. Strategic Alignment

Measures to what extent the proposed change support strategic organizational objectives. The more that the Change Request is aligned with strategic goals, the higher the consideration.

#### 2.1. Level of Interest

Assess the level of interest by senior managers at Federal Student Aid and ED. Considerations for this impact include:

- No expressed support for this Change Request by Federal Student Aid senior managers or ED.
- Change Request has strong support from Federal Student Aid senior managers, ED and/or the Secretary of Education. Change Request is specifically mentioned in correspondence.

#### 2.2. Federal Student Aid Enterprise Models

Assess the degree of alignment with Federal Student Aid's reference models and enterprise architecture. Considerations for this impact include:

- Change Request does not support organizational products/services identified in the Federal Student Aid service component reference model, processes identified in the Federal Student Aid business reference model nor components of the enterprise target state vision.
- Change Request is specifically mentioned in the enterprise architecture baseline and supports organizational products/services identified in the Federal Student Aid service component reference model, or processes identified in the Federal Student Aid business reference model. The Change Request supports business or service component reference models, but is not part of the enterprise architecture baseline.
- Change Request is specifically mentioned in the enterprise architecture baseline and supports organizational products/services identified in the Federal Student Aid service component reference model, or processes identified in the Federal Student Aid business reference model, and the Change Request has been coordinated with all business units identified for the respective processes the Change Request supports.

#### 2.3. Business Process Redesign

Assess the degree this Change Request enables Federal Student Aid to do business in a better way. Considerations for this impact include:

- This Change Request automates an existing business process with little improvement to the process (i.e., helps doing the same thing faster).
- Change Request enables a significant improvement in the way business is conducted (i.e. higher quality, less fallout, improved performance measures and outcomes).

### 3. Federal Student Aid Organizational Impact

Measures the impact on Federal Student Aid personnel by the Change Request.

#### 3.1. Personnel and Training

## ANALYSIS SUPPORTING GUIDANCE

Assess the impact of the Change Request on the knowledge, skill, and training of Federal Student Aid personnel if the Change Request is implemented. Considerations for this impact include:

- Change Request is likely to require significant new skills to maintain and operate. The business unit does not appear to mitigate this impact through appropriate training or changes in rating qualifications, etc.
- Change Request is an improvement to existing Federal Student Aid systems and will require relatively little new skill and/or knowledge to the organization. The business unit will mitigate any adverse impact through appropriate training, planning for rating qualification changes, etc.

### 3.2. Enterprise Scope/Beneficiaries

Assess the scope of beneficiaries across the enterprise. Considerations for this impact include:

- Limited number of beneficiaries. Only one business unit will use this change. Though the change is an enterprise event, it is not visible outside the originating business unit.
- Change Request is enterprise-wide and serves a number of business units. The change will be useful to a large number of business units. The change may be visible to Federal Student Aid customers and/or suppliers.

### 3.2. Quality of Work Life

Measure the improvement in quality of work life expected with the Change Request.

Considerations for this impact include:

- Little if any positive impact on the quality of work life. Change Request may actually increase the work required (e.g. additional data entry).
- Positive contribution to the quality of work life will clearly result. For example, the Change Request will allow a job to be completed much faster such that job satisfaction will increase.

## 4. Risks

Measure the risks resulting from uncertainty.

### 4.1. Schedule Risk

Evaluate the probability this Change Request can be completed on schedule. Key characteristics of both ends of the scale are as follows:

- Very risky. Execution of Change Request is likely to slip, staff/contractors allocated are limited in size and/or experience, and change is complex and impacts a significant number of systems. An accelerated schedule was imposed rather than developed from planning.
- Low risk. Execution is not likely to slip, adequate staff/contractors are available and has requisite experience, and change is not complex. Schedule has not been accelerated to meet artificial/external deadlines.

## ANALYSIS SUPPORTING GUIDANCE

### 4.2. Cost Sensitivity

Evaluate the sensitivity or quality of the cost estimates. Considerations for this impact include:

- Very risky. Change Request is complex and cost estimates appear to require additional refinement. Software development is required and represents more than 50 percent of the predicted cost.
- Low risk. Cost estimates are well supported. Little software development is required or a software cost estimating technique has been used to produce a reasonably reliable cost estimate.

### 4.3. Technical Risk

Evaluate the risk to complete the Change Request from a technical perspective. Considerations for this impact include:

- Very risky. Hardware and/or software do not conform to Federal Student Aid enterprise architecture and/or there is little experience with this technology within Federal Student Aid. Hardware, software, or support is not commercially available and requires custom development.
- Low risk. Planned hardware and software conforms to Federal Student Aid enterprise architecture and there is successful experience using this technology within Federal Student Aid. Hardware, software, and support are available and do not have to be developed for Federal Student Aid usage.

### 4.4. Organizational Risk

Assess the risk that the proposed Change Request will fail due to Federal Student Aid organizational disruption. Considerations for this impact include:

- Very risky. Implementation requires significant organizational change, process redesign and/or people's jobs will be done differently and the business unit is not proactively seeking to mitigate this risk.
- Low risk. The Change Request has little impact on the Federal Student Aid organization or the business unit is mitigating this risk through training and/or investment into a business process redesign effort that builds commitment to the change.

### 4.5. Risk of Not Doing

Assess the risk to the organization of not proceeding with this Change Request. Considerations for this impact include:

- Low risk. This is an incremental improvement to an existing system. The impact of this Change Request can be achieved by other means.
- Very risky. This Change Request is important to provide future opportunities for cost savings and/or much improved customer service. If this Change Request is not implemented or is delayed for a year, then the Federal Student Aid will probably fail to meet customer demands in the near future.

**ANALYSIS SUPPORTING GUIDANCE****5. Benefit/Cost Ratio**

Measures the value of the Change Request in dollar terms. The benefit/cost ratio is the key indicator. This ratio is developed using the standard benefit-cost guidance and spreadsheets/tables contained in the Federal Student Aid IT Investment Management Operating Procedures. The standard guidance ensures that all Change Requests of all magnitudes include a common set of costs and approach benefits definition in a similar manner.

## **Appendix F - Impact Analysis and Recommendation Report**

The following annotated outline provides a template for documenting the impact analysis and recommendation for an Enterprise Change Request.

<COVER PAGE>

U.S. Department of Education  
Federal Student Aid

<FSA LOGO>

Enterprise Operational Change Management  
Impact Analysis & Recommendation Report

for  
Enterprise Change Request No.: < No. >  
< Title >  
Version <No.>

< Report Date >

<TABLE OF CONTENTS>

## **EXECUTIVE SUMMARY**

< This section lists the Federal Student Aid systems/system components that are impacted by this Change Request and summarizes the changes required to each system/application. >

### **Recommendation Summary**

< This section summarizes the recommendations reached after performing the impact analysis on the Enterprise Change Management Change Request.

A reference to Appendix A – Supporting Materials is provided. >

## **1. PURPOSE AND SCOPE**

## **2. INTERDEPENDENCIES AND RELATED CHANGE REQUESTS**

### **Interdependent Plans**

< Provides an explanation of any interdependencies with existing business plans, technical plans, and schedules. >

### **Related Change Requests**

< Provides a list of related Change Request and explains their relationship. >

### **3. ALTERNATIVES/OPTIONS/DISSENSION**

#### **Alternatives**

< This section discusses any feasible alternatives that were considered when analyzing this Change Request. Alternatives may include business and/or technical solutions that could in turn impact the Change Request. >

#### **Options**

< This section discusses any options that were considered when analyzing this Change Request. Options may include approving, closing, escalating for Executive Leadership Team decision, merging with other Change Requests, or deferring this Change Request pending approval/disapproval or another Change Request. >

#### **Dissension**

< This section identifies any dissension that impacted business units request documented. Any time that consensus, to implement this Change Request, is not reached across the impacted business units, the reasons for lack of consensus will be listed here. >

### **4. RISK ASSESSMENT**

#### **Schedule Risk**

< This section evaluates the probability that this Change Request can be completed on schedule. >

#### **Cost Sensitivity**

< This section evaluates the sensitivity or quality of the cost estimates. >

#### **Technical Risk**

< This section evaluates the risk to complete this Change Request from a technical perspective. >

#### **Organizational Risk**

< This section assesses the risk that this Change Request will fail due to Federal Student Aid organizational disruption. >

#### **Risk of Doing Nothing**

< This section assesses the risk to the organization of not proceeding with this Change Request. >

### **APPENDIX A – SUPPORTING MATERIALS**

< This section provides any documents, presentations, or correspondence used to develop this recommendation. >