



United States Department of Agriculture
Office of the Chief Financial Officer

FINANCIAL MANAGEMENT SERVICES

STANDARD OPERATING PROCEDURES

for

CONFIGURATION MANAGEMENT

Version 5.1

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FMS STANDARD OPERATING PROCEDURES CONFIGURATION MANAGEMENT

I have assessed the information and approve this document.

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Revision History			
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1.0 Purpose

This Configuration Management (CM) Standard Operating Procedure (SOP) is a tool used to establish the overall approach for the CM of the Office of the Chief Financial Officer's Financial Management Services (FMS). The scope of this SOP extends to Configuration Items (CI) developed or implemented for a system's life cycle within FMS. This will be a dynamic document and will be updated as work proceeds and the necessity arise.

2.0 Scope

This SOP will establish the CM process used to support FMS. These procedures include identifying and describing the overall policies and methods for the activities used for applications and interfaces within FMS during the change lifecycle. This includes identifying standardized procedures that will be used to log, evaluate, approve, track, and maintain enhancements and defects from cradle-to-grave for the financial and administrative applications within FMS. These procedures will apply to any change to the total suite of applications, components, interfaces, and bolt-on systems that comprise the financial system.

3.0 Configuration Management

CM can be described as a system engineering process for establishing and maintaining consistency of a product's performance, functional, and physical attributes with its requirements, design, and operational information throughout its life. CM within FMS includes:

- Handling changes in a logical repeatable process so a system maintains its integrity over time.
- Implementing policies, procedures, techniques, and tools that are required to manage CI.
- Evaluating proposed changes and tracking the status of changes to production.
- Maintaining an inventory of updated system and support documents and artifacts.
- Providing technical and administrative direction to system development.
- Implementing the procedures, functions, services, tools, processes, and resources required to support a system.

As changes are made to the requirements and design, they must be approved and documented to create an accurate record of the system status. This continuous change process is required due to a variety of reasons, such as:

- Addressing new statutory requirements.
- Adding new functionality.
- Correcting deficiencies.
- Improving performance.
- Updating the baseline product to maintain hardware and software currency.

Effective management of changes to the production environment requires:

- Establishing processes to evaluate, design, develop, test, and implement changes to the base code and supporting data.
- Managing requirements.
- Controlling changes to CI through strict security control on privileged users who can perform CM functions.
- Providing configuration data to support staff, developers, end-users, and customers.
- Updating operational, functional, and procedural documentation.
- Managing scheduled releases, their content, and coordination across the enterprise.
- Providing Release Notes.
- Creating implementation and verification plans for each upgrade as well as the ability to roll back to a stable state should a production update fail.
- Ensuring accurate and timely communication with all stakeholders.

Deviating from the CM process may result in:

- Impact to our customers' ability to fully meet their mission.
- Disruption of established business processes and workflow in the production environment.
- Negative audit findings due to lack of proper internal control.
- Unnecessary re-work of business processes.
- Unreliable reporting of financial and management information.

Types of Configuration Items

A CI is a unit of change within CM. CIs are documented and maintained to be consistent with what is operating in the production solution. All changes to the systems will occur under formal configuration control procedures that include governance board authorization, security authorization, and a disciplined Release Management (RM) process.

Types of CIs can include:

- Functional Design Documents (FDD)
- Technical Design Documents (TDD)
- Online Help (OLHP) Documents
- Operational Procedures
- Security Impact Assessment (SIA) Documents

4.0 Configuration Management Teams

CM teams are a group of individuals, from various divisions, who coordinate, manage, monitor, and validate the CM change process for FMS.

Configuration Management Team

The CM team is responsible for monitoring changes that impact the configuration of the FMS infrastructure components and associated software development objects while maintaining accurate

records and documentation of how this is accomplished. The CM team also coordinates RM for FMS and handles changes consistently so that the system maintains integrity over time. By working to identify, validate, track, and implement changes to configurable items, the CM team can improve communication and promote early detection of issues and cross-team requirements.

Customer Support Team

The Customer Support team is responsible for supporting the initial receipt of customer requests and issues and providing feedback to the customer. Resolution of customer issues is performed using a multi-tiered help desk approach (see CM Process [Step 1](#)). Each tier will analyze identified issues, propose solutions, and perform tasks, as necessary, to resolve the issue. If an issue cannot be resolved, a detailed analysis and proposed solution will be submitted to the Engineering Review Board (ERB) for review.

Requirements Team

The Requirements team will review incoming enhancements and ensure the requested change is in accordance with the business processes and procedures inherent in FMS. The Requirements team will also review defects to ensure the issue is part of the current design documents, consist of a reasonable Level of Effort (LOE), and approve for release scheduling. Once functional and technical design documents are created, they must be reviewed and approved before the change is added to a release. (The Design Branch will serve as Tier 1, when necessary, for issues related to CPAIS–PP, CPAIS–RP, RITA, ACRWS, MINC (see [Appendix 1-Acronyms](#)) and other systems where no Tier 1 expertise is provided by Customer Support.)

Development Team

The Development team will take the designated actions required to implement the change. The team will receive the approved requirement (enhancement or defect), assign resources, and complete configuration, security, and technical design of the development object. In addition to the technical change, any applicable changes to the CI artifacts including test plans/test scripts will be completed.

System Test Team

The Design Branch is responsible for conducting system testing of all software changes to the FMS Corporate Financial Systems including CPAIS-PP, CPAIS-RP, RITA, ACRWS and MINC and other changes completed by the Development Branch. The system testers will ensure all software changes meet the documented requirements. System test results are provided to the Quality Assurance (QA) team at the conclusion of system testing.

Quality Assurance Team

The QA team is responsible for conducting a Test Readiness Review (TRR) to validate that all required documentation and related tasks have been completed. QA is also responsible for notifying agency representatives when User Acceptance Testing can begin and receives agency signoff (when applicable) prior to implementation.

5.0 Configuration Management Processes

All potential changes are initiated in ServiceNow (SN) as an incident. All incidents must go before the ERB to assess the necessity of the change. If the ERB decides the change is necessary, they will determine whether the incident should be converted into an enhancement or defect and confirm the urgency of the change.

See [Figure A](#) “Issue/Incident Workflow” for more details.

Enhancements

Enhancements require an update to the system solution and an update to a CI. When a CI is updated, a new requirement is being introduced or a design change is occurring. The Change Champion will create the enhancement in SN and reassign to the Design Branch who will work with applicable branches to gather all the appropriate documentation, including the SIA as well as LOE), to support the change. Approval must be obtained through the governance boards and the change scheduled into a release before any work can begin. Once approved by the Configuration Control Board (CCB), it will be assigned to the Release Manager to be prioritized and scheduled for a release.

Examples of possible enhancements include, but are not limited to:

- Change to the system that requires an update to the FDD
- Engineering Change Proposal (ECP) – new requirement
- Infrastructure Change Request (CR)
- New batch process
- Technical Upgrade
- Role CR
- New Security Role
- Configuration changes required to address new functionality (i.e., adding new Budget Object Classifications)
- Mandated changes
- Network updates
- Implementation of new business functionality
- Updates to software version controls

See [Figure B](#) “Enhancement Workflow” for more details.

Defects

Incidents are converted into defects when it is determined the system is not operating as designed and documented. Once the defect is created, the Change Champion will work with applicable branches to gather all the appropriate documentation, including LOE, to support the change and request approval from the Design Branch Chief. All approved defects are included on the CCB agenda as an FYI and are assigned to the Release Manager who will work with the appropriate teams to prioritize and schedule for release. Once work is completed and tested, the work will be reviewed and authorized for import into the production environment.

Examples of possible defects include, but are not limited to:

- Development where no change to the FDD is required.

- Change to data in custom rules or tables.
- Configuration changes to meet original functional requirements where no CI is impacted.
- Change in the schedule for an existing interface job.
- Implementation of OSS note(s).

See [Figure C](#) “Defect Workflow” for more details.

Configuration Management Process Steps

All requests go through a CM lifecycle process. Changes to infrastructure components, such as operating systems and infrastructure tools, and software system code changes/configuration are authorized and controlled through the CM process. The process also contains touchpoints of other processes to ensure changes are fully justified, prioritized, and monitored, providing full traceability of the actions and benefits realized across FMS.

The FMS’ CM steps consists of processes, tasks, roles, templates, and procedures discussed in this section and will follow these major elements and the intermediate steps.

Step 1: Customer Support Review and Resolution

Resolution of customer issues is performed using a multi-tiered help desk approach.

- Tier 0 (Agency Point of Contact) or internal support group will analyze incoming issues to determine validity before they are submitted to Tier 1 for further review. If Tier 0 is unable to create a ticket in SN they will contact Tier 1 for assistance. Each time a SN ticket is reassigned or completed SN will auto-generate an email to the requestor with a status update.
- Tier 1 will evaluate the issue and resolve, if possible. If Tier 1 can provide a solution, the ticket will be resolved and forwarded for validation and closure. In the event Tier 1 is unable to provide a solution, it will be reassigned to Tier 2 for further review and evaluation.
- Tier 2 will further evaluate the issue and work on any applicable resolutions. Tier 2’s evaluation will include addressing more technical issues and collaborating with Tier 3. if necessary. Any issues that cannot be resolved by Tier 2 may be escalated to Tier 3 or begin steps to present to ERB for review.
- Tier 3 will further analyze unresolved issues. If the issue cannot be resolved and further action is required, the Tier 3 Subject Matter Expert (SME) over the impacted area (Functional, Requirements/Development, Technical, (Business Intelligence (BI), or Security) will assess the issue or begin steps to present to ERB for review.

Once the Tier support has completed analysis, the Change Champion will present the issue to ERB.

Changes pertaining to infrastructure components will be entered and tracked in SN but will not route to Tier 1 or Tier 2 but instead will be routed to Tier 3 (technical support) for evaluation.

The Customer Support Review and Resolution step is a critical step in this process because this step:

- Requires a review, validation, and assessment of the issue
- Determines the tasks and actions required to resolve the issue

- Evaluates all alternatives

Step 2: Submission of Incident in ServiceNow

SN is the automated system used to track issues from identification to resolution. The issue can also be initiated by Tier 0 and passed to the next Tier of support if they are unable to resolve the issue at their level. This step is used for identification of the request, issue, or data that requires a change. CSB supports initial receipt of the requests and provides feedback to the customer. The initial customer request is then entered into SN by CSB.

All supporting information will be logged in SN throughout the process so that the information is available at each level of escalation to support the research and resolution. Additionally, the status of the ticket can be tracked by each stakeholder. The incident should be submitted with a description that defines the business need and clearly address the issue. It is recommended the team(s) who analyze the issue provide the option(s) for resolution.

Step 3: Approvals

The ERB is not an approving board but does determine if an incident will continue to proceed through the CM process. After being accepted by ERB, the item moves onto the CCB as outlined in [Section 7](#) under Governance Boards. Before CRs can be approved, the Change Champion must convert the ERB Task into an enhancement or defect in SN and change the incident state to *Resolved*. Once that has been accomplished, they will obtain the LOE and update the ticket.

Enhancements and defects take two different paths of approvals. Enhancements are approved by the appropriate governing bodies whereas defects are approved by the Design Branch Chief.

CCB is the governing entity that reviews and approves (or disapproves) all incoming and outstanding enhancements. The CCB consists of SMEs representing each branch from both a business process and technical perspective. CCB will finalize the urgency of the request using priority definitions as outlined in [Table 1](#).

Elevated approval is required for Operations and Maintenance (O&M) requests that exceed 320 in development hours. Requests of this nature are reviewed by CCB; however, approval must be provided by the Senior Leadership Project Review Board (SLPR). In the event approval is required prior to the next scheduled SLPR meeting, the Associate Chief Financial Officer will serve as an approving authority.

If a proposed solution previously accepted by the ERB must be modified, the change must return to **ERB** to evaluate the feasibility and impact of the new solution. Additionally, any modification to requirements for an approved change must be reviewed and approved by **CCB** before any work can resume.

Occasionally, detailed analysis may determine additional work is needed to fulfill the requirement of a CCB-approved change. In this case, the CR must be re-evaluated and approved by a designated approver based on the type of change and the following:

- Original LOE >40 hours and increase by 25% or more
- Original LOE <40 hours and increase by 10 hours or more

The Change Champion must provide the updated information in SN indicating the increased LOE along with a written justification for the increased scope to the approver of the CR. All documentation pertaining to the request must be reported in SN.

Step 4: Scheduling in a Release

All CRs must be approved before any functional or development work can begin. Once an item has been formally approved, it moves onto the RM phase. The Release Manager works with the applicable teams and personnel to add an item to an upcoming release. This will include conducting various meetings to ensure all items are added to the Release Schedule as outlined in [Section 6](#).

Step 5: Change Request Management (ChaRM)

ChaRM is an SAP Solution Manager tool used to manage change activities. ChaRM uses a workflow-based approval for transport management and audit documentation of functional changes. Once a change is approved by FMS governance, a change document(s) and transport(s) are created to promote the development effort. With ChaRM, we can ensure all transports are moved together into the Quality Assurance environment, regression tested as a whole, and imported into Production collectively. ChaRM eliminates the need for spreadsheets to keep track of transport requests and the order needed to be imported. Currently, ChaRM is used for ECC, Grants (CRM), and BI transportable changes with the intent to implement other systems for greater control and traceability.

Step 6: Development of New Functionality or Defect Resolution

Depending on the type of change, this step requires direct and indirect support from various teams to include but are not limited to:

- Requirements Management
- BI
- Functional
- Integration Manager
- RICE (Reports, Interfaces, Conversions, and Enhancements)
- Security
- Development
- Documentation
- Training
- Customer Support

These teams will:

- Validate requirements, coordinating with SMEs and Requestor.
- Review and analyze the enhancement/defect.
- Prepare applicable documentation for the change including:
 - FDD
 - TDD
 - Business Process documents
 - Training Materials
 - OLHP Procedures
 - Job Aids
 - Security/Role documentation
 - Release Notes
- Annotate projected release dates.
- Document required activities for the change.

- Execute required activities either by new development or by fixing existing code.
- Update the enhancement/defect as it moves through the various teams and activities that are completed (i.e., status updates, issue coordination, communication, etc.).

These various teams will work together to develop the requirement and design to meet the needs of FMS's customers.

Development of approved CRs will include application coding, unit and system testing, and peer reviews. Upon completion, the Development team forwards the CR to the Test team.

Step 7: Testing

The Test teams will run appropriate test scripts with their corresponding OLHP/Job Aids to confirm that the function being performed meets the intended results. The teams will maintain statistics on the test execution of the changes in the release including the tester and timeframes. The Tests teams should update SN to reflect the length of time a specific change was in testing. The TRR document will be reviewed and validated against the change. Upon completion of all required tasks and testing for the change, it will move to the Technical Configuration Control Board (TCCB) to be reviewed for production readiness and scheduled for implementation.

Step 8: Migrate to Production

The FMS RM team works to introduce changes into the financial system landscape without degradation or loss of system usage. The Production Manager is responsible for the overall coordination of the transports and will work with stakeholders to determine when changes will be available for final movement. This ensures that all items have been thoroughly vetted through the correct team(s) and is critical to maintaining a stable production environment.

Transports and changes will typically move into production on Fridays. This day is selected to minimize any disruption to production. However, some changes are unique and therefore may require a date and time other than a Friday. The Production Manager may approve other days and times to implement changes into production to minimize any performance disruption.

Step 9: Verify and Close

Once a change has completed its initial intake, validation, testing, and deployed the change can then be verified and closed. This process involves communicating the movement of the change into the production environment, publishing associated documentation to affected customers, and validating the change. The CMB team will update the change state to Deploy/Launch. The Release Notes are the designated communication to the business and end-user community.

When the communication and documentation portion is completed, the ticket can be formally closed within SN after the requestor has validated it. In general, two weeks are given to validate the change in production and offer feedback if the corrective action did not fully address the issue or the requirement. Validation may occur by the SN ticket originator, application user, functional/technical experts, or CSB personnel. In the event no issues are reported, and the ticket is not manually closed, SN will automatically change the state to Closed Complete 14 calendar days after Deploy/Launch state is applied. If an implemented change requires further action(s) to complete the documented solution the original Enhancement/Defect will be re-opened in SN. The Production Manager must approve prior to performance of the action.

6.0 Release Management

RM is a coordinated, cross-organizational effort that manages the introduction of changes into the production environment, including those affecting applications, infrastructure, and operations. The RM process begins once the item has been formally approved. The Release Manager works with the applicable personnel to add the item to a release. (see [Table 2](#) for Release Cycle Dates). Scheduled releases should be timed to allow regression testing of core business processes to ensure these changes do not negatively impact other critical business functions and processes. RM focuses on building like changes or non-interfering changes into release packages to ensure no degradation or interruption to production capabilities.

RM execution contributes to the following:

- Improved productivity
- Improved communication needed to coordinate simple to complex activities
- Realized cost savings due to elimination of re-work
- Increased efficiency of internal resources

Changes to production will be planned and assigned to quarterly releases. Quarterly releases are designed for major and/or minor application updates that have a technical and/or functional impact on the system and includes both enhancements and defects. Conducting releases quarterly allows sufficient time to create a schedule, allow for regression testing, and review. Each release promotes changes that are thoroughly tested, scheduled in advance, communicated, and packaged correctly for delivery to production. There are several factors that influence how changes are grouped for a release package including:

- LOE required to implement the change
- Availability of resources
- Criticality of the change
- Priority of the change to the stakeholder
- Impact of the change on business continuity
- Grouping of changes based on shared modules
- Grouping of changes based on impact on more than one functional area

Changes Implemented Outside of a Release

There will be times when a change is needed in production and cannot wait until the next scheduled release. The changes must be implemented as soon as it has met all functional, development, and testing requirements. These changes are narrowly focused, addressing a major impact on the business processes that must be corrected as soon as possible. These could include changes that were not complete at the release date but would be fixed within a week or so of the planned release date and the migration does not need to be held until the next quarterly release. CMB provides the Directives and Training Branch with a list of the “off-cycle” changes for publishing to the user community.

The three types of changes that can be implemented outside of a release (off-cycle) are *Emergency*, *Urgent*, and *Fast-tracked changes*. It is expected unscheduled releases will occur very infrequently.

Emergency Changes

Changes that are classified as *Emergency* means that a major exception has occurred to a normal business process and the processing of the request must be expedited. This is a high priority that bypasses CM governance review and goes directly to the approval state. Typically, these changes are time sensitive with an expected resolution occurring within 48 hours or less. The FMS Director is the designated authority to approve this classification of a change.

Emergency Changes can include:

- Work stoppage
- Payment processing
- Audit issues
- Critical reporting

Once approved, it is the requestor's responsibility to ensure all validations, documentation, and communications are completed. CMB will add the change to the subsequent CCB and TCCB agendas for informational purposes.

Urgent Changes

For a change to be processed as *Urgent*, there must be a significant business process impact that requires a major effort to work around. The ERB will review the incident and determine whether the incident will be prioritized as *Urgent*. On occasion, it may be necessary to elevate a change to urgent after passing ERB. In this case the CCB chair will have that authority. These changes will receive priority when assigning resources. *Urgent* changes may also include Mandated changes where the implementation timeframe dictates it cannot wait for the next scheduled release.

Fast-tracked Changes

Fast-tracked changes are those which are introduced to production that are considered low impact and require a low LOE to implement. Changes of this nature are considered pre-approved and may be fast-tracked through the Software Development Life Cycle (SDLC) process. Submission of this type of change is controlled and approved by the Production Manager with added oversight provided at the QA level. *Fast-tracked* changes may bypass ERB but will be presented to CCB and TCCB in accordance with all CRs and moved to production upon completion of testing.

Fast-tracked changes can include, but are not limited to:

- Availability Control Changes
- Table updates that require a transport
- Updates to Treasury Prompt Pay Interest Rates
- Changes to existing customer email addresses or phone numbers for Sales Offices
- GRC Mitigation Monitor role updates

Routine Changes

Routine changes are changes that are not classified as *emergency*, *urgent* or *fast-tracked*. This change type can be an enhancement or a defect and must proceed through the governance process to ensure proper review, approval and oversight is provided. *Routine* changes will be scheduled for a release. On occasion, a *Routine* change may be identified as time sensitive. In such cases, when development and

testing efforts can be completed amply prior to the next scheduled release, the change may be approved by ERB for an off-cycle implementation.

Release Management Deliverables

Release Notes

In preparation of a scheduled deployment, Release Notes are prepared which identify the content of the production update, provide a brief description of each change, and are approved by senior management. The Release Notes consist of internal and external changes, technical and non-technical changes and software and interface modifications. Additionally, Release Notes containing customer facing changes are provided for publication to the user community.

Release Metrics

Release metrics provide a quantitative assessment and a means to compare and track the overall performance and health of a release. As changes are deployed into production, metrics are captured to provide reports to leadership which summarizes the release performance. Key information collected and recorded can include:

- Executive summary of changes
- Release success rate
- Number of CRs implemented annually
- Number of Releases (by system)

Release Results

When an application baseline is updated, the Release Manager provides Release Results that consist of customer facing changes for publication to the user community. This ensures they are aware of changes that have been successfully implemented. Production updates approved for implementation outside a scheduled release cycle, based on the nature or urgency of the change, are also distributed and maintained. The Release Results can be found on the [FMS Website](#) and are segregated by system.

7.0 Governance Boards

FMS has several Governance boards that are an integral part of the CM process. The objective is to have each change go through these boards and be reviewed by FMS SMEs from all lines of services including Accounting, Development, Security, Operations, and Project Management. Ideally, this will allow the customer to receive the best product possible at the lowest cost to the Government.

Engineering Review Board

The ERB is an internal FMS only board, serving as the Governance body to review and determine the feasibility of a proposed change to the financial system(s). ERB reviews incidents presented by the Change Champion or SME, makes recommendations, and determines if the incident should advance to the next phase of the SDLC. ERB supports lines of communication between stakeholders within the organization ensuring all decisions are impartial and in the best interest of USDA Agencies. [Table 3](#) describes the roles and responsibilities associated with ERB.

ERB consists of FMS personnel from cross-functional disciplines including representation from the following departments:

- Operations
- Accounting
- Security
- Technical O&M
- Policy & Control
- Vendor Management
- Requirements
- Software Development

After evaluating the Incident, ERB Task, and any additional documentation provided, ERB determines the validity and feasibility of the change and offers one of the following recommendations:

- **Accepted**
 - ERB Task will be converted and will proceed through the SDLC process as an enhancement or defect.
- **Deferred**
 - Issue requires additional information before the board can complete the review and make a determination.
- **Rejected**
 - Issue is returned to the originator with a written explanation of why the request was rejected.

Configuration Control Board

The CCB is an internal FMS only board that serves as the Governance body to review and determine the feasibility of a proposed change to the financial system(s). The goal of the board is to maintain the health of FMS production operations by understanding the change being introduced and maintaining the stability of the solution while improving communication across all FMS O&M teams and the end-user community.

The CCB is comprised of FMS leadership and Government functional and technical representatives from each of the business areas that support O&M. Board members are selected due to their roles as financial, developmental, and technological experts. [Table 4](#) describes the roles and responsibilities associated with the CCB.

The CCB will review recommendations from the ERB. Most enhancements can be approved by the CCB while others will have to be referred to the SLPR (see [Section 5; Step 3](#) for more detail) for approval, depending on the scope and magnitude of the proposed change. All enhancements must be accompanied by a high-level requirements document and signed SIA form before submission. Defects, once approved, will be submitted for awareness purposes.

After evaluating the proposed change and any additional documentation provided, the CCB will take one of the following actions:

- **Approved**
 - CR will be accepted and submitted for prioritization and release scheduling if under 320 development hours and within the scope of O&M.
- **Advanced**
 - CR will proceed to the SLPR if it is a new requirement, within the scope of O&M, and is over 320 development hours.
- **Deferred**

- CR requires additional information before the board can complete the review and the CR must be re-submitted once additional information is received to obtain approval.
- **Rejected**
 - CR is returned to the originator with a written explanation to denote the reason the request was rejected.

Technical Configuration Control Board

The TCCB is a decision board that manages the risk of introducing changes to the production environment, and reviews all transports planned for production implementation. TCCB is the final board to review changes scheduled for production in the CM process. This review is a key element in the overall CM and Production Change Controls Process.

The goal of the board is to maintain the health of production operations by understanding the changes being introduced and controlling the release of those changes while improving communications across FMS and the end-user community. Additionally, the board will review communication plans, verify release descriptions, and discuss the appropriate schedule to minimize risks to production. The TCCB consists of FMS leadership and Governmental representatives from each of the business areas that support O&M. See [Table 5](#) for the Roles and Responsibilities associated with TCCB.

8.0 Appendices

Appendix I – Acronyms

Acronyms	
ACRWS	Automated Cash Reconciliation Worksheet System
CCB	Configuration Control Board
CI	Configuration Item
CM	Configuration Management
CMB	Configuration Management Branch
CPAIS-PP	Corporate Property Automated Information System – Personal Property
CPAIS-RP	Corporate Property Automated Information System – Real Property
CR	Change Request - Enhancement and Defect
CSB	Customer Support Branch
ECP	Engineering Change Proposal
ERB	Engineering Review Board
FDD	Functional Design Document
FMS	Financial Management Services
GRC	Governance Risk and Compliance
LOE	Level of Effort
MINC	Miscellaneous Income
O&M	Operations and Maintenance
OCFO	Office of the Chief Financial Officer
OLHP	On-line Help Procedure
OSS (Note)	On-line Service System
QA	Quality Assurance
RICE	Reports, Interfaces, Conversions, and Enhancements
RITA	Reconciliation of IPAC Transactions for Agriculture
RM	Release Management
SIA	Security Impact Assessment Form
SCR	Software Change Request
SDLC	Software Development Life Cycle
SLPR	Senior Leadership Project Review
SME	Subject Matter Expert
SOP	Standard Operating Procedure
SN	ServiceNow
TCCB	Technical Configuration Control Board
TDD	Technical Design Document
TRR	Test Readiness Review

Appendix II – Definitions

Definitions	
Change	Any modification to any plan, document, work product, deliverable, application, data, or artifact and requires approval prior to implementation.
Change Management	The CM process is designed to ensure standardized methods and procedures are used for efficient and prompt handling of all changes, to minimize the impact of change-related incidents upon service quality, and consequently improve the day-to-day operations of the organization.
Configuration Management	CM is a software engineering discipline consisting of standard processes and techniques often used by organizations to manage the changes introduced to its software products. CM helps in identifying individual elements and configurations, tracking changes, and version selection, control, and baselining. It precisely answers who, what, when, and why for all the CIs.
Change Request	A formal, documented proposal submitted to CCB for taking decision on a change. A CR document contains a complete description of the Change along with its Impact Analysis.
Release Management	RM is a process which guides the technology efforts from code development through testing and into production, focusing on coordinating pieces from various product deliverables that must come together to work as an integrated solution. This results in an effective delivery of new and enhanced IT services/functionality required by the business, while protecting the integrity of the existing ones.

9.0 Tables

Table 1 - Change Request Priority Definitions	
Priority	Definition
Emergency	An Emergency Change is: (1) where there is a critical business process impeded by the way the solution is working, (2) affecting a large number of users or multiple agencies, (3) where there is no workaround or no feasible workaround, (4) material dollar, material volume, or a critical reporting period are impacted and/or (5) the end user organizations are justifying that they cannot wait as the issue must be fixed immediately. Emergency changes typically fit the definition that there is a quick fix action that can be initiated and completed in less than a 48-hour turnaround.
Urgent	Significant business process impact that requires a major effort to work around. Start of work scheduled before any lower priority work begins. Resource impact can be assessed to determine if resources should be pulled from a lower priority item to start work on this more urgent requirement.
Routine	All other requirements scheduled routinely within resource constraints and plans. Some prioritization of routine requirements can be made based on impact to the business process and number of users impacted.

Table 2 - OCFO FMS Release Cycle			
System	Release Cycle	Release Months	Release Day
Grants Management / PEGA / CRM	Quarterly	January, April, July, October	Second Friday
SAP Financials (FMFI, ECC, BI, & GRC)	Quarterly	February, May, August, November	Second Friday
CPAIS Personal Property	Quarterly	January, April, July, October	First Friday
CPAIS Real Property	Quarterly	March, June, September, December	First Friday
RITA	Quarterly	January, April, July, October	Fourth Friday
FSDW	Quarterly	March, June, September, December	First Friday
ACRWS	Quarterly	February, May, August, November	Third Friday
MINC	Quarterly	February, May, August, November	Second Friday
DATA Act	Quarterly	February, May, August, November	Second Friday
AgCMS	Quarterly	March, June, September, December	First Friday

Table 3 – ERB Roles and Responsibilities

Roles	Representatives	Responsibilities
Chair/Co-Chair	Quality and Production Management Director	<ul style="list-style-type: none"> • Determines if the proposed change is “Accepted/Deferred/Rejected by ERB” and indicate whether it will move forward as an enhancement or defect. • Determine the urgency of the proposed change. • Update the State fields to <i>Accepted and Awaiting Change</i>.
Permanent Members	Includes: Various SMEs from the technical and functional areas within OCFO. Members can be revised as needed due to staffing/SME changes.	<ul style="list-style-type: none"> • Attend and participate in meetings. • Review proposed change items on the ERB Agenda prior to the meeting. • Analyze provided documentation and offer recommendations to accept, defer, or reject a request. • Identify the business areas, platforms, and interfaces to coordinate the change. • Determine the dependencies of the request on other processes and infrastructures and any possible linkages between this change and other pending changes that are currently being worked and coordinate, as necessary, to ensure all impacts are identified. • Offer alternatives and make recommendations to streamline development and processing efforts of any change. • Offer alternative solutions to a business need, when necessary, to ensure maximum functionality of production operations. • Verify the priority of a request based on the urgency and impact of the change.
Change Champion/FMS Designee	Varies	<ul style="list-style-type: none"> • Present proposed changes. • Considered a key stakeholder in the proposed change and is either an expert with regards to the change or very familiar with why the change is needed. • Discuss the nature of the change, business need, and impact assessment.
Facilitator	CMB	<ul style="list-style-type: none"> • In SN: <ul style="list-style-type: none"> ○ Annotate ERB decision. ○ Update Work Notes to document change type and pertinent discussions. ○ Indicate the urgency of the proposed change (where applicable). ○ Update incident and ERB task states, as necessary

Table 4 – CCB Roles and Responsibilities

Roles	Representatives	Responsibilities
Chair	Technical Innovation Services Division Director	<ul style="list-style-type: none"> • Confirm the requirements and SIA documents are provided or request additional information. • Concur with the proposed solution or send the enhancement back for analysis and alternatives. • Approve, Conditionally Approve, Advance, Defer, or Reject the enhancement.
CCB Administrator	CMB	<ul style="list-style-type: none"> • Facilitate the meeting. • Work with FMS personnel to ensure all documentation is properly prepared. • Prepare and distribute meeting agenda and minutes. • In SN: <ul style="list-style-type: none"> ○ Indicate the urgency of the proposed CR (where applicable). ○ Attach the meeting minutes to the change. ○ Re-assign the change to the FMS Release Manager once change is approved.
Board Members	Division Directors for: <ul style="list-style-type: none"> • Customer Services • Financial Services • Quality & Production Management • System Security & Compliance 	<ul style="list-style-type: none"> • Confirm the enhancement form clearly identifies the change(s) required. • Validate the requirements document and scope is justified and appropriate. • Provide a recommendation to proceed to the functional/technical design phase for major ECPs.
Change Champion	Varies	<ul style="list-style-type: none"> • Discuss the nature of change, business need, and impact assessment. • Identify all artifacts that must be created and/or updated. • Document LOE and proposed solution. • Discuss and consider any options or alternatives.

Table 5 – TCCB Roles and Responsibilities

Roles	Representatives	Responsibilities
Chair	QPMD Division Director or Designee	<ul style="list-style-type: none"> • Confirm Release Description. • Provide final approval to move transports.
Members (Leads or delegated representatives for each area)	<ul style="list-style-type: none"> • BASIS • BI • Customer Service • Directives & Training • Financial Reporting • Grants • Master Data • Production • QA • Security 	<ul style="list-style-type: none"> • Attend and participate in meetings. • Review provided documentation for completeness. • Determine if an item should/should NOT be moved to production. • Discuss possible dependencies between changes that are expected to move to production in the same release. • Confirm coordination has taken place for batch or real time job schedules. • Ensure all documentation covering the change for the pending release has been created or updated (FSD, TSD, OLHP, Training Material, etc.) • Validate QA testing was completed, and results are as expected. • Verify User Acceptance sign off was received or a signed waiver is provided.
Release Manager	CMB	<ul style="list-style-type: none"> • Manage the content of the Release Package. • Complete post-production activities or coordinate the completion of them. • Create Release Notes for distribution to the user community. • Document the implementation date in SN.
TCCB Administrator	CMB	<ul style="list-style-type: none"> • Facilitate the meeting. • Prepare and distribute meeting agenda and minutes. • In SN: <ul style="list-style-type: none"> ○ Attach the meeting minutes to the CR.

10.0 Figures

Figure A – Issue/Incident Workflow

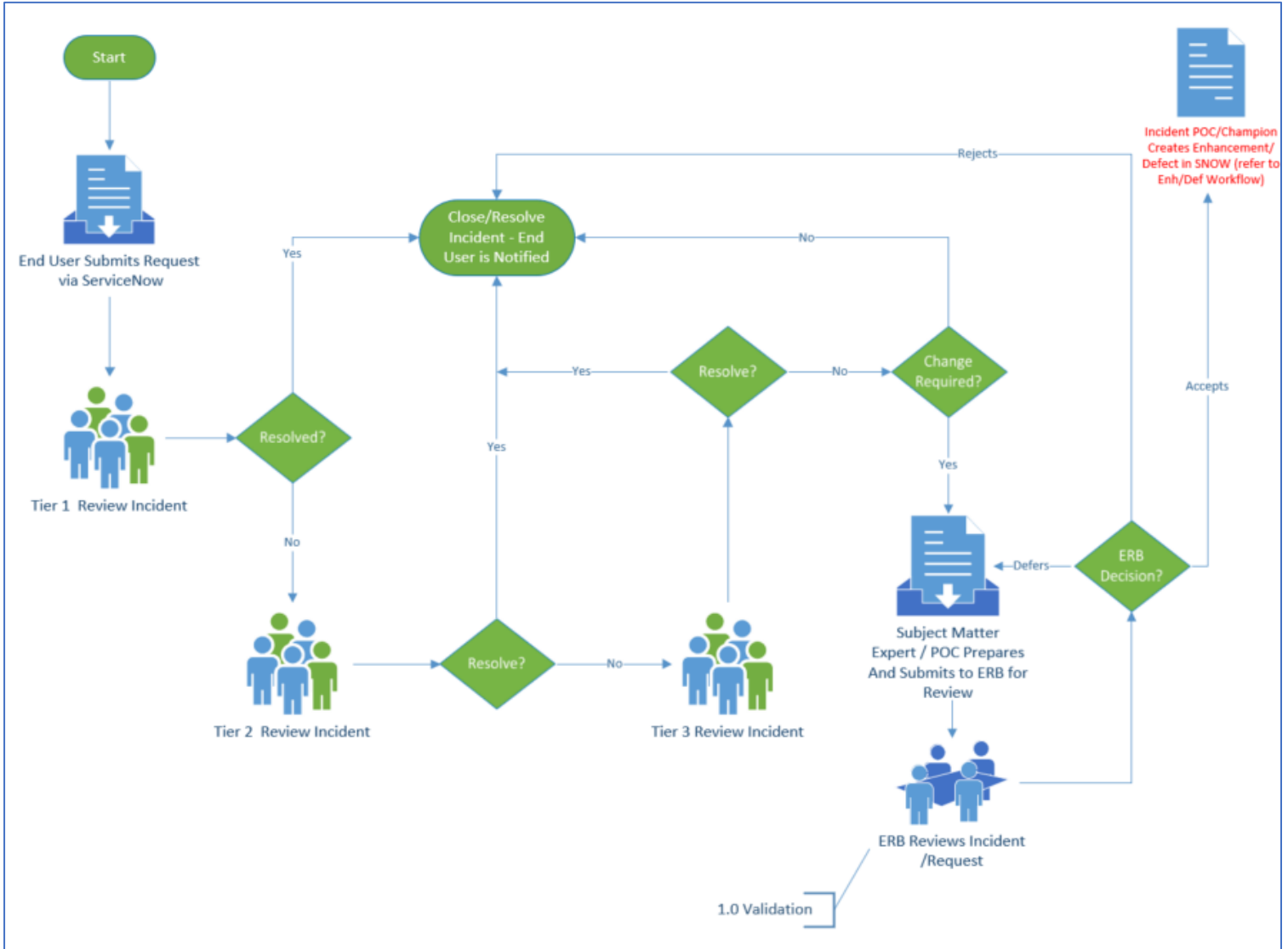


Figure B – Enhancement Workflow

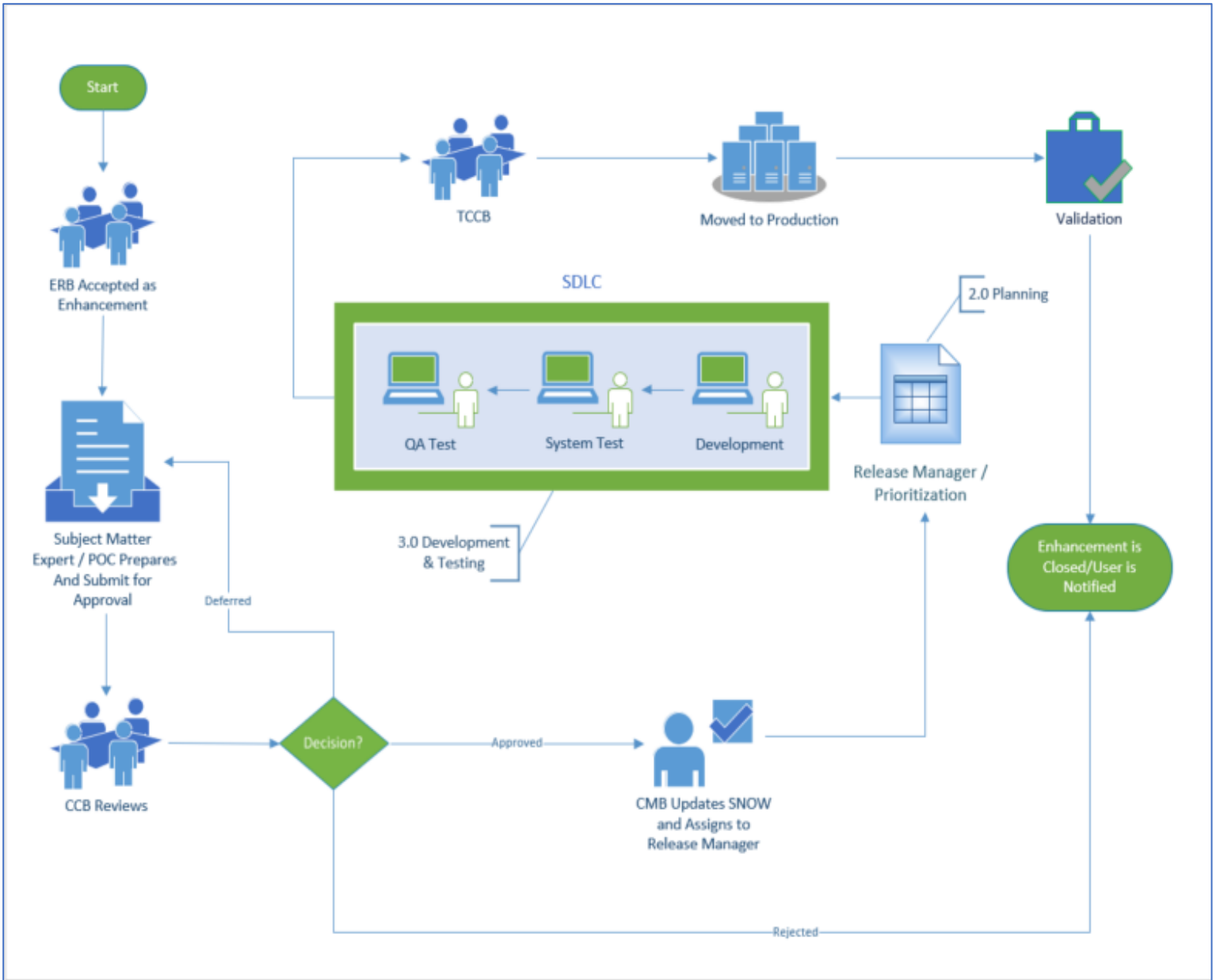


Figure C – Defect Workflow

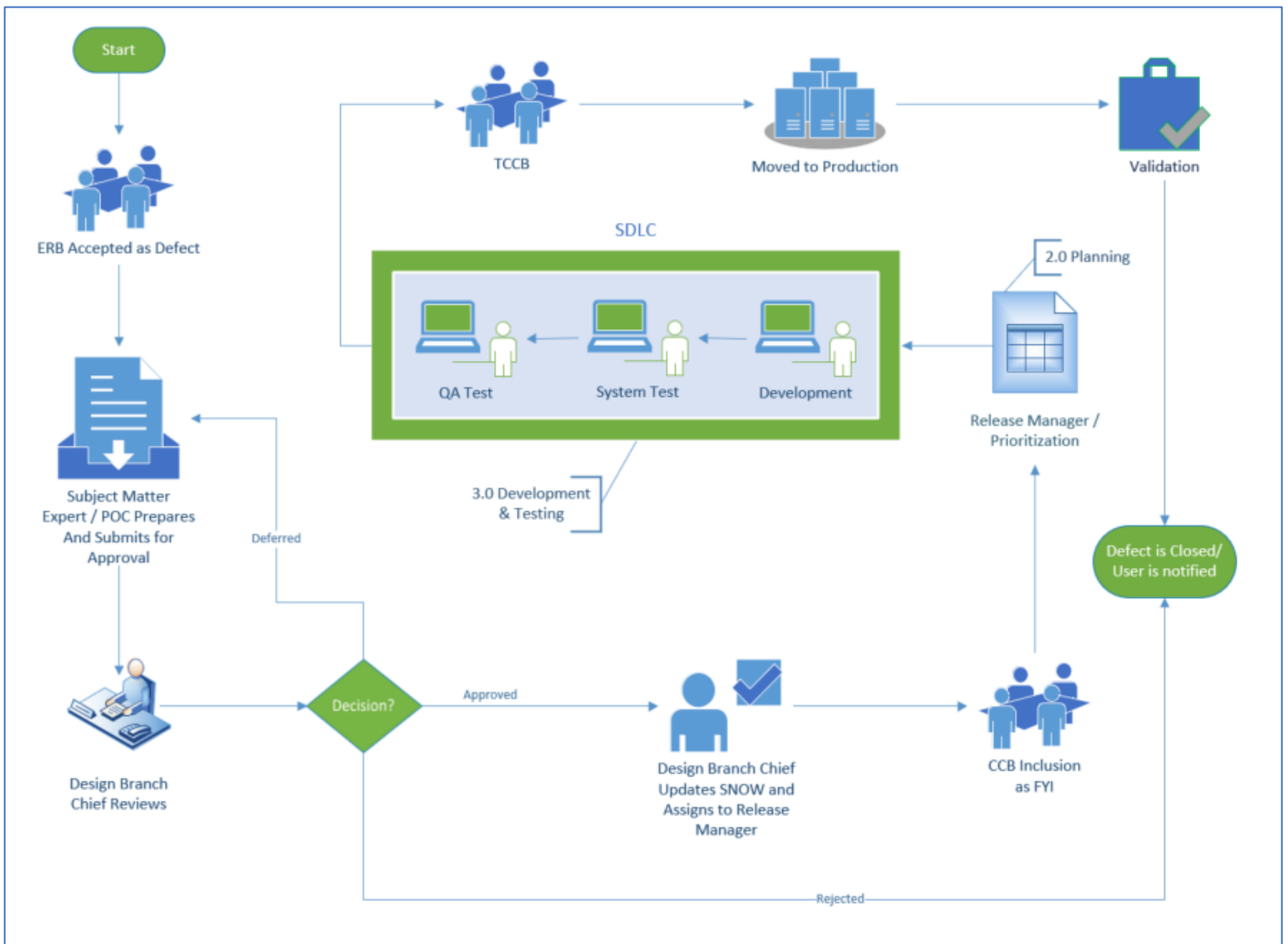


Figure D – Emergency Change Workflow

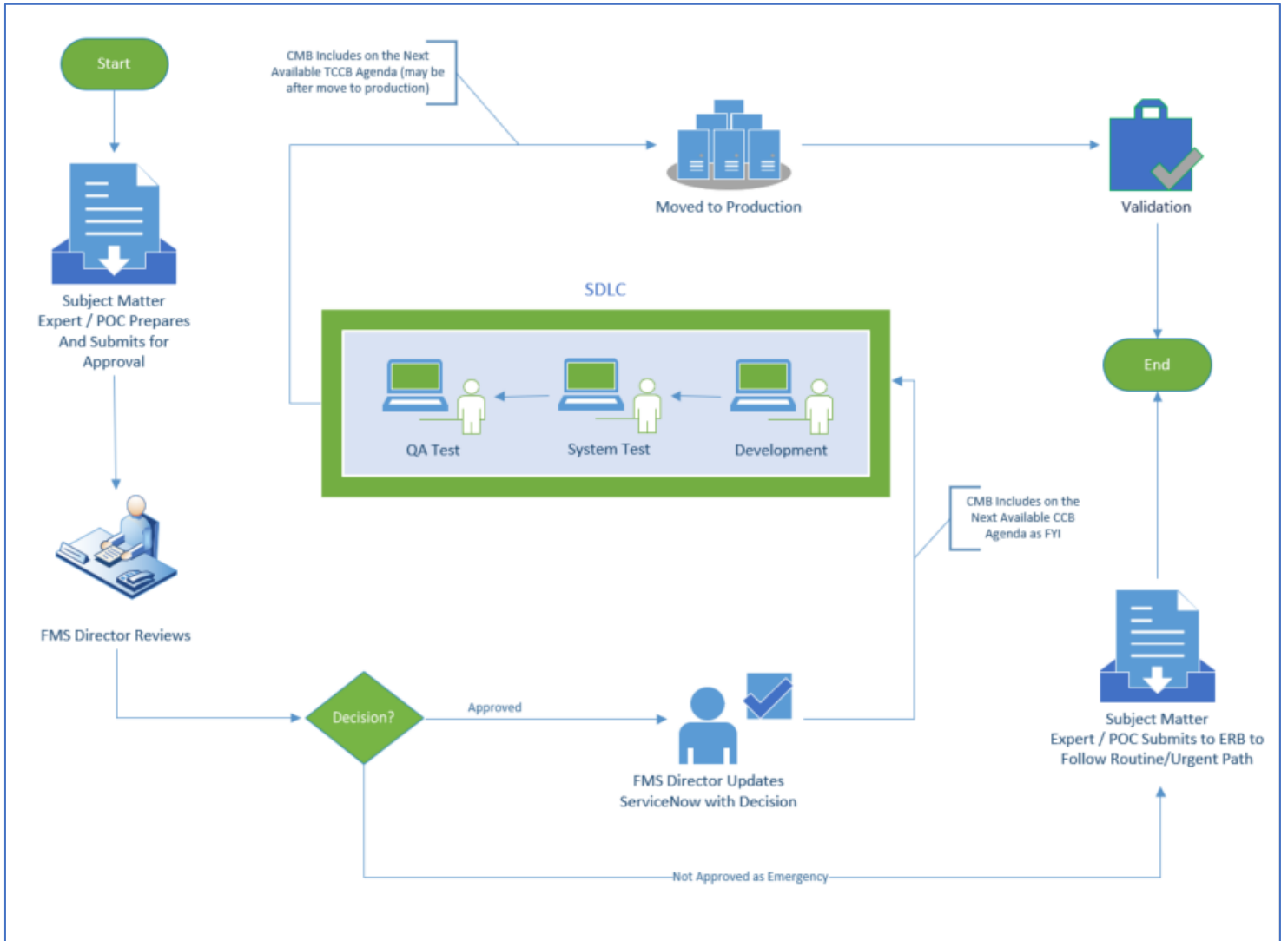


Figure E – Configuration Management Process Steps

