RCR

TECHNOLOGY CORP

Software Development Life Cycle Process (SDLC) Overview

Version 2.0-2016

Document Information

Document Source

The following provides an overview of the Application Services (AS) Software Development Life Cycle (SDLC).

Revision History

Version No.	Date	Summary of Changes	Name	Revision Marks

Table of Contents

Software Development Life Cycle - Process Overview

The following provides an overview of the Application Services (AS) Software Development Life Cycle (SDLC). The process includes several phases that are described in the sections below. Each section includes a description, identifies the key inputs, outputs and deliverables; and describes the key tasks / activities associated with each of the phases.

AS employs periodic Maintenance Releases to introduce enhancements and defect fixes in a controlled method. Each Maintenance Release (MR) encompasses the complete development cycle outlined below. The use of MRs allows for a stable production system environment, maximization of people assigned to the project and repeatable delivery timelines. A goal of AS is to communicate the general timing of the current plus three MRs into the future to facilitate planning across the stakeholder community.

1.1 Project Definition (Charter Development)

1.1.1 Description

This phase includes the development and sign-off of the formal Project Charter. The Project Charter is used to define the scope of the project and provide a summary of the software enhancements and defect fixes that will be delivered as part of a Maintenance Release (MR).

The Project Charter serves as a formal agreement between Application Services (AS) and xxxxxxxx regarding the scope of the software enhancements and defect fixes to be delivered in the MR; and requires signoff by the designated xxxxx Sponsor. The Charter is also used to communicate these noted items out to the IEMP Partner Community.

In addition to developing the Project Charter, this phase also includes the development of the preliminary project schedule and associated work breakdown structure for the Maintenance Release.

1.1.2 Inputs

The following are inputs for the 'Project Definition' phase:

a. ClearQuest (CQ) Listing of Prioritized Enhancements and Defects to be implemented within an MR (candidates)

b. Approved Change Requests and/or Perfective Maintenance changes to be implemented within an MR (candidates)

c. Approved Change Analyses with associated Estimating Worksheets

d. Listing of Resources and Available Work Hours

e. Key Project Assumptions

f. Listing of the Project Stakeholders

g. Designated Xxxxx Sponsor

h. MR Program Timeline

1.1.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the 'Project Definition' phase:

a. Review Xxxxx-identified priorities provided via the Change Review Board (CRB), Subject Matters Experts (SMEs), lawsuit activities, etc., as well as timelines for recent and pending policy changes and identify activities that are time sensitive relative to general MR timelines.

b. Review ClearQuest (CQ) for a prioritized list of potential enhancements and defects; and the Change Management Log (posted in Sharepoint) for a listing of the approved Change Requests.

c. Develop Level of Effort estimates to be used in conjunction with the output of (a) and (b) above to provide the basis for determining the preliminary scope for the MR.

d. Create a preliminary MR Scope document.

e. Review the preliminary MR Scope document with the Stakeholders.

f. Finalize the MR Scope document and incorporate into the formal Project Charter document.

g. Draft the Project Charter document, with input from the Stakeholders, for review by the Xxxxx.

h. Obtain approval and signature for the Project Charter from the designated Xxxxx representative.

i. Distribute Project Charter to key stakeholder(s).

j. Develop a preliminary Project Schedule that includes a work breakdown structure and initial resource assignments.

    - Schedule will identify dependencies on Xxxxx policy changes, other systems, such as ICES, and other affected organizations, such as training.

k. Update the MR Program Timeline with estimated dates.

l. Notify Business Analysts (BAs), Developers and Testers of work assignments and MR timeline.

m. Initiate weekly MR status meetings with the Xxxxx to review progress, defects, schedule, risks, etc. A red/green/yellow indicator is used to indicate the current status of the project. The Xxxxx is also provided a budget status including a review of actual versus budgeted hours expended to date and an estimate of hours to complete. These status meetings are conducted weekly throughout the MR project by the project manager assigned to the MR.

n. Post deliverables and supporting work product documentation to Sharepoint.

1.1.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the 'Project Definition' phase:

a. Signed Project Charter

b. Updated MR Program Timeline

c. MR Scope Document, including Level of Effort estimates

d. Project Schedule, MS Project Plan with work breakdown structure and initial resource assignments

e. Enhancement and Defect CQs updated with Business Analyst, Developer and Tester assignments

1.2 Requirements Definition and Analysis (Requirements Modeling)

1.2.1 Description

This phase includes developing a complete understanding of the business needs to be addressed and working with the appropriate Stakeholders to analyze, develop and document the business and functional requirements necessary to complete the technical design for the solution.

1.2.2 Inputs

The following are inputs for the 'Requirements Definition and Analysis' phase:

a. Signed Project Charter

b. Updated MR Program Timeline

c. MR Scope Document, including initial estimates

d. Enhancement and Defect CQs

e. Change Request documentation

f. Change Analysis documentation

g. Existing Requirements documentation

h. Other Related documentation, as available

1.2.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the 'Requirements Definition and Analysis' phase:

a. Review supporting documentation to gain an understanding of the business needs being addressed.

b. Complete requirements analysis and elicitation resulting in the documentation of the requirements, forms specifications and user interface specifications for the enhancements and/or defects.

c. Develop and/or update business use cases, process flow, and other requirements documentation.

d. Review requirements and scope with Stakeholders.

e. Obtain sign-off approval from the Xxxxx on any deliverables.

f. Conduct Requirements walkthrough, including deliverables and supporting work product documentation, with Developers and Testers.

g. Conduct a "Joint Test Planning" meeting with Partner SMEs, UAT testers, and the appropriate Application Services BAs, SIT testers and developers to gain a better understanding of the requirements and test scenarios necessary to better facilitate the 'Technical Definition and Analysis', 'Construction' and 'SIT' phases of the MR.

h. Notify the MR Manager of any changes to the MR scope and/or estimates.

i. Post deliverables and supporting work product documentation to Sharepoint.

1.2.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the 'Requirements Definition and Analysis' phase:

a. Updated MR Program Timeline

b. Updated MR Scope Document, with revised estimates

c. Updated Project Schedule (i.e. MS Project Plan)

d. Requirements Document(s)

e. Form Specification(s)

f. User Interface Specification(s)

g. Business Use Case(s)

h. Process Flow Document(s)

1.3 Technical Definition and Analysis (Technical Design)

1.3.1 Description

The purpose of this phase is to utilize the business and functional requirements developed in the prior phase to define the technical solution. As part of this phase, the technical design and architectural specifications for the solution will be completed and documented.

1.3.2 Inputs

The following are inputs for the 'Technical Definition and Analysis' phase:

a. Updated MR Program Timeline

b. Updated MR Scope Document, with revised estimates

c. Updated Project Schedule (i.e. MS Project Plan)

d. Enhancement and Defect CQs

e. Requirements Document(s)

f. Form Specification(s)

g. User Interface Specification(s)

h. Business Use Case(s)

i. Process Flow Document(s)

j. Other Related documentation, as available

1.3.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the 'Technical Definition and Analysis' phase:

a. Review documented requirements, functional specifications, business use cases and other supporting documentation.

b. Participate in Requirements handoff via the Requirements walkthrough held by the Business Analysts.

c. Conduct design review meetings with the Business Analysts and Partners in order to clarify and confirm solution requirements.

d. Develop and document technical design and architectural specifications for the solution.

e. Create Technical Design and Architectural Specifications Document(s).

f. Conduct design reviews with peers, BAs, DBAs and Partners, as appropriate.

g. Post deliverables and supporting work product documentation to Sharepoint.

1.3.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the ‘Technical Definition and Analysis’ phase:

a. Technical Design Document(s)

b. Architectural Specification(s)

c. Updated Project Schedule (i.e. MS Project Plan)

d. Updated Requirements Document(s), as necessary

1.4 Construction (Build and Unit Test)

1.4.1 Description

The purpose of this phase is to utilize the requirements, functional specifications, technical design and architectural specifications developed in the prior phases to complete the development of the software changes required to implement the solution. This phase also includes the unit testing associated with the software changes.

The AS team utilizes a series of tools including the Rational toolset to help manage the system codebase and to facilitate the migration of the code base from one environment to another (i.e. DEV to SIT, SIT to UAT, etc.). Code is stored in a repository and is checked in and out by developers to make changes. This ensures that the right environment uses the correct corresponding codebase.

1.4.2 Inputs

The following are inputs for the ‘Construction’ phase:

a. Enhancement and Defect CQs
b. Requirement Document(s)
c. Forms Specification(s)
d. User Interface Specification(s)
e. Business Use Case(s)
f. Technical Design Document(s)
g. Architectural Specification(s)
h. Development (DEV) Environment

1.4.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the ‘Construction’ phase:

a. Conduct meetings to confirm requirements, technical design and architectural specifications to create specific Developer work assignments.
b. Conduct design change reviews with Business Analysts, Partners and Xxxxx.
c. Complete software development and check-in the updated code into ClearCase.
d. Implement database changes and check-in the database scripts into ClearCase.
e. Conduct code reviews.
f. Complete unit testing of software changes.
g. Conduct performance testing, as appropriate.
h. Execute “Build” process to incorporate Service Center, Document Center, IVR and Interface code updates; and update and distribute Release Notes.
i. Deploy modified code to the DEV environment and distribute Release Notes.
j. Post deliverables and supporting work product documentation to Sharepoint.

1.4.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the ‘Construction’ phase:

a. Updated code checked into ClearCase
b. Functioning and Unit Tested System, including Service Center, Document Center, IVR and Interface code updates

c. Updated Database Schema

d. Database Scripts to facilitate updating the database in subsequent environments

e. Release Notes

1.5 System Integration Test

1.5.1 Description

The purpose of this phase is to conduct the System Integration Testing (SIT) for the software including the integration of the software changes with the system components and the end-to-end testing of the overall system. The emphasis of this testing is on the functional changes to the system. Testing occurs in a separate environment from code development and subsequent User Acceptance Testing. Testing is conducted by Application Services staff and includes manual testing of specific functions, automated testing using scripts that execute selected processes and regression testing that includes a specific set of functions that are tested for every release.

The SIT process is an iterative process wherein testers ensure that new functionality performs as specified in the requirements documents. This test stage also validates that existing functionality was not affected by enhancements and defect fixes incorporated into the code. As defects are identified in the updated code, they are documented in ClearQuest (CQ) and fixed by the developers. New versions of the code are released periodically for continued SIT.

The testing is conducted by using scenarios or test scripts that detail what information is expected in the system to conduct the test, what steps the tester should take to execute the test scenario, and what the expected results should be. The SIT tester compares both the steps planned to be taken and the actual steps executed in the system as well as the planned outcome versus the actual outcome to determine if the test passes or not.

The output of this phase is a fully tested system that is ready for User Acceptance Testing (UAT). Defects identified during SIT will be documented in ClearQuest (CQ) and resolved, unless agreement is reached with the Stakeholders to move forward without a resolution to the defect.

1.5.2 Inputs

The following are inputs for the ‘System Integration Test’ phase:

a. Project Charter

b. Requirement Document(s)

c. Forms Specification(s)

d. User Interface Specification(s)

e. Business Use Case(s)

f. Process Flow Document(s)

g. SIT Environment, with latest version of software

h. Release Notes

1.5.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the ‘System Integration Test’ phase:

a. Review the requirements documentation, business use cases and functional specifications of the solution.

b. Meet with Business Analysts, Developers, Xxxxx SMEs and Partners to clarify requirements and the solution.

c. Develop Test Plan for SIT.

d. Create test data for SIT.

e. Create test scripts for manual tests in Rational Manual Tester.

f. Update automated test scripts in Rational Functional Tester.

g. Deploy updated code to the selected SIT environment.

h. Execute the Test Plan for SIT, including regression testing.

i. Document test results.

j. Consolidate test results and distribute daily SIT Status Reports.

k. Identify and document in ClearQuest (CQ) any defects experienced during the testing.

l. Triage the defects to identify severity and address accordingly through code builds.

m. Assign and resolve defects identified during the testing.

n. Deploy code on a daily basis to address identified defects to the SIT environment. Deployments will be accompanied by Release Notes identifying defects addressed in the modified code.

o. Re-test system components, including execution of the automated test scripts, to confirm defects were resolved and did not create additional system issues.

p. Post deliverables and supporting work product documentation to Sharepoint.

1.5.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the ‘System Integration Test’ phase:

a. Documented SIT Test Case(s)

b. Executed Test Plan for SIT with a minimum of 95% of planned test cases passed

c. ClearQuest (CQ) defect records that document the defects identified with the associated analysis and resolution

d. Updated Requirements Document(s), as necessary

e. Updated Forms Specification(s), as necessary

f. Updated User Interface Specification(s), as necessary

g. Updated Business Use Case(s), as necessary

h. Updated Process Flow Document(s), as necessary

i. Fully Tested System

1.6 User Acceptance Test

1.6.1 Description

The purpose of this phase is to conduct the User Acceptance Testing (UAT) for the software changes utilizing the test plans and associated test cases developed by the UAT team. Testing occurs in a separate environment from code development and System Testing. UAT is conducted by Xxxxx and non-Application Services staff and includes manual testing of specific functions, automated testing using scripts that execute selected processes and regression testing that includes a specific set of functions that are tested for every release.

Similar to SIT, the UAT process is an iterative process wherein testers ensure that new functionality performs as specified and that existing functionality was not affected by enhancements and defect fixes incorporated into the code. As defects are identified in the updated code, developers fix the defects and new versions of the code are released for continued UAT.

The testing is conducted by using scenarios or test scripts that detail what information is expected in the system to conduct the test, what steps the tester should take to execute the test scenario, and what the expected results should be. The UAT tester compares both the steps planned to be taken and the actual steps executed in the system as well as the planned outcome versus the actual outcome to determine if the test passes or not.

The output of this phase is a fully tested system and concurrence from the UAT team to move forward with deployment of the code to Production. Defects identified during testing will be documented in ClearQuest (CQ) and resolved, unless agreement is reached with the Stakeholders to move forward without a resolution to the defect.

1.6.2 Inputs

The following are inputs for the 'User Acceptance Test' phase:

a. Project Charter

b. Executed Test Plan for SIT with a minimum of 95% of planned test cases passed

c. Requirement Document(s)

d. Forms Specification(s)

e. User Interface Specification(s)

f. Business Use Case(s)

g. Process Flow Document(s)

h. UAT Environment, with latest version of software

i. Release Notes

1.6.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the 'User Acceptance Test' phase:

a. Prepare "UAT Kickoff" meeting documentation.

b. Conduct "UAT Kickoff" meeting.

c. Review the Project Charter, requirements documentation, business use cases, functional specifications and other supporting documentation.

d. Meet with Business Analysts and SIT testers, as needed, to clarify the requirements and solution.

e. Develop Test Plan for UAT.

f. Create test data for UAT.

g. Deploy updated code to the selected UAT environment.

h. Execute the Test Plan for UAT.

i. Document test results.

j. Consolidate test results and distribute daily UAT Status Reports.

k. Identify and document in ClearQuest (CQ) defects identified during testing.

l. Triage the defects to identify severity and address accordingly through code builds.

m. Assign and resolve defects identified during testing.

n. Conduct daily “UAT Defect Review” meetings.

o. Deploy code on a daily basis to address identified defects to the UAT environment. Deployments will be accompanied by Release Notes identifying defects addressed in the modified code.

p. Re-test system components to confirm defects were resolved and did not create additional system issues. Code updates to address defects will be deployed by the AS team and tested.

q. Conduct stress testing of the modified system with data that is comparable in characteristics, variability and volume to Production.

r. Conduct “Go/No Go” meeting to obtain concurrence to move forward with the implementation.

s. Create Implementation Readiness Document.

t. Review Implementation Readiness Document and secure written approval of “Go Live” decision from the designated Xxxxx representative.

u. Post deliverables and supporting work product documentation to Sharepoint.

1.6.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the ‘User Acceptance Test’ phase:

a. Documented UAT Test Cases

b. Executed Test Plan for UAT with 100% of planned tests executed and in a known status; and with all Severity 1 and 2 defects fixed

c. Updated Requirements Document(s), as necessary

d. Updated Forms Specification(s), as necessary

e. Updated User Interface Specification(s), as necessary

f. Updated Business Use Case(s), as necessary

g. Updated Process Flow Document(s), as necessary

h. “Go Live” Decision for implementation from UAT Team

i. Implementation Readiness Document, signed by the designated Xxxxx representative

j. Fully Tested System, ready for Production environment

1.7 Implementation

1.7.1 Description

The purpose of this phase is to cutover the fully tested system to the Production (PROD) environment. This phase includes all the planning, preparation and documentation required to support the cutover.

1.7.2 Inputs

The following are inputs for the ‘Implementation’ phase:

a. Project Charter

b. MR Project Schedule (i.e. MS Project Plan)

k. Executed Test Plan for UAT with 100% of planned tests executed and in a known status; and with all Severity 1 and 2 defects fixed

c. “Go” Decision for implementation from UAT Team

d. Implementation Readiness Document, signed by the designated Xxxxx representative

e. Fully Tested System, ready for PROD environment

1.7.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the ‘Implementation’ phase:

a. Create the Maintenance Release Plan.

b. Conduct “Coming Attractions” meeting with AS staff to review changes in functionality that will be deployed in the pending Release.

c. Create and submit Netfor ticket to schedule cutover to PROD environment.

d. Identify “Smoke Testers” to confirm that the new functionality and core system are operating as planned in the PROD environment during the Release.

e. Identify a “SWAT Team” of AS team members to provide technical support and respond to any defects identified by the “Smoke Testers” during the Release.

f. Execute the Maintenance Release Plan to upgrade system in the PROD environment.

g. Perform “Smoke Test” and collect results.

h. Communicate Maintenance Release status to the Stakeholders.

i. Post deliverables and supporting work product documentation to Sharepoint.

1.7.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the ‘Implementation’ phase:

a. Maintenance Release Plan

b. Updated MR Project Schedule (i.e. MS Project Plan)

c. Documented “Smoke Test” Results

d. Operational PROD environment

1.8 Post-Implementation Support (Production Support)

1.8.1 Description

The purpose of this phase is to monitor the Production (PROD) environment following cutover and to develop a resolution plan for identified defects. This phase also includes the closeout of the project, including the updating and posting of all final deliverables and supporting work product documentation in Sharepoint.

1.8.2 Inputs

The following are inputs for the ‘Post-Implementation Support’ phase:

a. Operational PROD environment
b. MR deliverables and supporting work product documentation

1.8.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the ‘Post-Implementation Support’ phase:

a. Monitor the PROD environment and Netfor ticket activity for any post-implementation related issues.
b. Determine if issues reported are a result of the environment, the application (an MR-driven defect), or the need for additional user training.
c. Identify and document in ClearQuest (CQ) any defects experienced during post-implementation support that are or may be related to the MR.
d. Review identified post-implementation defects in weekly Defect Review meeting and assign severity and priority to the defects based on Stakeholder feedback.
e. Develop a plan for resolving the post-implementation defects based on the assigned severity and priority.
f. Update Training environment with the latest version of the software.
g. Update Disaster Recovery (DR) environment with the latest version of the software.
h. Solicit “Lessons Learned” feedback from AS and Stakeholders.
i. Review and update all deliverables and supporting work product documentation.
j. Post copies of final deliverables and supporting work product documentation to Sharepoint.

1.8.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the ‘Post-Implementation Support’ phase:

a. Defect CQs documented with assigned severity and priority
b. “Lessons Learned” Document

c. Final deliverables and supporting work product documentation posted in Sharepoint

1.9 Defect Management

1.9.1 Description

The purpose of this phase is to define the process used by Application Services to identify, analyze, triage and implement defects identified as existing Production issues.

1.9.2 Inputs

The following are inputs for the 'Defect Management' phase:

a. Netfor tickets

b. Operational problems

c. Defect ClearQuest (CQ) records

1.9.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the 'Defect Management' phase:

a. Review Netfor tickets and complete an initial assessment of the reported problem.

b. If the problem identified by the Netfor ticket is determined to be a software defect with any components of the client's solution or if the cause of the problem has not yet been determined, a CQ record is created to document the problem as a possible software defect.

c. In addition to software defects identified via Netfor tickets, CQ records are created to document potential production defects identified in the SIT, UAT and PROD environments.

d. A Defect Summary Report is generated to review the list of newly identified software defects. This report is reviewed within AS by Operations, BA Team, Development Team and other relevant SMEs and assignments are made to analyze the defects.

e. On a weekly basis, a preliminary prioritization meeting is held with the SMEs from both the Xxxxx and ACS, and other partners as appropriate, to complete a high level prioritization for the newly identified software defects.

f. After the high level prioritization has been completed, the software defects are then discussed in a weekly Internal AS Defect Review meeting to make a further assessment of the scope, impact, and possible workarounds; and also to confirm that the identified problems are software defects.

g. Following the Internal AS Defect Review meeting, the AS team completes an analysis to determine the root cause of the defect. (Depending on the complexity of the defect, this analysis could take multiple days or even weeks to complete.)

h. After the analysis has been completed, the CQ records are updated to indicate that the software defects are ready for review and prioritization with the Xxxxx and the Partner SMEs in the weekly Partner Defect Review meeting; and also updated with additional notes to provide a description of the nature and cause of the defect.

i. An updated Partner Defect Prioritization Report is generated for review in the weekly Partner Defect Review meeting.

j. The weekly Partner Defect Review meeting is held with the Xxxxx and Partner SMEs to: 1) assign a severity and priority to the software defects, 2) identify any defects that should be re-categorized as possible enhancements (i.e. Change Request candidates), 3) identify any defects that should be re-categorized as Perfective Maintenance enhancements, and 4) close out any defects that require no further action.

k. Following the Partner Defect Review meeting, the CQ records are updated to reflect the determinations made in the prior task.

l. The prioritized software defects are then periodically reviewed and assigned by the MR Project Manager for implementation as part of an MR or as a Non-MR implementation.

1.9.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the ‘Defect Management’ phase:

a. Defect records created in CQ

b. Defect CQs updated with a description of the nature and cause of the defect, as well as an assigned severity and priority, or closed out with the justification noted

c. Defects to be implemented within an MR

d. Defects to be implemented outside an MR (Non-MR implementation)

e. Perfective Maintenance CQs

f. Change Request (candidates)

1.10 Change Management

1.10.1 Description

The purpose of this phase is to define the process used by Application Services to identify, analyze and implement Program Enhancements, including Change Requests. Consideration is given based on whether these Enhancements or Change Requests result from Federal policy or program change; as an enhancement or program change requested by the Xxxxx, Partner Community or Application Services; or as an AS identified internal perfective maintenance change.

1.10.2 Inputs

The following are inputs for the 'Change Management' phase:

a. Federal Policy or Program Change

b. Xxxxx Requested Program Change

c. Partner Requested Program Change

d. Application Services Requested Program Change

e. Approved ICES Change

f. Perfective Maintenance CQ

1.10.3 Key Tasks / Activities

The following are the key tasks / activities used to complete the 'Change Management' phase:

a. New Change Requests (CRs) are created to identify enhancements or changes resulting from a Federal policy or program change; or an enhancement or program change requested by the Xxxxx, a Partner, or by Application Services. Planned ICES changes are also reviewed for possible impact on WFMS/FACTS; and as necessary, a new CR is created.

b. New CRs are submitted to the client's Steering Committee (SC) for review and prioritization. The SC meets on a bi-weekly basis. For each CR, the SC generates a prioritized weighting and a recommendation to: 1) Submit to CRB, 2) Implement without CRB consideration, or 3) take No Further Action.

CRs may also be returned to the submitter for additional information before formal consideration by the FSC.

c. CRs with a recommendation to 'Submit to CRB' are considered by the CRB which meets on a bi-weekly basis. The CRB will review and discuss the new CRs and determine if they should be approved for:

    a. Further analysis (i.e. Change Analysis);

    b. Implementation with no further analysis (typically requiring detailed business requirements to be generated);

    c. Deferral until further notice; or

    d. Withdrawn.

d. CRs approved by the CRB for 'further analysis' are assigned a Change Analysis owner and a due date is established for completing the analysis. The due date is established based on the agreed to 'Processing Priority' for the CR.

e. For approved CRs assigned to AS, AS assigns a Change Analysis owner. The CA Owner completes the Change Analysis and associated Estimating Worksheet (for AS internal planning purposes) and submits the completed Change Analysis to the CRB for review and approval. Prior to submitting the Change Analysis to CRB, the Change Analysis is reviewed and discussed with the Xxxxx and Partner SMEs in the AS Partner CR Impact meeting.

f. CRs that fall into the following categories are assigned and the implementation is monitored through existing change processes.

    a. CRs approved by the SC to be 'Implemented without CRB consideration'

    b. CRs approved by the CRB to be 'Implemented with no further analysis'

g. An implementation plan is established for each of the CRs approved by the SC and CRB, including whether the Change will be implemented within an MR or outside an MR (Non-MR Implementation).

h. For additional details for each of the Change Management tasks/activities described above, please refer to the 'Application Services – Change Management Process Overview & Instruction Guide'.

i. Perfective Maintenance CQs are reviewed and prioritized in the weekly AS Change Control Board (CCB) meeting.

j. Prioritized Perfective Maintenance CQs are periodically reviewed by the MR Project Manager for possible inclusion in an MR or the Perfective Maintenance change is assigned for a non-MR implementation.

1.10.4 Outputs / Deliverables

The following are outputs and deliverables resulting from the ‘Change Management’ phase:

a. Completed and Approved Change Requests

b. Completed and Approved Change Analyses with associated Estimating Worksheets (for AS internal planning purposes)

c. CQ Listing of Prioritized Perfective Maintenance items

d. Approved Change Requests and/or Perfective Maintenance changes to be implemented within an MR

e. Approved Change Requests and/or Perfective Maintenance changes to be implemented outside an MR (Non-MR implementation)

END OF DOCUMENT.

Application Services – Software Development Life Cycle Process Overview