

# National Interagency Resource Ordering and Status System

## Change Management Procedures



**Working Copy**  
June 9, 2003

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## **1. Purpose**

The procedures, roles, and responsibilities for administering and controlling changes to all aspects of the National Wildfire Coordinating Group's (NWCG) Resource Ordering and Status System (ROSS) are described in this document. Formal change systems are required to ensure that changes to established systems are managed appropriately. Normal ROSS application questions or inquiries handled by the Helpdesk are outside the scope of this document.

## **2. Change Control Board Description and Roles**

The ROSS Change Control Board (CCB) is comprised of:

- ◆ Business Lead (Permanent Member)
- ◆ Project or Current Manager (PM) (Permanent Member)
- ◆ National Interagency Coordination Center (1 rep)
- ◆ Geographic Area Coordination Centers (2 rep)
- ◆ Local Dispatch Centers (4 reps)

To ensure broad representation on the CCB, the Coordination or Dispatch Center representatives may be from the different Geographic Areas. The membership of the CCB shall be documented in the ROSS files and posted on the ROSS Website. Should an unplanned vacancy on the CCB occur, the PM and the Business Lead shall determine a suitable replacement. The National Coordinators and NWCG Information Resources Management Working Team (IRMWT) shall be notified when changes occur.

The National Coordinators shall appoint the members of the CCB, and designate the Chair. Tenure of CCB members shall be two years and be replaced on January 1 of the replacement year.

The CCB shall meet four times per year. The CCB shall make an annual report to the National Coordinators during their annual meeting. Copies of the annual report shall be forwarded to the IRMWT and NWCG Information Resource Management Program Management Office (IRM-PMO).

The role of the CCB is to develop/maintain change prioritization criteria, advise/make recommendations to the Business Lead and Project Manager on submitted Change Requests and priorities, and to participate in briefings and presentations made to the NWCG. The CCB shall consult with Change Management Advisors about review items as required and/or necessary to assist with evaluation and prioritization.

The CCB ensures that resulting system/application changes are in alignment with NWCG Application and Data Standards. The CCB shall involve appropriate advisors in decisions that affect business outside the dispatch community.

### **3. Change Management Advisors**

Advisors to the ROSS Business Lead, Project Manager, and CCB will vary according to the emphasis area. The following listing displays emphasis area and advising entities to be used:

#### **3.1. Training Curriculum and Courseware**

- ◆ NWCG Training Working Team (for NWCG Course curriculum)
- ◆ National Interagency Fire Center Training Group (for standards)
- ◆ Dispatch Training Steering Committee (for Business Processes)

#### **3.2. Application Software and Associated Data**

- ◆ NWCG Incident Operations Working Team (IOSWT)
- ◆ NWCG Incident Business Practices Working Team (IBPWT)
- ◆ Contracting Officer (CO)
- ◆ National and Geographic Area Coordinators
- ◆ Dispatch Efficiency Group (DEW Group)
- ◆ NWCG Data Administration Working Group (DAWG)
- ◆ NWCG IRM-PMO
- ◆ Operations and Maintenance (O&M) Contractors

#### **3.3. Infrastructure (Hardware, Network, Security)**

- ◆ NWCG IRMWT
- ◆ NWCG IRM-PMO
- ◆ National Information Technology Center (NITC)
- ◆ Agency Information Resource Management Staff (Agency IRM)
- ◆ O&M Contractors
- ◆ CO

#### **3.4. System and Client Software (non application)**

- ◆ NWCG IRMWT
- ◆ NWCG IRM-PMO
- ◆ NITC
- ◆ Agency IRM
- ◆ O&M Contractors
- ◆ CO

#### **3.5. Implementation Scope**

- ◆ NICC and GACC Coordinators
- ◆ NWCG – IRMWT
- ◆ NWCG IRM-PMO

- ◆ NWCG - IOSWT
- ◆ NWCG - IBPWT
- ◆ Incident Commanders Representative
- ◆ NWCG

### **3.6. Administration**

- ◆ Managing Agency
- ◆ NWCG IRM-PMO
- ◆ NWCG IRMWT
- ◆ CO

### **3.7. Policy**

- ◆ NWCG Member Agencies
- ◆ Affected Organizations/Agencies

### **3.8. Documentation**

- ◆ NWCG – IOSWT
- ◆ NWCG – IRMWT
- ◆ NWCG IRM-PMO
- ◆ DEW Group

### **3.9. Support (User Support)**

- ◆ NWCG – IOSWT
- ◆ NWCG – IRMWT
- ◆ NWCG IRM-PMO
- ◆ DEW Group

## **4. Change Procedure Description**

### **4.1. Procedure for Change Request Submission**

The ROSS Helpdesk shall serve as the receiving unit for all Change Requests. Input may be received by email, phone, Heat Self-Serve, notes from formal or informal meetings, and formal letters. Change Requests shall be logged into the Helpdesk tracking system and tagged as a Change Request. Information to be included with each submission shall include: Submission Date; Submitters Name, email, Phone, Unit ID, Agency; Description of the change, suggestion, or idea.

All submissions shall be assigned a Helpdesk Ticket Number. Documents received from meetings/training courses that contain a large number of comments shall be treated as one submission. A determination on how to break out the individual submissions shall be made during the screening process, as described in Section 4.2, “Idea/Change Request Screening.”

Submissions most generally will come from ROSS Users, Management, NITC Employees, O&M Contractor, Helpdesk Contractor, ROSS Partners, and Cooperators.

Any recommendations or discussions with the NWCG shall be preceded by reviews and discussion with the NWCG IRM-PMO and affected Working Teams. This requirement applies to any mention of discussions or approvals by the NWCG within this document.

## 4.2. Idea/Change Request Screening

4.2.1. During the first week of each month, the ROSS Project Manager and Business Lead shall perform an initial screening and categorization of all submitted Change Requests. Once the categorization is complete, the Helpdesk informs the submitter. Submissions shall be categorized as:

- ◆ Minor changes within the System baseline that can be accomplished using available O&M funding and labor sources. Examples for this category include: resolution of reported bugs, refinement of implemented business rules, cosmetic changes (e.g. movement/addition/deletion of buttons, adjustment of fields), performance tuning, new or revised reports, normal operation procedures (e.g. system maintenance, hardware maintenance/replacement), software licensing, and telecommunications infrastructure. Items shall be assigned code, “MCOM.”
- ◆ Items that are within the established system baseline that will require additional funding to accomplish. Examples for this category include: procurement of upgraded/additional hardware that is not covered within the normal replacement funding, major screen or process redesign caused by business changes or new regulations/policy, emergency procurements due to failure of components. Items shall be assigned code, “AFOM.”
- ◆ New Functionality that is outside the established system baseline. Examples for this category include: system interfaces not included in the delivered application, integration with other products, added capability that requires major requirements, design, and coding work. Work classified in this category will most likely be treated as a separate project which may/may not be managed by the Operations and Maintenance Team. Items shall be assigned code, “CFUN.”

4.2.2. Each submission shall be categorized as related to one or more of the following emphasis areas:

- ◆ Training Curriculum and Courseware (TC)
- ◆ Application Software and Associated Data (AS)
- ◆ Infrastructure (Hardware, Network, Security) (IF)
- ◆ System and Client Software (non application) (SCS)
- ◆ Implementation Scope (IS)
- ◆ Administration (AD)
- ◆ Policy (PY)
- ◆ Documentation (DC)
- ◆ Support (User Support) (SP).

Emphasis area codes shall be recorded on the helpdesk ticket record.

**4.3. Procedures for handling minor changes within the system baseline that can be accomplished using available funding and labor sources (MCOM).**

Work completed in this category focuses on operations and maintenance of the established system using resources that are within the scope of the established system baseline and within the established O&M budget.

The following criteria shall determine priority setting for this category. The CCB may be consulted for assistance in priority setting if necessary.

- Priority #1: Bug fixes critical to maintaining system stability.
- Priority #2: Bug fixes critical to maintaining application business process operation.
- Priority #3: Bug fixes critical to proper screen operation without utilizing work around procedures.
- Priority #4: Minor changes that maintain system stability.
- Priority #5: Minor changes that maintain business process operation.
- Priority #6: Minor changes to correct problems where a known work-around has been documented or widely known.

The Project Manager in consultation with the Business Lead shall determine the best course of action to execute work tasks in this category. A variety of means may be used to carry out work in this category ranging from internal labor provided by government agencies or O&M contract labor.

When the work is completed, the Project Manager will inform the Helpdesk so they can notify the submitter and close the ticket.

Figure 1, “MCOM Procedure,” displays this procedure.

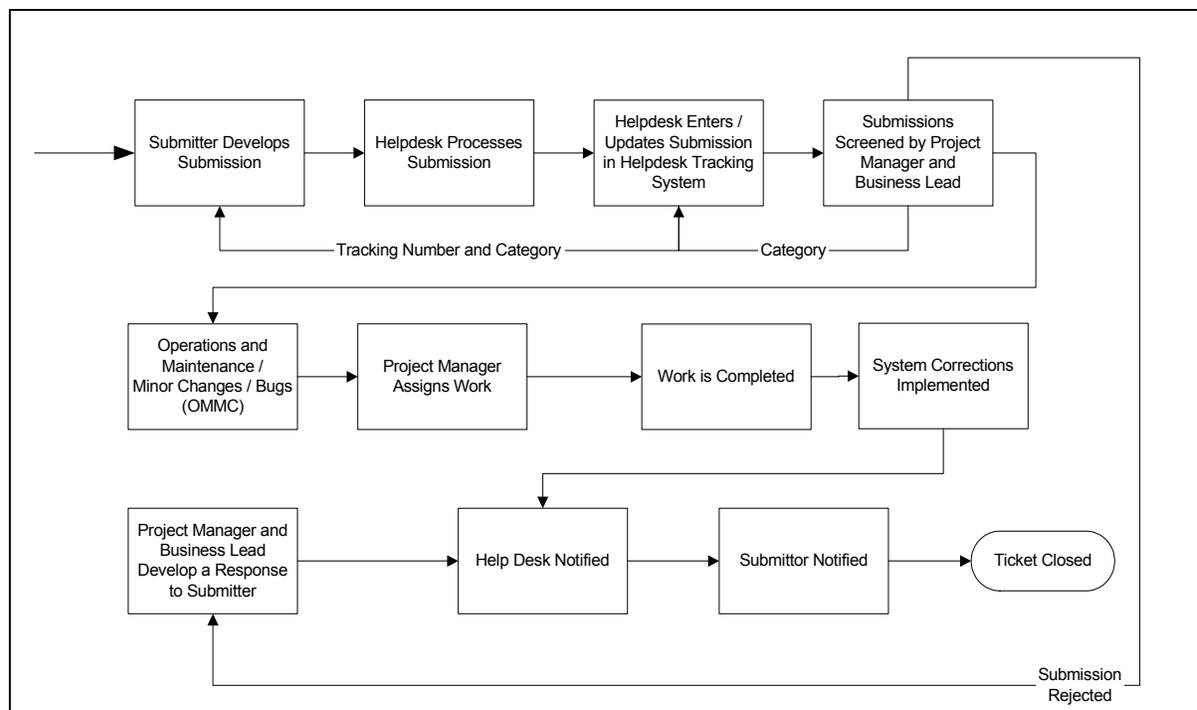


Figure 1. MCOM Procedure

#### 4.4. Procedures for handling items within the established system baseline but will require additional funding to accomplish (AFOM).

Work completed in this category focuses on operations and maintenance within the scope of the established system baseline, but requires more funding.

Submitted items will be reviewed and prioritized by the Business Lead and Project Manager. All submitted items, including documentation, will be presented to the CCB. The CCB will review each item and develop a recommended action. Items rejected by the CCB shall be returned to the Business Lead and Project Manager for development of a response to the Helpdesk who will send the response to the submitter and close the ticket. Initially, the recommended approval items will be presented to the Project Managing Partner for a funding decision and then to the NWCG for a decision, which may include the securing of funding from another agency. Deliverables from the CCB shall include:

- ◆ Complete description of the recommended change. This description may include example screens, high-level business process flowcharts, and business level requirements.
- ◆ Resource requirements (team, contractor, business community).
- ◆ Estimated schedule to complete.

- ◆ Estimated cost to design/build/test/implementation of the recommended change.
- ◆ Rationale for priority (why this change is rated more important than others that currently are under consideration).
- ◆ Briefing materials for discussions with the Managing Partner for the Project, NWCG, and other agency officials to be involved in the decision.
- ◆ Designated representative of the CCB to make presentations and hold discussions regarding the Change Request with the Managing Agency for the Project and NWCG representatives.

The Project Manager, in consultation with the Business Lead, shall determine the best course of action to execute work tasks in this category. A variety of means may be used to carry out work in this category ranging from internal labor provided by government agencies or O&M contract labor.

Figure 2, “AFOM Procedure,” displays this procedure.

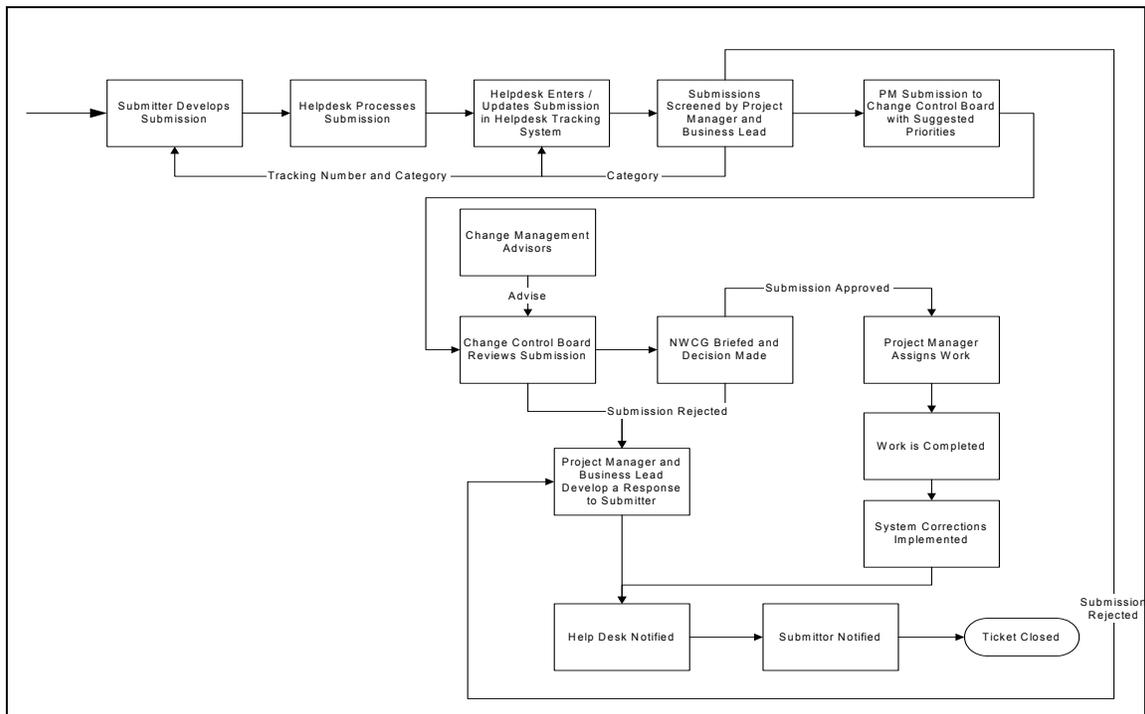


Figure 2. AFOM Procedure

#### 4.5. Procedures for Handling New Functionality that is outside the established system baseline (CFUN).

Work completed in this category focuses on developing new system functionality that is outside the scope of the established system baseline.

The Business Lead and Project Manager will review submitted items. All submitted items, including documentation, will be presented along with

suggested priorities to the CCB. The CCB will review each item and develop a recommended action for it. Items that are recommended for adoption shall be prioritized. Items rejected by the CCB shall be returned to the Business Lead and Project Manager for development of response to submitter and closure. The recommended approval items will be presented to the NWCG for a decision. Deliverables from the CCB shall include:

- ◆ Complete description and business reason for the recommended change. This description may include example screens, high-level business process flowcharts, and business level requirements.
- ◆ Estimated resource requirements (team, contractor, business community).
- ◆ Estimated schedule to complete.
- ◆ Estimated cost to design/build/test/implement the recommended change.
- ◆ Proposed scope change to system baseline.
- ◆ Rationale for priority (why this change is rated more important than others that currently are under consideration).
- ◆ Briefing materials for discussions with The Managing Agency for the Project, NWCG, and other agency officials to be involved in the decision.
- ◆ Designated representative of the CCB to make presentations and hold discussions regarding the Change Request with the Managing Agency for the Project and NWCG representatives.

Work to complete tasks shall be completed using sources identified using standard project management processes.

Figure 3, “CFUN Procedure,” displays this procedure.

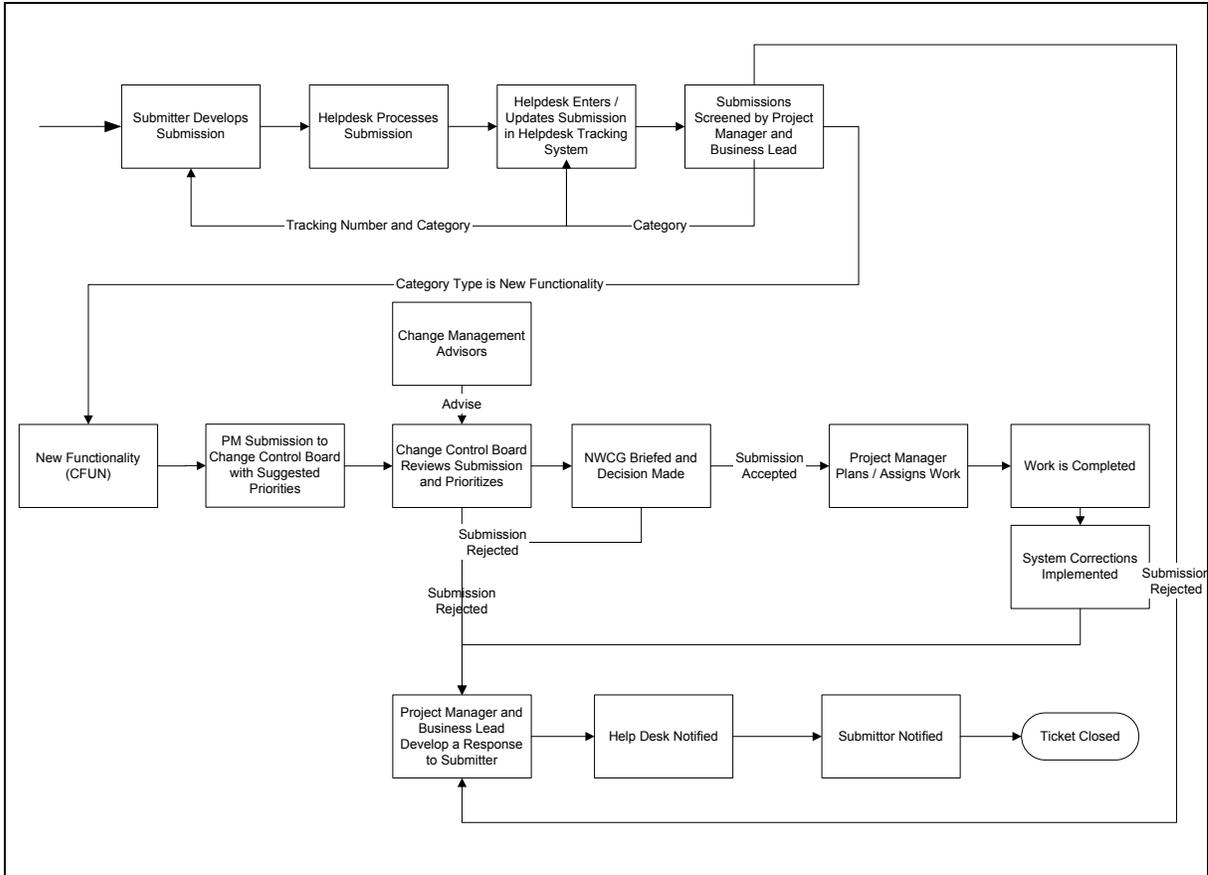


Figure 3. CFUN Procedure

## 5. Responsibilities

### 5.1. Business Lead

The Business Lead has the overall responsibility of overseeing the Change process and working with the Project Manager to ensure the Change Management Plan is followed.

### 5.2. Project Manager

The Project Manager has the overall responsibility and accountability for the project. The Project Manager administers the Change Management Plan.

### 5.3. Change Control Board (CCB)

The CCB is comprised of representation from a cross section of the business community and key leadership from the Project Team. The Board reviews, recommends, prioritizes, and defends submitted changes for potential inclusion into the ROSS System. For more detailed information, see Section 2, “Change Control Board Description and Roles,” and Section 4, “Change Procedure Description.”

#### **5.4. Managing Partner**

The Managing Partner has been designated by the NWCG as the accountable agency that represents the interests of the other participating agencies for the project's completion. The Managing Partner typically provides the primary share of financing.

The US Forest Service has been designated as the Managing Project Agency for the ROSS Project.

#### **5.5. National Wildfire Coordinating Group (NWCG)**

The NWCG is the sponsoring/chartering organization for the project. The NWCG provides final approval for changes that are outside the established system baseline and/or require funding beyond that allocated for O&M.

### **6. Communications**

Throughout the change process, communication will be ongoing with the person(s) or organizations submitting or involved in a request. Communication shall occur anytime an action is taken on a request. All communications shall reference the Helpdesk Ticket Number.

### **7. Modifications to this Plan**

Requests for updates or modifications to this plan shall be submitted to the Project Manager who will draft changes and present to the CCB. All changes shall be reviewed and approved by the NWCG.





## **Appendix B – ROSS Operations and Maintenance Contractor – Internal Change Review Policy**

Resource Ordering and Status System (ROSS) Program

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Professional Development Services

# **Resource Ordering and Status System (ROSS) Internal Change Review Policy**

August 23, 2000  
Version 1.0

Contract: GS-35F-4863G  
Delivery Order Number: FS31  
Lockheed Martin, Inc

# Internal Change Review Policy

## Internal Change Review Overview

The purpose of the Internal Change Review Policy (ICR) is to control, monitor, and track all changes to the existing ROSS application. The ICR is charged with managing the process by which all proposed changes are identified, clarified, evaluated, approved/not approved, documented including appropriate signatures, implemented, and verified. Proposed changes may include: coding, functionality, design, and documentation.

During the remaining performance of this ROSS Maintenance Contract, the ICR is in effect and maintained by the selected personnel.

## Procedures

There are three (3) ways to implement changes. Each procedure requires a process and is outlined below.

### 1. Minor changes to existing code.

Changes to existing code are defined as CRs (Change Requests) and will be submitted via Starteam<sup>1</sup>. To submit a CR, the following steps are performed:

- a. Customer identifies and enters CR into Starteam
- b. Customer changes CR status to “approved”
- c. Customer notifies contractor that a change has been authorized via email to [cr@lw-lmco.com](mailto:cr@lw-lmco.com)
- d. Contractor schedules a CR review session to determine severity and technical implications of the CR.
- e. Once approved by the contractor, the CR is scheduled for a future release.

Note: Any emergency CR will be handled on a case-by-case basis. To fix and deploy an emergency CR has a significant impact on the Contractor Software Development Team performance and should be handled judiciously.

### 2. Module Redesign

Module Redesign is defined as large-scale changes to an approved module.

Proposed redesign changes will require an evaluation and verification as to the impact on any existing modules.

- a. CR Review/Design Change Review. The purpose of the change review team is to analyze the functionality incorporated and to provide all the necessary information/documentation to describe the required changes.

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<sup>1</sup> StarTeam is a configuration management product that has been used by the project.

This documentation will be utilized as a baseline and be required for the contractor software development team. When a change review session is scheduled the following personnel must be included:

Contractor Requirements Analyst (or designee)

Contractor Quality Assurance Engineer

Customer SME (Subject Matter Expert)

- b. Design Change Package creation - The change review team generates a written change package to include:
  - Design Change Approval Form
  - Screen Designs in MS Powerpoint
  - User Interaction Diagrams in MS Word
  - Business Rules in MS Word.
- c. Design Change Review. Required to analyze the entire design with the software developer to discuss feasibility, performance and to make any necessary changes.
- d. Design Change Package signature approval. Requires signatures by the following personnel before any development is started:
  - Contractor Requirements Analyst (or designee)
  - Contractor Quality Assurance Engineer
  - Contractor Software Developer
  - Contractor Project Manager
  - Contractor Program Manager
  - Customer Program Manager.
- e. Version Control of Change Design Documents. All signature-approved documents are given to the contractor Quality Assurance Engineer for entry into Starteam.
- f. Detailed Design. Performed by the Contractor Software Developer and contains physical database design, queries, front/back-end functions, common coding impacts, and other impacts and risks.
- g. Detailed Design Review. Performed by the original Contractor Software Developer and one additional Contractor Software Developer to discuss/evaluate the detailed design.
- h. Code. Created by the Contractor Software Developer
- i. Database Changes. Performed by the Contractor Database Administrator
- j. Integrate. Brings all code onto a common server and integrates the new code with the existing code base.
- k. Unit Test. Performed by the Contractor Software Developer to ensure all requirements, as defined in this Design Change Package, are met and functionality is working correctly.
- l. Unit Test Review. Performed by the Contractor Software Developer and a Contractor Quality Assurance Engineer to further check requirements and functionality.

- m. Fix defects. Performed by the Contractor Software Developer to fix any defects found in the Unit Test process.
- n. Integrate. Performed again, as described in item “j,” to implement the final changes onto the common server.

Figure B.1, “Change Implementation Process” outlines this process.

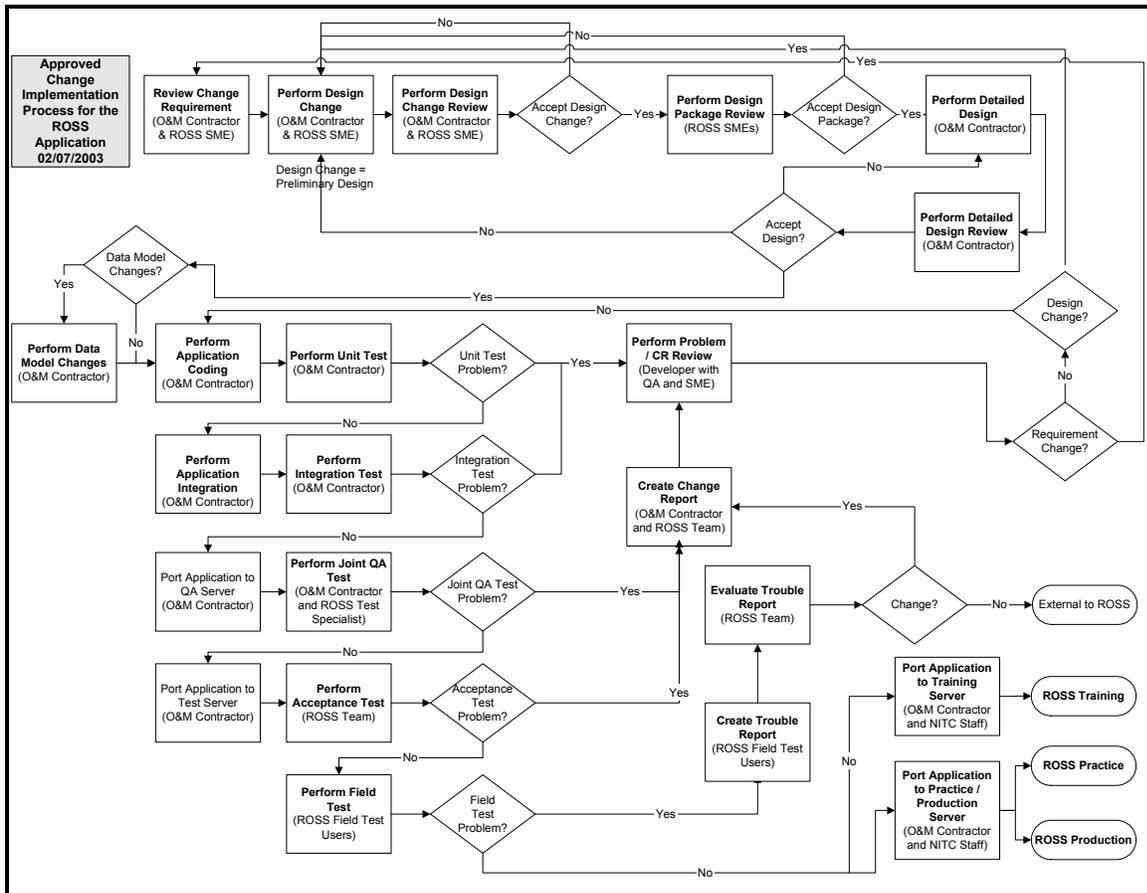


Figure B.1. Change Implementation Process

### 3. Changes to existing authorized designs

Any proposed changes to authorized designs requires an addendum to the existing design package and requires the same signatures/authorization as the original package. The processes, as listed herein, will be followed and the “Design Change Package” will be added as an addendum to the original package.

### Conclusion

A notification will be communicated to all appropriate personnel by the Customer and Contractor Program Managers (or their designees).

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Paul Condit, ROSS Project Program Manager  
Lockheed Martin, Inc.

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Date

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Jon Skeels, ROSS Project Contracting Officer's Representative  
USDA Forest Service

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Date