Appendix 6

Operational Support Systems Change Management Plan

DRAFT

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Revision XX

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REVISION HISTORY

Revision Number	Revision Date	Revision Description	Revised by

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LIST OF FIGURES

1.0 OPERATIONAL SUPPORT SYSTEMS CHANGE MANAGEMENT PLAN (OSS CMP)

Qwest has an Operational Support System (OSS) consisting of systems, software, and applications that it regularly maintains. In addition, Qwest will continue OSS innovations through new services and process design enhancements. These changes will likely impact the Networx OSS interfaces and the individuals in GSA and Agencies that work with these systems daily. The Government will be made aware in advance of these changes so that users may properly address the impact and help manage the changes.

The Change Management Process manages three types of changes:

1. Unplanned (emergency) Qwest-driven changes to the Qwest Control Networx Portal and underlying OSS.

2. Planned Qwest-driven changes to the Qwest Control Networx Portal and underlying OSS.

3. GSA/Agency-requested changes to the Qwest Control Networx Portal and underlying OSS.

Qwest understands and complies with GSA's requirement for proactive notification of all changes to the Qwest Control Networx Portal and the underlying OSS that may impact the Government.

2.0 PURPOSE

The Qwest OSS CMP will establish the organizational roles and responsibilities, policies, guidelines, and procedures necessary for OSS change management control, in partnership with the Government.

2.1 SCOPE

The OSS CMP will cover the roles, responsibilities, and processes related to governing and managing change to the OSS supporting the Networx program.

2.2 APPLICABILITY

Qwest's OSS CMP will apply to all changes impacting the Government that are made to the Qwest Control Networx Portal and the underlying Qwest OSSs.

2.3 APPLICABLE AND REFERENCED DOCUMENTS

The following identifies applicable and referenced documents to the Qwest change management activities. If a conflict occurs between the referenced documents and this plan, the conflict will be referred to the Qwest Contractor Program Organization (CPO) for resolution.

2.3.1 Applicable Change Management Documents

The applicable change management documents will include:

- Change Request (CR) Submission Form
- Change Request Tracking Report
- Change Management Process Flow

2.3.2 Referenced Change Management Documents

The following referenced change management documents are used internally by Qwest IT Operations for OSS management and control.

3.0 ORGANIZATION AND RESPONSIBILITIES

3.1 CHANGE MANAGEMENT PARTICIPANTS

An effective OSS change management process requires active support and contribution from Qwest and the Government. The following sections identify the organizations that will be directly involved in managing change, as well as describe the roles and responsibilities for the GSA Program Management Office (PMO), the Qwest CPO, Qwest Information Technology (IT), and the Qwest Process/System Team.

3.2 RESPONSIBILITIES

The following information identifies the organizations' responsibilities.

GSA PMO:

- Reflect and represent the Government and the broad Agency cross-section of users by serving as the focal point for Agency CRs.

- Provide high level business requirements and benefits documentation to the Qwest CPO on GSA/Agency-originating CRs.

- Participate in CR review, approval, and prioritization analysis at Qwest CPO/GSA PMO meetings.

- Participate in OSS verification testing for new functionality prior to release to production.

Qwest CPO:

- Provide single "front door" for GSA PMO-approved CRs.

- Track status of CRs and communicate all CRs status at Qwest CPO/GSA PMO meetings.

- Facilitate, review, and prioritize CR discussions at Qwest CPO/GSA PMO meetings. All GSA-originated and applicable Qwest-originated CRs will be reviewed.

- Coordinate client meetings between Qwest Process/Systems Team and GSA PMO, when necessary, for requirements definition, design, and implementation coordination.

- Coordinate OSS verification testing with GSA and Agencies for new functionality prior to release to production.

- Notify GSA PMO of any emergency changes to Qwest Control Networx Portal or underlying OSS impacting the Government as soon as the required change is known.

Qwest Process/Systems Team:

- Provide status to the Qwest CPO on all GSA-approved CRs.

- Provide Qwest CPO with a list of all Qwest-originated CRs that impact the Networx program's operations, for review and Government approval at Qwest CPO/GSA PMO meetings.

- Steward GSA-approved CRs through the Qwest Development Process, in partnership with the Qwest IT.

- Design and develop appropriate business process flows and functional requirements.

- Initiate the IT Change Management Process with Qwest IT when requirements change, or when additions are necessary after the CR has moved into the development phase.

- Document changes to revise OSS User Guides and manuals resulting from enhancements and functionality changes to the Qwest OSS.

Qwest IT:

- Steward GSA-approved CRs through the Qwest Development Process, in partnership with Qwest Process/Systems Team.

- Support Qwest development process by providing technical solutions and appropriate level of estimates based upon the business requirements.

- Develop and test software code to effect the approved CR.

- Provide ▮▮▮▮▮ status reports to the Qwest Process/Systems Team on all GSA-approved CRs.

- Facilitate the IT Change Management Process when requirements change, or when additions are necessary after the CR has moved into the development step.

4.0 CHANGE MANAGEMENT PROCESS

As mentioned previously, there are three types of changes covered within this plan. The following sections define each change and provide an overview of the supporting Change Management Process. ▮▮▮▮▮▮▮▮ ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
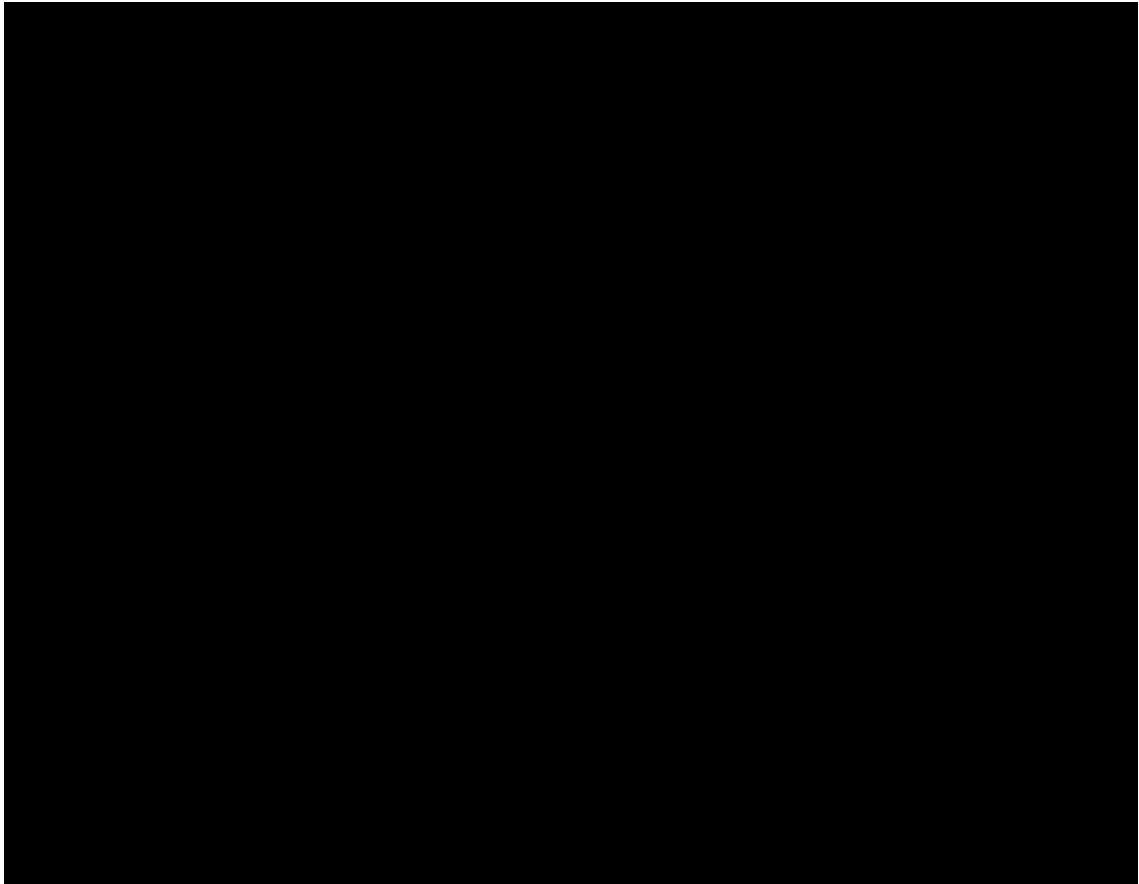
4.1 TYPES OF CHANGES

4.1.1 UNPLANNED QWEST-DRIVEN CHANGES –
EMERGENCIES

Unplanned or emergency changes to the Qwest Control Networx Portal or the underlying OSS may impact GSA or Agencies' daily operations. GSA and Agencies will need to be made aware as soon as this situation is known. ██

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██ The Qwest CPO will notify the GSA PMO and Agency representatives of the unplanned change. The appropriate communication and messaging actions

will be designed and implemented to ensure that Government users and critical business functions are aware of the impacts and can plan accordingly. Qwest will quickly implement communications, such as direct telephone and email contact with the GSA PMO and Agencies or Qwest Control Networx Portal login messages, as appropriate.

4.1.2 PLANNED QWEST-DRIVEN CHANGES

Planned, discretionary Qwest-driven changes are changes that Qwest would like to make to the Qwest Control Networx Portal and/or underlying OSSs. These changes will enhance user capabilities or provide process efficiencies, and will be documented in a CR. ███. Once the CR is reviewed by GSA, the CR will move forward to the development and delivery process.

Qwest will notify the Government ████████████████████ in advance of any scheduled change to the Qwest Control Networx Portal and/or the underlying OSS changes that may impact GSA and Agencies. Notifications will include discretionary enhancements and required maintenance activities that may impact the Government.

Notification of maintenance changes to the Qwest Control Networx Portal will be reviewed with the GSA PMO to ensure that GSA and Agencies are prepared for the changes.

4.1.3 GSA-DRIVEN CHANGES

The Qwest CPO will provide a "single front door" for GSA and Agencies to submit CRs for system improvements. The Qwest CPO will partner with the GSA PMO to determine which submitted CRs align with the Networx program goals and should be moved forward. The Qwest CPO will

consider the GSA PMO as the clearinghouse for all Agency and GSA-originating CRs.

Once a GSA/Agency-originated CR is submitted, the CR will be passed onto the Qwest Process/System Team for requirements definition and evaluation. A CR design document will be created by Qwest and delivered to the joint CCB. GSA or Agency must approve the CR design document before work may begin.

All enhancements to Qwest systems will undergo a rigorous evaluation review and prioritization process. The Qwest Process/Systems Team will work with Qwest IT to steward the CR through the Qwest development process. This process will govern the way in which the systems work is prioritized, defined, and delivered by Qwest IT.

4.2 NOTIFICATION OF CHANGES

GSA and Agencies will be notified of unplanned or emergency Qwest-driven changes to the Qwest Control Networx Portal and underlying OSS as soon as it is known that such a change is required. Qwest will notify the Government of these events via direct telephone and email contact or Qwest Control Networx Portal login messages, as appropriate.

Planned maintenance changes impacting the Qwest Control Networx Portal and/or the underlying Networx OSS will be reviewed with the GSA PMO ██████████████████ in advance of the change. Notification of maintenance changes will be posted to the Portal.

Changes that affect the system or human interface with GSA or users of the Qwest Control Networx Portal will be brought to the attention of the Government and, where applicable, approval sought before implementing those changes. Design changes originating from either a Qwest-driven or GSA-driven CR will be reviewed and approved at CCB meetings. The status

of approved changes will be tracked through the development lifecycle and reviewed monthly with the GSA PMO.

4.3 VERIFICATION TESTING

Qwest understands that the Government will want to retest the Qwest Control Networx Portal and/or underlying OSS before a change is released to production. The Qwest CPO will coordinate with the GSA PMO on verification testing and appropriate user testing of any change, to ensure that the Government is satisfied that requirements are being met by the Qwest Control Networx Portal and underlying OSS. When changes occur to the OSS, Qwest will retest as outlined in the OSS Verification Testing Plan, Appendix 5.

4.4 RETRAINING

Qwest understands that additional training or retraining of GSA or Agency personnel may be required to support a change to the Qwest Control Networx Portal and/or underlying OSS. Qwest will notify the GSA as outlined in the Change Management Plan when changes do occur. The Qwest CPO will partner with the GSA PMO to determine whether a given change warrants additional training or retraining effort. If so, the Qwest Networx Training Manager will work with the Qwest IT and Process teams to develop training content for the Government. The Training Manager will also coordinate the delivery of training using the various media formats requested by the Government. Training classes will appear on the training schedule and will be coordinated according to Networx training requirements.

4.5 UPDATING OF RELEVANT NETWORX DOCUMENTATION

Qwest understands that a change to the Qwest Control Networx Portal and/or underlying OSS may require updates and revisions to the documentation posted on the Qwest Control Networx Portal and Qwest

Networx Website. If updates and revisions are required, the Qwest CPO will be responsible for ensuring that the documentation is current and available on the Qwest Control Networx Portal and Qwest Networx Website. The modifications will be available within five business days of completing the change, at no additional cost to the Government.

4.6 MANAGING OSS CHANGES

4.6.1 Networx Change Requests

The Government will be responsible for reviewing and approving CRs. Qwest anticipates that CRs approved by the GSA Contracting Officer's Representative (COR) will be prioritized against other pending and approved Government-initiated CRs.

CRs to the Qwest OSS will be submitted by either GSA and Agencies or the Qwest Process/Systems Team. ██████████████████████ ██ ██ █████████████████████████████████████ Once the CR is evaluated and approved, the Qwest Process/Systems Team will sponsor the CR to Qwest IT and initiate the Qwest Development process described below.

The GSA COR will be the Qwest CPO's primary contact representing the Government's collective view pertaining to proposed changes and functional requirements. For Government-initiated CRs, the GSA COR will be responsible for submitting an explanation of the requirement to the Qwest CPO. The requirement will articulate the performance anticipated from each proposed change. CRs are to be provided to the Qwest CPO and the Government for consideration and review at Qwest CPO/GSA CCB meetings.

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███ the Qwest CPO will facilitate developing business requirements documentation for the CR with Qwest IT, other Subject Matter Experts (SMEs), and the Government as required. ███

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The Qwest CPO will provide status in the Networx Monthly Status Report on all approved CRs as they move through the Qwest Development process.

4.6.2 Qwest Development Process

For the Networx program, Qwest will adhere to our proven development process for managing software development. █████████
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Each CR must include high level business requirements that describe the requested change. High level business requirements █████████████
███████████████████████████████████████ After reviewing the high level business requirements, Qwest IT will provide the Qwest Process/Systems Team with a high level solution architecture ████████████
█████████████████████ estimate for use in the business case.

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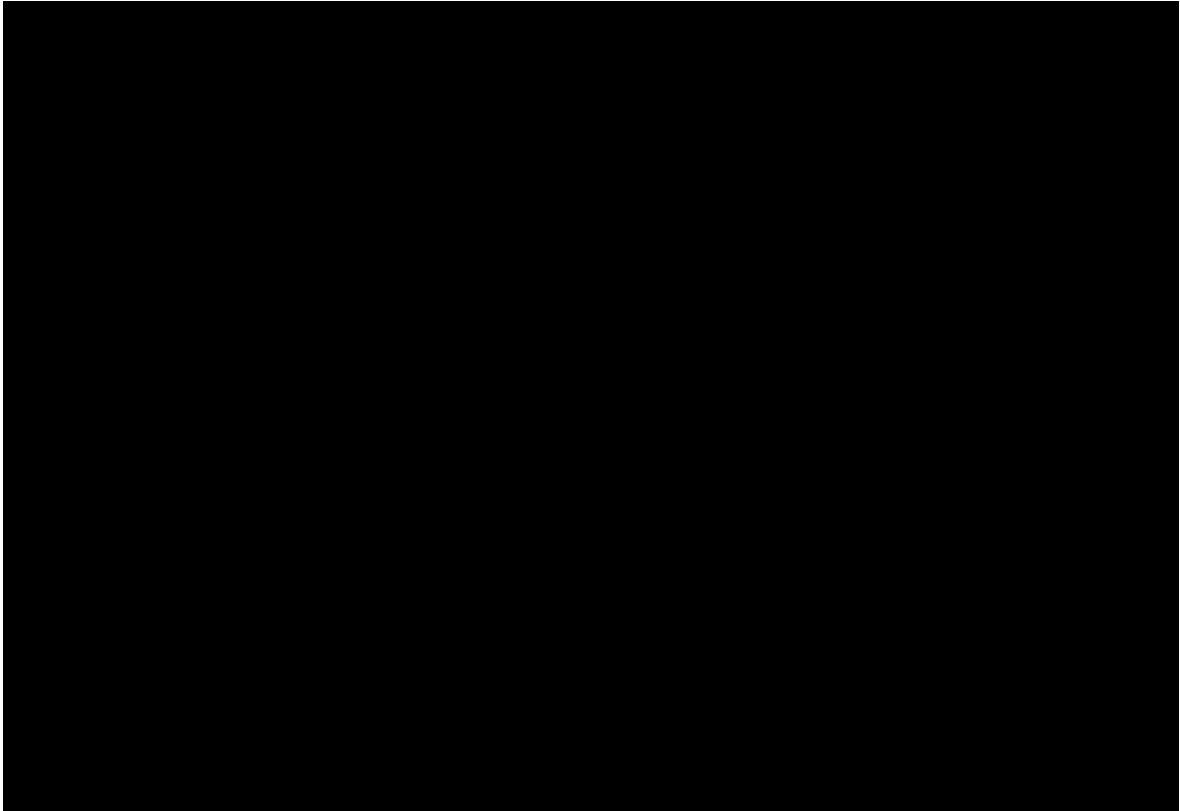
██ The Qwest CPO remains actively engaged in this process to ensure that the needs of the Government are understood and appropriately prioritized among other Qwest projects.

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██████████████████████████, the development teams will provide ██████████ estimate, which will be used in resource and budget planning.

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Qwest IT will ████████████ record and track the status of all IT requirements. Qwest IT will use the ███████████████████████ to formulate a method or methods by which a solution could be implemented to fulfill the requirement. Qwest IT will submit ██████████████████ Qwest Process/Systems Team. ████████████████████████

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██████████████████ Once the solution ████████████████████ ████████ as described in Section 3.13 Operational Support Systems, Figure 3.13.3-1, Types of Testing, prior to release into production. ████████████ ██ ████████████████████ Once all testing is completed, the software package will be ready for implementation in the production environment.

5.0 SOFTWARE QUALITY ASSURANCE

Qwest has established a quality assurance program to ensure that the Change Management process, policies, and procedures are compliant with the Networx requirements. Ownership of this quality program is the responsibility of the Qwest CPO, with input from the Government and other Qwest personnel.

5.1 CONTROLLING OSS CHANGES

Qwest IT has extensive change control procedures defined for software and hardware changes to the OSS.

5.1.1 Qwest Hardware and Application Change Management Process

Qwest has proven operational support processes for our OSS hardware and software environments. Extensive Qwest hardware and application software Change Management Plans are currently in effect. They govern any installation or alteration of hardware, system and application software, procedures, or environmental facilities that will add to, delete from, or modify the environment or attached network.

5.1.2 Change Management

Change Management is a systematic approach to dealing with change. Change Management has at least three different aspects, including: adapting to change; controlling change; and effecting change. A proactive approach to dealing with change is at the core of all three aspects. From an organization perspective, change management means defining and implementing procedures and/or technologies, to deal with changes in the business environment.

5.1.3 Controlling Change

Infrastructure Change Management is the process for managing and scheduling changes to eliminate conflicts and reduce downtime to all users in the computing environments. Computing environments are network, hardware, software, environmental (including power work or other changes to a building where servers, systems or the network may be impacted), and applications (from design to production).

Changes introduced in Qwest IT computing and communications environments will be implemented using the internal Qwest IT Change Process. ███████████████████████

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The IT Change Management will provide disciplined and common processes applicable to all changes, while having the flexibility to recognize the inherent differences that exist in those changes.

5.1.4 Effecting Change

The Release Management process will manage the design, development, testing, and/or packaging of code in preparation for implementation into production. █████████████████████████████

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5.1.5 Adapting to Change

Configuration Management is the detailed recording and updating of information that describes an enterprise's computer systems and networks, including all hardware and software components. Such information typically will ████████████████████████ have been applied to installed software packages, █████████████████████████████████ hardware devices.

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