# Change Management Procedure

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I. Introduction

The purpose of Change Management at the Connecticut State Colleges and Universities (ConnSCU) Board of Regents (BOR) System Office is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes associated with Information Technology (IT) services offered to the ConnSCU institutions. Changes in the IT infrastructure may arise reactively in response to problems, or proactively from seeking improved efficiency and effectiveness, as well as to reflect business initiatives, programs, projects, or service improvements. A proper balance between the need for change and the potential impact and risk of a change needs to be considered for each proposed change.

II. Scope

This document defines the process for the implementation of changes by the ConnSCU System Office. Each step in the process is important unto itself as well as being a necessary part of the entire process. It provides a vehicle for communication, evaluation, approval, implementation, and measuring effectiveness of all changes.

III. Objective

The primary objective of Change Management is to enable beneficial changes to be made, with minimum disruption to IT services. We will accomplish this objective by providing a:

- Structured process for planning, scheduling, announcing and implementing changes
- Forward Schedule of Changes impacting IT services offered to the ConnSCU institutions

IV. Definition of a Change

Changes that are required to go through this Change Management process are defined as those that make a modification or addition to any component of the IT infrastructure or any aspect of an IT system where the change could adversely impact service delivery. These modifications or additions carry an inherent risk to the integrity of production environment components and the systems they support. A change request can originate from a problem report, service request, enhancement, project initiative, etc. Upgrading a production server, reconfiguring a Local Area Network (LAN), or patching an application, are all examples of a change.

V. Roles and Responsibilities

A. Submitter

This is the IT professional who is requesting the change. It is the responsibility of the Submitter to provide a concise and complete Request for Change (RFC), with appropriate lead times, in the Change Management System. It is also the Submitter’s responsibility to implement the change and manage the RFC with the appropriate statuses.

B. Change Manager

The Change Manager is responsible for the overall facilitation of the Change Management process. The Change Manager is a ConnSCU BOR System Office IT staff member that is appointed by the BOR CIO. The responsibilities of the Change Manager include:

- Coordinate and chair CAB meetings
- Facilitate the resolution of any schedule conflicts that may arise
- Maintain the processes and procedures necessary to carry out the Change Management functions
- Provide access to the Change Management System
C. Internal CAB

The Internal CAB has representation from each of the IT Divisions within the ConnSCU System Office with each IT Division carrying a single vote. The CAB members are appointed by the BOR System Office CIO. Collectively, the Internal CAB votes to provide the authority, to the Submitter, to implement the changes as proposed in the RFC. The Internal CAB will meet at a regularly scheduled interval to review RFCs on the Forward Schedule of Changes and any other pertinent business.

Voting Details:

- An “Approve” vote represents that the change can move forward as documented.
- A “Disapprove” vote represents that the change cannot move forward as documented.
- The “Defer” vote should not be used.
- Voting functions will be performed by email
- CAB members should use an “Approve” vote when the proposed change has no impact on their respective IT Division and is in accordance with the defined change management process.
- Voting is based on the acceptable risk and impact of the change and NOT based on the technical details.

It is expected that each member will be an active participant on the Internal CAB and fulfill these responsibilities:

- Attend scheduled meetings on a regular basis
- Review and vote on every RFC, within the voting period, based on impact and risk
- Convey any upcoming changes to their respective IT Division

If a member fails to carry out these responsibilities, the Change Manager may submit a request to the BOR System Office CIO for a new appointment.

D. External CAB

The External CAB has representation from each of the seventeen (17) ConnSCU institutions with each institution carrying a single vote. The Senior Manager / IT Leader at each institution is responsible for appointing the institutions CAB member. Collectively, the External CAB votes to provide the authority, to the Submitter, to implement the changes as proposed in the RFC. The External CAB will meet at a regularly scheduled interval to review RFCs on the Forward Schedule of Changes and any other pertinent business.

Voting Details:

- An “Approve” vote represents that the change can move forward as documented.
- A “Disapprove” vote represents that the change cannot move forward as documented.
- The “Defer” vote should not be used.
- Voting functions will be performed by email
- CAB members should use an “Approve” vote when the proposed change has no impact to their respective institution and is in accordance with the defined change management process.
- Voting is based on the acceptable risk and impact of the change and NOT based on the technical details.

It is expected that each member will be an active participant on the External CAB and fulfill these responsibilities:

- Attend scheduled meetings on a regular basis
- Review and vote on every RFC, within the voting period, based on impact and risk
• Convey any upcoming changes to their respective Institution

If a member fails to carry out these responsibilities, the Change Manager may submit a request to the Senior Manager / IT Leader at the particular institution for a new appointment.

E. Emergency CAB

The Emergency CAB is defined by the BOR System Office CIO or designee and has the authority to approve Emergency RFCs.

VI. Request for Change Types

A. Normal RFC

This is a request that requires two weeks (10 normal business days) advance notice and follows the complete process of Change Management where the RFC is recorded, assessed and then approved or rejected by the CAB(s). The majority of requests are of this type.

Note: See Appendix A for the Normal RFC Workflow.

The phases of a Normal RFC are:

Step 1. Draft
• Can be created at any time. RFC will not move to a CAB vote until submitted.
• At the time of submission, the submitter needs to define a proposed Implementation Date.

Step 2. Internal CAB Vote
• The Internal CAB has two days to vote “Approve” or “Disapprove”. The “Defer” selection should not be used and does not extend the voting deadline.
• A unanimous “Approve” vote must be reached within two days for the RFC to move to the External CAB voting phase (if required).
• A single “Disapprove” vote will move this RFC to a REJECTED status. “Disapprove” votes must be accompanied with a rationale for rejection.
• In the case where the above criteria have not been met and the two day voting deadline has been reached, the RFC will move to an EXPIRED status. An RFC that has expired which needs to be resubmitted may no longer meet the required lead time for a Normal RFC. In these instances, an Expedited RFC can be submitted.

Step 3. If the change impacts services offered to a single or multiple ConnSCU institutions, then it needs to go to the External CAB (Step 4) for approval. If it only impacts the ConnSCU System Office, then it can go directly to Step 5.

Step 4. External CAB Vote
• The External CAB has three days to vote “Approve” or “Disapprove”. The “Defer” selection should not be used and does not extend the voting deadline.
• A unanimous “Approve” vote must be reached within three days for the RFC to move to the APPROVED status for implementation.
• A single “Disapprove” vote will move this RFC to a REJECTED status. “Disapprove” votes must be accompanied with a rationale for rejection.
• In the case where the above criteria have not been met and the three day voting deadline has been reached, the RFC will move to an EXPIRED status. An RFC that has expired which
needs to be resubmitted may no longer meet the required lead time for a Normal RFC. In these instances, an Expedited RFC can be submitted.

**NOTE:** During the initial implementation of the Change Management process the following exception is in effect: RFCs with an EXPIRED status due to missing votes will be voted on at the next CAB meeting. A unanimous “Approve” vote by the External CAB members in attendance at the CAB meeting where a quorum is present will move the RFC to the APPROVED status for implementation.

**Step 5.** Notifications
- Internal CAB
- External CAB (If required)
- Submitter

**B. Standard RFC**

This is a request for a change that is recurrent, well known, and has been proven to follow a pre-defined, relatively risk-free implementation. These requests must be submitted to the CAB(s) to be approved as a Standard RFC. Voting and deadlines for the Standard RFC fall under the framework of a Normal RFC. Changes in an approved Standard RFC no longer require the CAB(s) approval on a case-by-case basis.

*Note: See Appendix B for the Standard RFC Workflow.*

**C. Expedited RFC**

This is a request for a change that must be implemented in the shortest possible time for business or technical reasons. While it is not as critical as an Emergency RFC, it must be processed in a faster manner than a Normal RFC. The notice period for this change is in the range of 24 hours (real time) to two weeks (10 normal business days). It follows the complete process of a Normal RFC, with the exception that the expedited voting times are as follows:

- Four hour voting window for the Internal CAB
- Eight hour voting window for the External CAB

An RFC that has expired which needs to be resubmitted may no longer meet the required lead time for an Expedited RFC. *Note: See Appendix A for the Expedited RFC Workflow.*

**D. Emergency RFC**

This is a request for a change that occurs when immediate action is required to resolve a major incident, unplanned outage or security concern. It is normally implemented in less than twenty-four hours. The approval process is handled by the Emergency CAB. The Internal and External CABs will be notified of this change and will be provided regular status updates. Approval by the Emergency CAB can occur verbally, but must also be documented in the Change Management System once the change has been implemented.

*Note: See Appendix C for the Emergency RFC Workflow.*

**VII. Documenting the RFC**

This following information is required when entering an RFC into the Change Management System. It includes the details of the requested change and why it is required.
A. Status

- **Draft:** This status is used when initially documenting the RFC. There is no voting associated with this status. An RFC can stay in this status for as long as necessary.
- **Submitted for Approval:** This status is used when submitting the request to the various CAB groups for voting.
- **Approved:** This status is used to indicate that the RFC went through the various CAB votes and was approved for implementation. Approval has been given to proceed with the implementation plan and date as detailed in the RFC.
- **Implemented:** This status is used to indicate that an approved RFC has been implemented.
- **Backed Out:** This status is used to indicate that the changes in an approved RFC were attempted to be implemented or were implemented but needed to be backed out as per the back-out plan. This could be due to some unforeseen consequences or impediment.
- **Rejected:** This status is used to indicate that the RFC went through the various CAB votes and was not approved.
- **Expired:** This status is used to indicate that the voting criteria were not met because of insufficient voter participation and the voting deadline has expired.
- **Withdrawn:** This status is used when an RFC needs to be withdrawn.

B. Contact Information

The contact information of the RFC is the Submitter who is requesting and implementing the change.

C. Change Information

- **Area & Category:** These fields are used to categorize the change.
- **Institution(s) Impacted:** This field is used to list the institutions that could potentially be impacted by this change. For changes that only impact the ConnSCU System Office, the BOR option should be selected. For all other changes, the institution(s) impacted should be selected.
- **Implementation Date/Time:** This date/time field is only available when the status is set to **Submitted for Approval**. This date will be used to populate the Forward Calendar of Changes.
- **Implementation Plan:** This field contains the detailed information on how the proposed change will be implemented and tested. This plan should include any and all resources (personal, hardware, software, etc.) required. The level of detail must be sufficient for a person with similar skill to execute the change successfully and be understood by all RFC reviewers/approvers.
- **Objectives / Benefits:** This field contains information that indicates the goals and objectives of this change. This should include any benefits obtained by making this change.
- **Expected Impact Description:** This field is used to detail the impact of the change. This should include any anticipated impact to customers, services, policies or procedures.
- **Expected Impact Level:** This field is used to indicate the level of impact expected by the change.
- **Back Out Plan:** This field is used to outline a contingency plan, with step-by-step instructions on how the proposed change will be backed out if the change does not go as planned. The level of detail must be sufficient for a person with similar skill to execute the change successfully and be understood by all RFC reviewers/approvers.
- **Back Out Risk:** This field is used to indicate the risk associated with the Back Out plan.
- **Working Notes:** This field is for the purpose of taking notes, as needed during the implementation. Any issues or unforeseen obstacles should be included.
D. Assignees

The assignees area of the RFC includes the IT groups/staff that will be involved in the implementation. For instance, if the implementation plan requires a member of the Systems group and Database group, then those groups should be included. Those included in the assignees area will also receive notifications.

VIII. Forward Schedule of Changes

The Forward Schedule of Changes (FSC) is the documented list of upcoming changes which have been approved or are pending approval.
Appendix A: Normal & Expedited RFC Workflow

SUBMITTER RESPONSIBILITIES

START

RFC WITHDRAWN

RFC DRAFT

RFC BACKED OUT

RFC IMPLEMENTED

DOES THIS NEED EXTERNAL CAB APPROVAL?

EXECUTED CHANGE

NO

EXTERNAL CAB VOTE PROCESS

YES

UNANIMOUS YES

EXPIRED

RFC REJECTED

RFC EXPIRED

RFC SUBMITTED FOR APPROVAL

INTERNAL CAB VOTE PROCESS

ONE NO VOTE

EXPIRED

RFC APPROVED

impliment change

NEEDS TO BE BACKED OUT?

1 Normal Change Internal CAB Vote limit: 2 DAYS
Expedited Change Internal CAB Vote Limit: 4 HOURS

2 Normal Change External CAB Vote limit: 3 DAYS
Expedited Change External CAB Vote Limit: 8 HOURS
Appendix B: Standard RFC Workflow

START

RFC PRE-APPROVED

RFC BACKED OUT

RFC IMPLEMENTED

IMPLEMENT CHANGE

NEEDS TO BE BACKED OUT?

YES

NO
Appendix C: Emergency RFC Workflow

1 Approval by the Emergency CAB can occur verbally, but must also be documented in the Change Management System once the change has been implemented. The Internal and External CABs will be notified of this change and will be provided regular status updates.