## **SDLC and Change Management Policy**

Prepared By:	
Approved By: _	
Revision Date:	
Effective Date:	

#### **PURPOSE:**

To promote a controlled environment around change management procedures for Company X's IT systems and applications. The Change Management Procedures are designed to provide an orderly process in which changes to Company X's IT infrastructure are requested and approved prior to the installation or implementation of the change. This policy should be periodically reviewed and updated, where necessary, to reflect changes in the technology environment.

#### SCOPE:

The policies and procedures within this document apply to Company X's IT Systems and applications. The scope of this document is limited to development and changes to 1) applications 2) database structures and 3) IT infrastructure (including hardware, system software and configurations).

## **DEFINITIONS:**

COO – Chief Operations Officer SDLC - Systems Development Life Cycle VAR – Value Added Re-seller

## **PROCEDURES:**

#### A. REQUESTS:

Requests for all system development work, including break/fix, continuous improvements, data scripts, and projects will be documented in an approved Help Desk Management System. Each ticket in the Help Desk Management System will include:

Initiator's name and contact information;

Date/Time of notification:

Description of requested change and/or problem;

Priority set by the IT Personnel;

Category of the change and/or problem.

# **Types of Changes:**

## Custom Development

Currently, Company X utilizes purchased software for all financial applications and does not customize the application's functionality or database structures internally. In the event that minor customizations (i.e. report development) are required, the process will mirror the vendor upgrade process. All applications are supported by either a VAR or the software vendor directly.

#### Vendor Upgrades

The majority of the Company X's future recurring application changes will be minor version upgrades to the applications. Version upgrades, issues, and bug fixes are handled directly by the software vendors. Company X does not have access to the source code and therefore does not have the ability to modify these proprietary packages. All issues, bug fixes, and modifications are completed by the software vendors. Version upgrades are included as part of vendor maintenance agreements. The IT Manager and/or business system owner are notified via email when version upgrades are available, then a CD is mailed or a download link is sent to the client upon request. Release notes come with each upgrade and/or service pack.

### **Projects**

Projects arise in a number of ways, from a phone call or e-mail, to a formal functional specification. The initiation phase focuses on authorizing the project. It includes understanding of the request, assessing the project category, and communicating an early project scope to Company X's management. This is a starting point for discussions with interested parties. During this phase, the priority of the request is determined relative to other outstanding requests and a go/no-go decision is made.

## Objectives:

Needs identification;

Senior Management identification;

Sizing and prioritization of the project;

Management approval for the project.

## Major Activities:

Request new software development;

Define high-level business requirements;

Estimate project size for budgetary purpose;

Prioritize project;

Communicate results to Senior Management;

Get approval for the project.

#### Deliverables:

Request for development or project charter:

Company X will create a project folder within a Help Desk ticket to track those requests.

High-level Business Requirements:

An early view of the project scope.

High-level Estimate:

An initial estimate that represents a rough order of magnitude sizing of the project.

**Project Categorization:** 

An initial sizing category based on an estimate of the man-hours and level-of-impact of the project on the organization.

Project Prioritization:

Prioritize new request relative to other projects and initiatives.

Approval:

(Go/No-Go decision).

## Types of Project category:

## Large Projects:

Criteria: A project is categorized under *large* if it affects the organization as a whole and requires 100 or greater man-hours to complete.

Evaluation Process: A formal evaluation and system selection process will be followed. The Director/Department Manager/IT Manager making the request for the new application will create a business case, which will include a high-level requirements definition, project overview, proposed resource requirements and estimated cost. A formal risk and impact analysis will also be completed during the project identification process.

Approvals: If the IT Manager determines that the application implementation is feasible, technical specifications will be completed and reviewed by the COO. Upon approval by the COO, a business case will be presented to Senior Management for formal approval.

Evidence: The approval will be maintained with the project documentation within a Help Desk ticket form.

## Medium Projects:

Criteria: Projects that do not fall under the large or the break/fix category, are defined as medium-

sized projects. A medium-sized project would require anywhere between eight to 100 man-hours for completion and may not impact the organization to the extent of large projects.

Evaluation Process: For medium projects, some tasks and activities become optional in order to balance project deliverables with project scope and risk. The evaluation process may not be very detailed due to the nature of the project.

Approvals: The IT Manager will evaluate the project and present the case to the COO for approval.

Evidence: The evidence will be maintained in the project folder created within the Help Desk ticket.

#### Break/Fix:

Criteria: Break/fix issues require eight or less man hours for completion and do not impact the organization to the extent of large- and medium-sized projects.

Evaluation Process: These projects include minor customizations to the application and software patches. The IT Manager or Systems Administrator will evaluate the problem or the issue and forward the Help Desk ticket to the appropriate personnel in the IT Department to perform the fix. Approvals: There is minimal approval required for break/fix issues and is obtained from the IT Manager and/or the Systems Administrator.

Evidence: The request is initiated and documented within the Help Desk ticket.

## Emergency Change:

In the event of an emergency, the change control process will follow the same steps; however, it will be prioritized as highest priority and surpass all other requests in the queue. The IT Personnel will update the Help Desk ticket with a detailed description of the emergency fix. The documentation and business manager approval will be obtained after the fix takes place and is reflected within the Help Desk ticket.

#### **B. IMPLEMENTATION:**

The IT Manager will obtain the upgrade or patch either by downloading it directly from the vendor or requesting the upgrade on CD.

Once the upgrade(s) are obtained for the VAR supported application(s), the IT Manager and/ or VAR will install the change.

Since there is no existence of a test instance, the IT Department and/or VAR will make a backup of all the relevant files and work on the original file with a modified name prior to making the changes to the original file.

The IT Manager and/or VAR will perform unit testing on the upgrade to ensure that it functions properly. Since the IT Department will create a full backup of all relevant production data/program files prior to the change and/or upgrade, the files can be rolled back if needed.

Once the change and/or upgrade are complete, e-mail is sent to the business system owner and business users notifying them that the change is in the production environment. In addition, manual logs/system logs are used to track changes made to the production environment. As an additional compensating control, no modifications to financial systems may be made in the two weeks leading up to or following a quarter or year-end close.

# C. TESTING:

Business users will test the upgrade and/or fix by running a series of before-and-after reports to provide reasonable assurance of the data accuracy.

Once completed, the business users and/or business system owner (Controller) will send an e-mail to the IT Manager confirming the success of the upgrade and/or fix.

For data conversions, testing should involve the evaluation of key test balances as appropriate.