





|   |  |   |
|---|--|---|
| District of Columbia Department of Health<br><br><h2 style="text-align: center;">Information Technology<br/>Enhancements and Migration</h2>                 |  | <b>PROCEDURE 730.100</b><br>Implementing Office: Office of the Director/ Office of the Chief Information Technology Officer<br>Training Required: Yes<br>Originally Issued: November, 2016<br>Revised/Reviewed: |
| <b>Approved by:</b><br><br>LaQuandra S. Nesbitt MD, MPH<br>Agency Director | <b>Review by Legal Counsel:</b><br><br>Phillip Husband, Esq.<br>General Counsel | <b>Effective Date:</b> NOV 04 2016<br><br><b>Valid Through Date:</b> NOV 04 2019  |

|                                  |   |
|----------------------------------|---|
| <b>I. Authority</b>              | Reorganization Plan No. 4 of 1996; Mayor’s Order 1997-42  |
| <b>II. Reason for the Policy</b> | DOH operates within a dynamic environment with a wealth of information technology systems functioning across administrations and programs. It is essential for the DOH Office of the Chief Information Technology Officer (DOH IT), the office tasked with administering all of these assets, to manage its finite resources optimally, prioritizing the allocation of time, funds, and personnel. The migration of enhancements to IT platforms and applications is an important example of this management.                           |
| <b>III. Applicability</b>        | This SOP shall apply to all DOH employees, contractors, interns, and summer youth employees. In specific instances identified below, this SOP shall also apply to vendors party to an agreement with DOH to develop, enhance, integrate, or maintain IT platforms or applications.  |
| <b>IV. Policy Statement</b>      | <p>DOH IT is the only office with the authority to authorize an IT Migration through the procedures described herein. Any DOH employee who directs a vendor to execute a migration without proper authorization may be subject to disciplinary action.</p> <p>Program Managers shall initiate a request to the Change Control Board (CCB) to request any change to an IT platform or application using the Change Request Form. No IT migrations may occur without the authorization of the Change Control Board (See Procedure A).</p> |

|  |   |
|--|---|
|  | <p>Upon approval of the CCB, the CITO shall assign a project team to the approved change if one is not already in place. No DOH personnel may order a migration without following the procedures enumerated herein.</p>   |
| <p><b>IV. Definitions &amp; Acronyms</b></p> | <p><b>Change Control Board (CCB)</b> - The entity responsible for evaluating requested changes to IT platforms/applications. The CCB is composed of five members: two standing members and three rotating members. The two standing members are the CITO, and the DOH Tech Team Lead. The third member is the IT Project Manager assigned to the platform and application being enhanced. The fourth member is the Program Manager initiating the specific request. The fifth member is an employee of the Office of Contracts and Procurement (OCP) with specific knowledge of the agreement in place with the software developer. The CCB has a standing weekly meeting to review all pending requests. The CITO is the chair of the CCB.</p> <p><b>Change Window</b>- A specific period of time during which migrations may be scheduled to occur. Change windows occur at a fixed, recurring time and day of the week.</p> <p><b>CITO</b>- Chief Information Technology Officer</p> <p><b>IT</b>- Information Technology</p> <p><b>Migration</b>- The execution of requested and approved changes from existing as it state to planned and approved state, platform, environment or location. Examples of migrations may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Software Enhancements, upgrades and/or patches</li> <li>• Software/System Interface/ Integrations with other existing systems</li> <li>• Connectivity to the Internet and Voice Circuits</li> <li>• Network Systems and Equipment</li> <li>• Wireless Systems and Equipment</li> <li>• Server and Storage Equipment</li> <li>• Voice Equipment</li> <li>• End User Equipment (desktops / laptops / printers/ mobile devices)</li> <li>• Specialty Systems and Equipment Relocation as applicable</li> </ul> |

|  |  |
|--|--|
|  | <p><b>OCFO-</b> Office of the Chief Financial Officer</p> <p><b>OCP-</b> Office of Contracts and Procurement</p> <p><b>Operational Engineer-</b> The employee tasked with resolving system design and management issues that prevent organizations from achieving peak performance and operational efficiencies. He/she is responsible for optimizing and allocating resources and inventory to balance competing objectives of cost, service level, and productivity.</p> <p><b>Packaged Change-</b> A group of specifically selected and defined modifications to an environment.</p> <p><b>Program Manager-</b> An MSS employee with supervisory authority over the activities a particular IT platform or application supports.</p> <p><b>Project Team-</b> A group of individuals assembled to perform activities that contribute toward achieving a common task or goal. The members of a project team consist of varying skilled resources from the same or different function areas to work on a defined and approved project.</p> <p><b>System Architect-</b> The employee responsible for defining high level functional and non-functional requirements, analyzing technical trade-offs, determining the major components and subsystems, and defining the interfaces and collaborations between them. He/she understands the solution context of the change and work with the project team, customers, or vendors to ensure fitness for use in the DOH IT Environment. In addition, they play a critical role in helping align teams in a common technical direction toward accomplishment of the mission, vision and/or technical roadmap.</p> <p><b>Tech Team Lead-</b> The employee within DOH IT tasked with overseeing routine technical support for IT platforms and applications.</p> <p><b>Tester-</b> The employee tasked with conducting a detailed investigation to provide stakeholders with information about the quality of a product or service. Software/system testing can also</p> |
|--|--|

provide an objective, independent view of the software to allow the change requester the ability to appreciate and understand the risks of the software/system implementation. Testing includes but is not limited to the following;

- Design and executive test plans on computer applications.
- Record and document results and compare to expected results.
- Detect software failures so that defects may be discovered and corrected.
- Generate historical analysis of test results.
- Document anomalies and issues.
- Maintain database of software defects.
- Examine code and execution of code in various environments.
- Verify specific action or function of code.
- Operate and maintain test networks.
- Provide application instructions for users.
- Develop and document application test plans based on software requirements and technical specifications.
- Create meaningful error handling procedures for application code.
- Ensure compliance with general programming best practices, accepted web standards and those standards set forth by upstream sources.
- Perform application security audits.
- Implement application designs; create queries, scripts, web pages and other deliverables.
- Participate in application planning meetings.
- Ensure data integrity standards.
- Perform reviews, walkthroughs, or inspections

**Testing Plan-** Documentation of the testing scope, strategy, and activities that will be used and/or performed to verify and ensure that a product or system meets its design specifications and other requirements.

**User Acceptance Testing-** The phase of software development in which the product is tested under real world conditions by the intended audience or user.

|                             |   |
|-----------------------------|---|
| <p><b>V. Procedures</b></p> | <p><b>Procedure A: The Change Control Board (CCB)</b></p> <ol style="list-style-type: none"> <li>1. Any program manager whose office/bureau utilizes an IT platform or application to support its activities may initiate a request to the CCB for a change. The request shall be submitted to the IT Project Manager using the Change Request Form.</li> <li>2. The IT Project Manager shall collaborate with the Program Manager to develop a proposed change to address the identified issue.</li> <li>3. Once the proposed change is developed, the IT Project Manager shall produce a cost estimate based upon the vendor hours required and the hourly rate. This information shall be captured on the Change Request Form.</li> <li>4. The IT Project Manager shall route the Change Request Form to OCFO where funding attributes shall be identified and funding consistent with the cost estimate shall be certified.</li> <li>5. The Change Request Form shall then be routed to OCP where the Contracting Officer, or his/her designee, shall evaluate whether the work is permitted under the scope of the vendor agreement. If a modification is necessary to facilitate the work, he/she shall document the recommended modification in the Change Request Form.</li> <li>6. The Change Request Form shall be routed back to the IT Project Manager.</li> <li>7. The CCB shall hold a standing weekly meeting and evaluate all requests submitted since the last session. All effort shall be made to evaluate all pending requests each week. If time does not allow all requests to be reviewed, they may be deferred to the following week. When this occurs, deferred requests must be evaluated first before new requests are considered. The CITO has the authority to convene a mandatory ad hoc session of the CCB if time-sensitive requests must be resolved and deferring to the</li> </ol> |
|-----------------------------|---|

following week would represent a significant burden to the requesting office/bureau.

8. The CCB shall evaluate the change request upon the following criteria:
  - a. The urgency of its completion. This includes, but is not limited to, the impact of the change on: compliance with District and/or federal laws; the satisfaction of program requirements; and the efficiency and effectiveness of the related program.
  - b. The alignment between the proposed change and the precipitating issue(s)
  - c. The availability of required funds to execute the change.
  - d. The time-sensitivity of the request relative to those migrations already assigned to change windows.
  - e. The degree to which the requested change falls within the scope of work of the agreement in place with the developer. If a contract modification is necessary to execute the change, the CCB shall consider the implications of such a modification (i.e. time and cost) in its decision to approve the change. The OCP employee serving on the CCB shall work with the contract administrator of the agreement to initiate the contract modification if the change is approved to move forward.
9. Based upon the above criteria, the CCB shall vote to approve or deny a change.
10. If a request is denied, the CCB will agree on a set of recommendations to resolve the issues leading to the denial.
11. The IT Project Manager may re-submit as soon as the request has been revised to address the issues identified by the CCB.

#### **Procedure B: The Project Team and Change Development**

1. Upon approval from the CCB, the CITO will assign a project team to develop the change if that team is not already in place. At a minimum, an IT Project Manager will



be assigned to the change. Additional members will be assigned by the CITO based upon the specific skill sets required for the particular change.

2. The IT Project Manager will conduct a project kickoff meeting to initiate the change and follow the project management and system development life cycle methodologies to implement the approved requests for change.
3. The project team shall gather and finalize the requirements and change plan. If a vendor shall be the entity developing the change, the IT Project Manager shall be responsible for all communication with the vendor.

#### **Procedure C: Testing and Change Packaging**

1. All changes shall be conducted in a DOH-hosted or DOH-approved testing environment. Once the testing has been completed and accepted via User Acceptance Testing and signoff, the change can be scheduled for implementation.
2. Upon completion of the change development, the tester shall complete the Testing Plan. The Testing Plan shall demonstrate that the developed change satisfactorily addresses the precipitating issue, and will not lead to disruptions in service.
3. The completed Testing Plan shall be routed to the System Architect who is responsible for packaging the change.

#### **Procedure D: Verification and Scheduling**

1. The packaged change and Testing Plan are routed to the DOH Tech Team Lead. The Tech Team Lead is responsible for reviewing and approving both components for completeness and correctness. Upon approval, the Tech Team Lead shall forward all components to the CITO.
2. The CITO shall schedule a change window for the change to be executed and forward all components to the

Operational Engineer for execution. This decision shall be made based upon the following criteria:

- a. The time sensitivity of the change relative to other pending migrations.
  - b. The availability of resources to execute the migration with minimal disruption.
3. Upon completion of the change, the Operational Engineer shall verify the migration with all affected parties. With the change completed, the Program Manager shall begin implementation of the upgraded platform/application.

**Procedure E: Execution and Rollout**

1. The Operational Engineer is responsible for enlisting all resources necessary to execute the migration on schedule with minimal service disruption.
2. The Operational Engineer is responsible for alerting end-users to any service disruption to occur during the migration. For instance, users will receive advance notification of windows of time when the system will be unavailable. Guidance for managing the disruption shall be included as necessary.
3. The Operational Engineer shall oversee the migration during the assigned change window.
4. The Operation Engineer shall inform the CITO and the project team immediately of any problems or issues in the migration.
5. Once complete, the Operational Engineer shall send written verification to the CITO, the assigned IT Project Manager, all members of the project team, the Tester, the System Architect, the Tech Team Lead, and the Program Manager.
6. Upon completion, the Program Manager shall assume responsibility for the implementation of the change, including overseeing instructional materials, training sessions, and outreach to end users as needed.





|  |  |
|--|--|
| <b>VI. Contacts</b>                            | Chief Information Technology Officer- (202) 442-4805 |
| <b>VII. Related Documents, Forms and Tools</b> | Change Request Form                                  |