

ICT CHANGE MANAGEMENT POLICY



APPROVED BY:

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MR M NAKO

MUNICIPAL MANAGER

DATE: 21/06/2023

APPROVED BY:

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CLLR S JANDA

EXECUTIVE MAYOR

DATE: 21/06/2023

1. POLICY BACKGROUND

The IT Operational Staff operates multiple complex technology environments. The environments include development, test, production and other specialized instances. All environments are shared between multiple government ministries and programs.

The IT Operational Staff is responsible for providing system availability according to defined service levels. This responsibility includes responsibility to implement upgrades, enhancements, extensions and other changes to hardware and software in order to maintain and extend reliable information systems services.

It is important that changes to the computing environment are executed in a controlled manner in order to mitigate the risk of interruptions to service during prime access hours and in order to maintain a repository of knowledge about the current configuration and status of the computing environment.

2. POLICY PURPOSE

To protect the computing environment from uncontrolled changes.

To restrict service disruptions caused by necessary changes to defined low-use hours.

To minimize the occurrence of unintended affects during the implementation of necessary changes

3. DEFINITIONS

Change: Approach to deal with transition or transformation of an organizations goals, processes or Technology

IT: Information Technology

ITIL: Information Technology Infrastructure Library

4. APPLICATION AND SCOPE

The Change Management Policy applies to Production, Test and Development environments on all tiers. The Change Management Policy applies to:

- Anything requiring a reboot to either a production, test or development server.
- Upgrades, including software and operating system patches.
- Disk swaps and/or the replacement of other redundant parts.
- Addition or removal of hardware or software infrastructure.
- Changing access to any of the production servers.
- Rollouts of desktop applications.
- Changes to production applications and/or web links to production applications.

The Change Management Policy does not apply to:

- Day-to-day operational activities such as adding new clients, print queues, or creating or changing user groups.

5. LEGISLATIVE FRAMEWORK

Constitution Act 108 of 1996

Information Technology Infrastructure Library (ITIL v3)

6. POLICY PROCEDURE

ICT staff and end users are affected by this policies on implementation of the policy.

7. GENERAL POLICY PROVISIONS

7.1 ICT Steering Committee Responsibilities

Changes / upgrades / updated to be discussed at ICT Steering Committee Meeting as per ICT Steering Committee Terms of Reference. Meetings to be conducted as per municipal calendar and TOR.

7.2 Change Implementation Windows

Change Implementation Windows are reserved for routine system maintenance, system or application enhancements and problem resolution. Working online during change control windows presents the possibility of data loss or system unavailability as a result of this maintenance work.

7.2.1 Change Implementation Windows are:

- Will differ from each change to be implemented and impact to the municipality operation during the change.

7.2.2 Changes to development and test environments may be implemented during prime time working hours, subject to prior notice from the ITMB. In addition to the Change Windows described above, changes to development and test environments may be implemented during the following hours:

- Weekdays between the hours of 12:00 to 13:00,
- Weekdays between the hours of 17:00 to 07:30.

7.2.3 Workplace Technology Services operates an independent Change Control Window Sundays that may affect IT Operational Staff clients.

7.3 Change Requests

7.3.1 IT Operational Staff, end-user clients, or non-ministry personnel contracted for services to the IT Operational Staff may request changes.

7.3.2 An individual requesting a change must make a request in writing and send it to the Help Desk by e-mail.

7.3.3 Where expertise allows, the requestor is expected to draft and attach a Change Request Form including the following:

- Implementation Plan
- Test Plan
- Rollback or Contingency Plan

7.3.4 Change Request Form will be published on the IT Operational Staff Internet at www.mbhahsemun.gov.za.

7.3.5 If required, the Help Desk will assign a Change Owner to complete the Change Request Form and submit it to the IT Steering Committee for approval.

7.3.6 Standard and Informational Change Requests must be received by the Help Desk no later than 10:00 AM on the last business day before the proposed Change Implementation Window. Non-Standard Change Requests should be received by the Help Desk no later than 10:00 AM two business days before the proposed implementation date.

7.3.7 All requested changes are subject to approval by the IT Steering Committee.

7.3.8 The IT Steering Committee chair or designate may use discretion to re-schedule an approved change request.

7.3.9 Due to the need to plan, prioritize, communicate and coordinate changes, the IT Operational Staff will not guarantee that a change will be implemented in the proposed Change Implementation Window.

7.4 Change Approvals

Changes must be approved by the IT Steering Committee prior to implementation. Specific requirements for approval, communication and implementation are defined in section 7.5.1 under the heading "Change Categories."

7.5 Change Categories

7.5.1 The IT Steering Committee will categorize every change as falling within one of five Change Categories described in this section: Standard, Non-Standard, Operational, Informational, Change Freeze, Firewall Access or Security Audit.

- Every change must be managed and executed in compliance with the policies governing the category to which it belongs.
- All changes must follow the Standard change process except those meeting the criteria described in one of the other Change Categories.

- **Standard**

- For all Standard changes a Change Request Form must be completed and approved by the IT Steering Committee prior to implementation.
- Standard Change Requests must be submitted by the deadline identified.

- All Standard changes must be completed entirely within the opening and closing times of a Change Implementation Window.
- The Help Desk will notify users whose service may be interrupted by a Standard change at least one business day before the change implementation date.
- **Non-Standard**
 - A Non-Standard change is any change to a production system that is not completed entirely within the opening and closing times of a Change Implementation Window, and is not an Operational, Informational, Change Freeze Firewall Access or Security Audit change.
 - For all Non-Standard changes a Change Request Form must be completed and approved by the IT Steering Committee prior to implementation.
 - Non-Standard Change Requests should be submitted at least two business days in advance of the proposed implementation date.
 - The IT Steering Committee may approve a Non-Standard change in the following circumstances:
 - The change is an enterprise-wide desktop application rollout, patch, hot fix or upgrade.
 - There is a documented business need to implement the change before the next Sunday Change Implementation Window and the change requires longer to complete than is allowed in a midweek Change Implementation Window. In this circumstance the change must be started before the standard Change Implementation Window opening and must be completed before 07:30.
 - The change requires longer to complete than is allowed in a Sunday Change Implementation Window. In this circumstance the change must be completed before Sunday 23:00.
 - There is an urgent, documented business need to implement the change outside a Change Implementation Window. In this circumstance the change must be completed outside Prime Time Service Hours.
 - The Help Desk will notify users whose service may be interrupted by a Non-Standard change more than one business day in advance of the change implementation date. Lead times are to be based on duration of systems unavailability, changes in access or functionality, and potential for systems unavailability.
- **Operational**
 - An Operational change is any change that is executed in order to restore standard/normal availability or to prevent the imminent loss of system availability.

- All Operational changes must have a Change Request submitted before or after the change is implemented.
- The IT Steering Committee will review all Operational changes after implementation.
- The Help Desk may notify and update users about problems resulting in systems being unavailable.

- **Informational.**

- An Informational change is either:

- A change to production application code, or
- A change to a web link to a production application, or
- A change to a Development or Test environment that affects a limited client group and the affected client group has been notified of and has approved the change.

- For all Informational Change Requests a Change Request Form must be completed and submitted to the Help Desk. Change Requests for temporary or evaluation servers must indicate a completion end date. The server will be brought back to Ministry standards and rebuilt to its base configurations at the completion of the project.
- The IT Steering Committee will review all Informational Change Requests. IT Steering Committee approval is not required prior to implementation of an Informational Change; however, the IT Steering Committee retains the authority to disapprove a proposed Informational Change.
- The Change Owner is responsible for ensuring that affected clients, including non- ministry personnel contracted for services to the Information and Technology Management Branch, have been notified of and have approved the proposed change prior to implementation.
- The Help Desk will not notify users of an Informational change

- **Change Freeze**

- A Change Freeze is the suppression of all changes to a system.
- A Change Freeze must be requested in writing by the IT Operational Staff Team Lead responsible on behalf of the department or program area client.
 - An application for a Change Freeze should be sent by email to the Help Desk.
 - An application for a Change Freeze must identify a business reason for suppressing changes, the start and end dates for the period in which changes are to be suppressed and, where possible, should identify the system that is to be protected from change. The IT Steering Committee may request further supporting documentation from the Team Lead as required to make a decision.

- An application for a Change Freeze should be received by the Help Desk no later than 10 business days before the proposed start date identified in the application.
- The IT Steering Committee will review all applications for a Change Freeze and make recommendations to the Information and Technology Management Team Lead regarding approval and limitations of schedule and scope.
- The IT Operational Staff Team Lead will forward a written decision on the application for a Change Freeze to the requestor and to the IT Steering Committee Chair.
- If a Change Freeze application is accepted, the IT Steering Committee will assign a Change Owner who must submit a Change Request Form to the Help Desk, identifying the change as a Change Freeze describing the scope and limitations of the freeze and including a notification list and message text.
- The Help Desk will notify appropriate end users at least 5 business days in advanced of the proposed start date of the Change Freeze.

• **Firewall Access**

- A Firewall Access request is a request to provide a specific individual with access to a specific system that by-passes the protection of a firewall.
- Firewall access may be requested by sending an e-mail to the database administration group and an ITMB client manager.
 - A firewall access request must include the following information:
 - Name of firewall through which access is required (Gold/Web or MT/DB firewall)
 - Name of person who needs access.
 - IP of person who needs access (must be static IP).
 - Project name.
 - Name of server/site to which access is required.
 - Server IP.
 - Port.
 - Method (SQL, Telnet, SSH, etc.).
 - Purpose.
 - Date required.
- The database administration group must approve all requests to access the database tier. An IT Operational Staff manager or the tier owner must approve all other firewall access requests.
- A Firewall Access request will only be approved where there is a demonstrated business reason to provide the requested access.
- The Change Owner will submit a Change Request Form to the Help Desk for all Firewall Access requests that require the creation of a new port.
 - For all Firewall Access rule changes a Change Request Form must be completed and approved by the IT Steering Committee prior to implementation.

- A Firewall Access rule change may be implemented immediately after it is approved, so long as it does not set a precedent. If it does set a precedent, the access request will be reviewed by the IT Steering Committee, and if approved, will be completed any time after 2:00 pm.
- The Help Desk will not notify end users of a Firewall Access change.
- **Security Audit**
- A Security Audit is a managed review and test of the implementation and execution of security policies and procedures.
- The performance of a Security Audit may require that auditors be granted special access to documents and systems that would normally be restricted to specific IT Operational Staff. Therefore, it is imperative that a Security Audit be specifically authorized by the IT Operational Staff Director.
- A request for assistance with a Security Audit must be made by a senior representative of the business area for whom the audit is being performed.
 - A request for assistance with a Security Audit must be made in writing to the IT Operational Staff Director.
 - Assignment of IT Operational Staff to assist with a Security Audit must be approved and communicated in writing by the IT Operational Staff Director.
 - The IT Steering Committee will plan and execute the provision of assistance for an authorized Security Audit, making additional Change Requests as and when required.

7.6 Communication

Communications are critical to successful implementation of the Change Management Process. The IT Operational Staff Help Desk is the central point for formal change management communications between requestors, reviewers, approvers, implementers, and users.

- The Help Desk will log all Change Requests in the call management system and assign a log number to each request.
- The Help Desk will circulate all Change Requests to the IT Steering Committee for review, approval and scheduling.
- The Help Desk will notify the change requestor of the IT Steering Committee's decision to approve or reject the Change Request.
- The requestor will be responsible for providing a detailed communiqué to the helpdesk along with the Change Request, or the requestor has the option to send out their own communiqué to affected clients one business day prior to the implementation of the change.
- If the Help Desk is required to send out notification on behalf of the requestor, the helpdesk will notify appropriate end users.

- The IT Operational Staff will make every effort to notify clients with as much notice as possible whenever changes are planned.
- In some cases advance notification may be impossible to provide due to the nature of specific problems.
- A list of scheduled Change Requests will be published on the IT Operational Staff Internet at www.mbhashemun.gov.za
- An electronic repository will be established and maintained in which electronic copies of all Change Requests will be stored. IT Operational Staff will have read access to this repository.
- The electronic repository for Change Requests is located at: info@mbhashemun.gov.za.
- A hardcopy file of all Change Requests will be established and maintained by the IT Steering Committee.

7.7 Suppression of Changes

7.7.1 Objections to Planned Changes

Business area representatives, including the IT Operational Staff Team Lead, may object to the execution of a planned change request.

- Objections must be raised in writing and include reasons for opposing the planned change.
- Written objections must be received by the Help Desk no later than 2:00 PM on the last business day before the change is scheduled to occur.
- Objections should refer to the Help Desk ticket number assigned to the planned change.
- The IT Steering Committee will review objections to planned changes and will attempt to broker a resolution between the initiator of the Change Request and the initiator of the objection.
- If a resolution satisfactory to both parties cannot be negotiated by the IT Steering Committee, the IT Steering Committee will refer the matter to the Senior Manager for resolution. The decision of the Senior Manager shall be final.

7.7.2 Change Freezes

- As a matter of policy, the IT Operational Staff will not suppress Change Requests scheduled to occur during Change Implementation Windows in order to maintain uninterrupted service to an application or environment.

- The IT Operational Staff will make every effort to minimize changes during critical business processing times.
- A schedule of known critical business processing times is posted on the IT Operational Staff internet at www.mbhashemun.gov.za.
- The IT Operational Staff will correct the posted schedule of critical business processing times upon the receipt of information from a business area representative or IT Operational Staff Team Lead.
- A business area representative may make an application for a Change Freeze by way of an IT Operational Staff Team Lead, in order to suppress all changes to a computing environment for a specified period.
- An application for a Change Freeze must be made in writing to the Help Desk.
- The IT Steering Committee must review and approve all applications for a Change Freeze.
- The IT Steering Committee will have discretion to limit the schedule and scope of a Change Freeze.
- An application for a Change Freeze will be administered in accordance with the procedures described in sections 4.13.21 through 4.13.26.
- Notwithstanding section 4.22.2, approval of a Change Freeze is subject to the notification of affected users and the objection process described.

7.7.3 Change Implementation

- The Change Owner will update the Help Desk ticket in the call management system.
- The Change Owner will update the Help Desk ticket with information about the outcome of the change.
- The Change Owner will close the Help Desk ticket once all change implementation tasks, including documentation revisions have been completed.
- The Change Owner will close the Help Desk ticket for an Informational Change Request immediately after it is submitted.
- The Change Owner will not close the Help Desk ticket for a Change Freeze until the period covered by the freeze is over. The Change Owner will update and close the Help Desk ticket if the proposed change fails or is postponed. The Change Owner will submit a new Change Request Form for approval and re-scheduling of the change

7.8 PROCEDURES FOR IMPLEMENTING POLICY

7.8.1 Roles and Responsibilities

7.8.1.1 Requestor

Individuals within the Municipality, including IT Operational Staff, end-user clients, or non-municipal personnel contracted for services to the Information and Technology Management may request a change.

Requestor's Responsibilities

An individual requesting a change must make a request in writing and send it to the Help Desk by e-mail. Where expertise allows, the requestor is expected to draft and attach a Change Request Form including the following:

- Implementation Plan
- Test Plan
- Rollback or Contingency Plan
- Detailed communiqué for affected clients

If required, the Help Desk will assign a Change Owner to complete the Change Request Form and submit it to the IT Steering Committee for approval.

The requestor can expect the following status updates on the change request:

- Notification of change request rejected, or
- Notification of change request approved, and
- Notification of Implementation schedule.

If status updates are not received, it is the responsibility of the requestor to inquire with the Help Desk to determine the status of the request.

Escalation path for the Requestor on issues concerning Change Requests

1. Help Desk
2. Change Owner
3. IT Manager

7.8.1.2 Help Desk

Help Desk is the communications focal point for the Change Management process. The Help Desk logs all Change Requests received and tracks them to completion in the call management system. The Help Desk circulates Change Requests for approval and scheduling, provides notifications to requestors and affected clients, and provides reports to Technical Services Management.

Help Desk Responsibilities

Help Desk receives a change request e-mail and assigns the request to a Change Owner in the Call Management System.

The Help Desk receives Change Request forms, checks to see that the fields in the document have been completed, logs a Change Request call in the call management system and assigns a log number to the document.

Help Desk the request to a Change Owner in the Call Management System. Help Desk receives change schedule and notification list from Change Owner and forwards the request

to the IT Steering Committee.

Help Desk receives the decision to approve or reject the Change Request from the IT Steering Committee Chair or designate and notifies the Change Owner and the Requestor of the decision

If the Change Request is approved, Help Desk notifies appropriate End-users. Notifications will either be a standard text or crafted in conjunction with the Change Owner, or supplied by the Change Owner.

The Change request call remains open and is closed only if:

- The request has been rejected by the IT Steering Committee Chair (or designate), or
- The request is cancelled prior to implementation, or
- The request is an Informational Change Request, or
- The Change Owner notifies the Help Desk that the change is complete.

Help Desk reports monthly to the Technology Services Manager at least the following summary data:

- Number of Change Request calls opened in the month.
- Number of Change Requests closed in the month.
- Date for each of the Change Request Calls.
- Change Owner name associated with each Change Request.
- Unique Change Request log number associated with each request.
- Other relevant information identified by the Help Desk, or requested by the IT Steering Committee leads, or Technology Services Manager.

Escalation path for the Help Desk on issues concerning Change Requests

1. Requestor
2. Help Desk lead
3. Change Owner
4. Help Desk Coordinator

7.8.1.3 Owner

The Change Owner is the person who is assigned responsibility for a Change Request in the Call Management System. The Change Owner is a senior IT Operational Staff member and a member of the IT Steering Committee.

Owner's Responsibilities

The Change Owner is responsible for the accuracy and completeness of assigned Change Request Forms. The Change Owner is responsible for ensuring that assigned changes are appropriately scheduled, resourced and implemented.

The Change Owner receives notification of a Change Request through the Call Management System. The Change Owner ensures that the Change Request Form, including Implementation, Test, Rollback and Contingency plans, is complete.

The Change Owner schedules the change and assigns appropriate resources. If the change is Informational, the Change Owner notifies affected clients and ensures that they have approved the change.

The Change Owner communicates the schedule and notification requirements to the Help Desk using the Change Request Form.

The Change Owner reviews implementation of the change and ensures that all work activities, including documentation updates are complete.

The Change Owner updates the Call Management System with information about the outcome of the change and closes the ticket when all activities are complete.

Note: Serious or urgent situations resulting from a failed change implementation are to follow the Critical Incident Procedures (see *Operations Processes and Procedures – Area: Problem Response, Resolution and Escalation*).

Technology Services Manager

7.9.1 Information Communication Technology

The IT Manager is responsible for ensuring that the Change Management Policy is implemented and maintained. To maintain continuity in the change management process, the IT Manager has designated the chair of the IT Steering Committee to review, and approve or reject Change Requests.

Appointment and changes to the designated back-up must be communicated at least to:

- Help Desk
- IT Steering Committee

7.9.2 Implementer

Implementation of changes to the computing environment may involve one or a group of individuals from within the government enterprise or contracted to the Ministry. Assignment of resources is based on staff availability, applicable knowledge and skills.

7.9.2.1 Implementer's Responsibilities

Implementer receives notification from Change Owners requesting participation in the change tasks and respond to the Change Owner regarding availability. Implementer receives the Change Control Document and any other information important for the change from the Change Owner.

Implementer develops a high-level plan involving other resources as required that identifies:

- Participants
- Equipment and software requirements
- Third-party organizations' involvement
- Testing
- Roll-back
- Overall schedule
- Communications requirements
- Implementation-specific expenditures

- Product Turn-over requirements for operational support

Implementer forwards the plan to the Change Owner for approval.

Implementer develops a plan to test the change before implementation to the production environment and conducts the test, communicates test results to the Change Owner and the Help Desk, confirms the change implementation schedule and advises on required communications for end-users and others.

Implementer makes change to the environment, updates the information repository and reports outcome to the Change Owner.

Implementer's escalation path:

1. Change Owner
2. Technology Services Manager

Note: Serious or urgent situations resulting from a failed change implementation are to follow the Critical Incident Procedures (see *Operations Processes and Procedures – Area: Problem Response, Resolution and Escalation*).

7.9.3 Users

Users of the computing environment receive notifications of scheduled changes from the Help Desk.

User's escalation path:

1. Help Desk
2. Change Owner
3. IT Manager

7.10 Procedures

This section describes the high level Change Management procedures.

7.10.1 Making a Change Request

- Identify need for change and send a request to the Help Desk. IT initiating a change must submit a completed Change Request Form to the Help Desk.
- If required, the Help Desk will assign the request to a Change Owner.
- Change Owner downloads the Change Request Form from www.mbhashemun.gov.za.
- Change Owner completes the Change Request Form, attaches it to an e-mail message and sends it to info@mbhashe.gov.za. The Change Request Form should include an implementation plan, test plan, rollback plan and notification list. For more information on completing the Change Request Form, see section 6.2.

- Help Desk forwards the Change Request Form to the IT Steering Committee for review and approval.

Notes: Standard and Informational Change Requests must be received by the Help Desk no later than 11:00 AM on the last business day before the proposed Change Implementation Window. Non-Standard Change Requests should be received by the Help Desk no later than 11:00 AM two business days before the proposed implementation date.

All requested changes are subject to approval by the IT Steering Committee.

Due to the need to plan, prioritize, communicate and coordinate changes, the IT Operational Staff will not guarantee that a change will be implemented in the proposed Change Implementation Window.

7.11 Completing the Change Request Form

1. Download the Change Request Form from <http://www.mbhashemun.gov.za/IT> Forms.
2. Complete all relevant fields on the form

7.11.1 Communicating a Change Request

- Help Desk receives completed Change Request Form, logs the Change Request in the call management system, and assigns a ticket number and a Change Owner.
- Help Desk copies "Summary of Change" information into the subject line of an e-mail, attaches the Change Request and distributes it to the IT Steering Committee for approval.
- IT Steering Committee chair or designate communicates approval or rejection decision to the Help Desk.
- Change Management coordinator stores electronic copy of the Change Request in the Repository and publishes change information on the IT Operational Staff website.
- Help Desk communicates IT Steering Committee decision to the requestor and Change Owner.
- If the Change Request is approved, Help Desk sends e-mail notification of the scheduled change to affect clients and team leads identified on the Change Request Form.
- If the Change Request is approved, the Change Owner requests participation from appropriately skilled staff to implement the change.

7.11.2 Approving a Change Request

- Change Owner ensures that the Change Request Form, including Implementation, Test, Rollback and Contingency plans, and notification list is complete and that scheduling of the change is appropriate.
- IT Steering Committee members receive Change Request and review the proposed change.
- IT Steering Committee members record concerns or objections and send them to the Help Desk and IT Steering Committee. The deadline for Board Members to respond to a Change Request is 2:00 PM on the same business day if the request is received before 11:00 AM. The deadline for Board Members to respond to a Change Request is 2:00 PM on the following business day if the request is received after 11:00 AM.
- Change Management Chair or designate rejects or approves the proposed

change and communicates the decision to the Help Desk and IT Steering Committee. The deadline for the Change Management Chair or designate to render a decision on a Change Request is 2:00 PM on the same business day if the request is received before 11:00 AM. The deadline for the Change Management Chair or designate to render a decision on a Change Request is 2:00 PM on the following business day if the request is received after 11:00 AM.

- For rejected Change Requests, the Change Management Chair will attempt to broker a resolution between the initiator of the Change Request and the initiator of the objection.

7.11.3 Human Behavioural and cultural aspect and training of employees in relation to change management.

On the change planned by the municipality on ICT systems and environment, human behaviour around the new change will be trained on the new system or upgrade or environment before, during and after the implementation of change. These trainings will also be aligned with Mphashe Local Municipality Workplace Skills Plan (WSP) in order to implement all trainings as per approved budget.

Below are stages to be taken in making sure training is implemented on new changes or upgrades on ICT systems and environment:

7.11.4 Organisation Culture

- Innovative
- Aggressive
- Outcome Oriented
- Stable
- People Oriented
- Team Oriented
- Detail Oriented

7.11.5 Training of employees based on change.

- Identification
- Planning
- Assessment
- Implementation
- Review
- Closure

8 IMPLEMENTATION

2023-2024

9 REVIEWAL

Annually