KUOK (SINGAPORE) LIMITED

Change Management Standards

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Revision History

Version	Date	Change Number	Summary of Changes
1.0	18 Oct 2022	NA	First copy.

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Contents

1   Introduction

1.1   Scope

This control applies to all systems, people and processes that constitute the Kuok Singapore Limited (hereafter referred to as the company) information systems, including board members, directors, employees, vendors and other third parties (hereafter collectively referred to as staff) who have access to these resources.

1.2   Related Documents

The following policies, standards, process or procedures will be replaced and superseded by this document:

- ISMS18005 Change Management Process.
- ISMS18008 Change Management Process for Discovery Officer role

The following policies, standards, process or procedures are related to this document:

- ITP0301 Change Management Policy

1.3   Purpose

The purpose of this document is to define the change management standards of the company.

1.4   Abbreviations

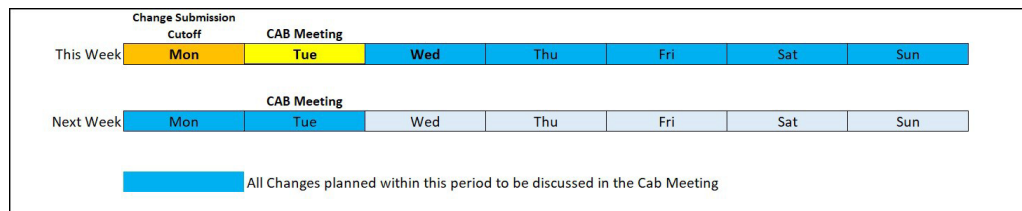|	
SME	Subject Matter Expert is person who provides the knowledge and expertise in a specific subject, domain or technical area.
UAT	User Acceptance Test is an acceptance test conducted to determine if the requirements of a specification or change meet its intended outcome.
Production	An environment where the service, software, products, or updates are provided to the intended users' usage.
CAB	Change Advisory Board consists of managers and SME who have the capacity and capabilities to assess and make decisions on discussed changes presented.
ECAB	Emergency Change Advisory Board consists of **senior management** who have the capacity and capabilities to assess and make decisions on presented unscheduled/unplanned changes.

2 Change Types and examples

Types	Description	Example
Standard	A **pre-authorized change** is low risk, does not impact overall security posture, relatively routine and follows a specified procedure or work instruction. Such activity does not cause impact to the production environment, or require service downtime. It must also have a documented procedure to qualify. This change **does not require** any approvals.	Adding disk space or non-intrusive configurations to a system **without** rebooting or downtime to service.
Normal	Planned and scheduled change that does not have any Major impact to the users or the company. This is the default change and will go through the CAB process. However, there may be cases where change request needs to be urgently raised or implemented. These will require Change Manager to endorse or approve on case to case basis outside CAB.	Upgrading the OS that require a reboot or downtime to service.
Major	Planned and scheduled change that can potentially create a Major impact/ High Risk to the users or the company. This change will require Group IT's Senior Management approval and CAB approval.	Replacing a core switch as part of a planned replacement exercise or downtime to services used by enterprise.
Emergency	Unplanned and unscheduled change that must be implemented as soon as possible to fix or resolve an incident. This change will require the approval from ECAB prior to implementation. Key point is to resolve the incident first then raise a retrospective Emergency Change Request within 2 working days for record purposes.	Implementing a security patch to address zero-day exploits.

3 Change Submission Schedule

Change Type	CAB	ECAB	Scheduled Window
Standard	-	-	Anytime; To be given at least 3 working days
Normal	Y	-	At least 1 week prior to implementation date, where possible
Major	Y	-	At least 2 weeks prior to implementation date, where possible
Emergency	-	Y	Anytime; This is driven by high severity and priority incidents.

4 Change Schedule and Frequency

Key Activity	Frequency	Working Day (+1WD if holiday)
Change submission cut-off	Weekly	Monday
CAB Meeting	Weekly	Tuesday

This Week	**Change Submission Cutoff**	**CAB Meeting**					
	Mon	Tue	Wed	Thu	Fri	Sat	Sun

Next Week		**CAB Meeting**					
	Mon	Tue	Wed	Thu	Fri	Sat	Sun

All Changes planned within this period to be discussed in the Cab Meeting

5   Change Likelihood Assessment

Likelihood	Description
Low	None or negligible failure rate; simple straightforward implementation, routine change and procedural as per documented process. Change can be easily reverted (e.g. Directly reverting or deleting the change)
Med	Change can be reverted as per documented rollback plan without causing problems in case of failed implementation.
High	Change is complex and can be difficult to revert. Reversion can cause other issues.

6   Change Impact Assessment

Impact	Description
Low	None or negligible impact and does not impact anyone or ability to cause an incident/outage. Change is transparent to the users.
Med	2 or less Functional groups affected by change; Change can cause service downtime.
High	More than 3 Functional groups or Enterprise-wide affected by change

7   Change Risk Matrix

	Needs Team Head or SMT approvals; CAB
	Needs to be presented in CAB (Default)
	Presented in CAB for awareness

8   Major (High Risk) Change Approvals

Domain	Members
Application	Team Head/ SMT
Infrastructure and Network	Team Head/ SMT
Security	Team Head/ SMT

9   Change Authority Board (CAB)

Domain	Members
Application (SAP)	Technical Manager/ Team Lead
Application (Non-SAP)	Technical Manager/ Team Lead
Infrastructure and Network	Technical Manager /Team Lead
Security	Technical Manager /Team Lead
Operations	Technical Manager /Team Lead
Change Administrator	Change Manager

10   Emergency CAB

Members
Chief Technology Officer
Head, Technology Solutions and Business Engagement
Senior General Manager, Infrastructure and Security

11   Roles and Responsibilities

Role	*Responsibilities
Requestor	- Author of the change record - A member or authorised staff of the affected domain. - To provide all necessary change request information. - Cancel request when it is not required - To provide justification and reference number for the change request where possible. - To plan and schedule the change early by the stipulated change submission schedule (Refer to Section 3). - To provide implementation, verification, backout plan. - To include roll back time into the requested change window. - To analyse and quantify the risk of the change (Default is medium). - To provide post implementation review confirmation upon verification.
Implementor	- To present the Change Request in the CAB forum. - Implementor can also be a requestor. - Implement change as per defined implementation plan and within change window. - To escalate to supervisor when implementation failed and roll-back changes. - To duly update the change request status reflecting either the success or failure of implementation and attach as evidence. - Perform post implementation review to ensure successful implementation and/or obtain verification from users/requestor and attach as evidence.

Technical Lead/ Manager	• Review and assess the change request • Approve or Reject Change Request • Cancel change request when not required • To perform post mortem review of all failed change implementation, where possible. • To sample review the completion of the change request.
Change Manager	• Verify change request information is correct and acceptable. • To organize weekly CAB meeting to assess any objections or concerns from CAB stakeholders. • To approve/reject based on assessment from Change Manager or CAB. • Publish Change notice weekly of all change status (Scheduled, rescheduled, implemented, cancelled or rejected) • Ensure timely closure of Change Request else to follow-up with requestor/implementor for the status. • To acknowledge and provide adhoc change approval for Change Request in the absence of CAB. • Reschedule the change request after CAB outcome.
CAB	• Review and assess the change request • Approve or Reject Change Request
ECAB	• Review and assess the change request • Approve or Reject Emergency Change Request

12 Change Workflow

Change Types	New	Asses	Authorize	Authorize	Scheduled	Implement	Review	Close
Standard	Requestor	Technical Lead/ Manager			Implementor	Implementor	Requestor	Technical Lead/ Manager; Change Manager
Normal	Requestor	Technical Lead/ Manager	CAB		Implementor	Implementor	Requestor	Technical Lead/ Manager; Change Manager
Major	Requestor	Technical Lead/ Manager	CAB	Group IT Senior Management	Implementor	Implementor	Requestor	Technical Lead/ Manager; Change Manager
Emergency/ Unplanned	Requestor	Technical Lead/ Manager	ECAB			Implementor	Requestor	Technical Lead/ Manager; Change Manager

After emergency implementation, requestor can raise retrospective change record within 2 working days

13 Deviation from this document

In specific circumstances, the applicability of certain Policies and Standards to the company's IT systems and information may require an exemption. Any exception or deviation from Policy and Standards must be duly documented and must be approved by Senior Management.

14 Reporting for Violations

Any violation must be reported to the support desk or appropriate IT department.

15 Disciplinary Actions

Any staff or other worker of the company found to have violated the provisions of this document may be subject to disciplinary action, including dismissal and legal action.

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