

# Change Management Policy and Process

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## Introduction

This is IT Operations Change Management policy and process for proposing and controlling IT changes within The National Archives.

## **Purpose**

The purpose of this document is to detail the Change Management policy and process, focusing on the following areas:

- Change Management objectives, success criteria and KPIs
- Request For Change (RFC) Approval Process
- Change Advisory Board purpose and membership
- Change Management process
- Change Management roles and responsibilities (see RACI matrix <u>Appendix A</u>).

## **Scope**

Changes to this organisation's IT Estate including all associated Configuration Items (CIs), whether physical (e.g. servers) or virtual (e.g. 'Live' and 'Test' application software) are within scope of this policy.

The change process controls IT change requests raised by Digital and external Suppliers providing TNA line of business applications. A change can be triggered via any of the following events:

- Request from a customer/user
- In response to an Incident or Major incident
- An event management alert
- A technical analyst identifying a need for Change
- 3<sup>rd</sup> Party Request

## **Out of Scope**

The Change process controls changes to Production/Live environments but does not control change to code.

Authorisation for changes taking place in development and test environments is not required, although any changes to the Live environment must also be applied to other non-live environments for the purpose of testing to ensure alignment and accurate test simulation.

## **Intended Audience**

This Policy document is intended for all TNA staff but is most pertinent to IT Operations and Digital Directorate colleagues.



## **Change Management Policy**

Change Management is a powerful process that helps co-ordinate, automate and prioritise requests for change. Each change request can be managed using the change lifecycle which has 4 main stages.

- Request
- Plan
- Implement
- Verify

The purpose of this document is to describe how this methodology is applied at The National Archives to control the change lifecycle to ensure that technology risks are mitigated and disruption to IT services is kept to a minimum.

This policy also describes the responsibilities of the key stakeholders involved and their interaction throughout the Change Management Process.

## **Objectives of Change Management**

The key objectives of the change management process are:-

- Assuring that all proposed changes are evaluated for their benefits and risks, and that all impacts are considered.
- Prevent conflicting changes by continuous monitoring of the Schedule of Change.
- All stakeholders have visibility and the opportunity to participate in change decisions if they are impacted by an RFC.
- Prioritising changes so that limited resource is allocated to those changes that produce the greatest benefit based on the business need.
- Ensuring all changes are thoroughly tested and that each deployment includes a backout plan to restore the state of the environment in the event that the deployment fails.
- Ensuring that the configuration management system is updated to reflect the effect of any changes.
- To continuously improve the Change Management process in line with stakeholder feedback.

## **Critical Success Factors**

The critical success factors of the change management function are:-

• The Change Management policy and associated processes are fit for purpose for The National Archives and the stakeholders identified in this document adopt and adhere to the policy and have appropriate guidance and resources to comply with the processes.



• The end to end Change lifecycle is controlled and managed efficiently with adequate flexibility to ensure that changes can be delivered with minimal impact on service operations.

## **Key Performance Indicators**

The success of the IT Change Management process will be monitored by the following KPIs:-

- Successful Changes Number of changes that have been completed successfully
- Emergency Changes Number of emergency changes assessed by E-CAB
- Number of Incidents caused by changes
- Number of failed changes
- Number of slipped Changes Number of changes not completed as scheduled.
- Number of changes that have not followed the approved Change Management process.

## **Request for Change**

Where a change is required to our IT estate, the change requester is required to raise a Request For Change (RFC) to initiate the Change Process.

An RFC is a formal communication requesting the implementation of a change to Configuration Items within the TNA IT Estate.

The IT Service Management Tool is used to register and monitor all RFCs. The TNA Change Manager authorises the access to the IT Service Management Tool for Change Management.

Steps to create an RFC in the IT service management tool have been explained in the <u>How to create</u> an <u>RFC in the ITSM Tool</u>.

A request for change must be raised prior to the proposed deployment of the change, except in an emergency following a major IT incident, where a retrospective change can be raised after the event as a record of corrective actions taken.

Normal and Emergency changes require approval at the weekly Change Approval Board meeting, so the change requestor is expected to plan the following activities in advance to ensure that CAB members have sufficient time to review and assess the change and its impacts on their respective areas. RFCs submitted for approval, a few hours before the CAB meeting is not considered sufficient time for review but will be accepted on a case by case basis. The RFC should include evidence of the following:-

- Technical discussions with stakeholders has been undertaken regarding the agreed solution and the implementation process has defined and documented.
- Appropriate pre-testing has been completed and a post implementation test plan has been identified to verify the success of the change.



- Directly affected business and user representatives have been contacted to discuss the change, it's impact and likely timescales.
- Additional documentation associated with the change e.g. Supplier Release Note, Test Scripts etc.

Depending on the nature of the change, the implementation analyst (or colleague who is able to assist) must be available for a sufficient period of time after the change to deal with any resulting issues or incidents.

Any changes submitted due to poor planning or last minute submissions will follow the normal change process. Ad hoc approvals from CAB members can be requested at the discretion of the TNA Change Manager.

## **Types of Changes**

All changes will be categorised and prioritized as follows:-

	Priority	Low	Medium	High	Urgent
	Explanation	Delay in Implementation does not cause any problems	Prolonged implementation delay will cause problems	Immediate action is required	
	Standard Not reviewed at CAB. Submitted 24 hours before implementation	Minor- Low risk Low Impact		pid implementation of while managing risk	
RFC	Normal		Medium or High i changes- Submitt		
ΤΥΡΕS	Emergency			P2 Incident - raised by IT, authorised in a very short timeframe. approved by E-CAB	
	Retrospective				P1 Incident – No time to document Emergency RFC. Raised immediately after successful incident resolution. Records actions and any further work.



## **RFC Approval Process**

The TNA Change Manager reviews the RFC's before acceptance into the Change process, ensuring that the RFC is complete and the associated risk management and impacts are accurate.

- Risk will be assessed and will be based on the impact and complexity of the change.
- Pre- and Post-change Testing details will be reviewed to ensure that testing has or will be carried out before and after implementation to the live environment. The onus of testing the implementation resides with the requesting analyst. The only changes that may not require testing are RFCs for decommissioning of hardware and database removal.

The RFC must have all mandatory information accurately and fully completed. See RFC template for field details. Failure to provide all required information will result in the RFC being referred to the original Submitter for rework.



#### Approval process diagram for a Normal Change



#### **Exceptions**

If authorised by the TNA Change Manager, it may be possible to fast-track an RFC through the Change Process. Steps within the process can be accelerated i.e. the use of a virtual CAB, but not bypassed. Fast-tracking RFCs can only be considered in cases of genuine emergency or urgency. However, an Impact Assessment must be conducted before a decision to approve is made.

## The role of the Change Manager

The TNA Change Manager acts as the single point of contact for Requests for Change via the change mailbox changemanagement@nationalarchives.gov.uk.

The TNA Change Manager (or appointed deputy) manages the administration of the Change Management Process and chairs all CAB / ECAB meetings, which is a weekly Board meeting attended by a quorum of IT Operations stakeholders required to:

- Advise and support the TNA Change Manager in their decision making
- Allow the TNA Change Manager to make decisions and assign actions to stakeholders

The Board members are chosen to ensure that all Changes can be adequately assessed from both the business and technical viewpoint.

The role of the Change Manager is to:

- Organise CAB meetings as required with appropriate attendance from essential CAB members, following the standard CAB agenda (see appendix B).
- Arrange virtual CABs (ECABs via conference call, email or an ad-hoc meeting) at any time to review RFCs with the necessary stakeholders.
- Check that changes are accurately defined (e,g, Standard vs Normal) and RFC details completed and submitted for CAB approval accordingly.
- Approve or reject the RFC following the CAB or (for Standard changes,) completion of impact analysis.
- Managing requests to cancel or supersede RFCs.
- Produce the weekly Schedule of Change, CAB meeting minutes and update the RFC in the ITSM Tool as required.

## **Change Advisory Board (CAB)**

#### **Format**

The CAB is held at least weekly or more frequently, as required.

RFCs and relevant change information is circulated in advance of the meeting to CAB members (see Appendix B for the list of representatives) for their review prior to the CAB meeting.

The change requestor (or appointed representative) describes the proposed change and the timescales involved (i.e. implementation time and down time), which the CAB members consider



and have the opportunity to question or raise concerns regarding any aspect of the implementation e.g. timing, testing, impact on users, communications etc.

Technical discussions regarding solution options should take place prior to the CAB meeting.

The outcome of the CAB meeting is a record of the proposed changes discussed and the decision of the CAB members to approve, put on hold or reject. A meeting note is circulated to all CAB members within 24 hours of the meeting and includes any associated actions arising from these discussions.

#### **Change Schedule Policy**

The Change Schedule found at <u>Appendix E</u> is a pre-defined timetable for known and routine changes e.g. Microsoft updates. Please note:

- Changes that may impact the live environment and/or staff/customer facing services, should be scheduled to minimise the impact on end users, however, this is not always possible and business representatives must be engaged to agree any downtime required.
- No planned changes should be scheduled from 1pm on Friday afternoon unless it is to fix an IT incident (i.e. an emergency change).
- TNA holds external events after hours and is open to the public until 7pm on Tuesdays and Thursdays. The change requester should check with M&C or Venue Management if scheduling after hours or weekend changes. Change approval will be subject to resource availability and will require approval of downtime from the business owner.
- Change freezes will normally occur in:
  - December to January for Christmas
  - March to April for the Financial Year End affecting Finance applications.



## **Change Management Process**

The TNA Change Manager is responsible for engaging with the key change control stakeholders at the appropriate stages of the Change Process workflow.

## **Process Workflow**

Below is a swim lane diagram of the change process for all changes except retrospective changes. Each activity is shown with the action owner.



The table below describes the states, transitions and decision points within the Change Process workflow diagram.

ACTIVITY	DESCRIPTION
Raise an RFC	A new RFC is submitted using the ITSM tool by a technical change requester within TNA. See details in document <u>How to create an RFC in the ITSM tool.</u>
Plan and Test	The change solution and back out will be planned and tested by the analyst/ users to ensure the change produces the desired outcome using the test



	environment or by using a representative sample of users for PC deployments.
	Testing for performance, security and functionality changes must be done. Evidence of testing (test results) must be documented and added to the RFC.
Submit RFC	After successful testing the RFC is submitted for TNA Change Manager Review using the ITSM tool.
Change Manager Review/ Validation	TNA Change Manager will quality assure the RFC ensuring change type, risk and impacts have been accurately stated and the change does not clash with another change. Information on Impact Analysis is in <u>Appendix C.</u>
	TNA Change Manager will either approve or reject the RFC within 24 hours of RFC submission via the Change Manager review task in the ITSM tool. See <u>ITSM Tool Change Manager Activities</u> document.
	The approved RFC will enter into the change process and the rejected RFC will require an update from the requestor.
	Standard and Minor Changes are authorised for implementation by the TNA change manager. Normal and Emergency RFCs will be presented at CAB / E-CAB.
Pre CAB Technical Review	For any complex changes or changes where the solution is ambiguous a Pre- CAB technical review meeting will be held by the TNA Change Manager. This meeting will ensure that all possible options / issues have been considered and the implementation agreed by the technical team/s involved in the change.
	The change solution will then be presented at CAB.
CAB Review	The TNA Change Manager will inform CAB members of RFCs to be discussed at CAB / E-CAB via email. CAB/ E-CAB members will attend the CAB meeting and will assist to approve or reject the RFC.
	For approved RFC's where the public/users or live services are impacted all impacted parties have to be completely informed by contacting the relevant support managers, the service desk or posting information onto Narnia and TNA Website.
	Minutes of the meeting will be sent to CAB members by the TNA Change Manager by email within 24 hours of the CAB/ E-CAB meeting.
	Rejection at CAB/E-CAB will close the RFC in the ITSM tool.
Schedule RFC	After RFC approval the RFC is scheduled in line with the Schedule of Change and any service outages or other work. See <u>How to display the Schedule of</u> <u>Change</u>
	Change dependencies that may impact other changes are considered.



Implementation	Before implementing an RFC all necessary backups must be taken. Implementation will be done as detailed in the implementation plan in the RFC. There should be no deviations from the plan approved at CAB. Any issues encountered should be documented by change implementer when completing the implementation task in the Actions and Resolutions section.					
	If the RFC needs to be rolled back Change Management and business owner must be notified of the reasons. A change that is rolled back is unsuccessful and closed by the TNA Change Manager. A new change request must be raised for any subsequent work. Service desk should inform change management of any tickets that have been raised as a result of a change.					
	If a change has not worked and there are no rollback procedures, or the rollback procedures are found to be inadequate, the change implementer must raise an emergency change before (s)he can undertake any further work					
	To delay a change the implementer has to agree another change window with the change manager otherwise the change will be closed as unsuccessful within 24 hours of the end of the change window.					
	TNA Change Manager will authorise the CMDB updates for the affected CI's on successful completion of the change.					
Post Implementation Testing	TNA Change Manager will email the user contact to test the implemented solution ensuring the change produced the desired results. If testing fails the reason for the failure and any observations or recommendations are documented in the RFC and the analyst informed.					
Post Implementation	TNA Change Manager will perform a post implementation review of the RFC scrutinising unsuccessful changes. Successful changes should also be reviewed.					
Review	The post implementation review will be done via meetings for high impact changes and via email for low impact changes.					
	The post implementation review should include :					
	Confirmation that the change met its objectives.					
	Users are content with the results.					
	Identification of any short comings.					
	• No unexpected or undesirable side effects to functionality, availability, capacity, performance, security etc. have been observed.					
	• The implementation plan worked correctly.					
	If executed the back-out plan functioned correctly.					



	Any incidents arising from the change must be included in the review. A representative from the service desk has to be present during the review. Follow up actions and lessons learnt must be documented in the RFC in the actions section of the post implementation review task. Results of the review and any observations are reported to CAB and the Change Initiator.
	A change that has been implemented successfully repeatedly needs to be assessed by the change review team with the option to make it a standard change which will have a documented implementation procedure.
Closed	The RFC will be Closed as unsuccessful or successful by the TNA Change Manager.

## **Reporting**

- A Schedule of Change is produced every week following the CAB meeting. The schedule also includes annual events i.e. change freeze periods, IT Health Check activities etc.
- A monthly report monitoring Change Management KPIs is produced for Senior Management.

## **Continuous Service Improvement**

Analysis of the Change Process will enable TNA Change to consider Change Process improvements and supply measurements of Stakeholder (including Supplier) performance.

The Change Process will be reviewed annually by TNA Change Manager.

There will be ongoing support, training and guidance available for everyone using this Change process.

Full training and access to the IT service management tool will be given to all new joiners. If there is a need for refresher session for existing users, then please speak to the TNA Change Manager.



# **<u>References</u>**

REFERENCE NUMBER	DOCUMENT TITLE	Link
1.	How to create an RFC in the ITSM tool.	http://narnia-apps/objref.asp?id=A4554473
2.	ITSM Tool Change Manager Activities	http://narnia-apps/objref.asp?id=A4554602
3.	ITSM Tool RFC <u>Template</u>	http://narnia-apps/objref.asp?id=A4615133
4.	Pre-Defined Change Schedule	http://narnia-apps/objref.asp?id=A4627619
5.	How to display the Schedule of Change	http://narnia-apps/objref.asp?id=A4764471

# <u>Glossary</u>

ACRONYM	DETAIL	DESCRIPTION
RFC	Request For Change	A formal request for an IT Change to be implemented.
САВ	Change Advisory Board	A group of people that advises the Change Manager in the Assessment, prioritization and scheduling of Changes.
ECAB	Emergency Change Advisory Board	A sub-set of the CAB who makes decisions about high impact Emergency Changes
CI	Configuration Items	A CI is any component of an IT Infrastructure, including a documentary item such as a Service Level Agreement or a Request For Change, which is (or is to be) under the control of Configuration Management and therefore subject to formal Change Control.
HOS	Heads of Service	Leaders of services provided by TNA IT Operations
CMDB	Configuration Management Database	A CMDB is a repository that holds data relating to a collection of IT assets (commonly referred to as configuration items (CI)), as well as to descriptive relationships between such assets.



IA	Impact Analysis	Change impact analysis is a systematic approach that seeks to discover possible risks associated with implementing a Request for Change.
АОВ	Any Other Business	Any Other Business
Schedule of Change	Schedule of Change	A Document that lists all approved Changes and their planned implementation dates.



## Appendix A - Change Management RACI Matrix

Tasks	Head of Service	Incident Manager	Database Team Lead	Web Content Manager	Analyst (Requestor)	End User Rep	CAB/ ECAB	IT Change Manager
Submission of RFC	A	A	R	R	R	1		A
Standard RFC	С	С	С	С	R	С		R/ A
Emergency RFC	С	С	С	С	R	С	R	R/A
Impact Analysis	1	1	1	1	R	С		R/A
Change Manager RFC Review					1			R/A
Technical Approval	R	R	R	R	A			1
Organising CAB / ECAB	1	1	1	1	I	1	1	R/ A
CAB / ECAB Change Approval	R	R	R	R	1	R	R	A
Communications	1	1	1	1	R	1		A
Pre Change Testing	С	С	С	с	R	C/R		1
Implementation	A/I	A/I	A/I	A/I	R	1		1
Post Change Testing					A/R	R		1
Post Implementation Review	1	1	1	1	C/I	1		R
Notify User of Change Results					R	1		A/C
Close RFC					С			R/A
Change Management Reporting	1	1	1	1	1	1	1	R

R = Responsible: The person who does the work to achieve the task. They have responsibility for getting the work done or decision made.

A = Accountable: The person who is accountable for the correct and thorough completion of the task

C = Consulted: The people who provide information for the project and with whom there is two-way communication.

I= Informed: The people kept informed of progress and with whom there is one-way communication. These are people that are affected by the outcome of the tasks



## <u> Appendix B – CAB Details</u>

#### CAB Members

The CAB is a regular forum attended by a quorum of 6 stakeholders required to:

- Advise and support the TNA Change Manager in their decision making
- Allow the TNA Change Manager to make decisions and assign actions to stakeholders.

The CAB members are chosen to ensure all Changes can be adequately assessed from both the business and technical viewpoint. Mandatory attendance is required from the CAB members by role or representative as listed below:

- Change Manager
- Analyst (Requester)
- Infrastructure Manager
- Business Support Team Manager
- IT and Cyber Security Manager
- Service Desk Manager

In situations where the primary member cannot attend the CAB, an authorised deputy must attend.

Attendance for the following is not mandatory. They will attend if impacted or involved in the change:

- Supplier(s)
- Security
- Head of IT Operations
- Members of the Service Desk team
- Security Manager
- Web Content Manager
- Application Development Lead (System Development)
- Business Owners
- Members of infrastructure team
- Members of Digital teams
- Members of Business support team

Attendance is recorded and any issues regarding non-representation will be escalated to the Head of IT Operations.

#### CAB Agenda

The agenda of the CAB will consist of, but is not limited to, the following structure:

- Discussion of new RFCs requiring approval\*
- Update of RFCs that have been escalated.
- Update on RFCs that have been approved or are in acceptance pending closure.
- Any other business (AOB). Discussion on new RFCs will not take place at this time.



\* New RFCs must be represented for approval by the Submitter or suitable representative.

New RFCs will only be accepted for representation at the CAB if they are submitted no less than 24 hours before the meeting. This enables TNA Change Manager to validate the information before production and distribution of any relevant meeting documentation. Any new RFCs submitted after this cut-off time will not be represented at this CAB unless urgent.

## Appendix C - Impact Analysis (IA)

Impact Analysis is a structured approach designed to unearth the potential "unexpected" effects of a change on an organization.

The key objective of performing Impact Analysis is to analyse the RFC and investigate the potential implications of the change being proposed.

Our aim is that the CMDB will be used to simulate the change and determine impacts on services and applications.

All Change requests will require consideration of the impact from the following perspectives:-

Business, Technical, Security, Financial etc.

Information that will be reviewed during the impact analysis includes:-

- Details of work required
- Impacts to infrastructure, applications and existing services
- Organisation and user impacts
- Risks to TNA in delivering the change
- Any benefits realized
- Any dependencies
- Any recommendations
- Proposed implementation date

## **Appendix D – Reviewers and Approvers Panel**

TITLE
Head of IT Operations
Engagement Service Delivery Manager
Infrastructure Manager
Business Systems Support Manager



IT Service Desk Manager
Planning Performance and Assurance Manager
IT Security Manager
Database Team Lead
Change, Asset and Configuration Analyst

## Appendix E Change Schedule

The Change Schedule identifies potential to schedule a change as follows:

- Green areas represent times when public facing changes can be undertaken.
- Yellow areas represent times when changes require business approval.
- Red areas indicate only emergency changes can be undertaken.