



HIC Services SOP16/2.0
Effective Date: 15/11/2022

HIC SERVICES STANDARD OPERATING PROCEDURE

Change Management

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2.0	Keith Milburn, ADP Manager	01/07/17	Revision after HIC Exec to reflect current practice
	Tracey Stewart (Data Entry Team Leader)	25/02/20	Updated cover sheet with new approval process information
	Rachael Torano (Business Support)	18/05/2020	Updated with new and approved Header Changes made to cover page to include Op's review date as agreed at the HIC Information Governance Meeting Document Review and Revision History table header updated As agreed by the HIC Governance Committee signatures have been removed from cover page and Document Review and Revision History table has been updated to include review dates and notes
2.0	HIC Ops	24/10/22	Reviewed 24/10/22 no changes required

***Draft and Archived/Obsolete revisions are not to be used.
Access current versioning system to verify revision.***



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1. PURPOSE

Health Informatics Centre Services (HIC Services) is a University Research Support Unit operating within the Tayside Medical Science Centre (TASC) at the University of Dundee, in collaboration with NHS Tayside and NHS Fife. HIC Services provides Data Users with linked, anonymised information derived mostly from large Population Based Health Datasets, owned mainly by the NHS and the University of Dundee. HIC also develops data collection software, provides data entry and securely hosts data for research use.

Change is an essential part of maintaining and continuously improving provided services. Change must be properly managed so that disruption and unpredictable interruptions to services are minimised. The purpose of this document is to highlight the practices in operation in HIC to guarantee due diligence is followed during changes that affect any aspect of its operations.

2. SCOPE

This document provides a summary of each of the main sections of the change management process as is implemented by HIC.

The document covers changes affecting the following:

- Software code developed by HIC for released applications.
- Data hosted by HIC either as Datasets or databases backing up released applications.
- Infrastructure in terms of physical and virtual hardware as well as network components.
- Documents and processes.



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3. DEFINITIONS

- Change Advisory Group (CAG) – The CAG is a HIC internal group comprised of senior members of staff and is responsible for approval of changes
- Change Category – Defines a common scale against which to judge the magnitude of the change in terms of effort and risks
 - MINOR: A change requiring little work and with little risk of causing problems
 - SIGNIFICANT: A change that will require significant effort and will have a substantial impact on services
 - MAJOR: A substantial change which may impact on at the organizational level
- Change Priority – Provides a comparator scale to measure how urgent the change is
 - LOW: A change is desirable but can wait until a convenient time
 - MEDIUM: A change has no great urgency or major impact but should not be deferred
 - HIGH: A change is required to remedy a serious error affecting a number of people, or an inconvenient error affecting a large number of people
 - IMMEDIATE: An instant change is required to fix a severe problem that seriously affects the use of essential services
- Incident – A fault in a system, service or component that will require a separate Change process to resolve.



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- **RFC** – Request for change. The RFC is the main reference for all documentation related to a change and supports the approval decision process. It should highlight the following:
 - **Change description**
 - Description of the change – what is being changed and how.
 - **Change category and priority**
 - A change can be Major, Significant or Minor. The priority can be low, medium, high or immediate.
 - **Reason and benefits for change**
 - Clearly record reasons for making a change
 - **Risk of not doing**
 - If the change is not made, what are the consequences and risks?
 - **Potential risks**
 - Once the change has been made are there any risks that might arise?
 - **Impact during change**
 - This refers to the impact that will be expected while the change is being implemented; includes impact on other proposed or approved changes.
 - **Roll-back plan**
 - If the change has been unsuccessful (or has created actual or suspected problems) a documented roll-back plan should be in place in advance of roll out.
 - **Resource estimate**
 - How much effort is required to make this change – how many FTE (Full Time Equivalent) days?
 - **Test plan**
 - What is the plan for testing the change before implementation?



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- **Immediate Change** - Immediate Changes are changes that demand absolute priority. Immediate changes require resources to be diverted, and are generally more disruptive and prone to failure. Immediate changes should be kept to a minimum and must still be approved. They should only be invoked when absolutely necessary. This will include circumstances where one or more of the following apply:
 - Delaying action will seriously affect the delivery of essential service(s)
 - There will be a serious impact on the business unless the change is made
 - There is a serious disruption to essential service and a change is needed to restore service
 - There is an immediate risk of serious disruption to a service
- **Standard Change** - Standard changes are changes which follow defined procedures which have been previously documented. Standard Changes have been approved as such by the CAG. Each time a standard change is made, it is recorded and a standard process is followed. If any of the elements of a standard change are to be re-defined, or the processes modified, it is classified as a new Change Request.

For all other definitions see HIC Services SOP Appendix B – Definitions.

4. RESPONSIBILITIES

- **Team Managers** – Manages and Monitors the whole process. They will be responsible for signing off successful changes.
- **HIC Director** – Responsible for overall HIC security policy and implementation
- **Governance Manager** – Monitoring compliance, handling significant events, keeping SOP up to date



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5. POLICY

5.1.1.1 Every change identified, either from external input or from an internal party, will go through a documented process.

5.2 Change validation and triaging

5.2.1 Overview

5.2.1.1 To verify the relevant procedure is being followed, proposed changes will need to be validated and triaged.

5.2.1.2 Validation is the process of ensuring that the party requesting the change is indeed authorised to request it. Triaging is performed by all parties involved and is needed to assign a Priority and a Category to the requested change.

5.2.2 Details

5.2.2.1 Particular importance will be given to:

- Identifying the risks following the change.
- Identifying the impact of the change.
- Creating a Test Plan.
- Creating a Roll-back plan.

5.2.2.2 If necessary, the proposed change could be prototyped in order to gather as much information as possible.



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5.3 Change approval

5.3.1 Overview

5.3.1.1 Approval by senior members of HIC Services associated with the change will be required, before proceeding.

5.3.2 Details

5.3.2.1 Senior staff will form a Change Advisory Group that will decide if the change request will be approved or not.

5.3.2.2 It may not be necessary to have all changes approved by the CAG and some changes may be approved by a single Senior Staff (Process Manager); the decision will be based on the RFC documentation, the impact and risks associated with the change, and external parties' input.

5.4 Change building

5.4.1 Overview

5.4.1.1 When a change is approved by the CAG, it will be designed and built by HIC Services, with external input as required.

5.5 Change testing

5.5.1 Overview

5.5.1.1 Before the change is ready to be deployed, further tests will be run in order to verify the impact of the change and re-assess its risks.

5.6 Change deployment

5.6.1 Overview

5.6.1.1 Once the change has been positively tested, it will be implemented. The outcome of the implementation will be recorded and verified. In case the change fails, the roll-back plan is implemented or an Incident is raised.



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5.7 Change verification

5.7.1 Overview

5.7.1.1 The implemented change is submitted to the person who initiated the request and the involved Team Manager to validate that the desired result is achieved and the services are working as expected. A successful implementation will terminate the process. In case of failure, the roll-back plan is implemented or an Incident is raised.

5.8 Change documentation and communication

5.8.1 Overview

5.8.1.1 A communication stream is essential to keep all the parties impacted by the change aware of its status.

5.8.1.2 The process will also verify that existing documentation is updated and, if necessary, new documentation will be produced.

5.8.2 Details

5.8.2.1 During all above stages of the Change Process, all the relevant parties involved in the change will be kept informed of the process.

5.8.2.2 Relevant documentation will be updated by the staff responsible.

5.8.2.3 A need for new documentation will be highlighted during the process and completed by the staff involved.

5.8.2.4 This process is parallel to the Change Process and does not finish when the Change Process ends.

5.8.2.5 This may involve, but is not limited to, training for staff and communications to users.

6. APPLICABLE REFERENCES

- University of Dundee ICS Change Management Policy