# **ICT Change Management Policy**

# 3<sup>rd</sup> Party Support Guide



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## **1 CHANGE MANAGEMENT SUMMARY**

Change Management (CM) is an important IT control used to effectively manage changes to CIAL's systems & infrastructure. It is a key component of our IT Service Management Standards and is related to the ITIL Framework.

The key goals of our CM program are to:

- Minimise issues and unplanned outages through ensuring we have effective planning and roll back steps in place
- Ensure that our changes are coordinated effectively to ensure that one change does not conflict with another
- Ensure that we are using standardised approaches to how we operate and removing risk where possible
- Ensure that we communicate effectively with the business and user community
- The change meets the needs of the business.

Our CM program is made up of a number of core components as follows;

#### 1.1 REQUEST FOR CHANGE (RFC)

An RFC is the process of putting forward a request for a change to a system or service.

Ostensibly this is about collating some key information in to a single document for review by others, minimum requirements for an RFC are:

- What is the change and why are we doing it it's important for historical reasons that we understand the context behind why you need to complete the work. What systems are you going to change?
- Date and Time of requested change to be applied
- Implementation Plan Details of how you plan to execute the change
- Rollback Procedures How will you back out if it's not going well or you are out of time?
- What people or systems could be impacted this is essential as these people need to be notified in advance of the potential for a service disruption. You will likely need our help with this.
- Test Plans How will you know that the changes have been a success and that they have not had unintended consequences.

The RFC is the single source of all information pertaining to the planned change. This will be used by the system owners and CIAL IT Team to sign off and approve the change. It is also the record of works completed so is an important historical document.

#### 1.2 FORWARD SCHEDULE OF CHANGE (FSQ)

This is an important tool which is used by the CIAL IT Team to help identify potential conflicts between similar changes and to ensure that staff levels can be managed around planned changes.

The simple fact is that changes lead to unplanned outages, no matter how well planned. Completing too many changes in close succession adds more complexity to something that we already know is risky.

In simple terms the FSQ is a calendar with planned changes listed against each date and time. It is our record of works completed and is used to help identify what has changed in the future.

#### 1.3 MAINTENANCE WINDOWS (MW)

An MW is an agreed period of time where the business has accepted as an appropriate time for systems to be made unavailable in a planned manner. The MW can be different for different systems. For example:

- The FIDS System is viewable to the public and so we have a small window of opportunity to take this system down. Currently this is after the last flight has arrived late at night and before the international check in opens again the next morning and only on Tuesday and Wednesday nights.
- Our ERP system is primarily used by corporate office staff, as a result we have a fairly large window of opportunity to make changes to the system after 6pm at night when most users do not require access.

An MW is not an approval for you to take systems down during these times. It is simply an agreed period which can be used on a regular basis as long as you have prior approval and notify the users in an appropriate time frame.

For our users we commit to provide 3 business days' notice of our intention to make use of an agreed MW.

#### 1.4 PRE APPROVED CHANGES (PAC)

A PAC is a special change which allows IT Staff & Partners to execute bypassing the usual approvals process.

To be pre-approved, a change needs to meet a number of criteria which includes having a well-defined and trusted process which is clearly documented and known to not cause systems outages.

#### 1.5 EMERGENCY CHANGES

An emergency change is where we need to make an urgent change to resolve a high priority or high impact outage. They are not the answer to poor planning or failure to complete an RFC in time!

#### 1.6 PERMIT TO WORK

There are a number of systems at CIAL which are not managed by IT, but which we are required to maintain certain components. A number of these systems require permits to be lodged and signed off before completing works.

Think of the permit to work as an RFC for systems owned or managed by other departments.

An example of this is the Gate Operating System (GOS). If you need to make changes to this we would need to complete an IT RFC as well as a completed permit to work signed off by the GOS business owner.

## **2 REQUEST FOR CHANGE PROCESS**

The process map for Change Management is available in ProMapp at the following URL:

https://go.promapp.com/cial/Process/Minimode/Permalink/BggvxAu7NAvVOugdviSrfm

At a very high level the process is:

- Request Complete the request for change using either the web form found here, or directly in the Footprints system if you have access.
- 2. Approvals The Change Manager ensures that the base information is correct and that we have enough time to complete the administrative process. Once confirmed the RFC will be pushed to the IT Management team who act as our Change Advisory Board or CAB. This is the baseline approval stage. If there is a need to gain approval from a business owner the RFC will be passed to them to review and approve as well.
- 3. Notifications This stage is where users and others in the business such as the operations centre are notified of planned works. Notifications are delivered by the CIAL Service Coordinator. Note; it is reasonable for notifications to be sent prior to approvals being granted to save time and ensure that Maintenance Windows are achieved.
- 4. Completion Once all required approvers have accepted the proposed works, the CIAL Service Coordinator will make contact with you to advise. At this point you have the authority to complete the change as detailed in the RFC. Note that any changes to this including the proposed date and time will require a new approvals process.

#### 2.1 RFC DO'S

The following are guidelines for what you should do when raising an RFC and delivering the associated works.

#### 2.1.1 THINK CAREFULLY ABOUT THE PLANNED DATE & TIME

Consider how long it will take for your change to be approved, how much time do we have to notify the business of the planned change? As a general guide, you should be allowing 5 workings days from initiating the RFC to intended implementation.

Work with the CIAL Service Coordinator who can check the FSQ to ensure that there are no other conflicting changes occurring at the same time and ensure that you are working within approved maintenance windows.

#### 2.1.2 PROVIDE A CLEAR DETAILED REASON FOR THE CHANGE

People need to be able to understand why we are making this change, you cannot underestimate the importance of this, especially a year or longer down the road as CIAL staff may need to recall why you or your colleagues did something. What is obvious today may not be so tomorrow.

#### 2.1.3 PROVIDE A CLEAR IMPLEMENTATION PLAN

Make it clear what your plan is and how you plan to implement. If you have attachments ensure that these are provided to the CIAL Service Coordinator

This is your chance to really think through and plan the change, thinking through each logical step that you need to take. Remember – <u>Failing to plan is planning to fail</u>.

It should be detailed with enough information that someone else with the appropriate skills could carry out the change without further direction.

#### 2.1.4 PUT A LOT OF THOUGHT IN TO ROLLBACK PLANS

Not all changes will go as expected; this is OK as long as you know how you will back out of your changes.

Consider how big your agreed maintenance window is, detail the time at which you will need to roll back if you will not have the time to complete the change.

Be prepared to answer the hard questions from CIAL IT Management. Your ability to back out of changes is more important than anything at this stage.

#### 2.1.5 THINK HARD ABOUT WHO OR WHAT WILL BE IMPACTED

You need to think laterally, what else depends on this system? Remember everything in IT is interconnected at some level.

The Service Coordinator will also use this information to generate the notifications.

#### 2.1.6 PLAN TESTING IN ADVANCE

Testing is essential. How will you know that your change has been a success? Are you the most appropriate person to complete the testing? Perhaps you will need a CIAL staff member or user to test afterwards.

Consider what success looks like with regards to testing. Not only for the change, but it's also important to test whether the change has negatively impacted other systems. Your change might be successful, but has something else broken as a result?

#### 2.1.7 USE THE RFC AS A REFERENCE WHEN COMPLETING WORKS

Remember the RFC is what you have said you will do, why you are doing it, when and how. And if it's all going wrong it will help you get out of a tough situation!

It is also the absolute confirmation that works are approved so you should have a copy of it in front of you before you start.

#### 2.1.8 COMPLETE AN IT POST RFC UPDATE

Use the link below to send an email CIAL IT Staff with any details relating to the RFC Works. Complete one of these regardless of the result.

 $\frac{http://radar/docs/InformationTechnology/SiteAssets/default/CIAL\%20IT\%20Post\%20}{RFC\%20update.oft}$ 

#### 2.2 RFC DO NOT'S

The following are guidelines for what not to do when raising or actioning an RFC.

#### 2.2.1 DO NOT START WORK WITHOUT APPROVAL

It seems obvious right? Always double check to ensure that your RFC has been approved. Assumptions do not cut it; if you are doing the work it is your responsibility to ensure that you have the approvals!

#### 2.3 DO NOT CHANGE THE DATE OR TIME WITHOUT APPROVAL

The approved RFC is for that date and time only. If you need to make changes to this talk with you're the CIAL Service Coordinator first. Date changes will almost certainly require a full approval process to be applied again.

#### 2.4 DO NOT CHANGE YOUR IMPLEMENTATION PLAN

Again the RFC is an approval of how you plan to make the changes. If you find that you are having to deviate from your plans, stop and think hard about the potential implications. It's better to defer and back changes out than to charge fourth and risk unplanned outages.

## 3 FORWARD SCHEDULE OF CHANGE (FSQ)

The FSQ is our essentially our change calendar. It details scheduled and approved works as they relate to CIAL IT.

The Service Coordinator can provide you with a copy.

This is an important tool when scheduling changes to ensure that you understand any potential conflicts.

#### 3.1 BOOKING A CHANGE WINDOW

You may have a need to block out a change window in advance of knowing all of the details associated with a potential planned change. The CIAL Service Coordinator can assist you with this.

## **4 MAINTENANCE WINDOWS**

Maintenance windows for IT systems are published on the internal CIAL Intranet site - <a href="http://radar/docs/InformationTechnology/IT\_Operations\_Manual/Change%20Manage">http://radar/docs/InformationTechnology/IT\_Operations\_Manual/Change%20Manage</a> <a href="maintenance%20Mindows.aspx">ment/Maintenance%20Mindows.aspx</a>

It is important that you schedule your changes within the appropriate windows, based on the system in question and the expected impact.

Remember Maintenance Windows are not a time that you can just use as you feel like it, they are simply an agreed period where planned maintenance works can be undertaken only. You still need to notify users of planned works.

Maintenance windows can be changed at any time based on the needs of the business.

From time to time, business owners may request the change to be made outside of the agreed maintenance windows to minimise impact. Typically these would be agreed to, unless the requested time impacts other users & business units.

Again the Service Coordinator can provide you with the latest version of the approved maintenance windows.

## **5 PRE APPROVED CHANGES**

A Pre-Approved change is an agreed change process which has been rigorously tested and known to be low risk when applied in an agreed fashion.

The primary benefit of a pre-approved change is that you will not require a full approvals process; you are still required to complete an RFC although the process is simplified.

For a change process to become "Pre-Approved" the following needs to be in place:

- A published ProMapp detailing the change process.
- A proven track record of success in completing these changes, as an example:
  - At least 5 successful changes using the defined process
  - No impact to users other than that defined in the agreed process
  - Able to be completed by anyone in the team by following the defined process (and having been completed by an alternative team member)
- An approved RFC to create the pre-approved change
- Detailed in the Pre-Approved Changes Register.
- A template for the change exists in the Footprints Change Management system

A pre-approved change does not give you the ability to complete these changes at any time. The RFC process is still followed and all of the usual constraints will apply, so for example if an outage (even small) is expected then the usual notice periods to our users apply.

It is essential that when completing a pre-approved change that you follow the agreed ProMapp process, no matter how many times you have done this.

A pre-Approved change is valid for a period of 12 months where upon the process will be reviewed in ProMapp. A pre-approved change can be revoked for any number of reasons including changes to infrastructure that may dictate further testing of processes to be sure that approved processes are still valid.

Pre-Approved changes are not exempt during periods of change freeze.

The Pre-Approved Changes register is located on the CIAL Intranet:

http://radar/docs/InformationTechnology/IT\_Operations\_Manual/Change%20Management/Pre%20Approved%20Changes.aspx

## **6 EMERGENCY CHANGES**

An Emergency Change is only approved for changes which are required urgently to resolve either an existing or imminent high impact outage (P1 or P2).

An Emergency Change is not available for times when you have failed to prepare or plan appropriately for a change or a project.

#### 6.1 THE KEY ATTRIBUTES OF AN EMERGENCY CHANGE ARE:

- Approval can only be granted verbally or otherwise for a change by CIAL IT or Executive Management.
- The RFC is still required to be completed, although it may be completed afterwards.
- Can be approved without usual notice periods to users, although it is expected that we communicate as practically as possible to the user base regardless
- Can occur outside of usual maintenance windows
- Can occur inside of change freeze periods.

## **7 PERMIT TO WORK**

The CIAL Permit To Work system is like a change management approvals process for other business systems and assets that are not managed or maintained by IT.

# 7.1 CURRENT SYSTEMS THAT REQUIRE A PERMIT TO WORK TO BE COMPLETED:

- Apogee System
- CEAG e-Lights
- Philips CATS e-lights
- Legrand Vision e-lights
- Gate Operating System (GOS)

Importantly you will need an approved permit to work <u>even to access</u> these applications regardless of whether you are making changes.

#### 7.2 PERMIT TO WORK PROCESS

- 1. Prior to work you need to complete a "Permit To Work On Existing Services" form which can be accessed <a href="here">here</a>. <a href="Allow 2 business days for approvals.">Allow 2 business days for approvals.</a>
- 2. Ensure that you receive a signed copy of the permit before you start works.
- 3. Upon completion of the planned works, sign the permit closure section and return to the Terminal Facilities Manager (Mike Parker)

#### 7.3 EXCEPTIONS TO THE PERMIT TO WORK PROCESS

The following are exception to the Permit To Work process as detailed above:

- Monthly Server Patching, although the usual notifications are expected.
- Investigation & fault resolution where the request has come from either the application owner or the building management/HVAC teams. If urgent access is required verbal approvals can be granted by either of;
  - Mike Parker
  - Matt Williams
  - Mike Heinemann
  - Sonny Ng

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## 1 WHAT IS A CHANGE?

There is often confusion around changes and what comes under change management and what does not. This guide will help.

Changes of some kind happen every day; a great example is changing a user's password. By any definition that's a change that fundamentally can have an impact on a user either positively or negatively depending on how or why it occurs. And yet we do it on a daily basis without any change management process.

There are also any number of other changes that occur which we do not require change management processes to be involved, so how do we draw the line? ITIL defines a change as:

"The addition, modification or removal of authorised, planned or supported service or service component and its associated documentation."

So that helps, but its not entirely clear either....

From a CIAL perspective we can think of changes as one of the following:

<u>Standard Change</u> – These are the changes that we make on a day to day basis, generally following a <u>set way</u> of doing things. Examples include rebuilding a PC, resetting a password or installing software on a user's PC.

The record of this change is the service request in the CIAL Footprints system.

**Normal Change** – These are the changes which require a full RFC process. The following changes are all in scope:

- Any change in configuration on Infrastructure such as servers, storage, network,
  PBX & compute services
- Any configuration change to server based software or business systems such as a SharePoint or FIDS.

<u>Pre-Approved Change</u> – These are "Normal Changes" which have been moved to a pre-approved status. They still require an RFC to record the made changes but will not require an approvals stage.

<u>Emergency Change</u> – This is exactly the same as a "Normal Change" with the exception that you have approval to make the change without having completed an approvals stage and the works can occur outside of approved maintenance windows with minimal or no user notification. These can only be approved by ICT or Executive Management.

<u>The general rule of thumb is</u> – If you are working on infrastructure which supports many users you will likely be required to work under a level of change management. If you are working on something only affecting one user it is likely to be a standard change.

## 2 WHATS NOT A CHANGE?

A restart of a system is not considered a change. It will likely be an outage however and so the usual guidelines around notifying our users in a timely fashion apply.

When working on a large project you may be granted the ability to make a large number of changes to systems as the project is underway. An example could be deploying new servers and installing software. Speak with the Technology Services Manager first.

**Development Environment Changes**. When working in the development environment most changes will not generally require approvals. An exception to this is "Production Dev" platforms such as ERP\_DEV.

#### Some Specific Examples Of Tasks Which Are Not Normal Changes:

- Creating a user in AD
- Adding a user to a group in AD
- Adding extensions to the PBX
- Adding a user to an existing VPN access group
- Enabling an access port on a network switch
- Moving a PC for a user.
- Deploying a new mobile phone to a user