Standard Custodian Name: **David Lee**

Name of Standard: **NRM Standard for TCRM**

Submitter Name: **David Lee, Gordon Parker**

Previous Version #: **1.0**

New Version #: **2.0, Major Change**

Date of Submission: **18-Dec-2017**

Stakeholder(s) Impacted by Change: **All migration/deployment Stakeholders.**

Type of Change: **Mirror (complexity)**

Change to Standard: **Remove references to ISSS, ensure generic language so the Standard applies to all migrations.**

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Standard

ToC

Version Control

1. Introduction
2. Overview of Deliverables and SDLC
3. Use of the Standard and related Template

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Supporting Documentation
### Version Control

<table>
<thead>
<tr>
<th>Document Version</th>
<th>Revision</th>
<th>Date</th>
<th>Author(s)</th>
<th>Change Reference</th>
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<tbody>
<tr>
<td>1.0</td>
<td>Jun 15, 2016</td>
<td>David Lee, Rick Stroebel, Stephane LeRoy</td>
<td>Initial Draft</td>
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<td>2.0</td>
<td>Dec 18, 2017</td>
<td>David Lee, Gordon Parker</td>
<td>Remove ISSS references</td>
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<td>Ensure TCRM standard is generic</td>
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1. Introduction

The Natural Resource Ministries (NRM) is currently transforming Technical Change and Release Management (TCRM), which is the migration process applied to all environments IMB is responsible for. The purpose of TCRM is to ensure that standards and procedures are in place so that changes to the technical environments are managed efficiently, effectively and with the lowest possible impact on service quality.

TCRM is supported by a committee which authorizes technical changes and assists change management through the assessment and prioritization of changes.

Role of Technical Change and Release Management Committee (TCRMC)

TCRMC provides oversight for ongoing development, management and improvement of Technical Change and Release Management for the Natural Resources Ministries.

TCRMC membership includes individuals who are capable of ensuring that the change is adequately assessed from both a business and a technical viewpoint. To achieve this, TCRMC includes resources with a clear understanding across the whole range of stakeholder needs.

The TCRMC has delegated a group of individuals as a Change Advisory Board (CAB) that meets on a weekly basis to review changes that are pending for the deployment environments.

Change Working Groups receive assignments from TCRMC in order to fulfill its mandate of technical change and release management with continuous improvement.

The TCRMC has the authority to delegate the evaluation of certain types of changes outside of the weekly meeting. There are two types of change that fall under this description:

- **Emergency Change** – dealt with through emergency meetings of TCRMC members
- **Infrastructure Change** – delegated to Change Manager
Diagram 1 shows the Technical Change and Release Management governance and reporting relationships of the Technical Change and Release Management Committee (TCRMC).

2. Request for Change Process

Atlassian JIRA is used as the tool for initiating, tracking, and managing all tasks and activities associated with all migrations.

Request for Change (RFC) is created in JIRA and is the process available for the organization to know a change is ready to move through environments and into Production in a controlled manner to minimize the impact to clients.

The RFC process highlights the information required for the assessment of any Change Request. This information is normally available early on in a project/release but is expected during the Design and Build phases of the SDLC.

To ensure the readiness of all stakeholders for the change the RFC has a sub-process called Request for Deployment (RFD) that articulates the tasks involved in implementing specific changes to specific environments, i.e. Integration, Test, Production.

The workflows for both processes have been implemented in JIRA.

Detailed workflows are described by two BPMN diagrams that can be found in the Appendix and are called:

1. BPMN RFC Process in JIRA
2. BPMN RFD Process in JIRA

RFCs are categorized by

1. Deploy release unit or package
2. Infrastructure change

**Deploy release unit or package**

- RFC **should** be created as early as possible
- RFC **should** be created no later than the end of the Design phase, and from sprint inception for AGILE projects
- RFC and RFD **must** be created before deploying to the Integration environment
- RFC **must** be submitted for evaluation 3 business days before the weekly TCRMC RFC review meeting
- RFC will be evaluated upon submission by the Change Manager (CM), Release Manager (RM), Deployment Manager (DM) and technical resources
- RFC being submitted for evaluation **must** have an RFD for environment ready for review and approval
- RFC and RFD deployment date for applicable environment **must** be set
- RFC and RFD being submitted for evaluation **must** have the IRS Application Name (acronym) set
- RFC being submitted for evaluation **must** have the Business Portfolio Manager (BPM) set

Note: In the case of non-ISSS application changes the role of Change Manager is delegated to the Business Portfolio Manager (BPM) with the exception of infrastructure changes as noted below.

- RFD Fixed Version **must** be set on creation
- RFD **must** have one or more RFD subtasks
- RFD subtask **must** have accurate details in the description
- RFD **must** be submitted to communicate it is ready for deployment
- RFD Target Environment **must** be set before submitting RFD

**Infrastructure Change**

- Infrastructure RFC and RFD **must** have a Technical Environment Change (TEC) bulletin posted if the outage causes an outage that impacts users. If in doubt a bulletin must be posted.
- Infrastructure RFC and RFD are reviewed by technical resources and **must** be authorised by the CM or their delegate
- Infrastructure RFC being submitted for evaluation **must** have the Business Portfolio Manager (BPM) set

**Note:** Infrastructure Change is using the RFC workflow and may or may not include RFD workflow as this is still formative. Authorization is delegated to the CM (Change Manager) and does not go to the TCRMC for review. This will be formalized in a future release of the RFC process. Deadlines for submission are still formative as well but a good guideline is to allow for two weeks as this is also the requirement for TEC bulletin submissions. This allows time for stakeholders to comment on the timing and the nature of the change.
A RFC will have priorities as follows:

1. Low
2. Medium
3. High
4. Emergency

Low, Medium and High Change

Low, medium and high changes are used to guide the order of required reviews. Most RFC will follow a priority of medium.

Emergency Change

Emergency change has not been formalized but will still follow the RFC process and does not have to align with the weekly TCRMC RFC review. These changes will be evaluated as required by an ad-hoc meeting/discussion of business stakeholders, the members of the TCRMC and technical resources. This will be formalized in a future release of the RFC process.

3. Release Policy

All changes to an NRM Environment are initiated with a Request for Change (RFC).

- An RFC should be initiated as early as possible via the JIRA tool
- RFCs are reviewed every Thursday, and must be submitted at least three (3) business days in advance
- RFCs must be updated and resubmitted for each target environment (Integration, Test, and Production).
- An emergency RFC may be handled outside of this policy on an exception basis.

Deployment constraints:

- Integration environment – Daily
- Test environment – Daily
- Production environment – To be negotiated

4. Appendix

The RACI matrices that follow are used to clarify roles and responsibilities for these processes along with definitions.

- **Responsible**: Those who do the work or ensure the work is done to achieve the deliverable. There is typically one role with a participation type of responsible, although others can be delegated to assist in the work required (see also RACI below for separately identifying those who participate in a supporting role).

- **Accountable**: (also approver or final approving authority): The one ultimately answerable for the correct and thorough completion of the deliverable, and the one who delegates the work to those responsible. In other words, an accountable must sign off (approve) on work that responsible provides. There must be only one accountable specified for each deliverable.
- **Consulted:** has critical information or skill sets to complete or participate in a deliverable. Those whose opinions are sought, typically Subject Matter Experts; and with whom there is two-way communication.

- **Informed:** Those who are kept up-to-date on progress, often only on completion of the deliverable; and with whom there is just one-way communication.

**Note:** In the case of non-ISSS applications, the Business Portfolio Manager has the delegated authority to authorize the RFC. See RFC authorization role in matrix.

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<th>Process</th>
<th>Change Manager</th>
<th>Deployment Manager</th>
<th>Release Manager</th>
<th>TCRM</th>
<th>Business Portfolio Manager (Business)</th>
<th>IMB or Vendor Technical Lead</th>
<th>JIRA Administrator (App Delivery)</th>
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<tr>
<td><strong>RFC process</strong></td>
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### Tools

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<th>Tool Description</th>
<th>Change Manager</th>
<th>Deployment Manager</th>
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### Release

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