Retail Credit Decision System Standards

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Version Control Table

Name	Changes made	Materiality	Approved by	Version number	Approval Date	Effective Date
Isaac Ivan Jesudian	Migration to Inline format- Non Material Change(No change to document content)	Non-Material	Xiaomin Rong	1.3	29/05/2023	19/08/2023

The full version history is included at the end of the document.

1. Introduction And Purpose

1.1 Purpose	1.1.1 The Retail Credit Decision Systems Group standards details the e2e Process, Roles and Responsibilities, prerequisite documentation and necessary approvals involved in managing and executing Request for Changes (RFC) to Retail Credit Decision Systems (NBSM, Probe, and Transact-SM,PCO, PCCM and Kuliza).
	1.1.2 The Global standards ensures a standard methodology is applied while implementing changes to Decision System with proper controls and monitoring. It applies across all our markets with Decision System capability handled centrally (CoE) or locally in Country.
	1.1.3 This Standards is mapped principally to the Retail Credit Risk Type Framework.
1.2 Governance	1.2.1 Decision Systems is governed under the Retail Credit Decision Systems Procedures and ORF. Any governance regarding Scorecard or IRB Model Implementation mentioned in "Model Family standards "should be fully adhered in addition to control standards described in this document.
1.3 Parameter/ strategy change implementation process	1.3.1 The parameter / strategy change implementation process is called the Request For Change (RFC) and is as detailed below from section 2 to section 8

2. Change Submission

2.1 General	2.1.1 This is the first step to initiating the RFC process. The appropriate teams in country to provide the CDS team with a list of scoped changes that is planned to be implemented in the prescribed format.
2.2 Pre-requisites to RFC submission	2.2.1 **Documents and approvals:** • Approved Country Policy/Regulatory strategy change document • Approved Product/Marketing strategy change document • Approved Collection strategy change document • Approved Process strategy change document/memo
	2.2.2 **RFC Documentation and submission** • Country should complete RFC document (Refer to Appendix 1 for RFC template) • RFC document to be email to groupdecisionsystems.production@sc.com/COE Users

2.3 Approval Authority	2.3.1 Depending on the nature of the change request the appropriate approver as below is required to approve the RFC.
	  1. Secured/ Unsecured Credit Policy Head - (HK, SG, MY and ID)
	  2. Credit Policy Head for all other countries
	  3. Product Head for product related changes
	  4. Collections Head for collections related changes

3. Change Walkthrough

3.1 Change Walkthrough	3.1.1 The purpose of the walkthrough is to ensure understanding and interpretation of the intended changes by the CDS team when translating the policy into technical solutions
	3.1.2 The change documentation is expected to be of high quality and standard to ensure there is less ambiguity for the person executing the change(s) in the system.
	3.1.3 The change walkthrough will cover the following: • Policy and/or process changes. • Expected system behavior post change execution.
	3.1.4 Any further clarifications from the walkthrough need to be closed out before commencing change execution.
	3.1.5 CDS team to highlight any obvious dependencies or showstopper to executing the requested changes.

4. Change Assessment and Delivery Timescale

<table>
<tr>
<td>4.1 Change Assessment</td>
<td colspan="4">4.1.1 Decision System manager reviews the RFC together with the approved supporting documents and assess the following:

• All required system and TP data are available to execute the intended changes
• Any data or external system dependencies that are prerequisites to enable Decision System changes.</td>
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<tr>
<td rowspan="2">4.2 Delivery Timescale</td>
<td colspan="4">4.2.1 Indicative timescales for DS change execution*</td>
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<td colspan="4">

High level Activity		Change Classification (effort in man days)		
		Simple	**Moderate**	**Complex**
RFC Submission	RFC Submission	0	0	0
	Change walkthrough	1	1	1
	Change Assessment and Execution	2	4	7
UAT	User Acceptance Testing	1	5	7
	UAT Signoff	1	1	1
Go-Live	Production Release	7	7	7
	Overall TAT	12	18	23

Each RFC changes item will be reviewed and assessed by Decision System Manager/Business Analyst who will classify the change based on change complexity as part of the effort estimation and timescale communicated to country.

* Where there are other systems dependencies go-live dates may be impacted.
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5. Decision System change execution

5.1 Documentation	5.1.1 Decision System manager/team to compile the Strategy Changes Requirement Document - SCRD which is consisted of 2 parts (Refer to Appendix 2 for SCRD template).
	5.1.2 **Part A:** This is completed by the CDS and handed over to the business. The document includes the following : • Missing data elements • Complexity of the change • Timelines for implementation • Recommended number of test cases for country to perform • All scoped changes and expected system behavior post change execution • Any 'Regulatory' related changes • Any 'Scorecard' related changes
	5.1.3 **Part B:** This is prepared by the CDS team to transform business requirements to Decision System technical specs/solution. This is internal to the CDS team.
5.2 SCRD walkthrough	5.2.1 Walk through of the SCRD Part A with the team which raised the change request. This is to ensure: • Changes have been accurately understood. • Communicate SCRD to country stakeholders and agree the expected system behaviour after change execution. This walkthrough is minuted by the CDS team under Part A of the SCRD document.

5.2.2 SCRD Part B which is internal to the CDS team will commence and will reflect the minutes of the SCRD walkthrough.

Internal Testing to be executed where possible to ensure there are no evident gaps in change execution from an e2e Decision System function and is free of bugs and quality deployment.

For countries with G3 NBSM (e.g. HK, ID, and UAE), Internal Testing will be performed using Automated Regression Tool, whenever available. The tool will:

- Perform e2e test on NBSM decision flow

- Compare internal test tool output against production data

- Generate internal test report on differences found during testing

A 100% check will be done on the documentation and solution changes by an independent person in the CDS team to ensure quality build. Once signed off (Refer to Appendix 3 for Internal Testing Results Report Sample) the system can be made available for UAT.

6. User Acceptance Testing (UAT)

6.1 General requirements	6.1.1 After the Decision System changes have been deployed to relevant system by PSS teams/COE Team, the RFC approver and related teams are to plan and execute overall test scenarios. They will also identify any additional type of testing that should be in scope as part of UAT test execution strategy.
6.2 Scenarios Planning	6.2.1 Below table is a guideline on UAT scenarios planning: **Guidelines for UAT test scenarios plan*** *Final count of UAT scenario shall be discussed du*ring SCRD walkthrough **N/A for countries on Global NBSM design, UAT results to be validated using internal testing tool
	6.2.2 Details points pertaining UAT scenarios planning: • Test executor should understand the scope and the expected outcome of change. • Both Positive and Negative test scenarios to cover borderline test scenarios. • Positive scenario is relevant test scenario where as all specified condition are met as per business requirement. • Negative scenario is relevant test scenario in which business requirement condition are not fully met. • Scenario that is not related with any business requirement conditions that are mentioned in Positive and Negative scenario. This will ensure no unintended implication of strategy change implementation.

Guidelines for UAT test scenarios plan*

	Simple	Moderate	Complex
Total Number of test case	2	7	15
Positive scenario	1**	3	8
Negative scenario	1**	2	5
Sanity Testing scenario	2	2	2

6.3 Roles and Responsibilities (R&R)	6.3.1 Below table is a guideline of R&R for UAT execution:

R&R for UAT execution

Activity List (High-level Guideline)	Country Team	Decision System Team	PSS Support Team	TP Data Team
RFC change execution		X		
UAT scenario preparation	X			
Identify TP data for UAT	X			
TP Data connectivity and integration			X	X
Test case data extraction support	X		X	
UAT Test Environment			X	
UAT test execution and verification	X	X		
UAT Issue resolution		X	X	
Go-Live Support	X	X	X	

6.3.2 Test Management guidelines on UAT execution to be followed as covered under 6.2.1 and 6.3.1

6.3.3 This is to ensure that country functional representatives involved in the testing have a clear sight of what results are expected from the UAT and also highlight potential defects during this process to the concerned unit.

6.4 Additional Steps	6.4.1 UAT RP's are responsible to report any anomalies identified during the test scenario to concerned support unit.
	6.4.2 UAT RP's to ensure all given scenarios are accurately executed during the scheduled UAT test window.

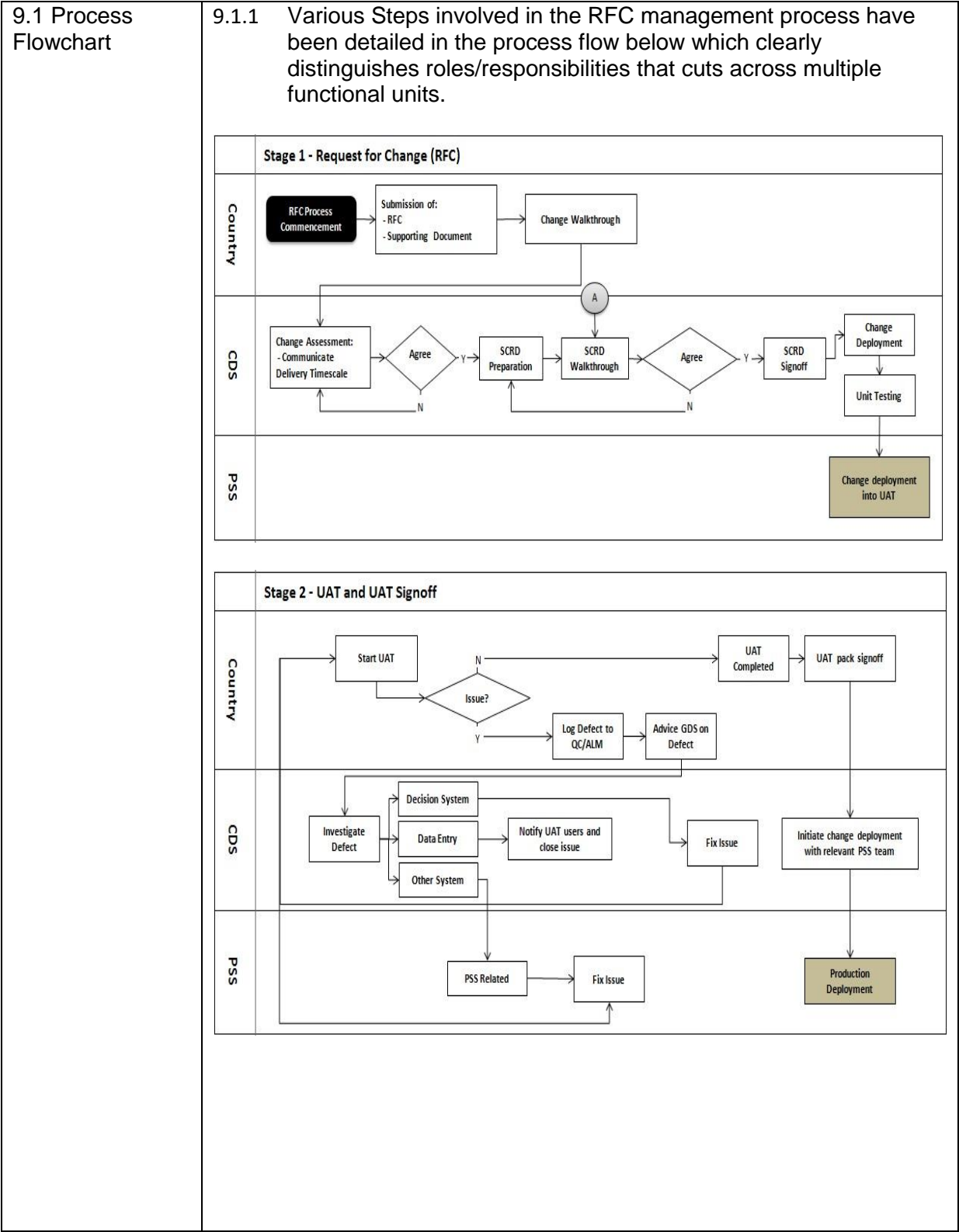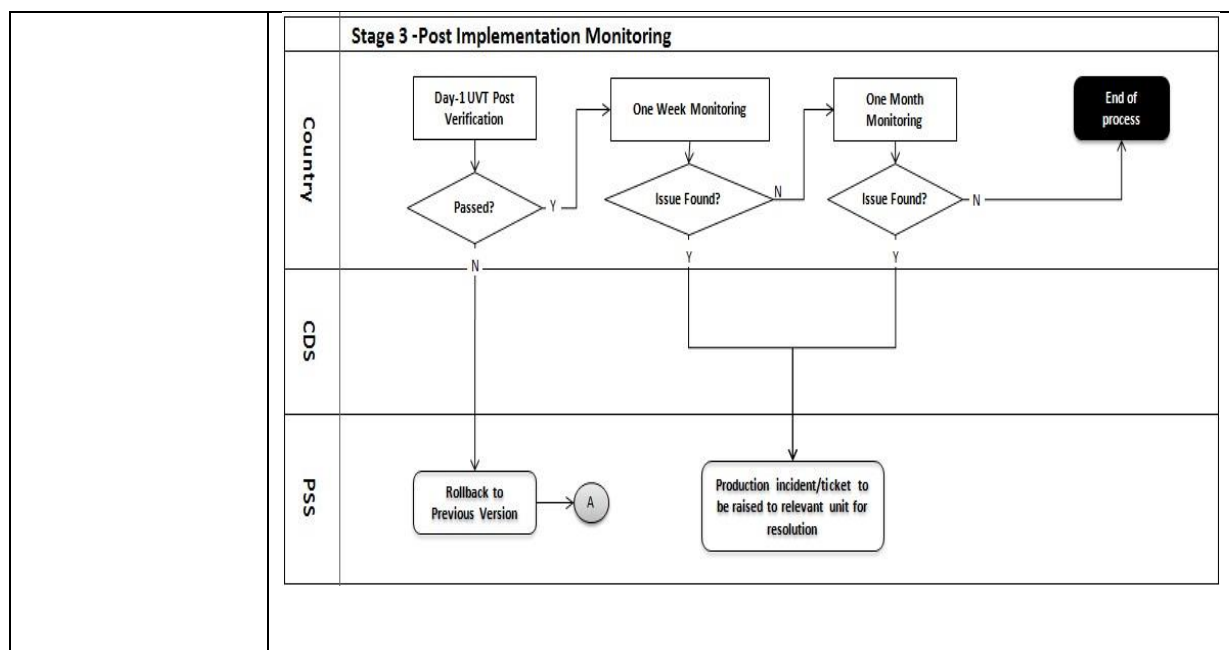|	6.4.3	UAT RP's are responsible to report any anomalies identified during the test scenario to concerned support unit.
	6.4.4	UAT RP's to ensure all given scenarios are accurately executed during the scheduled UAT test window.
	6.4.5	6.4.5 In the event that UAT cannot be completed as per the release schedule and an extension is not possible such change will have to be moved to the next scheduled window available.

7. UAT Signoff

7.1 Steps	7.1.1 The authorized approvers of the RFC should ensure UAT results are documented in the UAT sign off pack (Refer to Appendix 4 for UAT Sign Off Pack Template). UAT pack for Projects will follow the project implementation policies and procedures.
	7.1.2 This pack should be sent to the CDS team by the RFC approver as confirmation that UAT is successful and that changes can be deployed into production. The pack can be sent by the initiator with confirmation from approver.
	7.1.3 The CDS team will work with the relevant PSS to release the changes into the production environment.

8. Post-Implementation Monitoring

8.1 Steps	8.1.1 The authorized approver of the RFC is responsible to monitor changes implemented for Day 1, week 1 and at least 30 days. Any production incident related to implemented change has to be logged with appropriate severity level based on impact.
	8.1.2 If all the scenarios are not observed during 30 days, monitoring period should be extended until all change scenarios are verified.
	8.1.3 The CDS team will seek confirmation from the authorized approver of the RFC at the end of 30 days. If there is no response a reminder will be sent post which it will be deemed as a successful implementation. The implementation will be closed by the CDS team. Confirmation is received by the initiator by keeping the approver in loop. This is applicable for all under Point 8.

9. Process Flowchart

9.1 Process Flowchart	9.1.1 Various Steps involved in the RFC management process have been detailed in the process flow below which clearly distinguishes roles/responsibilities that cuts across multiple functional units.
	Stage 1 - Request for Change (RFC) Country: RFC Process Commencement → Submission of: - RFC - Supporting Document → Change Walkthrough CDS: Change Assessment: - Communicate Delivery Timescale → Agree → (Y) SCRD Preparation → SCRD Walkthrough → Agree → (Y) SCRD Signoff → Change Deployment → Unit Testing (N loops) PSS: Change deployment into UAT
	Stage 2 - UAT and UAT Signoff Country: Start UAT → Issue? (N) → UAT Completed → UAT pack signoff; (Y) Log Defect to QC/ALM → Advice GDS on Defect CDS: Investigate Defect → Decision System / Data Entry / Other System → Notify UAT users and close issue → Fix Issue → Initiate change deployment with relevant PSS team PSS: PSS Related → Fix Issue; Production Deployment

Stage 3 - Post Implementation Monitoring

10. Acronyms and Definitions

10.1 Acronyms and Definitions	10.1.1		
		DS	Decision Systems
		CDS	Credit Decision System
		NBSM	New Business Strategy Manager (NBSM is a generic reference to NBSM v2, G3 and PowerCurve solutions)
		SM	Strategy Manager
		RFC	Request For Change
		CoE	Centre of Expertise
		CCH	Country Credit Head
		PSS	Production Support System
		QA	Quality Assurance
		RP	Responsible Party
		UAT	User Acceptance Test
		UVT	User Verification Test
		SCRD	Strategy Change Requirement Document
		SDS	Strategy Design Studio
		R&R	Roles and Responsibility
		PCO	Power Curve Origination
		PCSM	Power Curve Strategy Manager
		PCCM	Power Curve Customer Management

11. Appendices

Appendices

Appendix 1: RFC Document Template (v2.4)

 Refer Link

Appendix 2: SCRD Document Template (v2.3)

 Refer Link

Appendix 3: Internal Testing Results Report Sample

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Appendix 4: UAT Sign Off Pack Template (v2.3)

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12. Version Control Table

Name	Changes made	Approved by	Version number
Hiren Kapadia	Section 1.1.1 Updation of new decision system implemented **- Section 2.2.2 RFC Documentation and submission-** Aligned to current process followed - Section 4.2.1 **Indicative timescales for DS change execution Aligned to current process followed** - Section 6.1.1 Aligned to current process followed - Section 6.3.2 Aligned to current process followed. Reference removed to the Test Management guidelines Link - Section 6.4.3 Aligned to current process followed. Removed reference to HP-ALM System. - Section 7.1.1, 7.1.2 & 8.1.3 Aligned to current process followed - Renamed the document from Cps Chapter 12- Credit Decision System Standards to Retail Credit Decision System Standards	Rong Xiaomin	1
Hiren Kapadia	Change made in Inquiry Contact.	Rong Xiaomin	1.1
Hiren Kapadia	Alignment of next renewal date as per the minimum frequency (3 years) for mandatory review of standards as defined in Framework & Policy Governance Standards (FPGS).	Rong Xiaomin	1.2