

# Oracle Financial Services Deposit Insurance Calculations for Liquidity Risk Management User Guide



Release 8.1.2.0.0  
G35468-01  
October 2022

ORACLE®

Copyright © 2000, 2025, Oracle and/or its affiliates.

Primary Authors: (primary author), (primary author)

Contributing Authors: (contributing author), (contributing author)

Contributors: (contributor), (contributor)

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

# Contents

<b>1</b>	<b>About the Guide</b>	
1.1	Scope of the Guide	1
1.2	Intended Audience	1
1.3	What is New in this Release	1
1.3.1	Installing this Major Release	1
1.4	Access to Oracle Support	1
1.5	Related Information Sources	2
1.5.1	Additional Reference Documents:	2
<b>2</b>	<b>Introduction</b>	
2.1	Data Flow of DIC	1
2.2	Getting Started with OFS DIC LRM	1
<b>3</b>	<b>Run Management</b>	
3.1	Run Definition Parameters	1
3.1.1	Linked To	1
3.1.2	Run Definition Details	1
3.1.3	Run Parameters	1
3.2	Understanding Run Management Summary	1
3.3	Define a DIC Run	3
<b>4</b>	<b>FDIC Part 370 Calculations</b>	
4.1	Solution Process Flow	1
4.2	Prerequisites for Insurance Calculation	2
4.2.1	Identification of FDIC Insurance Eligible Accounts	2
4.2.2	Entity-based Insurance Calculation	3
4.2.2.1	Insurance after Mergers and Restructuring	3
4.2.3	Treatment of Deposits Denominated in Foreign Currencies	4
4.2.4	Recognition of Death of Parties	4
4.2.5	Pre-Insurance Determination	4
4.3	ORC Classification and Insurance Calculation	4

4.3.1	Single Accounts (SGL)	4
4.3.1.1	Insurance Limit	5
4.3.1.2	Process Flow	5
4.3.2	Joint Accounts (JNT)	7
4.3.2.1	Insurance Limit	7
4.3.2.2	Treatment in case of Death of co-owner	8
4.3.2.3	Process Flow	8
4.3.3	Certain Retirement Accounts (CRA)	9
4.3.3.1	Insurance Calculation	9
4.3.3.2	Process Flow	10
4.3.4	Employee Benefit Plans (EBP)	11
4.3.4.1	Insurance Calculation	12
4.3.4.2	Process Flow	12
4.3.5	Trust Accounts	14
4.3.5.1	Identification of Eligible Beneficiaries	15
4.3.5.2	Death of Beneficiaries	15
4.3.5.3	Life Estate Beneficiary Treatment	16
4.3.6	Revocable Trust Accounts (REV)	16
4.3.6.1	Grantors as Beneficiary	16
4.3.6.2	Beneficiary as Another Trust account	16
4.3.6.3	No Eligible Beneficiary	16
4.3.6.4	Insurance Limit	17
4.3.6.5	Process Flow	17
4.3.7	Irrevocable Trust Accounts (IRR)	19
4.3.7.1	Creation by Death of a Grantor of a Revocable Trust	20
4.3.7.2	Insurance Calculation	20
4.3.7.3	Process Flow	20
4.3.8	Business Accounts (BUS)	22
4.3.8.1	Insurance Calculation	23
4.3.8.2	Process Flow	23
4.3.9	Government Accounts (GOV)	24
4.3.9.1	Insurance Limit	24
4.3.9.2	Process Flow	25
4.3.10	Mortgage Servicing Accounts (MSA)	27
4.3.10.1	Insurance Limit	28
4.3.10.2	Process Flow	28
4.3.11	Accounts held by a Depository Institution as the Trustee of an Irrevocable Trust (DIT)	30
4.3.11.1	Insurance Limit	31
4.3.11.2	Process Flow	31
4.3.12	Annuity Contracts (ANC)	33
4.3.12.1	Insurance Limit	33

4.3.12.2	Process Flow	34
4.3.13	Public Bond Accounts (PBA)	35
4.3.13.1	Insurance Limit	35
4.3.13.2	Process Flow	36
4.3.14	Custodian Accounts for American Indians (BIA)	37
4.3.14.1	Insurance Limit	37
4.3.14.2	Process Flow	38
4.3.15	Accounts of an Insured Depository Institution Pursuant to the Bank Deposit Financial Assistance Program of Energy (DOE)	39
4.3.15.1	Insurance Limit	39
4.3.15.2	Process Flow	40
4.4	Insurance Allocation	41
4.4.1	Liquidity Priority Order	41
4.4.2	Balance Order	42
4.4.3	Joint Accounts and Revocable Trusts	42
4.5	Pending Accounts	42
4.6	Alternative Recordkeeping	43

## 5 Perbadanan Insurance Deposit Malaysia

---

5.1	Insurance Allocation	1
5.1.1	Identification of Insurance Eligible Accounts	1
5.2	Allocation of Deposit Insurance	2

## 6 Singapore Deposit Insurance Corporation

---

6.1	Insurance Allocation	1
6.1.1	Identification of Insurance Eligible Accounts	1
6.1.2	Allocation of Deposit Insurance	2
6.1.3	Identification of Deposit Stability	6

## 7 Deposit Protection Scheme by the Hong Kong Deposit Protection Board

---

7.1	Insurance Allocation	1
7.1.1	Identification of Insurance Eligible Accounts	1
7.1.2	Allocation of Deposit Insurance	2
7.1.3	Identification of Deposit Stability	2

## 8 Regulation Addressed through Rules

---

8.1	Preconfigured Regulatory Scenarios	1
-----	------------------------------------	---

9	User Roles and Access	
<hr/>		
10	Appendix A – User Configuration and Settings	
<hr/>		
10.1	Standard Reclassifications	1
10.1.1	Standard Product Type Reclassification	1
10.1.2	Standard Party Type Reclassification	1
10.1.3	Insurance Party Type Reclassification	1
<hr/>		
11	Performance Improvement Guidelines for DIC	
<hr/>		

# Document Control

**Table    Document Control**

Version Number	Revision Date	Change Log
01	Created: July 2022	This is the first version of OFS Deposit Insurance Calculations for Liquidity Risk Management (DICLRM) Release 8.1.2.0.0.
02	Updated: September 2022	The document is updated for Hybrid Run type.

# 1

## About the Guide

This section provides a brief description of the scope, the audience, the references, the organization of the user guide, and conventions incorporated into the user guide.

### 1.1 Scope of the Guide

The objective of this user guide is to provide comprehensive knowledge about the regulatory calculations supported in the Oracle Financial Services Deposit Insurance Calculations for Liquidity Risk Management, Release 8.1.2.2.0.

### 1.2 Intended Audience

This manual is intended for the following audience:

- Business User: This user reviews the functional requirements and information sources, like reports.
- Strategists: This user identifies strategies to maintain an ideal liquidity ratio and liquidity gap based on the estimated inflow and outflow of cash.
- Data Analyst: This user is involved with cleaning, validation, and importing of data into the OFSAA Download Specification Format.

### 1.3 What is New in this Release

The Oracle Financial Services Deposit Insurance Calculations for Liquidity Risk Management Release

8.1.2.2.0 is an enhancement of the existing Oracle Financial Services Deposit Insurance Calculations for Liquidity Risk Management Release 8.1.2.0.0.

The new feature/enhancement introduced in this release are:

- Introduced the Run Process Selection.

#### 1.3.1 Installing this Major Release

For detailed instructions to install this Major Release, see the [Oracle Financial Services Liquidity Risk Solution Installation Guide Release](#).

### 1.4 Access to Oracle Support

Oracle customers have access to electronic support through [My Oracle Support](#). For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info>

OR visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

## 1.5 Related Information Sources

We strive to keep this document and all other related documents updated regularly; visit the [OHC Documentation Library](#) to download the latest version available. The list of related documents is provided here:

### [OHC Documentation Library](#) for **OFS Liquidity Risk Solution**

- OFS Liquidity Risk Solution Application Pack Release Notes
- OFS Liquidity Risk Solution Application Pack Installation Guide
- OFS Liquidity Risk Solution Release Analytics User Guide
- OFS Liquidity Risk Measurement and Management Release User Guide [OHC Documentation Library](#) for **OFS AAI Application Pack**:
- OFS Advanced Analytical Applications Infrastructure (OFS AAI) Application Pack Installation and Configuration Guide
- OFS Analytical Applications Infrastructure User Guide

### 1.5.1 Additional Reference Documents:

- [OFSAA Licensing User Manual, Release](#)
- [OFS Analytical Applications Technology Matrix](#)
- [OFS Analytical Applications Infrastructure Security Guide](#)
- [OFS LRS Security Guide](#)
- [Oracle Financial Services Analytical Applications Infrastructure Cloning Guide](#)
- [OFS LRS Cloning Guide](#)
- [OFSAAI FAQ Document](#)

# 2

## Introduction

Deposit Insurance Schemes have been implemented in most countries, to safeguard the interest of the depositors in the event of bankruptcy of the depository institution. With the introduction of regulations such as Basel III, the insured portion of a deposit is required to be identified and treated appropriately for liquidity risk purposes. Regulations, such as FDIC 370, mandate banks to identify and report the insurance coverage at an account level for various ownership rights and capacities, to ensure that the insurer pays out the amount due to depositors promptly.

OFS Deposit Insurance Calculations for Liquidity Risk Management (OFS DICLRM) covers Deposit Insurance Calculations for the liquidity coverage ratio and other calculations required for Liquidity Risk Management. The application identifies insurance eligible accounts under a particular Deposit Insurance Scheme, the right, and the capacity under which these accounts are held and the insurance limit provided by the country-specific insurer for each account. It allocates the insurance limit to the account level based on the ownership right and capacity and identifies the insured and uninsured portion of the account.

### 2.1 Data Flow of DIC

The [data flow diagram](#) is for illustrative purpose only.

### 2.2 Getting Started with OFS DIC LRM

To access the Deposit Insurance Calculations for Liquidity Risk Management Application you need to log into the OFSAAI Environment using the following window. Select the language and enter your credentials to log in.

1. When you log into OFSAAI, the OFSAA Home page is displayed.
2. Click **Financial Services Deposit Insurance Calculations for Liquidity Risk Management**. The Home page is displayed.

**Table 1: OFSAA Home Screen Icons and Descriptions**

Icons	Description
DICUSER	Click this button to select the following options: <b>Preferences, About, Change Password</b> , or to <b>logout</b> .
Application Icon	Click the icon and select the <b>Financial Services Deposit Insurance Calculations for Liquidity Risk Management</b> where the DICLRM Application is installed.
Administration Icon	Click this icon to view the Administration related tools such as <b>Translation Tools</b> and <b>Process Modelling Framework</b> .
Last Login Details	Click this icon to view details of the last login and last failed login date and time.
Common Object Maintenance	Common Object Maintenance is an integral part of the Infrastructure system and facilitates system administrators to define the Security Framework with the capacity to restrict access to the data and metadata in the warehouse, based on a flexible, fine-grained access control mechanism. See the <a href="#">OFS Analytical Applications Infrastructure User Guide</a> for details.

Deposit Insurance Calculation Liquidity Risk Management Link	Click this link to view the options under DICLRM.
--	---

# 3

## Run Management

The Run Management screen of the LRS pack allows you to define, approve, and execute Runs. All Runs are defined in the Run Management window of the application. The Run, once saved and approved, is registered in the Run section of the Rules Framework in Oracle Financial Services Analytical Applications Infrastructure.

### 3.1 Run Definition Parameters

The Run Definition window sections for defining parameters.

#### 3.1.1 Linked To

Specify the following details:

- **Folder:** Select the **Folder** which is specific to the Run definition.
- **Access Type:** Choose the access type option, Read/Write, or Read-Only.

#### 3.1.2 Run Definition Details

Specify the following details:

- **Run Name:** Specify the Run name.
- **Run Description:** Enter the Run description.

#### 3.1.3 Run Parameters

Specify the Run parameters for each Run definition in this section. It includes:

- **Run Type:** The Run Type for Deposit insurance Calculations is by default a **Contractual Run**.

### 3.2 Understanding Run Management Summary

In the OFSAA Home screen select **Financial Services Deposit Insurance Calculations for Liquidity Risk Management**.

To open the Run Management window, select **Deposit Insurance Calculations Liquidity Risk Management** and then select **Run Management** on the Left-Hand Side (LHS) menu.

**Figure 3-1 Run Management Summary**

Run Management Summary As of Date: 05/05/2018

Search

Run Name  Folder LRM806SEG

Purpose  Run Type

Approval Status

Run Name	Purpose	Run Type	Modified By	Modification Date	Approved By	Approved Date	Folder	Approval Status
EBA Contractual 01	EBA Delegated Act Liquidity Ratio Calculation	Contractual	LRM806IUT	05/07/2018 15:10:28	LRM806IUT	05/07/2018 15:10:40	LRM806SEG	Approved
RBI Contractual Run 001	RBI Basel III Liquidity Ratio Calculation	Contractual	LRM806IUT	05/07/2018 13:39:30	LRM806IUT	05/07/2018 13:39:55	LRM806SEG	Approved
EBA - Delegated Act - Liquidity Coverage Ratio Run	EBA Delegated Act Liquidity Ratio Calculation	Business-As-Usual	SYSADMN	12/06/2017 15:37:51	SYSADMN	07/07/2016 00:00:00	LRM806SEG	Approved
RBI Regulatory Ratios Run	RBI Basel III Liquidity Ratio Calculation	Business-As-Usual	SYSADMN	12/06/2017 15:37:51	SYSADMN	12/06/2017 00:00:00	LRM806SEG	Approved
EBA - Delegated Act - Contractual Run	EBA Delegated Act Liquidity Ratio Calculation	Contractual	SYSADMN	12/06/2017 15:37:51	SYSADMN	10/19/2015 00:00:00	LRM806SEG	Approved
RBI NSFR Computation Run	RBI Basel III Liquidity Ratio Calculation	Business-As-Usual	SYSADMN	12/01/2017 14:56:32	SYSADMN	12/01/2017 00:00:00	LRM806SEG	Approved
RBI Liquidity Coverage Ratio Run V2	RBI Basel III Liquidity Ratio Calculation	Business-As-Usual	SYSADMN	07/12/2017 15:47:42	SYSADMN	07/12/2017 00:00:00	LRM806SEG	Approved
RBI LCR Contractual Run V2	RBI Basel III Liquidity Ratio Calculation	Contractual	SYSADMN	04/26/2017 20:00:00	SYSADMN	04/26/2017 00:00:00	LRM806SEG	Approved
EBA DA - Contractual Run	EBA Delegated Act Liquidity Ratio Calculation	Contractual	SYSADMN	02/16/2017 11:00:00	SYSADMN	02/16/2017 00:00:00	LRM806SEG	Retired
BIS NSFR Computation	Basel III Liquidity Ratios Calculation	Business-As-Usual	SYSADMN	12/26/2016 10:51:32	SYSADMN	12/26/2016 00:00:00	LRM806SEG	Approved
BIS - Liquidity Ratio Run	Basel III Liquidity Ratios Calculation	Business-As-Usual	SYSADMN	11/14/2016 18:17:10	SYSADMN	11/14/2016 00:00:00	LRM806SEG	Approved

The Run Management Summary window of the DICLRM application allows you to define, approve, and execute Runs.

**Table 3-1 Fields in the Run Management Summary Window and their Descriptions**

Field/Icon	Description
Search	This icon allows you to search the Run definition based on the search criteria specified. Search criteria may include a combination of Run Name, Folder, Approval Status, and Run Type. The Run definitions displayed in the Run Management Summary table are filtered based on the search criteria specified on the clicking this icon.
Reset	This icon allows you to reset the Search section to its default state that is, without any selections. Resetting the Search section displays all the existing Run definitions in the Run Management Summary table.
Run Name	This field allows you to search the pre-defined Run based on the Run name. Enter the Run name.
Folder	This field allows you to search for the pre-defined Run definitions based on the selected folder. This field displays a list of folders that you have access to as a drop-down list. Selecting a folder from the drop-down list displays only those Run definitions that are defined within the selected folder/segment in the Run Management Summary table.
Run Type	The Run Type for Deposit insurance Calculations is by default a <b>Contractual Run</b> .
Approval Status	This field allows you to search the pre-defined Run based on approval status. This drop-down list displays the statuses that you have access to, that is, Approved, Draft, In Review, Open, Pending Approval or Retired. Click the drop-down list to select Approved or Rejected status. Selecting a status from the drop-down list displays only those Run definitions that are defined within the selected status in the Run Management Summary table.

**Table 3-2 Run Management – Search**

List of Runs
--------------

Table 3-2 (Cont.) Run Management – Search

Icon Name	Description
Add	Use this icon to define or add a new Run.
View	Use this icon to view the selected Run definitions.
Edit	Use this icon to edit the selected Run definition. Once the definition is approved, it cannot be edited in the case of Run definitions.
Delete	Use this icon to delete the selected Run definition.
Copy	Use this icon to copy a definition and resave it as a new definition.
Run Execution Parameters	Use this icon to specify execution parameters and execute the Run from the Run Execution Parameters screen. Select the check-box against a Run definition and click the Run Execution Parameters icon to view the Run Execution Parameter Specification window.
Run Execution Summary	This icon displays the Run Execution Summary window. The Run parameters specified as part of the Run Definition window are displayed in an un-editable form in the Run Parameters window. The entire list of executions and their details are displayed for the selected definition on this screen.
Workflow Summary	The icon displays the approval summary for the definition.

## 3.3 Define a DIC Run

You can define a new Run in the **Run Definition** window.

To define a DIC Run, follow these steps:

1. Click the **Add** icon on the **Run Management** window.  
The **Run Definition** window is displayed where you can define a Run.
2. In the **Linked To** section, follow these steps:
  - a. Select the **Folder** from the drop-down list which is specific to the Run definition. The Run definitions are linked to a segment.
  - b. Select **Access Type**. The values are either Read/Write or Read Only.
3. In the **Run Definition Details** section, follow these steps:
  - a. Enter the **Run Name** which is unique across Infodoms.
  - b. Enter the **Run Description**.

### Note

Both the Run Name and Run Description fields allow special characters.

4. In the **Run Parameters** section, follow these steps:
  - a. Select the **Purpose – Deposit Insurance Calculations**.

### Note

The value in the Run Type field is Contractual by default for DIC.

- b. Select one of the options from the **Deposit Insurance Scheme** section:
- Perbadanan Insurans Deposit Malaysia
  - Hong Kong Deposit Protection Board
  - Singapore Deposit Insurance Corporation
  - Federal Deposit Insurance Corporation

**Figure 3-2 Run Definition - DIC Run**

The screenshot shows the 'Run Definition' form for a 'DIC Run'. The breadcrumb trail is 'Liquidity Risk Management > Run Definition > Edit'. The form is divided into several sections:

- Linked To:** Includes a 'Folder' dropdown set to 'LRM807SEG' and an 'Access Type' section with radio buttons for 'Read Only' and 'Read/Write' (selected).
- Run Definition Details:** Includes a 'Run Name' field with 'FDIC1' and a 'Run Description' field.
- Run Parameters:** Includes a 'Purpose' dropdown set to 'Deposit Insurance Calculations' and a 'Run Type' dropdown set to 'Contractual'.
- Deposit Insurance Scheme:** Includes a checkbox for 'FDIC' which is checked.

At the bottom of the form are four buttons: 'Save', 'Send for Approval', 'Approval Summary', and 'Close'.

5. Click **Save**.
6. The **Run** is saved in the Run Framework of Oracle Financial Services Analytical Applications Infrastructure.
7. Select a Run Definition from the **Run Management Summary** section and then click the **Edit** icon . The Edit page is displayed.

In the **Run Process Selection** section, all the run processes are selected by default.

**Note**

You can select or unselect the Run Processes listed in the **Run Process Selection** only before sending the Run Definition for Approval.

**Note**

A Run is available for execution only after it has been approved.  
Once approved, you cannot edit the Run parameters.

See the [Oracle Financial Services Liquidity Risk Measurement and Management User Guide](#) on the OHC documentation library for details about the following:

- Run Definition Approval Process
- Adding a Custom Task to a Run
- Preparing for Execution
- Run Execution Parameters

**Note**

Back Dated execution is enabled for the Deposit Insurance

Calculation (FDIC) Run Purpose. See the [Oracle Financial Services Liquidity Risk Measurement and Management User Guide](#) on the OHC Documentation Library for details.

# 4

## FDIC Part 370 Calculations

Most countries have implemented deposit insurance schemes to safeguard the interest of the depositors if bankruptcy of the depository institution. With the introduction of regulations such as Basel III, the insured part of a deposit must be identified and treated appropriately for liquidity risk purposes. Recent regulations, such as FDIC 370, mandating banks to identify and report the insurance coverage at an account level for various ownership rights and capacities to ensure that the insurer pays out the amount due to depositors promptly.

OFS Deposit Insurance Calculations for Liquidity Risk Management covers deposit insurance calculations for liquidity coverage ratio and other calculations required for Liquidity Risk Management. The application identifies insurance eligible accounts under a particular deposit insurance scheme.

The right and capacity under which these accounts are held, and the insurance limit provided by the country-specific insurer for each account. It allocates the insurance limit to the account level based on the ownership right and capacity and identifies the insured and uninsured portion of the account.

Specifically, this release addresses the FDIC 370 guidelines, which will be followed by coverage for other countries.

The approach to the guidelines for the bank's deposits is split into three aspects:

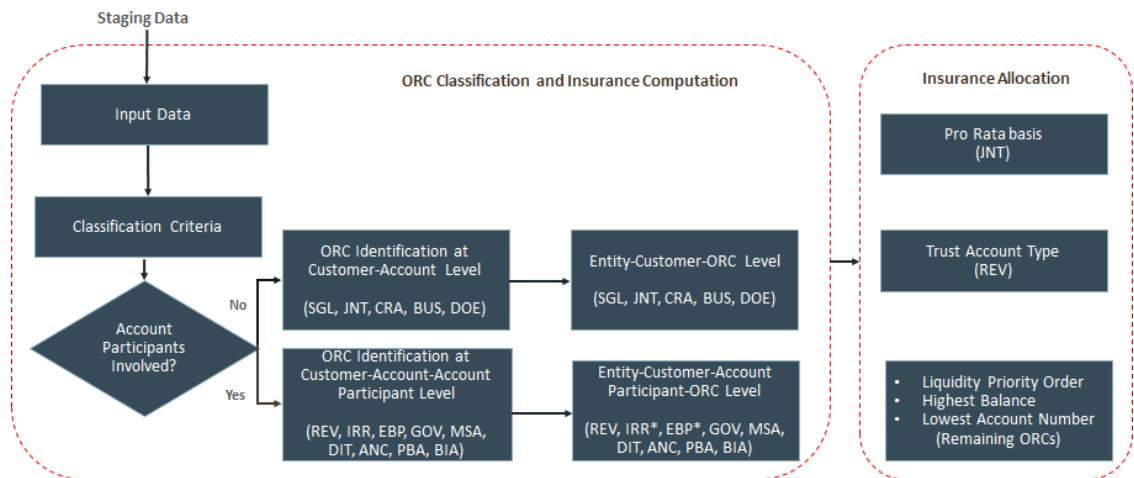
- [Prerequisites for Insurance Calculation](#)
- [ORC Classification and Insurance Calculation](#)
- [Insurance Allocation](#)

For brokered deposits, the bank may provide data in a reduced format as per Alternative Recordkeeping requirements. For such accounts, the ORC Classification is a download in OFS DICLRM. The Insurance calculation and the allocation process for these accounts are done with the bank's accounts.

### 4.1 Solution Process Flow

For the Bank's accounts, the classification and calculation process to comply with FDIC Part 370 guidelines is as shown in the following diagram:

**Figure 7: Solution Process Flow**

**Figure 4-1 Solution Process Flow**

## 4.2 Prerequisites for Insurance Calculation

Before classifying accounts and calculating the insurance, you must determine the following prerequisites. They are used during ORC classification or insurance determination. These include identifying FDIC Insurance eligible accounts, Identification and treatment of merged entities, Pre- insurance computations, and Treatment for deposits denominated in foreign currencies.

### 4.2.1 Identification of FDIC Insurance Eligible Accounts

The first step in determining insurance is to identify the subset of deposit accounts that are eligible for insurance coverage from the FDIC. Only FDIC Insurance-eligible accounts go through the FDIC Part 370 classification criteria and insurance calculation.

A deposit account is identified as eligible for deposit insurance coverage by FDIC based on the following criteria:

- Account domicile
- Domicile of the covered institution or its branch
- Whether the customer is internal to the organization structure or not

Additionally, identification and inclusion of overseas military banking facilities for the United States are also treated under the eligibility criteria.

#### **Note**

Deposits held by a depositor in the same right and capacity with multiple insured entities or the US branch of foreign entities are covered separately per entity for all the US branches of each foreign legal entity.

Only deposit accounts that have a balance greater than zero are considered for deposit insurance.

Prepaid Cards and Credit Cards with excess balance are also considered as eligible accounts for deposit insurance.

## 4.2.2 Entity-based Insurance Calculation

FDIC Insurance coverage is extended at a legal entity level. This indicates that all the accounts belonging to the same counterparty, same right and capacity, and the same legal entity are aggregated for insurance determination.

In a domestic scenario, the coverage is at the legal entity level, which indicates that the branches of a legal entity are not covered separately but are included in the legal entity coverage.

In certain instances, wherein a branch is covered separately from the legal entity, such as a branch of a foreign legal entity, the application provisions identifiers to capture and process this information. The granularity of the Insurance calculation as per FDIC Part 370 is as follows:

- Insured Legal Entity/Separately insured Branch: Ownership Right and Capacity - Customer  
In this case, the beneficial owner is the customer.
- Insured Legal Entity/Separately insured Branch: Ownership Right and Capacity - Customer – Beneficial Party

In this case, the beneficial owner is a party other than the customer. The insurance is provided on a pass-through basis.

### ① Note

- Banking facilities in overseas military bases are considered as domestic and treated accordingly. That is, FDIC covers all the domestic branches of a domestic legal entity along with the legal entity itself. This includes overseas military operations of a domestic legal entity. There is no separate coverage at the branch level.
- Deposits held in multiple US branches of a foreign legal entity, in the same right and capacity, are aggregated together for FDIC insurance. The coverage is not at an individual US branch level.

### 4.2.2.1 Insurance after Mergers and Restructuring

During restructuring, such as mergers, the FDIC has a six months grace period in recognizing the financial institution for insurance calculations. If two depository institutions, whether insured entities or separately insured branch and entities (in the case of US branches of foreign banks), merge or go through an acquisition, the deposit treatment for these institutions are as follows:

- If the restructuring occurred less than or equal to 6 months from the As of Date:  
Treat the two entities as separate entities and compute the deposit insurance for the accounts held by them separately.
- If the restructuring occurred greater than 6 months from the As of Date:
  1. If there are term deposits whose maturity is greater than 6 months from the restructuring date and are not renewed within 6 months, then the application treats them separately from the acquiring entity for deposit insurance calculation purposes till the maturity of such deposits.
  2. If there are term deposits that are renewed within 6 months of the restructuring on identical terms as the original terms, the application treats them separately from the acquiring entity for deposit insurance calculation purposes till the first maturity.

## 4.2.3 Treatment of Deposits Denominated in Foreign Currencies

Deposits held in foreign currencies are covered by FDIC, provided they meet other criteria for insurance eligible accounts. The application determines deposit insurance in terms of US dollars for all accounts, including foreign currency denominated deposits. The currency conversion rates used for this purpose are the 12 PM rates, meaning noon buying rates for cable transfers quoted by the Federal Reserve Bank of New York, unless a different source is specified under the agreement. The exchange rate source for the conversion of foreign currency-denominated deposits is captured separately from the rates used for other computations at an insured entity/branch level.

## 4.2.4 Recognition of Death of Parties

This section applies to the FDIC Customer type *Individual* only. FDIC provides a six months grace period for recognizing an individual customer's death for deposit insurance coverage. That is an individual is recognized as dead only after 6 months from the date of his/her death for deposit insurance purposes. This grace period applies to customers only and does not apply to account participants such as beneficiaries.

## 4.2.5 Pre-Insurance Determination

In this process, an initial aggregation is done by the customer. If a customer's total funds in all accounts held at a Legal Entity level is less than the Standard Maximum Deposit Insurance Amount (SMDIA) and the setup master entry for the component code FDIC\_DEP\_AGGR\_option is Yes, the initial aggregation is done at a Customer level. When the option is chosen as No, the aggregation is only done at an Ownership Right and Capacity (ORC) level.

# 4.3 ORC Classification and Insurance Calculation

A deposit account, if eligible for deposit insurance coverage from FDIC should be classified into one of the 14 ORCs as listed by FDIC. The classification is done using multiple criteria, such as customer type, fiduciary relationship criteria, deposit primary purpose, and so on.

After the classification is done, the insurance calculation is completed at a granularity level by the ORC to which the record is classified. For each ORC, the aggregated amounts are compared to the SMDIA. If the aggregated amount is lesser than the SMDIA, then the entire amount is insured, else, the funds up to SMDIA are insured and the portion exceeding the SMDIA is uninsured.

## 4.3.1 Single Accounts (SGL)

Coverage under this ORC extends to accounts that are either owned by one natural person or treated as if one natural person owns them. The single accounts category includes the following:

- Individually owned accounts
- Accounts in the name of a deceased person or the estate of a deceased person
- Sole proprietorship accounts

The following are also included in SGL ORC:

- Retained Interest from Irrevocable Trust

- The interest of Ineligible beneficiaries for Revocable Trust
- The interest of Ineligible beneficiaries for Irrevocable Trust
- Single accounts for Taxes and Insurance premiums of mortgagors
- Business accounts not engaged in independent activity
- Joint accounts where the number of owners has reduced to one

SGL ORC is also the default ORC for any FDIC Insurance eligible account that has all its data elements available. However, it does not fit the classification criteria for the other ORCs. For example, if an account has any data elements missing, it will be marked as 'Pending'. However, if an account has all the data elements present, but does not fit into any ORC bucket, then it is tagged as SGL.

#### 4.3.1.1 Insurance Limit

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied in the following way:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer level**

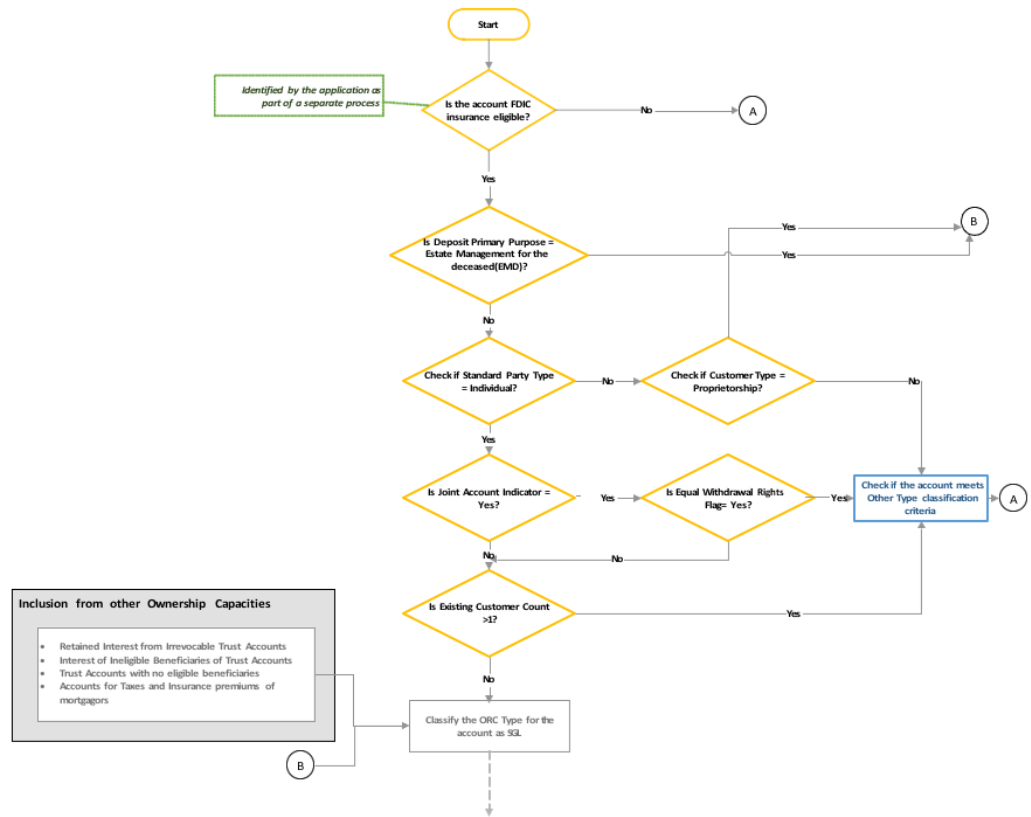
A deposit held by an individual in his or her capacity in a single account is insured for a maximum of up to the SMDIA.

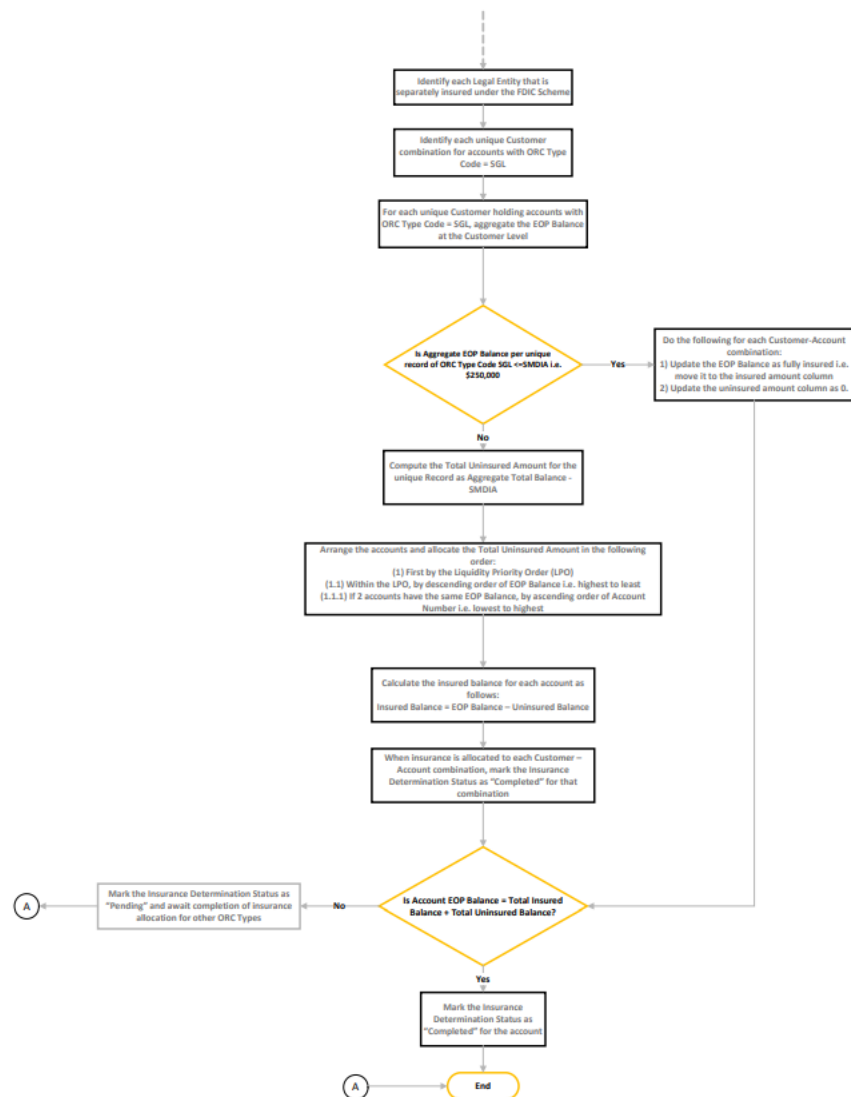
#### 4.3.1.2 Process Flow

The process flow for Single Accounts (SGL) ORC Type Classification is as follows.

Figure 4-2 Process Flow - SGL ORC Type Classification

## SGL ORC Type Classification



**Figure 4-3 Process Flow - SGL ORC Type Classification (continued)****SGL ORC Type Insurance Calculation**

## 4.3.2 Joint Accounts (JNT)

A joint account is a deposit owned by two or more individuals who meet the following criteria:

1. Each co-owner must be a natural person.
2. All co-owners must have equal withdrawal rights.
3. All co-owners have signed the signature card or equivalent.

### 4.3.2.1 Insurance Limit

The Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer level**

For JNT, this translates to:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Co owner level**

Each co-owner of a joint account is insured up to SMDIA for the combined amount of his or her interests in all joint accounts at the same IDI. In determining a co-owner's interest in a joint account, the Application assumes each co-owner is an equal owner.

**4.3.2.2 Treatment in case of Death of co-owner**

Given that the FDIC does not distinguish coverage based on whether the Joint accounts are held under 'Rights of survivorship' or 'Tenants in common', the application treats death across all joint accounts in the same manner. If a co-owner dies, the deposit balance applicable to the co-owner is distributed to the other co-owners.

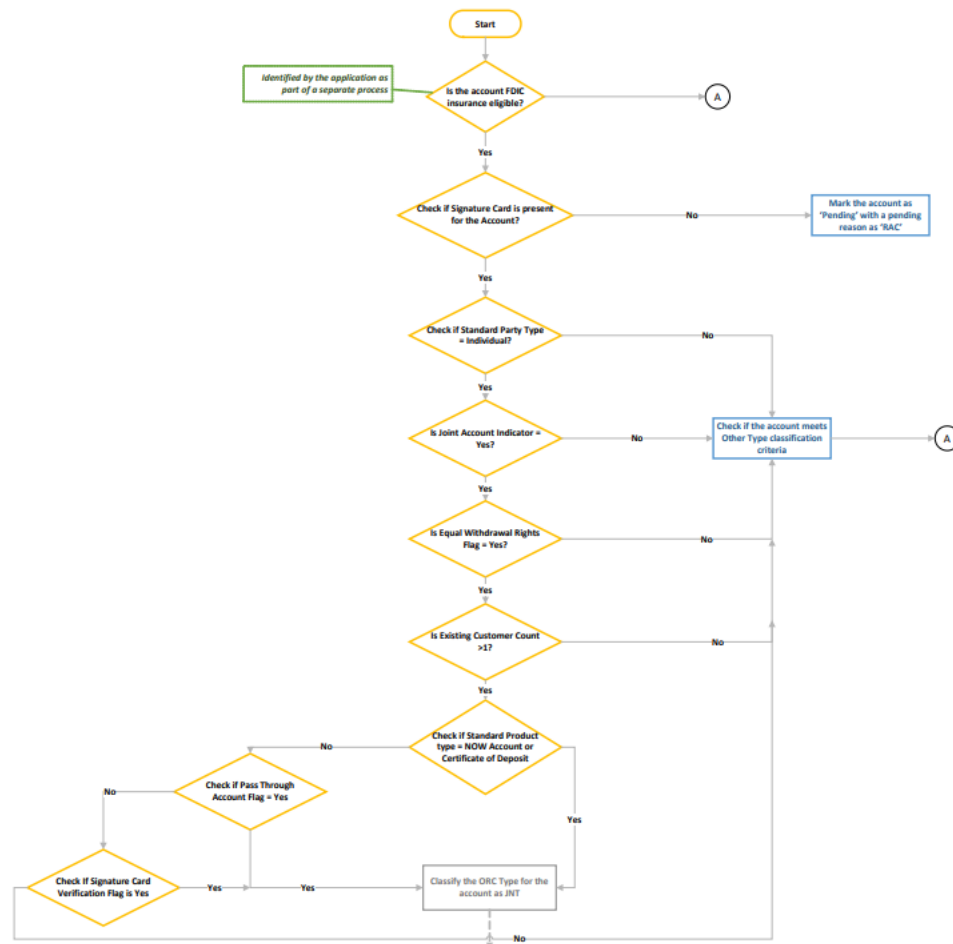
For a Joint account on the death of a co-owner, if the number of surviving owners is not more than 1, then such accounts revert to be treated in the SGL category.

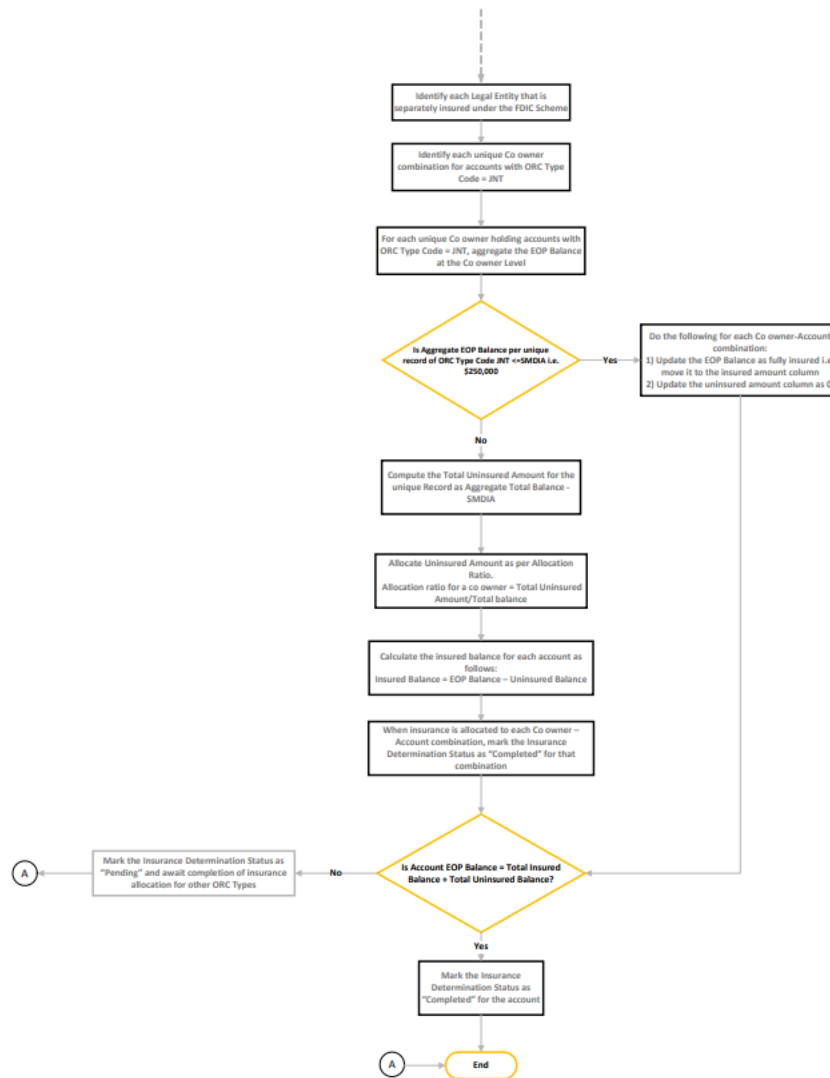
**4.3.2.3 Process Flow**

The process flow for Joint Accounts (JNT) ORC Type classification is as follows.

**Figure 4-4 Process Flow - JNT ORC Type Classification**

**JNT ORC Type Classification**



**Figure 4-5 Process Flow - JNT ORC Type Classification (continued)****JNT ORC Type Insurance Calculation**

### 4.3.3 Certain Retirement Accounts (CRA)

This Ownership Right and Capacity include Individual Retirement Accounts (IRA) such as Traditional and Roth IRAs, Savings Incentive Match Plan for Employees (SIMPLE) IRAs, Simplified Employee Pension (SEP) IRAs, and Section 457 deferred compensation plans. This also includes self-directed Keogh Plans and self-directed Defined Contribution plans.

#### 4.3.3.1 Insurance Calculation

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer level**

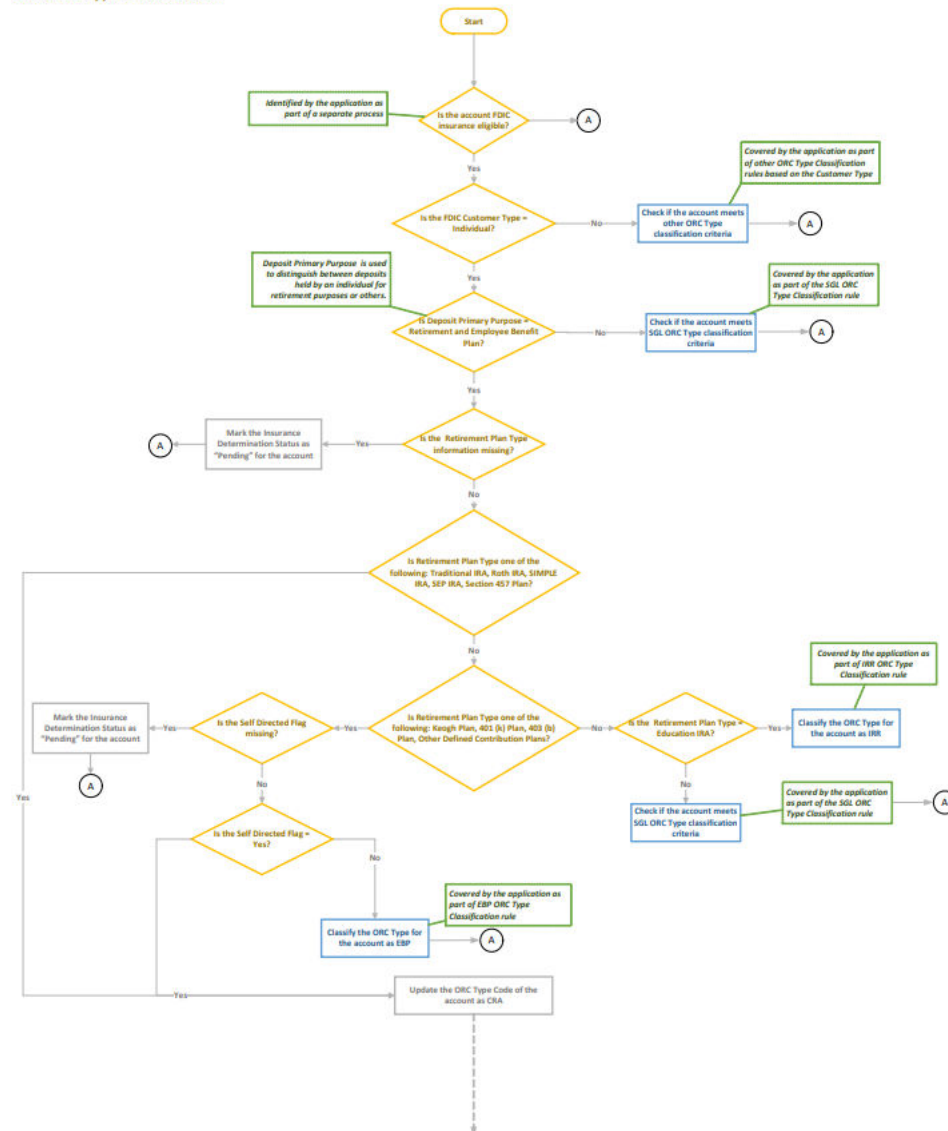
Insurance calculation for this ORC is done at this level irrespective of whether the customer has named beneficiaries or not.

### 4.3.3.2 Process Flow

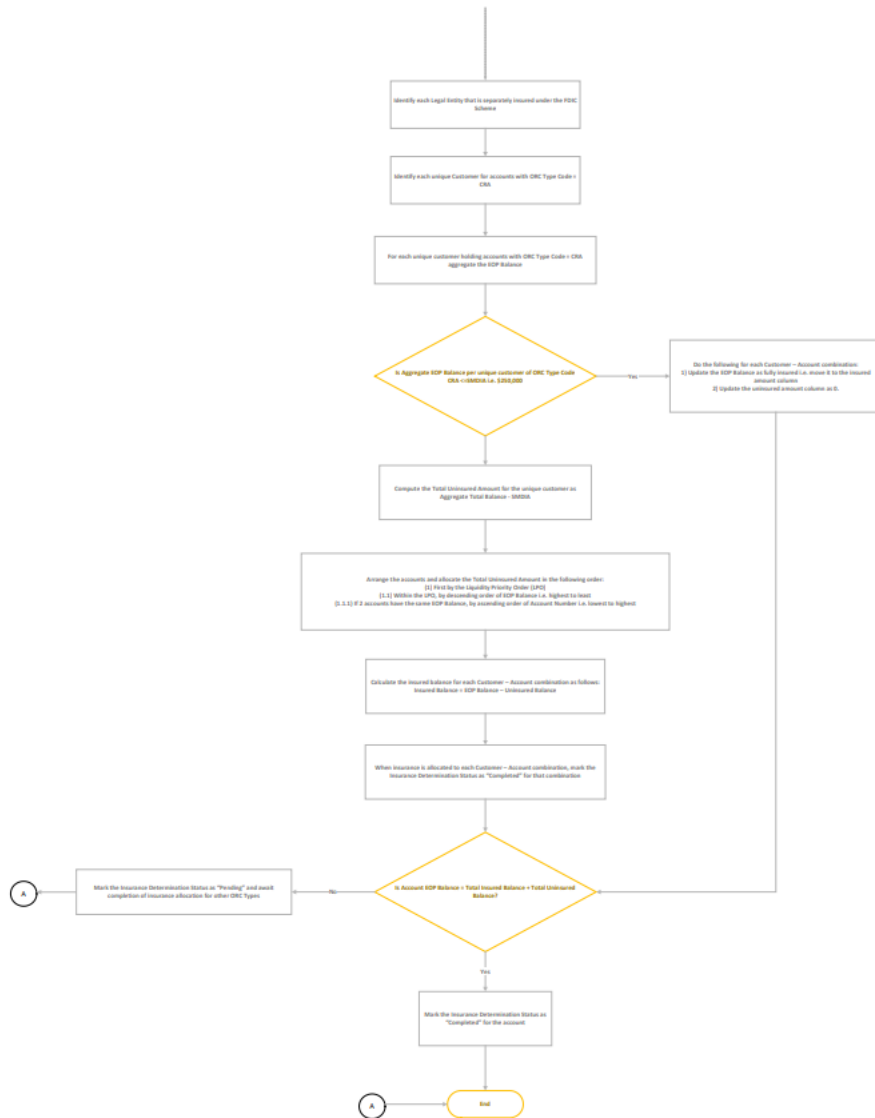
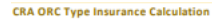
The process flow of Certain Retirement Accounts (CRA) is as follows.

**Figure 4-6 Process Flow - CRA ORC Type Classification**

#### CRA ORC Type Classification



**Figure 4-7 Process Flow - CRA ORC Type Classification**



#### 4.3.4 Employee Benefit Plans (EBP)

Under this ORC, all the defined benefit plans and defined contribution plans that are not self-directed are covered.

A defined benefit plan is one where the employer aggregates money in a retirement account and arranges to pay employees a fixed monthly payout during retirement, or mostly referred to as a pension.

A defined contribution plan, like 401(k), requires employees to put in their own money into the retirement accounts. The employer may also make contributions regularly. Future benefits in this type of plan are subject to investment fluctuations. Defined contribution plans that are not self-directed are covered in this ORC.

Overfunding amounts are computed by the Application by taking into consideration the Total Allocation Percentage of all employee benefit plan participants associated with an Employer. If

the Total Percentage is less than 100%, it is determined that there is Overfunding in the deposit account. This amount does not belong to any participant and instead belongs to the Employer.

All Overfunding amounts for an Employer are aggregated and receive a separate SMDIA under EBP ORC.

#### 4.3.4.1 Insurance Calculation

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) for Non-Contingent Interests are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer-Account Participant level**

For EBP, this translates to:

**Legal Entity/Separately insured branch- EBP-Employer- Employee Benefit Plan Participant level**

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) for Contingent interests are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer level**

For EBP, this translates to:

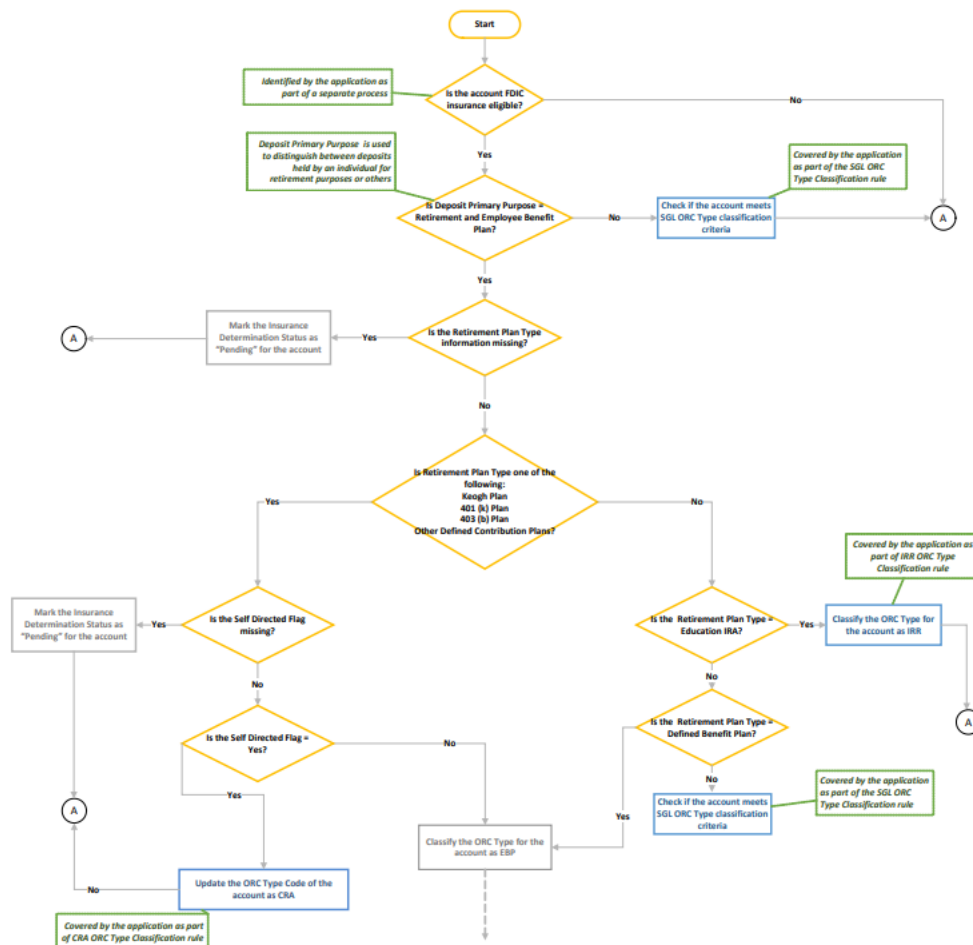
**Legal Entity/Separately insured branch- EBP-Employer level**

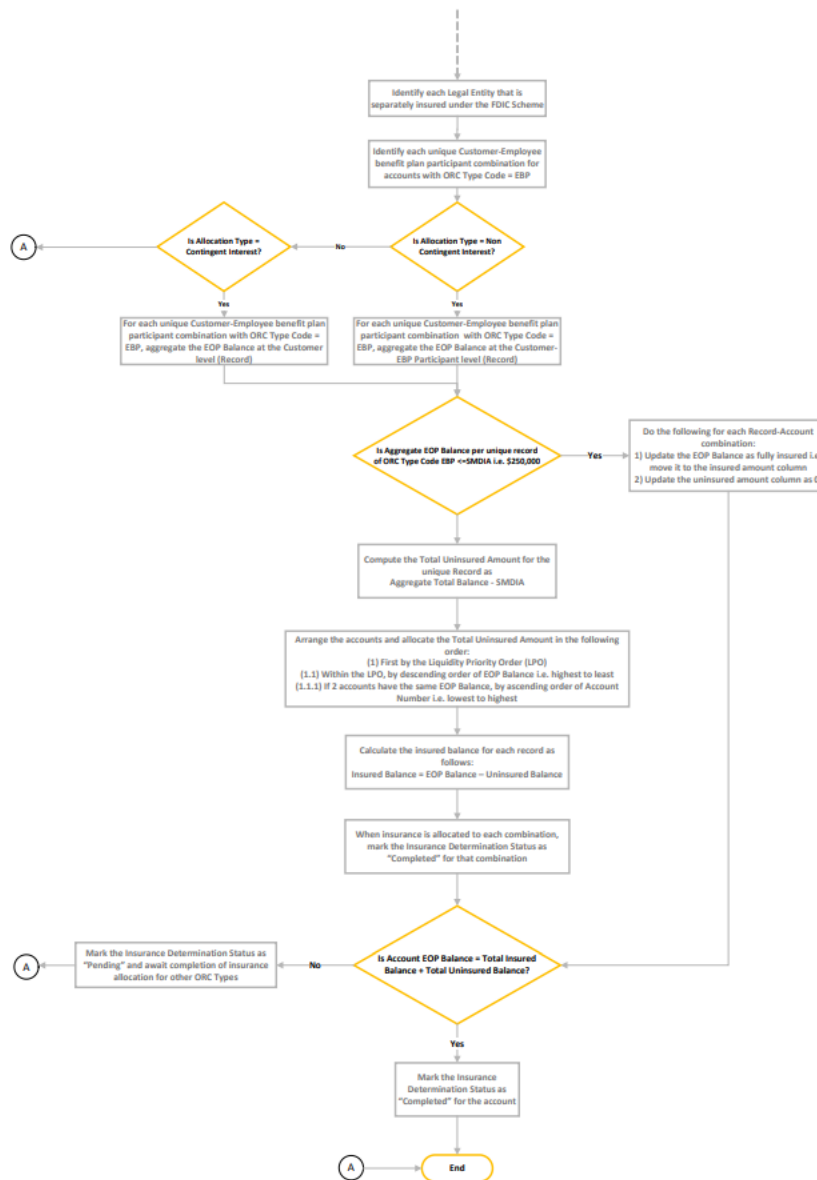
#### 4.3.4.2 Process Flow

The process flow of EBP ORC Type Classification is as follows.

Figure 4-8 Process Flow - EBP ORC Type Classification

## EBP ORC Type Classification



**Figure 4-9 Process Flow - EBP ORC Type Classification****EBP ORC Type Insurance Calculation**

## 4.3.5 Trust Accounts

A Trust Account is a legal arrangement through which funds or assets are held by a third party for the benefit of another party, which may be an individual or a group. The creator of the trust is known as a grantor or settlor. The beneficial parties are called the beneficiaries and the third party is called the trustee.

FDIC provides insurance coverage to both Revocable and Irrevocable Trust Accounts under ORC REV and IRR respectively. The terms of a Revocable Trust account, as the name suggests, can be revoked or modified at any time. An Irrevocable Trust on the other hand once set in place, cannot be modified.

To receive coverage under REV and IRR ORC, certain requirements must be fulfilled.

### 4.3.5.1 Identification of Eligible Beneficiaries

A named beneficiary of a Trust Account is deemed to be eligible for coverage under REV and IRR only if the beneficiary meets the following criteria:

- A natural person
- A charitable or non-profit organization

All other types of beneficiaries are either ineligible or invalid.

An ineligible beneficiary does not meet the requirements of an eligible beneficiary but is still able to legally receive the bequest under law. In such cases, to calculate deposit insurance, the result is a reversion of funds to the single account of the grantor. Under FDIC guidelines, for ineligible beneficiaries of a revocable trust, the amounts are treated as funds in the single account of the grantor.

An Invalid beneficiary is unable to legally receive the bequest under state law. For deposit insurance, bequests to invalid beneficiaries are ignored and the funds are allocated to the remaining beneficiaries. Under FDIC guidelines, for an invalid beneficiary, the funds associated with the beneficiary should be allocated to other beneficiaries. The Application takes the Invalid beneficiary's Account participant interest and divides it equally among other beneficiaries' Account participant's interests.

The Application identifies eligible beneficiaries by using the FDIC Customer type dimension as in the following example.

**Table 4: Identification of Eligible Beneficiaries**

**Table 4-1 Identification of Eligible Beneficiaries**

Beneficiary (Account Participant)	Account Participant Description	FDIC Customer Type Code	Eligible Beneficiary Flag (Processing)
Hema	Individual	IND	Yes
Rekha	Individual	IND	Yes
Nirma	Others	OTH	No
Oxfam	Charitable or Non-profit organization recognized by the IRS	NFP	Yes
Amnesty International	Charitable or Non-profit organization recognized by the IRS	NFP	Yes

### 4.3.5.2 Death of Beneficiaries

When a beneficiary is an individual, in case of death of the beneficiary, the insurance allocation varies whether there are any substitute beneficiaries named or not. The death of a beneficiary is recognized immediately for FDIC purposes, without any grace period given as follows:

- [Beneficiaries deceased with Successor beneficiaries](#)
- [Beneficiaries deceased without Successor beneficiaries](#)

#### 4.3.5.2.1 Beneficiaries Deceased with Successor Beneficiaries

Under FDIC guidelines, for the beneficiaries deceased, if the successor beneficiary(s) is eligible, the Application divides the amount equally among the successor beneficiaries for the deceased beneficiary.

#### 4.3.5.2.2 Beneficiaries Deceased without Successor Beneficiaries

All beneficiaries deceased: Under FDIC guidelines, in this case, the amount belonging to the deceased beneficiary will be treated as funds in the Single/Joint account of the grantor or grantors.

Some beneficiaries deceased: In this case, the funds belonging to the deceased beneficiary is ignored for insurance calculation.

#### 4.3.5.3 Life Estate Beneficiary Treatment

A Life Estate Beneficiary (LEB) can use the deposit assets during their life and the ownership is changed upon death. This person has the right to receive income from the trust or to use the trust assets before all other beneficiaries. The beneficiaries who inherit the estate after the LEB are called "Remainder Beneficiaries". FDIC provides coverage to both Life Beneficiaries.

The stake of the LEB is intangible. The FDIC allocates insurance to LEB in the following way:

- A fixed amount of SMDIA under REV ORC
- $(A \text{ Factor} * \text{Trust amount})$ , under IRR ORC (Factor based on IRS Actuarial tables)

### 4.3.6 Revocable Trust Accounts (REV)

A revocable trust account is a deposit account owned by one or more people expressing the intent that on the death of the owner, the deposited funds will pass to one or more named beneficiaries. A revocable trust account can be revoked, terminated, or amended at the discretion of the owner(s).

FDIC deposit insurance covers two types of revocable trusts — informal revocable trusts and formal revocable trusts. Insurance calculation does not depend on the type of revocable trusts.

#### 4.3.6.1 Grantors as Beneficiary

FDIC regulations provide that where the co-owners of a revocable trust account are themselves the sole beneficiaries of the corresponding trust, the account shall be insured as a joint account.

#### 4.3.6.2 Beneficiary as Another Trust account

When a Trust account names another trust account as Beneficiary, the set of owners of both Trusts are compared. If the Beneficiary Trust is owned by the Grantor or Grantors, then the Beneficiary Trust is replaced by its actual Beneficiaries. If not, this Beneficiary Trust is treated like any ineligible beneficiary.

#### 4.3.6.3 No Eligible Beneficiary

If the account has no eligible beneficiaries, then the amount in the trust account is treated under the Single ORC or Joint ORC of the grantor or grantors.

#### 4.3.6.4 Insurance Limit

The insurance limit is calculated as follows:

1. When the number of beneficiaries is five or fewer: **Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at: Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer level**

For REV, this translates to:

**Legal Entity/Separately insured branch- REV-Grantor level**

2. When the number of beneficiaries is more than five and beneficiary share is unequal: Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer-Account Participant level**

For REV, this translates to:

**Legal Entity/Separately insured branch** when beneficiaries are more than five and beneficiary share is unequal. - **REV- Grantor- Beneficiary level**

3. When the allocation across the beneficiaries is equal, irrespective of the number of eligible beneficiaries, the Insurance limit of SMDIA is at a grantor level. In other words, the treatment is the same as the case where the number of beneficiaries is five or fewer.

#### 4.3.6.5 Process Flow

The process flow of REV ORC Type Classification is as follows:

Figure 4-10 Process Flow - REV ORC Type Classification

REV ORC Type Classification

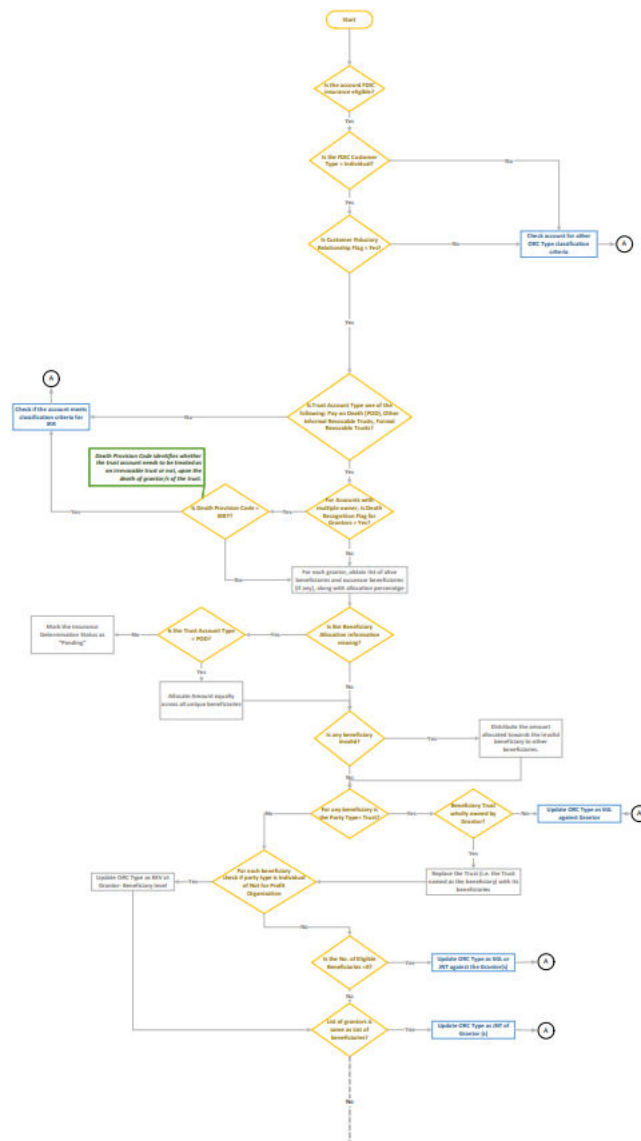
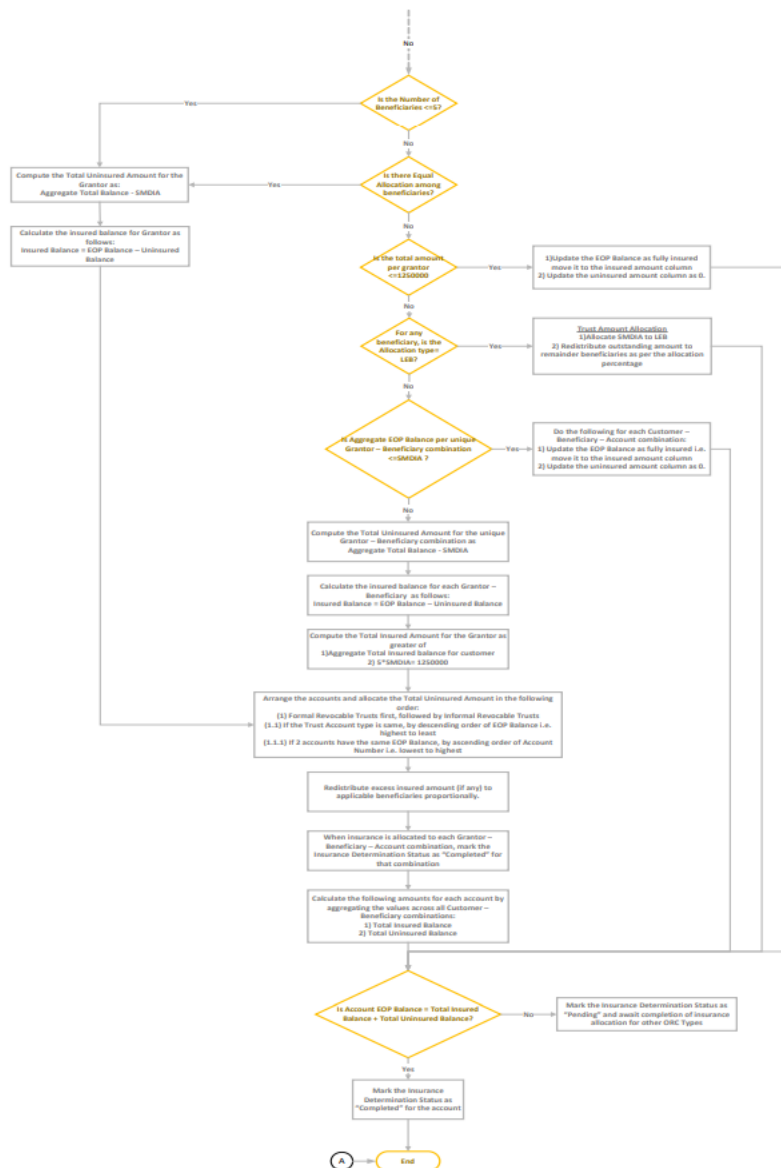


Figure 4-11 Process Flow - REV ORC Type Classification (continued)

## REV ORC Type Insurance Calculation



### 4.3.7 Irrevocable Trust Accounts (IRR)

Irrevocable Trust Accounts are deposit accounts held by an irrevocable trust established by a statute, written trust agreement, or valid court order. An irrevocable trust may also be created through the death of the grantor of a revocable living trust.

The following types of interests are present in an Irrevocable Trust:

- **Retained Interest:** Retained Interest represents those assets that can be returned by the trustee to the grantor by the terms of the trust agreement. For deposit insurance purposes, the funds under Retained interest are treated under SGL ORC.
- **Non-Contingent Interest:** Non-contingent trust Interest is defined in the FDIC's Regulations as an interest capable of determination without evaluation of contingencies. The only exception for contingencies, in this case, is present worth/life expectancy.

- **Contingent Interest:** Contingent Interest is a beneficiary interest that is subject to any types of contingency other than present worth/life expectancy.

The application identifies these interests under the Allocation Type Code Dimension.

#### 4.3.7.1 Creation by Death of a Grantor of a Revocable Trust

Certain Revocable Trusts which have multiple co-owners have a provision in the Trust Agreement to convert the Trust into an Irrevocable Trust on the death of any co-owner. When such a clause is triggered, the Revocable Trust receives coverage under IRR ORC. The Application identifies this treatment through the Trust Treatment Code dimension.

The amounts of such cases are treated as Non-Contingent interests.

#### 4.3.7.2 Insurance Calculation

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) for Non-Contingent Interests are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer-Account Participant level**

For IRR, this translates to:

**Legal Entity/Separately insured branch- IRR- Grantor- Beneficiary level**

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) for Contingent Interests are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer level**

For IRR, this translates to:

**Legal Entity/Separately insured branch- IRR-Grantor level**

#### 4.3.7.3 Process Flow

The process flow of IRR ORC Type Classification is as follows:

Figure 4-12 Process Flow - IRR ORC Type Classification

## IRR ORC Type Classification

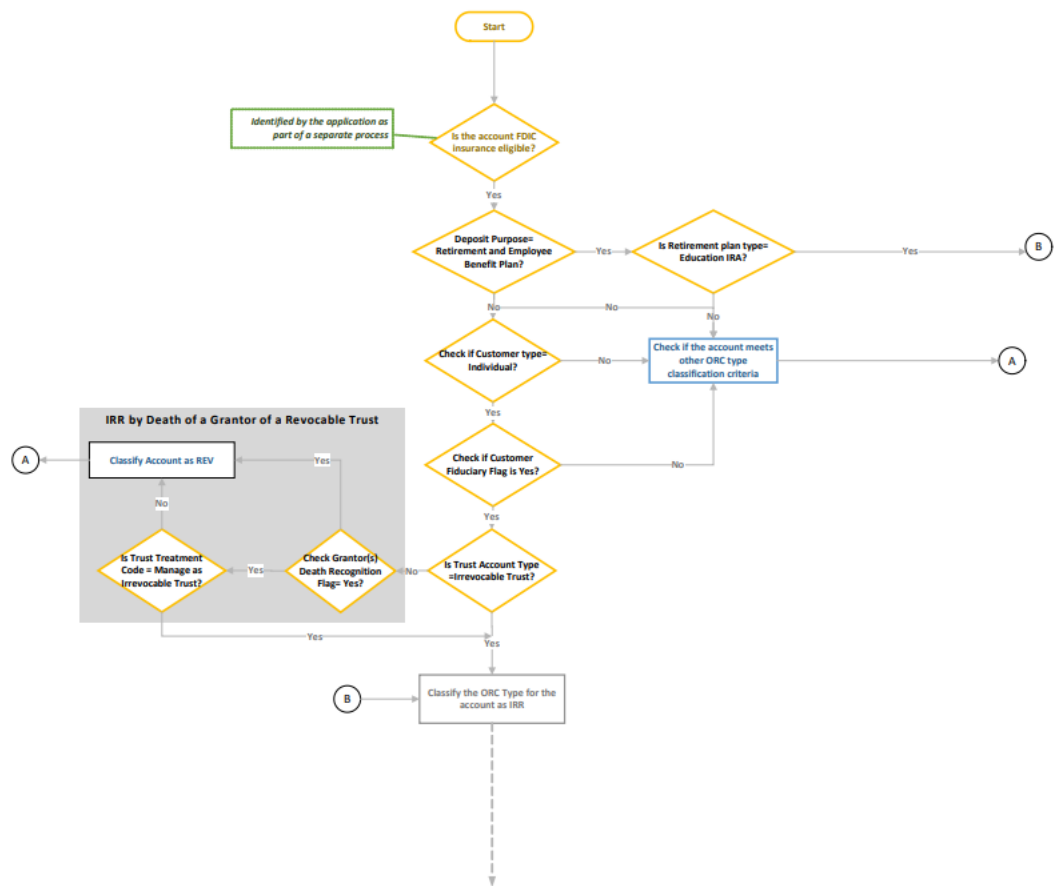
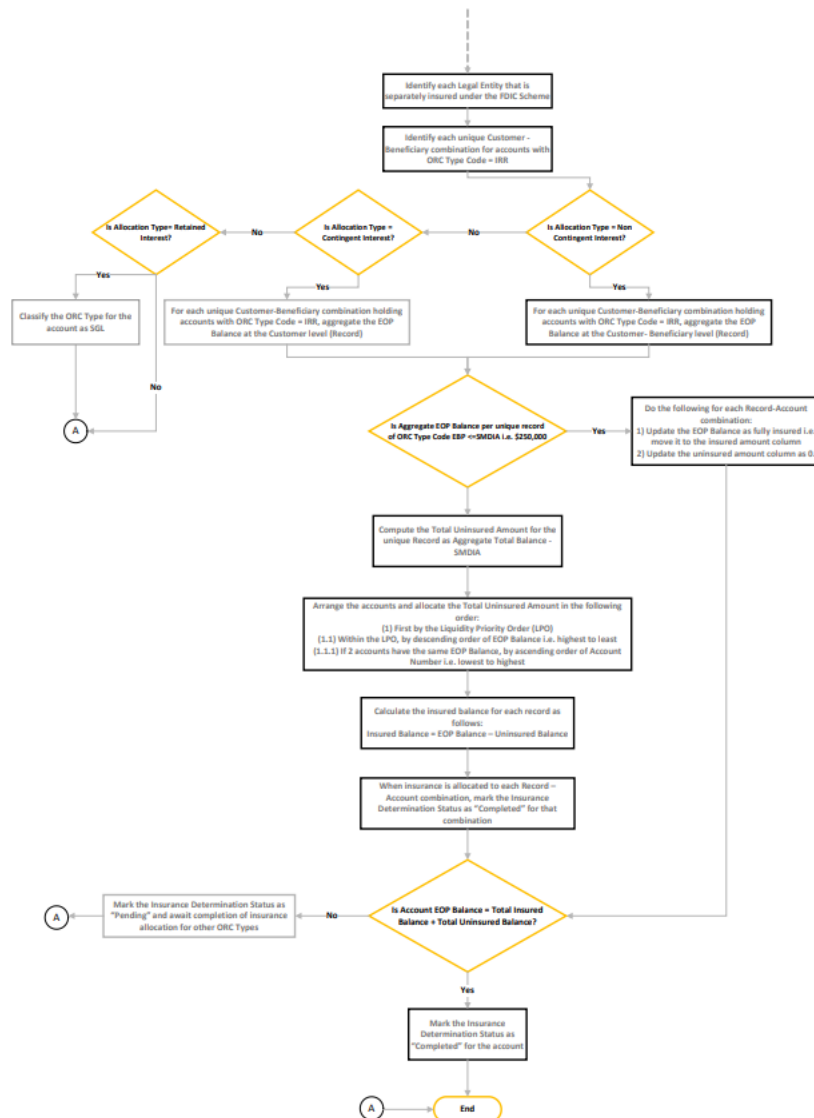


Figure 4-13 IRR ORC Type Classification (continued)

## IRR ORC Type Insurance Calculation



### 4.3.8 Business Accounts (BUS)

This ORC includes accounts from unincorporated associations, Partnerships, and Corporations engaged in the independent activity. The business itself is a beneficial party in this case. A deposit account that is a sole proprietorship or doing business as a (DBA) account is not insured under this ORC-this is insured as a single account of the owner.

For an unincorporated association, the Application checks for additional criteria such as the name of the association in the account title. This is an additional classification criterion for such accounts to be considered under the BUS ORC. If the title of the account does not have the name of the Unincorporated Association, the account will be insured under the SGL ORC of the account holders.

If multiple accounts belong to a corporation under different names (Such as those for each division/department), the application identifies a primary customer and maps all other accounts

of the corporation under the primary customer. The primary customer is the one who is separately insured by the FDIC.

### 4.3.8.1 Insurance Calculation

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

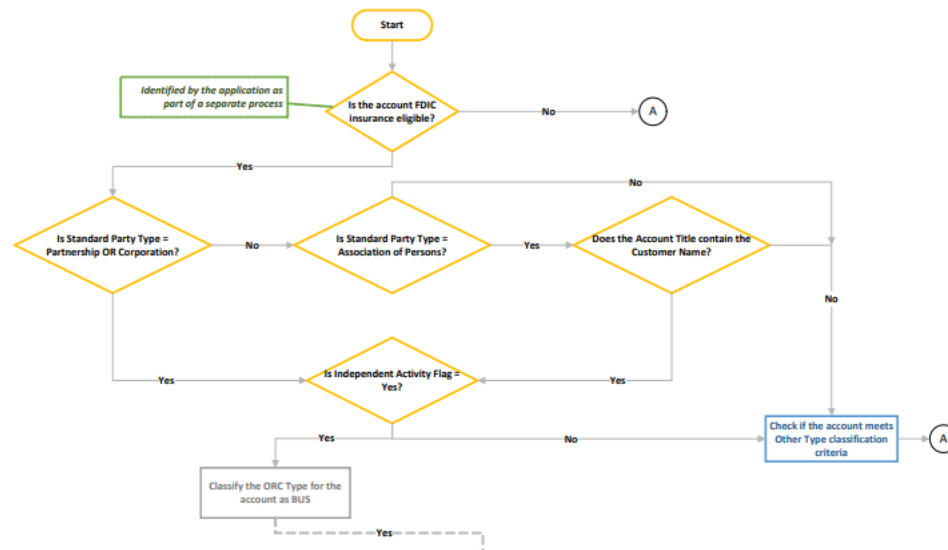
**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer level**

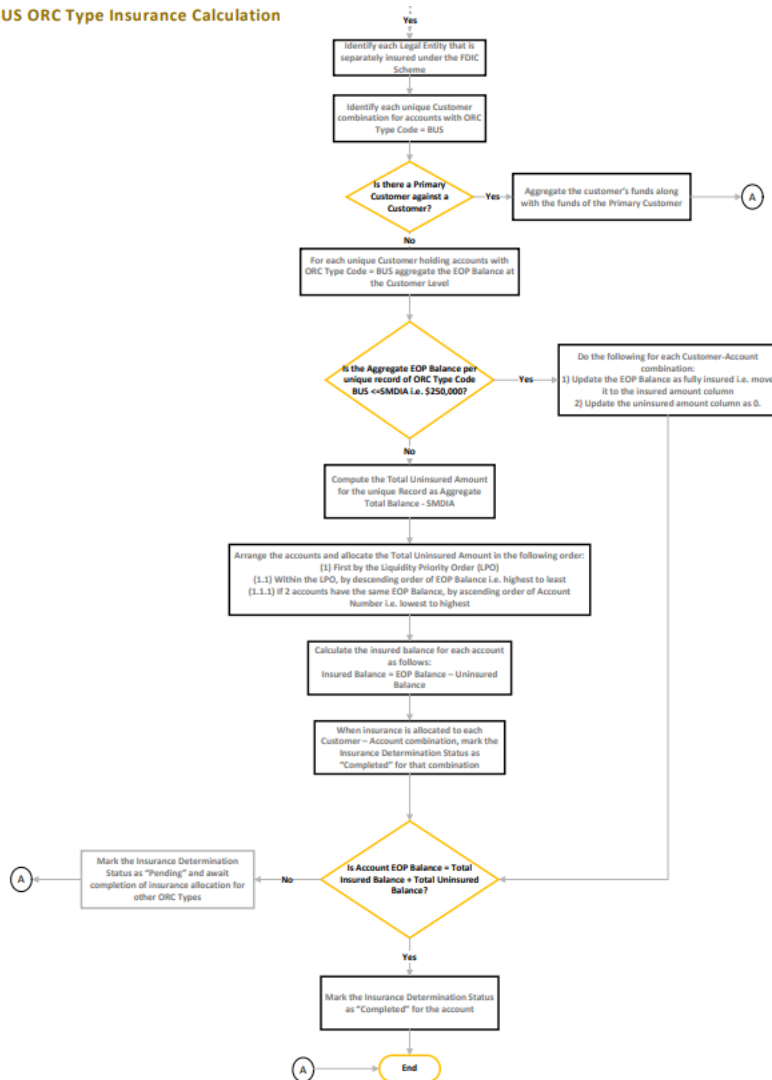
### 4.3.8.2 Process Flow

The process flow of BUS ORC Type Classification is as follows:

**Figure 4-14 Process Flow - BUS ORC Type Classification**

#### BUS ORC Type Classification



**Figure 4-15 Process Flow - BUS ORC Type Classification (continued)****BUS ORC Type Insurance Calculation**

## 4.3.9 Government Accounts (GOV)

Under this ORC, the coverage is extended to accounts of the federal government, state governments, and other governmental bodies.

### 4.3.9.1 Insurance Limit

Depending on the deposit product type and whether the account is held in state or not, the Application tags three ORC codes, GOV1, GOV2, and GOV3.

The following are the criteria.

**Table 5: Criteria for the ORC Codes****Table 4-2 Criteria for the ORC Codes**

ORC Criteria	Standard Product type	ORC
--------------	-----------------------	-----

**Table 4-2 (Cont.) Criteria for the ORC Codes**

Held by official custodian of The United States. OR The official custodian of a Native American tribe. OR Official custodian in a CI located in the same state as the public unit.	Certificate of Deposit, Savings Account, Term Deposits, Money Market Deposit Account, Negotiable Order of Withdrawal accounts	GOV1
Held by official custodian of The United States. OR The official custodian of a Native American tribe. OR Official custodian in a CI located in the same state as the public unit.	Demand deposit account	GOV2
Held by official custodian located outside the state in which the public unit is located		GOV3

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer-Account Participant level.**

For GOV, this translates to:

**Legal Entity/Separately insured branch- GOV-Public Unit- Official Custodian- level**

Each official custodian receives coverage up to SMDIA for each of the three codes GOV1, GOV2 and GOV3 separately.

### 4.3.9.2 Process Flow

The process flow for GOV ORC Type Classification is as follows.

Figure 4-16 Process Flow - GOV ORC Type Classification

## GOV ORC Type Classification

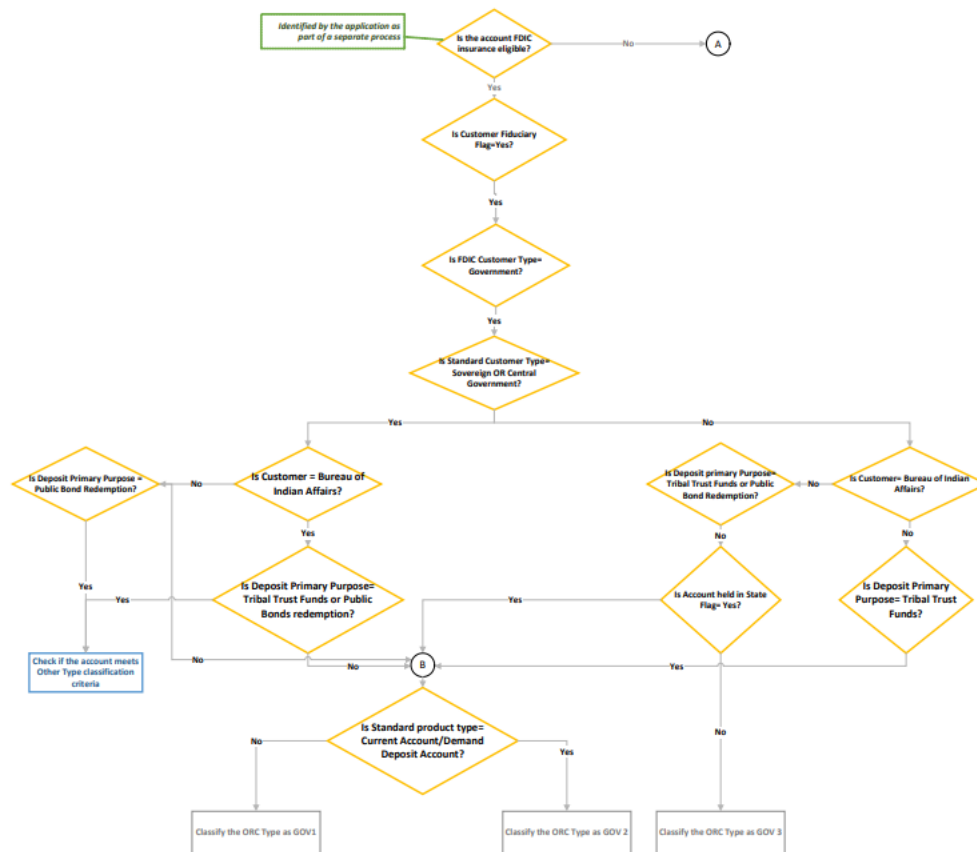
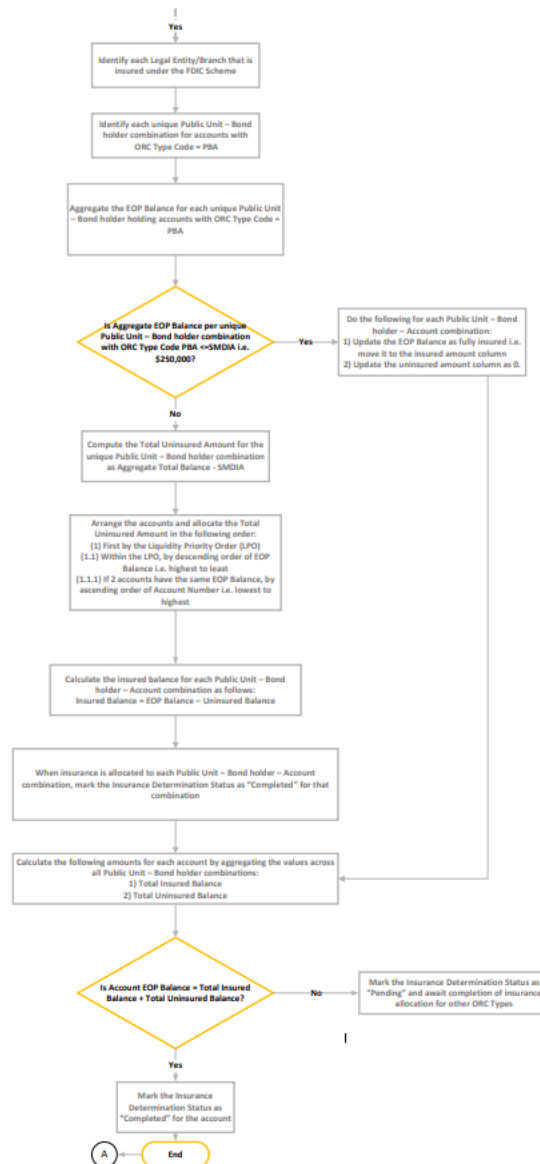


Figure 4-17 GOV ORC Type Classification (continued)

## PBA ORC Type Insurance Calculation



Yes

## 4.3.10 Mortgage Servicing Accounts (MSA)

Mortgage servicing accounts are deposit accounts opened by mortgage servicers to hold payments made by mortgagors. To this extent, the Principal and Interest portion of the Mortgage Servicing payments are covered under this right and capacity. The amounts held for payments of taxes and insurance premiums, on the other hand, are not covered in MSA ORC and are treated in the Single ORC classification for the Mortgage Servicer.

Overfunding amounts are computed by the Application by taking into consideration the Total Allocation Percentage of all the mortgagors concerning a Mortgage Servicer. If the Total Percentage is less than 100%, it is determined that there is Overfunding in the deposit account. This amount does not belong to any participant and instead belongs to the Mortgage

Servicer. Overfunding Amounts are also treated under MSA ORC and allotted a separate SMDIA as compared to the Principal and Interest Amounts.

#### 4.3.10.1 Insurance Limit

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer-Account Participant level**

For MSA, this translates to:

**Legal Entity/Separately insured branch- MSA-Mortgage Servicer- Mortgagor- level**

Mortgagors will be insured for up to SMDIA for all mortgages held with the same mortgagor.

#### 4.3.10.2 Process Flow

The process flow for MSA ORC Type Classification is as follows.

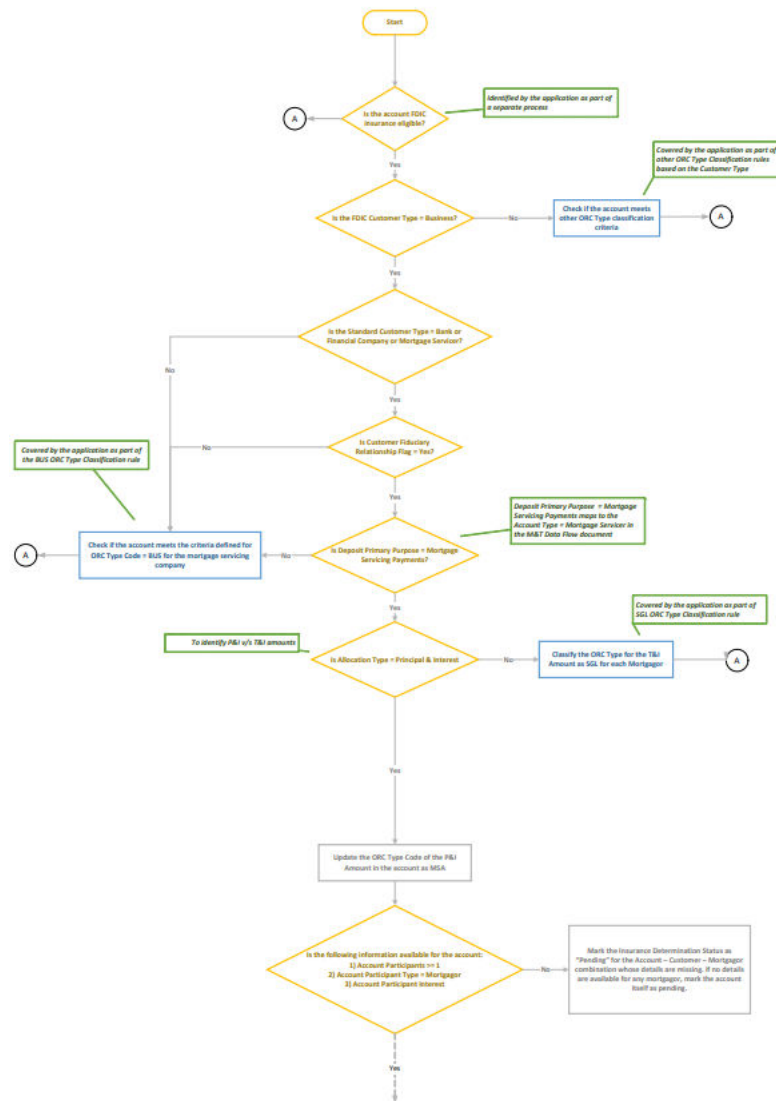
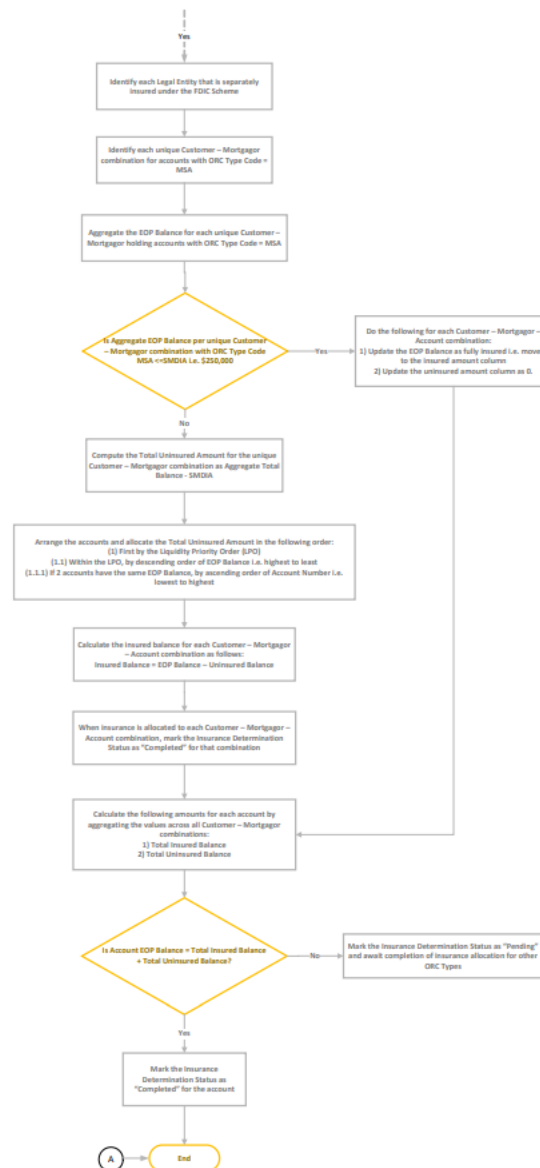
**Figure 4-18 Process Flow - MSA ORC Type Classification****MSA ORC Type Classification**

Figure 4-19 MSA ORC Type Classification (continued)

## MSA ORC Type Insurance Calculation



### 4.3.11 Accounts held by a Depository Institution as the Trustee of an Irrevocable Trust (DIT)

Under this ORC, coverage is extended to accounts held by an IDI as a trustee of an irrevocable trust. This category is applicable whether the IDI as trustee holds the trust funds in a deposit account at the IDI, or whether the IDI as trustee places the funds into a deposit account at another IDI.

Deposit Insurance Coverage for irrevocable trusts in this category is separate from, and in addition to, deposit insurance coverage for other ownership categories.

### 4.3.11.1 Insurance Limit

For Accounts with Commingled Trust Funds, Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer- Account Participant level**

For DIT, this translates to:

**Legal Entity/Separately insured branch - DIT-Insured Depository Institution- Beneficiary level**

For Irrevocable Trust Accounts where an IDI is a Trustee, Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer- Trust Account- Account Participant level**

For DIT Trust account at beneficiary level, this translates to:

**Legal Entity/Separately insured branch - DIT-Customer-Trust Account- Beneficiary level**

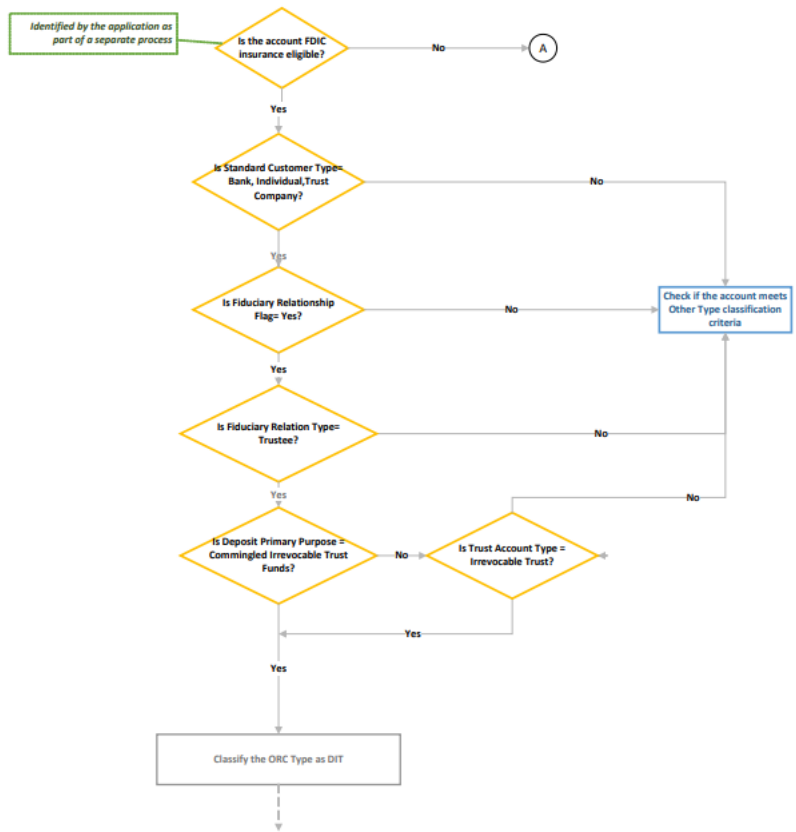
The FDIC insures each trust fund owner or beneficiary represented for up to the SMDIA. Under this ORC, both allocated and unallocated funds are covered.

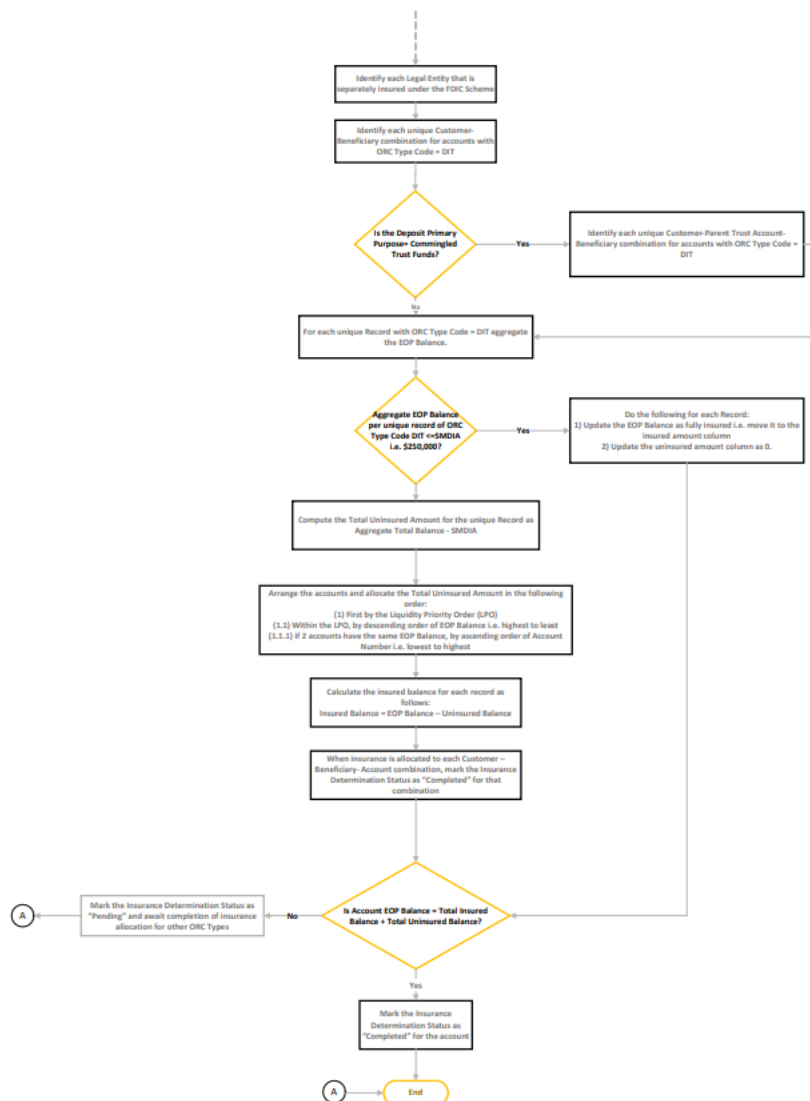
### 4.3.11.2 Process Flow

The process flow for DIT ORC Type Classification is as follows:

Figure 4-20 Process Flow - DIT ORC Type Classification

## DIT ORC Type Classification



**Figure 4-21 Process Flow - DIT ORC Type Classification (continued)****DIT ORC Type Insurance Calculation**

## 4.3.12 Annuity Contracts (ANC)

Under this ORC, the coverage is extended to deposit accounts that are set up by an insurance company or other corporation to hold funds for the sole purpose of funding life insurance or annuity contracts and any such benefits incidental to those contracts.

In certain states the funds are directly held by the annuitant who is the ultimate beneficial owner. In such cases, the granularity of insurance computation is different from when the insurance company holds the funds.

### 4.3.12.1 Insurance Limit

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer-Account Participant level**

For Funds held by the Insurance Company, this translates to:

**Legal Entity/Separately insured branch- ANC-Insurance company/corporation-Beneficiary (Annuitant) level**

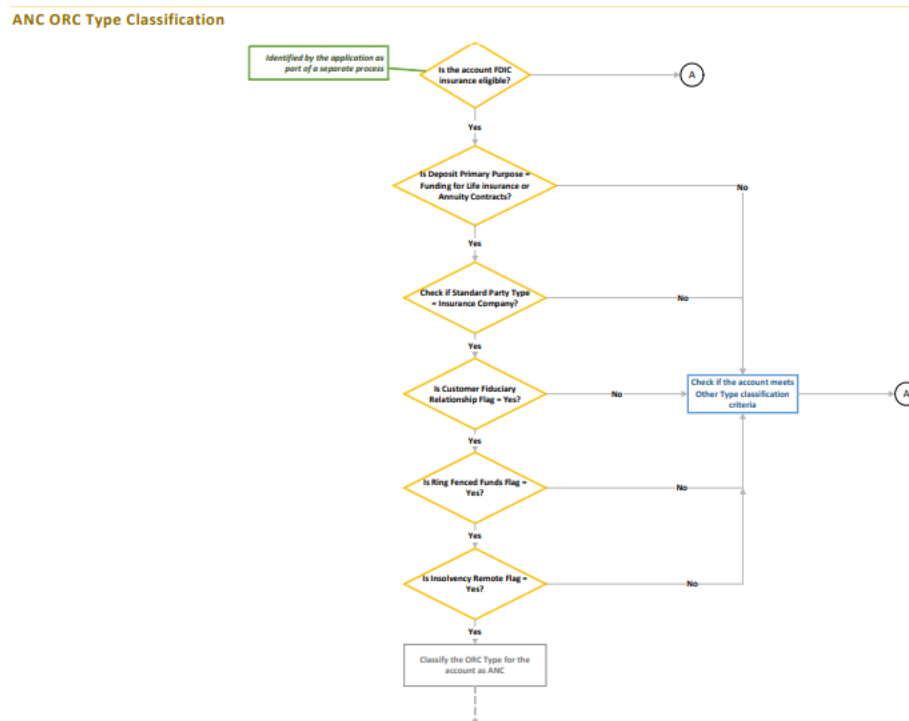
For Funds held by the Annuitant, Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

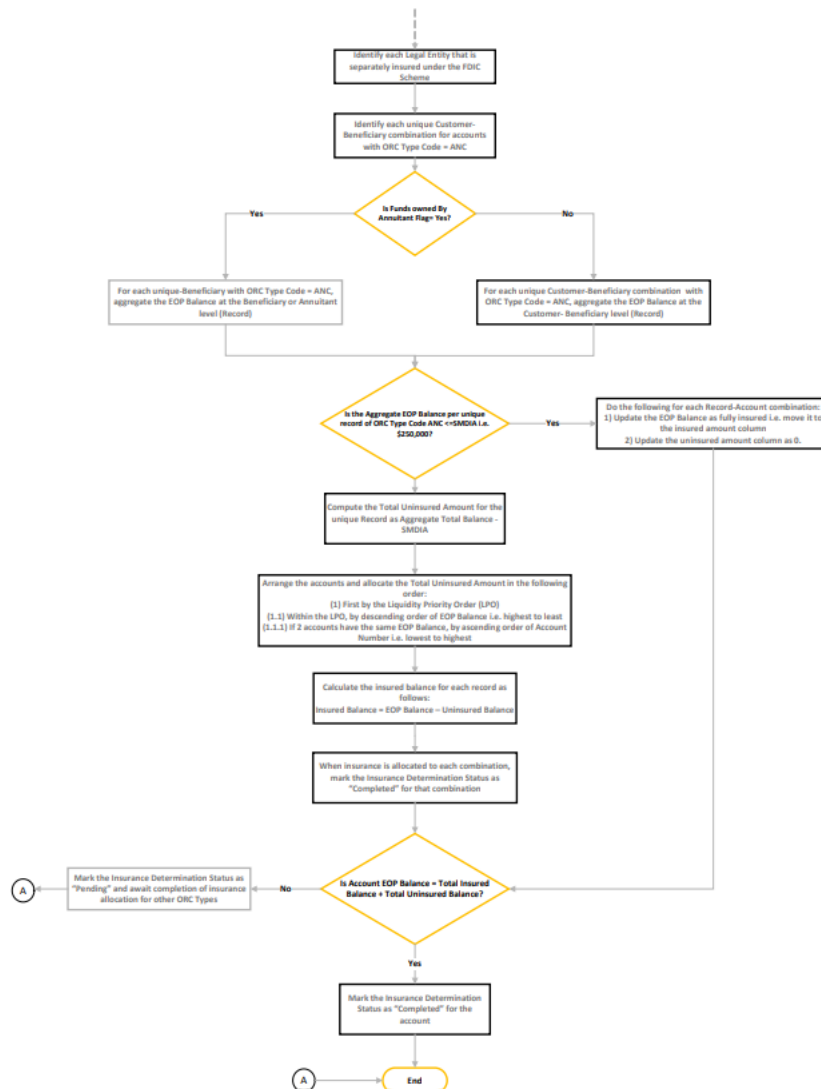
**Legal Entity/Separately insured branch- ANC - Beneficiary (Annuitant) level**

## 4.3.12.2 Process Flow

The process flow of ANC ORC Type Classification is as follows:

**Figure 4-22 Process Flow - ANC ORC Type Classification**



**Figure 4-23 Process Flow - ANC ORC Type Classification****ANC ORC Type Insurance Calculation**

### 4.3.13 Public Bond Accounts (PBA)

This ORC extends coverage to deposits held by an officer, agent, or employee of a public unit under a law or bond indenture that requires the deposits to be set aside to discharge a debt owed to the holders of notes or bonds issued by the public unit.

#### 4.3.13.1 Insurance Limit

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer-Account Participant level**

For PBA, this translates to:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Public Unit-Bondholder- level**

Bondholders will be insured for up to SMDIA for all bonds issued by the same issuer regardless of whether there are different series involved.

**4.3.13.2 Process Flow**

The process flow for PBA ORC Type Classification is as follows:

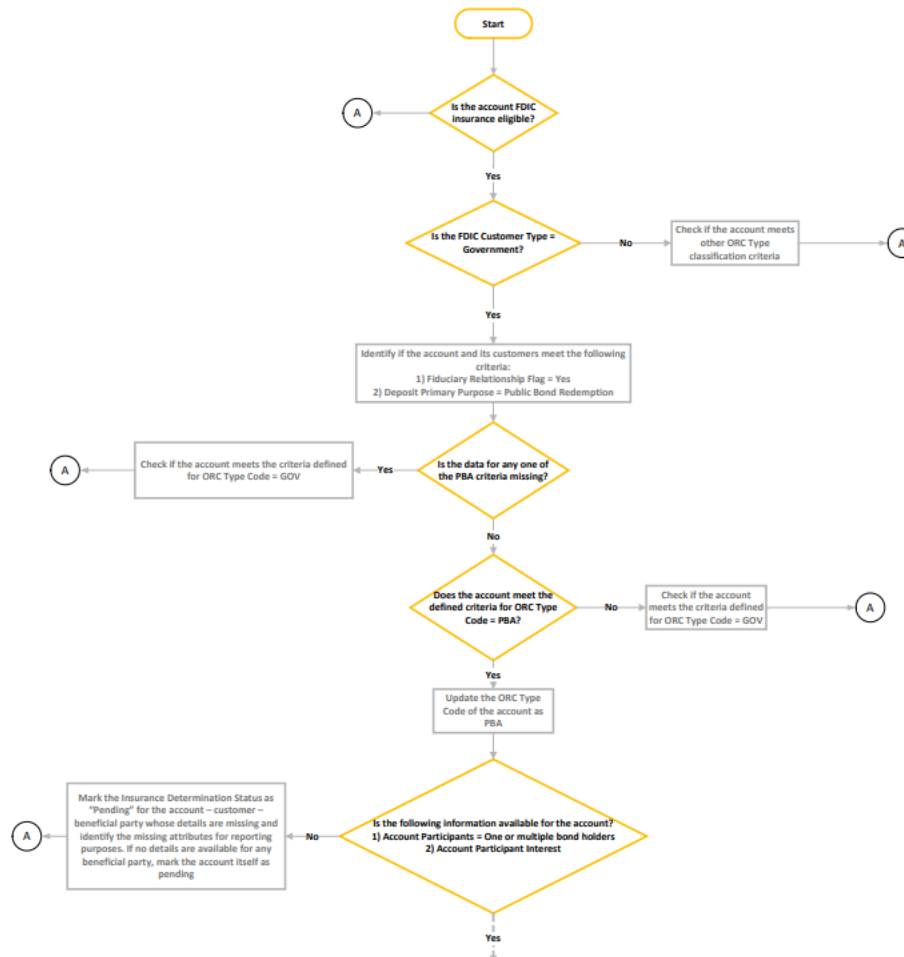
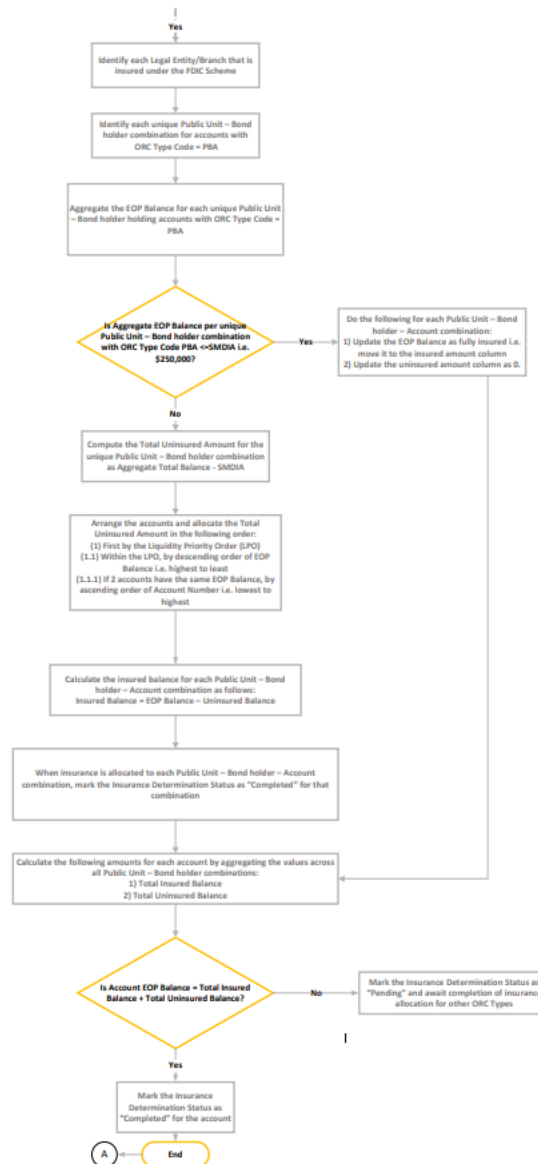
**Figure 4-24 Process Flow - PBA ORC Type Classification****PBA ORC Type Classification**

Figure 4-25 Process Flow - PBA ORC Type Classification (continued)

## PBA ORC Type Insurance Calculation



### 4.3.14 Custodian Accounts for American Indians (BIA)

This ORC extends coverage to deposit accounts held by the Bureau of Indian Affairs (BIA) on behalf of Native Americans and deposited into an IDI. If the account does not meet the classification criteria for BIA ORC, then they should be evaluated for GOV and SGL ORCs.

#### 4.3.14.1 Insurance Limit

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

**Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer-Account Participant level**

For BIA, this translates to:

### Legal Entity/Separately insured branch- BIA-Bureau of Indian Affairs- Native American-level

Under this category, the custodian accounts are insured up to SMDIA for each Native American for whom the Bureau of Indian Affairs is acting.

## 4.3.14.2 Process Flow

The process flow for BIA ORC Type Classification is as follows:

**Figure 4-26 Process Flow - BIA ORC Type Classification**

### BIA ORC Type Classification

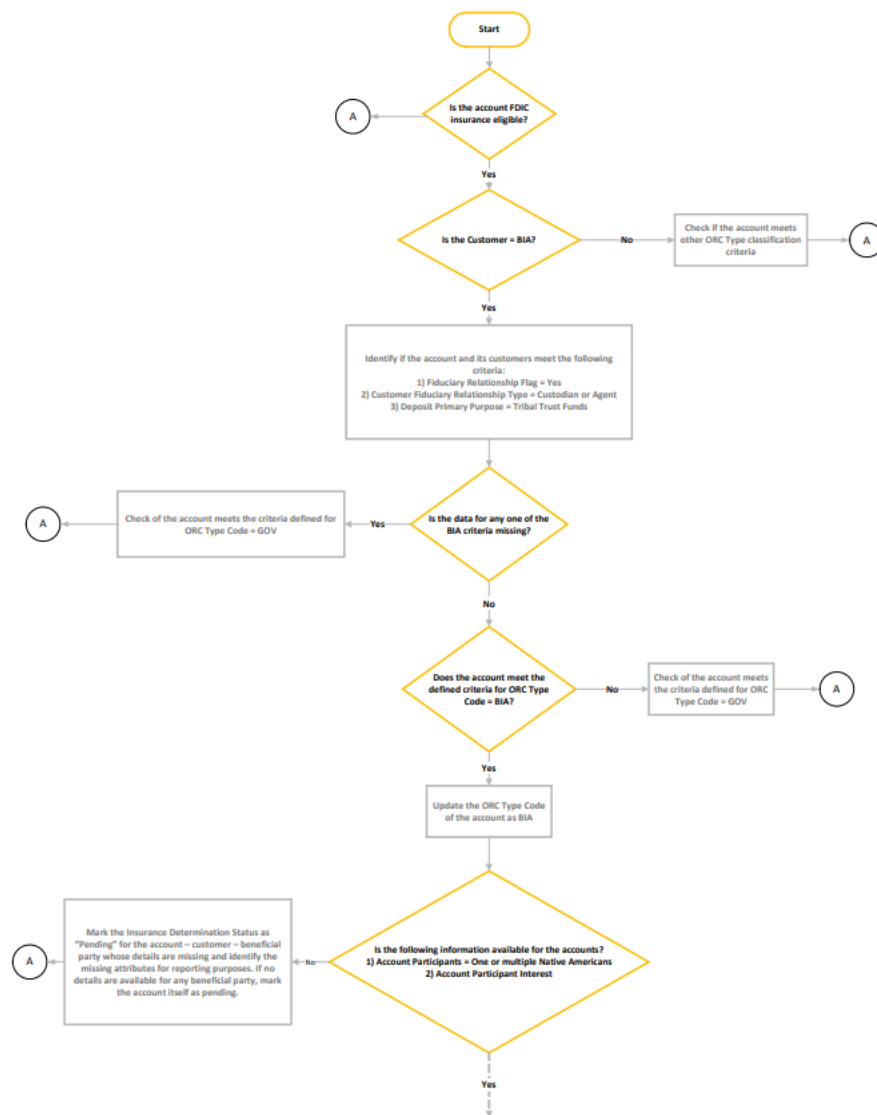
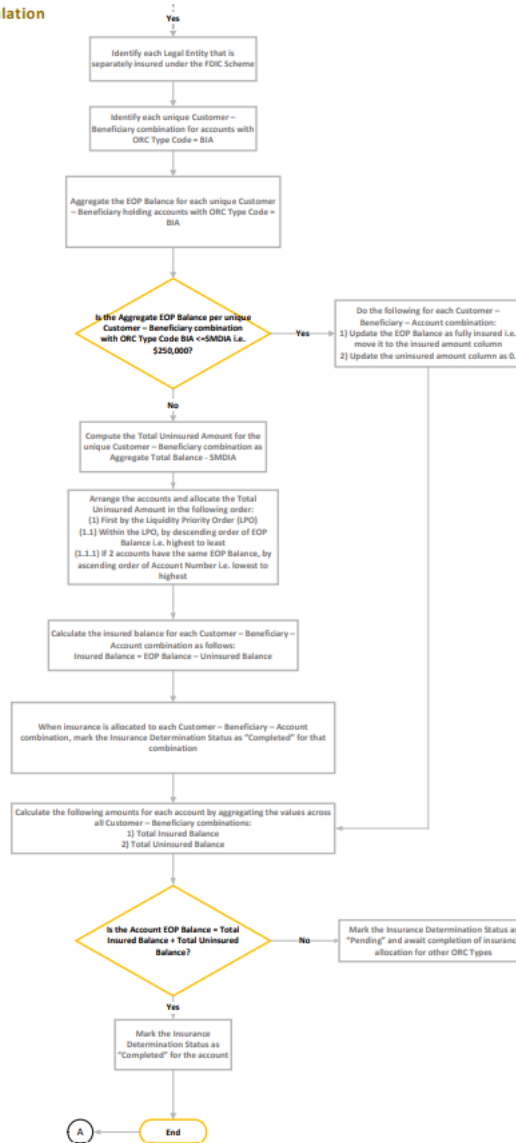


Figure 4-27 Process Flow - BIA ORC Type Classification (continued)

## BIA ORC Type Insurance Calculation



### 4.3.15 Accounts of an Insured Depository Institution Pursuant to the Bank Deposit Financial Assistance Program of Energy (DOE)

This category consists of funds deposited by an IDI under the Bank Deposit Financial Assistance Program of the Department of Energy.

#### 4.3.15.1 Insurance Limit

Insurance calculation and the Standard Maximum Deposit Insurance Amount (SMDIA) are applied at:

##### Legal Entity/Separately insured branch- Ownership Right and Capacity-Customer level

Each IDI depositing funds under this program will receive coverage up to SMDIA under this ORC.

### 4.3.15.2 Process Flow

The process flow for DOE ORC Type Classification is as follows:

**Figure 4-28 Process Flow - DOE ORC Type Classification**

#### DOE ORC Type Classification

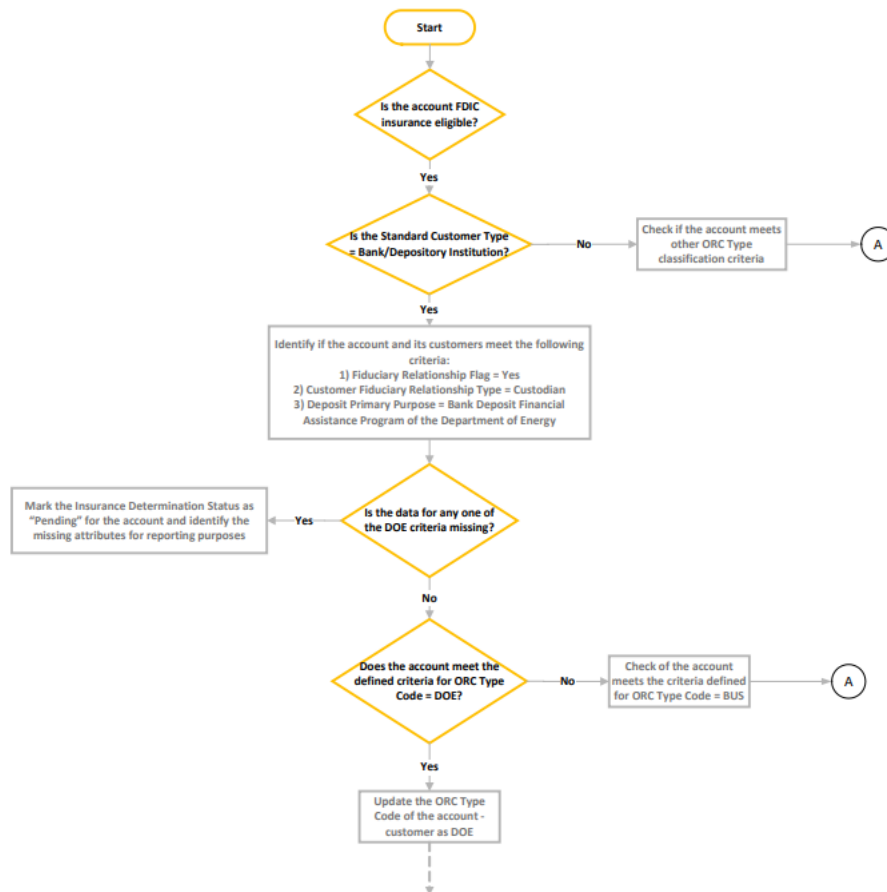
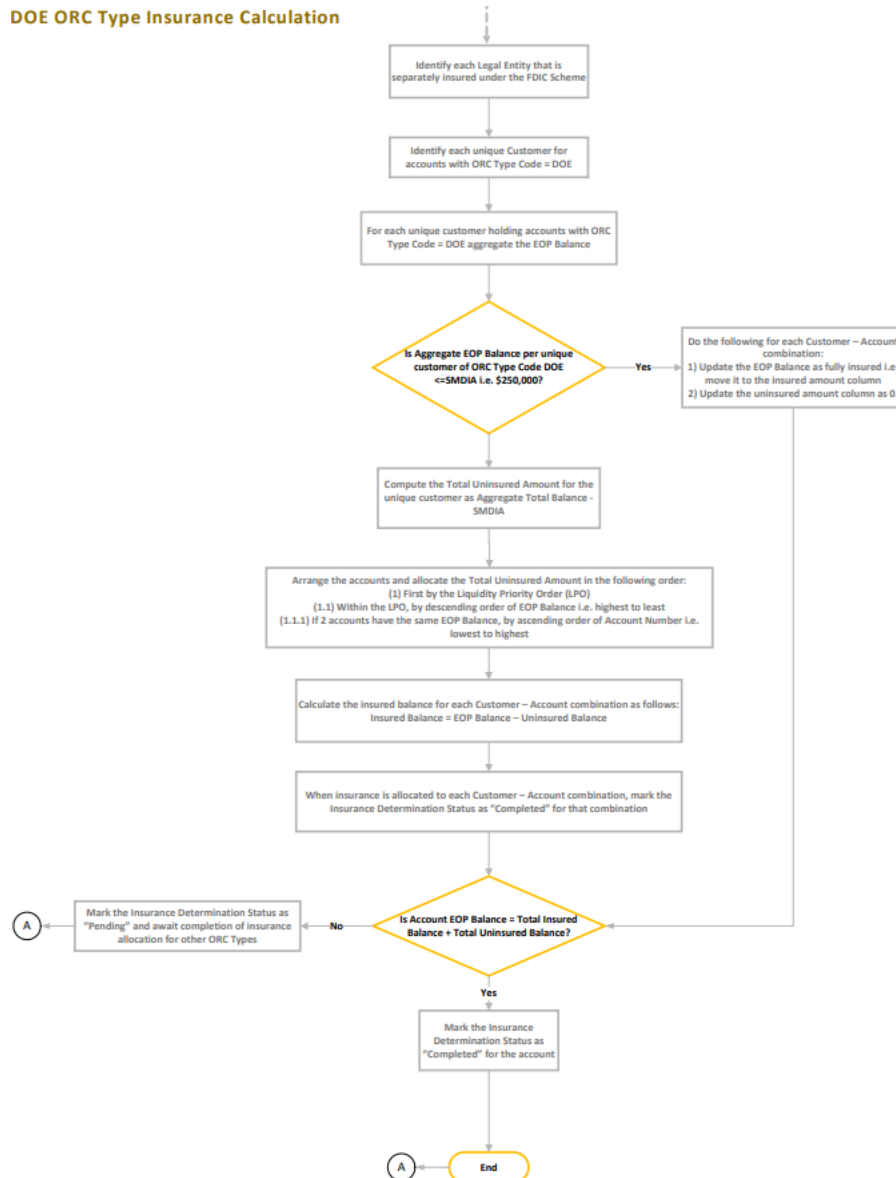


Figure 4-29 Process Flow - DOE ORC Type Classification (continued)

## DOE ORC Type Insurance Calculation



## 4.4 Insurance Allocation

The allocation towards the account level is always concerning the uninsured amounts. The insured amount for each account is calculated as a difference between the Total Balance and Uninsured amounts. The allocation is towards the total End of the Period balance of the account.

### 4.4.1 Liquidity Priority Order

The liquidity priority order is outlined to allocate insured amounts to depositors who have multiple accounts. This order helps in deciding the priority towards allocating uninsured funds and subsequently the insured funds. Except for jointly owned and revocable trust accounts, for

all other ORCs, the uninsured amount is allocated by the Standard Product type and is in the following table.

**Table 6: Liquidity Priority Order**

Priority	Standard Product Type
1	Certificate of deposit
2	Savings Account
3	Money Market Account
4	Negotiable order of withdrawal
5	Demand Deposit Account

For example, a customer's account which is a certificate of deposit carries a higher priority than a savings account. Therefore, uninsured funds for a customer would be allocated to that account first.

## 4.4.2 Balance Order

If a customer has accounts that are of the same product type, the allocation of uninsured amounts is done based on the End of Period balance. The account with the highest balance gets higher priority.

Rarely, customer accounts have the same product type and same balance. In this case, the account with the lowest number gets priority.

## 4.4.3 Joint Accounts and Revocable Trusts

Formal revocable trust accounts receive a higher priority than informal Revocable Trust Accounts. As the revocable trust category allows an account to have single and multiple owners, the suggested debiting order is followed for joint revocable trust accounts.

**Table 7: Joint Accounts and Revocable Trusts Priority Order**

Priority	Trust Account Type
1	Formal Revocable Trusts
2	POD
3	Informal Revocable Trusts- Other

If an account is joint and not titled to a formal or informal trust, uninsured amounts are debited on a pro-rata basis based on the co-owner's share percentage regardless of the account product type.

Jointly owned Revocable Trust Accounts are treated according to the order for revocable trusts.

## 4.5 Pending Accounts

Accounts that do not have the requisite information to proceed for ORC Classification or Insurance calculations are parked with a Pending state as Insurance Determination Status.

The following fields are considered optional. A missing value in these fields does not qualify for a Pending Status.

- Customer Type

- Product Category
- Participant Type

For each pending record, a reason is populated in the form a pending reason code as per FDIC Part 370 Regulation.

**Table 4-3 Pending Accounts – Code and Description**

Code	Comment
A	Missing Agent/Custodian information
B	Missing Beneficiary Information for Trusts
RAC	Missing Right and Capacity Code
OI	Missing Official Item
ARB	Direct Obligation Brokered Deposit
ARBN	Non-Direct Obligation Brokered Deposit
ARCRA	Certain Retirement Accounts
AREBP	Employee Benefit Plan Accounts
ARM	Mortgage Servicing for Principal and Interest Payments
ARO	Other Deposits
ARTR	Trust Accounts

## 4.6 Alternative Recordkeeping

As per FDIC Part 370, an IDI may not be required to maintain all information needed by the FDIC to calculate the entire amount of deposit insurance available to each depositor concerning certain types of deposit accounts. For this reason, IDIs are subjected to Alternative Recordkeeping requirements that apply to certain types of accounts such as brokered deposits.

For such accounts, data in a granular form with additional attributes such as ORC, contingent/non-contingent interest, and so on, is taken as a download. These records then go through Insurance calculation and Insurance allocation along with the bank's deposits.

If data required for insurance computation is missing, then the record will be marked as Pending, similar to that of the bank's deposits. The *Pending Reason* code is segregated for Alternative Recordkeeping which is prefixed with **AR**.

# Perbadanan Insurance Deposit Malaysia

This section provides information about the process of insurance allocation in Perbadanan Insurance Deposit Malaysia (PIDM).

## 5.1 Insurance Allocation

The steps involved in insurance allocation are described in the following sections.

### 5.1.1 Identification of Insurance Eligible Accounts

The identification of insurance eligible accounts involves looking at the inclusion and the exclusion criteria. The application requires users to provide the following inclusion criteria:

- **Ownership Category:** The application allocates the insurance limit separately for each ownership category level. Ownership categories include single accounts, joint accounts, trust accounts, and so on. As per Perbadanan Insurans Deposit Malaysia (PIDM), a separate limit is assigned to a depositor combination based on the ownership category of accounts and hence users must provide the ownership categories that get a separate limit. If a customer gets a single limit irrespective of whether the accounts are held as single, joint, or a combination, the ownership category should have a single default value.
- **Product Type:** The list of product types that are covered under the respective jurisdiction's deposit insurance scheme. The insurance limit is allocated to only those accounts of a customer whose product types match those that are covered by the deposit insurance. In the case of Malaysia, PIDM covers all types of deposits such as current accounts, savings accounts, and term deposits, which must be provided as inputs.
- **Product Type Prioritization:** The sequence in which the insured amount is to be allocated to each product type is captured. For instance, product prioritization may be specified as a current account, savings account, and term deposit. This indicates that the insured amount is allocated first to a current account held by the customer. After current accounts have been fully covered, the remaining amount is allocated to savings accounts and finally to term deposits. If product type prioritization is not specified, the default allocation will be proportionate to the EOP balance of each account irrespective of the product type.
- **Currency Eligibility for Insurance:** The list of currencies in which the accounts are denominated that are eligible for insurance coverage under a deposit insurance scheme. Some jurisdictions cover foreign currency deposits under their deposit insurance schemes. If eligible currencies are specified for insurance, then the insured balance is allocated to all accounts belonging to the particular legal entity which have the associated attributes required for assigning the insured balance. For instance, if PIDM insures only Malaysian Ringgit denominated deposits. The eligible currency against the PIDM insurance scheme should be provided as Malaysian Ringgit

The application includes insurance exemption criteria covering deposits of foreign sovereigns, central and state governments, and banks, and so on. Deposits that are eligible for insurance under a particular insurance scheme are identified based on the inclusion and exclusion criteria as specified by the users.

## 5.2 Allocation of Deposit Insurance

As part of the BNM Run, the application allocates the deposit insurance to accounts based on the guidelines specified by the PIDM. The insurance limit captured against each deposit insurance scheme is allocated to the insurance eligible accounts under that scheme based on the ownership category and the depositor combination.

The insurance limit, that is the maximum deposit balance covered by an insurance scheme per customer, is captured against each insurance scheme – ownership category combination. Customers with an account in multiple legal entities get a separate deposit insurance limit per legal entity. For the PIDM insurance scheme, the limit amount must be provided in the Stage Insurance Scheme Master table at the granularity of the insurance scheme.

The insurance limit is allocated to accounts as explained below:

- The application identifies the established relationship flag at a customer level.
- The accounts are sorted by the specified product type prioritizations.
- The insurance allocation is done based on the principal balance from the highest to the least, in the order of product type prioritization.
- The insurance limit available is allocated to account 1 to n – 1 as per the following formula:

**Figure 5-1 Formula**

$$\begin{aligned} \text{Insured Amount} \\ = \text{If } [((\text{Insurance Limit Available} - \text{Outstanding Balance}) \\ \geq 0); \text{Outstanding Balance else } 0] \end{aligned}$$

Where,

Insurance Limit Available: Limit available post allocation to previous accounts is equal to Insurance Limit Available n-1 minus Insured Amount x-1.

x: Number of accounts up to the current account to which insured amount is to be allocated.

n: Total number of accounts of a customer which are eligible for insurance coverage under a given ownership category.

The remaining available insurance is allocated to the last account. That is, account n for which insurance was not allocated.

If the insurance limit is available after allocating to the principal balances, it is allocated to the accrued interest from the highest to the least in the order of Product Type prioritization.

Following is an illustration of this procedure. It considers an insurance limit of 2, 50000 Malaysian Ringgit for each depositor combination under each ownership category for each legal entity. The inputs to this calculation, including account details and customer details, are as follows.

**Table 9: Illustration: Insurance Allocation**

Table 5-1 Illustration: Insurance Allocation

Legal Entity	Account Number	Account Balance	Principal Balance	Accrued Interest	Account Holding Type	Primary Holder	Secondary Holder 1	Secondary Holder 2	Insurance Scheme	Availability of Joint Account Balance Split	Number of Account Holders	Principal Balance Per Customer	Accrued Interest Per Customer
Legal Entity 1	100001	959967	959967		Single	Customer A			DPA		1		
Legal Entity 1	100002	100980	95931	5049	Single	Customer A			DPA		1		
Legal Entity 1	100003	124342	112602	11740	Single	Customer A			DPA		1		
Legal Entity 1	100004	80900	73619	7281	Joint	Customer A	Customer B		DPA	Yes	2		
Legal Entity 1	100005	55226	55226		Joint	Customer A	Customer B	Customer D	DPA	No	3	18408.67	0.00
Legal Entity 2	200001	713335	713335		Single	Customer A			DPA		1		
Legal Entity 2	200002	127132	127132		Joint	Customer B	Customer C		DPA	No	2	63566.00	0.00
Legal Entity 2	200003	138828	124946	13882	Joint	Customer C	Customer B		DPA	Yes	2		
Legal Entity 2	200004	135429	135429		Joint	Customer B	Customer A	Customer C	DPA	No	3	45143.00	0.00
Legal Entity 3	300001	117603	95259	22344	Single	Customer B			FDIC		1		
Legal Entity 3	300002	124775	107121	17654	Single	Customer B			FDIC		1		

**Table 5-1 (Cont.) Illustration: Insurance Allocation**

Legal Entity 3	300003	76065	76065		Single	Customer C			FDIC		1		
Legal Entity 3	300004	82622	82622		Joint	Customer A	Customer B		FDIC	No	2	41311.00	0.00
Legal Entity 3	300005	113340	113340		Joint	Customer B	Customer A		FDIC	No	2	56670.00	0.00

**Table 10: Illustration continued: Insurance Allocation****Table 5-2 Illustration continued: Insurance Allocation**

Customer A Principal Balance	Customer B Principal Balance	Customer C Principal Balance	Customer D Principal Balance	Customer A Accrued Interest	Customer B Accrued Interest	Customer C Accrued Interest	Customer D Accrued Interest
959967.00				0.00			
95931.00				5049.00			
112602.00				11740.00			
47852.35	25766.65			5096.7	2184.3		
18408.67	18408.67		18408.67	0.00	0.00		0.00
713335.00				0.00			
	63566.00	63566.00			0.00	0.00	
	24989.2	99956.8			2776.4	11105.6	
45143.00	45143.00	45143.00		0.00	0.00	0.00	
	95259.00				22344.00		
	107121.00				17654.00		
		76065.00				0.00	
41311.00	41311.00			0.00	0.00		
56670.00	56670.00			0.00	0.00		

The application allocates the insurance limit of Malaysian Ringgit 10,000,000 to all eligible accounts as follows:

**Table 5-3 Insurance Allocation for Customer A**

Insurance Scheme	Legal Entity	Account Number	Account Type	Account Currency	Principal Balance	Accrued Interest	Available Insurance Limit	Insured Principal Balance	Available Insurance Limit - Interest	Insured Accrued Interest	Total Insured Amount	Uninsured Principal Balance	Uninsured Accrued Interest	Total Uninsured Amount
------------------	--------------	----------------	--------------	------------------	-------------------	------------------	---------------------------	---------------------------	--------------------------------------	--------------------------	----------------------	-----------------------------	----------------------------	------------------------

Table 5-3 (Cont.) Insurance Allocation for Customer A

PID M	Le gal En tit y 1	100 001	Cur rent Acc oun t	MYR	Y	Sing le	9599 67.00	0.00	25000 0.00	2500 00.00	649 24.6 7	0.00	2500 00.00	70996 7.00
		100 002	Savi ngs Acc oun t	SGD	N	Sing le	9593 1.00	5049. 00	25000 0.00	9593 1.00	246 30.3 0	5049. 00	1009 80.00	0.00
		100 005	Cur rent Acc oun t	MYR	Y	Join t	1840 8.67	0.00	83333 .33	1840 8.67	649 24.6 7	0.00	1840 8.67	0.00
		100 004	Savi ngs Acc oun t	MYR	N	Join t	4785 2.35	5096. 70	16250 0.00	4785 2.35	297 27.0 0	5096. 70	5294 9.05	0.00
		100 003	Ter m Dep osit	MYR	N	Sing le	1126 02.0	11740 .00	15406 9.00	1126 02.00	414 67.0 0	11740 .00	1243 42.00	0.00
	Le gal En tit y 2	200 001	Cur rent Acc oun t	MYR	Y	Sing le	7133 35.00	0.00	250,0 00	2500 00.00	0.00	0.00	2500 00.00	46333 5.00
		200 004	Cur rent Acc oun t	MYR	N	Join t	4514 3.00	0.00	83,33 3	4514 3.00	381 90.3 3	0.00	4514 3.00	0.00
	Le gal En tit y 3	300 004	Cur rent Acc oun t	INR	N	Join t	4131 1.00	0.00	125,0 00	4131 1.00	836 89.0 0	0.00	4131 1.00	0.00
		300 005	Cur rent Acc oun t	INR	N	Join t	5667 0.00	0.00	83,68 9	5667 0.00	270 19.0 0	0.00	5667 0.00	0.00

Table 5-4 Insurance Allocation for Customer B

Insurance Scheme	Legal Entity	Account Number	Account Type	Account Currency	Principal Balance	Accrued Interest	Available Insurance Limit	Insured Principal Balance	Available Insurance Limit - Interest	Insured Accrued Interest	Total Insured Amount	Uninsured Principal Balance	Uninsured Accrued Interest	Total Uninsured Amount
PID M	Legal Entity 1	100005	Current Account	MYR	Y	Joint	18408.67	0.00	83333.33	18408.67	64924.67	0.00	18408.67	0.00
		100004	Savings Account	MYR	N	Joint	25766.65	2184.30	87500.00	25766.65	61733.35	2184.30	27950.95	0.00
		200002	Current Account	MYR	N	Joint	63566.00	0.00	87500.00	63566.00	0.00	0.00	63566.00	0.00
	Legal Entity 2	200004	Current Account	MYR	N	Joint	45143.00	0.00	83333.33	45143.00	0.00	0.00	45143.00	0.00
		200003	Savings Account	MYR	N	Joint	24989.20	2776.40	23934.00	23934.00	0.00	0.00	23934.00	1055.20
	Legal Entity 3	300001	Term Deposit	MYR	N	Sing le	95259.00	22344.00	25000.00	95259.00	9365.00	9365.00	104624.00	0.00
		300002	Savings Account	MYR	N	Sing le	107121.00	17654.00	154741.00	107121.00	27019.00	17654.00	124775.00	0.00
		300004	Current Account	INR	N	Joint	41311.00	0.00	12500.00	41311.00	27019.00	0.00	41311.00	0.00
		300005	Current Account	INR	N	Joint	56670.00	0.00	83689.00	56670.00	27019.00	0.00	56670.00	0.00

Table 5-5 Insurance Allocation for Customer C

Insuranc e Schem e	Legal Entit y	Accoun t Num ber	Accoun t Typ e	Accoun t Curr ency	Prin cipal Balan ce	Accrue d Inte rest	Avail able Insur ance Limit	Insured Prin cipal Balan ce	Avail able Insur ance Limit - Inter est	Insured Accrue d Inte rest	Total Insured Amount	Uninsured Principal Balance	Uninsured Accrue d Interest	Total Uninsured Amount
PIDM	Legal Entit y 2	200 002	Cur rent Accoun t	THB		0.00	1000 000	6356 6.00	7802 28.60	0.00	6356 6.00	0.00	0.00	0.00
		200 003	Cur rent Accoun t	THB	4514 3.00	0.00	9364 34.00	4514 3.00	7802 28.60	0.00	4514 3.00	0.00	0.00	0.00
		200 004	Savi ngs Accoun t	THB	9995 6.80	111 05.6 0	8912 91.00	9995 6.80	7913 34.20	1110 5.60	1110 62.4 0	0.00	0.00	0.00
	Legal Entit y 3	300 003	Cur rent Accoun t	INR	N	Sing le	7606 5.00	0.00	2500 00.00	7606 5.00	1739 35.0 0	0.00	7606 5.00	0.00

Table 5-6

Insuranc e Schem e	Legal Entit y	Accoun t Num ber	Accoun t Typ e	Accoun t Curr ency	Prin cipal Balan ce	Accrue d Inte rest	Avail able Insur ance Limit	Insured Prin cipal Balan ce	Avail able Insur ance Limit - Inter est	Insured Accrue d Inte rest	Total Insured Amount	Uninsured Principal Balance	Uninsured Accrue d Interest	Total Uninsured Amount
PIDM	Legal Entit y 1	100 005	Cur rent Accoun t	MYR	Y	Join t	1840 8.67	0.00	83,33 3	1840 8.67	6492 4.67	0.00	1840 8.67	0.00

# 6

## Singapore Deposit Insurance Corporation

This section details the deposit insurance calculations for the Monetary Authority of Singapore (MAS).

### 6.1 Insurance Allocation

This chapter discuss the insurance allocation steps.

#### 6.1.1 Identification of Insurance Eligible Accounts

The identification of insurance eligible accounts involves looking at the inclusion as well as the exclusion criteria. The application requires users to provide the following inclusion criteria:

- **Ownership Category:**

There are three ownership categories available in LRRCMAS:

- SDIC-DI: This category includes single accounts, joint accounts, sole proprietorship, trusts, and company.
- SDIC-CPFRS: This category includes CPF Retirement Sum Scheme (CPFRS).
- SDIC-CPFIS: This category includes the CPF Investment Scheme (CPFIS).

For Singapore Deposit Insurance Corporation (SDIC), a separate limit is assigned to a depositor combination based on the ownership category of accounts. Users must provide the ownership categories that get a separate limit. If a customer gets a single limit irrespective of whether the accounts are held as single, joint, or a combination, the ownership category should have a single default value.

- **Product Type:** This is a list of product types that are covered under the respective jurisdiction's deposit insurance scheme. The insurance limit is allocated to only those accounts of a customer whose product types match those that are covered by the deposit insurance. In the case of Singapore, SDIC Deposit Insurance covers all types of deposits such as current accounts, savings accounts, and term deposits, which must be provided as inputs

- **Product Type Prioritization**

The sequence in which the insured amount is to be allocated to each product type is captured. For instance, product prioritization may be specified as a current account, savings account, and term deposit. This indicates that the insured amount is allocated first to a current account held by the customer. After current accounts have been fully covered, the remaining amount is allocated to savings accounts and finally to term deposits.

If product type prioritization is not specified, the default allocation will be proportionate to the EOP balance of each account irrespective of the product type.

- **Currency Eligibility for Insurance:** This is a list of currencies in which the accounts are denominated that are eligible for insurance coverage under a deposit insurance scheme. Some jurisdictions cover foreign currency deposits under their deposit insurance schemes. If eligible currencies are specified for insurance, then the insured balance is allocated to all accounts belonging to the particular legal entity which have the associated attributes required for assigning the insured balance. For instance, SDIC Deposit Insurance ensures

only Singapore Dollar-denominated deposits. Therefore, the eligible currency against SDIC Deposit Insurance should be provided as the Singapore Dollar.

The application includes insurance exemption criteria covering deposits of foreign sovereigns, central and state governments, and banks, and so on. The deposits that are eligible for insurance under a particular insurance scheme are identified based on the inclusion and exclusion criteria as specified by the users.

## 6.1.2 Allocation of Deposit Insurance

As part of the Run execution, the application allocates the deposit insurance to accounts based on the guidelines specified by the SDIC Deposit Insurance. The insurance limit captured against each deposit insurance scheme is allocated to the insurance eligible accounts under that scheme based on the ownership category and the depositor combination.

The insurance limit, that is the maximum deposit balance covered by an insurance scheme per customer, is captured against each insurance scheme – ownership category combination. Customers having an account in multiple legal entities get a separate deposit insurance limit per legal entity. For the SDIC Deposit Insurance scheme, the limit amount should be provided in the Stage Insurance Scheme Master table at the granularity of insurance scheme.

The insurance limit is allocated to accounts as follows:

1. The application identifies the established relationship flag at a customer level.
2. The accounts are sorted by the specified product type prioritizations.
3. The insurance allocation is done based on the principal balance from the highest to the least, in the order of product type prioritization.
4. The insurance limit available is allocated to account 1 to  $n - 1$  as per the formula given below:

**Figure 6-1 formula**

$$\begin{aligned} \text{Insured Amount} &= \text{If } [((\text{Insurance Limit Available} - \text{Outstanding Balance}) \\ &\geq 0); \text{Outstanding Balance else } 0] \end{aligned}$$

Where,

Insurance Limit Available: Limit available post allocation to previous accounts is equal to Insurance Limit Available  $n-1$  minus Insured Amount  $x-1$

$x$ : Number of accounts up to the current account to which insured amount is to be allocated.

$n$ : Total number of accounts of a customer which are eligible for insurance coverage under a given ownership category.

The remaining available insurance is allocated to the last account, such as Account  $N$ , for which insurance was not allocated.

If the insurance limit is available after allocating to the principal balances, it is allocated to the accrued interest from the highest to the least in the order of Product Type prioritization.

This procedure is illustrated in the following table, considering an insurance limit of 50,000 Singapore Dollar (SGD) for each depositor combination under each ownership category for each legal entity as follows.

**Note**

- For the Single, Joint, and Sole proprietorship category, the insurance limit is aggregated for each customer per legal entity.
- Each account holder in the joint ownership category has an equal share for insurance calculation until specifically provided by the legal entity.
- Trusts with distinct account numbers are treated separately. Trust accounts are insured on a per- account– beneficiary basis without aggregation.
- Client accounts with distinct account numbers are treated separately. Client accounts are insured on a per-account basis without aggregation.

The inputs to this calculation, including account details and customer details, are provided in the following table:

**Table 6-1 Allocation of Deposit Insurance in SDIC**

Legal Entity	Account Number	Standard Product Type	Account Balance	Account Currency	Ownership Category	Primary Holder	Secondary Holder	Account Attribute	Unique Deposit or Combination	Limit Applicable	Total Deposit per Unique Depositor	Insured Amount	Uninsured Amount
Legal Entity 1	100001	Saving Account	40,000	SGD	Single	Customer 001			1	50,000	110,665	50,000	60,665
Legal Entity 1	100002	Current Account	36,903	SGD	Single	Customer 001							
Legal Entity 1	100003	Term Deposit	33,762	SGD	Single	Customer 001							
Legal Entity 1	100004	Term Deposit	40,681	USD	Single	Customer 001					40,681		40,681
Legal Entity 1	100005	Saving Account	7,355	SGD	Single	Customer 002			2	50,000	29,852.50	29,852.50	
Legal Entity 1	100006	Term Deposit	44,995	SGD	Joint	Customer 002	Joint Account with Customer 003						
Legal Entity 1	100007	Term Deposit	44,995	SGD	Joint	Customer 003	Joint Account with Customer 002		3	50,000	22,497.50	22,497.50	

**Table 6-1 (Cont.) Allocation of Deposit Insurance in SDIC**

Legal Entity 1	100008	Saving Account	7,568	SGD	Singl e	Customer 004			4	50,000	44,773	44,773.00	
Legal Entity 1	100009	Saving Account	37,205	SGD	Sole proprietorship	Customer 004							
Legal Entity 1	200100	Saving Account	29,451	SGD	Singl e	Customer 101			5	50,000	86,390	50,000	36,390
Legal Entity 1	200101	Current Account	79,640	SGD	Joint	Customer 101	Joint Account with Customer 102						
Legal Entity 1	200102	Term Deposit	10,700	SGD	Joint	Customer 101	Joint Account with Customer 103						
Legal Entity 1	200103	Term Deposit	11,769	SGD	Sole proprietorship	Customer 101							
Legal Entity 1	200103	Term Deposit	79,640	SGD	Joint	Customer 102	Joint Account with Customer 101		6	50,000	39,820	39,820.00	
Legal Entity 2	100010	Saving Account	7,337	SGD	Singl e	Customer 005			7	50,000	7,337	7,337.00	
Legal Entity 3	100011	Term Deposit	45,016	SGD	Trust	Customer 005		For benefit of son	8	50,000	45,016	45,016.00	
Legal Entity 4	100012	Term Deposit	6,574	SGD	Trust	Customer 005		For benefit of daughter	9	50,000	6,574	6,574.00	
Legal Entity 5	100013	Saving Account	4,759	SGD	Trust	Customer 005		For benefit of spouse	10	50,000	4,759	4,759.00	

**Table 6-1 (Cont.) Allocation of Deposit Insurance in SDIC**

Legal Entity 6	100014	Saving Account	20,517	SGD	Company	Customer 008		Office Account	11	50,000	20,517	20,517.00	
Legal Entity 7	100015	Saving Account	24,254	SGD	Company	Customer 008		Client Account for Customer X	12	50,000	24,254	24,254.00	
Legal Entity 8	100016	Saving Account	68,691	SGD	Company	Customer 008		Client Account for Customer Y	13	50,000	68,691	50,000.00	18,691.00
Legal Entity 9	100017	Saving Account	68,691	SGD	Single	Customer X			14	50,000	68,691	50,000.00	18,691.00
Legal Entity 1	100018	Deposit	50,101	SGD	CPFI S	Customer 501			15	50,000	50,101	50,000.00	101.00
Legal Entity 1	100019	Deposit	45,493	SGD	CPFR S	Customer 502			16	50,000	45,493	45,493.00	
Legal Entity 1	100020	Deposit	14,252	SGD	CPFR S	Customer 503			17	50000	64,590	50000	14590
Legal Entity 1	100021	Deposit	50,338	SGD	CPFI S	Customer 503							
Legal Entity 1	100022	Deposit	58,412	SGD	Single	Customer 504			18	50,000	58,412	50,000.00	8,412.00
Legal Entity 1	100024	Deposit	41,769	SGD	CPFI S	Customer 504			19	50000	52,469	50000	2469

Legal Entity	Account Number	Standard Product Type	Account Balance	Account Currency	Ownership Category	Primary Holder	Secondary Holder	Account Attribute	Unique Deposit or Combination	Limit Applicable	Total Deposit per Unique Depositor	Insured Amount	Uninsured Amount
Legal Entity 9	100017	Saving Account	68,691	SGD	Single	Customer X			14	50,000	68,691	50,000.00	18,691.00

Legal Entity 1	100018	Deposit	50,101	SGD	CPFI S	Customer 501			15	50,000	50,101	50,000.00	101.00
Legal Entity 1	100019	Deposit	45,493	SGD	CPFR S	Customer 502			16	50,000	45,493	45,493.00	
Legal Entity 1	100020	Deposit	14,252	SGD	CPFR S	Customer 503			17	50000	64,590	50000	14590
Legal Entity 1	100021	Deposit	50,338	SGD	CPFI S	Customer 503							
Legal Entity 1	100022	Deposit	58,412	SGD	Singl e	Customer 504			18	50,000	58,412	50,000.00	8,412.00
Legal Entity 1	100023	Deposit	10,700	SGD	CPFR S	Customer 504			19	50000	52,469	50000	2469
Legal Entity 1	100024	Deposit	41,769	SGD	CPFI S	Customer 504							

### 6.1.3 Identification of Deposit Stability

After the insurance limit is allocated at an account level, the application determines the deposit stability as follows:

#### 1. Stable Deposits

A stable deposit is the portion of a deposit which is fully covered by deposit insurance provided by an effective deposit insurance scheme or a public guarantee that provides equivalent protection and which satisfies one of the following conditions:

It is held in a transactional account by the depositor

OR,

□ The depositor has an established relationship with the reporting legal entity.

For Monetary Authority of Singapore (MAS), if a deposit is partially covered by insurance and meets the other criteria, the insured portion of such deposits is considered stable while the uninsured portion is considered less stable.

Stable deposits receive a 5% run-off rate unless they meet additional deposit criteria.

#### 2. Highly Stable Deposits

All “stable” deposits identified through the criteria specified in point 1 are classified as meeting additional insurance criteria if the insurance scheme under which they are covered satisfies the following conditions:

- It is based on a system of prefunding through the periodic collection of levies on banks with insured deposits.
- Has adequate means of ensuring ready access to additional funding in the event of a large call on its reserves, for example, an explicit and legally binding guarantee from the government, or a standing authority to borrow from the government.
- Access to insured deposits is available to depositors quickly once the deposit insurance scheme is triggered.

Such deposits receive a 3% run-off rate.

**3. Less Stable Deposits**

All insured and uninsured deposit or funding balances that do not meet the stable deposits criteria specified earlier are classified as less stable deposits. This includes:

- Insured balance of deposits meeting stable deposits criteria but denominated in ineligible foreign currencies.
- Uninsured balance of deposits meeting stable deposits criteria.
- Insured balance of deposits which are not transactional accounts and the customer has no established relationship with the bank.
- Deposit balance where the insurance coverage status is Uninsured.

Such deposits receive a 10% run-off rate

# Deposit Protection Scheme by the Hong Kong Deposit Protection Board

This section details the deposit insurance calculations for the Hong Kong Deposit Protection Board.

## 7.1 Insurance Allocation

The steps involved in insurance allocation are described in the following sections.

### 7.1.1 Identification of Insurance Eligible Accounts

The identification of insurance eligible accounts involves looking at the inclusion as well as the exclusion criteria. The application requires users to provide the following inclusion criteria:

- **Ownership Category**  
OFS LRRCHKMA allocates the insurance limit separately for each ownership category level. Ownership categories include single accounts, joint accounts, trusts, and Business accounts. As per the HKMA insurance agency, a separate limit is assigned to a depositor combination based on the ownership category of accounts. Users must provide the ownership categories that get a separate limit. The coverage per Legal Entity- Customer-Ownership category combination is HK\$ 500,000.
- **Product Type**  
This is a list of product types that are covered under the respective jurisdiction's deposit insurance scheme. The insurance limit is allocated to only those accounts of a customer whose product types match those that are covered by the deposit insurance. For HKMA, DPS covers the following products:
  - Current and Savings accounts
  - Term Deposits with contract maturity less than 5 years  
The following products are not covered by deposit insurance:
  - Structured Deposits
  - Certificate of Deposit
  - Term Deposits with contract maturity exceeding 5 years
- **Product Type Prioritization**  
While allocating insured amounts from customer level to customer-account level, priority is given as shown in the following table:

**Table 7-1 Product Type Prioritization**

Basis	Description
1. Standard Product Type	Current Account and Savings accounts =Priority 1; Time deposits= Priority 2
2. Balance	If the Product types of two or more accounts are the same, the priority is given to account with highest EOP balance.

**Table 7-1 (Cont.) Product Type Prioritization**

3. Account number	Rarely, the product type and balances between accounts are the same. When this occurs, allocate priority to the lowest account number.
-------------------	--

## 7.1.2 Allocation of Deposit Insurance

As part of the HKMA Run, the application allocates the deposit insurance to accounts based on the guidelines specified by the DPS. The insurance limit captured against each deposit insurance scheme is allocated to the insurance eligible accounts under that scheme based on the ownership category and the depositor combination. The customer under consideration should not be an Excluded party. An excluded party is one where the party's deposits are not eligible to be covered under the deposit insurance scheme. As per Hong Kong Deposit Protection Scheme, licensed banks, senior management, controllers and directors of the Scheme member and its related companies are not eligible for deposit insurance.

## 7.1.3 Identification of Deposit Stability

After the insurance limit is allocated at an account level, the application determines the deposit stability as follows:

A Stable Deposit is the portion of a deposit which is covered by deposit insurance provided by an effective deposit insurance scheme or a public guarantee that provides equivalent protection and which satisfies one of the following conditions:

- — It is held in a transactional account by the depositor.  
OR
- The depositor has an established relationship with the reporting legal entity.

The application identifies the existence of an established relationship if the depositor meets one of the following criteria:

- Depositor holds more than one account with the bank, of which at least one account should be of a type other than a deposit.  
OR
- The bank has assigned a customer relationship manager to the depositor.

If a deposit is partially covered by insurance and meets the other criteria, the insured portion of such deposits is treated as stable while the uninsured portion is treated as less stable. Stable deposits receive a 5% run-off rate.

All insured and uninsured deposit or funding balances that do not meet the stable deposits criteria specified earlier are classified as less stable deposits: This includes:

- — Uninsured balance of deposits meeting stable deposits criteria.
- Insured balance of deposits which are not transactional account and the customer has no established relationship with the bank.
- Deposit balance where the insurance coverage status is Uninsured. Less stable deposits receive a 10% run-off rate.

# 8

## Regulation Addressed through Rules

The application supports multiple pre-configured rules and scenarios based on regulator-specified scenario parameters such as inflow rates, outflow rates, run-offs and haircuts, and so on.

### 8.1 Preconfigured Regulatory Scenarios

The list of preconfigured rules and the corresponding reference to the regulatory requirement that it addresses are provided in the following table.<sup>1</sup>

**Table 17: Pre-configured Rules in DICLRM**

**Table 8-1 Pre-configured Rules in DICLRM**

Sl. No.	Rule Name	Rule Description	Regulatory Reference
1	DIC - Deposit Insurance - Party Type Reclassification	This is a reclassification rule to reclassify all bank party types to the FDIC party type in the FSI_DEPOSIT_INSURANCE_RECLASS table.	12 CFR Part 370 ITFG v2.0 –Appendix A, Customer File, CS_Type
2	DIC - Deposit Insurance - Eligible Accounts Identification	This rule identifies whether or not a deposit account is eligible for insurance calculation. If eligible, the deposit account is marked as eligible in the FSI_DEPOSIT_INSURANCE table.	12 CFR Part 330.3 12 CFR Part 370 ITFG v2.0 - 2.2.7
3	DIC - Deposit Insurance - ORC Flag	This rule identifies whether or not the account should be considered for ORC reclassification. If eligible, then ORC is marked as eligible in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 – 3.3 Step 4
4	DIC - Deposit Insurance - Eligible Beneficiary Flag	This rule identifies whether or not the beneficiary is eligible for insurance calculation. If eligible, then the beneficiary is marked as eligible in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 330.10 c and d.
5	DIC - ORC Type Identification - Mortgage Servicing Accounts	This rule identifies if a deposit account meets the criteria for Mortgage Servicing Accounts (MSA) Ownership Right and Capacity type. MSA identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.10.1
6	DIC - ORC Type Identification - Business Accounts	This rule identifies if a deposit account meets the criteria for Business Accounts (BUS) Ownership Right and Capacity type. BUS identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.8.1

**Table 8-1 (Cont.) Pre-configured Rules in DICLRM**

7	DIC - ORC Type Identification - Irrevocable Trust Accounts	This rule identifies if a deposit account meets the criteria for Irrevocable Trust Accounts (IRR) Ownership Right and Capacity type. IRR identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.5.1
8	DIC - ORC Type Identification - Revocable Trust Accounts	This rule identifies if a deposit account meets the criteria for Revocable Trust Accounts (REV) Ownership Right and Capacity type. REV identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.4.1
9	DIC - ORC Type Identification - Certain Retirement Accounts	This rule identifies if a deposit account meets the criteria for Certain Retirement Accounts (CRA)	12 CFR Part 370 ITFG v2.0 –4.1.6.1
		Ownership Right and Capacity type. CRA identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	
10	DIC - ORC Type Identification - Employee Benefit Plan Accounts	This rule identifies if a deposit account meets the criteria for Employee Benefit Plan Accounts (EBP) Ownership Right and Capacity type. EBP identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.7.1
11	DIC - ORC Type Identification - DIT as the Trustee of an Irrevocable Trust Accounts	This rule identifies if a deposit account meets the criteria for Depository Institution as the Trustee Accounts (DIT) Ownership Right and Capacity type. DIT identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.11.1
12	DIC - ORC Type Identification - Sovereign and Central Government Accounts	This rule identifies if a deposit account meets the criteria for Government Accounts (GOV) -Sovereign and Central Government accounts Ownership Right and Capacity type. GOV identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.9.1- 5
13	DIC - ORC Type Identification - Other Government Accounts	This rule identifies if a deposit account meets the criteria for Government Accounts (GOV) -Other Government accounts Ownership Right and Capacity type. GOV identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.9.1- 7
14	DIC - ORC Type Identification - Tribal Trust Funds held under Government Accounts	This is a rule which identifies if a deposit account meets the criteria for Government Accounts (GOV) - Tribal Trust Funds held under Government accounts Ownership Right and Capacity type. GOV identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.9.1- 7
15	DIC - ORC Type Identification - Joint Accounts	This rule identifies if a deposit account meets the criteria for Joint Accounts (JNT) Ownership Right and Capacity type. JNT identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.3.1

**Table 8-1 (Cont.) Pre-configured Rules in DICLRM**

16	DIC - ORC Type Identification - Single Accounts	This rule identifies if a deposit account meets the criteria for the Single Accounts (SGL) Ownership Right and Capacity type. SGL identification is stored in FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.2.1
17	DIC - ORC Type Identification - DOE Accounts	This rule identifies if a deposit account meets the criteria for the Department of Energy Accounts (DOE) Ownership Right and Capacity type. DOE identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.15.1
18	DIC - ORC Type Identification - Public Bond Accounts	This rule identifies if a deposit account meets the criteria for Public Bond Account (PBA) Ownership Right and Capacity type. PBA identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.13.1
19	DIC - ORC Type Identification - Annuity Contract Accounts	This rule identifies if a deposit account meets the criteria for Annuity Contract Accounts (ANC) Ownership Right and Capacity type. ANC identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.12.1
20	DIC - ORC Type Identification - BIA - Custodian Accounts for American Indians	This rule identifies if a deposit account meets the criteria for Custodian Account for American Indians (BIA) Ownership Right and Capacity type. BIA identification is stored in the FSI_DEPOSIT_INSURANCE_DTLS table.	12 CFR Part 370 ITFG v2.0 –4.1.14.1
21	DIC - Pending Reason Identification - Irrevocable Trust Accounts	This rule updates the pending reasons for Trust Accounts.	12 CFR Part 370 ITFG v2.0 – Appendix A, Customer File, CS_Type 5.4 –Output File population
22	DIC - Pending Reason Identification - Sovereign and Central Government Accounts	This rule updates the pending reasons for Government Accounts.	12 CFR Part 370 ITFG v2.0 – Appendix A, Customer File, CS_Type 5.4 –Output File population
23	DIC - Pending Reasons	This rule updates the pending reasons for All Accounts which has a missing interest.	12 CFR Part 370 ITFG v2.0 – Appendix A, Customer File, CS_Type 5.4 –Output File population

# 9

## User Roles and Access

The following roles are defined for the Deposit Insurance Calculation (DIC) application:

1. **DIC Analyst (DICANALYST):** This user handles defining and maintaining the user interface input parameters and definitions required by the application. This user is also allowed to execute the Runs defined within the application.  
A DIC Analyst can define Runs with the following access privileges: Add, View, Edit, Copy, Delete, Send for Approval, Make Active, Retire, Approval Summary, and execute the Runs created in the application. This user may not approve definitions. A Run is sent for approval by this user to the DIC approver.
2. **DIC Approver (DICAPROVER):** This user handles verifying and approving the tasks assigned to and completed by the DIC Analyst. Additionally, this user can execute the Runs created in the application. For instance, this user can approve and execute a definition.

A DIC Approver can approve Runs defined by the DIC analyst with the following access privileges: View, Approve, Reject, Retire, Approval Summary, and execute the Runs created in the application.

## Appendix A – User Configuration and Settings

This section includes information about the standard reclassifications involved in the application.

### 10.1 Standard Reclassifications

The regulatory guidelines specify classifications and computations based on certain generic products and party types. Each bank, internally, will have its product and party types, which differ from bank to bank. To ensure consistency in computations, the application supports two standard dimensions based on the regulatory guidelines:

- Standard Product Type
- Standard Party Type

The bank-specific product and party types, which are accepted as a download in the staging tables, must be reclassified to standard product and party types supported by OFS LRS respectively.

#### 10.1.1 Standard Product Type Reclassification

Banks must map their specific product types to the Standard Product Types as part of the rule LRM - Standard Product Type Reclassification. The application then reclassifies the bank product types to Standard Product Types and utilizes the Standard Product Types for further processing.

#### 10.1.2 Standard Party Type Reclassification

Banks must map their specific party types to the Standard Party Types as part of the rule LRM - Standard Party Type Reclassification. The application then reclassifies the bank party types to Standard Party Types and utilizes the Standard Party Types for further processing. Party types include customer type, issuer type, and guarantor type.

#### 10.1.3 Insurance Party Type Reclassification

Banks must map their specific party types to the Insurance Party Types as part of the rule DIC – Deposit Insurance - Party Type Reclassification. The application then reclassifies the bank party types to Insurance Party Types and utilizes the Insurance Party Types for further processing.

# Performance Improvement Guidelines for DIC

See the OFS LRS [Performance Tuning User Guide Release](#) for more information about performance improvement guidelines