Oracle Financial Services Liquidity Risk Regulatory Calculations for European Banking Authority

User Guide

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OFS Liquidity Risk Regulatory Calculations for European Banking Authority User Guide

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1.0	Created: June 2020	Captured updates for 8.1.0.0.0 release
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1 Preface

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

Topics:

- Scope of the guide
- Intended Audience
- Related Information Sources
- Abbreviations
- What Is new In This Release

1.1 Scope of the Guide

The objective of this user guide is to provide comprehensive information about the regulatory calculations supported in the Oracle Financial Services Liquidity Risk Regulatory Calculations for European Banking Authority (LRRCEBA), Release 8.0.7.0.0. This document is intended to help you understand the methodologies involved in computing the LCR ratio and other regulatory metrics and computations.

This User Guide should be used in conjunction with the documents listed in the Related Information Sources section to get a complete view of how the general capabilities of LRRCEBA have been leveraged and the configurations required for addressing the regulatory requirements.

1.2 Intended Audience

Welcome to Release 8.1.0.0.0 of the Oracle Financial Services Liquidity Risk Regulatory Calculations for European Banking Authority. This manual is intended for the following audience:

- Business Users: 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 Analysts: This user helps clean, validate, and import data into the OFSAA Download Specification Format.

1.3 Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support (MOS). 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.

1.4 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 8.1.0.0.0 Release Notes
- OFS Liquidity Risk Solution Application Pack 8.1.0.0.0 Installation Guide
- OFS Liquidity Risk Solution Release 8.1.0.0.0 Analytics User Guide
- OFS Liquidity Risk Measurement and Management Release 8.1.0.0.0 User Guide

OHC Documentation Library **for OFS AAAI Application Pack:**

- OFS Advanced Analytical Applications Infrastructure (OFS AAAI) Application Pack Installation and Configuration Guide
- OFS Analytical Applications Infrastructure User Guide

Additional Reference Documents:

- OFSAA Licensing User Manual, Release 8.1.0.0.0
- OFS Analytical Applications 8.1.0.0.0 Technology Matrix
- OFS Analytical Applications Infrastructure Security Guide
- OFS LRS Security Guides Release 8.1.x
- Oracle Financial Services Analytical Applications Infrastructure Cloning Guide
- OFS LRS Cloning Guide Release 8.0.x
- OFS LRS Cloning Guide Release 8.1.x

1.5 Abbreviations

The following table lists the abbreviations used in this document.

Table 1: Abbreviations

Abbreviation	Description
LRS	Liquidity Risk Solution
LRMM	Liquidity Risk Measurement and Management
LRRCHKMA	Liquidity Risk Regulatory Calculations for the Hong Kong Monetary Authority
LRRCEBA	Liquidity Risk Regulatory Calculations for the European Banking Authority
LRRCRBI	Liquidity Risk Regulatory Calculations for Reserve Bank of India
LRRCUSFED	Liquidity Risk Regulatory Calculations for US Federal Reserve
DICLRM	Deposit Insurance Calculations for Liquidity Risk Management
OFS	Oracle Financial Services

Abbreviation	Description
LCR	Liquidity Coverage Ratio
NSFR	Net Stable Funding Ratio
LMR	Liquidity Maintenance Ratio
CFR	Core Funding Ratio

1.6 What is New in this Release

The Oracle Financial Services Liquidity Risk Regulatory Calculations for European Banking Authority 8.1.0.1.0 is an enhancement of the existing Oracle Financial Services Liquidity Risk Regulatory Calculations for European Banking Authority Release 8.1.0.0.0 which has the following enhanced features:

- Enhancements have been made in the Deposit Insurance Calculation.
- Additional insured amount due to temporary high balance has been introduced.
- Amendments have been made to the Deposit Stability Identification and Computation.
- Back-dated run execution for Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) reports is introduced.

2 Liquidity Coverage Ratio Calculation as Per Delegated Act

The EBA Delegated Act (DA) Liquidity Coverage Ratio calculations cater to the guidelines on liquidity coverage requirement for Credit Institutions that were published by the European Commission in October 2014 as a supplement to Regulation (EU) 575/2013. The Commission proposed several adjustments to reflect the Union specificities, most notably for certain covered bonds and securitized assets.

The liquidity coverage ratio addresses the short-term liquidity needs of an institution during a stressful situation. It estimates whether the stock of high-quality liquid assets is sufficient to cover the net cash outflows under stress situations over a specified future period, in general, lasting 30 calendar days (or LCR horizon). The liquidity coverage ratio is calculated at the legal entity level, on a standalone and consolidated basis.

Topics:

- Inputs
- Process Flow
- Preconfigured Regulatory LCR Scenario

2.1 Inputs

The application requires the following inputs for LCR calculation:

- Liquidity haircut for each asset level, which is provided through business assumption with assumption category as valuation change and assumption subcategory as the haircut.
- The business assumption that defines the outflow percentage. It is defined through appropriate business assumptions. For example, retail deposit Run-off is defined through business assumption with category as incremental cash flow and subcategory as Run-off.
- The business assumption that defines the inflow percentage. It is defined through appropriate business assumptions. For example, Rollover Reverse Repo is defined through business assumption with category as cash flow movement and subcategory as a Rollover.
- Liquidity Horizon is specified as the Runtime parameter.

2.2 Process Flow

This section provides a high-level LCR Calculation Process Flow (Under EBA Delegated Act).

Topics:

- Identifying Asset Levels
- Identifying Eligible HQLA
- Calculating Stock of HQLA
- Determining Maturity of Cash Flows
- Classifying Operational Amount
- Calculating Operational Amount

- Calculating Deposit Insurance
- Identifying Deposit Stability
- Consolidation
- Cash Flow Aggregation
- Business Assumption
- Calculating Contractually Required Collateral
- Calculating Excess Collateral
- Calculating Downgrade Impact Amount
- Calculating Net Derivative Cash Inflows and Outflows
- Calculating Twenty-Four Month Look-back Amount
- Calculating Operational Amount
- Calculating HQLA Transferability Restriction
- Calculating Cash Inflows and Outflows
- Alternative Liquidity Approaches
- Home-Host Configuration
- Interdependent Cash Flows (LCR)
- Calculating of Liquidity Coverage Ratio

The application supports a ready-to-use delegated act LCR calculation that has the regulatory scenarios with associated HQLA haircuts, inflow, and outflow rates preconfigured in the form of business assumptions as prescribed by the European Banking Authority as part of the Commission Delegated Regulation (EU) 2015/61.

2.2.1 Identifying Asset Levels

High quality liquid assets are assets that can be easily sold or used as collateral to obtain funds at little or no loss of value even under stress scenarios. All assets, whether owned by the bank or received from counterparties as collateral, that meet the high quality liquid asset criteria specified by BIS, are classified as follows:

- Level 1 Assets
- Level 2A Assets
- Level 2B Assets

Level 1 assets excluding covered bonds can be included without limit, Level 1 covered bonds can only include 70% of the stock of Level 1 assets and Level 2 assets can only include 40% of the stock of HQLA. Of this, Level 2B assets can only include 15% of the stock of HQLA. Any asset not classified as an HQLA is considered an Other Asset.

NOTE

1. The application assigns relevant regulatory haircuts to each asset classified as HQLA as part of the preconfigured regulatory scenario. This haircut can be modified by the user for stress testing.
2. The value included in the stock of HQLA is net of any hedge termination cost or gain, as applicable.

Topics:

- Identifying and Treating Level 1 Assets
- Identifying and Treating Level 2A Assets
- Identifying and Treating Level 2B Assets

2.2.1.1 Identifying and Treating Level 1 Assets

The application identifies the following assets as HQLA Level 1 assets:

1. Cash which includes coins, banknotes, and restricted cash. The value included in the stock of HQLA is the cash balance Central bank reserves, to the extent that the central bank policies allow them to be drawn down in times of stress. These include bank's overnight deposits and term deposits that can be withdrawn immediately Central bank reserves, include the balance held by a bank with the central bank directly, or through a correspondent bank less any minimum reserve requirement. The value of eligible term deposits that are included in the amount net of any withdrawal penalty.
2. Assets issued or guaranteed by one of the following:
   - European Central Bank
   - The Central Bank of a Member State
   - The Central Government of a Member State
3. Assets which satisfy the following conditions:
   - Issuer type or guarantor type is one of the following:
     - Central Bank
     - Central Government
   - The party, that is issuer or guarantor, belongs to a third country.
   - The party is assigned a minimum of a credit quality step 1 credit assignment.
4. Assets which satisfy the following conditions:
   - Issuer type or guarantor type is one of the following:
     - Regional Government
     - Local Authority
     - Public Sector Entity
   - The exposure to the party is treated similarly to the exposure to its respective central government, whether belonging to a Member State or a third country.

5. Assets which satisfy the following conditions:
   - Issuer type or guarantor type is one of the following:
     - Central Bank
     - Central Government
   - The party, that is issuer or guarantor, belongs to a third country.
   - The party is not assigned a credit quality step 1 credit assessment.

     Such assets are included in the stock of HQLA only up to the extent of the bank's net stressed cash outflows in that currency arising from the bank's operations in that foreign jurisdiction.
6. Assets which satisfy the following conditions:
   - Issuer type or guarantor type is one of the following:
     - International Organization
     - Multilateral Development Bank
   - The party is assigned a credit quality step 1 credit assessment.
7. Assets issued by credit institutions which satisfy the following criteria:
   - The institution is backed by a Member State central government, regional government or local authority.
   - The exposure to the regional government or local authority is treated similarly to the exposure to its respective central government.
   - The backing authority is obligated to ensure the financial viability of the institution.
8. Assets issued by credit institutions which satisfy the following criteria:
   - The institution is a promotional lender.
   - 90% of its loan is guaranteed a Member State central government, regional government or local authority.
   - The exposure to the regional government or local authority is treated similarly to the exposure to its respective central government.
9. Covered bonds which satisfy the following criteria:
   - Are subject to special supervision which protects bondholders and whose proceeds are invested in a manner that enables the issuer to pay claims on the bonds when they arise.
   - Have an issue size of at least EUR 500 million.
   - Are assigned a minimum of credit quality step 1 credit assessment or a risk weight of <=10%.
   - Not more than 15% of the outstanding issue of covered bond is collateralized by assets issued by institutions assigned a credit quality Step 1.
   - The institution and issuer meet the transparency requirements which accord preferential treatment to covered bonds.
   - The underlying asset pool is more than 2% of the outstanding amount of the covered bond.

10. Sight deposits of the credit institution, which belongs to an institutional protection scheme or a cooperative network, maintained with the central institution of the network, where the central credit institution is legally required to invest the deposit amount in liquid assets of a specified level. The amount included in the stock of Level 1 assets is that portion of the deposit which is invested in Level 1 assets.

11. Assets issued by credit institutions which satisfy the following conditions:

- Guarantor type is one of the following:
  - Central Government
  - Regional Government
  - Local Authority
- The guarantor belongs to a Member State.
- The exposure to the guarantor is treated similarly to the exposure to its respective central government.
- The guarantee was given before 30 June 2014.
- The guarantee is direct, explicit, irrevocable, and unconditional and covers the failure to pay principal and interest when due.

The amount included in the stock of HQLA is only to the extent guaranteed before 30 June 2014.

12. Senior bonds issued by member state-sponsored impaired assets management agencies of the following countries:

- Ireland
- Spain
- Slovenia

Such bonds are included in the stock of HQLA only till 31 December 2023.

13. Investments in Collective Investment Units (CIUs) which satisfy the following criteria:

- The following information relating to the CIU is published:
  - The categories of assets in which the CIU is authorized to invest.
  - if investment limits apply, the relative limits and the methodologies to calculate them.
  - the business of the CIU on an annual basis.
- The underlying assets of the CIU are liquid assets which are classified as Level 1 assets. This is classified by the application.
  - Should not be self-issued.
  - The issuer is subject to special supervision and it ensures sufficient cooperation with the competent authority.

NOTE The maximum value of the investment in CIUs by a particular entity included in the stock of HQLA is EUR 500 million across all CIUs held by the entity.

The application assigns and applies a 0% haircut to all assets classified as Level 1 except covered bonds and CIU's. Covered bonds classified as Level 1 assets are assigned a haircut of 7%.

CIUs classified as Level 1 assets, are assigned haircuts as follows:

- 0% on coins, banknotes, and exposures to central banks.
- 12% on covered bonds.
- 5% on other levels 1 assets.

2.2.1.2 Identifying and Treating Level 2A Assets

The application identifies the following assets as HQLA Level 2A assets:

1. Assets which satisfy the following conditions:
   - Issuer type or guarantor type is one of the following:
     - Regional Government
     - Local Authority
     - Public Sector Entity
   - The party, that is issuer or guarantor, belongs to a Member State
   - The exposure is assigned a risk weight of less than or equal to 20%.
2. Assets which satisfy the following conditions:
   - Issuer type or guarantor type is one of the following:
     - Central Bank
     - Central Government
     - Regional Government
     - Local Authority
     - Public Sector Entity
   - The party, that is issuer or guarantor, belongs to a third country.
   - The exposure is assigned a risk weight of less than or equal to 20%.
3. Covered bonds which satisfy the following criteria:
   - Are subject to special supervision which protects bondholders and whose proceeds are invested in a manner that enables the issuer to pay claims on the bonds when they arise.
   - Have an issue size of at least EUR 250 million.
   - Are assigned a minimum of credit quality step 2 credit assessment or a risk weight of <=20%.
   - Not more than 15% of the outstanding issue of covered bond is collateralized by assets issued by institutions assigned a credit quality step 1.
   - The institution and issuer meet the transparency requirements which accord preferential treatment to covered bonds.

- The underlying asset pool is more than 7% of the outstanding amount of the covered bond when the issue size is greater than or equal to 500 EUR million.
- The underlying asset pool is more than 2% of the outstanding amount of the covered bond when the issue size is greater than or equal to 250 and less than 500 EUR million provided the bonds are assigned a minimum credit quality step 1 credit assessment or risk weight of less than or equal to 10%.

4. Covered bonds issued by credit institutions in third countries which satisfy the following criteria:

- Are subject to special supervision, in the third country, which protects bondholders and whose proceeds are invested in a manner that enables the issuer to pay claims on the bonds when they arise.
- Have an issue size of at least EUR 250 million.
- Are assigned a minimum of credit quality step 1 credit assessment or a risk weight of less than or equal to 10%.
- Not more than 15% of the outstanding issue of covered bond is collateralized by assets issued by institutions assigned a credit quality step 1.
- The institution and issuer meet the transparency requirements which accord preferential treatment to covered bonds.
- The underlying asset pool is more than 7% of the outstanding amount of the covered bond when the issue size is greater than or equal to 500 EUR million and 2% of the outstanding amount when the issue size is greater than or equal to 250 and less than 500 EUR million.
- Backed by a pool of assets of one or more of the following types mentioned:
  - Debt securities issued or guaranteed by third country's central government or central bank or multilateral development bank or international organization that are assigned a minimum of credit quality step 1.
  - Debt securities issued or guaranteed by third country's public sector entity or regional government or local authority bank that are assigned a minimum of credit quality step 1, and the exposure is assigned a minimum of credit quality step 2.
  - Residential loans having a maximum loan-to-value (LTV) ratio of 80% and assigned a risk weight <= 35%.
  - Loans secured by commercial immovable property having a maximum LTV ratio of 60%.
  - Maritime loans having a maximum LTV ratio of 60%.

5. Corporate debt securities which satisfy the following conditions:

- Are assigned a rating of credit quality step 1 or risk weight less than or equal to 20%.
- The issue size is greater than or equal to EUR 250 million.
- The time to maturity when the security was issued was less than or equal to 10 years.

6. Sight deposits of the credit institution, which belongs to an institutional protection scheme or a cooperative network, maintained with the central institution of the network, where the central credit institution is legally required to invest the deposit amount in liquid assets of a specified level. The amount included in the stock of Level 2A assets is that portion of the deposit which is invested in Level 2A assets.

The application assigns and applies a 15% haircut to all assets classified as Level 2A except CIUs.

7. Investments in Collective Investment Units (CIUs) which satisfy the following criteria:
    - The following information relating to the CIU is published:
        - the categories of assets in which the CIU is authorized to invest.
        - if investment limits apply, the relative limits and the methodologies to calculate them.
        - the business of the CIU on an annual basis.
    - The underlying assets of the CIU are liquid assets which are classified as Level 2A assets. This is classified by the application.
    - Should not be self-issued.
    - The issuer is subject to special supervision and it ensures sufficient cooperation with the competent authority.

> **NOTE** The maximum value of the investment in CIUs by a particular entity included in the stock of HQLA is EUR 500 million across all CIUs held by the entity.

2.2.1.3 Identifying and Treating Level 2B Assets

The application identifies the following assets as HQLA Level 2B assets:

1. Asset-backed security meeting the following criteria:
    - Has a rating of at least credit quality step 1 or risk weight up to 20%.
    - Are Senior bonds.
    - The underlying asset is one of the following types:
        - First, lien residential loan having either maximum Loan-To-Value ratio (LTV) of 80% or maximum Loan-To-Income ratio (LTI) of 60%.
        - Fully Guaranteed Residential Loans.
        - Commercial Loans or Leases or Credit Facilities.
        - Auto Loans or Leases.
        - Personal Loans or Credit Facilities.
        - Are not self-issued.

    Asset-backed securities fulfilling above criteria are assigned haircuts as follows:
    - 25% on first-lien residential loans, fully guaranteed residential loans, and auto loans and leases.
    - 35% on commercial loans, leases, credit facilities, or personal loans.
2. Corporate debt securities which satisfy the following conditions:
    - Are assigned a minimum rating of credit quality step 3 or risk weight >= 20% and <=100%.
    - The issue size is >= EUR 250 million.

- The time to maturity when the security was issued was <=10 years.

The application assigns and applies a 50% haircut to all corporate debt securities classified as Level 2B.

3. Shares which satisfy the following conditions:
   - Are a component of a major stock index.
   - Issuer type is not a financial institution or its affiliated entities.
   - Price has not decreased, or haircut has not increased by more than 40% over a 30-day period during a relevant period of significant liquidity stress which is specified by the bank.
   - Are denominated in the domestic currency of the legal entity's home jurisdiction. If denominated in a foreign currency, they are included in the stock of HQLA as Level 2B assets only to the extent of the bank's net stressed cash outflows in that currency arising from bank's operations in that foreign jurisdiction.
4. Restricted-use committed liquidity facility provided by the following:
   - European Central Bank.
   - Central Bank of a Member State.
   - Central Bank of a third country.
   - The application assigns and applies a 0% haircut to all restricted-use committed liquidity facilities classified as Level 2B.
5. Exposures in the form of extremely high quality covered bonds meeting the following criteria:
   - Issue size of at least EUR 250 million.
   - Institution periodically receives information about the pool, geographical distribution, maturity structure, loan percentage more than 90 days past due.
   - The underlying asset pool is more than 10% of the outstanding amount of the covered bond.
   - National law to protect bondholders supervises issuer and the covered bonds. The laws of third countries are at least equal to respective union laws.
   - Backed exclusively by a pool of assets having the following asset types fulfilling accompanying criteria:
     - A debt security issued or guaranteed by member state's central government or central bank or ECB or public sector entity or regional government or local authority.
     - Residential loan having maximum Loan-To-Value ratio (LTV) of 80% and risk weight up to 35%.
     - The residential loan fully guaranteed by eligible credit protection provider having maximum Loan-To-Income ratio (LTI) of 33%.

   The application assigns and applies a 30% haircut to all covered bonds classified as Level 2B.
6. Sight deposits of the credit institution, which belongs to an institutional protection scheme or a cooperative network, maintained with the central institution of the network, meeting one of the following criteria:

- The central credit institution is legally required to invest the deposit amount in liquid assets of a specified level and has invested the deposit amount in Level 2B liquid assets. In this case, the amount included in the stock of Level 2B assets is that portion of the deposit which is invested in Level 2B assets.
- The central credit institution has no obligation to invest the deposit amount in liquid assets

7. Liquidity Facility provided by the central institution of an institutional network of cooperative banks or institutional protection schemes. Considered as Level 2B up to the portion of funding not collateralized by any specific liquid asset.

   The application assigns and applies a 25% haircut such liquid facilities classified as Level 2B.

8. A non-interest bearing asset which satisfies the following conditions:
   - Issuer type or guarantor type is one of the following:
     - Central Bank
     - Central Government
     - Regional Government
     - Local Authority
     - Public Sector Entity
   - The party, that is issuer or guarantor, belongs to a third country.
   - The exposure is assigned a minimum rating of credit quality step 5 or risk weight of <=100%.
   - Is not an obligation of a financial institution or any of its affiliated entities.

   The application assigns and applies a 50% haircut to all non-interest bearing assets classified as Level 2B.

9. Asset-backed security meeting the following criteria:
   - Has a rating of at least credit quality step 1 or risk weight up to 20%.
   - Is Senior bond.
   - Underlying asset pool is First lien residential loan having maximum Loan-To-Value ratio (LTV) of > 80% and maximum Loan-To-Income ratio (LTI) of > 45%.
   - Are not self-issued.
   - Asset-backed security issue date greater than or equal to 1-Oct-2015 meets the following criteria:
     - Underlying of Asset Based Security is not subject to Loan-to-Income Ratio.
     - Underlying Loan is issue date less than 1-Oct-2015.
     - Such Asset-backed security are included in the stock of HQLA only till 1-October-2025

10. Investments in Collective Investment Units (CIUs) which satisfy the following criteria:
    - The following information relating to the CIU is published:
      - the categories of assets in which the CIU is authorized to invest.
      - if investment limits apply, the relative limits and the methodologies to calculate them.

— the business of the CIU on an annual basis.

- The underlying assets of the CIU are liquid assets which are classified as Level 2B assets. This is classified by the application.
- Should not be self-issued.
- The issuer is subject to special supervision and it ensures sufficient cooperation with the competent authority.

NOTE The maximum value of the investment in CIUs by a particular entity included in the stock of HQLA is EUR 500 million across all CIUs held by the entity.

CIUs classified as Level 2B assets are assigned haircuts as follows:

- 30% on Level 2B securitizations backed by residential and auto loans.
- 35% on Level 2B covered bonds.
- 40% on Level 2B securitizations backed by commercial and personal loans.
- 55% on Level 2B corporate bonds, shares and non-interest Bearing assets.

2.2.2 Identifying Eligible HQLA

The application identifies whether a bank's asset or a mitigant received under re-hypothecation rights meets all the operational requirements prescribed by the regulator. If an asset classified as HQLA meets all the relevant general requirements and operational criteria it is identified as eligible HQLA and included in the stock of HQLA. The application checks for the following general requirements and operational criteria:

- **Unencumbered**

  The application looks at the encumbrance status and includes only those assets in the stock which are unencumbered. If partially encumbered, then the portion of the asset that is unencumbered is considered as HQLA and included in the stock. If an asset is pledged to the central bank or a PSE but is not used, the unused portion of such an asset is included in the stock. The application assigns the usage of a pledged asset in the ascending order of asset quality. The lowest quality collateral is marked as used first.

- **Exclusion of Certain Rehypothecated Assets**

  Any asset that a bank receives under a re-hypothecation right is not considered eligible HQLA if the counterparty or beneficial owner of the asset has a contractual right to withdraw the asset at any time within 30 calendar days.

- **Operational Capability to Monetize HQLA**

  An asset is considered HQLA only if the bank has ready access to their liquid asset holdings, demonstrated the operational capability to monetize such an asset, and has periodically monetized such an asset via outright sale or repurchase agreement. The application captures this information for each asset as a flag.

- **HQLA Under the Control of the Liquidity Management Function**

To be considered eligible HQLA the asset is required to be under the control of the management function of the bank that manages liquidity. The application captures this information for each asset as a flag.

- **Termination of Transaction Hedging HQLA**

  If an HQLA is hedged by a specific transaction, then the application considers the impact of closing out the hedge to liquidate the asset that is, the cost of or gain from terminating the hedge while computing the stock of HQLA. The hedge termination cost or gain is adjusted to the market value of the asset for inclusion in the stock of HQLA.

- **Exclusion of Certain Issuers**

  An asset issued by the institution, its parent, subsidiaries, or affiliates does not qualify to be included in the stock of HQLA. The application identifies the self-issued flag based on the issuer of the asset and excludes self-issued assets from the stock of HQLA. Similarly, certain assets issued by financial institutions are excluded from the stock of HQLA. This is addressed during the classification of an asset as an HQLA.

- **Liquid and readily marketable**

  The application checks the following criteria for determining whether an asset is liquid and readily marketable:

  - Availability of timely and observable market prices
  - Listed on a recognized exchange
  - High trading volumes
  - Presence of active secondary market
  - Presence of a two-way market

  This is addressed during the classification of an asset as an HQLA.

- **Transferability Restriction during Consolidation**

  Assets held in a third country, where there are restrictions to their free transferability, are included in the stock of HQLA only to the extent required to meet liquidity outflows in that third country. Assets held in a nonconvertible currency are included in the stock of HQLA only to the extent required to meet liquidity outflows in that currency. The application identifies such restrictions and includes them in the stock of HQLA appropriately during the consolidation process.

2.2.3 Calculating Stock of HQLA

All unencumbered assets classified as Level 1, 2A, or 2B, which meet the HQLA eligibility criteria, are included in the Stock of High-Quality Liquid Assets (SHQLA). The formula for calculating SHQLA is as follows:

$$\begin{aligned}&\textit{Stock of HQLA}\\&= \textit{Total Unadjusted Stock of HQLA} - \textit{Minimum}\,(\textit{Total Unadjusted Stock of HQLA},\\&\quad \textit{Excess Liquid Asset Amount})\end{aligned}$$

Where:

Total Unadjusted Stock of HQLA = Level 1 Excluding Covered Bonds + Level 1 Covered Bonds + Level 2A Assets + Level 2B Assets

Excess Liquid Asset Amount = Excess Level 1 Covered Bonds Liquid Asset Amount + Excess Level 2A Liquid Asset Amount + Excess Level 2B Liquid Asset Amount

The application applies the relevant liquidity haircuts to the market value of each eligible HQLA based on the haircuts specified as part of a business assumption. The sum of haircut adjusted market value of all assets which are not *other assets* and which are classified as *eligible HQLA* includes the stock of HQLA. The stock includes the bank's assets which are unencumbered, that is not placed as collateral; as well assets received from counterparties where the bank has a re-hypothecation right and where such assets are not rehypothecated.

NOTE All calculations are based on the market value of assets.

The following steps are involved in computing the stock of HQLA:

Topics:

- Calculating Stock of Liquid Assets
- Identifying Eligible HQLA on Unwind
- Unwinding of Transactions Involving Eligible HQLA
- Calculating Adjusted Stock of HQLA
- Calculating Excess Liquid Asset Amount

2.2.3.1 Calculating Stock of Liquid Assets

This section explains the calculation of stock of liquid assets.

1. **Calculating Stock of Level 1 Assets**

   The stock of Level 1 assets equals (1-haircut percent) of the market value of all Level 1 liquid assets held by the bank as of the calculation date that is eligible HQLA, less the amount of the minimum/mandatory reserves less hedge termination costs (if any), less withdrawal penalty on time deposits (if any).

2. **Calculating Stock of Level 2A Assets**

   The stock of Level 2A liquid assets equals (1-haircut percent) of the market value of all Level 2A liquid assets held by the bank as of the calculation date that are eligible HQLA, less hedge termination costs (if any).

3. **Calculating Stock of Level 2B Assets**

   The stock of Level 2B liquid assets equals (1-haircut percent) of the market value of all Level 2B liquid assets held by the bank as of the calculation date that are eligible HQLA, less hedge termination costs (if any).

2.2.3.2 Identifying Eligible HQLA on Unwind

The application identifies the assets placed as collateral which are eligible HQLA if they are not encumbered. Placed collateral is marked as eligible HQLA on unwinding if it fulfills all of the following criteria:

- Asset Level is Level 1, 2A or 2B asset.
- Meets HQLA Operational Requirements on Unwind.

2.2.3.3 Unwinding of Transactions Involving Eligible HQLA

The application identifies all transactions maturing within the LCR horizon where HQLA is placed or received. These transactions include repos, reverse repos, secured lending transactions, collateral swaps, and so on. Such transactions are unwound that is, the original position is reversed and the cash or stock of HQLA has adjusted accordingly. This is done to avoid including any asset in the stock that should be returned to its owner before the end of the LCR horizon. The unwinding of transactions results in adjustments to the stock of HQLA, such as additions to or deductions from the stock of HQLA.

2.2.3.4 Calculating Adjusted Stock of HQLA

1. Adjusted Stock of Level 1 Assets

   The formula for calculating adjusted stock of Level 1 assets is as follows:

$$\begin{aligned}&\textit{Adjusted Stock of Level 1 Assets}\\&\qquad = \textit{Post Haircut Stock of Level 1 Assets}\\&\qquad + \textit{Post Haircut Adjustments to Stock of Level 1 Assets}\end{aligned}$$

> **NOTE** Adjustments relate to the cash received or paid and the eligible Level 1 asset posted or received as collateral or underlying assets as part of secured funding, secured lending, and asset exchange transactions.

2. Adjusted Stock of Level 2A Assets

   The formula for calculating adjusted stock of Level 2A assets is as follows:

$$\begin{aligned}&\textit{Adjusted Stock of Level 2A Assets}\\&\qquad = \textit{Post} - \textit{Haircut Level 2A Assets}\\&\qquad + \textit{Post Haircut Adjustments to Stock of Level 2A Assets}\end{aligned}$$

> **NOTE** Adjustments relate to eligible Level 2A assets posted or received as collateral or underlying assets as part of secured funding, secured lending, and asset exchange transactions.

3. Adjusted Stock of Level 2B Assets

   The formula for calculating adjusted stock of Level 2B RMBS assets is as follows:

$$\begin{aligned} \textit{Adjusted Stock of Level 2B ssets} \\ &= \textit{Post} - \textit{Haircut Stock of Level 2B Assets} \\ &+ \textit{Post Haircut Adjustments to Stock of Level 2B Assets} \end{aligned}$$

NOTE	Adjustments relate to eligible Level 2B RMBS assets posted or received as collateral or underlying assets as part of secured funding, secured lending, and asset exchange transactions.

2.2.3.5 Calculating Excess Liquid Asset Amount

The regulation requires banks to maintain the composition of the stock of HQLA as follows:

- A minimum of 60 % should include Level 1 assets.
- A minimum of 30 % should include Level 1 assets excluding extremely high quality covered bonds.
- A maximum of 15% should include Level 2B assets.

The Level 1 covered bonds, Level 2A, and 2B assets more than the composition prescribed by the regulator are excluded from the stock of HQLA. The application computes the excess liquid asset amounts as per the following procedure:

1. **Excess Level 1 Covered Bonds Liquid Asset Amount**

   The formula for calculating excess Level 1 covered bonds liquid asset amount is as follows:

$$\begin{aligned} \textit{Excess Level 1 Covered Bonds Liquid Asset Amount} \\ &= \textit{Adjusted Level 1 Covered Bonds} - \textit{Post Cap Adjusted Level 1 Covered Bonds} \end{aligned}$$

   Where,

   Post-Cap Adjusted Level 1 Covered Bonds = Minimum [Adjusted Level 1 Covered Bonds, (Adjusted Level 1 Assets Excluding Covered Bonds *70/30)]

2. **Excess Level 2A Liquid Asset Amount**

   The formula for calculating excess Level 2A liquid asset amount is as follows:

$$\begin{aligned} \textit{Excess Level 2A Liquid Asset Amount} \\ &= \textit{Adjusted Level 2A Assets} - \textit{Post Cap Adjusted Level 2A Assets} \end{aligned}$$

   Where,

   Post-Cap Adjusted Level 2A Assets = Minimum [Adjusted Level 2A Assets, {(Adjusted Level 1 Assets Excluding Covered Bonds + Post-Cap Adjusted Level 1 Covered Bonds)*40/60}, Maximum {(Adjusted Level 1 Assets Excluding Covered Bonds*70/30) – Post-Cap Adjusted Level 1 Covered Bonds, 0}]

- **Excess Level 2B Liquid Asset Amount**

The formula for calculating excess Level 2B liquid asset amount is as follows:

$$\textit{Excess Level 2B Liquid Asset Amount} = \textit{Adjusted Level 2B Assets} - \textit{Post Cap Adjusted Level 2B Assets}$$

Where,

Post-Cap Adjusted Level 2B Assets = Minimum [Adjusted Level 2B Assets, (Adjusted Level 1 Assets Excluding Covered Bonds + Post-Cap Adjusted Level 1 Covered Bonds + Post-Cap Adjusted Level 2A Assets)*15/85, Maximum {(Adjusted Level 1 Assets Excluding Covered Bonds + Post-Cap Adjusted Level 1 Covered Bonds)*40/60 – Post-Cap Adjusted Level 2A Assets,0}, Maximum {(70/30*Adjusted Level 1 Assets Excluding Covered Bonds) – Post-Cap Adjusted Level 1 Covered Bonds – Post-Cap Adjusted Level 2A Asset),0}]

2.2.4 Determining the Maturity of Cash Flows

To calculate the Liquidity Coverage Ratio, the application identified the maturity of certain transactions as follows:

1. For liabilities having embedded optionality, such as callable features, that reduces the maturity of the account, the application considers the earliest date, which is the first call date, as the revised maturity date.
2. For assets having embedded optionality that reduces the maturity of the account, where the collateral received is not rehypothecated, the application considers the earliest date, which is the first call date, plus notice period as the revised maturity date.
3. For derivatives having embedded optionality that reduces the maturity of the account, where the collateral received is not rehypothecated, the application considers the earliest date, which is the first call date, as the revised maturity date.
4. For assets or derivatives, where the collateral received has been rehypothecated for a period greater than the maturity of the asset itself, the application considers the maturity date of the liability, against which the collateral received is rehypothecated, as the revised maturity of the asset.
5. For assets or derivatives having embedded optionality that reduces the maturity of the account, where the collateral received has been rehypothecated for a period greater than the first call date plus notice period but less than the original maturity of the asset itself, the application considers the maturity date of the liability, against which the collateral received is rehypothecated, as the revised maturity of the asset.
6. For derivatives having embedded optionality that reduces the maturity of the account, where the collateral received has been rehypothecated for a period greater than the first call date but less than the original maturity of the asset itself, the application considers the maturity date of the liability, against which the collateral received is rehypothecated, as the revised maturity of the asset.
7. For assets having embedded optionality that reduces the maturity of the account, where the collateral received has been rehypothecated for a period less than the first call date plus notice period, the application considers the first call date plus notice period as the revised maturity of the asset.

8. For derivatives having embedded optionality that reduces the maturity of the account, where the collateral received has been rehypothecated for a period less than the first call date plus notice period, the application considers the first call date as the revised maturity of the asset.
9. For assets and derivatives which do not have embedded optionality that reduces the maturity of the account, where the collateral received has been rehypothecated for a period less than the maturity of the asset itself, the application considers the original maturity date of the asset, as the revised maturity of the asset.
10. For assets and derivatives which do not have embedded optionality that reduces the maturity of the account, where the collateral received has not been rehypothecated, the application considers the original maturity date of the asset, as the revised maturity of the asset.

> **NOTE** The revised maturity is computed by the application as per regulatory expectation and is used for the calculation of LCR.

2.2.5 Classifying Operational Account

Operational deposits are those deposits placed by customers with a bank or balances kept by the bank with other financial institutions to meet their payment and settlement needs and other operational requirements. The application classifies accounts as operational if they meet the following criteria:

1. They are held in specifically designated accounts, which is held as operational accounts, at or with the depositing institution.
2. They arise out of a clearing, custody, or cash management relationship with the bank.
3. They do not arise out of correspondent banking services or in the context of prime brokerage services.
4. The termination of such agreements requires a minimum notice period of 30 days.
5. If the agreement can be terminated within 30 days, the customer must pay significant switching or termination costs to the depositing institution.

2.2.6 Calculating Operational Amount

The application supports a new methodology to compute the operational portion of the EOP balance of deposits and balances with banks classified as operational deposits. The regulation requires banks to apply the preferential rate only on that portion of the operational deposit balance that is truly held to meet operational needs.

The following steps are involved in computing the operational balance:

1. All deposits and balances with banks classified as operational as per regulatory guidelines are identified. This is a separate process in LRM.
2. The EOP balances of eligible operational accounts are obtained over a user-defined historical window including the As of Date. To identify historical observations, the f_reporting_flag must be updated as Y for one execution of the Run per day in the LRM Run Management Execution Summary UI. The application looks up the balance for such accounts against the Run execution for which the Reporting Flag is updated as Y for each day in the past.

The historical window is captured in the Setup Master as part of the parameter named DAYS_HIST_OPER_BAL_CALC_UPD.

3. A rolling 5-day average is calculated for each account over the historical window.
4. The average of the 5-day rolling averages computed in Step 3 is calculated.
5. The operational balance is calculated as follows:

$$\boldsymbol{Operational\ Balance = Min\ (Current\ EOP\ Balance, Average\ Computed\ in\ Step\ 4)}$$

6. The non-operational balance is calculated as follows:

$$\boldsymbol{Non - operational\ Balance = Current\ EOP\ Balance - Operational\ Balance}$$

7. The operational insured balance is calculated as follows:

$$\boldsymbol{Operational\ Insured\ Balance = Min\ (Operational\ Balance, Insured\ Balance)}$$

The insured and uninsured balances are calculated as part of a separate process, for example the insurance allocation process, which is explained in detail in the relevant section under each jurisdiction.

8. The operational uninsured balance is calculated as follows:

$$\boldsymbol{Operational\ Uninsured\ Balance = Operational\ Balance - \ Insured\ Operational\ Balance}$$

9. The non-operational insured balance is calculated as follows:

$$\boldsymbol{Non - operational\ Insured\ Balance = Min\ [Non - operational\ Balance, (Insured\ Balance - \ Insured\ Operational\ Balance)]}$$

10. The non-operational uninsured balance is calculated as follows:

$$\boldsymbol{Non - operational\ Uninsured\ Balance = Non - operational\ Balance - \ Insured\ Non - operational\ Balance}$$

The operational deposit computation process is illustrated in the following table, assuming a 15-day historical window instead of 90-days and for the As of Date 28th February 2017. The historical balances for 15-days including the As of Date are provided as follows.

Table 2: Operational Deposit Computation

Clients With Operational Accounts	Eligible Operational Accounts	Historical Time Window														As of Date
		2/14/2017	2/15/2017	2/16/2017	2/17/2017	2/18/2017	2/19/2017	2/20/2017	2/21/2017	2/22/2017	2/23/2017	2/24/2017	2/25/2017	2/26/2017	2/27/2017	2/28/2017
A	10001	102,000	102,125	102,250	102,375	102,500	102,625	102,750	102,875	103,000	103,125	103,250	103,375	103,500	103,625	103,750
	10296	23,500	23,550	23,600	23,650	23,700	23,750	23,800	23,850	23,900	23,950	24,000	24,050	24,100	24,150	24,200
B	31652	65,877	59,259	59,234	59,209	59,184	59,159	59,134	59,109	59,084	59,059	59,034	59,009	58,984	58,959	58,934

The rolling averages and cumulative average are computed as follows:

Table 3: Rolling Average and Cumulative Average Computation

Clients with Operational Accounts	Eligible Operational Accounts	5-day Rolling Average											Cumulative Average (a)
		2/18/2017	2/19/2017	2/20/2017	2/21/2017	2/22/2017	2/23/2017	2/24/2017	2/25/2017	2/26/2017	2/27/2017	2/28/2017	
A	10001	102,250	102,375	102,500	102,625	102,750	102,875	103,000	103,125	103,250	103,375	103,500	95136
	10296	23,600	23,650	23,700	23,750	23,800	23,850	23,900	23,950	24,000	24,050	24,100	22721
B	31652	60,553	59,209	59,184	59,159	59,134	59,109	59,084	59,059	59,034	59,009	58,984	56931

The operational and non-operational balances are computed as follows:

Table 4: Operational and Non-operational Balances Computation

Clients with Operational Accounts	Eligible Operational Accounts	Current Balance (b)	Operational Balance (c = a – b)	Non-Operational Balance	Insured Balance	Uninsured Balance	Insured Operational Balance	Uninsured Operational Balance	Insured Non-Operational Balance	Uninsured Non-Operational Balance
A	10001	103,750	95,136	8,615	100,000	3,750	95,136		4,865	3,750
	10296	24,200	22,721	1,480		24,200		22,721		1,480
B	31652	58,934	56,931	2,003	58,934		56,931		2,003	

NOTE

- Negative historical balances are replaced by zero for this computation.
- For operational accounts that have an account start date greater than or equal to 90 historical days including the As of Date, missing balances are replaced by previously available balance.
- For operational accounts that have an account start date less than 90 historical days including the As of Date:
    1. Missing balances between the account start date and As of Date are replaced by previously available balance.
    2. The rolling average is calculated only for the period from the account start date to the As of Date.

2.2.7 Calculating Deposit Insurance

Deposit insurance calculations in LRRCEBA is performed at a Legal Entity and Insurance Scheme - Customer combination.

Multiple schemes in different currencies can be defined per Legal Entity. During Run execution, the deposit amounts, scheme limits, and other relevant amounts are converted into the reporting currency. Additionally, all the comparisons and calculations are performed in the reporting currency.

For every Legal Entity - Insurance Scheme - Customer combination, the application compares the total deposit balance with the scheme limit. After comparison, LRRCEBA determines the following:

- **Insured Amount**
  - If the total deposit amount is greater or equal to the scheme limit, then:

    Insured amount = Scheme limit amount
  - If the total deposit amount is lesser than the scheme limit, then:

    Insured amount = Total deposit amount

  After the insured amount is calculated, the application computes the uninsured amount.
- **Uninsured amount** = Total deposit balance - Insured amount

After these computations are performed at the higher granularity, the application allocates these amounts back to the account level.

2.2.7.1 Temporary High Balance

Some countries in Europe provide additional insurance for temporary increases in deposit balances. Such increases can be due to benefits payable on retirement, marriage or civil partnership, compensation claims, real estate dealings, and so on. These events are referred to as Temporary High Balance (THB) events. When such events occur, the deposit balances increase, and the insurance provider offers additional coverage for the amounts.

LRRCEBA supports the inclusion of additional insured amounts in the calculation of the total insured amount for an account. After the insurance allocation is complete at the account level (see the section Deposit Insurance Calculation), the application calculates the total additional insured amount due to temporary high balances.

For every account, the application calculates the insured amount as follows:

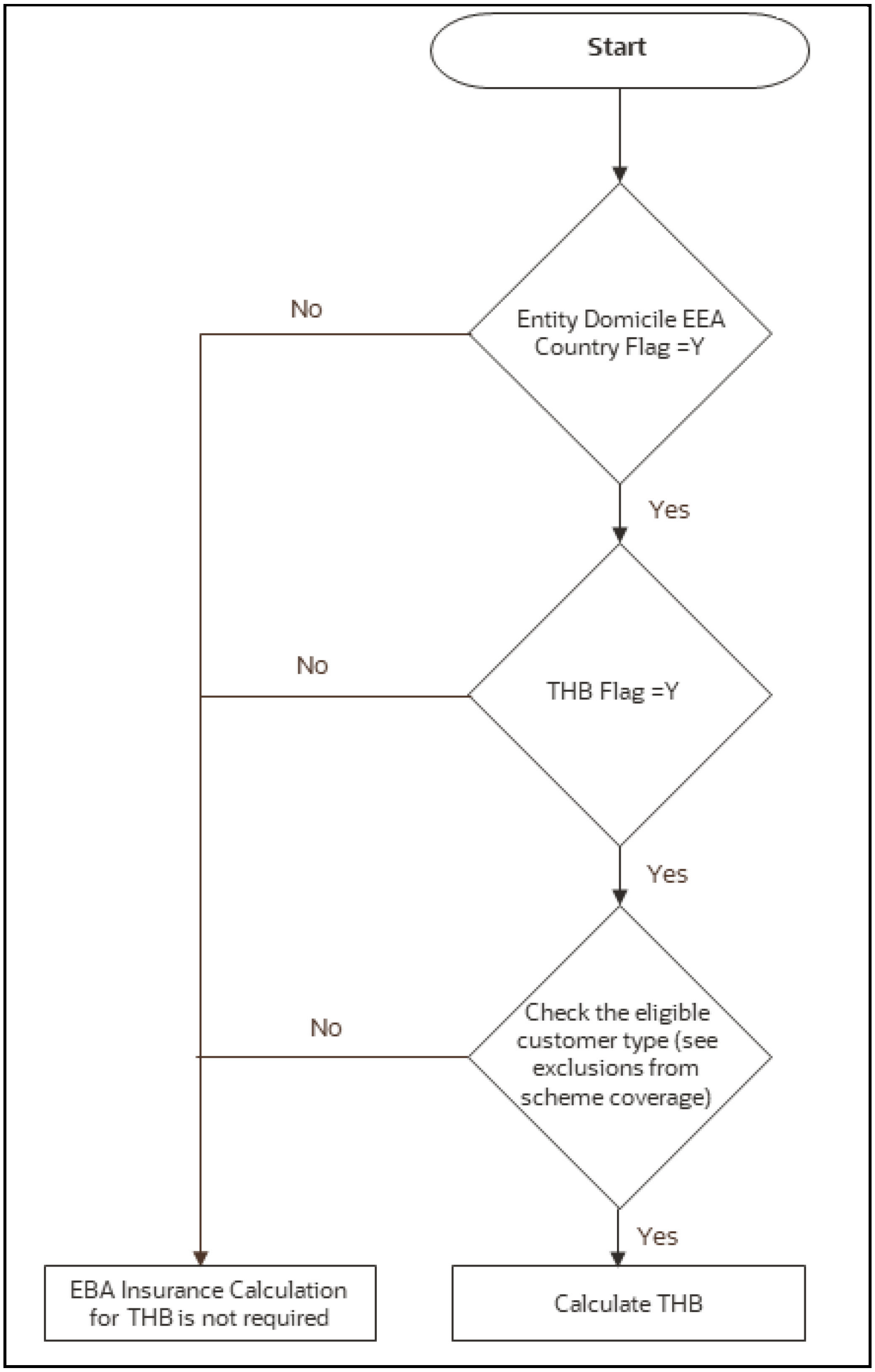
New Insured amount = Original insured amount + Additional insured amount due to Temporary High Balance

New Uninsured amount = EOP Balance of account - New insured amount

In case of no additional insured amount due to Temporary High Balance event, the new insured amount is the same as the one computed from the insurance calculation and allocation process as described in section Deposit Insurance Calculation.

Verifying whether the new insured amount must be less than or equal to the EOP balance of the account is included as part of the validations to ensure an accurate representation of data. The following process flow describes the calculation of temporary high balance.

Figure 1: Process Flow - Temporary High Balance



In the European Economic Area (EEA) countries, specific events result in a temporary increase in the balance, for which an additional insurance limit is allocated to the account. An Absolutely Entitled Account (AEA) refers to any account where the depositor is absolutely entitled to the sums held in an account. The following events are considered as Temporary High Balance (THB) events, for the Absolutely Entitled Account (AEA) ownership category as per EBA guidelines.

- Earmarked for Purchase of Private Residential Property
- Proceeds from Sale of Private Residential Property
- Paid on Separation, Divorce, or Dissolution of Civil Union
- Benefits Payable on Retirement
- Claim for Compensation for Unfair Dismissal
- Claim for Compensation for Redundancy
- Benefits Payable for Death or Bodily Injury
- Claim for Compensation for Wrongful Conviction

NOTE	The application allows you to add any new events as per the jurisdictional requirement by adding data in the tables mentioned in the LRRCEBA Download Specification.

Not Absolutely Entitled Account (non-AEA) refers to any account where the depositor is not absolutely entitled to the sums held in an account. For accounts in the non-AEA ownership category, the deposit limit is unlimited. The application does not consider these accounts for Temporary High Balance insurance coverage.

The application first checks if the Legal Entity falls under an EEA country, and then checks if the Branch is domiciled in an EEA country. The application considers the following cases for THB:

- **Both the Legal Entity and Branch Domicile is located in an EEA country**: The Branch and the Legal Entity are eligible for the THB coverage.
- **The Legal Entity is domiciled in an EEA country, and Branch is not Domiciled in an EEA country**: The Legal Entity is eligible for the THB coverage and the Branch is not eligible for the THB coverage.
- **The Legal Entity is not domiciled in an EEA country, but the branch is domiciled in an EEA country**: The Branch and the Legal Entity are not eligible for the THB coverage.

The application achieves this by the following two flags:

- **Entity Domicile European Economic Area Country Flag:** The flag f_entity_eea_country_flag, identifies whether the Legal Entity domicile country is considered to be a member state of the European Economic Area (EEA). The flag is set to YES if the Legal Entity is domiciled in an EEA Country otherwise the value of the flag is NO.
- **Branch Domicile European Economic Area Country Flag**: The flag f_branch_eea_country_flag, identifies whether the branch domicile country is considered to be a member state of the European Economic Area. The flag is set to YES if the branch is domiciled in an EEA Country otherwise the value of the flag is NO.

  For example, in the following illustration for Legal Entity 1, Branch 1 and Branch 2 have Legal Entity and Branch domiciled, in an EEA country, and therefore are considered for the coverage. However, Branch 3 has the Legal Entity domiciled in an EEA country, but the Branch is domiciled in a non-EEA country, and thus is not considered for the coverage.

Table 5: Illustration – Inclusion of Branch for Insurance Coverage

Entity	Entity Domicile	Entity Domicile EEA Country	Branch	Branch Domicile	Branch Domicile EEA Country	Entity Coverage	Branch Coverage
Legal Entity 1	Malta	Yes	Branch 1	Malta	Yes	Yes	Yes
		Yes	Branch 2	France	Yes		Yes
		Yes	Branch 3	Turkey	No		No
Legal Entity 2	France	Yes	Branch 4	France	Yes	Yes	Yes
		Yes	Branch 5	Malta	Yes		Yes
Legal Entity 3	United States of America	No	Branch 6	United States of America	No	No	No
		No	Branch 7	Malta	Yes		No

2.2.8 Eligibility of the Deposits to be Covered by Insurance

The application considers accounts under the following Standard Product Types for insurance coverage:

- Savings Account with a balance greater than 0
- Current Account with a balance greater than 0
- Term Deposits

- Credit Cards with a credit balance
- Overdraft with a credit balance
- Certificate of Deposit issued to an individual, which existed on or before July 2nd, 2014.

The application excludes the following deposits from insurance coverage:

- **Deposits by non-individuals such as**:
  - Bank
  - Hedge Fund Investment Firm
  - Investment Company
  - Personal Investment Company
  - Private Equity Investment Firm
  - Real Estate Investment Trust
  - Small Business Investment Companies
  - Trust and investment company
  - Mutual Funds
  - Government-Sponsored Insurance Entity
  - Insurance Entity
  - Reinsurance Firm
  - Collective Investment Undertaking
  - Employee Pension Fund
  - Social Security Fund Management Company
  - Sovereign
- **Deposit by individuals**:
  - Individuals involved in financial activities
  - Deposits arising out of transactions in connection with which there has been a criminal conviction for money laundering as defined in Article 1(2) of Directive 2005/60/EC. The application uses the following flag to handle this scenario:

— **Frozen Account Due to Anti-money Laundering Event Flag**: The flag f_frozen_for_aml_event_flag stores the Frozen Account indicator due to an anti-money laundering event.

2.2.8.1 Insurance Allocation

This section provides the steps involved in insurance allocation.

Topics:

- Identifying Insurance Eligible Accounts
- Allocation of Deposit Insurance

2.2.8.1.1 Identifying 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:

1. **Ownership Category**

   OFS LRRCEBA allocates the insurance limit separately for each ownership category level. Ownership categories include Absolutely Entitled Account and Non-Absolutely Entitled Account.

2. **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 customer accounts whose product types match those covered by the deposit insurance. In the case of EBA, all types of deposits such as current accounts, savings accounts, and term deposits are covered, which must be provided as inputs.

3. **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.

> **NOTE** The application allows the prioritization of insurance allocation to be done at a Bank Product level or Product Type level. If no prioritization is provided, the application allocates the amount to all insured accounts in equal priority.

4. **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, EBA insures only in terms of Euro denominated deposits. The eligible currency against the EBA insurance scheme should be provided as Euros.

   Deposits denominated in all currencies are covered by the EBA Deposit Guarantee Scheme. However, the payout will be in the insurance limit currency.

2.2.8.1.2 Allocating Deposit Insurance

As part of the EBA Run, the application allocates the deposit insurance to accounts based on the guidelines specified by the EBA. 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, which 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. In the case of the EBA Deposit Guarantee scheme, the limit amount must be provided in the Stage Insurance Scheme Master Table at the granularity of the insurance scheme.

> **NOTE** In case the event is eligible for a THB coverage, the insurance limit will be first utilized to cover the entire balance on account of a THB event, and the remaining balance will get covered if there is any unused limit left under the deposit guarantee scheme.

The insurance limit is allocated to accounts as per the following procedure:

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 following formula:

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

Where,

Insurance Limit Available: Limit available post allocation to previous accounts

= Insurance Limit Available x-1 – Insured Amount x-1

X: Number of accounts up to the current account to which the 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.

5. 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.

The following is an illustration of this procedure. It considers an insurance limit of 100,000 EUR 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.

Illustration: Conversion of Eligible Balances to Limit Currency

Table 6: Conversion of Eligible Balances to Limit Currency

Legal Entity	Account Number	Account Currency	Account Balance	Account Holding Type	Temporary High Balance	Customer Holding Temporary High Balance	Temporary High Balance Event	Temporary High Balance	Insurance Scheme Code	Insurance Limit Currency	Converted Account Balance	Converted Temporary High Balance
Legal Entity 1	100001	EUR	759967	Single	Yes	Customer A	Proceeds from Sale of Private Residential Property	245000	MDCS	EUR	759967	245000
							Earmarked for Purchase of Private Residential Property	430000	MDCS	EUR		430000

Legal Entity	Account Number	Account Currency	Account Balance	Account Holding Type	Temporary High Balance	Customer Holding Temporary High Balance	Temporary High Balance Event	Temporary High Balance	Insurance Scheme Code	Insurance Limit Currency	Converted Account Balance	Converted Temporary High Balance
Legal Entity 1	100002	GBP	1243427	Single	Yes	Customer A	Proceeds from Sale of Private Residential Property	650000	MDCS	EUR	1094216	572000
							Benefits Payable on Retirement	125000	MDCS	EUR		110000
Legal Entity 1	100003	USD	7759	Single	No				MDCS	EUR	8690	0
Legal Entity 1	100004	EUR	20172	Single	No				MDCS	EUR	20172	0
Legal Entity 1	100005	EUR	523504	Single	No				MDCS	EUR	523504	0
Legal Entity 1	100006	EUR	26292	Single	No				MDCS	EUR	26292	0
Legal Entity 1	100007	EUR	85255	Joint	No				MDCS	EUR	85255	0
Legal Entity 1	100008	EUR	653019	Joint	No				MDCS	EUR	653019	0
Legal Entity 1	100009	EUR	271034	Single	No				MDCS	EUR	271034	0

Legal Entity	Account Number	Account Currency	Account Balance	Account Holding Type	Temporary High Balance	Customer Holding Temporary High Balance	Temporary High Balance Event	Temporary High Balance	Insurance Scheme Code	Insurance Limit Currency	Converted Account Balance	Converted Temporary High Balance
Legal Entity 1	100010	EUR	67933	Single	No				MDCS	EUR	67933	0
Legal Entity 1	100011	GBP	80900	Joint	No				MDCS	EUR	71192	0
Legal Entity 2	500001	GBP	8461	Single	No				MDCS	EUR	7445.68	0
Legal Entity 2	500002	USD	6427	Single	No				MDCS	EUR	7198.24	0
Legal Entity 2	500003	EUR	7953	Single	No				MDCS	EUR	7953	0
Legal Entity 2	400001	EUR	124775	Single	No				MDCS	EUR	124775	0
Legal Entity 2	400002	EUR	76065	Single	No				MDCS	EUR	76065	0
Legal Entity 2	400003	EUR	82622	Joint	No				MDCS	EUR	82622	0

Table 7: Splitting of Converted Balances across Account Holders

Legal Entity	Account Number	Account Holding Type	Ownership Category Code	Primary Holder	Secondary Holder 1	Temporary High Balance	Customer Holding Temporary High Balance	Temporary High Balance Event	Converted Account Balance	Converted Temporary High Balance	Converted General Category Account Balance	Number of Account Holders	General Category Balance Per Customer	General Category Balance - Customer A	General Category Balance - Customer B	General Category Balance - Customer C
Legal Entity 1	100006	Single	AEA	Customer C		No			26292	0	26292.00	1	26292.00			26292.00
Legal Entity 1	100007	Joint	AEA	Customer A	Customer C	No			85255	0	85255.00	2	42627.50	42627.50		42627.50
Legal Entity 1	100008	Joint	NAEA	Customer C	Customer A	No			653019	0	653019.00	2	326509.50	326509.50		326509.50
Legal Entity 1	100009	Single	NAEA	Customer C		No			271034	0	271034.00	1	271034.00			271034.00
Legal Entity 1	100010	Single	AEA	Customer C		No			67933	0	67933.00	1	67933.00			67933.00

Table 8: Identification of Validity of Additional Protection for Temporary High Balance Events

Legal Entity	Account Number	Temporary High Balance	Customer Holding Temporary High Balance	Temporary High Balance Event	Converted Temporary High Balance	Temporary High Balance Deposit Start Date	Insurance Scheme Code	Temporary High Balance Protection Period (in Months)	As of Date	Temporary High Balance Protection End Date	Additional Protection Valid	Insurance Eligible Temporary High Balance Amount
Legal Entity 1	100001	Yes	Customer A	Proceeds from Sale of Private Residential Property	245000	28-Jun-17	FSCS	6	1-Dec-17	27-Dec-17	Y	245000
				Earmarked for Purchase of Private Residential Property	430000	6-Sep-17	FSCS	6	2-Dec-17	5-Mar-18	Y	430000
Legal Entity 1	100002	Yes	Customer A	Proceeds from Sale of Private Residential Property	572000	14-Jul-17	FSCS	6	3-Dec-17	13-Jan-18	Y	572000
				Benefits Payable on Retirement	110000	3-Jun-17	FSCS	6	4-Dec-17	2-Dec-17	N	0

The application allocates the insurance limit to all eligible accounts as follows:

Insurance Allocation for Customer A

Table 9: Insurance Allocation for Customer A - Temporary High Balance Events

Legal Entity	Temporary High Balance Event	Account Number	Temporary High Balance Insurance Eligible Amount	Temporary High Balance Insurance Ineligible Amount	Available Insurance Limit	Insurance Allocation Weight	Temporary High Balance Insured Amount	Temporary High Balance Uninsured Amount
Legal Entity 1	Proceeds from Sale of Private Residential Property	100001	245000.00	0.00	500000	29.99%	149938.80	95061.20
Legal Entity 1		100002	572000.00	0.00		70.01%	350061.20	221938.80
Legal Entity 1	Earmarked for Purchase of Private Residential Property	100001	430000.00	0.00	500000	100.00%	430000.00	0.00
Legal Entity 1	Benefits Payable on Retirement	100002	0.00	110000.00	500000	0.00%	0.00	110000.00

Table 10: Insurance Allocation for Customer A – General Category

Legal Entity	Account Number	Account Holding Type	General Category Balance	Uninsured Temporary High Balance	Total General Category Balance	Ownership Category Code	Insurance Limit for General Category	Insurance Allocation Weight	Insured General Category Amount	Uninsured Total General Category Amount
Legal Entity 1	100001	Single	84967.00	95061.20	180028.20	AEA	100000	17.96%	17959.60	162068.60
Legal Entity 1	100002	Single	412215.76	331938.80	744154.56	AEA		74.24%	74236.82	669917.74
Legal Entity 1	100007	Joint	42627.50		42627.50	AEA		4.25%	4252.52	38374.98
Legal Entity 1	100011	Joint	35596.00		35596.00	AEA		3.55%	3551.06	32044.94
Legal Entity 1	100008	Joint	326509.50		326509.50	NAEA	Unlimited	100%	326509.50	0.00
Legal Entity 2	500001	Single	7445.68		7445.68	AEA	100000	13.31%	7445.68	0.00
Legal Entity 2	500002	Single	7198.24		7198.24	AEA		12.86%	7198.24	0.00
Legal Entity 2	400003	Joint	41311.00		41311.00	AEA		73.83%	41311.00	0.00

Table 11: Insurance Allocation for Customer A – Total Insured and Uninsured Amount

Legal Entity	Account Number	General Category Insured Amount	Temporary High Balance Insured Amount	Total Insured Amount	Converted EOP Balance	Total Uninsured Amount
Legal Entity 1	100001	17959.60	95061.20	113020.80	759967.00	646946.20
Legal Entity 1	100002	74236.82	331938.80	406175.62	1094215.76	688040.14
Legal Entity 1	100007	4252.52		4252.52	42627.50	38374.98
Legal Entity 1	100011	3551.06		3551.06	35596.00	32044.94
Legal Entity 1	100008	326509.50		326509.50	326509.50	0.00
Legal Entity 2	500001	7445.68		7445.68	7445.68	0.00
Legal Entity 2	500002	7198.24		7198.24	7198.24	0.00
Legal Entity 2	400003	41311.00		41311.00	41311.00	0.00

Insurance Allocation for Customer B

Table 12: Insurance Allocation for Customer B – General Category

<table>
<tr><th>Legal Entity</th><th>Account Number</th><th>Account Holding Type</th><th>General Category Balance</th><th>Uninsured Temporary High Balance</th><th>Total General Category Balance</th><th>Ownership Category Code</th><th>Insurance Limit for General Category</th><th>Insurance Allocation Weight</th><th>Insured General Category Amount</th><th>Uninsured Total General Category Amount</th></tr>
<tr><td>Legal Entity 1</td><td>100003</td><td>Single</td><td>8690.08</td><td>0.00</td><td>8690.08</td><td>AEA</td><td rowspan="3">100000</td><td>13.48%</td><td>8690.08</td><td>0.00</td></tr>
<tr><td>Legal Entity 1</td><td>100004</td><td>Single</td><td>20172.00</td><td>0.00</td><td>20172.00</td><td>AEA</td><td>31.29%</td><td>20172.00</td><td>0.00</td></tr>
<tr><td>Legal Entity 1</td><td>100011</td><td>Joint</td><td>35596.00</td><td>0.00</td><td>35596.00</td><td>AEA</td><td>55.22%</td><td>35596.00</td><td>0.00</td></tr>
<tr><td>Legal Entity 1</td><td>100005</td><td>Single</td><td>523504.00</td><td>0.00</td><td>523504.00</td><td>NAEA</td><td>Unlimited</td><td>100.00%</td><td>523504.00</td><td>0.00</td></tr>
<tr><td>Legal Entity 2</td><td>500003</td><td>Single</td><td>7953.00</td><td>0.00</td><td>7953.00</td><td>AEA</td><td rowspan="2">100000</td><td>4.57%</td><td>4569.67</td><td>3383.33</td></tr>
<tr><td>Legal Entity 2</td><td>400001</td><td>Single</td><td>124775.00</td><td>0.00</td><td>124775.00</td><td>AEA</td><td>71.69%</td><td>71693.70</td><td>53081.30</td></tr>
</table>

Legal Entity	Account Number	Account Holding Type	General Category Balance	Uninsured Temporary High Balance	Total General Category Balance	Ownership Category Code	Insurance Limit for General Category	Insurance Allocation Weight	Insured General Category Amount	Uninsured Total General Category Amount
Legal Entity 2	400003	Joint	41311.00	0.00	41311.00	AEA		23.74%	23736.63	17574.37
Legal Entity 2	400002	Single	76065.00	0.00	76065.00	NAEA	Unlimited	100.00%	76065.00	0.00

Table 13: Insurance Allocation for Customer B - Total Insured and Uninsured Amount

Legal Entity	Account Number	General Category Insured Amount	Temporary High Balance Insured Amount	Total Insured Amount	Converted EOP Balance	Total Uninsured Amount
Legal Entity 1	100003	8690.08	0.00	8690.08	8690.08	0.00
Legal Entity 1	100004	20172.00	0.00	20172.00	20172.00	0.00
Legal Entity 1	100011	35596.00	0.00	35596.00	35596.00	0.00
Legal Entity 1	100005	523504.00	0.00	523504.00	523504.00	0.00
Legal Entity 2	500003	4569.67	0.00	4569.67	7953.00	3383.33
Legal Entity 2	400001	71693.70	0.00	71693.70	124775.00	53081.30
Legal Entity 2	400003	23736.63	0.00	23736.63	41311.00	17574.37
Legal Entity 2	400002	76065.00	0.00	76065.00	76065.00	0.00

Insurance Allocation for Customer C

Table 14: Insurance Allocation for Customer C – General Category

Legal Entity	Account Number	Account Holding Type	General Category Balance	Uninsured Temporary High Balance	Total General Category Balance	Ownership Category Code	Insurance Limit for General Category	Insurance Allocation Weight	Insured General Category Amount	Uninsured Total General Category Amount
Legal Entity 1	100006	Single	26292.00	0.00	26292.00	AEA	100000	19.21%	19211.93	7080.07
Legal Entity 1	100007	Joint	42627.50	0.00	42627.50	AEA		31.15%	31148.50	11479.00
Legal Entity 1	100010	Single	67933.00	0.00	67933.00	AEA		49.64%	49639.58	18293.42
Legal Entity 1	100008	Joint	326509.50	0.00	326509.50	NAEA	Unlimited	100.00%	326509.50	0.00
Legal Entity 1	100009	Single	271034.00	0.00	271034.00	NAEA	Unlimited	100.00%	271034.00	0.00

Table 15: Insurance Allocation for Customer C – Total Insured and Uninsured Amount

Legal Entity	Account Number	General Category Insured Amount	Temporary High Balance Insured Amount	Total Insured Amount	Converted EOP Balance	Total Uninsured Amount
Legal Entity 1	100006	19211.93	0.00	19211.93	26292.00	7080.07
Legal Entity 1	100007	31148.50	0.00	31148.50	42627.50	11479.00
Legal Entity 1	100010	49639.58	0.00	49639.58	67933.00	18293.42
Legal Entity 1	100008	326509.50	0.00	326509.50	326509.50	0.00
Legal Entity 1	100009	271034.00	0.00	271034.00	271034.00	0.00

2.2.9 Identifying Deposit Stability

A stable deposit is a deposit whose outstanding balance is either fully or partially covered by the deposit insurance provided by the relevant national deposit insurance organization satisfying 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 first step in identifying deposit stability is to allocate deposit insurance limit at an account level.

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

1. **High Run-off Deposits**

   Two additional stability criteria are supported for the deposit balances that are subject to higher outflows, if they meet the regulatory criteria for such higher rates. The application identifies the less stable deposits that meet the higher outflow rate criteria as specified by the regulator and classifies them into the following two types:

   - High Run-off Deposits Category 1, which meet the criteria for receiving a higher outflow rate of 15%
   - High Run-off Deposits Category 2, which meet the criteria for receiving a higher outflow rate of 20%

   Deposits fulfilling the following criteria are classified as High Run-off Deposits Category:

   Criteria A. Total deposit of the customer is greater than EUR 500,000

   Criteria B. Is an internet-only account

   Criteria C. Interest rate on deposits exceeds the average interest rate

   Criteria D. Interest rate on deposits is derived from the market variable flag

   Criteria E. Depositor is a resident of a third country, or the deposit is denominated in a currency other than Euro, or the domestic currency of a member state

   — Deposits fulfilling criteria A or any two criteria from B to E are classified as High Run-off Deposits Category 1.

   — Deposits fulfilling criteria A and any other criteria from B to E or fulfilling any three criteria from A to E are classified as High Run-off Deposits Category 2.

2. **Stable Deposits**

   A stable deposit is that 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 satisfies one of the following conditions:

   a. It is held in a transactional account by the depositor.

   Or

b. The depositor has an established relationship with the reporting legal entity, which makes a withdrawal unlikely.

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

3. **Highly Stable Deposits**

All stable deposits identified as per the criteria specified in High Run-off Deposits are classified as meeting additional insurance criteria, if the insurance scheme under which they are covered satisfies the following conditions:

a. Has available financial means, raised ex ante by contributions made by members at least annually.

b. Has adequate means of ensuring ready access to additional funding in the event of a large call on its reserves, including access to extraordinary contributions from member credit institutions and adequate alternative funding arrangements to obtain short-term funding from public or private third parties.

c. Ensures a seven working day repayment period from the date of application of the 3% outflow.

Such deposits receive a 3% Run-off rate.

4. **Less Stable Deposits**

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

a. Insured balance of deposits meeting stable deposits criteria but denominated in ineligible foreign currencies.

b. Uninsured balance of deposits meeting stable deposits criteria.

c. Insured balance of deposits which are not transactional account and the customer has no established relationship with the bank.

d. Deposit balance where the insurance coverage status is Uninsured.

Such deposits receive a 10% Run-off rate.

NOTE	All the deposit type amount is calculated only on unencumbered EOP balance. Encumbered EOP balance or blocked amount is not considered if it is blocked/encumbered beyond the LCR horizon.

2.2.10 Consolidation

The approach to consolidation as per LCR approach followed by OFS LRRCEBA is as follows:

Identification and Treatment of Unconsolidated Subsidiary

The application assesses whether a subsidiary is a consolidated subsidiary or not by checking the regulatory entity indicator against each legal entity. The application consolidates the cash inflows and outflows of a subsidiary and computes the consolidated LCR, only if the subsidiary is a regulatory consolidated subsidiary. If the entity is an unconsolidated subsidiary, the cash inflows and outflows from the operations of such subsidiaries are ignored (unless otherwise specifically included in the denominator of LCR per regulations) and only the equity investment in such subsidiaries is considered as the bank's asset and appropriately taken into the numerator or denominator based on the asset level classification.

For instance, legal entity 1 has 3 subsidiaries, legal entity 2, legal entity 3, and legal entity 4. The regulatory consolidated flag for legal entity 4 is No. In this case, legal entity 4 is treated as a third party for consolidation and its assets and cash flows are completely excluded from calculations. Legal entity 1's interest in legal entity 4 including common equity of legal entity 4 and assets and liabilities where legal entity 4 is the counterparty will not be eliminated as legal entity 4 is considered a third-party during consolidation.

1. **HQLA Consolidation by Subsidiary Type**

   The process of consolidating HQLA differs slightly based on whether the subsidiary is a material entity that is expected to report LCR separately from the parent or not. This is done to ensure consistency in the results when consolidating at a parent level and when calculating the LCR at the material subsidiary level as well. Broadly 2 methods of consolidating HQLA are followed, which are detailed as follows:

   a. For material subsidiaries subject to individual LCR requirements, consolidation is done as follows:

      - The application identifies whether the subsidiary is a consolidated subsidiary.
      - If condition (a) is fulfilled, it identifies whether the consolidated subsidiary is subject to LCR requirement that is, whether the subsidiary in question is a regulated entity.
      - If condition (b) is fulfilled, then it calculates the net cash outflow by eliminating inter-company transactions at the level of the consolidated subsidiary.
      - The application consolidates post-haircut restricted HQLA to the extent of the consolidated subsidiary's net cash outflow that is, to the extent required to satisfy minimum LCR requirements of that subsidiary as part of the covered company's HQLA.
      - It consolidates the entire amount of post-haircut unrestricted HQLA held at the consolidated subsidiary as part of the covered company's HQLA.
      - It consolidates all cash inflows and outflows which are part of the net cash flow calculation.

   b. For subsidiaries not subject to individual LCR requirements, consolidation is done as follows:

      - The application identifies whether the subsidiary is a consolidated subsidiary.
      - If condition (a) is fulfilled, it identifies whether the consolidated subsidiary is subject to minimum LCR requirement that is, whether the subsidiary in question is a regulated entity.
      - If condition (b) is not fulfilled, it eliminates all inter-company transactions until the level of the immediate parent of the consolidated subsidiary and then calculates the net cash outflow.
      - The application consolidates post-haircut restricted HQLA to the extent of the consolidated subsidiary's net cash outflow and the entire amount of post-haircut unrestricted HQLA as part of the covered company's HQLA.

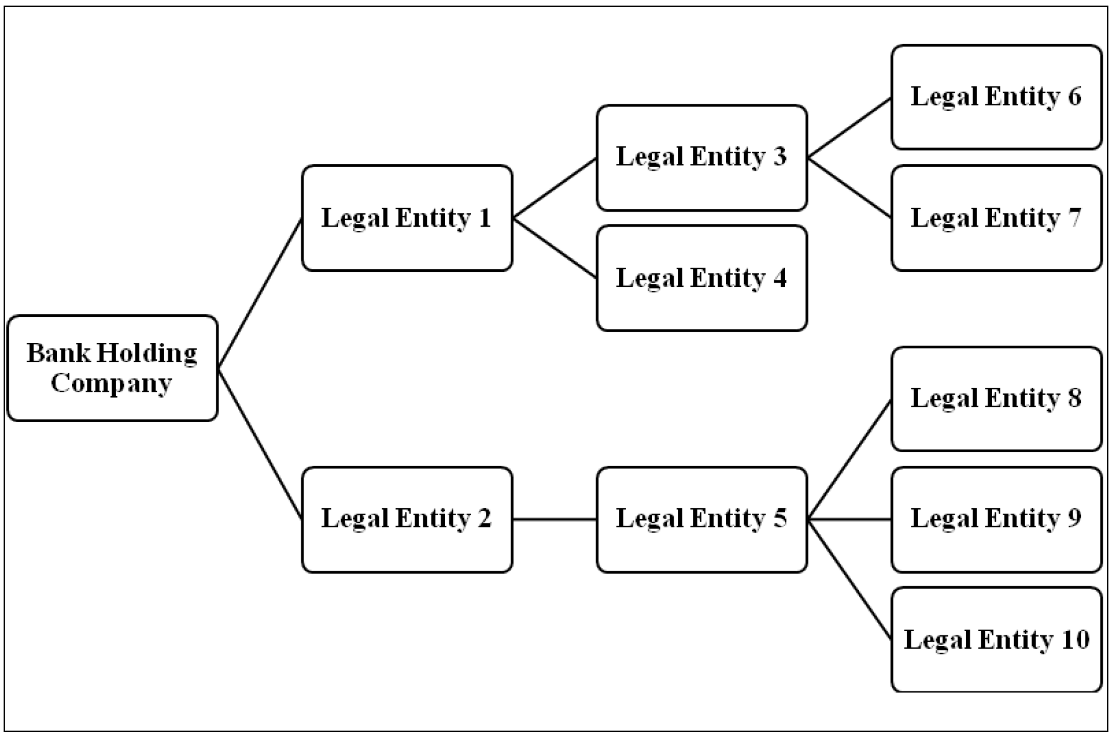
— It consolidates all cash inflows and outflows which are part of the net cash flow calculation.

2. **Consolidated LCR Calculation**

Consolidation is done on a step-by-step basis based on each level of the organization structure starting from the most granular level. This means that intercompany transactions are eliminated at each sub-consolidation level till the final level of the consolidation (generally BHC) is reached. The Consolidated HQLA calculated at the level of the immediate subsidiary of the BHC is added to the HQLA held by the BHC. All intercompany cash flows are eliminated and the LCR is calculated per the LCR approach.

For instance, a bank's organizational structure is as follows:

Figure 2 Bank's Organization Structure



In this case, at the first level of consolidation, calculation of net cash outflows and HQLA is done on a solo basis for legal entities 6, 7, 8, 9, and 10 as they do not have any subsidiaries. For regulated entities, such as material entities, intercompany transactions are not eliminated; whereas for non-regulated entities, intercompany transactions are eliminated to the next level of consolidation that is, legal entities 3 and 5. The restricted HQLA from entities 6 and 7 are consolidated to the extent of their net cash outflows, while the unrestricted HQLA is transferred fully to legal entity 3. The cash inflows and outflows are consolidated to the full extent.

At the second level of consolidation that is, legal entity 3, intercompany transactions are eliminated till legal entity 1, if LE 3 is a non-regulated entity. The HQLA is calculated as a sum of the consolidated restricted and unrestricted HQLA of entities 6 and 7 and the HQLA of legal entity 3. The net cash outflow is calculated based on the cash flows of entities 3, 6, and 7, post-elimination of intercompany transactions if applicable. The consolidated HQLA is calculated based on the procedure detailed in Step 2.

This process continues in a step-by-step manner till the highest parent level which is the bank holding company in this example.

2.2.11 Cash Flow Aggregation

Cash Flow aggregation is based on a list of LRM dimensions which users can choose using the Application preference option under LRM applications. See the Application Preferences section in the OFS Liquidity Risk Measurement and Management User Guide for more information.

2.2.12 Business Assumption

A list of preconfigured business Assumptions as per the regulatory requirement is provided as ready-to-use. For EBA specific business assumptions, see Preconfigured Regulatory LCR Scenarios.

2.2.13 Calculating Contractually Required Collateral

Contractually required collateral is the amount of collateral that is contractually due from one party to the other based on the current exposure and collateral position. This amount must be paid to the party soon and results in outflow for the party owing the collateral and inflow to the party to whom the collateral is due. It can be of two types based on the direction of the exposure, Excess Collateral Due or Excess Collateral Receivable.

Topics:

- For Derivatives
- For Other Assets and Liabilities

2.2.13.1 For Derivatives

This section details the calculation of contractually due collateral and contractually receivable collateral for derivatives.

Topics:

- Calculating Contractually Due Collateral
- Calculating Contractually Receivable Collateral

2.2.13.1.1 Calculating Contractually Due Collateral

The application computes the value of the collateral that a bank is required to post contractually to its derivative counterparty as follows, if one of the following conditions are met:

1. If Secured Indicator is No, then the contractually due collateral is 0.
2. If Secured Indicator is Yes and CSA Type is One way, then the contractually due collateral is 0.
3. If Secured Indicator is Yes, CSA Type is Two way and Gross Exposure is greater than or equal to 0, then the contractually due collateral is 0.
4. If Secured Indicator is Yes, CSA Type is Two way and Gross Exposure is less than 0, the application computes the contractually due collateral as follows:

$$\textbf{\textit{Contractually Due Collateral}} = \textbf{\textit{Max}}[\mathbf{0}, \{\textbf{\textit{Abs}}(\textbf{\textit{Gross Exposure}}) - \textbf{\textit{Threshold}} - \textbf{\textit{Collateral Posted}}\}]$$

Where,

Threshold is the unsecured exposure that a party to a netting agreement is willing to assume before making collateral calls.

The contractually due collateral is assumed to be posted and therefore receives the relevant outflow rate specified by the regulator as part of the preconfigured business assumptions for LCR calculations.

2.2.13.1.2 Calculating Contractually Receivable Collateral

The application computes the value of the collateral that a derivative counterparty is required to post contractually to the bank as follows, if one of the following conditions are met:

1. If Secured Indicator is No, then the contractually receivable collateral is 0.
2. If Secured Indicator is Yes and Gross Exposure is less than or equal to 0, then the contractually receivable collateral is 0.
3. If Secured Indicator is Yes and Gross Exposure is greater than 0, then the application computes the contractually receivable collateral as follows:

$$\boldsymbol{Contractually\ Receivable\ Collateral = Max[0, \{Abs(Gross\ Exposure) - Threshold - Collateral\ Received\}]}$$

The contractually receivable collateral does not receive a pre-specified inflow rate from the regulator and is, therefore, excluded from the LCR calculations. However, the application computes this to generate reports.

2.2.13.2 For Other Assets and Liabilities

This section details the calculation of contractually due collateral and contractually receivable collateral for other assets and liabilities.

Topics:

- Calculating Contractually Due Collateral
- Calculating Contractually Receivable Collateral

2.2.13.2.1 Calculating Contractually Due Collateral

The application calculates contractually due collateral for other assets and liabilities as follows, if one of the following conditions are met:

1. If Balance Sheet Category is Asset, then the contractually due collateral is 0.
2. If Balance Sheet Category is Liability, and Secured Indicator is N, then the contractually due collateral is 0.
3. If Balance Sheet Category is Liability, and Secured Indicator is Y, then the application computes the contractually due collateral as follows:

$$\boldsymbol{Contractually\ Due\ Collateral = Max[0, \{EOP\ Balance\ of\ Liability - Collateral\ Posted\}]}$$

2.2.13.2.2 Calculating Contractually Receivable Collateral

The application calculates contractually receivable collateral for other assets and liabilities as follows, if one of the following conditions are met:

1. If Balance Sheet Category is Liability, then the contractually due collateral is 0.
2. If Balance Sheet Category is Asset, and Secured Indicator is N, then the contractually due collateral is 0.
3. If Balance Sheet Category is Asset, and Secured Indicator is Y then the application computes the contractually due collateral as follows:

$$\textit{Contractually Receivable Collateral} = \textit{Max}[0, \{\textit{EOP Balance of Asset} - \textit{Collateral Received}\}]$$

2.2.14 Calculating Excess Collateral

Excess collateral is the value of collateral posted or received that is more than the collateral required based on the current levels of exposure and collateral position. This amount can be withdrawn by the party which has provided the collateral over its exposure and results in outflow to the party holding the excess collateral and an inflow to the party who has provided the excess collateral. It can be of two types, Excess Collateral Due or Excess Collateral Receivable.

Topics:

- For Derivatives
- For Other Assets and Liabilities

2.2.14.1 For Derivatives

This section details the calculation of excess collateral due and excess collateral receivable for derivatives.

Topics:

- Calculating Excess Collateral Due
- Calculating Excess Collateral Receivable

2.2.14.1.1 Calculating Excess Collateral Due

The application computes the value of the collateral that a derivative counterparty has posted to the bank, over the contractually required collateral, and therefore can be withdrawn by the counterparty, as follows:

1. If Secured Indicator is No, then the excess collateral due is 0.
2. If Secured Indicator is Y and Gross Exposure are less than or equal to 0, the application computes the excess collateral due as follows:

$$\textit{Excess Collateral Due} = \textit{Min}[\textit{Adjusted Collateral Received}, \textit{Non} - \textit{segregated Collateral Received}]$$

Where,

Adjusted collateral received: Collateral received from the counterparty less customer withdrawable collateral

Customer withdrawable collateral: Collateral received under re-hypothecation rights that can be contractually withdrawn by the customer within the LCR horizon without a significant penalty associated with such a withdrawal.

3. If Secured Indicator is Y and Gross Exposure are greater than 0, the application computes the excess collateral due as follows:

$$\boldsymbol{Excess\ Collateral\ Due = Min[Max\{0, Adjusted\ Collateral\ Received - Gross\ Exposure\}, Non-segregated\ Collateral\ Received]}$$

The excess collateral due is assumed to be recalled by the counterparty and therefore receives the relevant outflow rate specified by the regulator as part of the preconfigured business assumptions for LCR calculations.

2.2.14.1.2 Calculating Excess Collateral Receivable

The application computes the value of the collateral that the bank has posted to its derivative counterparty, over the contractually required collateral, and therefore can be withdrawn by the bank, as follows:

1. If Secured Indicator is No, then the excess collateral receivable is 0.
2. If Secured Indicator is Y and Gross Exposure are greater than or equal to 0, the application computes the excess collateral receivable as follows:

$$\boldsymbol{Excess\ Collateral\ Receivable = Min[Adjusted\ Collateral\ Posted, Non-segregated\ Collateral\ Posted]}$$

Where,

Adjusted collateral posted: Collateral posted by the bank less firm withdrawable collateral.

Firm withdrawable collateral: Collateral provided under re-hypothecation rights that can be contractually withdrawn by the bank within the LCR horizon without a significant penalty associated with such a withdrawal.

3. If Secured Indicator is Y and Gross Exposure are less than 0, the application computes the excess collateral receivable as follows:

$$\boldsymbol{Excess\ Collateral\ Receivable = Min[Max\{0, Adjusted\ Collateral\ Posted - Abs(Gross\ Exposure)\}, Non-segregated\ Collateral\ Posted]}$$

The excess collateral receivable does not receive a pre-specified inflow rate from the regulator and is, therefore, excluded from the LCR calculations. However, the application computes this to report.

2.2.14.2 For Other Assets and Liabilities

This section details the calculation of excess collateral due and excess collateral receivable for other assets and liabilities.

Topics

- Calculating Excess Collateral Due
- Calculating Excess Collateral Receivable

2.2.14.2.1 Calculating Excess Collateral Due

The application calculates the excess collateral due for other assets and liabilities as follows, if one of the following conditions are met:

1. If Balance Sheet Category is Liability, then the contractually due collateral is 0.
2. If Balance Sheet Category is Asset, and Secured Indicator is N, then the contractually due collateral is 0.
3. If Balance Sheet Category is Asset, and Secured Indicator is Y, then the application computes the contractually due collateral as follows:

$$\textbf{\textit{Excess Collateral Due}} = \textbf{\textit{Min}}[\textbf{\textit{Max}}\{\mathbf{0}, \textbf{\textit{Adjusted Collateral Received}} - \textbf{\textit{EOP Balance of Asset}}\}, \textbf{\textit{Non}} - \textbf{\textit{segregated Collateral Received}}]$$

2.2.14.2.2 Calculating Excess Collateral Receivable

The application calculates the excess collateral receivable for other assets and liabilities as follows, if one of the following conditions are met:

1. If Balance Sheet Category is Asset, then the contractually due collateral is 0.
2. If Balance Sheet Category is Liability, and Secured Indicator is N, then the contractually due collateral is 0.
3. If Balance Sheet Category is Liability, and Secured Indicator is Y, then the application computes the contractually due collateral as follows:

$$\textbf{\textit{Excess Collateral Receivable}} = \textbf{\textit{Min}}[\textbf{\textit{Max}}\{\mathbf{0}, \textbf{\textit{Adjusted Collateral Posted}} - \textbf{\textit{EOP Balance of Liability}}\}, \textbf{\textit{Non}} - \textbf{\textit{segregated Collateral Posted}}]$$

2.2.15 Calculating Downgrade Impact Amount

This section explains the calculation of downgrade impact amount.

Topics:

- Calculating Downgrade Impact Amount for Derivatives
- Calculating Downgrade Impact Amount for Other Liabilities

2.2.15.1 Calculating Downgrade Impact Amount for Derivatives

The application calculates the downgrade impact amount for derivatives as follows, if one of the following conditions are met:

1. If a downgrade trigger does not exist for the derivatives contract or netting agreement, the downgrade impact amount is 0.
2. If Net Exposure greater than 0, the downgrade impact amount is 0.
3. If Net Exposure less than or equal to 0, the downgrade impact amount is calculated as follows:

$$\textbf{\textit{Downgrade Impact Amount}} = \textbf{\textit{Max}}[\mathbf{0}, \{\textbf{\textit{Abs}}(\textbf{\textit{Net Exposure}}) - \textbf{\textit{Contractually Due Collateral}}\}]$$

2.2.15.2 Calculating Downgrade Impact Amount for Other Liabilities

The application calculates the downgrade impact amount for other liabilities, including annuities, that have an associated downgrade, derivatives as follows, if one of the following conditions are met:

1. If a downgrade trigger does not exist for the liability account, the downgrade impact amount is 0.
2. The downgrade impact amount for liabilities other than derivatives and securitizations is calculated as follows:

$$\boldsymbol{Downgrade\ Impact\ Amount} = \boldsymbol{Max}[\mathbf{0}, (\boldsymbol{EOP\ Balance} - \boldsymbol{Collateral\ Posted})]$$

> **NOTE** Any liability account that is triggered due to a particular level of rating downgrade has an outflow corresponding to a pre-specified percentage of the downgrade impact amount. For instance, if a 3-notch downgrade is specified, then the downgrade impact amount will outflow only for those accounts that have a trigger of 1-notch, 2-notches, and 3-notches. If a 2-notch downgrade is specified, then the downgrade impact amount will outflow only for those accounts that have a trigger of 1-notch and 2-notches. The rating downgrade and the outflow percentage as specified by the regulator are part of the preconfigured business assumptions for LCR calculations.

2.2.16 Calculating Net Derivative Cash Inflows and Outflows

This section explains the calculation of net derivative cash inflows and outflows.

Topics:

- Cash Flow Netting at Derivative Contract Level
- Cash Flow Netting at Netting Agreement Level

2.2.16.1 Cash Flow Netting at Derivative Contract Level

Cash flows from each derivative contract are netted as follows:

1. When cash inflows and outflows are denominated in the same currency and occur at the same time bucket:
   a. The cash inflows and outflows are summed up and the net value is computed as follows:

   $$\boldsymbol{Net\ Cash\ Flow} = \boldsymbol{Cash\ Outflow} - \boldsymbol{Cash\ Inflow}$$

   b. When net cash flow is positive and there is no netting agreement associated with the derivative contract, the value is treated as net derivative cash outflow.
   c. If the net cash flow is negative and there is no netting agreement associated with the derivative contract, the value is treated as net derivative cash inflow.

2. When cash inflows and outflows are denominated in different currencies but settle within the same day:
   a. The cash inflows and outflows are summed up after being converted to the reporting currency and the net value is computed.
   b. If the net cash flow is positive and there is no netting agreement associated with the derivative contract, the value is treated as net derivative cash outflow.
   c. If the net cash flow is negative and there is no netting agreement associated with the derivative contract, the value is treated as net derivative cash inflow.
3. When cash inflows and outflows are denominated in different currencies and do not settle within the same day:
   a. The cash outflows from each derivative contract without an associated netting agreement are summed up and treated as net derivative cash outflows.
   b. The cash inflows from each derivative contract without an associated netting agreement are summed up and treated as net derivative cash inflow.

NOTE If a derivative contract has a netting agreement associated with it, the cash flow is further netted across contracts at the netting agreement level.

2.2.16.2 Cash Flow Netting at Netting Agreement Level

For derivative contracts which have a netting agreement associated with them, the net cash flows computed at the derivative contract level are further netted across multiple contracts under the same netting agreement as follows:

1. For derivative contracts, that belong to a single netting agreement, whose payment netting agreement flag is Yes:
   a. The cash inflows and outflows occurring in each time bucket, denominated in each currency, are summed up across all contracts whose payment netting agreement flag is Yes, and the net value is computed.
   b. If the net cash flow is positive, the value is treated as net derivative cash outflow.
   c. If the net cash flow is negative, the value is treated as net derivative cash inflow.
2. For derivative contracts, that belong to a single netting agreement, whose payment netting agreement flag is No:
   a. The cash outflows occurring in each time bucket, denominated in each currency, are summed up separately for each derivative contract whose payment netting agreement flag is No and treated as net derivative cash outflow.
   b. The cash inflows occurring in each time bucket, denominated in each currency, are summed up separately for each derivative contract whose payment netting agreement flag is No and treated as net derivative cash inflow.

NOTE Cash flow netting for netting agreements is done separately for each currency. Cash flows are not netted across currencies. Instead, the inflows and outflows converted into the reporting currency are summed up separately to report the net derivatives cash inflow and net derivatives cash outflow at an entity level.

2.2.17 Calculating Twenty-Four Month Look-back Amount

The application computes the 24-month look-back amount, to define outflows due to increased liquidity needs related to market valuation changes on derivatives as follows:

- The Mark-to-Market (MTM) value of collateral outflows and inflows due to valuation changes on derivative transactions are captured at a legal entity level. The values over a 24-month historical time window from the As of Date are identified.
- The application computes the largest 30-day absolute net collateral flow occurring within each rolling 30-day historical time window as follows:

  a. The net Mark-to-Market collateral change is computed for each day within a particular 30-day historical time window as follows:

  $$Net\ MTM\ Collateral\ Change = MTM\ Colateral\ Outflows - MTM\ Collateral\ Inflows$$

  b. The cumulative net Mark-to-Market collateral change is computed for each day within a particular 30-day historical time window as follows:

  $$Cumulative\ Net\ MTM\ Collateral\ Change = \sum_{1}^{i} Net\ MTM\ Collateral\ Change$$

  Where,

  i: Each day within a particular 30-day historical time window

  n: Each 30-day historical time window

  c. The absolute net Mark-to-Market collateral change is computed for each day within the rolling 30-day historical time window as follows:

  $$Absolute\ Net\ MTM\ Collateral\ Change = Abs(Cumulative\ Net\ MTM\ Collateral\ Change)$$

  d. The largest 30-day absolute net collateral flow occurring within the rolling 30-day historical time window is identified as follows:

  $$Largest\ 30 - day\ Absolute\ Net\ Collateral\ Flow = Max(Absolute\ Net\ MTM\ Collateral\ Change_i)$$

NOTE Steps (a) to (d) are repeated for each rolling 30-day historical time window.

  e. The 24-month look-back amount is calculated as follows:

$$24 - \boldsymbol{Month\ Lookback\ Amount} = \boldsymbol{Max}(\boldsymbol{Largest}\ 30 - \boldsymbol{day\ Absolute\ Net\ Collateral\ Flow}_{n})$$

NOTE

1. This calculation is done for each legal entity separately.
2. The largest 30-day absolute net collateral flow is computed in 30-day blocks on a rolling basis. For example, the first 30-day block is As of Date to As of Date - 29; the second 30-day block is As of Date - 1 to As of Date - 30 and so on.
3. The 24-month look-back amount is computed as the maximum of the largest absolute net collateral flow during all rolling 30-day periods in every 24 months.

The 24-month look-back calculations are illustrated in the following table considering a 34-day historical time window instead of 24-months. This results in 5 rolling 30-day windows.

Table 16: Illustration - 24-month Look-back Calculation

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
As of Date to As of Date - 29	As of Date	65	14	51	51	51
	As of Date - 1	65	9	56	107	107
	As of Date - 2	74	83	-9	98	98
	As of Date - 3	71	97	-26	72	72
	As of Date - 4	84	89	-5	67	67
	As of Date - 5	8	57	-49	18	18
	As of Date - 6	40	59	-19	-1	1
	As of Date - 7	42	87	-45	-46	46
	As of Date - 8	100	6	94	48	48
	As of Date - 9	41	30	11	59	59
	As of Date - 10	45	9	36	95	95
	As of Date - 11	9	32	-23	72	72
	As of Date - 12	59	67	-8	64	64
	As of Date - 13	61	10	51	115	115
	As of Date - 14	22	36	-14	101	101
	As of Date - 15	63	81	-18	83	83

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
	As of Date - 16	36	3	33	116	116
	As of Date - 17	61	22	39	155	155
	As of Date - 18	94	37	57	212	212
	As of Date - 19	3	18	-15	197	197
	As of Date - 20	13	27	-14	183	183
	As of Date - 21	24	56	-32	151	151
	As of Date - 22	57	75	-18	133	133
	As of Date - 23	66	87	-21	112	112
	As of Date - 24	33	71	-38	74	74
	As of Date - 25	29	30	-1	73	73
	As of Date - 26	64	25	39	112	112
	As of Date - 27	54	39	15	127	127
	As of Date - 28	51	6	45	172	172
	As of Date - 29	35	31	4	176	176
As of Date - 1 to As of Date - 30	As of Date - 1	65	9	56	56	56
	As of Date - 2	74	83	-9	47	47
	As of Date - 3	71	97	-26	21	21
	As of Date - 4	84	89	-5	16	16
	As of Date - 5	8	57	-49	-33	33

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
	As of Date - 6	40	59	-19	-52	52
	As of Date - 7	42	87	-45	-97	97
	As of Date - 8	100	6	94	-3	3
	As of Date - 9	41	30	11	8	8
	As of Date - 10	45	9	36	44	44
	As of Date - 11	9	32	-23	21	21
	As of Date - 12	59	67	-8	13	13
	As of Date - 13	61	10	51	64	64
	As of Date - 14	22	36	-14	50	50
	As of Date - 15	63	81	-18	32	32
	As of Date - 16	36	3	33	65	65
	As of Date - 17	61	22	39	104	104
	As of Date - 18	94	37	57	161	161
	As of Date - 19	3	18	-15	146	146
	As of Date - 20	13	27	-14	132	132
	As of Date - 21	24	56	-32	100	100
	As of Date - 22	57	75	-18	82	82
	As of Date - 23	66	87	-21	61	61
	As of Date - 24	33	71	-38	23	23

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
	As of Date - 25	29	30	-1	22	22
	As of Date - 26	64	25	39	61	61
	As of Date - 27	54	39	15	76	76
	As of Date - 28	51	6	45	121	121
	As of Date - 29	35	31	4	125	125
	As of Date - 30	93	68	25	150	150
As of Date - 2 to As of Date - 31	As of Date - 2	74	83	-9	-9	9
	As of Date - 3	71	97	-26	-35	35
	As of Date - 4	84	89	-5	-40	40
	As of Date - 5	8	57	-49	-89	89
	As of Date - 6	40	59	-19	-108	108
	As of Date - 7	42	87	-45	-153	153
	As of Date - 8	100	6	94	-59	59
	As of Date - 9	41	30	11	-48	48
	As of Date - 10	45	9	36	-12	12
	As of Date - 11	9	32	-23	-35	35
	As of Date - 12	59	67	-8	-43	43
	As of Date - 13	61	10	51	8	8
	As of Date - 14	22	36	-14	-6	6

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
	As of Date - 15	63	81	-18	-24	24
	As of Date - 16	36	3	33	9	9
	As of Date - 17	61	22	39	48	48
	As of Date - 18	94	37	57	105	105
	As of Date - 19	3	18	-15	90	90
	As of Date - 20	13	27	-14	76	76
	As of Date - 21	24	56	-32	44	44
	As of Date - 22	57	75	-18	26	26
	As of Date - 23	66	87	-21	5	5
	As of Date - 24	33	71	-38	-33	33
	As of Date - 25	29	30	-1	-34	34
	As of Date - 26	64	25	39	5	5
	As of Date - 27	54	39	15	20	20
	As of Date - 28	51	6	45	65	65
	As of Date - 29	35	31	4	69	69
	As of Date - 30	93	68	25	94	94
	As of Date - 31	51	97	-46	48	48
As of Date - 3 to As of Date - 32	As of Date - 3	71	97	-26	-26	26
	As of Date - 4	84	89	-5	-31	31

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
	As of Date - 5	8	57	-49	-80	80
	As of Date - 6	40	59	-19	-99	99
	As of Date - 7	42	87	-45	-144	144
	As of Date - 8	100	6	94	-50	50
	As of Date - 9	41	30	11	-39	39
	As of Date - 10	45	9	36	-3	3
	As of Date - 11	9	32	-23	-26	26
	As of Date - 12	59	67	-8	-34	34
	As of Date - 13	61	10	51	17	17
	As of Date - 14	22	36	-14	3	3
	As of Date - 15	63	81	-18	-15	15
	As of Date - 16	36	3	33	18	18
	As of Date - 17	61	22	39	57	57
	As of Date - 18	94	37	57	114	114
	As of Date - 19	3	18	-15	99	99
	As of Date - 20	13	27	-14	85	85
	As of Date - 21	24	56	-32	53	53
	As of Date - 22	57	75	-18	35	35
	As of Date - 23	66	87	-21	14	14

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
	As of Date - 24	33	71	-38	-24	24
	As of Date - 25	29	30	-1	-25	25
	As of Date - 26	64	25	39	14	14
	As of Date - 27	54	39	15	29	29
	As of Date - 28	51	6	45	74	74
	As of Date - 29	35	31	4	78	78
	As of Date - 30	93	68	25	103	103
	As of Date - 31	51	97	-46	57	57
	As of Date - 32	12	31	-19	38	38
As of Date - 4 to As of Date - 33	As of Date - 4	84	89	-5	-5	5
	As of Date - 5	8	57	-49	-54	54
	As of Date - 6	40	59	-19	-73	73
	As of Date - 7	42	87	-45	-118	118
	As of Date - 8	100	6	94	-24	24
	As of Date - 9	41	30	11	-13	13
	As of Date - 10	45	9	36	23	23
	As of Date - 11	9	32	-23	0	0
	As of Date - 12	59	67	-8	-8	8
	As of Date - 13	61	10	51	43	43

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
	As of Date - 14	22	36	-14	29	29
	As of Date - 15	63	81	-18	11	11
	As of Date - 16	36	3	33	44	44
	As of Date - 17	61	22	39	83	83
	As of Date - 18	94	37	57	140	140
	As of Date - 19	3	18	-15	125	125
	As of Date - 20	13	27	-14	111	111
	As of Date - 21	24	56	-32	79	79
	As of Date - 22	57	75	-18	61	61
	As of Date - 23	66	87	-21	40	40
	As of Date - 24	33	71	-38	2	2
	As of Date - 25	29	30	-1	1	1
	As of Date - 26	64	25	39	40	40
	As of Date - 27	54	39	15	55	55
	As of Date - 28	51	6	45	100	100
	As of Date - 29	35	31	4	104	104
	As of Date - 30	93	68	25	129	129
	As of Date - 31	51	97	-46	83	83
	As of Date - 32	12	31	-19	64	64

Rolling 30-Day Period	Day	Mark-To-Market Collateral Outflows Due To Derivative Transaction Valuation Changes (a)	Mark-To-Market Collateral Inflows Due To Derivative Transaction Valuation Changes (b)	Net Mark-To-Market Collateral Change (c = a – b)	Cumulative Net Mark-To-Market Collateral Change (d = Cumulative c)	Absolute Net Mark-To-Market Collateral Change [e = Abs (d)]
	As of Date - 33	34	36	-2	62	62

The largest 30-day absolute net collateral flow for each rolling 30-day period and the 24-month look-back value (in this example, the 34-day look-back value) is computed as follows.

Table 17: Illustration continued - 24-month Look-back Calculation

Rolling 30-Day Period	Largest 30-Day Absolute Net Collateral Flow [f = Max (e)]	24 Month Look-back Value [Max (f)]
As of Date to As of Date - 29	212	212
As of Date - 1 to As of Date - 30	161	
As of Date - 2 to As of Date - 31	153	
As of Date - 3 to As of Date - 32	144	
As of Date - 4 to As of Date - 33	140	

2.2.18 Calculating Operational Amount

The regulator-prescribed lower outflow rate for operational deposits should be applied only to the portion of the EOP balance that is truly held to meet operational needs. The application supports a new methodology to compute the operational portion of the EOP balance of operational deposits. The following steps are involved in computing the operational balance:

1. All deposits classified as operational as per regulatory guidelines are identified. This is a separate process in LRM.

2. The EOP balances of eligible operational accounts are obtained over a 90-day historical window including the As of Date, for example, As of Date – 89 days. To identify historical observations, the f_reporting_flag must be updated as Y for one execution of the Run per day in the LRM Run Management Execution Summary UI. The application looks up the balance for such accounts against the Run execution for which the Reporting Flag is updated as Y for each day in the past.

NOTE	The historical time window is captured as a parameter in the SETUP_MASTER table. The default value is 90 days which can be modified by the user. To modify this value, update the value under the component code DAYS_HIST_OPER_BAL_CALC_UPD.

3. A rolling 5-day average is calculated for each account over the historical window.
4. The average of the 5-day rolling averages computed in Step 3 is calculated.
5. The operational balance is calculated as follows:

NOTE	The calculation of the operational balance can be either a direct download from the staging tables or through the historical balance approach.

$$\boldsymbol{Operational\ Balance = Min\ (Current\ EOP\ Balance, Average\ Computed\ in\ Step\ 4)}$$

NOTE	The operational balance calculation based on historical lookback is optional. You can choose to compute the operational balances using this method or provide the value as a download. To provide the value as a download, update the value in the SETUP_MASTER table under the component code HIST_OPERATIONAL_BAL_CALC_UPD as N. If the value is Y then the value would be calculated through historical balance approach.

6. The non-operational balance is calculated as follows:

$$\boldsymbol{Non - operational\ Balance = Current\ EOP\ Balance - Operational\ Balance}$$

7. The operational insured balance is calculated as follows:

$$\boldsymbol{Operational\ Insured\ Balance = Min\ (Operational\ Balance, Insured\ Balance)}$$

The insured and uninsured balances are calculated as part of a separate process, for example the insurance allocation process which is explained in detail in the relevant section under each jurisdiction.

8. The operational uninsured balance is calculated as follows:

$$\boldsymbol{Operational\ Uninsured\ Balance = Operational\ Balance - \ Insured\ Operational\ Balance}$$

9. The non-operational insured balance is calculated as follows:

$$\boldsymbol{Non - operational\ Insured\ Balance = Min\ [Non - operational\ Balance, (Insured\ Balance - \ Insured\ Operational\ Balance)]}$$

10. The non-operational uninsured balance is calculated as follows:

$$\boldsymbol{Non - operational\ Uninsured\ Balance = Non - operational\ Balance - \ Insured\ Non - operational\ Balance}$$

The operational deposit computation process is illustrated in the following table, assuming a 15-day historical window instead of 90-days and for the As of Date 28th February 2017. The historical balances for 15-days including the As of Date are provided as follows.

Table 18: Computation of Operational Deposit

Clients With Operational Accounts	Eligible Operational Accounts	Historical Time Window														As of Date
		2/14/2017	2/15/2017	2/16/2017	2/17/2017	2/18/2017	2/19/2017	2/20/2017	2/21/2017	2/22/2017	2/23/2017	2/24/2017	2/25/2017	2/26/2017	2/27/2017	2/28/2017
A	10001	102,000	102,125	102,250	102,375	102,500	102,625	102,750	102,875	103,000	103,125	103,250	103,375	103,500	103,625	103,750
	10296	23,500	23,550	23,600	23,650	23,700	23,750	23,800	23,850	23,900	23,950	24,000	24,050	24,100	24,150	24,200
B	31652	65,877	59,259	59,234	59,209	59,184	59,159	59,134	59,109	59,084	59,059	59,034	59,009	58,984	58,959	58,934

The rolling averages and cumulative average are computed as follows.

Table 19: Computation of Rolling Average and Cumulative Average

Clients with Operational Accounts	Eligible Operational Accounts	5-day Rolling Average											Cumulative Average (a)
		2/18/2017	2/19/2017	2/20/2017	2/21/2017	2/22/2017	2/23/2017	2/24/2017	2/25/2017	2/26/2017	2/27/2017	2/28/2017	
A	10001	102,250	102,375	102,500	102,625	102,750	102,875	103,000	103,125	103,250	103,375	103,500	95136
	10296	23,600	23,650	23,700	23,750	23,800	23,850	23,900	23,950	24,000	24,050	24,100	22721
B	31652	60,553	59,209	59,184	59,159	59,134	59,109	59,084	59,059	59,034	59,009	58,984	56931

The operational and non-operational balances are computed as follows.

Table 20: Calculation of Operational and Non-operational Balances

Clients with Operational Accounts	Eligible Operational Accounts	Current Balance (b)	Operational Balance (c = a – b)	Non-Operational Balance	Insured Balance	Uninsured Balance	Insured Operational Balance	Uninsured Operational Balance	Insured Non-Operational Balance	Uninsured Non-Operational Balance
A	10001	103,750	95,136	8,615	100,000	3,750	95,136		4,865	3,750
	10296	24,200	22,721	1,480		24,200		22,721		1,480
B	31652	58,934	56,931	2,003	58,934		56,931		2,003	

NOTE

- Negative historical balances are replaced by zero for this computation.
- For operational accounts that have an account start date is greater than or equal to the historical days including the As of Date, missing balances are replaced by previously available balance.
- For operational accounts that have an account start date is less than the historical days including the As of Date:
  - **a.** Missing balances between the account start date and As of Date are replaced by previously available balance.
  - **b.** The rolling average is calculated only for the period from the account start date to the As of Date.
- The methodology to compute operational balance is optional. This can be turned On or Off using the Setup master table, where component code = HIST_OPERATIONAL_BAL_CALC_UPD. The option to provide the operational balance as a download is supported by the application.

2.2.19 Calculating HQLA Transferability Restriction

Regulators across jurisdictions recognize the existence of liquidity transfer restrictions, for banks that operate in multiple jurisdictions. Such transfer restrictions have implications for the group-wide consolidated LCR calculations and hence require to be treated appropriately. OFS LRM, in the LCR consolidation process, includes the restricted HQLA from a subsidiary in the consolidated stock of HQLA only to the extent of that subsidiary's liquidity needs that is its net cash outflow, per the regulatory requirements. The treatment of transferability restriction during consolidation is done separately for the following three scenarios:

- Accounts Domiciled in Third Countries with Transfer Restrictions
- Accounts Denominated in Non-convertible Currencies
- Accounts Denominated in Currencies with Operational Restrictions

2.2.19.1 Accounts Domiciled in Third Countries with Transfer Restrictions

The HQLA transferability restriction for accounts domiciled in third Countries with transfer restrictions is calculated as follows:

1. The net cash outflows are computed for accounts domiciled in a third country. The consolidation entity is the subsidiary itself in this case. If the subsidiary is a leaf level entity, then the net cash outflow is calculated on a standalone basis.
2. The restricted and unrestricted stock of Level 1, Level 2A, and Level 2B is computed for accounts domiciled in the third country, before applying HQLA caps. OFS LRM captures the HQLA transferability restriction at an account level through the flag F_TRANSFERABILITY_RESTRICTION.
3. The application computes the consolidated HQLA amount in the third country with restrictions (TCR) as follows:

   $$\{Min(Stock\ of\ HQLA\ in\ TCR;\ Net\ Cash\ Outflow\ TCR)\}$$

4. The application computes the restricted HQLA in the third country with restrictions as follows:

   $$Stock of\ \mathrm{HQLA} - \mathrm{Consolidated\ HQLA\ in\ TCR}$$

5. The application assigns the restricted HQLA amount in the third country with restrictions in the following order:
   a. First by asset level starting from least to highest, that is, Level 2B to Level 1.
   b. Next by haircut values within an asset level starting from the highest to least.
6. The application verifies if the legal entity has exposure to any restricted third country.
7. The application calculates the total restricted HQLA amount for each legal entity as the sum of the restricted HQLA due to currency operational restriction, non-convertible currency restriction and third-country restriction at each asset level.
8. The application calculates net cash outflows at the legal entity level.
9. The application calculates stock of Level 1, Level 2A, Level 2B assets at the legal entity level.

10. It calculates the unrestricted stock of Level 1, Level 2A, and Level 2B assets at the legal entity level by deducting the restricted amount for each asset level. The restricted amount is excluded from the stock calculation.
11. The application transfers the unrestricted stock of Level 1, Level 2A, and Level 2B assets to the immediate parent.
12. Steps 7 to 12 are repeated for each sub-consolidation level within the organization structure of the consolidation entity until the consolidation entity itself.

NOTE The allocation of restricted assets is done in the descending order of asset quality to maximize the stock of HQLA.

This calculation is part of the LCR consolidation process. To get a complete view of the process, see the Consolidation section.

2.2.19.2 Accounts Denominated in Non-convertible Currencies

The HQLA transferability restriction for accounts denominated in non-convertible currencies is calculated as follows:

1. The net cash outflows are computed for accounts in the non-convertible currency. The consolidation entity is the subsidiary itself in this case. If the subsidiary is a leaf level entity, then the net cash outflow is calculated on a standalone basis.
2. The restricted and unrestricted stock of Level 1, Level 2A, and Level 2B assets in non-convertible currency is computed, before applying HQLA caps. The application captures the HQLA transferability restriction at an account level through the flag F_TRANSFERABILITY_RESTRICTION.
3. The application computes the consolidated HQLA amount in the non-convertible currency (NCC) as follows:

$$\{Min(Stock\ of\ HQLA\ in\ NCC;\ Net\ Cash\ Outflow\ NCC)\}$$

4. The application computes the restricted HQLA in NCC as follows:

$$Stock of\ \mathrm{HQLA}\ -\ \mathrm{Consolidated\ HQLA\ in}\ NCC$$

5. The application assigns the restricted HQLA amount in the non-convertible currency in the following order:
   a. First by asset level starting from least to highest, that is, Level 2B to Level 1.
   b. Next by haircut values within an asset level starting from the highest to least.
6. The application verifies if the legal entity has exposure to any other non- convertible currency.
7. Steps 7 to 12 in section Accounts Domiciled in Third Countries with Transfer Restrictions are repeated for each sub-consolidation level within the organization structure of the consolidation entity until the consolidation entity itself.

> **NOTE** The allocation of restricted assets is done in the descending order of asset quality to maximize the stock of HQLA.
>
> This calculation is part of the LCR consolidation process. To get a complete view of the process, see the Consolidation section.

2.2.19.3 Accounts Denominated in Currencies with Operational Restrictions

The HQLA transferability restriction for accounts denominated in currencies with operational restrictions is calculated as follows:

1. The net cash outflows are computed in the currency for which operational restriction is specified. The consolidation entity is the subsidiary itself in this case. If the subsidiary is a leaf level entity, then the net cash outflow is calculated on a standalone basis.
2. The restricted and unrestricted stock of Level 1, Level 2A and Level 2B is computed for assets in the currency for which operational restriction is specified. OFS LRM captures the HQLA transferability restriction at an account level through the flag F_TRANSFERABILITY_RESTRICTION.
3. The application computes available excess HQLA, that is, restricted HQLA due to currency restriction as to the difference between the total stock of HQLA and the maximum permissible HQLA amount in that currency before applying Alternative Liquidity Approach (ALA). The application computes the restricted HQLA in NCC as follows:

   $$Stock\,\text{of HQLA} - \text{Consolidated HQLA in } NCC$$

4. The application assigns the available excess HQLA amount after applying currency operational restrictions in the following order:
   a. First by asset level from least to highest, that is, Level 2B to Level 1.
   b. Next by haircut values within an asset level starting from the highest to least.
5. The application check if there is any currency for which operational restriction is specified.
6. Steps 7 to 12 in section Accounts Domiciled in Third Countries with Transfer Restrictions are repeated for each sub-consolidation level within the organization structure of the consolidation entity until the consolidation entity itself.

> **NOTE** The allocation of restricted assets is done in the descending order of asset quality to maximize the stock of HQLA.
>
> This calculation is part of the LCR consolidation process. To get a complete view of the process, see the Consolidation section.

2.2.20 Calculating Cash Inflows and Outflows

This section explains the cash inflows and outflows calculation.

Topics:

- Calculating Total Cash Inflows

- Calculating Total Cash Outflows
- Calculating Net Cash Outflows

2.2.20.1 Calculation of Total Cash Inflows

The application applies the business assumptions, specified on products involving cash inflows, selected as part of the Run. The regulatory assumptions specified in the Regulation Addressed through Business Assumptions section, are predefined and packaged as part of the ready-to-use Run to determine the inflows over the liquidity horizon. The business assumption adjusted cash inflows occurring over the liquidity horizon are summed up to obtain the total cash inflow. These include inflows from earning assets such as loans, assets that are not eligible for inclusion in the stock of HQLA, derivatives inflows, and so on.

The business adjusted cash inflows calculated according to the above process, are capped to total expected cash outflows while calculating net cash outflows. Capping is done according to the following criteria:

- Inflows in countries with transfer restrictions are capped up to outflows of that country.
- Inflows in non-convertible currencies are capped up to outflows of that currency.
- Inflows from the parent or a subsidiary of the legal entity, or another subsidiary of the same parent are capped up to outflows.
- Inflows from deposits placed within institutional networks are capped up to outflows.
- Inflows from promotional loans from banks, pass-through loans from MDB or PSE, and pass-through mortgage loans are capped up to outflows.
- Specialized credit institutions whose primary functions are leasing and factoring and having the primary function to balance sheet ratio of greater than 80% are capped up to outflows from such specialized credit institutions.
- Specialized credit institutions whose primary functions are Motor Vehicle Financing or Consumer Credit and having the primary function to balance sheet ratio of greater than 80% are capped up to 90% of outflows from such specialized credit institutions.
- Inflows apart from the above-mentioned conditions are capped up to 75% of the outflows from such transactions.

2.2.20.2 Calculation of Total Cash Outflows

The application applies the business assumptions, specified on products involving cash outflows, selected as part of the Run. The regulatory assumptions specified in the Regulation Addressed through Business Assumptions section, are predefined and packaged as part of the ready-to-use Run to determine the outflows over the liquidity horizon. The business assumption adjusted cash outflows occurring over the liquidity horizon is summed up to obtain the total cash outflow. These include outflows from liabilities, derivatives outflow, outflows due to changes in financial conditions such as rating downgrade and valuation changes, and so on.

2.2.20.3 Calculation of Net Cash Outflows

The total net cash outflows are defined as the total expected cash outflows minus total expected cash inflows for the LCR horizon, that is, subsequent 30 calendar days. Total expected cash outflows are calculated by multiplying the outstanding balances of various categories or types of liabilities and off-balance sheet commitments by the rates at which they are expected to run off or be drawn down. Total expected cash inflows are calculated by multiplying the outstanding balances of various categories of contractual receivables by the rates at which they are expected to flow in up to an aggregate cap of 75% of total expected cash outflows. This requires that a bank must maintain a minimum amount of stock of HQLA equal to 25% of the total cash outflows.

Total expected cash inflows are calculated by multiplying the outstanding balances of various categories of contractual receivables by the rates at which they are expected to flow in are capped up to total expected outflows as mentioned in section Calculation of Total Cash Inflows.

$$NLO = TO - MIN(FEI, TO) - MIN(IHC, 0{,}9 * MAX(TO - FEI, 0)) - MIN(IC, 0{,}75 * MAX(TO - FEI - IHC/0{,}9, 0))$$

Where,

NLO: Net Liquidity Outflows

TO: Total Outflows

MIN(FEI, too): Reduction for Fully Exempt Inflows*

MIN(IHC, 0,9*MAX(TO – FEI, 0)) and MAX(TO – FEI – IHC/0,9, 0): Reduction for Inflows Subject to 90% Cap*

MIN(IC, 0,75*MAX(TO – FEI – IHC/0,9, 0)): Reduction for Inflows Subject to 75% Cap*

Banks will not be permitted to double count items, that is if an asset is included as part of the stock of HQLA (that is the numerator), the associated cash inflows cannot also be counted as cash inflows (that is the part of the denominator). Where there is potential that an item could be counted in multiple outflow categories, (for example, committed liquidity facilities granted to cover debt maturing within the 30 calendar day period), a bank only has to assume up to the maximum contractual outflow for that product.

2.2.21 Alternative Liquidity Approaches

Where there are insufficient liquid assets in a given currency for credit institutions to meet the liquidity coverage ratio, the institution can adopt alternative liquidity ratios. These approaches are subject to jurisdictional approval. Liquidity Risk Regulatory Calculations for European Banking Authority supports the following options:

- **Option 1**: Contractually committed credit facilities from the relevant central bank, with a fee.
- **Option 2**: Foreign currency HQLA to cover domestic currency liquidity needs.
- **Option 3**: Additional use of Level 2A Assets with a higher haircut.

NOTE	HQLA shortfall is determined by the difference in the NCOF and the available HQLA. When an HQLA Shortfall occurs, one or all three of the applicable and alternative liquidity approaches, are applied based on the sequence specified, and the maximum permissible amount.

Topics:

- Option 1

- Option 2
- Option 3

2.2.21.1 Option 1

This refers to contractually committed credit line facilities from the relevant central bank for a fee. These facilities are other than the facilities which are regular central bank standing arrangements. This is identified through a credit line purpose as Contractual Committed Facility Extended by Central Bank as Alternative Liquidity. The line should be irrevocable if not, it should have a Notice period before revocation as greater than the LCR Horizon.

2.2.21.2 Option 2

This refers to currencies that do not have sufficient HQLA. Option 2 allows banks that evidence a shortfall of HQLA in the domestic currency, to hold HQLA in a currency that does not match the currency of the associated liquidity risk, provided that the resulting currency mismatch positions are justifiable and controlled within limits agreed by their supervisors. These criteria are checked by dimensions such as non-convertible currency flag, Pegged currency pair, and so on. Such assets would be further subject to an additional haircut as specified.

2.2.21.3 Option 3

This option addresses currencies for which there are insufficient Level 1 assets, but there are sufficient Level 2A assets. In such cases, the excess Level 2A assets can be included in the stock beyond the cap for the Level 2 assets. Such assets, when included are subject to a higher haircut than the standard Level 2A haircuts.

NOTE The applicable ALA options are captured as a parameter in the SETUP_MASTER table. You can modify the default value in all the approaches supported by the application such as CBCF, ALTCCY, ALTL2A. To modify this value, update the value under the component code APPLICABLE_ALA_APPROACH_TYPE_CODE.

2.2.22 Home-Host Configuration

Home or Host treatment applies to a group of credit institutions which are domiciled in different regions, to apply the liquidity coverage ratio either based on home regulation or host regulation, whichever is more stringent. This treatment is applicable for HQLA, Inflows, and Outflows as explained in the following points. The home or host treatment can be applied as a separate Run within the application. Under Home or Host treatment the application evaluates and computes:

- **HQLA**

  For each of the assets, the home level and the host level are compared, through the haircut applied for each asset. The home asset level is as computed using the application, whereas the host level and haircuts are taken as a download. The greater haircut is applied to the asset and the corresponding asset level is updated.

> **NOTE** You can provide the host HQLA data either as a download in the table fsi_lrm_host_acct_hqla_level, or you can configure the host HQLA rules. The sample HQLA rule LRM - Host - HQLA Level 1 - Sovereign, Central Bank, and MDB Issued Zero Risk Weight Securities, is seeded in the application. If you choose to give the HQLA data as a download in the table fsi_lrm_host_acct_hqla_level, ensure to remove the seeded rule LRM - Host - HQLA Level 1 - Sovereign, Central Bank, and MDB Issued Zero Risk Weight Securities from the run.

The sample host haircuts have been seeded in the assumption Host HQLA Haircuts. This assumption has to be reconfigured based on the host regulations.

- **Outflows**

  For each combination of dimensions, the home outflow rate is compared to the host outflow rate and the greater rate is applied.

- **Inflows**

  For each combination of dimensions, the home inflow rate is compared to the host inflow rate and the lesser rate is applied.

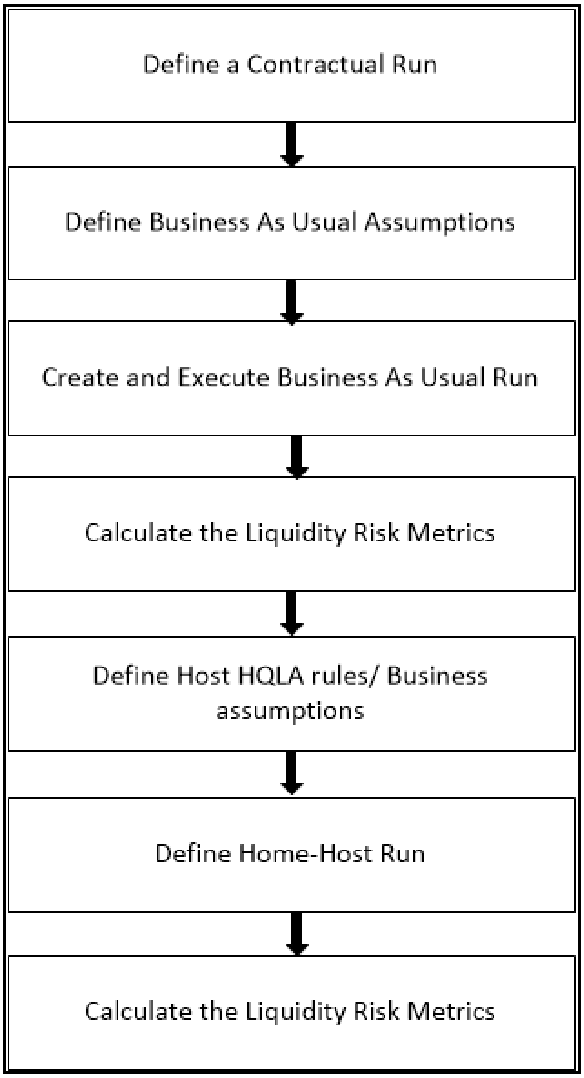
Topics:

- Home-Host Treatment Run
- Define a Home-Host Run
- Run Definition Approval Process
- Add a Custom Task to a Run
- Prepare for Execution
- Run Execution Parameters
- Execute a Run
- Run Execution Summary

2.2.22.1 Home-Host Treatment Run

The Home or Host Run is an additional process that compares the home rates and host rates and applies the stricter rate. This is applicable to legal entities incorporated in a host country. HQLA asset levels or haircuts, factor for Inflows and Outflows are compared for both countries and finalized in this Run.

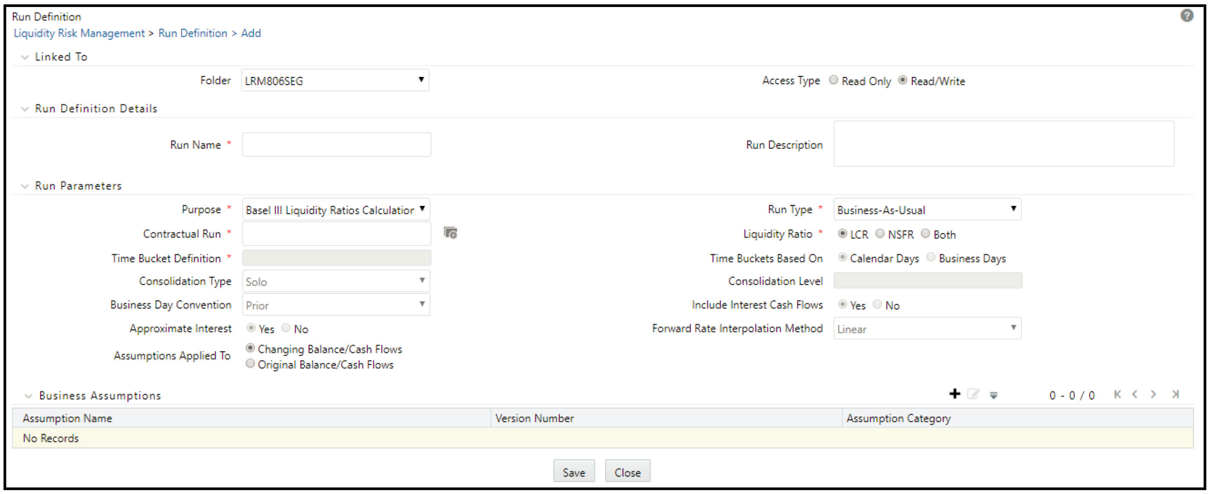
Figure 3: Process Flow - Home or Host Run



2.2.22.2 Define a Home-Host Run

See Run Management chapter in the OFS Liquidity Risk Measurement and Management User Guide for details.

Figure 4: Run Definition - Home - Host Run



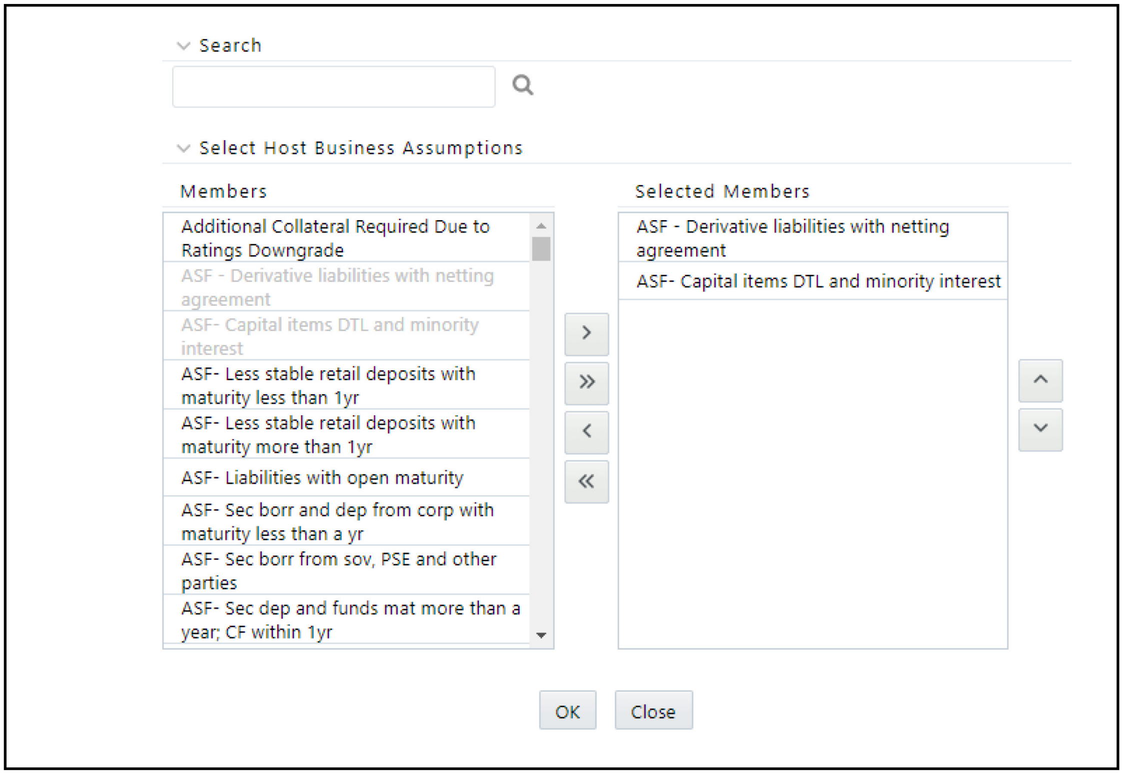
To define a Home-Host Run, follow these steps:

1. Click Add on the **Run Management** window.
2. The **Run Definition** window is displayed where you can define a Home-Host Run.
3. In the **Linked To** section,
   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**. It is either Read/Write or Read Only option
4. In the **Run Definition Details** section,
   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.

5. In the **Run Parameters** section,
   a. Select the **Purpose** EBA Delegated Act Liquidity Ratio Calculation from the drop-down list.
   b. Select the **Run Type** as Home-Host Treatment from the drop-down list.
   c. Click and select the Home BAU Run.
   d. The Home Business Assumptions section includes the selected assumptions.
   e. In the Host Business Assumptions section, click **Add** and select the Host Business Assumptions.
6. Click **Move** to select one, or click **Move All** to select multiple business assumptions that you want to apply to the contractual cash flows and move them to the Selected Members section.

7. Using up or down arrows, you can sequence the assumptions.



8. To add or edit the business assumptions click **Edit** .

9. If you do not wish to save the assumption, click **Close**.

10. The details are displayed under the Home Business Assumption and Host Business Assumption section for each selected business assumption as:

    - Assumption Name
    - Version Number
    - Assumption Category

NOTE	Only the approved business assumptions appear in the list. For information on Assumption Category, see section Assumption Category. The assumptions are executed as per the sequence in which they are selected in the Run Definition screen. This sequence is stored to report.

11. Click **Save**. The Run is saved in the Run Framework of OFSAAI. A Run is available for execution only after it has been approved. Once approved, Run parameters cannot be edited.

2.2.22.3 Run Definition Approval Process

See Run Definition Approval Process section in the OFS Liquidity Risk Measurement and Management User Guide details.

2.2.22.4 Adding a Custom Task to a Run

See Adding a Custom Task to a Run section in the OFS Liquidity Risk Measurement and Management User Guide for details.

2.2.22.5 Preparing for Execution

See Preparing for Execution section in the OFS Liquidity Risk Measurement and Management User Guide for details.

2.2.22.6 Run Execution Parameters

See Run Execution Parameters section in the OFS Liquidity Risk Measurement and Management User Guide for details.

In the Run Execution Parameters section:

1. Click  to select the **As of Date**.
2. Enter the **Run Execution Description**.
3. Enter details in the fields **BAU Run Execution ID.**

Figure 5: Run Execution Parameters

4. Click **Create Batch**, or **Execute**.

2.2.22.7 Executing a Run

See Executing a Run section in the OFS Liquidity Risk Measurement and Management User Guide for details.

2.2.22.8 Run Execution Summary

See Run Execution Summary section in the OFS Liquidity Risk Measurement and Management User Guide for details.

2.2.23 Interdependent Cash Flows (LCR)

As per the Delegated Act Regulation, Article 26, credit institutions can calculate the liquidity outflow and net of an interdependent inflow. The European Banking Authority in an FAQ has clarified that such cash flows are only applicable for derivatives. The criteria for netting interdependent cash flows are:

- The interdependent inflow is directly linked to the outflow and is not considered in the calculation of liquidity inflows elsewhere.
- The interdependent inflow is required according to a legal, regulatory, or contractual commitment.
- The interdependent inflow meets one of the following conditions:
  - It arises compulsorily before the outflow.
  - It is received within 10 days and is guaranteed by the central government of a Member State.

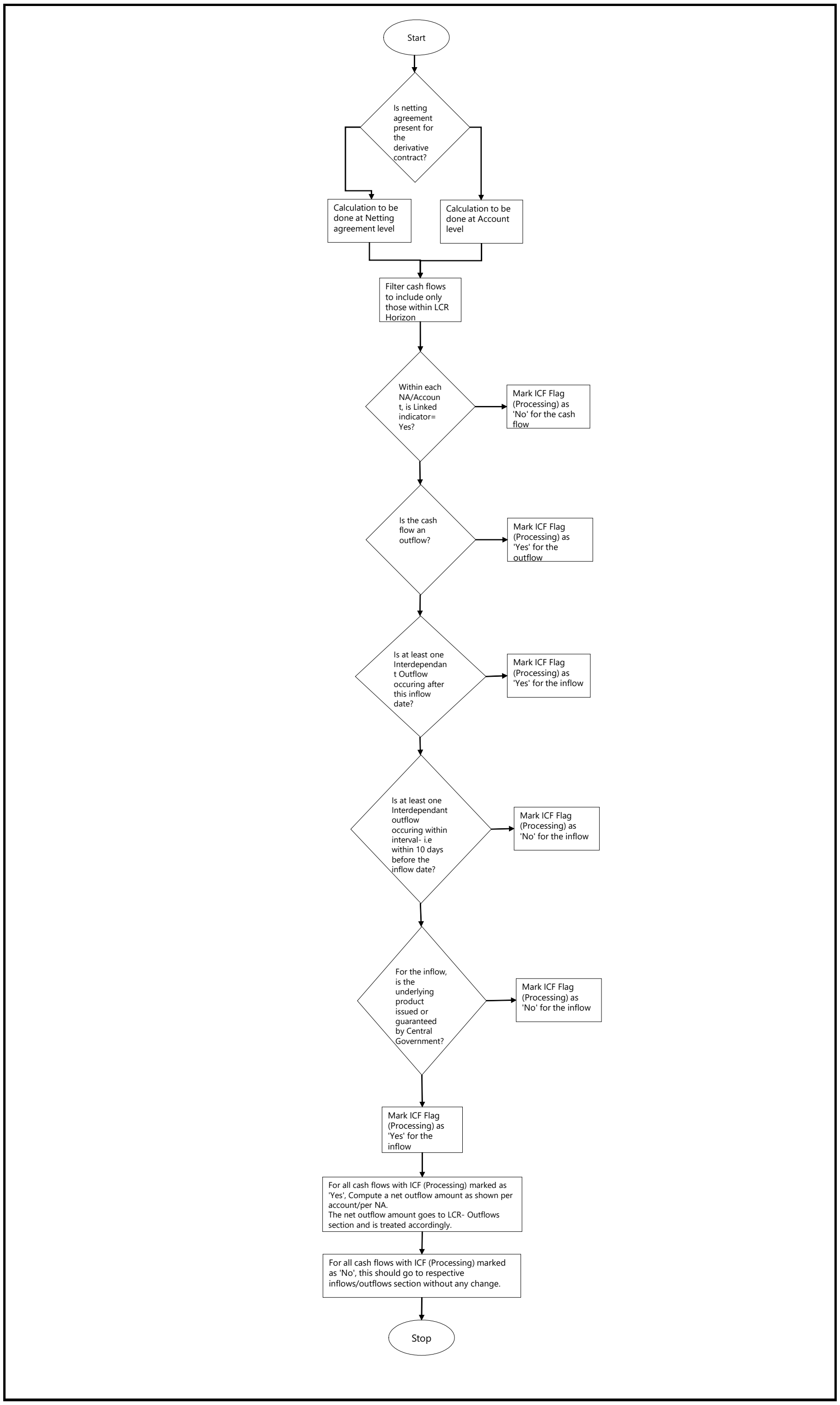
These criteria are mapped internally in the application as follows.

Table 21: Cash Flow Criteria

Cash Flow Criteria										
Standard Product Type	**Cash Flow Reason**	**Linked indicator**	**Occurrence**	**Comparison**	**Interval**	**Underlying Standard Product Type**	**Underlying Issuer Type or Guarantor Type**	**Interdependent CF Flag (Processing)**	**Outflows Net of ICF (Processing)**	**Calculation Granularity**
All Derivatives and Netted Derivatives. (Derivatives include Futures, Forwards, Options, Swaps, and others.)	Legal OR Regulatory	Yes	<=LCR Horizon	Inflow date < Outflow date				Yes	Total Linked Outflows - Total Linked Inflows	Account/Netting agreement level
All Derivatives.	Legal OR Regulatory	Yes	<=LCR Horizon	Inflow date >= Outflow date	Inflow date - Outflow date <= 10 days	Bonds, Treasury Bills, Debt Securities	Sovereign, Central Government	Yes	Total Linked Outflows - Total Linked Inflows	

The netted cash flows are directly included in the Outflows section of the LCR. You can turn-on or turn-off this feature. It is turned off by default, as it does not apply to all banks. The process flow is as follows.

Figure 6: Process Flow - Interdependent Cash Flows



2.2.24 Calculation of Liquidity Coverage Ratio

The formula for calculating the liquidity coverage ratio is as follows:

$$Liquidity\ Coverage\ Ratio = \frac{Total\ Stock\ of\ High\ Quality\ Liquid\ Assets * 100}{Total\ Net\ Cash\ Outflow\ over\ the\ next\ 30\ days}$$

2.3 Preconfigured Regulatory LCR Scenario

This section explains the business assumptions which support inflow and outflow percentage/rates as per the Commission delegated regulation (EU) 2015/61.

NOTE For detailed processes and tasks, see the run chart.

Topics:

- Regulation Addressed through Business Assumptions
- Regulation Addressed through Business Rules

2.3.1 Regulation Addressed through Business Assumptions

The list of preconfigured business assumptions and the corresponding reference to the regulatory requirement that it addresses is provided in the following table:

Table 22: Preconfigured LCR Business Assumptions

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
Inflows				
1	EBA DA-Unsecured interest inflow from non-financial customer	Interest and other fee-related inflows from unsecured lending to the financial customers.	The inflow rate on the interest and fees from fully performing loans with a stated maturity, extended to retail customers, SMEs, non-financial corporates, sovereigns, multilateral development banks, public sector enterprises, and other non-financial customers, is predefined as part of this assumption. This assumption applies a 0% rollover that is 100% inflow on the interest and fee from performing loans.	Article 32 Paragraph (3)(a)
2	EBA DA-Inflows from open maturity assets excl. credit cards	Inflows from open maturity assets like loans, leases, overdrafts excluding credit cards.	The inflow rate on open maturity loans, leases, and overdrafts, that are contractually due within the LCR horizon, is predefined as part of this assumption. This assumption applies an 80% rollover that is 20% inflow on such assets.	Article 32 Paragraph (3)(i)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
3	EBA DA-Inflows from credit cards	Inflows due to minimum payments received on credit cards within the LCR horizon.	The inflow rate on the minimum payments, that are contractually due within the LCR horizon, on open maturity credit cards, is predefined as part of this assumption. This assumption applies a 20% inflow on minimum payments for credit cards.	Article 32 Paragraph (3)(i)
4	EBA DA-Inflows from operational deposits	Inflows from operational deposits held with other financial institutions for clearing or cash management or custody management purposes.	The inflow rates on the deposits held in operational accounts with other financial institutions, for clearing, custody, or cash management, are predefined as part of this assumption. This assumption applies a 25% inflow on such operational deposits placed by the bank.	Article 32 Paragraph (3)(d), Article 27 Paragraph (1)
5	EBA DA-Inflows from an IPS or a cooperative network	Inflows from operational deposits, held within a co-operative banking network or an institutional protection scheme, to obtain cash clearing or central credit institution services or common task sharing.	The inflow rate on the deposits, placed by a member institution with the central institution or a specialized central service provider of an institutional network of co-operative banks, maintained for operational services are predefined as part of this assumption. This assumption applies a 25% inflow on such deposits used for common task-sharing that are not considered HQLA by the depositing institution, whereas a 100% inflow is applied on the portion that is considered as HQLA. Additionally, this assumption applies a 25% inflow on such deposits used for clearing and central institution services.	Article 32 Paragraph (3)(d) , Article 27 Paragraph (1)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
6	EBA DA-Inflows from the non-op portion of operational accounts	Inflows from the non-operational portion of an operational account held with financial entities.	The inflow rate on the non-operational portion of deposits held in operational accounts, with other financial institutions, is predefined as part of this assumption. This assumption applies a 25% inflow on such deposits.	Article 32 Paragraph (3)(d)
7	EBA DA-Unsecured non-operational inflows from financial cust	Inflows from central banks and unsecured lending to financial customers, other than operational deposits, and central banks.	The inflow rate on unsecured assets, other than operational deposits, from central banks and financial customers, is predefined as part of this assumption. This assumption applies a 0% rollover that is 100% inflow on assets specified earlier.	Article 32 Paragraph (2)(a)
8	EBA DA-Inflows from trade finance and securities	Inflows from trade financing transactions with financial entities and securities issued by financial entities maturing within the LCR horizon.	The inflow rates on trade financing transactions with financial entities and securities issued by financial entities maturing within the LCR horizon are predefined as part of this assumption. This assumption applies a 100% inflow on the EOP balances of such accounts.	Article 32 Paragraph (2)(a) (i) and (ii)
9	EBA DA-Inflows from major index equity positions	Inflows, excluding dividends, from major index equity positions which are not included in the stock of HQLA.	The inflow rate on unsettled major index equity positions, excluding dividends, which are not included in the stock of HQLA, is predefined as part of this assumption. This assumption applies a 0% rollover that is 100% inflow on such unsettled equity positions.	Article 32 Paragraph (2)(b)
10	EBA DA-Secured inflows where collateral covers shorts	Inflows from secured lending transactions where the collateral received are used to cover customer or firm short positions.	The inflow rate on secured lending transactions, where the collateral received is used to cover customer or firm short positions is predefined as part of this assumption. This assumption applies a 0% inflow on the EOP balances of such secured lending transactions.	Article 32 Paragraph (3) (b) and (f)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
11	EBA DA-Unsecured principal inflow from non-financial customer	Principal inflows from unsecured lending to non-financial customers.	The inflow rate corresponding to the principal on the fully performing loans, with a stated maturity, extended to retail customers, SMEs, non-financial corporates, sovereigns, multilateral development banks, public sector enterprises, and other non-financial customers, is predefined as part of this assumption. This assumption applies a 100% inflow on the unsecured lending dues. Unsecured lending dues are calculated by subtracting, from the inflows due from such customers, the higher of the maximum of contractual obligation to extend funds, and 50% of the principal inflows within 30 days.	Article 32 Paragraph (3) (a)
12	EBA DA-Secured lending Run-off collateralized by another asset	Inflows from secured lending transactions excluding collateral swaps, which are collateralized by other assets that is non-high quality liquid assets.	The inflow rates on secured lending, excluding collateral swaps, collateralized by non- high-quality liquid assets that are not used to cover short positions, are predefined as part of this assumption. This assumption applies a 100% inflow to the secured lending inflow amount. The secure lending inflow amount is calculated by deducting the haircut adjusted value of collateral received from the EOP balance.	Article 32 Paragraph (3) (b)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
13	EBA DA-Draws on committed funding facilities by the central bank	Drawdowns on committed facilities received by the bank from central banks.	The inflow rate on the undrawn amount available to be drawn down, on all committed facilities received by the bank from central banks, is predefined as part of this assumption. This assumption applies a 0% inflow rate when the committed facilities are recognized as HQLA and a 100% inflow rate when they are not recognized as HQLA.	Article 32 Paragraph (3) (g)
14	EBA DA-Committed funding facilities draws excl. central bank	Drawdowns on committed facilities received by the bank from all entities except central banks.	The inflow rate on the undrawn amount available to be drawn down, on the committed credit, liquidity, and other facilities received by the bank, from entities other than central banks, is predefined as part of this assumption. This assumption applies a 0% inflow rate on the credit and liquidity lines that do not meet additional criteria for higher inflows and a 100% inflow when they meet the additional criteria for higher inflows. Additionally, it applies a 0% inflow on other facilities received by the bank.	Article 32 Paragraph (3) (g) , Article 34
15	EBA DA-Derivative cash inflows	Net cash inflows expected over 30 days from derivative transactions.	The inflow rate on the 30-day cash inflows from derivative transactions, net of collateral, is predefined as part of this assumption. This assumption applies a 100% inflow on derivative cash inflows, on a net basis in case of derivatives, which are part of a netting agreement, and on a non-net basis for other derivatives.	Article 32 Paragraph (5)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
16	EBA DA-Secured lending Run-off collateralized by HQLA	Inflows from secured lending transactions excluding collateral swaps, which are collateralized by high-quality liquid assets.	The inflow rates on the secured lending, excluding collateral swaps, which are collateralized by HQLA that are not used to cover short positions, are predefined as part of this assumption. This assumption applies a 100% inflow to a secured lending inflow amount. Secure lending inflow amount is calculated by deducting the haircut adjusted value of collateral received from the EOP balance.	Article 32 Paragraph (3) (b)
17	EBA DA-Inflows from collateral swap	Inflows from collateral swap transactions.	The inflow rates on the collateral swaps are predefined as part of this assumption. This assumption applies the inflows applicable to the market value of placed collateral, when the collateral placed under a swap transaction is of a higher quality than the collateral received, as the difference between the liquidity haircuts applicable to the placed and received collateral. A 0% inflow rate is applied when the underlying asset received is used for covering short positions.	Article 32 Paragraph (3) (e)
18	EBA DA-Dividend inflows from major index equities	Dividend inflows from major index equity positions which are not included in the stock of HQLA	The inflow rate on dividends from major index equity positions that are not included in the stock of HQLA are predefined as part of this assumption. This assumption applies a 0% rollover that is 100% inflow on dividend receivable.	Article 32 Paragraph (2) (b)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
19	EBA DA-Liquid asset exclusion	Exclusion of inflows from liquid assets that are included in the stock of HQLA.	The inflow rate on the liquid assets that are included in the stock of HQLA is predefined as part of this assumption. This assumption applies a 100% rollover that is 0% inflow on such assets.	Article 32 Paragraph (6)
20	EBA DA-Inflows from promotional loan commitments	Inflows from commitments received from banks, MDBs and PSEs, related to the disbursement of promotional loans to the retail and non-financial customers.	The inflow rate on promotional loan commitments received from banks, multilateral development banks, and public sector enterprises for disbursement to retail and non-financial customers, are predefined as part of this assumption. This assumption applies a 5% drawdown on the available undrawn amount for promotional loans to retail customers and a 30 % drawdown for the promotional loan to non-financial customers.	Article 32 Paragraph (3) (a)
21	EBA DA-Release of balance held in segregated account	The inflow rate on the release of balances held in segregated accounts that are maintained as HQLA.	The inflow rate on the release of balances held in segregated accounts that are maintained as HQLA is predefined as part of this assumption. This assumption applies a 100% inflow on EOP balances.	Article 32 Paragraph (4)
22	EBA DA-Draws on committed funding facilities by central bank	Drawdowns on committed facilities received by the bank from central banks.	The inflow rate on the undrawn amount available to be drawn down, on all committed facilities received by the bank from the central bank, is predefined as part of this assumption. This assumption applies a 0% inflow rate when the committed facilities are recognized as HQLA, whereas 100% inflow is applied when the committed facilities are not recognized as HQLA.	Article 32 Paragraph (3) (g)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
Outflows				
23	EBA DA-Penalty free highly stable retail deposit Run-off	Run-off rates on the penalty-free portion of highly stable term deposits maturing beyond 30 days that can be withdrawn without incurring a penalty and are treated as demand deposits, from retail customers and SMEs treated as retail.	The outflow rate on the portion of highly stable term deposits, that are treated as demand deposits, from retail customers and SMEs who are treated like retail customers for LCR, is predefined as part of this assumption. This assumption applies a 3% Run-off on the penalty-free portion of highly stable deposits maturing beyond the LCR horizon of 30 days that can be withdrawn without incurring a penalty.	Article 24 Paragraphs (1) to (3), Article 25 Paragraph (2) (d), Article 25 Paragraph (4), Article 25 Paragraph (5)
24	EBA DA-Penalty free stable retail deposit Run-off	Run-off rates on the penalty-free portion of stable term deposits maturing beyond 30 days that can be withdrawn without incurring a penalty and are treated as demand deposits, from retail customers and SMEs treated as retail.	The outflow rate on the portion of stable term deposits, that are treated as demand deposits, from retail customers and SMEs who are treated like retail customers for LCR, is predefined as part of this assumption. This assumption applies a 5% Run-off on the portion of stable retail deposits maturing beyond the LCR horizon that can be withdrawn without incurring a penalty.	Article 24 Paragraphs (1) to (3), Article 25 Paragraph (2) (d), Article 25 Paragraph (4), Article 25 Paragraph (5)
25	EBA DA-Penalty free less stable retail deposit Run-off	Run-off rates on the penalty-free portion of less stable term deposits maturing beyond 30 days, that can be withdrawn without incurring a penalty and are treated as demand deposits, from retail customers and SMEs treated as retail.	The outflow rate on the portion of less stable term deposits, that are treated as demand deposits, from retail customers and SMEs who are treated like retail customers for LCR, is predefined as part of this assumption. This assumption applies a 10% Run-off on the portion of less stable retail deposits maturing beyond the LCR horizon that can be withdrawn without incurring a penalty.	Article 24 Paragraphs (1) to (3), Article 25 Paragraph (2) (d), Article 25 Paragraph (4) (b), Article 25 Paragraph (5)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
26	EBA DA-Insured operational balance Run-off	Run-off on the portion of the operational balance, from deposits generated by clearing, custody, and cash management activities, that is fully covered by deposit insurance.	The outflow rate on the insured portion of the balance held in operational accounts, with other financial institutions, for clearing, custody and cash management, is predefined as part of this assumption. This assumption applies a 5% Run-off on insured operational balances that are not covered by deposit insurance	Article 27 Paragraph (1)(a), (2), and (4)
27	EBA DA-Uninsured operational balance Run-off	Run-off on the portion of the operational balance, from deposits generated by clearing, custody, and cash management activities, that are not covered by deposit insurance.	The outflow rate on the uninsured portion of the balance held in operational accounts, with other financial institutions, for clearing, custody and cash management, is predefined as part of this assumption. This assumption applies a 25% Run-off on uninsured operational balances that are not covered by deposit insurance.	Article 27 Paragraph (1)(a), (2), and (4)
28	EBA DA-Established relationship operational deposit Run-off	Outflows from operational deposits, maintained in the context of an established operational relationship with non-financial customers, excluding those held for clearing, custody and cash management purposes.	The outflow rate on deposits held in operational accounts, maintained in the context of an established operational relationship with non-financial customers, excluding those held for clearing, custody and cash management purposes, is predefined as part of this assumption. This assumption applies a 25% Run-off on the operational portion of such operational deposits.	Article 27 Paragraph (1) (c) , Paragraph (4), and Paragraph (6)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
29	EBA DA-Run-off on operational deposits held within a network	Outflows from operational deposits, held within a co-operative banking network, or an institutional protection scheme, to obtain cash clearing or central credit institution services or common task sharing.	The outflow rate on deposits, placed by a member institution with the central institution or specialized central service providers of an institutional network of co-operative banks, maintained for operational services, are predefined as part of this assumption. This assumption applies a 25% Run-off on such deposits used for common task-sharing that are not considered HQLA by the depositing institution whereas 100% Run-off is applied on the portion that is considered as HQLA. Additionally, this assumption applies a 25% Run-off on such deposits used for clearing and central institution services.	Article 27 paragraph (1) (b) and (d), Paragraph (3), and Paragraph (4)
30	EBA DA-Run-off on CB and PB deposits	Outflows from deposits arising out of correspondent banking (CB) relationship or from prime brokerage (PB) services.	The outflow rates on deposits arising out of correspondent banking relationships or from prime brokerage services are predefined as part of this assumption. This assumption applies a 100% Run-off on the EOP balance of such deposits.	Article 27 Paragraph (5)
31	EBA DA-Run-off from issued debt security	Run-off rate of 100% is applied on debt securities issued by the bank, that are neither sold exclusively in the retail market nor held in the retail account. Whereas debt securities issued by the bank, that are sold exclusively in the retail market and held in the retail account, are treated as retail deposits.	The outflow rates on the debt securities issued by the bank itself are predefined as part of this assumption. This assumption applies a 90% rollover that is 10% Run-off on issued securities that are sold exclusively in the retail market and held in retail accounts, and 0% rollover that is 100% Run-off on all other issued securities.	Article 28 Paragraph (6), Article 25

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
32	EBA DA-Rating downgrade related collateral outflow	Additional collateral outflow due to a material deterioration in the credit quality of an entity corresponding to a 3-notch rating downgrade.	The outflow rate, on the additional collateral required to be posted on contracts with downgrade triggers, due to a 3-notch rating downgrade, is predefined as part of this assumption. This assumption applies a 100% outflow on the downgrade impact amount arising from a 3-notch rating downgrade.	Article 30 Paragraph (2)
33	EBA DA-Re-hypothecation rights lost due to rating downgrade	Additional collateral outflow arising from a loss of rehypothecation rights on assets received as collateral due to a material deterioration in the credit quality of an entity corresponding to a 3-notch ratings downgrade.	The outflow rate, on the additional cash outflows arising on contracts with downgrade triggers that result in a loss of rehypothecation rights due to a 3-notch rating downgrade, is predefined as part of this assumption. This assumption applies a 100% outflow on the value of mitigants received under re-hypothecation rights corresponding to accounts whose downgrade trigger is activated due to the 3-notch ratings downgrade.	Article 30 Paragraph (2)
34	EBA DA-Outflow of excess collateral	Additional collateral outflow corresponding to the excess collateral received that can be contractually recalled by the counterparty.	The outflow rate on the excess unsegregated collateral held by a bank, which can be potentially withdrawn by the counterparty, is predefined as part of this assumption. This assumption applies a 100% outflow on the value of excess collateral.	Article 30 Paragraph (6) (a)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
35	EBA DA-Outflow of contractually due collateral	Additional collateral outflow corresponding to the collateral that is contractually required to be posted to the counterparty but has not yet been posted.	The outflow rate on the collateral that the bank is contractually required to post to its counterparty, but has not yet posted, is predefined as part of this assumption. This assumption applies a 100% outflow on the value of contractually due collateral.	Article 30 Paragraph (6) (b)
36	EBA DA-Funding loss on structured financing facilty and prod	Loss of funding on asset-backed securities, covered bonds, and other structured financing instruments. It also covers loss of funding on asset-backed commercial paper, conduits, securities investment vehicles, and other such financing facilities due to the inability to refinance maturing debt.	The Run-off rate on the maturing asset-backed securities, covered bonds, and other structured financing instruments is predefined as part of this assumption. Additionally, the assumption outflows on the maturing amount of asset-backed commercial paper, conduits, securities investment vehicles, and other such financing facilities are covered as part of this assumption. This assumption applies a 100% Run-off on the EOP balance of such structured instruments that mature within the LCR horizon.	Article 30 Paragraph (8) and (9)
37	EBA DA-Funding loss from financing facility-return of assets	Loss of funding on asset-backed commercial paper, conduits, securities investment vehicles, and other such financing facilities due to potential return of assets.	The outflow rate on the returnable assets underlying asset-backed commercial paper, conduits, securities investment vehicles, and other such financing facilities is predefined as part of this assumption. This assumption applies a 100% Run-off on the value of the assets that are returnable within the LCR horizon.	Article 30 Paragraph (9)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
38	EBA DA-Outflows from trade finance instruments	Outflows from trade finance related instruments.	The outflow rate on the trade finance related instruments is predefined as part of this assumption. This assumption applies a 5% Run-off on such trade finance obligations. Additionally, it applies a 0% Run-off on instruments that are not used for trade finance obligation related activities.	Article 23 Paragraph (1) (h)
39	EBA DA-Outflows from non-contractual obligations	Outflows from non-contractual obligations including joint ventures, minority investments, debt buy-back requests, structured products, and managed funds.	The outflow rate on the non-contractual obligations related to joint ventures, minority investments, debt buy-back requests, structured products, managed funds, and any other similar obligations is predefined as part of this assumption. This assumption applies a 0% outflow rate on non-contractual obligations. The outflow rate can be updated to reflect the rates specified by competent authorities.	Article 2 Paragraph (1) (a) to (e), Article 23 Paragraph (2)
40	EBA DA-Drawdown on undrawn loans	Drawdown on the undrawn portion of loans and advances to wholesale counterparties, mortgages, credit cards and overdrafts.	The outflow rate on the undrawn portion of credit cards, overdrafts, mortgages, and loans to wholesale counterparties is predefined as part of this business assumption. This assumption applies a 0% outflow rate on the undrawn portion of such contractual obligations. The outflow rate can be updated to reflect the rates specified by competent authorities.	Article 23 Paragraph (1) (f)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
41	EBA DA-Outflows from loan renewals and extensions	Outflows from the available undrawn amount, related to other contractual obligations to extend funds within 30 days to financial institutions.	The outflow rate on contractual obligations to extend funds to retail and non-financial corporate customers, more than contractual inflows from such customers, within the LCR horizon, is predefined as part of this assumption. This assumption applies a 100% outflow on the excess contractual obligation amount.	Article 23 Paragraph (1) (f)
42	EBA DA-Securities borrowed on an unsecured basis outflows	Run-off on securities, borrowed on an unsecured basis, maturing within 30 days, which are received in the form of collateral.	The outflow rate on securities borrowed on an unsecured basis that are received in the form of collateral maturing within 30 days is predefined as part of this assumption. This assumption applies a 100% Run-off on the market value of collateral received as borrowed securities that are included in the stock of HQLA and 0% Run-off when it is not included in the stock of HQLA.	Article 30 Paragraph (11)
43	EBA DA-Stable retail deposits Run-off	Run-offs on the stable portion of deposits from retail customers and SMEs treated as retail.	The outflow rate on the stable portion of deposits, from retail customers and SMEs treated as retail customers, for LCR, is predefined as part of this assumption. This assumption applies a 5% Run-off on the stable portion of retail deposits, which do not meet the additional requirements for deposit insurance schemes, and either mature or result in early withdrawal, without incurring a significant penalty, within the LCR horizon.	Article 24 Paragraphs (1) to (3), Article 25 Paragraph (2) (d), Article 25 Paragraph (4) (b), Article 25 Paragraph (5)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
44	EBA DA-Highly stable retail deposits Run-off	Run-offs on the highly stable portion of deposits from retail customers and SMEs treated as retail.	The outflow rate on the highly stable portion of deposits, from retail customers, and SMEs treated as retail customers for LCR, is predefined as part of this assumption. This assumption applies a 3% Run-off on the stable portion of retail deposits, which meet the additional requirements for deposit insurance schemes, and either mature or result in early withdrawal, without incurring a significant penalty, within the LCR horizon.	Article 24 Paragraphs (1) to (6), Article 25 Paragraph (2) (d), Article 25 Paragraph (4) (b), Article 25 Paragraph (5)
45	EBA DA-Less stable retail deposits Run-off	Run-offs on the less stable portion of deposits from retail customers and SMEs treated as retail.	The outflow rate on the less stable portion of deposits, from retail customers and SMEs, treated as retail customers for LCR, is predefined as part of this assumption. This assumption applies a 10% Run-off on the portion of retail deposits, which do not meet the deposit stability criteria, and either mature or result in early withdrawal, without incurring a significant penalty, within the LCR horizon.	Article 25 Paragraph (1), Article 25 Paragraph (2) (d), Article 25 Paragraph (4) (b), Article 25 Paragraph (5)
46	EBA DA-High Run-off category 1 retail deposits Run-off	Run-offs on the portion of deposits from retail customers and SMEs treated as retail that is eligible for category 1 high Run-offs.	The outflow rate on the deposits, from retail customers and SMEs treated as retail customers for LCR, that qualify for higher Run-offs is predefined as part of this assumption. This assumption applies a 10% Run-off on the portion of retail deposits that qualify for category 1 higher Run-offs, and either mature or result in early withdrawal, without incurring a significant penalty, within the LCR horizon.	Article 25 Paragraph (3) (a), Article 25 Paragraph (2) (d), Article 25 Paragraph (4), Article 25

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
47	EBA DA-High Run-off category 2 retail deposits Run-off	Run-offs on the portion of deposits from retail customers and SMEs treated as retail that is eligible for category 2 high Run-offs.	The outflow rate on the deposits, from retail customers and SMEs treated as retail customers for LCR, that qualify for higher Run-offs is predefined as part of this assumption. This assumption applies a 10% Run-off on the portion of retail deposits that qualify for category 2 higher Run-offs, and either mature or result in early withdrawal, without incurring a significant penalty, within the LCR horizon.	Article 25 Paragraph (3) (b), Article 25 Paragraph (2) (d), Article 25 Paragraph (4), Article 25
48	EBA DA-Outflow from cancelled deposits	Outflows from the cancelled deposit with a residual maturity of fewer than 30 days where pay-out has been agreed.	The outflow rate on the canceled deposits, with a residual maturity of fewer than 30 days and where the pay-out has been agreed, is predefined as part of this assumption. This assumption applies a 100% Run-off on such canceled deposits.	Article 25 Paragraph (4)
49	EBA DA-Outflows on unsecured non-operational funding	Outflows on the funding, provided by non-financial customers, sovereigns, central banks, MDB, PSE, credit unions, personal investment companies, or deposit brokers, that is not classified as an operational deposit.	The Run-off rates on the cash flows, from unsecured funding, that is not classified as an operational deposit, received from non-financial customers, sovereigns, central banks, multilateral development banks, public sector entities, credit unions, personal investment companies or deposit brokers, are predefined as part of this assumption. This assumption applies an 80% rollover that is 20% Run-off on cash flows from non-operational funding accounts that are fully covered by deposit insurance and a 60% rollover that is 40% Run-off on those non-operational funding accounts that are not fully covered by deposit insurance.	Article 28 Paragraph (1)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
50	EBA DA-Outflows on uninsured non-op portion of Op account	Outflows on the uninsured portion of the non-operational balance of funding, classified as an operational deposit, provided by non-financial customers, sovereigns, central banks, MDB, PSE, credit unions, personal investment companies, or deposit brokers.	The Run-off rates on the uninsured portions of the non-operational balances held in operational accounts are predefined as part of this assumption. This assumption applies a 40% Run-off on the uninsured non-operational balances provided by non-financial customers, sovereigns, central banks, multilateral development banks, public sector entities, credit unions, personal investment companies, or deposit brokers.	Article 28 Paragraph (1)
51	EBA DA-Outflows on insured non-op portion of op account	Outflows on the insured portion of the non-operational balance of funding, classified as an operational deposit, provided by non-financial customers, sovereigns, central banks, multilateral development banks, public sector entities, credit unions, personal investment companies or deposit brokers.	The Run-off rates on the insured portions of the non-operational balances held in operational accounts are predefined as part of this assumption. This assumption applies a 20% Run-off on insured non-operational balances provided by non-financial customers, sovereigns, central banks, multilateral development banks, public sector entities, credit unions, personal investment companies, or deposit brokers.	Article 28 Paragraph (1)
52	EBA DA-Outflows from substitutable collateral	Additional outflows from contracts that allow a counterparty to substitute collateral classified as liquid assets for non-liquid collateral.	The outflow rate on the collateral classified as HQLA that the counterparty can contractually substitute with collateral classified as other assets is predefined as part of this assumption. This assumption applies a 100% outflow rate on the market value of received collateral for collateral substitution fulfilling the above-mentioned criteria.	Article 30 Paragraph (6) (c)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
53	EBA DA-Additional outflow due to adverse market scenario	Additional outflow on collateral arising from the impact of adverse market conditions on derivatives and other transactions.	The outflow rate on the collateral outflows occurring due to market valuation changes, on derivatives and other transactions is predefined as part of this assumption. This assumption applies a 100% outflow rate on the additional collateral amount for derivatives. The additional collateral amount for derivatives is calculated as the higher of internal model-based advanced method additional collateral amount and historical method based 24-month lookback amount.	Article 30 Paragraph (3)
54	EBA DA-Draws on committed liquidity facilities	Drawdowns on committed liquidity facilities extended to retail customers, SMEs, corporates, sovereigns, central banks, multilateral development banks, public sector entities, personal investment companies, special purpose entities, and banks.	The outflow rate on the undrawn amount available to be drawn down on the committed liquidity facilities extended to retail customers, SMEs, corporates, sovereigns, central banks, multilateral development banks, public sector entities, personal investment companies, special purpose entities, and banks is predefined as part of this assumption. This assumption applies the relevant outflow as a drawdown rate, based on the counterparty type.	Article 31
55	EBA DA-Draws on committed credit facilities	Drawdowns on committed credit facilities extended to retail customers, SMEs, corporates, sovereigns, central banks, multilateral development banks, and public sector entities.	The outflow rate on the undrawn amount available to be drawn down on the committed credit facilities extended to retail customers, SMEs, corporates, sovereigns, central banks, MDBs and PSEs, is predefined as part of this assumption. This assumption applies the relevant outflow as a drawdown rate, based on the counterparty type.	Article 31

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
56	EBA DA-Draws on committed facilities to financial inst	Drawdowns on committed credit facilities extended to financial customers including banks and liquidity facilities extended to financial customers excluding banks.	The outflow rate on the undrawn amount available to be drawn down on the committed credit and liquidity facilities extended to financial customers is predefined as part of this assumption. This assumption applies a 40% drawdown rate on credit facility extended to financial customers that are regulated and 100% drawdown rate for financial customers that are not regulated. Additionally, it applies 100% drawdown rate on liquidity facilities extended to all financial customers except banks.	Article 31
57	EBA DA-Additional outflow due to change in collateral value	Additional outflows on derivative contracts due to potential changes in the value of collateral posted which is classified as a Level 1 covered bond, Level 2A asset, Level 2B asset, or other assets.	The outflow rate on derivative contracts, due to potential changes in the value of posted collateral is predefined as part of this assumption. This assumption applies a 10% outflow rate on the market value of the placed collateral classified as Level 1 covered bonds, and a 20% outflow rate on the market value of placed collateral classified as Level 2A asset, Level 2B asset or other assets.	Article 30 Paragraph (1)
58	EBA DA-Derivative cash outflows	Net cash outflows expected over 30 days from derivative transactions.	The outflow rate on the 30-day cash outflows from derivative transactions, net of collateral, is predefined as part of this assumption. This assumption applies a 100% outflow on derivatives cash outflows, on a net basis in case of derivatives, which are part of a netting agreement, and on a non-net basis for other derivatives.	Article 30 Paragraph (4)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
59	EBA DA-Outflows from collateral swap	Outflows on collateral swap transactions.	The Run-off rates on collateral swaps are predefined as part of this assumption. This assumption applies the Run-offs applicable to the market value of received collateral, when the collateral received under a swap transaction is of a higher quality than the collateral placed, as the difference between the liquidity haircuts applicable to the received and placed collateral.	Article 28 Paragraph (4)
60	EBA DA-Secured funding Run-off	Run-off on secured wholesale funding, excluding collateral swaps, received from sovereigns, central banks, multilateral development banks, and PSEs.	The Run-off rates on the secured funding, excluding collateral swaps, received from sovereigns, central banks, multilateral development banks, and PSEs, are predefined as part of this assumption. This assumption applies the regulatory Run-offs applicable to each counterparty type in the form of rollover rates that is 1 – Run-off rates.	Article 28 Paragraph (3)
61	EBA DA-Outflows on secured funding from other counterparties	Run-off on secured wholesale funding, excluding collateral swaps, received from counterparties other than sovereigns, central banks, multilateral development banks by placing collateral classified as other assets.	The Run-off rates on the secured funding, excluding collateral swaps, received from all counterparties other than sovereigns, central banks, multilateral development banks, and PSEs having risk weight <= 20 %, by placing collateral classified as other assets, are predefined as part of this assumption. This assumption applies a 0% rollover that is 100% outflow.	Article 28 Paragraph (3)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
62	EBA DA-Draws on committed facilities to banks and networks	Drawdowns on committed credit facilities extended to intra-institutional networks and promotional loans and liquidity facilities extended to intra-institutional networks and banks excluding SPEs.	The outflow rate on the undrawn amount available to be drawn down on the committed credit facilities extended to intra-institutional networks and promotional loans and liquidity facilities extended to intra-institutional networks, and banks excluding SPEs, is predefined as part of this assumption. This assumption applies a 75% drawdown rate on credit facilities treated as HQLA by the customer that are extended to intra-institutional networks. This assumption also applies a 5% drawdown rate on credit facilities extended as promotional loans to retail customers and a 10% drawdown rate on promotional loans to financial customers. Additionally, it applies a 75% drawdown rate on liquidity facilities treated as HQLA by customers that are extended to intra-institutional networks. This assumption also applies a 5% drawdown rate on liquidity facilities extended as promotional loans to retail customers, a 30% drawdown rate on promotional loans to financial customers, and a 40% drawdown on other purposes for banks excluding SPEs.	Articles 29(1), 29(2), 31(7), and 31(9)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
63	EBA DA-Additional outflows from short positions	Additional outflows related to short positions which are required to be delivered within 30 days.	The outflow rate on the customer and firm short positions is predefined as part of this assumption. This assumption specifies outflows on the short positions based on assets covering such short positions.	Article 30(5)
64	EBA DA-Run-off on operational deposits held within a network	Outflows from operational deposits, held within a co-operative banking network or an institutional protection scheme, to obtain cash clearing or central credit institution services or common task sharing.	The outflow rate on deposits, placed by a member institution with the central institution or specialized central service providers of an institutional network of co-operative banks, maintained for operational services, are predefined as part of this assumption. This assumption applies a 25% Run-off on such operational deposits used for common task-sharing that are included in the stock of HQLA whereas 100% Run-off is applied on the portion that is excluded from the stock of HQLA. Additionally, this assumption applies a 25% Run-off on such operational deposits used for clearing and central institution services.	Article 27 paragraph (1) (b) and (d), Paragraph (3), and Paragraph (4)
65	EBA DA-Derivative cash outflows	Net cash outflows expected over 30 days from derivative transactions.	The outflow rate on the 30-day cash outflows from derivative transactions is predefined as part of this assumption. This assumption applies a 100% outflow on derivatives cash outflows, on a net basis in case of derivatives, which are part of a netting agreement, and on a non-net basis for other derivatives.	Article 30 Paragraph (4)

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
66	EBA DA-Outflow of excess collateral	Additional collateral outflow corresponding to the excess collateral received that can be contractually recalled by the counterparty.	The outflow rate on the excess unsegregated collateral held by a bank, which can potentially be withdrawn by the counterparty, is predefined as part of this assumption. This assumption applies a 100% outflow on the value of excess collateral.	Article 30 Paragraph (6) (a)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2018/1620
67	EBA DA-Secured funding Run-off for central banks	Outflows from secured funding transactions other than collateral swaps where a central bank is a counterparty.	This assumption specifies the factor for secured funding transactions where the counterparty is a central bank. A 100% rollover rate is predefined as a part of this assumption.	Article 32
68	EBA DA-Outflows from collateral swaps with central banks	Outflows from collateral swaps where a central bank is a counterparty.	This assumption specifies the factor for outflows on collateral swaps where the counterparty is a central bank. A 100% Run-off rate is predefined as a part of this assumption.	Article 28

2.3.2 Regulation Addressed through Business Rules

The list of preconfigured rules and the corresponding reference to the regulatory requirement that it addresses are provided in the following table:

Table 23: Preconfigured LCR Business Rules

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
1	LRM - Excess And Contractually Due Collateral And Mitigant And Downgrade Trigger Amount Update	This rule computes and updates the values of contractually due to collateral, excess collateral due, contractually receivable collateral, excess collateral receivable, and downgrade impact amount in the FSI_NETTING_AGREEMENT table.	The computation of collateral value that is contractually required to be posted to the counterparty, the excess collateral that can be recalled by the counterparty and the loss due to a ratings downgrade in case of derivative contracts with associated netting agreements is configured as part of this rule.	Article 30 Paragraph 2
2	LRM - EBA - Country liquidity risk indicator for NCOF	This computation rule identifies if a legal entity, holding debt securities issued in a foreign currency, has undertaken liquidity risk in that country. The rule checks if the legal entity has operations in a foreign country, other than those for purely trading purposes, and updates the account liquidity risk flag as Yes if this condition is met.	The identification of whether a legal entity has liquidity risk in a particular foreign jurisdiction is configured as part of this rule. This rule further used for classifying debt securities held by the bank, issued in foreign currencies by sovereigns or central banks assigned a non-zero risk weight by international rating agencies, as Level 1 assets.	Article 10 Paragraph 1 (d), Article 8 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
3	LRM - EBA - Mitigant Country Liquidity Risk Indicator For NCOF	This computation rule identifies if a legal entity holding mitigants issued in foreign currency has undertaken liquidity risk in that country. The rule checks if the legal entity has operations in a foreign country, other than those for purely trading purposes, and updates the account liquidity risk flag for such mitigants as Yes if this condition is met.	The identification of whether a legal entity has liquidity risk in a particular foreign jurisdiction is configured as part of this rule. This rule is further used for classifying debt securities, received as mitigants, issued in foreign currencies by sovereigns or central banks assigned a non-zero risk weight by international rating agencies, as Level 1 assets.	Article 10 Paragraph 1 (d), Article 7 Paragraph 2 (b), Article 8 Paragraph 2
4	LRM EBA - Instruments - Liquid And Readily Marketable Flag Update	This rule reclassifies an account which is liquid and readily marketable based on the following attributes: - Is traded in an active secondary market - Is listed on a recognized Stock Exchange - Has a two-way market - Has timely and observably market prices - Has high trading volumes	The classification of an asset, as liquid and readily marketable, is configured as part of this rule.	Article 7 Paragraphs 5 and 6
5	LRM EBA - Mitigants - Liquid And Readily Marketable Flag Update	This rule reclassifies a mitigant which is liquid and readily marketable based on the following attributes: - Is traded in an active secondary market - Is listed on a recognized stock exchange - Has a two-way market - Has timely and observably market prices - Has high trading volumes	The classification of an asset, received as a mitigant, as liquid and readily marketable is configured as part of this rule.	Article 7 Paragraphs 2, 5 and 6

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
6	LRM - Classification Of Customers As Retail And Wholesale	This rule identifies a customer as retail or wholesale. The customer is classified as retail if the customer type is retail else all the other customers will be classified as wholesale.	The classification of a small business customer, as eligible for retail treatment or not as per the regulation, is configured as part of this rule.	Article 3 Paragraph 8
7	LRM - EBA - Currency Free Convertible Flag Update	This computation rule updates the Currency Free Convertible flag for a default set of currencies.	The identification of currencies that are freely convertible and hence have no transfer restriction is configured as part of this rule. Inflows from non-convertible currencies are limited to outflows from non-convertible currencies whereas inflows from freely convertible currencies are included in the calculations without limitations.	Article 8 Paragraph 2
8	EBA_Ins_Unins_Amt_Calc	This DT calculates the insured and uninsured amount at the account-customer level.	The computation of insured and uninsured amount at an account - customer level is configured as part of this data transformation.	Article 27 Paragraph 2
9	EBA DA LCR - Retail Established Relationship Assignment	This rule assigns the established relationship flag to retail deposits.	The identification of an established relationship for each retail customer is configured as part of this rule.	Article 24 Paragraph 2
10	EBA LCR - Established Operational Relationship Wholesale Non-Financial Institutions	This rule classifies established operational relationship for wholesale non-financial institutions.	The identification of established operational relationship for each non-financial wholesale customer is configured as part of this rule.	Article 27 Paragraph 6
11	EBA DA - Retail Deposits Subject to Higher Outflows Risk Factor Assignment	This rule assigns higher outflow category to retail deposits, as Higher Run-off category 1 or Higher Run-off category 2.	The identification of an additional set of criteria for the classification of retail deposit into higher category 1 and higher category 2 retail deposit is configured as part of this rule.	Article 25 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
12	FN_OPERATIONAL_BAL	This DT calculates the operational balance amount in reporting currency, based on the historical end of period balances.	The computation of operational balance based on a 5-day rolling average of historical balances is configured as part of this rule.	Article 27
13	EBA LCR - Non Operational Amount Computation For Deposits	This rule calculates the non-operational portion of operational deposits.	The computation of the non-operational portion of the EOP balance of the accounts classified as operational deposits is configured as part of this rule.	Article 27
14	EBA LCR - Operational Relationship - Operational Insured Balance	This rule calculates the operational insured balance.	The computation of the insured portion of the operational balance of the accounts classified as operational deposits is configured as part of this rule.	Article 27
15	EBA LCR - Operational Relationship - Operational Uninsured Balance	This rule calculates the operational uninsured balance.	The computation of the uninsured portion of the operational balance of the accounts classified as operational deposits is configured as part of this rule.	Article 27
16	EBA LCR - Operational Relationship - Non-Operational Insured Balance	This rule calculates the non-operational insured balance.	The computation of the insured portion of the non-operational balance of the accounts classified as operational deposits is configured as part of this rule.	Article 27
17	EBA LCR - Operational Relationship - Non-Operational Uninsured Balance	This rule calculates the non-operational uninsured balance.	The computation of the uninsured portion of the non-operational balance of the accounts classified as operational deposits is configured as part of this rule.	Article 27
18	LRM -EBA Basel III Deposit Stability - Stable Amount Calculation	This rule calculates the stable amount as per EBA DA guidelines.	The computation of the stable portion of a deposit is configured as part of this rule.	Article 24 Paragraphs 1 to 3, Article 25 Paragraphs 2 (d)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
19	LRM -EBA Basel III Deposit Stability - Less Stable Amount Calculation	This rule calculates the less stable amount as per EBA DA guidelines.	The computation of the less stable portion of a deposit is configured as part of this rule.	Article 25 Paragraphs 1 and 2, Article 25 Paragraph 2 (d)
20	LRM - High Stability Insured Indicator Assignment	This rule classifies an account as highly stable if it meets additional insurance criteria and updates the highly stable amount for such accounts in the FSI_LRM_INSTRUMENT table. This rule also updates the stable amount for accounts classified as highly stable as 0, to avoid double counting of a stable amount.	The computation of the highly stable portion of a deposit is configured as part of this rule.	Article 24 Paragraphs 1 to 6, Article 25 Paragraph 2 (d)
21	EBA LCR - High Run-off Category Amount Calculation	This computation rule calculates the high Run-off category 1 and category 2 amounts as per EBA DA guidelines.	The computation of the portions of a deposit categorized as high Run-off category 1 and high Run-off category 2 is configured as part of this rule.	Article 25 Paragraphs 3 (a), Article 25 Paragraph 2 (d)
22	EBA LCR - Reclassification - Level 1 - Central Bank Reserves	This rule reclassifies central bank reserves, to the extent that the central bank policies allow them to be drawn down in times of stress, as HQLA Level 1 asset per the criteria specified by EBA.	The classification of central bank reserves as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (b) (iii)
23	EBA LCR - Reclassification - Level 1 - Cash, Restricted Cash and Bank Notes	This rule reclassifies cash, banknotes, and restricted cash as HQLA Level 1 asset per the criteria specified by EBA.	The classification of cash, including restricted cash and banknotes, as HQLA Level 1 asset is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (a)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
24	EBA LCR - Reclassification - Level 1 - Market Asset Issuer	This rule reclassifies securities, issued by the central bank, sovereigns and central government as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, issued by sovereigns, central banks, central governments, and local authorities domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule. Additionally, the classification of marketable securities, issued by central banks that are zero risks weighted and are not domiciled in EEA and the European Central Bank, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (b) (i), (ii), (c)
25	EBA LCR - Reclassification - Level 1 - Market Asset Guarantor	This rule reclassifies securities guaranteed by central banks, sovereigns, and central governments as HQLA Level 1 asset, per the criteria specified by EBA.	The classification of marketable securities, guaranteed by sovereigns, central banks, central governments or local authorities domiciled in EEA or the European Central Bank, as HQLA Level 1 assets is configured as part of this rule. Additionally, the classification of zero risk-weighted marketable securities, guaranteed by central banks that are domiciled in EEA and the European Central Bank, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (b) (i), (ii), (c)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
26	EBA LCR - Reclassification - Level 1 - Assets Issued By Central And Reg Govt, Local Auth And PSE	This rule reclassifies marketable securities, issued by credit quality step 1 risk-rated central banks, regional governments, local authorities, PSE securities, zero risk weight multilateral development banks, and international organizations as HQLA Level 1 asset, per the criteria specified by EBA.	The classification of marketable securities, issued by multilateral development banks and international organizations that are zero risk-weighted, as HQLA Level 1 assets is configured as part of this rule. This rule also covers the classification of marketable securities, issued by state governments, regional governments and zero risks weighted PSEs, domiciled in EEA, as HQLA Level 1 assets. Additionally, the classification of marketable securities, issued by sovereigns, central governments, state governments, regional governments, local authorities that are zero risks weighted and are not domiciled in EEA, as HQLA Level 1 assets is configured.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (c) (ii) to (v), (g)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
27	EBA LCR - Reclassification - Level 1 - Assets Guaranteed By Central and Reg Govt, Local Auth, PSE	This rule reclassifies marketable securities, guaranteed by credit quality step 1 risk-rated central banks, regional governments, local authorities, PSE securities, and zero risk weight multilateral development banks and international organizations as HQLA Level 1 asset, per the criteria specified by EBA.	The classification of marketable securities, guaranteed by multilateral development banks and international organizations that are zero risk-weighted, as HQLA Level 1 assets are configured as part of this rule. This rule also covers the classification of marketable securities, guaranteed by state governments, regional governments, and zero risk-weighted PSEs, domiciled in EEA, as HQLA Level 1 assets. Additionally, the classification of marketable securities, guaranteed by sovereigns, central governments, state governments, regional governments, local authorities that are zero risk-weighted and are not domiciled in EEA, as HQLA Level 1 assets is configured.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (c) (ii) to (v), (g)
28	EBA LCR - Reclassification - Level 1 - Assets Issued By Credit Inst And Guaranteed By Central Govt	This rule reclassifies marketable securities, issued by credit quality step 1 risk-rated, or zero risk weight credit institutions and guaranteed by central governments as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of securities, issued by zero risk-weighted credit institutions and guaranteed by sovereigns, central governments, regional governments or local authorities, domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule.	Article 35
29	EBA LCR - Reclassification - Level 1 -Non-zero RW Assets Issued By Central,Reg Govt, Local Auth PSE	This rule reclassifies securities, issued by central banks, regional governments, local authorities and PSEs that have a risk rating other than credit quality step 1 or non-zero risk weight, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, issued by sovereigns, central governments and central banks that are non-zero risk weighted and are not domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (d)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
30	EBA LCR - Reclassification - Level 1-Non-zero RW Assets Guar By Central and Reg.Govt,Local Auth, PSE	This rule reclassifies securities, guaranteed by central banks, regional governments, local authorities, and PSEs that have a risk rating other than credit quality step 1 or non-zero risk weight, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, guaranteed by sovereigns, central governments and central banks that are non-zero risk-weighted and not domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (d)
31	EBA LCR - Reclassification - Level 1 - Deposits Placed Under Institutional Protection Scheme	This rule reclassifies deposits placed at central institutions of networks under the obligation to invest them in Level 1 assets, as HQLA Level 1 asset per the criteria specified by EBA.	The classification of deposits, placed with central institutions of a cooperative network or an institutional protection scheme, that are invested in Level 1 assets by the central institution, as HQLA Level 1 assets is configured as part of this rule.	Article 16 Paragraph 1 (a)
32	EBA LCR - Reclassification - Level 1 - Government Backed Promotional Lending Credit Institution	This rule reclassifies marketable securities, issued by EEA domiciled government-backed credit institutions or promotional lenders, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of securities, issued by a promotional lender or government incorporated credit institution domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (e) (i)
33	EBA LCR - Reclassification - Level 1 - Covered Bonds	This rule reclassifies high quality covered bonds that are credit quality step 1 risk-rated or zero risks weighted, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of covered bonds having issue size >= 500 million Euro and over-collateralization ratio >=2%, as HQLA Level 1 assets, is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (f)
34	EBA LCR - Reclassification - Level 1 - Senior Bonds Issued By Impaired Asset Management Agencies	This rule reclassifies bonds, issued by credit quality step 1 risk-rated or zero risk-weighted asset restructuring companies, as HQLA Level 1 asset per the criteria specified by EBA.	The classification of senior bonds, issued by a credit quality step 1 risk-rated or zero risks weighted government-backed impaired assets management company domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule.	Article 36

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
35	EBA LCR - Reclassification - Level 2A - Assets Issued By Regional Govt, Local Authorities And PSE	This rule reclassifies marketable securities assigned a 20% risk weight, issued by EEA domiciled central governments, regional governments, local authorities, and PSEs, as HQLA Level 2A assets per the criteria specified by EBA.	The classification of marketable securities assigned a risk weight of 20% or lower, issued by regional governments, state governments, local authorities, and PSEs domiciled in EEA, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 11 Paragraph 1 (a)
36	EBA LCR - Reclassification - Level 2A - Assets Guaranteed By Regional Govt, Local Authorities, PSE	This rule reclassifies marketable securities assigned a 20% risk weight, guaranteed by EEA domiciled central governments, regional governments, local authorities, and PSEs, as HQLA Level 2A assets per the criteria specified by EBA.	The classification of marketable securities assigned a risk weight of 20% or lower, guaranteed by regional governments, state governments, local authorities, and PSEs domiciled in EEA, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 11 Paragraph 1 (a)
37	EBA LCR - Reclassification - Level 2A - Assets Issued By Local Govt Inst in a Third Country	This rule reclassifies marketable securities assigned a 20% risk weight, issued by third-country domiciled central governments, regional governments, local authorities, and PSEs, as HQLA Level 2A assets per the criteria specified by EBA.	The classification of marketable securities assigned a risk weight of 20% or lower, issued by regional governments, state governments, local authorities, and PSEs domiciled in third countries, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 11 Paragraph 1 (b)
38	EBA LCR - Reclassification - Level 2A - Assets Guaranteed By Local Govt Inst in a Third Country	This rule reclassifies marketable securities assigned a 20% risk weight, guaranteed by third-country domiciled central governments, regional governments, local authorities, and PSEs, as HQLA Level 2A assets per the criteria specified by EBA.	The classification of marketable securities assigned a risk weight of 20% or lower, guaranteed by regional governments, state governments, local authorities, and PSEs domiciled in third countries, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 11 Paragraph 1 (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
39	EBA LCR - Reclassification - Level 2A - EEA Covered Bonds	This rule reclassifies covered bonds issued by government institutions domiciled in EEA, that are credit quality step 2 risk-rated, or having a minimum risk weight of 20%, as HQLA Level 2A assets per the criteria specified by EBA.	The classification of covered bonds, issued by government institutions domiciled in EEA, which are at least credit quality step 2 risk-rated for issue size > 500 million Euro with an over-collateralization ratio >= 7%, or credit quality step 1 risk-rated for issue size >= 250 million Euro with an over-collateralization ratio >= 2%, as HQLA Level 2A assets, is configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 11 Paragraph 1 (e)
40	EBA LCR - Reclassification - Level 2A - Third Country Covered Bonds	This rule reclassifies covered bonds issued by third-country domiciled local government institutions, that are credit quality step 1 risk-rated or having a minimum risk weight of 10%, and whose underlying exposures meet at least one of the criteria amongst B1, B2, C, E, and F, as HQLA Level 2A assets per the criteria specified by EBA. The classification of underlying assets based on the criteria specified by EBA is handled as part of the EBA DA - LCR Covered Bond Eligibility Criteria process.	The classification of covered bonds, which are credit quality step 1 rated, issued by third-country domiciled local government institutions and whose underlying exposures meet at least any one of the criteria amongst B1, B2, C, E, and F, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 11 Paragraph 1 (d)
41	EBA LCR - Reclassification - Level 2A - Debt Security Issued By Corporate	This rule reclassifies credit quality step 1 rated marketable securities issued by corporates as HQLA Level 2A assets per the criteria specified by EBA.	The classification of debt securities, which are rated at least credit quality step 1 and issued by corporates, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 11 Paragraph 1 (e)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
42	EBA LCR - Reclassification - Level 2A – Deposits Placed Under Institutional Protection Scheme	This rule reclassifies deposits placed at central institutions of networks under the obligation to invest them in Level 2A assets, as HQLA Level 2A assets per the criteria specified by EBA.	The classification of deposits, placed with central institutions of a cooperative network or an institutional protection scheme, that are invested in Level 2A assets by the central institution, as HQLA Level 2A assets are configured as part of this rule.	Article 16 Paragraph 1 (a)
43	EBA LCR - Reclassification - Level 2B - Debt Securities Issued By Corporate	This rule reclassifies securities issued by corporates as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of debt securities issued by corporates, which are at least credit quality step 3 rated or equivalent, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (b)
44	EBA LCR - Reclassification - Level 2B - Common Equity Shares	This rule reclassifies marketable common equities as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of shares that are components of a major equity index, as HQLA Level 2B assets is configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (c)
45	EBA LCR - Reclassification - Level 2B - Restricted Use Committed Liquid Facility	This rule reclassifies the central bank-issued a line of credit as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of restricted use liquidity facility as HQLA Level 2B assets is configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (d), Article 14
46	EBA LCR - Reclassification - Level 2B - Covered Bonds	This rule reclassifies covered bonds, which do not meet the Level 1 and Level 2A asset criteria and whose underlying exposures exclusively meet criteria - A, C, and D, as HQLA Level 2B assets per the criteria specified by EBA. The classification of underlying assets based on the criteria specified by EBA is handled as part of the process - EBA DA - LCR Covered Bond Eligibility Criteria.	The classification of high quality covered bonds having issue size >= 250 million Euro and over-collateralization ratio >=10%, whose underlying exposures meet either criterion A or criteria C or criteria D, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (e)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
47	EBA LCR - Reclassification - Level 2B - Non Interest Bearing Assets	This rule reclassifies the line of credit received from a central institution, which can be used as liquid facility as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of the liquidity facility, provided by the central institution of an institutional network of cooperative banks or institutional protection scheme, as HQLA Level 2B asset is configured as part of this rule.	Article 16 Paragraph 2
48	EBA LCR - Reclassification - Level 2B - Securitization	This rule reclassifies asset-backed securities as HQLA Level 2B securitizations, per the criteria specified by EBA.	The classification of asset-backed securities, which are rated at least credit quality step 1, and having an underlying asset pool of residential loans, auto loans and leases, personal loans, commercial loans, or leases and credit facilities, as HQLA Level 2B assets, is configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (a), Article 13
49	EBA LCR - Reclassification - Level 2B - Deposits Placed Under Institutional Protection Scheme	This rule reclassifies deposits placed at central institutions as obligated investments, as HQLA Level 2B assets per the criteria specified by EBA.	The classification of deposits, placed with central institution of a cooperative network or institutional protection scheme, which are either invested in Level 2B assets or where the central institution has no obligation to invest in the liquid asset of a specified asset level, as HQLA Level 2B assets are configured as part of this rule.	Article 16 Paragraph 1
50	EBA LCR - Reclassification - Level 2B - Sukuk Issued	This rule reclassifies Sukuk, issued by central banks, regional governments, state governments, local authorities, and PSEs, as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of non-interest bearing assets, which are at least credit quality step 5 rated and issued by central banks, central governments, regional governments, state governments, local authorities, and PSEs, not domiciled in EEA, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (f)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
51	EBA LCR - Reclassification - Level 2B - Sukuk Guaranteed	This rule reclassifies Sukuk, guaranteed by central banks, regional governments, state governments, local authorities, and PSEs as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of non-interest bearing assets, which are at least credit quality step 5 rated and guaranteed by central banks, central governments, regional governments, state governments, local authorities, and PSEs, not domiciled in EEA, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (f)
52	EBA LCR Mitigants - Reclassification - Level 1 - Market Asset Issuer	This rule reclassifies securities received as mitigants, issued by central banks, sovereigns and central governments as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, received as mitigants and issued by sovereigns, central banks, central governments, and local authorities domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule. Additionally, the classification of marketable securities received as mitigants, issued by central banks that are zero risk-weighted and are not domiciled in EEA and the European Central Bank, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (b) (i), (ii), (c)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
53	EBA LCR Mitigants - Reclassification - Level 1 - Market Asset Guarantor	This rule reclassifies securities received as mitigants, guaranteed by central banks, sovereigns, and central governments as HQLA Level 1 asset, per the criteria specified by EBA.	The classification of marketable securities received as mitigants and guaranteed by sovereigns, central banks, central governments, and local authorities domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule. Additionally, the classification of securities received as mitigants and guaranteed by central banks that are zero risk-weighted and are not domiciled in EEA and the European Central Bank, as HQLA Level 1 assets is configured.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (b) (i), (ii), (c)
54	EBA LCR Mitigants - Reclassification - Level 1 - Assets Issued By Central,Regional Govt,Local Auth	This rule reclassifies marketable securities received as mitigants, issued by credit quality step 1 risk-rated central banks, regional governments, local authorities, PSE, and zero risk weight multilateral development banks and international organizations as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities received as mitigants and issued by multilateral development bank and international organization that is zero risk-weighted, as HQLA Level 1 assets is configured as part of this rule. The rule also covers the classification of marketable securities, received as mitigants and issued by state governments, regional governments and zero risks weighted PSEs domiciled in EEA, as HQLA Level 1 assets. Additionally, the classification of marketable securities received as mitigants and issued by sovereigns, central governments, state governments, regional governments, and local authorities that are zero risks weighted and domiciled outside EEA, as HQLA Level 1 assets is configured.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (c) (ii) to (v), (g)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
55	EBA LCR Mitigants - Reclassification - Level 1 - non-zero RW Assts Guarntd By Cntrl,Rg Gvt Lcl Auth	This rule reclassifies marketable securities received as mitigants, guaranteed by credit quality step 1 risk-rated or non-zero risk weight central governments, regional governments, local authorities, and PSEs, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities received as mitigants and guaranteed by sovereigns, central government, and the central bank that are non-zero risk-weighted and not domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (d)
56	EBA LCR Mitigants - Reclassification - Level 1 - Assets Guaranteed By Central,Reg Govt Local Auth	This rule reclassifies marketable securities received as mitigants, guaranteed by credit quality step 1 risk-rated central governments, regional governments, local authorities, PSEs, and zero risk weight multilateral development banks and international organizations, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities received as mitigants and guaranteed by multilateral development banks and international organizations that are zero risk-weighted, as HQLA Level 1 assets is configured as part of this rule. This rule also covers the classification of marketable securities, guaranteed by state governments, regional governments and zero risks weighted PSEs, domiciled in EEA, as HQLA Level 1 assets. Additionally, the classification of marketable securities, guaranteed by sovereigns, central governments, state governments, regional governments, local authorities that are zero risk-weighted and are not domiciled in EEA, as HQLA Level 1 assets is configured.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (c) (ii) to (v), (g)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
57	EBA LCR Mitigants - Reclassification - Level 1 - non-zero RW Assts Issud By Cntrl,Reg Govt,Local Aut	This rule reclassifies securities received as mitigants, issued by credit quality step 1 risk-rated or non-zero risk weight central governments, regional governments, local authorities, and PSEs, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities received as mitigants and issued by sovereigns, central governments and central banks that are non-zero risk-weighted and are not domiciled in EEA, as HQLA Level 1 assets are configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (d)
58	EBA LCR Mitigants - Reclassification - Level 1 - Assets Issued By CreInst And Guar By Cent Govt	This rule reclassifies marketable securities received as mitigants, issued by credit quality step 1 risk-rated or zero risk weight credit institutions and guaranteed by central governments as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of securities received as mitigants and issued by zero risk-weighted credit institutions and guaranteed by sovereigns, central governments, regional governments, and local authorities, domiciled in EEA, as HQLA Level 1 asset is configured as part of this rule.	Article 35, Article 7 Paragraph 2
59	EBA LCR Mitigants - Reclassification - Level 1 - Govt Backed Promotional Lending Credit Institution	This rule reclassifies marketable securities received as mitigants, issued by EEA domiciled government-backed credit institutions or promotional lenders, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of securities received as mitigants and issued by promotional lenders or government incorporated credit institutions domiciled in EEA as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraph 2 to 7,Article 10 Paragraph 1 (e) (i)
60	EBA LCR Mitigants - Reclassification - Level 1 - Covered Bonds	This rule reclassifies high quality covered bonds received as mitigants that are credit quality step 1 risk-rated or zero risk-weighted, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of covered bonds received as mitigants, having an issue size >= 500 million Euro and over-collateralization ratio >=2%, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraphs 3 to 7, Article 10 Paragraph 1 (f)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
61	EBA LCR Mitigants - Reclassification - Level 1 - Senior Bonds Issued By Impaired Asset Mgmt Agencies	This rule reclassifies bonds received as mitigants, issued by credit quality step 1 risk-rated or zero risk-weighted asset restructuring companies as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of senior bonds received as mitigants and issued by a credit quality step 1 risk-rated or zero risk-weighted government-backed impaired assets management company domiciled in EEA, as HQLA Level 1 assets is configured as part of this rule.	Article 36, Article 7 Paragraph 2
62	EBA LCR Mitigants - Reclassification - Level 2A - Issued By Regional Govt,Local Authorities and PSE	This rule reclassifies marketable securities assigned a 20% risk weight, received as mitigants, issued by EEA domiciled central governments, regional governments, local authorities, and PSEs, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of marketable securities assigned a risk weight of 20% or lower, received as mitigants and issued by regional governments, state governments, PSEs, and local authorities domiciled in EEA, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (a)
63	EBA LCR Mitigants - Reclassification - Level 2A - Assets Guaranteed by Reg. Govt,Local Authorities	This rule reclassifies marketable securities assigned a 20% risk weight, received as mitigants, guaranteed by EEA domiciled central banks, regional governments, local authorities, and PSEs, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of marketable securities, assigned a risk weight of 20% or lower, received as mitigants and guaranteed by regional governments, state governments, PSEs, and local authorities domiciled in EEA, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (a)
64	EBA LCR Mitigants - Reclassification - Level 2A - Assets Issued By Local Govt Ins in a Third Country	This rule reclassifies marketable securities assigned a 20% risk weight, issued by third-country central governments, regional governments, local authorities, and PSEs, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of marketable securities, assigned a risk weight of 20% or lower, received as mitigants and issued by sovereigns, central governments, regional governments, state governments, PSE and local authorities, not domiciled in EEA, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
65	EBA LCR Mitigants - Reclassification - Level 2A - Assets Guar By Local Govt Ins in a Third Country	This rule reclassifies marketable securities assigned a 20% risk weight, received as mitigants, guaranteed by third-country central governments, regional governments, local authorities, and PSEs, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of marketable securities, assigned a risk weight of 20% or lower, received as mitigants and guaranteed by sovereigns, central governments, regional governments, state governments, PSE and local authorities, which are not domiciled in EEA, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (b)
66	EBA LCR Mitigants - Reclassification - Level 2A - EEA Covered Bonds	This rule reclassifies covered bonds received as mitigants, issued by government institutions domiciled in EEA, that are credit quality step 2 risk-rated or have a minimum risk weight of 20%, as HQLA Level 2A assets per the criteria specified by EBA.	The classification of covered bonds received as mitigants, issued by government institutions domiciled in EEA, that are at least credit quality step 2 risk-rated for issue size greater than 500 million Euro with an over-collateralization ratio greater than or equal to 7%, or credit quality step 1 risk-rated for issue size greater than or equal to 250 million Euro with an over-collateralization ratio greater than or equal to 2%, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 11 Paragraph 1 (e)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
67	EBA LCR Mitigants - Reclassification - Level 2A - Third Country Covered Bonds	This rule reclassifies covered bonds received as mitigants, issued by the third country domiciled local government institutions, that are credit quality step 1 risk-rated or have a minimum risk weight of 10% risk weight, and whose underlying exposures meet at least one of the criteria amongst - B1, B2, C, E, F criteria, as HQLA Level 2A assets per the criteria specified by EBA. The classification of underlying assets based on the criteria specified by EBA is handled as part of the process - EBA DA - LCR Covered Bond Eligibility Criteria.	The classification of covered bonds received as mitigants, that are credit quality step 1 risk-rated, issued by third-country domiciled local government institutions, and whose underlying exposures meet at least any one criteria out of B1, B2, C, E, and F, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 11 Paragraph 1 (d)
68	EBA LCR Mitigants - Reclassification - Level 2A - Debt Security Issued By Corporate	This rule reclassifies credit quality step 1 rated marketable securities, received as mitigants, issued by corporates, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of debt securities which are rated at least credit quality step 1, received as mitigants and issued by corporates as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1(e)
69	EBA LCR Mitigants - Reclassification - Level 2B - Debt Securities Issued by Corporate	This rule reclassifies securities received as mitigants, issued by corporates as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of at least credit quality step 3 rated debt securities received as mitigants and issued by corporates as HQLA Level 2B assets is configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1 (b)
70	EBA LCR Mitigants - Reclassification - Level 2B - Common Equity Shares	This rule reclassifies marketable common equities received as mitigants, as HQLA Level 2B assets per the criteria specified by EBA.	The classification of shares traded at major equity index received as mitigants are configured as HQLA Level 2B as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1 (c)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
71	EBA LCR Mitigants - Reclassification - Level 2B - Covered Bonds	This rule reclassifies covered bonds received as mitigants, which do not meet the Level 1 and Level 2A asset criteria and whose underlying exposures exclusively meet criteria A, C, and D criteria, as HQLA Level 2B assets per the criteria specified by EBA. The classification of underlying assets based on the criteria specified by EBA is handled as part of the process - EBA DA - LCR Covered Bond Eligibility Criteria.	The classification of high quality covered bonds received as mitigants, having an issue size >= 250 million Euro and over-collateralization ratio >=10%, whose underlying exposures meet either criterion A or criteria C or criteria D, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (e)
72	EBA LCR Mitigants - Reclassification - Level 2B - Securitization	This rule reclassifies asset-backed securities, received as mitigants, which has an underlying asset pool of fully guaranteed residential loans, commercial loans, leases and credit facilities, auto loans and leases, personal loans credit facilities or first-lien residential loans as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of asset-backed securities received as mitigants, which are rated at least credit quality step 1 having an underlying asset pool of residential loans, auto loans and leases, personal loans or commercial loans, leases and credit facilities, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1 (a), Article 13
73	EBA LCR Mitigants - Reclassification - Level 2B - Sukuk Issued	This rule reclassifies Sukuk received as mitigants, issued by central governments, regional governments, state governments, local authorities, and PSEs as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of non-interest bearing assets received as mitigants, which are at least credit quality step 5 rated and issued by central banks, central governments, regional governments, state governments, local authorities and PSEs, not domiciled in EEA, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1 (f)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
74	EBA LCR Mitigants - Reclassification - Level 2B - Sukuk Guaranteed	This rule reclassifies Sukuk received as mitigants, guaranteed by central governments, regional governments, state governments, local authorities, and PSEs as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of non-interest bearing assets received as mitigants, which are at least credit quality step 5 rated and guaranteed by central banks, central governments, regional governments, state governments, local authorities, and PSEs, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1(f)
75	EBA LCR Subs Coll - Reclassification - Level 1 - Market Asset Issuer	This rule reclassifies securities that can be contractually substituted for existing collateral received, issued by central banks, sovereigns, and central governments as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, issued by sovereigns, central banks, central governments, and local authorities domiciled in EEA that can potentially be substituted for existing collateral, as HQLA Level 1 asset is configured as part of this rule. Additionally, marketable securities, issued by central banks and the European Central Bank that are zero risk-weighted and are not domiciled in EEA and can potentially be substituted for existing collateral, as HQLA Level 1 assets is configured.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (b) (i),(ii), (c) , Article 17 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
76	EBA LCR Subs Coll - Reclassification - Level 1 - Market Asset Guarantor	This rule reclassifies securities that can be contractually substituted for existing collateral received, guaranteed by central banks, sovereigns, and central governments as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, guaranteed by sovereigns, central banks, central governments, and local authorities domiciled in EEA that can be potentially substituted for existing collateral, as HQLA Level 1 asset is configured as part of this rule. Additionally, marketable securities, guaranteed by zero risk-weighted central banks that are not domiciled in EEA, and the European Central Bank that can be potentially substituted for existing collateral, as HQLA Level 1 assets are configured.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (b)(i),(ii),(c) , Article 17 Paragraph 2
77	EBA LCR Subs Coll - Reclassification - Level 1 - Issued By Cent.,Reg. govt, Local Auth. and PSE	This rule reclassifies marketable securities that can be contractually substituted for existing collateral received, issued by credit quality step 1 risk-rated central banks, regional governments, local authorities, PSEs, and zero risk weight multilateral development banks and international organizations as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, issued by zero risks weighted multilateral development banks, international organizations, PSEs, state governments, and regional governments, domiciled in EEA and can be potentially substituted for existing collateral, as HQLA Level 1 assets, is configured as part of this rule. Additionally, the classification of marketable securities, issued by sovereigns, central governments, local authorities that are zero risks weighted and not domiciled in EEA and can be potentially substituted for existing collateral, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (c) (ii) to (v), (g), Article 17 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
78	EBA LCR Subs Coll - Reclassification - Level 1 - non-zero RW Assets Issued by Cent.,Reg. govt	This rule reclassifies securities that can be contractually substituted for existing collateral received, issued by credit quality step 1 risk-rated or non-zero risk weight central banks, regional governments, local authorities, and PSEs, as HQLA Level 1 asset, per the criteria, specified by EBA.	The classification of marketable securities, guaranteed by sovereigns, central governments and central banks that are non-zero risk-weighted and not domiciled in EEA and can be potentially substituted for existing collateral, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (d), Article 17 Paragraph 2
79	EBA LCR Subs Coll - Reclassification - Level 1 - Assets Guar. By Cent.,Reg. Govt,Loc Auth. and PSE	This rule reclassifies marketable securities that can be contractually substituted for existing collateral received, guaranteed by credit quality step 1 risk-rated central banks, regional governments, local authorities, PSEs, and zero risk weight multilateral development banks and international organizations as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, guaranteed by zero risk-weighted multilateral development banks, international organizations, PSEs, state governments, and regional governments that can be potentially substituted for existing collaterals, as HQLA Level 1 assets is configured as part of this rule. Additionally, the classification of marketable securities guaranteed by sovereigns, central governments, local authorities that are zero risk-weighted and not domiciled in EEA that can be potentially substituted for existing collateral, as HQLA Level 1 assets is configured.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (c) (ii) to (v), (g), Article 17 Paragraph 2
80	EBA LCR Subs Coll - Reclassification - Level 1 - non-zero RW Assets Guar. by Cent.,Reg. govt	This rule reclassifies securities that can be contractually substituted for existing collateral received, guaranteed by credit quality step 1 risk-rated, or non-zero risk weight central banks, regional governments, local authorities, and PSEs, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of marketable securities, issued by sovereigns, central governments and central banks that are non-zero risk-weighted and are not domiciled in EEA, and can potentially be substituted for existing collateral, as HQLA Level 1 assets is configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 10 Paragraph 1 (d), Article 17 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
81	EBA LCR Subs Coll - Reclassification - Level 1 - Assets Issued By Credit Inst. And Guar. By Cent.Gov	This rule reclassifies marketable securities issued by credit institutions that can be contractually substituted for existing collateral received, guaranteed by credit quality step 1 risk-rated central, regional governments, local authorities, PSE securities, and zero risk weight multilateral development banks and international organizations as HQLA Level 1 asset, per the criteria specified by EBA.	The classification of securities issued by zero risk-weighted credit institutions and guaranteed by sovereigns, central governments, regional governments, and local authorities which are domiciled in EEA and can be potentially substituted for existing collateral, as HQLA Level 1 assets is configured as part of this rule.	Article 35, Article 7 Paragraph 2 , Article 17 Paragraph 2
82	EBA LCR Subs Coll - Reclassification - Level 1 - Govt. Backed Promotional Lending Credit Institution	This rule reclassifies marketable securities issued by EEA domiciled government-backed credit institutions or promotional lenders, that can be contractually substituted for existing collateral received, as HQLA Level 1 asset, per the criteria specified by EBA.	The classification of securities issued by a promotional lender or government incorporated credit institution domiciled in EEA and can be potentially substituted for existing collateral, as HQLA Level 1 assets are configured as part of this rule.	Article 7 Paragraph 2 to 7,Article 10 Paragraph 1(e) (i)
83	EBA LCR Subs Coll - Reclassification - Level 1 - Senior Bonds Issued By Impaired Asset Mgmt Agencies	This rule reclassifies bonds that can be contractually substituted for existing collateral received, issued by credit quality step 1 risk-rated or zero risk-weighted asset restructuring companies, as HQLA Level 1 assets, per the criteria specified by EBA.	The classification of senior bonds, issued by a credit quality step 1 risk-rated or zero risks weighted government-backed impaired assets management company domiciled in EEA and can be potentially substituted for existing collaterals, as HQLA Level 1 assets is configured as part of this rule.	Article 36, Article 7 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
84	EBA LCR Subs Coll-Reclassification - Level 2A - Assets Issued by Reg. Govt., Local Auth. and Pse	This rule reclassifies marketable securities that can be contractually substituted for the existing collateral received, assigned a 20% risk weight, issued by EEA domiciled central governments regional governments, local authorities, and PSE securities, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of marketable securities assigned a risk weight of 20% or lower and issued by regional governments, state governments, PSEs and local authorities, domiciled in EEA and can be potentially substituted for existing collaterals, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (a), Article 17 Paragraph 2
85	EBA LCR Subs Coll-Reclassification - Level 2A - Assets Guar. By Reg. Govts., Local Auth. And Pse	This rule reclassifies marketable securities that can be contractually substituted for existing collateral received, assigned a 20% risk weight, guaranteed by EEA domiciled central governments regional governments, local authorities, and PSE securities, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of marketable securities assigned a risk weight of 20% or lower and guaranteed by regional governments, state governments, PSEs and local authorities, domiciled in EEA that can be potentially substituted for existing collateral, as HQLA Level 2A assets is configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (a), Article 17 Paragraph 2
86	EBA LCR Subs Coll - Reclassification - Level 2A - Assets Issued By Loc.Govt.Inst. in a Third Country	This rule reclassifies securities that can be contractually substituted for the existing collateral received, issued by up to 20% risk-weighted third-country central governments, regional governments, local authorities, and Public sector enterprises, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of marketable securities assigned a risk weight of 20% or lower and issued by sovereigns, central governments, regional governments, state governments, PSEs and local authorities not domiciled in EEA that can be potentially substituted for existing collateral, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (b), Article 17 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
87	EBA LCR Subs Coll-Reclassification - Level 2A - Assets Guar. By Loc. Govt. Inst. in a Third Country	This rule reclassifies securities that can be contractually substituted for existing collateral received, assigned a 20% risk weight, guaranteed by third-country domiciled central governments, regional governments, local authorities, and Public sector enterprises, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of marketable securities, assigned a risk weight of 20% or lower and guaranteed by sovereigns, central governments, regional governments, state governments, PSEs and local authorities which are not domiciled in EEA that can potentially be substituted for existing collateral, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (b), Article 17 Paragraph 2
88	EBA LCR Subs Coll-Reclassification - Level 2A - Debt Security Issued By Corporate	This rule reclassifies credit quality step 1 rated marketable securities that can be contractually substituted for existing collateral received, issued by corporates, as HQLA Level 2A assets, per the criteria specified by EBA.	The classification of debt securities, which are rated at least credit quality step 1 that can be potentially substituted for existing collateral and issued by corporates, as HQLA Level 2A assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 11 Paragraph 1 (e), Article 17 Paragraph 2
89	EBA LCR - Subs Coll Reclassification - Level 2B - Debt Securities Issued By Corporate	This rule reclassifies securities that can be contractually substituted for existing collateral received, issued by corporates as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of debt securities, which are at least credit quality step 3 rated and issued by corporates that can potentially be substituted for existing collateral, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1 (b), Article 17 Paragraph 2
90	EBA LCR - Subs Coll-Reclassification - Level 2B - Common Equity Shares	This rule reclassifies marketable common equities that can be contractually substituted for existing collateral received, as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of shares traded at major equity index that can be potentially substituted for existing collateral, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1 (c), Article 17 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
91	EBA LCR - Subs Coll Reclassification - Level 2B - Sukuk Issued	This rule reclassifies Sukuk that can be contractually substituted for existing collateral received, issued by central banks, regional governments, state governments, local authorities, and PSEs as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of non-interest bearing assets, which are at least credit quality step 5 rated and issued by central banks, central governments, regional governments, state governments, local authorities and PSEs which are not domiciled in EEA that can be potentially substituted for existing collateral, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1 (f), Article 17 Paragraph 2
92	EBA LCR - Subs Coll Reclassification - Level 2B - Sukuk Guaranted	This rule reclassifies Sukuk, which can be contractually substituted for existing collateral received, guaranteed by central banks, regional governments, state governments, local authorities, and PSEs, as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of non-interest bearing assets, which are at least credit quality step 5 rated and guaranteed by central banks, central governments, regional governments, state governments, local authorities and PSEs which are not domiciled in EEA that can potentially be substituted for existing collateral, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 2 to 7, Article 12 Paragraph 1 (f), Article 17 Paragraph 2
93	EBA LCR Subs Coll-Reclassification - Level 2B - Securitization	This rule reclassifies asset-backed securities that can be contractually substituted for existing collateral received, in an underlying asset pool of fully guaranteed residential loans or commercial loans, leases and credit facilities, auto loans and leases, personal loans credit facilities or first-lien residential loans as HQLA Level 2B assets, per the criteria specified by EBA.	The classification of asset-backed securities, which are at least credit quality step 1 rated having an underlying asset pool of residential loans, auto loans and leases, personal loans or commercial loans, leases and credit facilities, that can be potentially substituted for existing collateral, as HQLA Level 2B assets are configured as part of this rule.	Article 7 Paragraph 3 to 7, Article 12 Paragraph 1 (a), Article 13, Article 17 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
94	LRM EBA -Sub Asset Level Classification - Balance with Bank,Cash, Banknotes,Common equity and CB	This rule classifies the products such as balances with the bank, cash, banknotes, common equities, and covered bonds into different sub-asset levels based on the associated asset levels and the product types.	The further classification of assets such as balances with banks, cash, banknotes, common equities, and covered bonds into different sub-asset levels is configured as part of this rule.	Article 10
95	LRM EBA - Sub Asset Level Classification - Debt Sec, Line of Credit Rec, Sukuk, Asset Bckd Sec	This rule classifies the products such as debt securities, lines of credit received, Sukuk, asset-backed securities into different sub-asset levels based on the associated asset levels, and the product types.	The further classification of assets such as debt securities, lines of credit received, Sukuk, asset-backed securities into different sub-asset levels is configured as part of this rule.	Article 12 Paragraph 2
96	LRM EBA - Sub Asset Level Classification - Mitigants	This rule classifies the products received as mitigants, into different sub-asset levels based on the associated asset levels and other dimensions.	The further classification of assets received as mitigants into different sub-asset levels is configured as part of this rule.	Article 12 Paragraph 2, Article 10, Article 7 Paragraph 2
97	LRM - EBA - Bank Own Assets - Meets HQLA Operational Requirements and HQLA Eligibility Flag Update	This rule identifies whether the bank's assets, both unencumbered assets as well as those placed as collaterals, meet the operational requirements as prescribed in EBA DA regulations, except for being unencumbered for placed collaterals. For unencumbered assets, it updates the Meets HQLA Operational Requirements flag. In case of placed collateral, it updates the Meets HQLA Operational Requirements on Unwind flag and the Hqla Eligibility Flag HQLA that fulfill the HQLA operational requirements and therefore can be included in the stock of HQLA.	The identification of whether an asset owned by the bank meets the operational requirements set forth by EBA DA for its inclusion in the stock of HQLA is configured as part of this rule.	Article 8

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
98	LRM - EBA - Re-hypothecated Mitigants - Meets HQLA Operational Requirements and HQLA Eligi Flag updt	This rule identifies whether the rehypothecated mitigants meet the operational requirements as prescribed in EBA DA regulations, to be considered for inclusion in the stock of HQLA. It updates the Meets HQLA Operational Requirements flag and Hqla Eligibility flag for such mitigants.	The identification of whether collateral received from a counterparty, that is further placed as collateral, meets the operational requirements set forth by EBA DA on unwinding is configured as part of this rule.	Article 8, Article 7 Paragraph 2
99	LRM - EBA - Mitigants - Meets HQLA Operational Requirements and HQLA Eligibility Flag Update	This rule identifies whether the mitigants meet the operational requirements as prescribed in EBA DA regulations, to be considered for inclusion in the stock of HQLA. It updates the Meets HQLA Operational Requirements flag and Hqla Eligibility flag for such mitigants.	The identification of whether the collateral received from the counterparty meets the operational requirements set forth by EBA is configured as part of this rule.	Article 8, Article 7 Paragraph 2
100	LRM - Downgrade Impact Amount for Other Liabilities	This rule calculates the downgrade impact amount for all liability products other than derivatives and securitizations, as the difference between the EOP balance and the collateral received.	The computation of the loss due to a rating downgrade, concerning liabilities other than derivatives and securitizations, is configured as part of this rule.	Article 30 Paragraph 2
101	LRM - EBA - Instruments - Hedge Termination Cost Adjusted Value	This computation rule identifies all high quality liquid assets that have a hedge associated with them and computes the value of the unencumbered portion of such assets to be included in the stock as less of the hedge termination cost.	The computation of the market value of a high-quality liquid asset adjusted for the outflow that would arise on the early termination of the hedge is configured as part of this rule. The hedge termination cost adjusted value of the asset is included in the stock of HQLA.	Article 8 Paragraph 3

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
102	LRM - EBA - Mitigants - Value to be Included in the Stock of Liquid Assets	This rule computes the unencumbered portion of there-hypothecate mitigants, classified as high-quality liquid assets, which can be included in the stock of HQLA.	The identification and computation of the value of the non-rehypothecated portion of HQLA collateral received under re-hypothecation rights are configured as part of this rule.	Article 7 Paragraph 2
103	LRM - Reserves and Balances With Bank - Value to be Included in the Stock of Liquid Assets	This rule computes the value of central bank reserves to be included in the stock of Level 1 assets by deducting the minimum reserves and pass-through reserves, if any, from the reserve balance. Additionally, it computes the value of term deposits placed at the central bank (balances with banks) that are classified as Level 1 assets to be included in the stock of HQLA less of any applicable withdrawal penalty.	The computation of the value of reserves and balances with the banks as HQLA is configured as part of this rule.	Article 10 Paragraph 1
104	LRM - EBA - Instruments - Value to be included in Stock - Placed Collateral	This rule computes the unused portion of placed collaterals, classified as high-quality liquid assets, which is eligible to be included in the stock as it is currently unencumbered.	The computation of the unused portion of high-quality liquid assets that are pre-positioned, or pledged but have not been used to generate liquidity is configured as part of this rule. The assets are encumbered in the order of lowest to the highest quality to compute the unused portion of the placed collateral.	Article 7 Paragraph 2
105	EBA DA - HQLA Haircut - Instruments	This rule assigns haircut percentages to be applied on all HQLA instruments excluding balances with banks.	The computation of haircut percentage for all high quality liquid asset instruments excluding balances with the banks is configured as part of this rule.	Article 10, Article 11, Article 12

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
106	EBA DA - HQLA Haircut - Balances with banks	This rule assigns haircut percentages to be applied to all HQLA balances with banks.	The computation of haircut percentage for the balances with banks which are high-quality liquid asset instruments is configured as part of this rule.	Article 10
107	EBA DA - HQLA Haircut - Mitigants	This rule assigns haircut percentages to be applied to all HQLA mitigants.	The computation of haircut percentage for all high quality liquid asset instruments received as mitigants are configured as part of this rule.	Article 10, Article 11, Article 12
108	LRM - EBA - CIU - Value to be Included in the Stock and Hair Cut Assignment	This rule computes the unencumbered portion of the CIUs, classified as high-quality liquid assets, which can be included in the stock of HQLA and assigns the haircut percentages to the same.	The computation of the value of collective investment units as HQLA is configured as part of this rule.	Article 15
109	LRM - EBA - CIU Mitigants - Value to be Included in the Stock and Hair Cut Assignment	This rule computes the unencumbered portion of the CIUs received as mitigants and classified as high-quality liquid assets, which can be included in the stock of HQLA and assigns the haircut percentages to the same.	The computation of the value of the non-rehypothecated portion of the collective investment units collaterals received under re-hypothecation rights as HQLA is configured as part of this rule.	Article 15, Article 7 Paragraph 2

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
110	EBA LCR - Stock Adjustment Reclassification - Level 1 Covered Bond - Addition	This rule identifies all secured funding, asset exchange, and collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. In case of secured funding transactions, where the collateral posted is a Level 1 covered bonds asset, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted. In case of asset exchange transactions and collateralized derivatives transaction, where the collateral posted is a Level 1 covered bond asset and the collateral received is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted.	The identification of secured lending, collateralized derivatives, and asset exchange transactions required to be unwound, and the amount to be added to the stock of Level 1 covered bond assets due to such an unwind, is configured as part of this rule.	Annex I Paragraph 3 (a), (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
111	EBA LCR - Stock Adjustment Reclassification - Level 1 Covered Bond - Deduction	This rule identifies all secured lending, asset exchange, and collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. In case of secured lending transactions, where the collateral received is a Level 1 covered bond assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received. In case of asset exchange transactions and collateralized derivatives transaction, where the collateral received is a Level 1 covered bond asset and the collateral posted is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received.	The identification of secured funding, collateralized derivatives, and asset exchange transactions required to be unwound, and the amount to be deducted from the stock of Level 1 covered bond assets due to such an unwind, is configured as part of this rule.	Annex I Paragraph 3 (a), (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
112	EBA LCR - Stock Adjustment Reclassification - Level 1 Secured Transactions and Swaps - Addition	This rule identifies all secured funding, secured lending, and asset exchange transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. In case of secured funding transactions, where the collateral posted is a level1 coin, banknotes, and exposures to central banks asset or Level 1 other assets excluding covered bonds asset, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted. In case of secured lending transactions, where the collateral received is a Level 1 asset or Level 2A asset or Level 2B asset, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the amount paid. In case asset exchange, where the collateral posted is a Level 1 coin, banknotes and exposures to central banks asset or Level 1 other assets excluding covered bonds asset and the collateral received is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted.	The identification of secured funding secured lending, and asset exchange transactions required to be unwound, and the amount to be added to the stock of Level 1 assets excluding Level 1 covered bonds due to such an unwind, is configured as part of this rule.	Annex I Paragraph 3 (a), (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
113	EBA LCR - Stock Adjustment Reclassification - Level 1 Secured Transactions and Swaps - Deduction	This rule identifies all secured funding, secured lending, and asset exchange transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. In case of secured funding transactions, where the collateral posted is a Level 1 asset or Level 2A asset or Level 2B asset, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the amount received. In case of secured lending, where the collateral received is a Level 1 Coins, banknotes and exposures to central banks or Level 1 other assets excluding covered bonds, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received. In case of the asset exchange transaction, where the collateral posted is a Level 1 asset or Level 2A asset or Level 2B asset and the collateral received is a Level 1 coin, banknotes and exposures to central banks asset or Level 1 other assets excluding covered bonds asset, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received.	The identification of secured funding secured lending, and asset exchange transactions required to be unwound, and the amount to be deducted from the stock of Level 1 assets excluding Level 1 covered bonds due to such an unwind, is configured as part of this rule.	Annex I Paragraph 3 (a), (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
114	EBA LCR - Stock Adjustment Reclassification - Level 1 Unwinded Derivatives - Addition	This rule identifies all collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. Collateralized derivatives transaction, where the collateral posted is a Level 1 asset or Level 2A asset or Level 2B asset or other assets and which are considered to be eligible HQLA on unwinding and in a position to be bought or sold and the collateral received is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted or as the addition of the amount paid.	The identification of collateralized derivatives transactions required to be unwound is configured as part of this rule. Additionally, the amount to be added to the stock of Level 1 assets, excluding Level 1 covered bonds due to such an unwind, where the rehypothecated collateral received meets the HQLA criteria after unwinding the position, is also configured.	Annex I Paragraph 3 (a), (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
115	EBA LCR - Stock Adjustment Reclassification - Level 1 Unwinded Derivatives - Deduction	This rule identifies all collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. Collateralized derivatives transaction, where the collateral posted is a Level 1 asset or Level 2A asset or Level 2B asset or other assets and which are considered to be eligible HQLA on unwinding and in a position to be bought or sold and the collateral received is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received or as the deduction of the amount received.	The identification of collateralized derivatives transactions required to be unwound is configured as part of this rule. Additionally, the amount to be deducted from the stock of Level 1 assets excluding Level 1 covered bonds due to such an unwind, where the rehypothecated collateral received meets the HQLA criteria after unwinding the position, is also configured.	Annex I Paragraph 3 (a), (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
116	EBA LCR - Stock Adjustment Reclassification - Level 1 Derivatives - Addition	This rule identifies all collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. Collateralized derivatives transaction, where the collateral posted is a Level 1 asset or Level 2A asset or Level 2B asset or other assets and which are in a position to be bought or sold and the collateral received is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted or as the addition of the amount paid.	The identification of collateralized derivatives transactions required to be unwound is configured as part of this rule. Additionally, the amount to be added to the stock of Level 1 assets excluding Level 1 covered bonds due to such an unwind, where the rehypothecated collateral received does not meet the HQLA criteria after unwinding the position, is also configured.	Annex I Paragraph 3 (a), (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
117	EBA LCR - Stock Adjustment Reclassification - Level 1 Derivatives - Deduction	This rule identifies all collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. Collateralized derivatives transaction, where the collateral posted is a Level 1 asset or Level 2A asset or Level 2B asset or other assets and which are in a position to be bought or sold and the collateral received is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received or as the deduction of the amount received.	The identification of collateralized derivatives transactions required to be unwound is configured as part of this rule. The amount to be deducted from the stock of Level 1 assets excluding Level 1 covered bonds due to such an unwind, where the rehypothecated collateral received does not meet HQLA criteria after unwinding the position, is also configured as part of this rule.	Annex I Paragraph 3 (a), (b)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
118	EBA DA LCR - Stock Adjustment Reclassification - Level 2A - Addition	This rule identifies all secured funding, asset exchange, and collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. In case of secured funding transactions, where the collateral posted is a Level 2A asset, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted. In case of asset exchange transactions and collateralized derivatives transaction, where the collateral posted is a Level 2A asset and the collateral received is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted.	The identification of secured funding, collateralized derivatives and asset exchange transactions required to be unwound, and the amount to be added to the stock of Level 2A assets due to such an unwind is configured as part of this rule.	Annex I (3) (c)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
119	EBA DA LCR - Stock Adjustment Reclassification - Level 2A - Deduction	This rule identifies all secured lending, asset exchange, and collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. In case of secured lending transactions, where the collateral received is a Level 2A asset, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received. In case of asset exchange transactions and collateralized derivatives transaction, where the collateral received is a Level 2A asset and the collateral posted is a Level 1 asset or Level 2A asset or Level 2B asset or other assets, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received.	The identification of secured lending, collateralized derivatives, and asset exchange transactions required to be unwound and the amount to be deducted from the stock of Level 2A assets due to such an unwind, is configured as part of this rule.	Annex I (3) (c)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
120	EBA DA LCR - Stock Adjustment Reclassification - Level 2B - Addition	This rule identifies all asset exchange and collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. Asset exchange transactions and collateralized derivatives transaction, where the collateral posted is Level 2B securitizations backed by residential and auto loans or Level 2B securitizations backed by commercial and personal loans, or Level 2B corporate bonds, or Level 2B shares, or Level 2B non-interest bearing assets, or Level 2B covered bonds, and the collateral received is a Level 1 asset, or Level 2A asset, or Level 2B asset, or other assets, or Level 2B securitizations backed by residential and auto loans, or Level 2B securitizations backed by commercial and personal loans, or Level 2B corporate bonds, or Level 2B shares, or Level 2B non-interest bearing assets, or Level 2B covered bonds, the type of adjustment to the stock of HQLA due to such an unwind is updated as the addition of the market value of collateral posted.	The identification of secured funding, collateralized derivatives transaction and asset exchange transactions required to be unwound, and the amount to be added to the stock of Level 2B assets due to such an unwind, is configured as part of this rule.	Annex I (3) (d)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
121	EBA DA LCR - Stock Adjustment Reclassification - Level 2B - Deduction	This rule identifies all asset exchange and collateralized derivatives transactions involving HQLA that mature within the LCR horizon which are required to be unwound and therefore reclassifies them to the appropriate adjustment rule. Asset exchange transactions and collateralized derivatives transaction, where the collateral received are Level 2B securitization backed by residential and auto loans or Level 2B securitizations backed by commercial and personal loans, or Level 2B corporate bonds, or Level 2B shares, or Level 2B non-interest bearing assets, or Level 2B covered bonds, and the collateral posted is a Level 1 asset, or Level 2A asset, or Level 2B asset, or other assets, or Level 2B securitizations backed by residential and auto loans, or Level 2B securitizations backed by commercial and personal loans, or Level 2B corporate bonds, or Level 2B shares, or Level 2B non-interest bearing assets, or Level 2B covered bonds, the type of adjustment to the stock of HQLA due to such an unwind is updated as the deduction of the market value of collateral received.	The identification of secured lending, collateralized derivatives and asset exchange transactions required to be unwound, and the amount to be deducted from the stock of Level 2B assets due to such an unwind, is configured as part of this rule.	Annex I (3) (d)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
122	LRM - EBA - Covered Bond - Underlying Exposure HQLA Eligibility Criteria A	This rule identifies whether the underlying exposures of the covered bonds meet eligibility criterion A, where criterion A refers to the underlying assets which are debt securities, issued or guaranteed by EEA domiciled PSEs, regional governments, or local authorities.	The classification of underlying exposures of the covered bonds, where the underlying assets are debt securities, issued or guaranteed by central governments, central banks, PSEs, regional governments, or local authorities domiciled in EEA, as Criteria A, is configured as part of this rule.	Article 12 Paragraph 1 (e)
123	LRM - EBA - Covered Bond - Underlying Exposure HQLA Eligibility Criteria B1 C E F	This rule identifies whether the underlying exposures of the covered bonds meet eligibility criterion B1, C, E, and F, where the criterion - B1 refers to the underlying assets which are debt securities, issued or guaranteed by non-EEA domiciled central governments, central banks, MDBs, or international organizations. - C refers to underlying assets which are residential mortgage-backed securities having LTV less than or equal to 80%. - E refers to underlying assets which are commercial immovable properties having LTV less than or equal to 60%. - F refers to underlying assets which are maritime loans having LTV less than or equal to 60%.	The classification of underlying exposures of the covered bonds where underlying assets are debt securities, issued or guaranteed by credit quality step 1 rated central governments, central banks, MDBs, or international organizations, not domiciled in EEA, as Criteria B1 is configured as part of this rule. Additionally, the classification of residential property received as underlying exposures having loan-to-value ratio less than or equal to 80%, as Criteria C, the classification of commercial immovable property received as underlying exposures having loan-to-value ratio less than or equal to 60%, as Criteria E, and the classification of maritime loans received as underlying exposures having loan-to-value ratio less than or equal to 60%, as Criteria F, is configured.	Article 11 Paragraph 1 (d), Article 12 Paragraph 1 (e)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
124	LRM - EBA - Covered Bond - Underlying Exposure HQLA Eligibility Criteria B2	This rule identifies whether the underlying exposures of the covered bonds meet eligibility criterion B2, where criterion B2 refers to the underlying assets which are debt securities, issued or guaranteed by non EEA domiciled PSEs, regional governments, or local authorities.	The classification of underlying exposures of the covered bonds where underlying assets are debt securities assigned a rating of less than credit quality step 2, issued or guaranteed by credit quality step 1 rated PSEs, regional governments, or local authorities not domiciled in EEA, as Criteria B2 is configured as part of this rule. The underlying exposures fulfilling criteria B2 must be less than or equal to 20% of the total outstanding issue size of the covered bond.	Article 11 Paragraph 1 (d),
125	LRM - EBA - Covered Bond - Underlying Exposure HQLA Eligibility Criteria D	This rule identifies whether the underlying exposures of the covered bonds meet eligibility criterion D, where criterion D refers to the underlying assets which are residential loans, guaranteed by eligible credit protection.	The classification of underlying exposures of the covered bonds, where the underlying exposures are residential mortgages having loan-to-value ratio <= 80%, and which are fully guaranteed by eligible credit protection, as Criteria D is configured as part of this rule.	Article 12 Paragraph 1 (e)
126	Determining Restricted Non-Convertible Currency HQLA to Asset Level 2A	This rule calculates Level 2A asset for Non-convertible currency restriction.	This set of Rules check transferability restrictions when Assets are held in a third country and non-convertible currencies. Assets held in a non-convertible currency shall be deemed readily accessible only insofar as the credit institution uses those assets to meet liquidity outflows in that currency.	Article 8 Paragraph (2)
127	Determining Restricted Non-Convertible Currency HQLA to Asset Level 2B	This rule calculates Level 2B Asset for Non-convertible currency restriction.		
128	Determining Restricted Third Party HQLA to Asset Level 2B	This rule calculates Level 2B Asset for Third-Party Restriction.		
129	Determining Restricted Third Party HQLA to Asset Level 2A	This rule calculates Level 2A Asset for Third-Party Restriction.		

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
130	Determining Restricted Third Party HQLA to Asset Level 1	This rule calculates Level 1 Asset for Third-Party Restriction.		
131	Determining Restricted Non-Convertible Currency HQLA to Asset Level 1	This rule calculates Level 1 Asset for Non-Convertible Currency Restriction.		
132	Determining Restricted Currency Mismatch HQLA to Asset Level 2A	This rule Determines Restricted Currency Mismatch HQLA to Asset Level 2A.	These Rules identify and treat the currency mismatch restriction limits when the bank is holding assets not denominated in the currency where the liquidity risk originates.	Article 8 Paragraph (6)
133	Determining Restricted Currency Mismatch HQLA to Asset Level 1	This rule Determines Restricted Currency Mismatch HQLA to Asset Level 1.		
134	Determining Restricted Currency Mismatch HQLA to Asset Level 2B	This rule Determines Restricted Currency Mismatch HQLA to Asset Level 2B.		
135	LRM-Determining Inflow Capped to Outflow for Specialised Institution	This rule identifies the specialized institutions which have been exempted from the cap on inflows.	These Rules address the treatment of inflows for specialized institutions that are not subject to the 75% cap on Inflows.	Article 33 Paragraph (3)
136	LRM-Determining Inflow Capped to Outflow for other than Specialised Institution	This rule identifies the non-specialized institutions which have been exempted from the cap on inflows.		
137	Determining ALA target LCR and buffer over target LCR juris HQLA srtfall and min maintainance of L1A	This rule captures the target LCR coverage percentage of the net cash outflows that a bank requires to hold to meet their liquidity coverage requirement and the buffer allowed to be held over the target LCR.	This set of Rules address the Alternative liquidity approaches requirement as outlined in the EBA Delegated Act. These Rules enable a bank to bridge its HQLA shortfall with alternative approaches such as the use of Domestic Central bank committed facility, additional use of	Article 19
138	Calculation of Assets Restricted Due to Currency Operational Restrictions	This rule captures the maximum permissible HQLA amount and available excess HQLA.		

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
139	LRM - Determining ALA Target LCR, Buffer, Jurisdictional HQLA Shortfall and Min Maintenance of L1A	This rule is used to provide the Target LCR, Buffer, Jurisdictional HQLA Shortfall, and Minimum Maintenance of L1A.	Level 2A assets, and use of foreign currency HQLA.	
140	LRM - Calculation of Assets Restricted Due to Currency Operational Restrictions	This rule is used to compute maximum permissible HQLA and available excess HQLA amounts.		
141	LRM - ALA option sequencing and Maximum usage of individual option	This rule is used to provide the order of execution and maximum usage for the option central bank committed facility and additional use of level 2a assets with a higher haircut.		
142	LRM - Determining ALA Haircut for the option Central Bank Committed fclty,Addtnl Use of L2A Assets	This rule is used to provide the haircut for the options central bank committed facility and additional use of Level 2A assets with a higher haircut.		
143	LRM - Determining Haircut,Threshold,Major and Pegged Currency indicator for the ALA option ALTCCY	This rule is used to provide the order of execution, Haircut, Threshold, major, and pegged currency indicator for the option foreign currency HQLA to cover domestic currency liquidity requirements.		
144	LRM- EBA Eligible HQLA for Covered Position	This rule is used to determine if the covering account is eligible for HQLA.	This Rule identifies whether an account covering a short position is eligible HQLA or not. This is needed for determining additional outflow Run-off as per Article 30.	Article 30 Paragraph (5)
145	EBA LCR - Blocked Amount compution	This rule is for computation of Blocked Amount.	This Rule computes the encumbered deposit amount, after taking into account any blocked amounts. Amounts can be blocked in deposits due to tax, statutory and regulatory reasons.	Article 7 Paragraph (2)

Sl. No.	Rule Name	Rule Description	Regulatory Requirement Addressed	COMMISSION DELEGATED REGULATION (EU) 2015/61
146	LRM - EBA - CIU - Sub Asset Level Assignment	This rule classifies all the underlying assets of the Collective Investment Undertakings into different sub-asset levels.	This set of rules separately identify CIU assets that share the same asset level as other comparable assets but receive different haircuts.	Article 15 (EU 2015/16)
147	LRM - EBA - CIU Mitigants - Sub Asset Level Assignment	This rule classifies all the underlying assets of the Collective Investment Undertakings received as Mitigants into different sub-asset levels.	This set of rules separately identify CIU assets that share the same asset level as other comparable assets but receive different haircuts.	Article 15 (EU 2015/16)
148	LRM - EBA Eligible Counterparty Flag Update	This rule calculates Eligible Counterparty Flag as per the EBA Delegated Act for one of the following: • Central government • Public sector entity • Multilateral development banks The certain regional or local authority of the home state of the credit institution or of the third country in which the credit institution is incorporated.	This rule identifies 'Eligible Counterparties' as defined in the July 2018 EBA DA LCR Regulation. Eligible counterparties receive a different outflow factor, which is capped at 25% as compared to other counterparties.	Article 28 ((EU) 2018/1620)

3 Net Stable Funding Ratio Calculation as Per Capital Requirements Regulation

The Net Stable Funding Ratio (NSFR) is defined as the amount of available stable funding relative to the amount of required stable funding. This ratio is equal to at least 100% on an ongoing basis. Available stable funding is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. The amount of such stable funding required (Required stable funding) of a specific institution is a function of the liquidity characteristics and residual maturities of the various assets held by that institution as well as those of its off-balance sheet (OBS) exposures.

The NSFR aims to ensure that a firm has an acceptable amount of stable funding to support its assets and activities over the medium or long term (over one year).

$$\text{NSFR} = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} >= 100\%$$

Topics:

- Asset Reclassification Rules
- Business Assumptions
- Interdependent Assets and Liabilities

3.1 Asset Reclassification Rules

Asset reclassification for EHQLA and HQLA is done as part of the LCR process and is applicable to NSFR as well. Also, the assets that are not classified under EHQLA or HQLA can be categorized as Other Liquid Asset or Other Non-Liquid Asset based on the following criteria:

1. EBA NSFR Domestic Currency Sovereign Bonds

   Sovereign bonds issued in domestic currency rated below ECAI 2 OR of minimum issue size less then EUR 100 million (or the local currency equivalent) is reclassified as Other Liquid Assets. For this purpose, the issuer type is considered as either Sovereign (that is, Central Government) or Central Banks.

2. Classified as Other Liquid Assets when conditions mentioned in the following points are met else as Other Non-Liquid Assets.

3. BA NSFR EEA Currencies Bonds Issued by Local Government Institutions.

   Bonds issued by local government institutions in EEA currencies, rated below ECAI 2 OR of minimum issue size less than EUR 250 million (or the local currency equivalent) and a maximum time to maturity of 10 years is reclassified as Other Liquid Assets.

4. EBA NSFR ECAI 1 Rated Covered Bonds Issued by Credit Institutions

   Covered bonds issued by Credit Institutions (including Banks) rated ECAI 1 (that is, of highest credit quality) having minimum issue size less than EUR 250 million.

5. EBA NSFR RMBS Issued by Credit Institutions

RMBS issued by Credit Institutions (including Banks) rated ECAI 1 having minimum issue size less than of EUR 100 million (or the local currency equivalent).

6. EBA NSFR Common Equity Shares or Gold

   Common equity shares or Gold funds not classified as HQLA when not central bank eligible but are tradable.

7. EBA NSFR Gold Funds

   Gold funds not classified as HQLA when not central bank eligible but are tradable.

8. EBA NSFR Assets Backed Securities

   Asset-Backed Securities (including RMBS) not classified as HQLA when they are tradable and central bank eligible. Also, must be of highest credit quality (that is rated ECAI 1).

9. EBA NSFR Credit Claims

   Credit Claims when non-tradable and being central bank eligible.

3.2 Business Assumptions

New business assumptions related to RSF are created to estimate the NSFR under a stressed condition.

All these new business assumptions have the following common assumption properties:

1. Assumption Category: Value Change
2. Assumption Sub Category: Required Stable Funding Factor
3. Based On: Sub Account Balance
4. Assumption Unit: Percentage

The business assumptions are as follows:

- Assumption Name: EBA NSFR RSF Assumption 1
- Assumption Description: Assets assigned a 0% RSF Factor
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 24: Assumption Parameter Selection - EBA NSFR RSF Assumption 1

Assumption Parameter Selection				
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Issuer Type	LRM - Underlying Asset Level	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Cash Central Bank Reserves	NA	EHQLA	NA	0%
Debt Security	Central Bank	EHQLA	Less Than 6 Months	0%

- Assumption Name: EBA NSFR RSF Assumption 2A
- Assumption Description: Assets assigned a 5% RSF Factor – Securities issued by Sovereigns, Central Banks and MDBs
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 25: Assumption Definition - EBA NSFR RSF Assumption 2A

Assumption Definition				
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Issuer Type	LRM - Underlying Asset Level	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Debt Security	Sovereigns, MDBs and Supranational Institutions	EHQLA	NA	5%
Debt Security	Central Bank	EHQLA	Greater Than or Equal to 6 Months	5%

- Assumption Name: EBA NSFR RSF Assumption 2B
- Assumption Description: Assets assigned a 5% RSF Factor – Other EHQLA Assets
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 26: Assumption Parameter Selection - EBA NSFR RSF Assumption 2B

Assumption Parameter Selection		
LRM - Underlying Asset Level	LRM – NSFR Factor Status	Required Stable Funding Factor
EHQLA	Unassigned	5%

- Assumption Name: EBA NSFR RSF Assumption 3
- Assumption Description: Assets assigned a 10% RSF Factor
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 27: Assumption Parameter Selection - EBA NSFR RSF Assumption 3

Assumption Parameter Selection					
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Party Type	LRM - Underlying Asset Level	LRM - Cash Flow Time Bucket	LRM - Re-Hypothecation Flag	Required Stable Funding Factor

Assumption Parameter Selection					
Loans	Banks	EHQLA	Less Than 6 Months	Yes	10%
Loans	Banks	EHQLA	Less Than 6 Months	No	15%

- Assumption Name: EBA NSFR RSF Assumption 4
- Assumption Description: Assets assigned a 15% RSF Factor
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 28: Assumption Parameter Selection - EBA NSFR RSF Assumption 4

Assumption Parameter Selection				
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Issuer Type	LRM - Underlying Asset Level	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Debt Security Covered Bond	Sovereign Central Banks PSEs MDBs and Supranational Institutions Corporate	HQLA	NA	15%
Loans	Banks	HQLA, Other Liquid Assets	Less Than 6 Months	15%

*Loans to Banks classified as EHQLA and qualifying for 15% RSF factor are included as part of business assumption 3.

- Assumption Name: EBA NSFR RSF Assumption 5A
- Assumption Description: Assets assigned a 50% RSF Factor – Loans to Financial Institutions and Central Banks
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 29: Assumption Parameter Selection - EBA NSFR RSF Assumption 5A

Assumption Parameter Selection				
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Issuer Type	LRM - Underlying Asset Level	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Loans	Banks Central Banks	HQLA Other Liquid Assets	Between 6 to 12 Months	50%

- Assumption Name: EBA NSFR RSF Assumption 5B
- Assumption Description: Assets assigned a 50% RSF Factor – Encumbered HQLA
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 30: Assumption Parameter Selection - EBA NSFR RSF Assumption 5B

Assumption Parameter Selection			
LRM - LRM Standard Product Type (LEVEL 1)	LRM – Encumbrance Period Bands	LRM - Underlying Asset Level	Required Stable Funding Factor
LRM Standard Product Type	Between 6 to 12 Months	HQLA	50%

- Assumption Name: EBA NSFR RSF Assumption 5C
- Assumption Description: Assets assigned a 50% RSF Factor – RMBS and Corporate Debt Securities
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 31: Assumption Parameter Selection - EBA NSFR RSF Assumption 5C

Assumption Parameter Selection				
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Issuer Type	LRM - Underlying Asset Level	LRM - Basel Credit Rating	Required Stable Funding Factor
RMBS	NA	Other Liquid Assets	ECAI 1	50%
Debt Security	Corporate	Other Liquid Assets	ECAI 2 ECAI 3	50%

- Assumption Name: EBA NSFR RSF Assumption 5D
- Assumption Description: Assets assigned a 50% RSF Factor – Exchange Traded Equities

- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 32: Assumption Parameter Selection - EBA NSFR RSF Assumption 5D

Assumption Parameter Selection				
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Issuer Type	LRM - Underlying Asset Level	LRM – Exchange Traded	Required Stable Funding Factor
Equity	Corporate	Other Liquid Assets	Yes	50%

- Assumption Name: EBA NSFR RSF Assumption 5E
- Assumption Description: Assets assigned a 50% RSF Factor – Operational Deposits
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 33: Assumption Parameter Selection - EBA NSFR RSF Assumption 5E

Assumption Parameter Selection		
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Party Type	Required Stable Funding Factor
Operational Deposits Placed	Banks	50%

- Assumption Name: EBA NSFR RSF Assumption 5F
- Assumption Description: Assets assigned a 50% RSF Factor – Non-HQLA Loans

Table 34: Assumption Parameter Selection - EBA NSFR RSF Assumption 5E

Assumption Parameter Selection				
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Issuer Type	LRM - Underlying Asset Level	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Loans	• Corporate • Retail • SME • Sovereigns • PSEs	Other Liquid Assets	Less Than 1 Year	50%

- Assumption Name: EBA NSFR RSF Assumption 6A
- Assumption Description: Assets assigned a 65% RSF Factor – Residential Mortgages
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 35: Assumption Parameter Selection - EBA NSFR RSF Assumption 6A

Assumption Parameter Selection			
LRM - LRM Standard Product Type (LEVEL 1)	LRM – RML Qualifying Status	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Residential Mortgage	Yes	Greater than or Equal to 1 Year	65%

- Assumption Name: EBA NSFR RSF Assumption 6B
- Assumption Description: Assets assigned a 65% RSF Factor – Other unencumbered loans
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 36: Assumption Parameter Selection - EBA NSFR RSF Assumption 6B

Assumption Parameter Selection					
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Party Type	LRM - Underlying Asset Level	LRM - Basel Credit Rating	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Loans	PSEs Corporate	Other Liquid Assets	ECAI 1	Greater than or Equal to 1 Year	65%
Loans	Sovereign Central Bank	Other Liquid Assets	ECAI 1 ECAI 2	Greater than or Equal to 1 Year	65%

- Assumption Name: EBA NSFR RSF Assumption 7A
- Assumption Description: Assets assigned an 85% RSF Factor - Loans
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 37: Assumption Parameter Selection - EBA NSFR RSF Assumption 7A

Assumption Parameter Selection					
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Party Type	LRM - Underlying Asset Level	LRM - Basel Credit Rating	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Loans	PSEs Corporate	Other Liquid Assets Other Non-Liquid Assets	Below ECAI 1	Greater than or Equal to 1 Year	85%
Loans	Sovereign Central Bank	Other Liquid Assets	Below ECAI 2	Greater than or Equal to 1 Year	85%
Loans	Retail	NA	NA	Greater than or Equal to 1 Year	85%

- Assumption Name: EBA NSFR RSF Assumption 7B
- Assumption Description: Assets assigned an 85% RSF Factor – Gold and other precious metals
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 38: Assumption Parameter Selection - EBA NSFR RSF Assumption 7B

Assumption Parameter Selection	
LRM - LRM Standard Product Type	Required Stable Funding Factor
Gold Silver Precious Metals	85%

- Assumption Name: EBA NSFR RSF Assumption 7C
- Assumption Description: Assets assigned an 85% RSF Factor – Debt Securities
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 39: Assumption Parameter Selection - EBA NSFR RSF Assumption 7C

Assumption Parameter Selection					
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Fully Performing Assets	LRM - Underlying Asset Level	LRM – Exchange Traded	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Debt Security	Yes	Other Liquid Assets Other Non-Liquid Assets	NA	Greater than or Equal to 1 Year	85%

- Assumption Name: EBA NSFR RSF Assumption 7D
- Assumption Description: Assets assigned an 85% RSF Factor – Exchange Traded Equities
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 40: Assumption Parameter Selection - EBA NSFR RSF Assumption 7D

Assumption Parameter Selection					
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Party Type	LRM - Underlying Asset Level	LRM – Exchange Traded	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Equity	Banks	Other Liquid Assets Other Non-Liquid Assets	Yes	Greater than or Equal to 1 Year	85%

- Assumption Name: EBA NSFR RSF Assumption 8A
- Assumption Description: Assets assigned a 100% RSF Factor – Encumbered Assets
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 41: Assumption Parameter Selection - EBA NSFR RSF Assumption 8A

Assumption Parameter Selection		
LRM - LRM Standard Product Type (LEVEL 1)	LRM – Encumbrance Period Bands	Required Stable Funding Factor
LRM Standard Product Type	Greater than or Equal to 1 Year	100%

- Assumption Name: EBA NSFR RSF Assumption 8B

- Assumption Description: Assets assigned a 100% RSF Factor – Loans to Financial Institutions
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 42: Assumption Parameter Selection - EBA NSFR RSF Assumption 8B

Assumption Parameter Selection			
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Standard Party Type	LRM - Cash Flow Time Bucket	Required Stable Funding Factor
Loans	Banks	More than 1 Year	100%

- Assumption Name: EBA NSFR RSF Assumption 8C
- Assumption Description: Assets assigned a 100% RSF Factor – Non-Performing Loans
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 43: Assumption Parameter Selection - EBA NSFR RSF Assumption 8B

Assumption Parameter Selection		
LRM - LRM Standard Product Type (LEVEL 1)	LRM - Fully Performing Assets	Required Stable Funding Factor
Loans	No	100%

- Assumption Name: EBA NSFR RSF Assumption 8D
- Assumption Description: Assets assigned a 100% RSF Factor – Default assignment for all other assets
- Filter On: Amount Type = EOP Balance (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 44: Assumption Parameter Selection - EBA NSFR RSF Assumption 8D

Assumption Parameter Selection	
LRM – NSFR Factor Status	Required Stable Funding Factor
Unassigned	100%

- Assumption Name: EBA NSFR RSF Assumption 9A
- Assumption Description: RSF Factor Assignment for Off-Balance Sheet Assets – Credit Facilities
- Filter On: Amount Type = Undrawn Amount (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 45: Assumption Parameter Selection - EBA NSFR RSF Assumption 9A

Assumption Parameter Selection		
LRM - LRM Standard Product Type (LEVEL 1)	LRM- Unconditionally Cancellable Limit Indicator	Required Stable Funding Factor
Line of Credit	No	5%
Line of Credit	Yes	0%

- Assumption Name: EBA NSFR RSF Assumption 9B
- Assumption Description: RSF Factor Assignment for Off-Balance Sheet Assets – Trade Finance
- Filter On: Amount Type = Undrawn Amount (this can be added as a filter or using another source hierarchy on Amount Type dimension)

Table 46: Assumption Parameter Selection - EBA NSFR RSF Assumption 9B

Assumption Parameter Selection	
LRM - LRM Standard Product Type (LEVEL 1)	Required Stable Funding Factor
Trade Finance	5%

After all the RSF factors based on business assumptions are run, the NSFR is calculated based on the following formula:

$$\text{NSFR} = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}}$$

3.3 Interdependent Assets and Liabilities

As per BIS and EBA guidelines, certain assets and liabilities can be paired together and called interdependent, if they satisfy the following criteria:

1. The individual interdependent asset and liability items are identifiable.
2. The maturity and the principal amount of the liability and its interdependent asset must be the same.
3. The bank is acting solely as a pass-through unit to channel the funding received (the interdependent liability) into the corresponding interdependent asset.
4. The counterparties for each pair of interdependent liabilities and assets must not be the same.

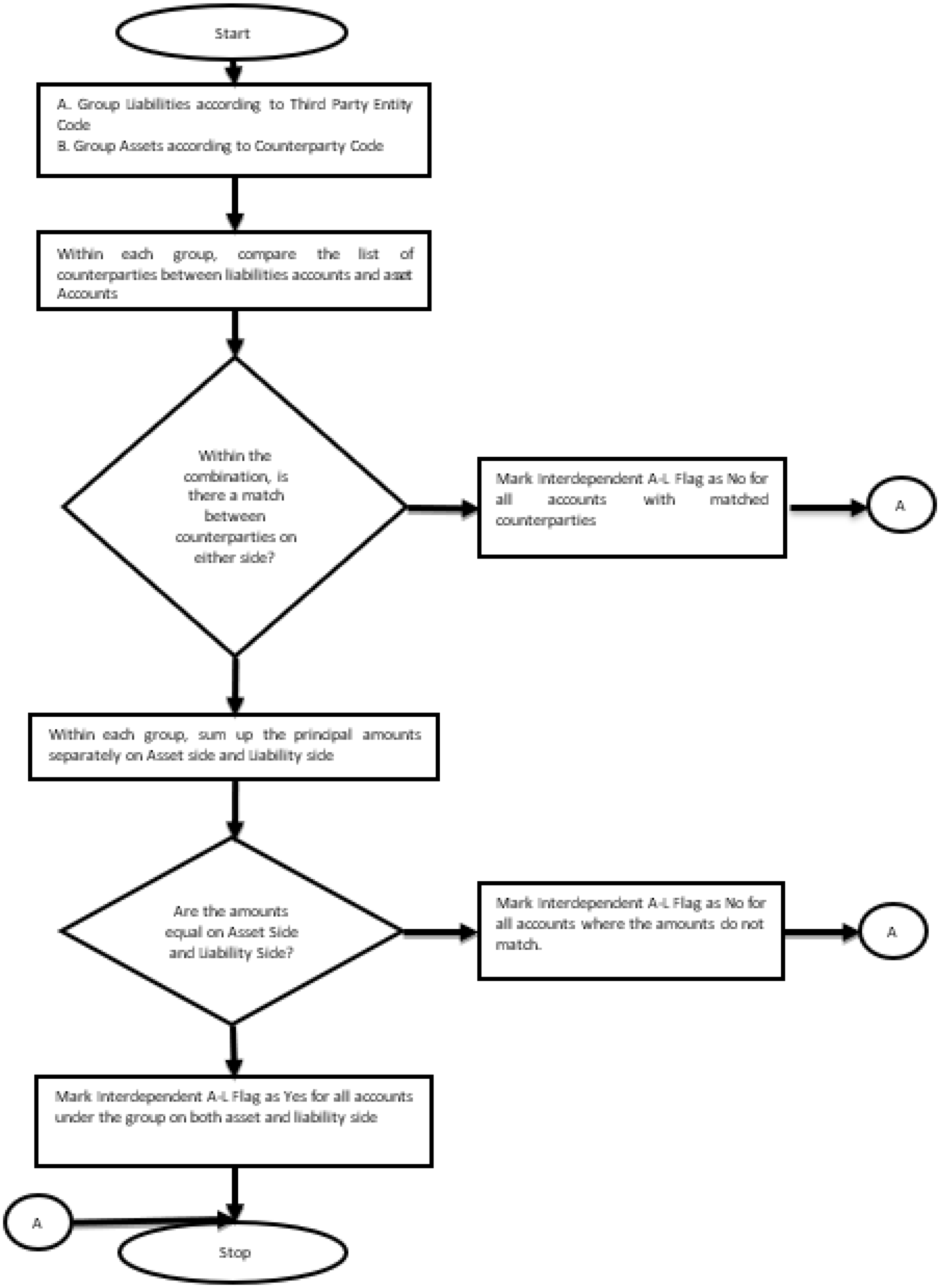
Within the EBA jurisdiction, the centralized regulatory savings fulfill the criteria above and can be recognized as interdependent assets and liabilities. In this system, some retail/other deposits are placed by the bank with a central/public authority.

The corresponding centralized amount of deposits is managed by the public authority in a dedicated, ad-hoc fund. The public institution is bound by the national law to reimburse credit institutions during a decrease in the amount of regulated savings due to observed withdrawals (less than 10 days between the withdrawal and the reimbursement by the public institution), thus incurring liquidity risk on behalf of the credit institution.

LRS considers loans on the asset side and deposits on the liabilities side in this feature. A result flag called 'Interdependent Asset-Liability Flag' is updated for each such pair which has a possibility of being linked. When Interdependent Asset-Liability Flag is set to Yes, the asset receives a 0% RSF and the liability receives a 0% ASF. In effect, given that the asset and liability are matched, they do not pose a liquidity risk and hence are excluded in the NSFR calculation. When Interdependent Asset-Liability Flag is No, the asset or liability receives appropriate RSF or ASF factors depending on other attributes.

Here is the process flow for the pair identification:

Figure 7: Process Flow for the Pair Identification



3.4 Preconfigured Regulatory LCR Scenario

This section explains the business assumptions which support inflow and outflow percentage/rates as per:

- Corrigendum to Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.
- DIRECTIVE 2013/36/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.
- EBA FINAL draft Implementing Technical Standards on supervisory reporting under Regulation (EU) No 575/2013.
- Report on appropriate uniform definitions of extremely high-quality liquid assets (extremely HQLA) and high-quality liquid assets (HQLA) and operational requirements for liquid assets under Article 509(3) and (5) CRR.
- Implementing Technical Standards amending Commission Implementing Regulation (EU) No 680/2014 (ITS on supervisory reporting) concerning the Liquidity Coverage Ratio (LCR).

> **NOTE** For detailed Processes and Tasks, see the Run Chart.

Topics:

- Regulation Addressed Through Business Assumptions
- Required Stable Funding Factor
- Derivatives

3.4.1 Regulation Addressed Through Business Assumptions

The preconfigured NSFR assumptions are listed in the following table.

Table 47: Preconfigured NSFR Assumptions

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
1	EBA-Capital items DTL and minority interest	Gross tier 1, additional tier 1, tier 2 capital, Deferred tax liabilities, and minority interest.	This assumption specifies Tier 1 and Tier 2 capital, before the application of capital deductions and excluding the proportion of Tier 2 instruments with residual maturity of less than one year. This also includes DTL and Minority interest.	BIS: Paragraphs 21 a and b EBA: Section 2.2.5
2	EBA-Stable retail deposits	Stable and highly stable deposits as defined in the LCR from retail customers with a remaining maturity of less than 1 year.	This assumption specifies "Stable" (as defined in the LCR) demand and/or term deposits from retail and small business customers.	BIS: Paragraphs 22 EBA: Section 2.2.5
3	EBA-Stable retail deposits CF	Stable and highly stable deposits as defined in the LCR from retail customers with a remaining maturity of more than 1 year and cash flow maturity of less than 1 year.	This assumption specifies "Stable" (as defined in the LCR) demand and/or term deposits from retail and small business customers.	BIS: Paragraphs 22 EBA: Section 2.2.5
4	EBA-Less stable retail deposits	Less stable deposits as defined in the LCR from retail customers with a remaining maturity of less than 1 year.	This assumption specifies "Less Stable" (as defined in the LCR) demand and/or term deposits from retail and small business customers.	BIS: Paragraphs 23 EBA: Section 2.2.5
5	EBA-Less stable retail deposits CF	Less stable deposits as defined in the LCR from retail customers with a remaining maturity of more than 1 year and cash flow maturity of less than 1 year.	This assumption specifies "Less Stable" (as defined in the LCR) demand and/or term deposits from retail and small business customers.	BIS: Paragraphs 23 EBA: Section 2.2.5

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
6	EBA-Operational deposits from non financial corporates	Unsecured operational deposits from non-financial corporates with deposit maturity less than 1 year.	The ASF factor to be applied on unsecured funding from non-financial corporates of which is an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 a and b EBA: Section 2.2.5
7	EBA-Operational deposits from non financial corporates CF	Unsecured operational deposits from non-financial corporates (NFC) with deposit maturity more than 1 year and cash flow maturity less than 1 year.	This assumption specifies unsecured funding from non-financial corporates of which is an operational deposit (as defined in the LCR.	BIS: Paragraphs 24 a and b EBA: Section 2.2.5
8	EBA-Non operational deposits from non financial corporates	Unsecured non-operational deposits from non-financial corporates with deposit maturity less than 1 year. This includes a) entire portion of non-operational deposits. b) non-operational part of operational deposits.	This assumption specifies unsecured funding from non-financial corporates of which is a non-operational deposit (as defined in the LCR).	BIS: Paragraphs 24 a and b EBA: Section 2.2.5
9	EBA-Non operational deposits - non financial corporates CF)	Unsecured non-operational funding from non-financial corporates (NFC) with deposit maturity more than 1 year and cash flow maturity less than 1 year.	This assumption specifies unsecured funding from the non-financial corporate of which is a non-operational deposit (as defined in the LCR).	BIS: Paragraphs 24 a and b EBA: Section 2.2.5
10	EBA-Other funding from non financial corporates.	Unsecured funds that are not deposited from non-financial corporates with account maturity less than 1 year.	This assumption specifies unsecured funding from the non-financial corporate of which are not deposits.	BIS: Paragraphs 24 a and b EBA: Section 2.2.5
11	EBA-Other funding from non financial corporates CF	Unsecured funds that are not deposited from corporates (financial and non-financial) with account maturity more than 1 year, but cash flow maturity less than 1 year.	This assumption specifies unsecured funding from non-financial corporates of which are not deposits.	BIS: Paragraphs 24 a and b EBA: Section 2.2.5

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
12	EBA-Operational deposits from PSE and others	Unsecured operational deposit (UOD) funding from Central banks, sovereigns, Public sector entities (PSE), Multilateral development banks (MDB), and National development banks (NDB) with maturity less than 1 year.	This assumption specifies the unsecured funding from central banks and other parties of which is an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
13	EBA-Operational deposits from PSE and others CF	Unsecured operational deposit funding from central bank (CB), Public sector enterprises (PSE), National development bank (NDB), Multilateral development bank (MDB) and sovereigns with a deposit maturity of more than 1 year, and cash flow maturity of less than 1 year.	This assumption specifies the unsecured funding from central banks and other parties of which is an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
14	EBA-Non operational deposits from PSE and others	Unsecured non-operational (UnOD) deposit funding from Central Banks, sovereigns, Public sector entities (PSE), Multilateral development banks (MDB), and National development banks (NDB) with maturity less than 1 year.	This assumption specifies unsecured funding from central banks and other parties of which is a non-operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
15	EBA-Non operational deposits from PSE and others CF	Unsecured non-operational deposit funding from central bank (CB), Public sector enterprises (PSE), National development bank (NDB), Multilateral development bank (MDB) and sovereigns with a deposit maturity of more than 1 year, and cash flow maturity of less than 1 year.	This assumption specifies unsecured funding from central banks and other parties of which is a non-operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
16	EBA-Unsecured other funding from PSE and others	Unsecured other funding (UnOth) from Central banks, sovereigns, Public sector entities (PSE), Multilateral development banks (MDB), and National development banks (NDB) with maturity less than 1 year.	This assumption specifies unsecured funding from central banks and other parties of which are not deposits.	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
17	EBA-Unsecured other funding from PSE and others CF	Unsecured other funding (non-deposits) from central bank (CB), Public sector enterprises (PSE), National development bank (NDB), Multilateral development bank (MDB) and sovereigns with a deposit maturity of more than 1 year, and cash flow maturity of less than 1 year.	This assumption specifies unsecured funding from central banks and other parties of which are not deposits.	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
18	EBA-Operational deposits from financial institutions	Unsecured operational deposit funding from financial corporates with a remaining maturity of less than 1 year.	This assumption specifies unsecured funding from financial corporates and financial institutions of which is an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
19	EBA-Operational deposits from other entities	Unsecured operational deposit funding from all other legal entities(LE) with a remaining maturity of less than 1 year.	This assumption specifies unsecured funding from all other entities of which is an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
20	EBA-Operational deposits from financial instituitions CF	Unsecured operational deposit funding from financial corporates with a remaining account maturity of more than 1 year, but cash flows maturing less than 1 year.	This assumption specifies unsecured funding from financial corporates and financial institutions of which is an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
21	EBA-Operational deposits from other entities CF	Unsecured operational deposit funding from all other legal entities(LE) with a remaining maturity more than 1 year, but cash flows maturing in less than 1 year.	This assumption specifies unsecured funding from all other entities of which is an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
22	EBA-Non operational deposits from financial institutions	Unsecured non-operational deposit funding from financial corporates with a remaining maturity of less than 1 year.	This assumption specifies unsecured funding from financial corporates and financial institutions of which is not an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
23	EBA-Non operational deposits from other entities	Unsecured non-operational deposit funding from all other legal entities(LE) with a remaining maturity of less than 1 year.	This assumption specifies unsecured funding from all other entities of which is not an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
24	EBA-Non operational deposits-financial instituitions CF	Unsecured non-operational deposit funding from financial corporates with a remaining account maturity of more than 1 year, but cash flows maturing less than 1 year.	This assumption specifies unsecured funding from financial corporates and financial institutions of which is not an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
25	EBA-Non operational deposits from other entities CF	Unsecured non-operational deposit funding from all other legal entities(LE) with a remaining maturity more than 1 year, but cash flows maturing in less than 1 year.	This assumption specifies unsecured funding from all other entities of which is not an operational deposit (as defined in the LCR).	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
26	EBA-Unsecured funding from financial instituitions	Unsecured other funding from financial corporates with a remaining maturity of less than 1 year.	This assumption specifies unsecured funding from financial corporates and financial institutions which are other than deposits.	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
27	EBA-Unsecured funding from other entities	Unsecured other funding from other legal entities (LE) with a remaining maturity of less than 1 year.	This assumption specifies unsecured funding from all other legal entities which are other than deposits.	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
28	EBA-Unsecured funding from financial instituitions CF	Unsecured funds that are not deposits from corporates (financial and non-financial) with account maturity more than 1 year, but cash flow maturity less than 1 year.	This assumption specifies unsecured funding from all other legal entities which are other than deposits.	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
29	EBA-Unsecured funding from other entities CF	Unsecured other funding from all other legal entities(LE) with a remaining maturity more than 1 year, but cash flows maturing in less than 1 year.	This assumption specifies unsecured funding from all other legal entities which are other than deposits.	BIS: Paragraphs 24 (d) and 25 (a) EBA: Section 9.3.1
30	EBA-Secured Funding from PSE and others	Secured funding from sovereigns, Public sector enterprises (PSE), National development banks (NDB), Multilateral development banks (MDB) with a residual maturity of less than a year.	This assumption specifies the factor for secured deposits from PSE, MDB, NDB, sovereigns, central banks, and other parties.	BIS: Paragraphs 21 c, 24 and 25 (a) EBA: Section 9.3.1
31	EBA-Secured Funding from other parties	Secured funding with a residual maturity of less than a year.	This assumption specifies the factor for secured deposits from parties other than PSE, MDB, NDB, Retail, SME, and Corporates.	BIS: Paragraphs 21 c, 24 and 25 (a) EBA: Section 9.3.1
32	EBA-Secured Funding from Corporates	Secured deposits and other liabilities from financial and non-financial corporates with maturity less than a year.	This assumption specifies the factor for secured deposits from financial and non-financial corporates.	BIS: Paragraphs 21 c, 24 and 25 (a) EBA: Section 9.3.1

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
33	EBA-Secured Funding from PSE and others CF	Secured funding from sovereigns, Public sector enterprises (PSE), National development banks (NDB) and Multilateral development banks (MDB) where residual maturity is greater than a year and cash flows falling within a year.	This assumption specifies the factor for secured deposits from PSE, MDB, NDB, sovereigns, central banks, and other parties.	BIS: Paragraphs 21 c, 24 and 25 (a) EBA: Section 9.3.1
34	EBA-Secured Funding from other parties CF	Secured funding where residual maturity is greater than a year and cash flows are falling within a year.	This assumption specifies the factor for secured deposits from parties other than PSE, MDB, NDB, Retail, SME, and Corporates	BIS: Paragraphs 21 c, 24 and 25 (a) EBA: Section 9.3.1
35	EBA-Secured deposits from wholesale SME	Secured deposits from Small and medium enterprises (SME) are treated as wholesale.	This assumption specifies the factor for secured deposits from SME treated as Wholesale.	BIS: Paragraphs 21 c, 24 and 25 (a) EBA: Section 9.3.1
36	EBA-Secured Funding from Corporates CF	Secured deposits and other liabilities from financial and non-financial corporates with residual maturity more than a year and cash flows falling within one year.	This assumption specifies the factor for secured deposits from financial and non-financial corporates.	BIS: Paragraphs 21 c, 24 and 25 (a) EBA: Section 9.3.1
37	EBA-Trade date payables	Trade date payables arising from purchases of foreign currencies, financial instruments, and commodities that are expected to settle or have failed but are expected to settle within the standard settlement cycle.	This assumption specifies the factor for trade date payables.	BIS: Paragraphs 25 (d) EBA: Section 9.3.1
38	EBA-Liabilities with open maturity	Secured deposits and all other borrowings and which do not have a stated maturity.	This assumption specifies factor for liabilities without a stated maturity.	BIS: Paragraphs 25 (b) EBA: Section 9.3.1

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
39	EBA-Liabilities with maturities beyond 1 year	Borrowings and liabilities with residual maturities and cash flows falling beyond 1 year.	This assumption specifies the total amount of secured and unsecured borrowings and liabilities (including term deposits) with effective residual maturities of one year or more (Catch all for cash flows beyond 1 year).	BIS: Paragraphs 21 c

3.4.2 Required Stable Funding Factor

This section enlists all the preseeded assumptions acting on assets and off-balance sheet items that receive an RSF factor.

Table 48: Preconfigured ASF NSFR Assumptions

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
1	EBA-Coins and banknotes	Coins, banknotes, cash, and restricted cash held by the bank.	This assumption specifies factor for Coins, banknotes, cash, and restricted cash held by the bank.	BIS: Paragraphs 36(a) EBA: Section 2.2.6
2	EBA-Central Bank Reserves	All central bank reserves, including, required reserves and excess reserves.	This assumption specifies factor for central bank reserves.	BIS: Paragraphs 36(b) EBA: Section 2.2.6
3	EBA-Unencumbered claims on central banks	Unencumbered loans and other claims on central banks.	This assumption specifies Claims on central banks with residual maturities less than 6 months. This assumption specifies Loans to central banks and financial institutions with residual maturity between 6 months to 1 year.	BIS: Paragraphs 31, 36(c), 40(c), 43(a) 43© EBA: Section 2.2.6

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
4	EBA-Encumbered claims on central banks	Encumbered loans and other claims on central banks.	This assumption specifies Claims on central banks with residual maturities less than 6 months. This assumption specifies Loans to central banks and financial institutions with residual maturity between 6 months to 1 year.	BIS: Paragraphs 31, 36(c), 40(c), 43(a) 43© EBA: Section 2.2.6
5	EBA-Loans to financial instituitions secured by L1 asset	Unencumbered loans to financial institutions where the loan is secured against Level 1 assets as defined in the LCR.	This assumption specifies unencumbered loans to financial institutions with residual maturities of less than 6 months, where the loan is secured against Level 1 asset and where the bank can freely rehypothecate the received collateral for the life of the loan.	BIS: Paragraphs 31, 39(b), 40(c), 43(a), 43(c
6	EBA-Encumbered loans to financial institutions-L1	Encumbered loans to financial institutions where the loan is secured against Level 1 assets as defined in the LCR.	This assumption specifies unencumbered loans to financial institutions with residual maturities of less than 6 months, where the loan is secured against Level 1 asset and where the bank can freely rehypothecate the received collateral for the life of the loan.	BIS: Paragraphs 31, 39(b), 40(c), 43(a), 43(c
7	EBA-Loans to financial institutions secured by other asset	Unencumbered loans to financial institutions where the loan is secured against assets belonging to levels other than Level 1, as defined in the LCR.	This assumption specifies all other secured loans to financial institutions.	BIS: Paragraphs 31, 39(b), 40(c), 43(a), 43(c
8	EBA-Encumbered loans to financial institutions-other asset	Encumbered loans to financial institutions where the loan is secured against assets belonging to levels other than Level 1, as defined in the LCR.	This assumption specifies all other secured loans to financial institutions.	BIS: Paragraphs 31, 39(b), 40(c), 43(a), 43(c
9	EBA-Unsecured loans to financial institutions	Unencumbered unsecured loans to financial institutions.	This assumption specifies all other secured loans to financial institutions.	BIS: Paragraphs 31, 39(b), 40(c), 43(a), 43(c

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
10	EBA-Encumbered unsecured loans to financial institutions	Encumbered unsecured loans to financial institutions.	This assumption specifies all other secured loans to financial institutions.	BIS: Paragraphs 31, 39(b), 40(c), 43(a), 43(c
11	EBA-Loans to non financial parties	Unencumbered loans with residual maturity less than a year to other counterparties that is Non-financial corporates, retail and small business customers, sovereigns, Public sector enterprises, and sovereigns.	This assumption specifies loans to non-financial corporate, retail, and small business customers, sovereigns, and PSE with a residual maturity of less than 1 year.	BIS: Paragraphs 31, 40(e), 41, 43(a)
12	EBA-Encumbered loans to non financial parties	Encumbered loans with residual maturity less than a year to other counterparties that is Non-financial corporates, retail and small business customers, sovereigns, Public sector enterprises, and sovereigns.	This assumption specifies loans to non-financial corporate, retail, and small business customers, sovereigns, and PSE with a residual maturity of less than 1 year.	BIS: Paragraphs 31, 40(e), 41, 43(a)
13	EBA-Loans maturing beyond 1year to others	Unencumbered loans with residual maturity more than a year to other counterparties that is Non-financial corporates, retail and small business customers, sovereigns, Public sector enterprises, and sovereigns.	This assumption specifies other unencumbered loans not included in the above categories, with a residual maturity of 1 year or more that would qualify for a 35% or lower weight under the Basel 2 approach.	BIS: Paragraphs 41 (b), 42 (b), 43(a)

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
14	EBA-Encumbered loans maturing beyond 1year to others	Encumbered loans with residual maturity more than a year to other counterparties that is Non-financial corporates, retail and small business customers, sovereigns, Public sector enterprises, and sovereigns.	This assumption specifies other unencumbered loans not included in the above categories, with a residual maturity of 1 year or more that would qualify for a 35% or lower weight under the Basel 2 approach.	BIS: Paragraphs 41 (b), 42 (b), 43(a)
15	EBA-Non HQLA assets	Unencumbered securities, with maturity less than 1 year, which do not qualify as High quality liquid assets under the EBA DA LCR Rule.	This assumption specifies all other non-HQLA not included in the above categories that have a residual maturity of less than 1 year.	BIS: Paragraphs 31, 42(c), 43(a)
16	EBA-Non HQLA assets maturing beyond 1 year	Unencumbered securities, with a maturity greater than 1 year which do not qualify as HQLA under the EBA DA LCR Rule.	This assumption specifies all other non HQLA not included in the above categories that have a residual maturity of greater than 1 year.	BIS: Paragraphs 31, 42(c), 43(a)
17	EBA-Encumbered non HQLA assets	The encumbered portion of securities, with maturity less than 1 year which do not qualify as High quality liquid assets under the EBA DA LCR Rule.	This assumption specifies all other non-HQLA not included in the above categories that have a residual maturity of less than 1 year.	BIS: Paragraphs 31, 42(c), 43(a)
18	EBA-Encumbered non HQLA assets maturing beyond 1 year	The encumbered portion of securities, with a maturity greater than 1 year which does not qualify as HQLA under the EBA DA LCR Rule.	This assumption specifies all other non-HQLA not included in the above categories that have a residual maturity of greater than 1 year.	BIS: Paragraphs 31, 42(c), 43(a)

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
19	EBA-Other Level 1 assets	Unencumbered assets that qualify for inclusion in Level 1 of High quality liquid assets as defined in the EBA DA LCR.	This assumption specifies factor for Level 1 assets excluding assets receiving a 0% RSF as in paragraph 36.	BIS: Paragraphs 37, 40(b)
20	EBA-Level 2A and 2B assets	Unencumbered assets that qualify for inclusion in Level 2A and 2B of High quality liquid assets as defined in the EBA DA LCR.	This assumption specifies the factor for Level 2A assets and Level 2B assets.	BIS: Paragraphs 37, 40(b)
21	EBA-Encumbered Level 1 assets	The encumbered portion of assets that qualify for inclusion in Level 1 of High quality liquid assets as defined in the EBA DA LCR.	This assumption specifies factor for Level 1 assets excluding assets receiving a 0% RSF as in paragraph 36.	BIS: Paragraphs 31, 37, 40(b), 43(a)
22	EBA-Encumbered Level 2A and 2B assets	The encumbered portion of assets that qualify for inclusion in Level 2A and 2B of High quality liquid assets as defined in the EBA DA LCR.	This assumption specifies the factor for Level 2A assets and Level 2B assets.	BIS: Paragraphs 31, 37, 40(b), 43(a)
23	EBA-Operational deposits with other banks	Operational portion of Unencumbered deposits held at other financial institutions, for operational purposes and are subject to the 50% ASF treatment.	This assumption specifies unencumbered Deposits held at other financial institutions for operational purposes that are subject to the 50% ASF treatment.	BIS: Paragraph 40(d)

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
24	EBA-Non operational deposits with other banks	The non-operational portion of Unencumbered deposits held at other financial institutions, for operational purposes and are subject to the 50% ASF treatment.	This assumption specifies non-operational deposits held at financial institutions	BIS: Paragraph 40(d)
25	EBA-Encumbered deposits with other banks	Encumbered deposits, held at other financial institutions, for operational purposes and are subject to the 50% ASF treatment.	This assumption specifies the factor for encumbered Operational deposits at financial institutions.	BIS: Paragraph 31, 40(d),43(a)
26	EBA-Residential loans	Unencumbered residential mortgage loans and residential guaranteed loans which would qualify for a) 35% or lesser risk weight as per Basel 2 standardized approach for credit risk b) higher than 35% risk weight as per Basel 2 standardized approach for credit risk.	This assumption specifies factors for residential mortgages with a residual maturity of 1 year or more that would qualify for a 35% or lesser risk weight as per Basel 2.	BIS: Paragraphs 41 a and 40 e

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
27	EBA-Encumbered residential loans	Encumbered residential mortgage loans and residential guaranteed loans which would qualify for a) 35% or lesser risk weight as per Basel 2 standardized approach for credit risk b) higher than 35% risk weight as per Basel 2 standardized approach for credit risk.	This assumption specifies factors for residential mortgages with a residual maturity of 1 year or more that would qualify for a 35% or lesser risk weight as per Basel 2.	BIS: Paragraphs 41 a and 40 e
28	EBA-Commodities	Unencumbered physically traded commodities, including gold.	This assumption specifies factors for physically traded commodities.	BIS: Paragraphs 31, 42(d), 43(a)
29	EBA-Encumbered commodities	Encumbered physically traded commodities including gold.	This assumption specifies factors for physically traded commodities.	BIS: Paragraphs 31, 42(d), 43(a)
30	EBA-Trade date receivables	Trade date receivables arising from purchases of foreign currencies, financial instruments, and commodities that are expected to settle or have failed but are expected to settle within the standard settlement cycle.	This assumption specifies the factor for Trade date receivables.	BIS: Paragraphs 36(d)
31	EBA-Credit and liquidity facilities to client	Off-balance sheet exposures- Irrevocable, revocable and conditionally revocable credit and liquidity facilities offered to any clients by the bank.	This assumption specifies the factor for credit and liquidity facilities offered by the bank.	BIS: Paragraph 47

Sl. No.	Name	Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014 EBA CRR Report: EBA/Op/2015/22
32	EBA-Guarantees and letters of credit	Off-balance sheet exposures- Guarantees and letters of credit.	This assumption specifies the factor for Guarantees and Letter of Credit.	BIS: Paragraph 47 EBA: Section 6.8

3.4.3 Derivatives

This section includes the NSFR assumptions for Derivatives.

Table 49: Preconfigured Derivatives NSFR Assumptions

Sl. No.	Assumption Name	Assumption Description	Regulatory Requirement Addressed	Regulatory Reference BIS: BCBS 295 Oct 2014
1	EBA-Derivative liabilities	RSF Treatment of derivative liabilities.	This assumption specifies 20% of derivative liabilities (negative replacement cost amounts) as calculated according to para 19 (before deducting variation margin posted).	Paragraph 43 (d)
2	EBA-Derivative liabilities with netting agreement	RSF Treatment of derivative liabilities with netting agreement.	20% of derivative liabilities (negative replacement cost amounts) as calculated according to para 19 (before deducting variation margin posted).	Paragraph 44 (d)
3	EBA-NSFR Derivative liabilities	ASF Treatment of derivative liabilities.	Calculation of NSFR derivative liabilities.	Paragraphs 19 and 20
4	EBA-NSFR Derivative assets	RSF Treatment of derivative assets.	Calculation of NSFR derivative assets.	Paragraphs 34 and 35
5	EBA-Initial Margin for derivatives	RSF Treatment of derivative assets posted as initial margin and toward default fund of a central counterparty (CCP).	Cash, securities and other assets posted as initial margin for derivative contracts.	Paragraph 42 (a)

4 Back Dated Run Execution

This feature is available for Contractual Runs, for the run purpose EBA Delegated Act Liquidity Ratio Calculation. Prior to Release 8.1.0.1, during a Contractual Run execution for a previous date, the application considered the dimensions that are currently used for execution. Back Dated Execution feature enables you to specify a back dated MIS Date which will consider the dimensions which were being used during that specific period, for execution. See the Liquidity Risk Measurement and Management User Guide for details on back-dated execution.

5 Appendix A: Data Transformations/Functions used in LRRCEBA

This section provides information about the Data Transformations (DTs) or functions used in the LRM application.

1. **FN_UPD_LIQUIDITY_HORIZON**

   This function updates the Liquidity Horizon to 30 days in the FCT_LRM_RUN_PARAM table for current Run Skey.

2. **TB_DATE_ASSIGNMENT**

   This function performs the following actions:

   a. Identifies the dates between the bucket start day and bucket end day.

   b. Populates the intermediate dates based on the chosen FIC-MIS date, in the FSI_LRM_TIME_BUCKET_DAYS table.

   c. The business day convention (prior, conditional prior, following, no-Adjustment) is applied, taking into account the holiday calendar applicable for a Legal Entity, and is populated in the FSI_LRM_TIME_BUCKET_DETAILS table for each Legal Entity.

3. **EBA_WHOLESALERETAIL_IDFN**

   This function identifies wholesale or retail indicators for each account. It performs the following:

   a. Reads the annual sales threshold and aggregate deposit threshold amount from the SETUP_MASTER table.

   b. Populates the financial information such as balance sheet, profit, and loss statement, and ratios of various parties such as Customer, Issuer, and Guarantor in FCT_PARTY_FINANCIALS along with financial period start and end date.

   c. Identifies the retail customer in FSI_LRM_INSTRUMENT based on an aggregate deposit threshold amount.

   d. Updates the high value (EOP balance between €100000 and €500000, or local DGS amount) and very high value (EOP balance greater than €500000 or local DGS amount) indicator for each customer in FSI_LRM_INSTRUMENT.

   e. Identifies wholesale or retail customers in FSI_LRM_INSTRUMENT based on party type (retail or corporate).

4. **EBA_UPD_UNDERLYING_AST**

   This function updates all the attributes of the underlying assets, mitigants or placed collateral of an account such as asset level, fair value, market value, and so on, in the FSI_LRM_INSTRUMENT table. For example, consider loan contracts for which a mitigant is received. This loan account is captured in the STG_LOAN_CONTRACTS table and the mitigant information is captured in the STG_MITIGANTS table. The link between the loan account and the mitigant is captured in the STG_ACCOUNT_MITIGANT_MAP table. From STG_ACCOUNT_MITIGANT_MAP table, data moves to FCT_ACCOUNT_MITIGANT_MAP table.

   The function identifies the account mitigant mapping from the FCT_ACCOUNT_MITIGANT_MAP table and updates the attributes of the mitigant against the loan account in the FSI_LRM_INSTRUMENT table. For example, if the market value of the mitigant is $500, then the function updates the column FSI_LRM_INSTRUMENT.N_UNDERLYING_RECV_LEG_MKT_RCY as $500 for the loan contract account.

Similarly, consider another example of a repo contract where the bank has placed collateral. The repo contract is captured in the STG_REPO_CONTRACTS table and moved to the FSI_LRM_INSTRUMENT table. The collateral placed against the repo contract is captured in the STG_PLACED_COLLATERAL table. The relationship between placed collateral and the REPO contract is captured in the STG_ACCT_PLACED_COLL_MAP table and is moved to the FCT_ACCT_PLACED_COLL_MAP table.

The function updates the asset level of the placed collateral against the repo contract in the FSI_LRM_ISNTRUMENT table, which indicates that the FSI_LRM_INSTRUMENT.N_UNDERLYING_ASSET_LEVEL_SKEY column is updated.

Similarly, the function updates the following attributes of the underlying asset (Mitigant/Placed Collateral) in the FSI_LRM_ISNTURMENT table:

- N_UNDERLYING_ASSET_LEVEL_SKEY
- N_UNDERLYING_MKT_RCY
- N_UNDERLYING_FAIR_RCY
- F_UNDERLY_QUALIF_UNENCUMB
- N_UNDERLY_RISK_WEIGHT_SKEY
- N_UNDERLY_STD_ISSUER_TYPE_SKEY
- N_UNDERLY_STD_PROD_TYPE_SKEY
- N_UNDERLYING_INST_BASEL_RATING
- F_UNDERLY_COLL_COVER_SHORT_POS
- F_UNDRLY_COVER_BANK_SHORT_POS
- F_UNDRLY_COVER_CUST_SHORT_POS
- F_UNDERLY_ISSUER_FINAN_ENTITY
- F_UNDERLY_REHYPOTHECATED_FLAG
- F_UNDERLYING_ISSUER_US_FLAG
- F_UNDERLYING_GUARANTOR_US_FLAG
- F_UNDRLYNG_PLACED_HQLA_FLAG
- F_UNDERLYING_HELD_BY_CLIENT
- F_UNDRLYNG_ASST_SEGREGATED_IND
- N_HQLA_MIT_VAL_RCY
- N_NON_HQLA_MIT_VAL_RCY
- N_EXP_NOT_COV_BY_HQLA_MIT_RCY

These columns are used for calculating the adjustments to be performed in the stock of HQLA process and also in business as usual assumptions.

This data transformation identifies the underlying asset of an account from the mapping tables (FCT_ACCOUNT_MITIGANT_MAP and FCT_ACCT_PLACED_COLL_MAP), reads the attributes of the underlying asset (mitigant from FCT_MITIGANTS and placed collateral from the FSI_LRM_INSTRUMENT table) and updates it against the account in the FSI_LRM_INSTURMENT table using the following steps:

a. Assigns the used portion of a placed collateral in FCT_ACCT_PLACED_COLL_MAP table, that is, updates the FCT_ACCT_PLACED_COLL_MAP.N_DRWN_PORTION_COLL_AMT column.

b. Assigns the underlying asset level.

c. Assigns the underlying asset level Skey of SUBSTITUTABLE COLLATERAL to:

   - Derivative Products
   - Non-Derivative Products

   Updates the N_COLL_SUBSTITU_ASSET_LVL_SKEY and N_SBSTBL_ASST_LVL_ENT_SKEY columns of the FSI_LRM_INSTRUMENT table.

d. Assigns revised maturity date Skey for (CS, REVREPO, DRB, SECBORR) product, that is FLI.N_REVISED_MATURITY_DATE_SKEY.

Updates the encumbrance percent in the FSI_LRM_INSTRUMENT table against the placed collateral records, that is, FLI.N_PERCENT_ENCUMBERED.

5. **EBA_INS_UNINS_AMT_CALC**

This function calculates the insured and uninsured amounts and updates this information at an account-customer combination in the FSI_LRM_ACCT_CUST_DETAILS table.

See Deposit Stability Identification for details on Insurance Calculation.

6. **UPD_PROCESS_SCENARIO_KEY**

This function updates the process scenario Skey in DIM_FCST_RATES_SCENARIO tables. It performs the following:

a. Reads the current Run information from FCT_LRM_RUN_PARAM and DIM_RUN tables.

b. Populates the Contractual/Business, as usual, Run name, Run type, Run description into DIM_FCST_RATES_SCENARIO table from DIM_RUN.

c. Updates the process key for current Run in FCT_AGG_BASE_CCY_LR_GAP table storing liquidity risk gap measures in base currency.

d. Updates the process key for current Run in FCT_AGG_BASE_CCY_LR_GAP table storing liquidity risk gap measures in consolidated currency.

e. Updates both local and natural, inflow, and outflow amount columns in FCT_AGG_CASH_FLOWS using exchange rate conversion.

f. Updates both inflow and outflow local currency amount columns in FCT_ACCOUNT_CASH_FLOWS using exchange rate conversion.

g. Updates both local and natural currency amount columns in FCT_LRM_LE_SUMMARY using exchange rate conversion.

7. **FN_UNDERLYING_ASSET_ASSIGNMENT**

This function computes the excess portion of SLR government securities as follows: Total Market Value of SLR Eligible Government Securities - Minimum SLR + Net CBLO Collateral Where, The market value of SLR eligible securities is computed as the sum of all securities where SLR Eligible flag = Y and Issuer or Guarantor Type = Sovereign or Government. The minimum SLR refers to the mandatory SLR which is to be excluded. The Net CBLO Collateral value is calculated as follows:

Net CBLO Collateral = Total Collateral Received under Collateralized Lending Obligation (CLO) - Total Collateral Posted under Collateralized Borrowing Obligation (CBO).

6 Appendix B: User Configuration and Settings

This section includes information about the user configurations and settings.

Topics:

- Standard Reclassifications
- Mitigant Sub Type Classifications

6.1 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, are required to be reclassified to standard product and party types supported by OFS LRM respectively.

Topics:

- Standard Product Type Reclassification
- Standard Party Type Reclassification

6.1.1 Standard Product Type Reclassification

Banks should map their specific product types to the Standard Product Types as part of the rule RBI LCR - 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.

6.1.2 Standard Party Type Reclassification

Banks are required to 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.

6.2 Mitigant Sub Type Classifications

Banks are required to map their mitigant product types to the Standard Product Types as part of the rule LRM - Mitigant Sub Type Classification. The application then reclassifies the bank mitigant types to Standard product Types and utilizes this for further processing.

7 Appendix C: Performance Recommendations for EBA

Create indexes as follows:

1. Create an index on N_ASSUMPTION_OBJECT_ID column of FSI_BUSINESS_ASSUM_GRID_VAL table.
2. Create an index on V_HIER_NODE column of FSI_LRM_HIER_MEMBER_DETAILS table.

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