



## **INSTRUCTION No. 22/2023<sup>1</sup> ON LIQUIDITY RISK MANAGEMENT**

Banco Central de Timor-Leste (BCTL) has the responsibility of regulating and supervising financial institutions as prescribed by Art. 5 (j) of Law no. 5/2011 of 14 June, on the Organic Law of the BCTL.

Furthermore, paragraph 16.2 of Regulation 2000/8 of 25 February determines that the Governing Board of a bank shall be responsible for establishing the policies for the operations of the bank and for supervision of their implementation.

Liquidity risk is inherent in banking institutions' activities. The fundamental role of banks in the maturity transformation of short-term deposits into long-term loans makes banks vulnerable to liquidity risk.

Liquidity risk shall not be considered isolated. Other risks as credit, market, operational, reputation and strategic risks may affect a bank from accessing funds at a reasonable cost and thus increase its liquidity risk.

Liquidity problems can affect a bank's earnings and capital and may even lead to the bank becoming insolvent. If the bank is a major player in the market, the problems can have consequences for the banking system and the functioning of the national payment system. Sound liquidity risk management is of vital importance to the individual bank and the banking system strength.

Paragraph 23.1 of the Regulation above mentioned determines that banks shall conduct their administration and operations in accordance with sound administrative and accounting procedures, the requirements of that Regulation, and the instructions or guidelines issued by the BCTL, and, finally, Section 26 establishes prudential requirements to be observed by banks.

Furthermore, paragraph 26.2.a of Regulation 2000/8 of 25 February requires that each bank shall observe requirements concerning the minimum aggregate amount of liquid resources or specific categories of such resources in relation to the value or change in value of assets (including guarantees and collateral received) or specific categories thereof, or in relation to the amount or change in amount of liabilities or specific categories of liabilities, provided, however, that banks shall be permitted to meet the requirements concerning liquid resources by maintaining with the BCTL money deposits of an equivalent value.

Section 46 of Regulation 2000/8 empowers the BCTL to issue instructions and guidelines, as deemed necessary or advisable to give effect to the provisions of that regulation.

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<sup>1</sup> Please refer to the Portuguese version for official use. This English version is prepared to facilitate the availability of information for the financial institutions

The best international practices on banking supervision are defined by the Basel Committee on Banking Supervision (BCBS) and Principle 24 of the Core Principles for Effective Banking Supervision (Basel Core Principles) emphasize that the supervisor shall set prudent and appropriate liquidity requirements (which can include either quantitative or qualitative requirements or both) for banks that reflect the liquidity needs of the bank; determine that banks have a strategy that enables prudent management of liquidity risk and compliance with liquidity requirements. Such strategy shall consider the bank's risk profile as well as market and macroeconomic conditions and includes prudent policies and processes, consistent with the bank's risk appetite, to identify, measure, evaluate, monitor, report and control or mitigate liquidity risk over an appropriate set of time horizons. And at least for internationally active banks, liquidity requirements shall be not lower than the applicable Basel standards.

Taking into consideration the above referred best international practices and essential principles on liquidity risk set on the document *Principles for Sound Liquidity Risk Management and Supervision*, among others, and that the BCBS has set the liquidity coverage ratio and the net stable funding ratio as the relevant instruments for liquidity management.

In view of the best international practices and in the interest of protecting the Timorese banking system, the depositors, and the institutions, enhancing a sound and safe financial and banking sector,

The Governing Board of Banco Central de Timor-Leste, in accordance with Section 46 of Regulation n° 2000/8 of 25 February and Article 31 paragraph 1 of Law no. 5/2011 of 15 June, hereby resolves to approve the following Instruction:

### **Article 1 Objective and Scope**

1. The objective of the present BCTL Instruction is to establish a sound and consistent standard of liquidity risk management, which will contribute to a safe and sound banking system and financial stability in Timor-Leste.
2. The Instruction also establishes the methodology for determining the Liquidity Coverage Ratio (RCL) and the Net Stable Funding Ratio (RFE), important monitoring tools to be adopted by banks for consistent liquidity management.
3. This Instruction shall apply to all banks including branches of foreign entities licensed to operate in Timor-Leste.
4. Where applicable, the Instruction is applied to other deposit taking institutions (ODTIs) licensed according to the terms of the Instruction n° 6/2010 of December 17.

### **Article 2 Definitions**

In this Instruction, the following terms and expressions mean:

- a) "Risk appetite" means the level of risk that a bank considers acceptable in search of its objectives;
- b) "*Unencumbered assets*" means assets free of legal, regulatory, contractual, or other restrictions on the ability of the bank to liquidate, sell, transfer, or assign the assets;

- c) “*High Quality Liquid Assets (HQLA)*” means assets that can be easily and immediately converted into cash at little or no loss of value;
- d) “*Risk Management Committee (RMC)*” as defined by Section 19.3 of Regulation 2000/8 of 25 February, which can delegate the liquidity functions to an Assets and Liability Management Committee;
- e) “*Retail funding*” means all funding from households, including non-profit organizations, and small and medium enterprises;
- f) “*Wholesale funding*” means all funding from other sectors than the retail funding;
- g) “*Liquidity*” means ability of a bank to fund increases in assets and meet obligations as they become due, without incurring unacceptable losses;
- h) “*Liquidity risk*” means the risk of financial difficulties a bank may incur and becomes unable to meet the liquidity needs in a timely manner;
- i) “*Funding liquidity risk*” means the risk that a bank will not be able to meet efficiently both expected and unexpected current and future cash flow and collateral needs without affecting either daily operations or the financial condition of the bank;
- j) “*Market liquidity risk*” means the risk that a bank cannot easily offset or eliminate a position at the market price because of inadequate market depth or market disruption;
- k) “*Bank’s liability holders*” means those that are funding the bank, that have funds in the bank, like individual depositors, corporate entities, other banks, insurance companies, etc
- l) “*Risk tolerance*” means the amount of risk a bank is willing to assume to achieve a potential desired result;
- m) ) ‘*stress*’ shall mean a sudden or severe deterioration in the solvency or liquidity position of a credit institution due to changes in market conditions or idiosyncratic factors as a result of which there may be a significant risk that the credit institution becomes unable to meet its commitments;
- n) “*Net Stable Funding Ratio (NSFR)*” is the amount of available stable funding relative to the amount of required stable funding.
- o) “*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.
- p) “*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.

## **CHAPTER I LIQUIDITY RISK MANAGEMENT**

### **Article 3 Framework for Managing Liquidity Risk**

1. A bank is responsible for the sound management of liquidity risk. The focus is primarily on funding liquidity risk, although the relation to market liquidity risk shall be considered.
2. A bank shall establish a robust liquidity risk management framework that ensures it maintains sufficient liquidity, including a cushion of unencumbered, high quality liquid assets, to withstand a range of stress events, including those involving the loss or impairment of both unsecured and secured funding sources.
3. The framework for managing liquidity risk requires an effective Board of Directors and senior management oversight, a definition of a risk tolerance and a liquidity strategy, adequate policies and procedures, effective internal controls, and independent reviews, as well as a sound process for identifying, measuring, monitoring, and controlling liquidity risk.

### **Article 4 Responsibilities**

1. A bank shall manage its assets and liabilities, as well as its off-balance sheets assets and liabilities to ensure it maintains the liquidity needed to meet its financial obligations as they fall due.
2. The objectives of the liquidity risk management framework are:
  - a) ensure that the bank is able to address its daily liquidity obligations and withstand a period of liquidity stress affecting its funding, being the problem bank-specific or market-wide; and
  - b) hold an adequate liquidity cushion comprised of readily marketable assets to overcome periods of liquidity stress, commensurate with the on- and off-balance sheet activities, the liquidity of assets and liabilities, its funding mismatches, the business mix, and the funding strategies.
3. The BCTL has the duty of assessing the adequacy of both a bank's liquidity risk management framework and its liquidity position and must take prompt action if a bank is deficient in either area to protect depositors and to limit potential damage to the financial system.

### **Article 5 Governance of Liquidity Risk Management**

1. A bank shall set a liquidity risk tolerance considering its business objectives, strategic direction, and overall risk appetite.
2. The Board of Directors shall establish the bank's liquidity risk tolerance because it is responsible for the liquidity risk assumed by the bank and the way the risk is managed.
3. The liquidity risk tolerance shall:

- a) define the level of liquidity risk that the bank is willing to assume, appropriate for the business strategy of the bank and its role in the financial system and considering the bank's financial condition and funding capacity;
- b) ensure that the bank manages its liquidity firmly in normal times in such a way that it can withstand a prolonged period of stress;
- c) be articulated in such a way that all levels of management clearly understand the trade-off between risks and profits;
- d) use a variety of qualitative and quantitative ways in which a bank can express its risk tolerance.

**Article 6**  
**Liquidity Risk Management Strategy**

1. Senior management is responsible for developing and implementing a liquidity risk management strategy in accordance with the bank's risk tolerance.
2. The strategy shall include specific policies on liquidity management, such as:
  - a) the composition and maturity of assets and liabilities;
  - b) the diversity and stability of funding sources;
  - c) the approach to managing liquidity in different currencies, across borders, and across business lines and legal entities;
  - d) the approach to intraday liquidity management; and
  - e) the assumptions on the liquidity and marketability of assets.
3. The strategy shall take account of liquidity needs under normal conditions as well as liquidity implications under periods of liquidity stress.
4. The strategy may include various high-level quantitative and qualitative targets.
5. The strategy shall consider the present Instruction on liquidity risk management.
6. The Board of Directors shall approve the strategy and critical policies and practices and review them at least annually. The Regulation 2000/8 requires the establishment of a Risk Management Committee (RMC) which can act on behalf of the Board.
7. The Board of Directors shall also ensure that senior management, those natural persons who exercise executive functions and who are responsible, and accountable to the management body, for the day-to-day management of the bank, translates the strategy into clear guidance and operating standards (policies, controls, or procedures).
8. The Board of Directors must safeguard that senior management and appropriate personnel have the necessary expertise and that the bank has processes and systems to measure, monitor, and control all sources of liquidity risk.
9. The bank's liquidity policies shall determine the structure, responsibilities, and controls for managing liquidity risk and for overseeing the liquidity positions.
10. The liquidity strategy, key policies for implementing the strategy, and the liquidity risk management structure shall be communicated throughout the organization by senior management.

11. Senior management shall guarantee that the bank has adequate internal controls to ensure the integrity of its liquidity risk management process and that operationally independent, appropriately trained, and competent personnel are responsible for implementing internal controls.
12. The Board of Directors shall review regular reports on the liquidity position of the bank and be informed immediately of new or emerging liquidity concerns. When required, it shall make sure that senior management takes appropriate remedial actions to address the concerns.

## **Article 7 Management**

1. The Bank's senior management has the responsibility to develop and implement a liquidity risk management strategy in accordance with the bank's risk tolerance and one appropriate for the nature, scale, and complexity of the bank's activities.
2. The responsibility for managing the overall liquidity of the institution can be placed with a specific, identified group within the institution. While the Risk Management Committee is in accordance with the Regulation 2000/8 at the Board of Directors level, the responsibility can be delegated at senior management level to an Asset and Liability Management Committee (ALCO), comprising senior management from key functional areas.
3. The ALCO shall ensure that the liquidity strategy approved by the Board can be effectively implemented and establish a schedule of liquidity reviews with appropriate frequency and depth.
4. RMC and ALCO meetings must be held at least monthly.
5. The effective management of assets and liabilities shall, at a minimum, incorporate the following activities:
  - a) assessing current balance sheet position;
  - b) reviewing previous results;
  - c) projecting exogenous factors such as economic outlook, performance of counterparties;
  - d) developing asset and liability strategies;
  - e) simulating the strategies;
  - f) determining the most appropriate strategies;
  - g) setting measurable targets;
  - h) communicating the targets to appropriate managers and staff; and
  - i) monitoring actions regularly and reviewing performance.

## **Article 8 Sound Liquidity Management Practices**

1. A bank shall have a sound process for identifying, measuring, monitoring, and controlling liquidity risk. The process must include a robust framework for comprehensively projecting cash flows arising from assets, liabilities, and off-balance sheets items over an appropriate set of time horizon.

2. A bank's liquidity needs and the sources of liquidity available to meet those needs depend significantly on the bank's business and product mix, balance sheet structure and cash flow profiles of its on- and off-balance sheet obligations.
3. A bank shall consider the interactions between exposures to funding liquidity risk and market liquidity risk. If a bank obtains liquidity from capital markets, it shall recognize that these sources may be more volatile than traditional retail deposits.
4. The assets shall be prudently valued according to relevant accounting and supervisory standards and be considered that those valuations may deteriorate under market stress.
5. A bank shall recognize and consider the strong interactions between liquidity risk and the other types of risk – including interest rate, credit, operational, legal, and reputational risks - to which it is exposed.
6. A bank shall assess its cash inflows against its outflows and the liquidity value of its assets to identify the potential for future net funding shortfalls. A bank shall be able to measure and forecast its prospective cash flows for assets, liabilities, off-balance sheet commitments and derivatives over a variety of time horizons, under normal conditions and a range of stress scenarios, including scenarios of severe stress.
7. A bank shall identify, measure, monitor and control its liquidity risk positions for:
  - a) future cash flows of assets and liabilities;
  - b) sources of contingent liquidity demand and related triggers associated with off-balance sheet positions, including derivatives and securitization;
  - c) currencies in which a bank is active; and
  - d) correspondent, custody, and settlement activities.
8. To complete the above referred tasks a bank shall:
  - a) make realistic assumptions about its future liquidity needs for both the short- and long-term that reflect the complexities of its underlying businesses, products, and markets;
  - b) analyze the quality of assets that can be used as collateral for funding in stressed conditions; and
  - c) manage the timing of incoming flows in relation to known outgoing sources to obtain an appropriate maturity distribution for its sources and uses of funds.

## **Article 9**

### **Liquidity Risk Environment**

1. A banks' liquidity strategy, policies and processes shall establish an appropriate and properly controlled liquidity risk environment including:
  - a) clear articulation of an overall liquidity risk appetite that is appropriate for the banks' business and its role in the financial system and that is approved by the banks' Boards;
  - b) sound day-to-day, and intraday, liquidity risk management practices;

- c) effective information systems to enable active identification, aggregation, monitoring and control of liquidity risk exposures and funding needs (including active management of collateral positions) bank-wide;
  - d) adequate oversight by the banks' Boards in ensuring that management effectively implements policies and processes for the management of liquidity risk in a manner consistent with the banks' liquidity risk appetite; and
  - e) regular review by the banks' Boards, at least annually, and appropriate adjustment of the banks' strategy, policies, and processes for the management of liquidity risk in the light of the banks' changing risk profile and external developments in the markets and macroeconomic conditions in which they operate.
2. The Board of Directors must review and approve the strategy, policies and practices related to the management of liquidity at least annually and ensure that senior management manages liquidity risk effectively.

**Article 10**  
**Funding Policies**

1. A bank shall establish, and regularly review, funding strategies and policies and processes for the ongoing measurement and monitoring of funding requirements and the effective management of funding risk.
2. The policies and processes include consideration of how other risks may impact the bank's overall liquidity strategy, and include:
  - a) an analysis of funding requirements under alternative scenarios and different time horizons;
  - b) the maintenance of a cushion of high quality, unencumbered, liquid assets that can be used, without impediment, to obtain funding in times of stress;
  - c) diversification in the sources (including counterparties, instruments, currencies, and markets) and tenor of funding, and regular review of concentration limits;
  - d) regular efforts to establish and maintain relationships with liability holders; and
  - e) regular assessment of the capacity to sell assets.
3. Deterioration in the banks' funding capacity can result from the following, among other circumstances:
  - a) difficulty in accessing the inter-bank and wholesale markets;
  - b) concentration in funding sources;
  - c) deterioration in asset quality;
  - d) increased competition for funds;
  - e) worsening of earnings performance;
  - f) negative media attention; and
  - g) adverse change in credit rating.

4. A bank that relies heavily on wholesale funds shall continuously assess its market acceptance by counterparties to detect any sign of resistance in the funding market.
5. The funding strategy shall provide for effective diversification in the sources and tenor of funding. In that view:
  - a) the bank must maintain an ongoing presence in its chosen funding markets and strong relationships with funds providers to promote effective diversification of funding sources;
  - b) the bank must, for any of its funding sources, regularly gauge its capacity to raise funds quickly from each source;
  - c) the bank must identify main factors that affect its ability to raise funds and monitor those factors closely to ensure that estimates of fund-raising capacity remain valid.

**Article 11**  
**Liquidity Policies and Procedures**

1. Each bank must have a set of liquidity policies, even where liquidity is managed on a consolidated global basis at head office level, in the case of regional and international banking groups.
2. The key elements of any liquidity policy include:
  - a) Management's responsibilities – outline of responsibilities of the liquidity risk management functions, including structural balance sheet management, pricing, marketing, contingency planning, management reporting, lines of authority and responsibility for liquidity decisions;
  - b) Liquidity risk management structure – systems for monitoring, reporting, and reviewing liquidity;
  - c) Liquidity risk management tools – approach for identifying, measuring, monitoring, and controlling liquidity risk (including the types of liquidity limits and ratios in place and rationale for establishing such limits and ratios);
  - d) Contingency plan – strategy for handling liquidity crisis.
3. The policy must be reviewed at the Board and senior management level at least annually or more frequently when there are material changes in the bank's current and prospective liquidity risk profile.
4. A bank shall establish documented procedure and/or process manuals to implement its liquidity policies. The procedure manual must detail the necessary operational steps and processes to execute the relevant liquidity risk controls.
5. Procedure manuals shall be periodically reviewed and updated to consider new activities, changes in risk management approaches and systems.

**Article 12**  
**Intra-group Liquidity**

1. An effective liquidity risk management requires a good understanding of the funding positions of all entities in the bank's group that could affect the bank's liquidity.

2. Intra-group liquidity analysis and monitoring require an integrated review of all relevant cash flows.
3. A bank shall analyze and monitor intra-group liquidity on a continuous basis.

### **Article 13 Intraday liquidity**

1. Intraday liquidity management is an important component of a bank's liquidity management strategy since a bank shall be able to meet its payment obligations at the time expected, benefiting its own liquidity position and that of other counterparties, which cannot become unexpectedly short of funds, impairing their abilities to meet payment obligations, and disrupting the smooth functioning of payment and settlement systems.
2. A bank's strategy to achieve its intraday liquidity management objectives shall have at least six operational elements:
  - a) the capacity to measure expected daily gross liquidity inflows and outflows;
  - b) monitor intraday liquidity positions against expected activities and available resources;
  - c) arrange to acquire sufficient intraday funding to meet its intraday objectives;
  - d) manage and mobilize collateral as necessary to obtain intraday funds;
  - e) manage the timing of its liquidity outflows in line with its intraday objectives; and
  - f) be prepared to deal with unexpected disruptions to its intraday liquidity flows.

### **Article 14 Limits and Ratios**

1. The Board of Directors and management shall establish limits for the nature and amount of liquidity risk that the institution is willing to assume.
2. The limits shall incorporate the nature of the bank's strategies and activities, its past performance, level of earnings and capital available to absorb potential losses, and its risk tolerance.
3. Limits shall be used for managing day-to-day liquidity within and across lines of business and legal entities under normal conditions.
4. Limits shall be documented in the liquidity policies and reviewed periodically - at least annually - or when conditions or risk tolerances change.
5. Management shall have the means to review compliance with established limits. The responsibility for monitoring limits shall be assigned to a function independent of the funding areas.
6. A defined procedure for reporting limits exceptions to management shall be in place. Limit exceptions can be early indicators of excess risk or inadequate liquidity risk management.
7. Liquidity ratios shall always be used in conjunction with more qualitative information such as funding capacity to reveal material liquidity trends and are useful for quantifying liquidity risk.

8. To obtain a forward-looking view of liquidity risk exposures, a bank shall use metrics that assess the structure of the balance sheet, as well as metrics that project cash flows and future liquidity positions, considering off-balance sheet risks.
9. The ratios and limits that a bank shall use to monitor liquidity risk are described in Chapter II.

#### **Article 15**

#### **Internal Liquidity Adequacy Assessment Process (ILAAP)**

1. At least yearly banks shall prepare an Internal Liquidity Adequacy Assessments (ILAA), in accordance with the guidelines established by BCTL.
2. The ILAA shall be submitted to the BCTL, for review, within a maximum of 15 days after its approval by the bank's Board of Directors.

#### **Article 16**

#### **Management Information System**

1. A bank shall have a reliable management information system (MIS) designed to provide the Board of Directors, management, and other appropriate personnel with timely and forward-looking information on the liquidity position of the bank.
2. The MIS shall be able of measuring, monitoring, controlling, and reporting liquidity risk under normal and stressed situations.
3. The management shall agree on a set of reporting criteria, specifying the scope, manner, and frequency of reporting for various recipients, such as the Board, management, asset – liability committee, and the parties responsible for preparing the reports.
4. Reporting of risk measures shall be done on a frequent basis (e.g., daily reporting for those responsible for managing liquidity risk, and at each RMC meeting during normal times), with reporting increasing in times of stress, and shall compare current liquidity exposures to established limits to identify any emerging pressures and limit breaches.
5. Breaches in liquidity risk limits shall be reported and thresholds and reporting guidelines should be specified for escalation to management, the Board and BCTL.
6. The MIS shall encompass all significant aspects of liquidity risk, including those associated with new products and business initiatives, and capable of evaluating their effect on cash flows and liquidity ratios. In particular, the MIS should be capable of:
  - a) Calculating cash flows and maturity mismatch positions arising from the full range of a bank's assets, liabilities, and off-balance sheet positions on a day-to-day basis;
  - b) Analyzing cash flows and maturity mismatch positions in all currencies in which an institution trades, both individually and on an aggregate basis;
  - c) Calculating and projecting various limits and ratios in relation to liquidity for both statutory and internal risk management purposes;
  - d) Checking compliance with established liquidity policies and limits, and generating exceptions reports; and

- e) Reporting risk measures and liquidity trends to management on a timely basis.

### **Article 17** **Early Warning Indicators**

1. A bank shall design a set of indicators to identify the emergence of increased risk or vulnerabilities in its liquidity risk position or potential funding needs, allowing an assessment and potential response by management to mitigate the bank's exposure to the emerging risk.
2. Early warning indicators can be qualitative or quantitative in nature and may include:
  - a) rapid asset growth, especially when funded with potentially volatile liabilities;
  - b) growing concentrations in assets or liabilities;
  - c) increases in currency mismatches;
  - d) a decrease of weighted average maturity of liabilities;
  - e) repeated incidents of positions approaching or breaching internal or regulatory limits;
  - f) negative trends or heightened risk associated with a particular product line, such as rising delinquencies;
  - g) significant deterioration in the bank's earnings, asset quality, and overall financial condition;
  - h) negative publicity;
  - i) a credit rating downgrade;
  - j) stock price declines or rising debt costs;
  - k) widening debt or credit-default-swap spreads;
  - l) rising wholesale or retail funding costs;
  - m) counterparties that begin requesting or request additional collateral for credit exposures or that resist entering new transactions;
  - n) correspondent banks that eliminate or decrease their credit lines;
  - o) increasing retail deposit outflows;
  - p) increasing redemptions of CDs before maturity;
  - q) difficulty accessing longer-term funding; and
  - r) difficulty placing short-term liabilities, as commercial paper.
3. A bank shall have a system for identifying and tracking such indicators to spot potential problems at an early stage.

### **Article 18** **Liquidity Stress Testing**

1. A bank shall conduct stress tests on a regular basis for a variety of short-term and extended bank-specific and market-wide stress scenarios to identify sources of potential liquidity strain and to ensure that current exposures remain in accordance with a bank's established liquidity risk tolerance.

2. The bank shall use stress test outcomes to adjust its policies and strategies on liquidity risk management, to improve its intraday liquidity positions and to develop effective contingency plans.
3. The stress test serves to identify and quantify its exposures to possible future liquidity stresses, analyzing possible impacts on the institution's cash flows, liquidity position, profitability, and solvency.
4. Board of Directors and management shall examine the results and use them as the basis for taking remedial or mitigating actions to limit the bank's exposures, build up a liquidity cushion and adjust the bank's liquidity profile to fit its risk tolerance. The results of stress tests shall also play a key role in shaping the bank's contingency planning and in determining the strategy and tactics to deal with events of liquidity stress.
5. In designing stress scenarios, the nature of the bank's business, activities and vulnerabilities should be taken into consideration so that the scenarios incorporate the major funding and market liquidity risks to which the bank is exposed. These include risks associated with its business activities, products (including complex financial instruments and off-balance sheet items) and funding sources.
6. A bank shall consider short-term and extended term, as well as bank-specific and market-wide, stress scenarios in its stress tests, including:
  - a) a simultaneous drying up of market liquidity in several previously highly liquid markets;
  - b) severe constraints in accessing secured and unsecured funding;
  - c) restrictions on currency convertibility;
  - d) severe operational or settlement disruptions affecting one or more payment or settlement systems; and
  - e) consider the link between reductions in market liquidity and constraints on funding liquidity.
7. Based on the type and severity of the scenario, a bank needs to consider the appropriateness of several assumptions, relevant to its business, including:
  - a) asset market illiquidity and the erosion in the value of liquid assets;
  - b) the run-off of retail funding;
  - c) the (un)availability of secured and unsecured wholesale funding sources;
  - d) effectiveness of diversification;
  - e) additional margin calls and collateral requirements;
  - f) contingent claims;
  - g) liquidity absorbed by off-balance sheet vehicles and activities;
  - h) availability of contingent lines extended to the bank;
  - i) liquidity drains associated with complex products/transactions;
  - j) foreign exchange convertibility and access to foreign exchange markets;
  - k) ability to transfer liquidity across entities and borders considering legal, regulatory, operational and time zone restrictions and constraints;

- l) the access to central bank facilities;
  - m) the operational ability of the bank to monetize assets; and
  - n) estimates of future balance sheet growth, among others.
8. The assumptions shall be consistent, reasonable, verified and supported by sufficient evidence, and documented.
  9. The management shall review stress test scenarios and assumptions as well as the results of the stress tests. The bank's choice of scenarios and related assumptions must be well documented and reviewed together with the stress test results.
  10. The stress tests' results shall be reported to and discussed with the Board of Directors.
  11. The management shall integrate the results of the stress testing process into the bank's strategic planning process (e.g., adjust its asset-liability composition) and the day-to-day risk management practices (e.g., monitoring sensitive cash flows or reducing concentration limits) or consider them in the setting of internal limits. The results of stress tests shall be incorporated in assessing and planning for related potential funding shortfalls in the institution's contingency funding plan.

### **Article 19 Contingency Funding Plan**

1. A bank shall have a formal Contingency Funding Plan (CFP) that clearly sets out strategies for addressing liquidity shortfalls in emergency situations.
2. The CFP shall outline policies to manage a range of stress environments, establish clear lines of responsibility, include clear invocation and escalation procedures, and be regularly tested and updated to ensure that it is operationally robust.
3. A CFP is the compilation of policies, procedures, and action plans for responding to severe disruptions to a bank's ability to fund some or all its activities in a timely manner and at a reasonable cost.
4. The CFP needs to be commensurate with the bank's complexity, risk profile, scope of operations and role in the financial systems in which the institution operates. Also, be closely integrated with the bank's ongoing analysis of liquidity risk and with the results of the scenarios and assumptions used in stress tests.
5. CFPs shall articulate available potential contingency funding sources and the amount of funds a bank estimates can be derived from these sources; clear escalation/prioritization procedures detailing when and how each of the actions can and should be activated; and the lead time needed to tap additional funds from each of the contingency sources. In addition, the CFP needs to be closely integrated with the bank's ongoing analysis of liquidity risk and with the results of the scenarios and assumptions used in stress tests.
6. The CFP shall be updated and reviewed on a periodic basis (at least semi-annually) by management to ensure that it remains robust over time and reflects the bank's changing operating circumstances.
7. The CFP shall include the following:

- a) Policies, procedures, roles, and responsibilities. The CFP shall contain clear policies and procedures that will enable the bank's management to make timely and well-informed decisions, execute contingency measures proficiently, and communicate effectively to implement the plan efficiently. It shall have a clear specification of roles and responsibilities; establish a formal "crisis team" to facilitate internal coordination and decision-making during a liquidity crisis; and designate the personnel responsible for the identification of crisis and for contingency management. The plan shall explicitly set out the procedures to deliver effective internal coordination and communication across the bank's different business lines and locations. It shall also address when and how to contact external parties, such as BCTL, or payments system operators;
- b) Communication plans. A bank shall develop a plan that will deliver timely, clear, consistent, and frequent communication to internal as well as external parties, such as BCTL, system operators, correspondents, custodians, counterparties, and customers, in a time of stress, to support the general confidence in the bank;
- c) Design of CFPs. When designing its CFP, a bank shall account for:
  - i. the impact of stressed market conditions on its ability to sell or securitize assets;
  - ii. the link between asset market and funding liquidity;
  - iii. second round and reputational effects related to execution of contingency funding measures; and
  - iv. the potential to transfer liquidity across group entities, borders, and lines of business, considering legal, regulatory, operational, and other restrictions and constraints.
- d) Testing, update, and maintenance. CFPs shall be reviewed and tested regularly to ensure their effectiveness and operational feasibility. The management shall review and update the CFP at least every year for the Board's approval, or more often if required.

**Article 20**  
**Internal Controls and Audit**

1. A bank shall have adequate internal controls to ensure the integrity of its liquidity risk management process.
2. The management shall ensure that operationally independent, appropriately trained, and competent personnel are responsible for implementing internal controls. It is critical that personnel in independent control functions have the skills and authority to challenge information and modelling assumptions provided by business lines.
3. When significant changes impact the effectiveness of controls and revisions or enhancements to internal controls are warranted, management shall make certain that necessary changes are implemented in a timely manner.
4. The internal controls shall promote effective and efficient operations, reliable financial and regulatory reporting, and compliance with relevant BCTL Instructions and other rules.

5. Internal audit shall regularly review the implementation and effectiveness of the agreed framework for controlling liquidity risk.
6. The RMC shall be informed on the internal audit results and remedial actions be take always that they are required.

**Article 21**  
**Public Disclosure**

1. Public disclosure is relevant because improves transparency, facilitates valuation, and strengthens market discipline.
2. A bank shall disclose sufficient information regarding its liquidity risk management to enable relevant stakeholders to make an informed judgement about the ability of the bank to meet its liquidity needs.
3. A bank shall disclose, on a regular basis, its organizational structure and framework for the management of liquidity risk, including the roles and responsibilities of the relevant committees, as well as those of different functional and business units.
4. A bank's description of its liquidity risk management framework shall indicate the degree to which the treasury function and liquidity risk management is centralized or decentralized and describe this structure regarding its funding activities, to its limit setting systems, and to its intra-group lending strategies.

**Article 22**  
**BCTL Assessment**

1. BCTL will regularly perform a comprehensive assessment of a bank's overall liquidity risk management framework and position given the bank's role in the financial system.
2. BCTL can intervene to require effective and timely remedial action by a bank to address deficiencies in its liquidity risk management processes or liquidity position, including through on-site examinations.

**CHAPTER II**  
**LIQUIDITY RATIOS AND INDICATORS**

**SECTION I**

**LIQUIDITY COVERAGE RATIO**

**Article 23**  
**Definition of Liquidity Coverage Ratio**

1. Banks shall hold liquid assets, the sum of the values of which covers the liquidity outflows less the liquidity inflows under stressed conditions to ensure that they maintain levels of liquidity buffers, which are adequate to face any possible imbalance between liquidity inflows and outflows under gravely stressed conditions over a period of 30 days.
2. The Liquidity Coverage Ratio (LCR) is an indicator of the short-term resilience of the liquidity risk profile of a bank by ensuring that the bank has sufficient high-quality liquid assets (HQLA) to survive a significant stress scenario lasting 30 calendar days.

3. The proposed stress scenario considers a combined shock that would result mainly in the run-off of a proportion of retail deposits, a partial loss of wholesale funding or secured short-term financing, unscheduled draws on committed but not used credit and liquidity facilities provided by the bank and increases in market volatilities.
4. The LCR has two components:
  - a) Value of the stock of high-quality liquid assets (HQLA) in stressed conditions; and
  - b) Total net cash outflows, over the next 30 calendar days, calculated according to the scenario parameters outlined below.
5. The ratio of a bank's stock of HQLA to its net cash outflows over the 30-day period must not be less than 100 percent at any time.
6. A bank may monetize their liquid assets to cover their net liquidity outflows during stress periods, even if such a use of liquid assets may result in their liquidity coverage ratio falling below 100 % during such periods.
7. Where at any time the liquidity coverage ratio of a credit institution has fallen or can be reasonably expected to fall below 100 %, the requirement laid down in Article 37 of Chapter III of this Instruction shall apply.
8. The BCTL may require the bank to maintain higher minimum liquidity holdings or LCR if it has concerns about the bank's liquidity risk profile or the quality of its liquidity risk management.
9. Every bank must calculate the LCR and meet the minimum requirements considering the legal tender of Timor-Leste and all other currencies in which their assets, liabilities and off-balance sheet business are denominated.

**Article 24**  
**Stock of HQLA**

1. The numerator of the LCR is the stock of HQLA.
2. Banks must hold a stock of unencumbered HQLA to cover the total net cash outflows over a 30-day period under the stress scenario prescribed, where "unencumbered" means free of legal, regulatory, contractual, or other restrictions on the ability of the bank to liquidate, sell, transfer, or assign the asset.
3. Assets are considered to be HQLA if they can be easily and immediately converted into cash at little or no loss of value. To qualify as "HQLA", assets shall be liquid in markets during a time of stress and, ideally, be eligible by the BCTL for overnight liquidity facilities.
4. To be classified as HQLA, the assets shall possess the following characteristics and operational requirements:
  - a) Low risk: assets that are less risky tend to have higher liquidity. High credit standing of the issuer and a low degree of subordination increase an asset's liquidity. Low duration, low legal risk, low inflation risk and denomination in a convertible currency with low foreign exchange risk all enhance an asset's liquidity.

- b) Ease and certainty of valuation: an asset's liquidity increases if market participants are more likely to agree on its valuation. Assets with more standardized, homogenous, and simple structures tend to be more fungible, promoting liquidity.
  - c) Low correlation with risky assets: the stock of HQLA should not be subject to wrong-way (highly correlated) risk. The assets issued by banking institutions are more likely to be illiquid in times of liquidity stress in the banking sector.
  - d) Listed on a developed and recognized exchange: being listed increases an asset's transparency.
  - e) Active and sizable market: the asset should always have active outright sale or repo markets, with historical evidence of diversity of market participants and robust market infrastructure.
  - f) Low volatility: assets whose prices remain relatively stable and are less prone to sharp price declines over time will have a lower probability of triggering forced sales to meet liquidity requirements.
  - g) Flight to quality: historically, the market has shown tendencies to move into these types of assets in a systemic crisis. The correlation between proxies of market liquidity and banking system stress is one simple measure that could be used.
5. The institution shall only report as high-quality liquid assets those holdings of liquid assets that meet the following conditions:
- a) they are appropriately diversified.
  - b) they are legally and practically readily available at any time during the next 30 days to be liquidated via outright sale or via a simple repurchase agreement on approved repurchase markets in order to meet obligations coming due.
  - c) the liquid assets are controlled by a liquidity management function;
  - d) a portion of the liquid assets is periodically and at least annually liquidated via outright sale or via simple repurchase agreements on an approved repurchase market for the following purposes:
    - i. to test the access to the market for these assets;
    - ii. to test the effectiveness of the processes for the liquidation of assets;
    - iii. to test the usability of the assets;
    - iv. to minimize the risk of negative signaling during a period of stress;
  - e) price risks associated with the assets may be hedged but the liquid assets are subject to appropriate internal arrangements that ensure that they are readily available to the Treasury when needed and especially that they are not used in other ongoing operations, including:
    - i. hedging or other trading strategies;
    - ii. providing credit enhancements in structured transactions;
    - iii. covering operational costs;
  - f) the denomination of the liquid assets is consistent with the distribution by currency of liquidity outflows after the deduction of inflows.

6. There are two categories of assets that can be included in the stock at an amount no greater than the current market value: Level 1 and Level 2 assets.
7. Assets to be included in each category are those that the bank is holding on the first day of the stress period, irrespective of their residual maturity.
8. Level 1 assets can be included without any limit, while Level 2 assets can only comprise up to 40% of the stock.
9. Level 1 assets are limited to:
  - a) coins and banknotes;
  - b) central bank reserves (including required reserves), to the extent that the central bank policies allow them to be drawn down in times of stress;
  - c) marketable securities representing claims on or guaranteed by sovereigns, central banks, the Bank for International Settlements, the International Monetary Fund, or multilateral development banks, and satisfying all of the following conditions: assigned a 0% risk-weight under the Standardized Approach for credit risk; traded in large, deep and active repo or cash markets characterized by a low level of concentration; have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions; and not an obligation of a financial institution or any of its affiliated entities. If a sovereign has a non-0% risk weight, sovereign or central bank debt securities issued in domestic currencies can be included;
  - d) where the sovereign has a non-0% risk weight, domestic sovereign or central bank debt security issued in foreign currencies are eligible up to the amount of the bank's stressed net cash outflows in that specific foreign currency stemming from the bank's operations in the jurisdiction where the bank's liquidity risk is being taken; and
  - e) if the bank belongs to a network of institutions, in accordance with legal or statutory provisions, for clearing, or settlement, the legal or statutory minimum deposits with the central credit institution and other statutory or contractually available liquid funding from the central credit institution can be included in Level 1 HQLA if they can be drawn down in times of stress.
10. Level 2 assets can be included in the stock of HQLA, subject to the requirement that they comprise no more than 40% of the overall stock after haircuts have been applied.
11. The value of a liquid asset to be reported shall be its market value, subject to appropriate haircuts that reflect at least the duration, the credit and liquidity risks and typical repo haircuts in periods of general market stress. A 15% haircut is applied to the current market value of each Level 2 asset held in the stock of HQLA.
12. Level 2 assets are limited to the following:
  - a) Marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs or multilateral development banks that satisfy all of the following conditions: assigned a 20% risk weight under the Standardized Approach for credit risk; traded in large, deep and active repo or cash markets characterized by a low level of concentration; have a proven record as a reliable source of liquidity in the markets (repo or sale) even during

stressed market conditions (i.e., maximum decline of price not exceeding 10% or increase in haircut not exceeding 10 percentage points over a 30-day period during a relevant period of significant liquidity stress); and not an obligation of a financial institution or any of its affiliated entities.

- b) Corporate debt securities not issued by a financial institution, including commercial paper, and covered bonds not issued by the bank itself or any of its affiliated entities:
  - i. either (i) have a long-term credit rating from a recognized external credit assessment institution of at least AA- or in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating; or (ii) do not have a credit assessment by a recognized credit assessment institution but are internally rated as having a probability of default corresponding to a credit rating of at least AA-;
  - ii. traded in large, deep, and active repo or cash markets characterized by a low level of concentration; and
  - iii. have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions: i.e., maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 10%.

13.A bank must exclude from the stock those assets that, although meeting the definition of unencumbered, the bank does not have the operational capability to monetize to meet outflows during the stress period.

### **Article 25 Total Net Cash Outflows**

1. The term total net cash outflows is defined as the total expected cash outflows minus total expected cash inflows in the specified stress scenario for the subsequent 30 calendar days.
2. 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.
3. 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 under the scenario up to an aggregate cap of 75% of total expected cash outflows.

Total net cash outflows over the next 30 calendar days = Total expected cash outflows – Min {total expected cash inflows; 75% of total expected cash outflows}
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4. Banks are not permitted to double count items, i.e., if an asset is included as part of the “stock of HQLA” (i.e., the numerator), the associated cash inflows cannot also be counted as cash inflows (i.e., part of the denominator).
5. Where applicable, cash inflows and outflows shall include interest that is expected to be received and paid during the 30-day time horizon.
6. Where there is potential that an item could be counted in multiple outflow categories, as committed liquidity facilities granted to cover debt maturing

within the 30-calendar day period, a bank only must assume up to the maximum contractual outflow for that product.

## **Article 26**

### **Cash Outflows**

1. Retail deposits are defined as deposits placed with a bank by a natural person. Deposits from legal entities, sole proprietorships or partnerships are captured in wholesale deposit categories. Retail deposits subject to the LCR include demand deposits and term deposits.
2. Retail deposits are divided into “stable” and “less stable” portions of fund, with minimum run-off rates listed for each category:
  - a) Stable deposits, which receive a run-off factor of 5%, are the amount of the deposits that are fully insured by an effective deposit insurance scheme or by a public guarantee that provides equivalent protection and where the depositors have other established relationships with the bank that make deposit withdrawal highly unlikely; or the deposits are in transactional accounts (e.g., accounts where salaries are automatically deposited).
  - b) Less stable deposits, which are the other retail deposits. The run-off factor for less stable deposits will be 10%.
3. If a bank is not able to readily identify which retail deposits would qualify as “stable” according to the above definition, it should place the full amount in the “less stable” bucket.
4. Deposits in foreign currencies shall be considered less stable deposits.
5. Cash outflows related to retail term deposits with a residual maturity or withdrawal notice period of greater than 30 days will be excluded from total expected cash outflows if the depositor has no legal right to withdraw deposits within the 30-day horizon of the LCR, or if early withdrawal results in a significant penalty that is materially greater than the loss of interest. On the contrary, they shall be considered demand deposits.
6. For the purposes of the LCR, “unsecured wholesale funding” is defined as those liabilities and general obligations that are raised from non-natural persons (i.e., legal entities, including sole proprietorships and partnerships) and are not collateralized by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation, or resolution. The bank shall include all funding that is callable within the LCR's horizon of 30 days or that has its earliest possible contractual maturity date situated within this horizon. Obligations related to derivative contracts are explicitly excluded from this definition.
7. Unsecured wholesale funding provided by small business customers is treated the same way as retail deposits and classified as stable or less stable deposit, with a run-off of 5% or 10%, respectively.
8. Operational deposits generated by clearing, custody and cash management activities have a 25% run-off. Certain activities lead to financial and non-financial customers needing to place, or leave, deposits with a bank to facilitate their access and ability to use payment and settlement systems and otherwise make payments. These funds will receive the 25% run-off factor only if the

customer has a substantive dependency with the bank and the deposit is required for such activities.

9. Unsecured wholesale funding provided by non-financial corporates and sovereigns, central banks, multilateral development banks, and PSEs, will receive a 40% run-off. This category comprises all deposits and other extensions of unsecured funding from non-financial corporate customers, which are not categorized as small business customers, and sovereign, central bank, multilateral development bank, and PSE customers that are not specifically held for operational purposes.
10. Unsecured wholesale funding provided by non-financial corporate customers, sovereigns, central banks, multilateral development banks, and PSE without operational relationships will receive a 20% run-off factor if the entire amount of the deposit is fully covered by an effective deposit insurance scheme or by a public guarantee that provides equivalent protection.
11. Unsecured wholesale funding provided by other legal entity customers has a run-off factor of 100%. This category consists of all deposits and other funding from other institutions (including banks, other deposit taking institutions, securities firms, insurance companies, etc.), affiliated entities of the bank and other entities that are not specifically held for operational purposes and not included in the prior three categories.
12. All notes, bonds and other debt securities issued by the bank must be included in this category regardless of the holder, unless the bond is sold exclusively in the retail market and held in retail accounts (including small business accounts treated as retail), in which case the instruments may be treated in the appropriate retail or small business customer deposit category.
13. For the purposes of this Instruction, “secured funding” is defined as those liabilities and general obligations that are collateralized by legal rights to specifically designated assets owned by the borrowing bank in the case of bankruptcy, insolvency, liquidation, or resolution.
14. A bank shall apply the following factors to all outstanding secured funding transactions with maturities within the 30-calendar days, including customer short positions that do not have a specified contractual maturity:
  - a) Backed by Level 1 assets or with central banks: 0%.
  - b) Backed by Level 2 assets: 15%.
  - c) Secured funding transactions with domestic sovereign, PSEs (those that have a risk weight of 20% or lower) or multilateral development banks that are not backed by Level 1 or 2 asset: 50%.
15. The amount of outflow is calculated based on the amount of funds raised through the transaction, and not the value of the underlying collateral.
16. For all other maturing transactions, the run-off factor is 100%.
17. Derivatives cash outflows: the sum of all net cash outflows should receive a 100% factor. Banks shall calculate, in accordance with their existing valuation methodologies, expected contractual derivative cash inflows and outflows.

18. Any contractual loan drawdowns from committed facilities, which are irrevocable, and estimated drawdowns from revocable facilities within the 30-day period must be fully reflected as outflows in the following run-off rates:
- a) for retail clients, including small business entities: 5% drawdown of the undrawn portion of the facility;
  - b) undrawn committed credit facilities extended to clients other than retail and financial customers: 10% drawdown of the undrawn portion of the facility;
  - c) undrawn committed liquidity facilities extended to clients other than retail and financial customers: 30% drawdown of the undrawn portion of the facility;
  - d) extended to banks and ODTIs subject to prudential supervision: 40% drawdown of the undrawn portion of the facility;
  - e) undrawn committed credit facilities extended to non-bank financial institutions and investment firms: 40% drawdown of the undrawn portion of the facility;
  - f) undrawn committed liquidity facilities extended to non-bank financial institutions and investment firms: 100% drawdown of the undrawn portion of the facility;
  - g) extended to other legal entity customers, credit, and liquidity facilities: 100% drawdown of the undrawn portion of the facility.
19. Any contractual lending obligations within a 30-day period to financial institutions not captured elsewhere in the above categories shall consider a 100% outflow.
20. Outflows related to operating costs, however, are not included in this cash outflow for effects of this Instruction.

## **Article 27 Cash Inflows**

1. When considering its available cash inflows, the bank shall only include contractual inflows (including interest payments) from outstanding exposures that are fully performing and for which the bank has no reason to expect a default within the 30-day time horizon.
2. Contingent inflows, including facilities from a central bank, are not included in total net cash inflows.
3. Banks need to monitor the concentration of expected inflows across wholesale counterparties in the context of banks' liquidity management to ensure that their liquidity position is not overly dependent on the arrival of expected inflows from one or a limited number of wholesale counterparties.
4. To prevent banks from relying solely on anticipated inflows to meet their liquidity requirement, and to ensure a minimum level of HQLA holdings, the amount of inflows that can offset outflows is capped at 75% of total expected cash outflows as calculated in Article 6. This requires that a bank must maintain a minimum amount of stock of HQLA equal to 25% of the total cash outflows.
5. Banks shall assume that maturing reverse repurchase or securities borrowing agreements secured by Level 1 assets will be rolled over and will not give rise to

any cash inflows, which means that the inflow rate will be 0%. When secured by Level 2 assets, banks can include as inflow the same haircut used for outflows. When secured by other liquid assets, a bank is assumed not to roll over the agreement and will receive back 100%.

6. Collateralized loans extended to customers for the purpose of taking leveraged trading positions (“margin loans”) must also be considered as a form of secured lending and banks must not recognize more than 50% of contractual inflows when the collateral is not a HQLA.
7. No credit facilities, liquidity facilities or other contingent funding facilities that the bank holds at other institutions, including facilities obtained from a central bank, for its own purposes are assumed to be able to be drawn. Such facilities receive a 0% inflow rate, meaning that this scenario does not consider inflows from committed credit or liquidity facilities.
8. For all other types of transactions, either secured or unsecured, the inflow rate will be determined by counterparty and the following set of limits on contractual inflows by counterparty type is applied:
  - a) Retail and small business customer inflows. Banks assume that will receive all payments (including interest payments and instalments) from retail and small business customers that are fully performing and contractually due within a 30-day horizon. At the same time, however, banks are assumed to continue to extend loans to retail and small business customers, at a rate of 50% of contractual inflows. This results in a net inflow number of 50% of the contractual amount.
  - b) Other wholesale inflows. Banks shall assume that will receive all payments (including interest payments and instalments) from wholesale customers that are fully performing and contractually due within the 30-day horizon. In addition, banks are assumed to continue to extend loans to wholesale clients, at a rate of 0% of inflows for financial institutions and central banks, and 50% for all others, including non-financial corporates, sovereigns, multilateral development banks, and PSE. This will result in an inflow percentage of 100% for financial institution and central bank counterparties and 50% for non-financial wholesale counterparties.
9. When considering loan payments, the bank must only include inflows from fully performing loans. Further, inflows must only be taken at the latest possible date, based on the contractual rights available to counterparties. For revolving credit facilities, a bank must assume that the existing loan is rolled over and that any remaining undrawn balances are treated in the same way as a committed facility.
10. Inflows from loans that have no specific maturity (i.e., have non-defined or open maturity) must be excluded; therefore, a bank must not make assumptions as to when maturity of such loans would occur. As an exception to this approach, banks may include minimum payments of principal, fee or interest associated with an open maturity loan, provided that such payments are contractually due within 30 days.
11. Inflows from securities maturing within 30 days not included in the stock of HQLA may be treated in the same category as inflows from financial institutions (i.e., 100% inflow).

12. Deposits held at other financial institutions for operational purposes, such as for clearing, custody, and cash management purposes, are assumed to stay at those institutions, and no inflows can be counted for these funds – i.e., they will receive a 0% inflow rate.
13. For derivatives cash inflows, the sum of all net cash inflows should receive a 100% inflow factor.
14. Any other contractual cash inflows shall also be captured, with explanation given to what comprises each item and inflow percentages shall be determined as appropriate for each type of inflow based on banks' experience.
15. However, cash inflows related to non-financial revenues are not considered in the calculation of the net cash outflows for the purposes of this Instruction.
16. The liquidity inflows shall comprise only contractual inflows from exposures that are not past due and for which the institution has no reason to expect non-performance within the 30-day time horizon.

## **SECTION II**

### **NET STABLE FUNDING RATIO**

#### **Article 28 Requirements**

1. The Net Stable Funding Ratio (NSFR) requires banks to maintain a stable funding profile in relation to the composition of their assets and off-balance-sheet activities. A sustainable funding structure can reduce the probability that disruptions to regular sources of funding will erode the bank's liquidity position, increasing the risk of its failure and lead to broader systemic stress.
2. This ratio should be equal to at least 100% on an ongoing basis as represented by the following formula:

$\frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} \geq 100\%$
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3. The amounts of available and required stable funding are calibrated to reflect the presumed degree of stability of liabilities and liquidity of assets. The calibration reflects the stability of liabilities across two dimensions:
  - a) Funding tenor – The NSFR is generally calibrated such that longer-term liabilities are assumed to be more stable than short-term liabilities.
  - b) Funding type and counterparty – The NSFR is calibrated under the assumption that short-term (maturing in less than one year) deposits provided by retail customers and funding provided by small business customers are behaviorally more stable than wholesale funding of the same maturity from other counterparties.
4. In determining the appropriate amounts of required stable funding for various assets, the following criteria were taken into consideration, recognizing the potential trade-offs between these criteria:

- a) Resilient credit creation – The NSFR requires stable funding for some proportion of lending to the real economy to ensure the continuity of this type of intermediation.
  - b) Bank behavior – The NSFR is calibrated under the assumption that banks may seek to roll over a significant proportion of maturing loans to preserve customer relationships.
  - c) Asset tenor – The NSFR assumes that some short-dated assets (maturing in less than one year) require a smaller proportion of stable funding because banks would be able to allow some proportion of those assets to mature instead of rolling them over.
  - d) Asset quality and liquidity value – The NSFR assumes that unencumbered, high-quality assets that can be securitized or traded, and thus can be readily used as collateral to secure additional funding or sold in the market, do not need to be wholly financed with stable funding.
5. Additional stable funding sources are also required to support at least a small portion of the potential calls on liquidity arising from off-balance sheet commitments and contingent funding obligations.

**Article 29**  
**Available Stable Funding**

1. The amount of available stable funding (ASF) is measured based on the broad characteristics of the relative stability of an institution's funding sources, including the contractual maturity of its liabilities and the differences in the propensity of different types of funding providers to withdraw their funding.
2. The amount of ASF is calculated by first assigning the carrying value of an institution's capital and liabilities to one of five categories as presented below. The amount assigned to each category is then multiplied by an ASF factor, and the total ASF is the sum of the weighted amounts. Carrying value represents the amount at which a liability or equity instrument is recorded before the application of any regulatory deductions, filters, or other adjustments.
3. When determining the maturity of an equity or liability instrument, investors are assumed to redeem a call option at the earliest possible date.
4. Where the market expects certain liabilities to be redeemed before their legal final maturity date, banks should assume such behavior for the purpose of the NSFR and include these liabilities in the corresponding ASF category.
5. For long-dated liabilities, only the portion of cash flows falling at or beyond the six-month and one-year time horizons should be treated as having an effective residual maturity of six months or more and one year or more, respectively.
6. Derivative liabilities are calculated first based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a negative value. The collateral posted in the form of variation margin in connection with derivative contracts, regardless of the asset type, must be deducted from the negative replacement cost amount.
7. Liabilities and capital instruments receiving a 100% ASF factor comprise:

- a) the total amount of regulatory capital, before the application of capital deductions, excluding the proportion of Tier 2 instruments with residual maturity of less than one year;
  - b) the total amount of any capital instrument not included in (a) that has an effective residual maturity of one year or more, but excluding any instruments with explicit or embedded options that, if exercised, would reduce the expected maturity to less than one year;
  - c) the total amount of secured and unsecured borrowings and liabilities (including term deposits) with effective residual maturities of one year or more; and
  - d) retail term deposits maturing over one year that cannot be withdrawn early without significant penalties.
8. Cash flows falling below the one-year horizon but arising from liabilities with a final maturity greater than one year do not qualify for the 100% ASF factor.
9. Liabilities receiving a 95% ASF factor comprise “stable”, as defined in the paragraph 2 of Article 26, non-maturity (demand) deposits and/or term deposits with residual maturities of less than one year provided by retail and small business customers.
10. Liabilities receiving a 90% ASF factor comprise “less stable” as defined in the paragraph 2 of Article 26, non-maturity (demand) deposits and/or term deposits with residual maturities of less than one year provided by retail and small business customers.
11. Liabilities receiving a 50% ASF factor comprise:
- a) funding (secured and unsecured) with a residual maturity of less than one year provided by non-financial corporate customers;
  - b) operational deposits generated by clearing, custody and cash management activities (as defined in Article 26 paragraph 7);
  - c) funding with residual maturity of less than one year from sovereigns, public sector entities (PSE), and multilateral and national development banks; and
  - d) other funding (secured and unsecured) not included in the categories above with residual maturity between six months to less than one year, including funding from central banks and financial institutions.
12. Liabilities receiving a 0% ASF factor comprise:
- a) all other liabilities and equity categories not included in the above categories, including other funding with residual maturity of less than six months from central banks and financial institutions;
  - b) other liabilities without a stated maturity as short positions and open maturity positions.
13. Deferred tax liabilities should be treated according to the nearest possible date on which such liabilities could be realized and can be assigned either a 100% ASF factor if the effective maturity is one year or greater, or 50%, if the effective maturity is between six months and less than one year.
14. Minority interest should be treated according to the term of the instrument, usually in perpetuity.

## **Article 30**

### **Required Stable Funding for Assets and Off-Balance Sheet Exposures**

1. The amount of required stable funding (RSF) is measured based on the broad characteristics of the liquidity risk profile of an institution's assets and off-balance sheet exposures. The amount of required stable funding is calculated by first assigning the carrying value of an institution's assets to the categories listed below. The amount assigned to each category is then multiplied by its associated required stable funding (RSF) factor, and the total RSF is the sum of the weighted amounts added to the amount of off-balance sheet activity (or potential liquidity exposure) multiplied by its associated RSF factor.
2. The RSF factors assigned to various types of assets are intended to approximate the amount of a particular asset that would have to be funded, either because it will be rolled over, or because it could not be monetized through sale or used as collateral in a secured borrowing transaction over the course of one year without significant expense. Under the NSFR standard, such amounts are expected to be supported by stable funding.
3. Assets should be allocated to the appropriate RSF factor based on their residual maturity or liquidity value. When determining the maturity of an instrument, investors should be assumed to exercise any option to extend maturity.
4. Where the market expects certain assets to be extended in their maturity, banks should assume such behavior for the purpose of the NSFR and include these assets in the corresponding RSF category. For amortizing loans, the portion that comes due within the one-year horizon can be treated in the less-than-one-year residual maturity category.
5. For purposes of determining its RSF, an institution should:
  - a) include financial instruments, foreign currencies, and commodities for which a purchase order has been executed, and
  - b) exclude financial instruments, foreign currencies, and commodities for which a sales order has been executed.
6. Encumbered assets. - Assets on the balance sheet that are encumbered for one year or more receive a 100% RSF factor. Assets encumbered for a period of between six months and less than one year that would, if unencumbered, receive an RSF factor lower than or equal to 50%, receive a 50% RSF factor. Assets encumbered for between six months and less than one year that would, if unencumbered, receive an RSF factor higher than 50% retain that higher RSF factor. Where assets have less than six months remaining in the encumbrance period, those assets may receive the same RSF factor as an equivalent asset that is unencumbered. In addition, for the purposes of calculating the NSFR, assets that are encumbered for exceptional central bank liquidity operations may receive the same RSF factor as an equivalent asset that is unencumbered.
7. Secured financing transactions. - For secured funding arrangements, use of balance sheet and accounting treatments should generally result in banks excluding, from their assets, securities which they have borrowed in securities financing transactions (such as reverse repos and collateral swaps) where they do not have beneficial ownership. In contrast, banks should include securities they have lent in securities financing transactions where they retain beneficial ownership. Banks should also not include any securities they have received

through collateral swaps if those securities do not appear on their balance sheets. Where banks have encumbered securities in repos or other securities financing transactions but have retained beneficial ownership and those assets remain on the bank's balance sheet, the bank should allocate such securities to the appropriate RSF category.

8. Securities financing transactions with a single counterparty may be measured net when calculating the NSFR, provided that the netting conditions and requirements are met.
9. Derivative assets are calculated based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a positive value.
10. Assets assigned a 0% RSF factor comprise:
  - a) coins and banknotes immediately available to meet obligations;
  - b) all central bank reserves (including required reserves);
  - c) all claims on central banks with residual maturities of less than six months; and
  - d) "trade date" receivables arising from sales of financial instruments, foreign currencies, and commodities that (i) are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction, or (ii) have failed to, but are still expected to, settle.
11. Assets assigned a 5% RSF factor comprise unencumbered Level 1 assets as defined in paragraph 2 of Article 24, excluding assets receiving a 0% RSF as specified above, and including:
  - a) marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs, the Bank for International Settlements, the International Monetary Fund, the European Central Bank and the European Community, or multilateral development banks that are assigned a 0% risk weight under the standardized approach for credit risk; and
  - b) non-0% risk-weighted sovereign or central bank debt securities when in domestic currency.
12. Assets assigned a 10% RSF factor. - Unencumbered loans to financial institutions with residual maturities of less than six months, where the loan is secured against Level 1 assets, and where the bank could freely rehypothecate the received collateral for the life of the loan.
13. Assets assigned a 15% RSF factor comprise:
  - a) unencumbered Level 2 assets, including:
    - i. marketable securities representing claims on or guaranteed by sovereigns, central banks, PSE, or multilateral development banks that are assigned a 20% risk weight under the standardized approach for credit risk; and
    - ii. corporate debt securities (including commercial paper) and covered bonds with a credit rating equal or equivalent to at least AA-.

- b) all other unencumbered loans to financial institutions with residual maturities of less than six months not included in above categories.

14.Assets assigned a 50% RSF factor comprise:

- a) unencumbered assets including:
  - i. residential mortgage-backed securities (RMBS) with a credit rating of at least AA;
  - ii. corporate debt securities (including commercial paper) with a credit rating of between A+ and BBB-; and
  - iii. exchange-traded common equity shares not issued by financial institutions or their affiliates.
- b) any HQLA as defined in the LCR that are encumbered for a period of between six months and less than one year;
- c) all loans to financial institutions and central banks with residual maturity of between six months and less than one year;
- d) deposits held at other financial institutions for operational purposes (Article 26 paragraph 8), that are subject to the 50% ASF factor (Article 29 paragraph 11b); and
- e) all other non-HQLA not included in the above categories that have a residual maturity of less than one year, including loans to non-financial corporate clients, loans to retail customers and small business customers, and loans to sovereigns and PSE.

15.Assets assigned a 65% RSF factor comprise:

- a) unencumbered residential mortgages with a residual maturity of one year or more that would qualify for a 50% or lower risk weight under the Basel II standardized approach for credit risk; and
- b) other unencumbered loans not included in the above categories, excluding loans to financial institutions, with a residual maturity of one year or more that would qualify for a 50% or lower risk weight under the standardized approach for credit risk.

16.Assets assigned an 85% RSF factor comprise:

- a) cash, securities, or other assets posted as initial margin for derivative contracts, and cash or other assets provided to contribute to the default fund of a central counterparty (CCP);
- b) other unencumbered performing loans that do not qualify for the 50% or lower risk weight under the standardized approach for credit risk, and have residual maturities of one year or more, excluding loans to financial institutions;
- c) unencumbered securities with a remaining maturity of one year or more and exchange traded equities, that are not in default and do not qualify as HQLA according to the LCR; and
- d) physical traded commodities, including gold.

17.Assets assigned a 100% RSF factor comprise:

- a) all assets that are encumbered for a period of one year or more;

- b) derivative assets net of derivative liabilities if derivative assets are greater than derivative liabilities;
  - c) all other assets not included in the above categories, including non-performing loans, loans to financial institutions with a residual maturity of one year or more, non-exchange-traded equities, fixed assets, items deducted from regulatory capital, retained interest, insurance assets, subsidiary interests, and defaulted securities; and
  - d) 20% of derivative liabilities (i.e., negative replacement cost amounts).
18. Off-balance sheet exposures. Many potential off-balance sheet liquidity exposures require little direct or immediate funding but can lead to significant liquidity drains over a longer time horizon. The NSFR assigns an RSF factor to various off-balance sheet activities to ensure that banks hold stable funding for the portion of those exposures that may be expected to require funding within a one-year horizon.
19. The RSF factor for irrevocable and conditionally revocable credit and liquidity facilities to any client shall be 5% of the currently undrawn portion.
20. Other contingent funding obligations, including products and instruments such as unconditionally revocable credit and liquidity facilities; trade finance-related obligations (including guarantees and letters of credit); and guarantees and letters of credit unrelated to trade finance obligations shall have a RSF factor of 3% of the currently undrawn portion.

### **SECTION III MONITORING TOOLS**

#### **Article 31 Relevant Tools**

1. In addition to the LCR and NSFR outlined in this Chapter, Sections I and II, this section outlines metrics to be used as consistent monitoring tools.
2. These metrics capture specific information related to a bank's cash flows, balance sheet structure, available unencumbered assets, and certain market indicators that aid in assessing the liquidity risk of a bank.
3. The recommended metrics include the following:
  - a) Contractual maturity mismatch;
  - b) Concentration of funding;
  - c) Available unencumbered assets;
  - d) LCR by significant currency; and
  - e) Market-related monitoring tools.
4. The bank, in addition to these metrics, may use any other instrument it deems appropriate for adequate liquidity management.

#### **Article 32 Contractual Maturity Mismatch**

1. The contractual maturity mismatch profile identifies the gaps between the contractual inflows and outflows of liquidity for defined time bands. These maturity gaps indicate how much liquidity a bank would potentially need to raise in each of these time bands if all outflows occurred at the earliest possible date. This metric provides insight into the extent to which the bank relies on maturity transformation under its current contracts.
2. All contractual cash and security inflows and outflows from all on- and off-balance sheet items shall be mapped to defined time bands based on their respective maturities, in accordance with the template reporting attached on Annex 1.
3. A bank shall report contractual cash and security flows in the relevant time bands based on their residual contractual maturity.
4. Instruments that have no specific maturity (non-defined or open maturity) shall be reported separately, with details on the instruments, and with no assumptions applied as to when maturity occurs.
5. Banks shall consider that no rollover of existing liabilities is assumed to take place, and, for assets, the bank is assumed not to enter into any new contracts.
6. Contingent liability exposures that would require a change in the existing conditions, such as contracts based on a change in prices of financial instruments or on a downgrade of the bank's credit rating, need to be detailed, grouped by what would trigger the liability, with the respective exposures clearly identified.
7. Banks will provide the raw data to the BCTL, with no assumptions included in the data.
8. A bank shall be able to indicate how it plans to bridge any identified gaps in its internally generated maturity mismatches and explain why the assumptions applied differ from the contractual terms.

**Article 33**  
**Concentration of Funding**

1. This metric is meant to identify those sources of wholesale funding that are of such significance that withdrawal of this funding could trigger liquidity problems, thus encouraging the diversification of funding sources.
2. The following indicators shall be determined:
  - a) Funding liabilities sourced from each significant counterparty as a percentage of total liabilities.
  - b) Funding liabilities sourced from each significant product/instrument as a percentage of total liabilities.
  - c) List of asset and liability amounts by significant currency.
3. The numerator a) and b) of paragraph 2 is determined by examining funding concentrations by counterparty or type of instrument/product. Banks should monitor both the absolute percentage of the funding exposure, as well as significant increases in concentrations.
4. The numerator for counterparties is calculated by aggregating the total of all types of liabilities to a single counterparty or group of connected or affiliated

counterparties, as well as all other direct borrowings, both secured and unsecured, which the bank can determine arise from the same counterparty.

5. A “significant counterparty” is defined as a single counterparty or group of connected or affiliated counterparties accounting in aggregate for more than 1% of the bank's total assets, although in some cases there may be other defining characteristics based on the funding profile of the bank. A ‘group of connected counterparties’ is, in this context, defined in the same way as ‘group of inter-related persons’ on Instruction CPO/B-2000/5 of December 26, on Large Credit Exposure.
6. The numerator for type of instrument/product shall be calculated for each individually significant funding instrument/product, as well as by calculating groups of similar types of instruments/products.
7. A “significant instrument/product” is defined as a single instrument/product or group of similar instruments/products that in aggregate amount to more than 1% of the bank's total assets.
8. In order to capture the amount of structural currency mismatch in a bank’s assets and liabilities, banks are required to provide a report of the amount of assets and liabilities in each significant currency.
9. A currency is considered “significant” if the aggregate liabilities denominated in that currency amount to 5% or more of the bank's total liabilities.
10. The above metrics should be reported separately for the time horizons of less than one month, 1-3 months, 3-6 months, 6-12 months, and for longer than 12 months.

### **Article 34**

#### **Available Unencumbered Assets**

1. These metrics provide data on the quantity and key characteristics, including currency denomination and location, of banks’ available unencumbered assets.
2. These assets have the potential to be used as collateral to raise additional HQLA or secured funding in secondary markets or are eligible at central banks and as such may potentially be additional sources of liquidity for the bank.
3. A bank is to report the amount, type and location of available unencumbered assets that could serve as collateral for secured borrowing in secondary markets at prearranged or current haircuts at reasonable costs.
4. Likewise, a bank should report the amount, type and location of available unencumbered assets that are eligible for secured financing with relevant central banks at prearranged (if available) or current haircuts at reasonable costs, for standing facilities only (i.e., excluding emergency assistance arrangements).
5. Collateral that has already been accepted at the central bank but remains unused shall be included.
6. For assets to be counted in this metric, the bank must have already put in place the operational procedures that would be needed to monetize the collateral.
7. In addition to providing the total amounts available, a bank should report these items categorized by significant currency. A currency is considered “significant” if the aggregate stock of available unencumbered collateral denominated in that

currency amounts 5% or more of the associated total amount of available unencumbered collateral (for secondary markets or central banks).

8. These metrics are useful for examining the potential for a bank to generate an additional source of HQLA or secured funding. They will provide a standardized measure of the extent to which the LCR can be quickly replenished after a liquidity shock either via raising funds in private markets or utilizing central bank standing facilities.
9. ODTIs shall consider the sum of unencumbered liquid assets, including deposits, as the amount of highly liquid assets for compliance with paragraph 1 of Article 19 of Instruction no. 6/2010 of December 17.

### **Article 35** **LCR by significant currency**

1. While the LCR is required to be met in one single currency, to better capture potential currency mismatches, banks should also monitor the LCR in significant currencies. This will allow the bank to track potential currency mismatch issues that could arise.
2. The adjusted formula for calculation is:

$\text{Foreign Currency LCR} = \frac{\text{Stock of HQLA in each significant currency}}{\text{Total net cash outflows over a 30-day time period in each significant currency}}$
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3. The amount of total net foreign exchange cash outflows should be net of foreign exchange hedges.
4. The definition of the stock of high-quality foreign exchange assets and total net foreign exchange cash outflows shall mirror those of the LCR for common currencies.
5. A currency is considered “significant” if the aggregate liabilities denominated in that currency amount to 5% or more of the bank's total liabilities.
6. As the foreign currency LCR is not a standard but a monitoring tool, it does not have a defined minimum required threshold.

### **Article 36** **Market-Related Monitoring Tools**

1. High frequency market data with little or no time lag can be used as early warning indicators in monitoring potential liquidity difficulties at banks.
2. While there are many types of data available in the market, banks can monitor data at the following levels to focus on potential liquidity difficulties:
  - a) Market-wide information
  - b) Information on the financial sector
  - c) Bank-specific information
3. Market-wide information. Banks can monitor information both on the absolute level and direction of major markets and consider their potential impact on the financial sector and the specific bank. Market-wide information is also crucial when evaluating assumptions behind a bank’s funding plan.
4. Valuable market information to monitor includes, but is not limited to, equity prices, debt markets (money markets, medium-term notes, long term debt,

derivatives, government bond markets, credit default spread indices, etc.); foreign exchange markets, commodities markets, and indices related to specific products, such as for certain securitized products.

5. Information on the financial sector. To track whether the financial sector is mirroring broader market movements or is experiencing difficulties, information to be monitored includes equity and debt market information for the financial sector broadly and for specific subsets of the financial sector, including indices.
6. Bank-specific information. To monitor whether the market is losing confidence in a particular institution or has identified risks at an institution, it is useful to collect information on equity prices, CDS spreads, money-market trading prices, the situation of roll-overs and prices for various lengths of funding, the price/yield of bank debenture or subordinated debt in the secondary market.

### **CHAPTER III FINAL PROVISIONS**

#### **Article 37**

#### **Compliance with liquidity requirements**

1. Where an institution does not meet or expects not to meet the requirement set out in Sections I and II of Chapter II, including during times of stress, it shall immediately notify the BCTL and shall submit without undue delay to the competent authorities a plan for the timely restoration of compliance the mentioned Sections.
2. The BCTL shall monitor and control the implementation of the restoration plan and shall require a more speedy restoration if appropriate.

#### **Article 38**

#### **Frequency of calculation and reporting**

1. Banks are expected to meet the LCR and NSFR requirement on an ongoing basis.
2. The LCR and NSFR, as well as other liquidity indicators, shall be reported quarterly to BCTL in accordance with the templates reporting attached on Annex 1
3. The reporting shall be handed over by the 20th of the following quarter.
4. The BCTL, if considered necessary for supervision, can require banks to prepare an LCR and a NSFR monthly report, to be forwarded by the 10<sup>th</sup> of the following month.
5. In the case of paragraph 1 of Article 37, until compliance has been restored, the institution shall report the items referred above, as appropriate, daily by the end of each business day unless the BCTL authorizes a lower reporting frequency and a longer reporting delay. BCTL shall only grant such authorizations based on the individual situation of an institution and taking into account the scale and complexity of the institution's activities.

#### **Article 39.°**

#### **Duty of Disclosure on Liquidity**

1. As part of its periodic financial reporting, a bank shall provide quantitative information on:
  - a) size and composition of the bank's liquidity cushion;
  - b) additional collateral requirements as a result of a credit rate downgrade;
  - c) the values of internal ratios and other indicators, including the Liquidity Coverage Ratio, the Net Stable Funding Ratio and the monitoring tools prescribed in Chapter II of this Instruction, as well as other key metrics that management monitors.
2. A bank shall also disclose additional qualitative information including:
  - a) the aspects of liquidity risk to which the bank is exposed and that it monitors;
  - b) the diversification of the bank's funding sources;
  - c) other techniques used to mitigate liquidity risk;
  - d) the concepts utilized in measuring its liquidity position and liquidity risk, as well as those used for ratios and indicators;
  - e) an explanation of how asset market liquidity risk is reflected in the bank's framework for managing funding liquidity;
  - f) an explanation of how stress testing is used;
  - g) a description of the stress testing scenarios modelled;
  - h) an outline of the bank's contingency funding plans and an indication of how the plan relates to stress testing;
  - i) the bank's policy on maintaining liquidity reserves;
  - j) the frequency and type of internal liquidity reporting.
3. Bank must disclose on an annual basis the asset liability management maturity pattern of certain items of assets and liabilities in their audited financial statements.
4. A bank must either include the information required by this Instruction in its published financial reports or, at a minimum, provide a direct and prominent link to the information completely disclosed on its website or in publicly available regulatory reports.
5. The external auditor of a bank shall provide assurance about the accuracy and quality of the information reported by the bank in accordance with this Instruction.
6. Disclosures provided for in this article shall also be in compliance with specific Instructions of BCTL.
7. The report of LCR and NSFR shall follow the formats and frequencies set in this Chapter.

**Article 40**  
**BCTL's Supervision**

1. Without prejudice to the reporting requirements specified above, the BCTL reserves the right to direct access to information maintained in the database of a bank.

**Article 41**  
**Repealing and Entry into Force**

1. Instruction CPO/B-2000/03, on Bank Liquidity, dated of 26 October is hereby repealed.
2. This Instruction shall enter into force from the date of its publication; however, banks shall report in compliance with this Instruction starting with the position of June 30, 2024.
3. Banks shall continue reporting in accordance with the repealed Instruction until June 2024.

Approved on 4 July 2023

The Governor

**Abraão de Vasconcelos**

**ANNEX I – LIQUIDITY REPORTING TEMPLATES**

Code of Template	Name of the Template
LR1	Reporting on liquid assets and liquidity ratios
LR2	Reporting on liquidity outflows
LR3	Reporting on cash inflows
LR4	Required stable funding
LR5	Available stable funding
LR6	Maturity analysis
LR7	Concentration of funds
LR8	Largest depositors

**LR1 - LIQUIDITY COVERAGE - LIQUID ASSETS AND HQLA**

Code	Item	Market Value	Haircut	Amount considered HQLA	Amount not satisfying criteria
1	<b>ASSETS OF LEVEL 1</b>	0	0%	0	0
1.1	Cash		0%	0	0
1.2	Exposures to Central Bank		0%	0	0
1.3	Marketable securities representing claims or guaranteed by	0		0	0
1.3.1	Government	0		0	0
1.3.1.1	claims		0%	0	0
1.3.1.2	guaranteed by		0%	0	0
1.3.2	Central Bank	0		0	0
1.3.2.1	claims		0%	0	0
1.3.2.2	guaranteed by		0%	0	0
1.3.3	BIS, IMF, WB, Multilateral Development Banks	0		0	0
1.3.3.1	claims		0%	0	0
1.3.3.2	guaranteed by		0%	0	0
1.3.4	Other central bank and public sector entity	0		0	0

1.3.4.1	claims		0%	0	0
1.3.4.2	guaranteed by		0%	0	0
1.4	Standby credit facilities granted by central banks not collateralized by liquid assets and excluding emergency liquidity assistance		0%	0	0
1.5	Deposits with clearing or central institution and other statutory or contractually available liquid funding not collateralized by liquid assets	0	0%	0	
1.5.1	Deposits		0%	0	0
1.5.2	Contractually available liquid funding		0%	0	0
<b>2</b>	<b>ASSETS OF LEVEL 2</b>			0	0
2.1	Marketable securities representing claims or guaranteed by sovereign, central bank, multilateral development banks and PSE assets qualifying for 20% risk weighting		15%	0	0
2.2	Qualified Non financial corporate bonds rated AA- or higher		15%	0	0
2.3	Qualifying covered bonds rated AA- or higher		15%	0	0
3.1	LEVEL 1 + LEVEL 2 ASSETS			0	
3.2	MAXIMUM LEVEL 2 ASSETS TO BE CONSIDERED			0	
3.3	AMOUNT OF LEVEL 2 ASSETS (Minimum of Row 2 or Row 3.1)			0	
3.4	HQLA - Total High Quality Liquid Assets			0	

<b>4</b>	<b>ASSETS NOT CLASSIFIED AS LEVEL 1 OR LEVEL 2</b>	<b>Unencumbered</b>	<b>Encumbered</b>	<b>Total</b>
4.1	Due from resident banks			0
4.2	Due from non-resident banks			0
4.3	Non residential mortgage backed instruments issued by a bank			0
4.4	Residential mortgage backed instruments issued by a bank			0
4.5	Qualifying corporate debt securities rated between A+			0

	and BBB-			
4.6	Securities issued by a financial institution other than banks			0
4.7	Other transferable assets that are of extremely high/high liquidity and credit quality (credit rating of between A+ and BBB-)			0
4.9	Sovereign, central bank and PSE debt securities rated BBB- or higher that do not qualify as a Level 1 or Level 2 asset			0
4.10	Deposits with the central institution and other statutory or contractually available liquid funding not collateralized by liquid assets (not included in Row 1.5)	0	0	0
4.10.1	Deposits			0
4.10.2	Contractually available liquid funding			0
4.11	Non financial corporate securities			0
4.14	Total of Non-Level 1 or 2 Assets	0	0	0
4.15	Total of Unencumbered Liquid Assets			0

<b>5</b>	<b>Liquidity Coverage</b>	
5.1	Total High Quality Liquid Assets	0
5.2	Total Cash Outflow	0
5.3	Total Cash Inflow	0
5.4	75% of Total Cash Outflow	0
5.5	Min [Total Cash Inflow; 75% of Total Cash Outflow]	0
5.6	Liquidity Coverage Ratio	#DIV/0!

<b>6</b>	<b>Net Stable Funding Ratio</b>	
6.1	Available Stable Funding	0
6.2	Required Stable Funding	0
6.3	Net Stable Funding Ratio	#VALUE!



## LR2. OUTFLOWS

Ordem	Item	Amount	Run-off	Outflow Amount
1.	Retail Deposits			0
1.1	Covered by Deposit Guarantee or transactional accounts		5%	0
1.2	Uninsured retail deposits		10%	0
2	Unsecured wholesale funding			0
2.1.	Demand deposits and term deposits (less than 30 days maturity) provided by small business customers		10%	0
2.2	Operational deposits generated by clearing, custody and cash management activities		25%	0
2.3	Non-financial corporates, sovereigns, central banks, multilateral development banks and PSEs (not operational)		40%	0
2.4	Non-financial corporates, sovereigns, central banks, multilateral development banks and PSEs (not operational) covered by Deposit Guarantee		20%	0
2.5	Other legal entity customers		100%	0
3	Secured Liabilities (collateralised by assets)			0
3.1	Secured funding transactions with a central bank counterparty or backed by Level 1 assets with any counterparty		0%	0
3.2	Secured funding transactions backed by Level 2 assets with any counterparty		15%	0
3.3	Secured funding transactions backed by non-Level 1 or non-Level 2 assets with domestic sovereign, multilateral development bank, or domestic PSEs as a counterparty		25%	0
3.4	Secured funding backed by other Level 2 assets		50%	0
3.5	All other secured funding transactions		100%	0
4	Own operating expenses		0%	0
5	Additional Outflows Related to Collateral			0
5.1	Corresponding to additional collateral needs that would result from a material deterioration in the credit quality of the institution		100%	0
5.2	Corresponding to additional collateral needs that would result from the impact of an adverse market scenario on the institution's derivatives transaction, financing transactions and other contracts if material		100%	0

5.3	Corresponding to the excess collateral the institution holds that can be contractually called at any time by the counterparty		100%	0
5.4	Corresponding to collateral that is due to be returned to a counterparty		100%	0
5.5	Corresponding to collateral that corresponds to assets that would qualify as HQLA and can be substituted by assets would not qualify as HQLA without the consent of the institution.		100%	0
6	Outflows from credit and liquidity facilities			0
6.1	Maximum amount that can be drawn of undrawn committed credit facilities and undrawn committed liquidity facilities			0
6.1.1	For retail clients, including small business entities		5%	0
6.1.2	Extended to clients other than retail and financial customers			0
6.1.2.1	undrawn committed credit facilities		10%	0
6.1.2.2	undrawn committed liquidity facilities		30%	0
6.1.3	Extended to banks and ODTIs subject to prudential supervision		40%	0
6.1.4	Extended to non-bank financial institutions			0
6.1.4.1	undrawn committed credit facilities		40%	0
6.1.4.2	undrawn committed liquidity facilities		100%	0
6.1.5	Extended to other legal entity customers, credit and liquidity facilities		100%	0
6.2	Other contingent funding liabilities (such as guarantees, letters of credit, revocable credit and liquidity facilities)			0
6.2.1	Trade finance-related obligations (including guarantees and letters of credit)		5%	0
6.2.2	Unconditionally revocable credit and liquidity facilities		10%	0
6.2.3	Guarantees and letters of credit unrelated to trade finance obligations		10%	0
6.2.4	Non-contractual obligations		10%	0
7	Net derivative cash outflows		100%	0
8	Any other contractual cash outflows		100%	0
9	TOTAL CASH OUTFLOWS	0		0

### LR3. CASH INFLOWS

Code	Item	Amount	CAP	Inflow
1	Secured lending, including reverse repos and securities borrowing			
1.1	Reverse repurchase or securities borrowing agreements secured by Level 1 assets		0%	
1.2	Secured by Level 2 assets		15%	
1.3	Secured by eligible residential mortgage backed securities		50%	
1.4	Margin loans		50%	
1.5	Secured by other liquid assets		100%	
2	Cash inflows – other inflows by counterparty			
2.1	Monies due from retail customers		50%	
2.2	Monies due from small business customers		50%	
2.3	Monies due from wholesale customers			
2.3.1	Monies due from central banks		100%	
2.3.2	Monies due from banks and ODTIs		100%	
2.3.3	Monies due from other financial customers		100%	
2.3.4	Monies due from other non-financial entities		50%	
2.4	Monies due from trade financing transactions		100%	
2.5	Assets with an undefined contractual end date		0%	
2.6	Payments of principal, fee or interest associated with an open maturity loan, contractually due within 30 days		100%	
2.7	Securities not included in the stock of HQLA		100%	
2.8	Operational deposits held at other financial institutions		0%	
3	Cash inflows – other cash inflows			
3.1	Net derivative cash inflows		100%	
3.2	Other contractual cash inflows		100%	
4	Cash inflows – Committed facilities			
4.1	Credit facility or liquidity facilities provided to the bank		0%	
4.2	Other contingent funding facilities available		0%	
	<b>TOTAL CASH INFLOWS</b>			

**LR4 - STABLE FUNDING - ASSETS REQUIRING STABLE FUNDING**

Ordem	Assets Requiring Stable Funding	Carrying Amount	RSF Factor	Required Stable Fund
1	Assets with 0% RSF Factor			
1.1	Cash		0%	
1.2	All central bank reserves		0%	
1.3	All claims on central banks with residual maturities of less than six months		0%	
1.4	“Trade date” receivables arising from sales of financial instruments, foreign currencies and commodities		0%	
2	Assets with 5% to 40% RSF Factor			
2.1	Unencumbered Level 1 assets, excluding coins, banknotes and central bank reserves		5%	
2.2	Marketable securities representing claims on or guaranteed by sovereigns, central banks, Public Sector Entities, or multilateral development banks that are a 0% risk weight for credit risk		5%	
2.3	Non-0% risk-weighted sovereign or central bank debt securities when in domestic currency		5%	
2.4	Assets listed in 2.1 to 2.3 encumbered for less than six months		5%	
2.5	Unencumbered loans to financial institutions with residual maturities of less than six months, where the loan is secured against Level 1 assets		10%	
2.6	All other unencumbered loans to financial institutions with residual maturities of less than six months not included in the above categories		15%	
2.7	Unencumbered Level 2 assets		15%	
2.8	Marketable securities representing claims on or guaranteed by sovereigns, central banks, Public Sector Entities, or multilateral development banks that are a 20% risk weight for credit risk		15%	
2.9	Corporate debt securities (including commercial paper) and covered bonds with a credit rating equal or equivalent to at least AA-		15%	
2.10	Assets listed in 2.6 to 2.9 encumbered for less than six months		15%	
3	Assets with 50% RSF Factor			
3.1	Unencumbered assets represented by residential mortgage backed securities with a credit rating of at least AA-		50%	
3.2	Unencumbered assets represented by debt corporate securities with a credit rating of between A+ and BBB-		50%	

3.3	High-quality liquid assets (HQLA) encumbered for a period of six months or more and less than one year		50%	
3.4	Loans to financial institutions and central banks with residual maturities between six months and less than one year		50%	
3.5	Exchange-traded common equity shares not issued by financial institutions		50%	
3.6	Deposits held at other financial institutions for operational purposes		50%	
3.7	All other non-HQLA not included in the above categories that have a residual maturity of less than one year		50%	
3.8	Assets encumbered for a period of between six months and less than one year that would, if unencumbered, receive an RSF factor lower than or equal to 50%		50%	
3.9	Assets listed in 3.1 to 3.7 encumbered for less than six months		50%	
4	Assets with 65% RSF Factor			
4.1	Unencumbered residential mortgages with a residual maturity of one year or more and with a credit risk weight of less than or equal to 50%		65%	
4.2	Other unencumbered loans, excluding loans to financial institutions, with a residual maturity of one year or more and a credit risk weight of less than or equal to 50%		65%	
4.3	Assets encumbered for between six months and less than one year that would, if unencumbered, receive an RSF factor of 65%		65%	
4.4	Assets listed in this group encumbered for less than six months		65%	
5	Assets with 85% RSF Factor			
5.1	Cash, securities or other assets posted as initial margin for derivative contracts		85%	
5.2	Other unencumbered performing loans, excluding loans to financial institutions, with a residual maturity of one year or more and a credit risk weight of more than 50%		85%	
5.3	Unencumbered securities not in default nor qualify as HQLA with a remaining maturity of one year or more		85%	
5.4	Exchange traded equities, that are not in default nor qualify as HQLA, not considered above		85%	
5.5	Physical traded commodities, including gold		85%	
5.6	Assets encumbered for between six months and less than one year that would, if unencumbered, receive an RSF factor of 85%		85%	
5.7	Assets listed in this group encumbered for less than six months		85%	

6	Assets with 100% RSF Factor			
6.1	All assets that are encumbered for a period of one year or more		100%	
6.2	Assets encumbered for between six months and less than one year that would, if unencumbered, receive an RSF factor of 100%		100%	
6.3	Derivative assets net of derivative liabilities if positive		100%	
6.4	20% of gross amount of derivative liabilities		100%	
6.5	Assets without a stated maturity		100%	
6.6	Non-performing loans		100%	
6.7	Loans to financial institutions with a residual maturity of one year or more		100%	
6.8	Non-exchange-traded equities		100%	
6.9	Assets listed in encumbered for less than six months			
6.10	All other assets not included in the above categories		100%	
7	OFF-BALANCE SHEET ITEMS REQUIRING STABLE FUNDING			
7.1	Irrevocable and conditionally revocable credit and liquidity facilities to any client		5%	
7.2	Unconditionally revocable credit and liquidity facilities		3%	
7.3	Trade finance-related obligations as guarantees and letters of credit		3%	
7.4	Other contingent funding obligations		3%	
8	TOTAL REQUIRED STABLE FUNDS			0

**LR5 - STABLE FUNDING - ITEMS PROVIDING STABLE FUNDING**

Ordem	Items Providing Stable Funding	Carryng Amount	ASF Factor	ASF Amount
1	Total Regulatory Capital			
1.1	Tier 1 capital instruments		100%	
1.2	Tier 2 capital instruments, excluding instruments with residual maturity of less than one year		100%	
2	Other capital instruments with effective residual maturity of one year or more		100%	
3	LIABILITIES			
3.1	Liabilities with effective residual maturity of one year or more		100%	
3.2	Retail and small business customer deposits:			
3.2.1	Term deposits maturing over one year with penalties for early withdrawn		100%	
3.2.2	Stable deposits		95%	
3.2.3	Less stable deposits		90%	
3.3	Liabilities receiving a 50% ASF factor			
3.3.1	Funding with residual maturity of less than one year provided by non-financial corporate customers		50%	
3.3.2	Operational deposits		50%	
3.3.3	Funding with residual maturity of less than one year from sovereigns, public sector entities (PSEs) and multilateral and national development banks		50%	
3.3.4	Funding provided by central banks and financial institutions with residual maturity between six months and less than one year		50%	
3.3.5	Other funding with residual maturity between six months and less than one year not included in the above categories		50%	
3.4	Liabilities receiving a 0% ASF factor			
3.4.1	Funding provided by central banks and financial institutions with residual maturity less than six months		0%	
3.4.2	Liabilities without a stated maturity		0%	
3.4.3	All other liabilities and equity not included in the above categories		0%	
3.4.4	Derivative liabilities net of derivative assets if positive		0%	
3.4.5	“Trade date” payables arising from purchases of financial instruments, foreign currencies and commodities		0%	
4	TOTAL AVAILABLE STABLE FUNDS			0

## LR6 - MATURITY ANALYSIS

ASSETS	Amount Maturing from							
	0 - 30 days	31-60 days	61-90 days	91 - 180 days	181 - 270 days	271 - 365 days	1 Yr- 2Yrs	Above 2Yrs
1. Cash on hands								
2. Balances with Central Bank								
3. Balances with banks and ODTIs								
4. Operations with parent bank and subsidiaries								
5. Reverse repurchase agreement								
6. Securities at amortised cost								
7. Performing loans and advances at amortised cost								
8. Other financial assets held for trading								
9. Other financial assets at fair value through profit or loss								
10. Financial assets at fair value through other comprehensive income								
11. Other receivable assets								
<b>Total Liquid Assets</b>	-	-	-	-	-	-	-	-
12. Investment in subsidiaries and joint ventures								
13. Tangible, intangible and other assets								
<b>TOTAL ASSETS</b>	-	-	-	-	-	-	-	-

LIABILITIES	Amount Maturing from							
	0 - 30 days	31-60 days	61-90 days	91 - 180 days	181 - 270 days	271 - 365 days	1 Yr- 2Yrs	Above 2Yrs
1. Due to Central								

Bank									
2. Due to banks and other financial institutions									
3. Repurchase agreement									
4. Operations with parent bank and subsidiaries									
5. Demand deposits and saving accounts									
6. Term deposits									
7. Other deposits									
8. Issued debt securities at amortised cost									
9. Other financial liabilities at amortised cost									
10. Financial instruments held for trading									
11. Other financial liabilities at fair value									
12. Provisions									
13. Other Liabilities									
<b>Total Liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>EQUITY</b>									
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Mismatch / Funding Gap</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Cumulative Mismatch</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Anticipated / Proposed Funding:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
a.									
b.									
c.									
d. Etc....									
<b>Net Funding Position</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**LR7 - CONCENTRATION OF FUNDS**

Code	LIABILITIES	At fair value through profit or loss	Amortised cost	Total	% of total liabilities
1.	<b>Deposits</b>				0
1.1	Central banks				0
1.1.1	<i>Current accounts / overnight deposits</i>				0
1.1.2	<i>Deposits with agreed maturity</i>				0
1.1.3	<i>Repurchase agreements</i>				0
1.2	General governments				0
1.2.1	<i>Current accounts / overnight deposits</i>				0
1.2.2	<i>Deposits with agreed maturity</i>				0
1.2.3	<i>Repurchase agreements</i>				0
1.3	Credit institutions				0
1.3.1	<i>Current accounts / overnight deposits</i>				0
1.3.2	<i>Deposits with agreed maturity</i>				0
1.3.3	<i>Repurchase agreements</i>				0
1.4	Other financial corporations				0
1.4.1	<i>Current accounts / overnight deposits</i>				0
1.4.2	<i>Deposits with agreed maturity</i>				0
1.4.3	<i>Repurchase agreements</i>				0
1.5	Non-financial corporations				0
1.5.1	<i>Current accounts / overnight deposits</i>				0
1.5.2	<i>Deposits with agreed maturity</i>				0
1.5.3	<i>Repurchase agreements</i>				0
1.6	Households				0
1.6.1	<i>Current accounts / overnight deposits</i>				0
1.6.2	<i>Deposits with agreed maturity</i>				0
1.6.3	<i>Repurchase agreements</i>				0
2	<b>Debt securities issued</b>				0
2.1	Certificates of deposits				0
2.2	Asset-backed securities				0
2.3	Covered bonds				0
2.4	Other debt securities issued				0
3	<b>Other financial liabilities</b>				0
4	<b>Total Liabilities according to balance sheet</b>			1	

**LR8 - LARGEST DEPOSITORS**

Order	Name of depositors	Amount of deposit	Type of deposit	Maturity Date	% of Total Liabilities
	10 largest retail depositors				
1					-
2					-
3					-
4					-
5					-
6					-
7					-
8					-
9					-
10					-
	10 largest non-financial corporation depositors				
1					-
2					-
3					-
4					-
5					-
6					-
7					-
8					-
9					-
10					-
	<b>TOTAL</b>	-			-