CENTRAL BANK OF NIGERIA



GUIDELINES ON LIQUIDITY RISK MANAGEMENT AND INTERNAL LIQUIDITY ADEQUACY ASSESSMENT PROCESS (ILAAP)

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1. INTRODUCTION

- 1. Liquidity risk management is a fundamental aspect of banks' operations, as insufficient liquidity poses an immediate threat to their ability to meet short term maturing obligations.
- 2. These Guidelines takes into consideration the Basel Committee for Banking Supervision (BCBS) Principles for Sound Liquidity Risk Management and Supervision which was published in 2008 and reviewed in January 2019.
- The BCBS Principles require banks to establish a robust liquidity risk management framework that ensures they maintain sufficient liquidity, including a cushion of unencumbered high-quality liquid assets (HQLA) to withstand a range of stress events.
- 4. The BCBS Principles also require supervisors to assess the adequacy of banks' liquidity risk management frameworks and their liquidity position and to take prompt action where deficiencies are identified.
- 5. In line with the expectation of the BCBS Principles, the Central Bank of Nigeria (CBN) expects all banks to adequately manage their liquidity and funding risk and has issued these Guidelines on Liquidity Risk Management and Internal Liquidity Adequacy Assessment Process (ILAAP) with the aim of setting out the minimum supervisory expectation.
- 6. As part of the ILAAP, Nigerian banks are required to ensure that all the material liquidity risks are identified, effectively managed, and covered by a sufficient level of high-quality liquidity buffers.
- 7. The ILAAP shall remain the responsibility of individual banks and should be implemented in a proportionate and credible manner taking into consideration the nature, scale, and complexity of the bank's activities.
- 8. Banks are expected to update and document their ILAAP on a quarterly basis and whenever there are material changes in the business processes and strategy or when economic and other conditions suggest that the current level of liquidity is insufficient for the bank to meet its obligations without incurring unacceptable losses.

1.1 Purpose

9. The primary objective of the liquidity risk management framework should be to ensure that the bank is in a position to meet its daily liquidity obligations and that

- it can withstand a period of market-wide or bank-specific liquidity stress affecting both secured and unsecured funding.
- 10. The main purpose of the ILAAP is to assess and be able to demonstrate that a bank has adequate liquidity, a prudent funding profile, and robust processes for the management of its liquidity and funding risks.

1.2 Scope and Proportionality

11. These Guidelines are applicable to all Deposit Money Banks in Nigeria including the specialized non-interest banks. The principle of proportionality will however be applied by CBN in the supervisory assessment of liquidity management processes and methodologies as part of the ILAAP review.

1.3 Disclosures and Frequency of Reporting

- 12. Banks should bi-annually submit to the CBN the ILAAP report. The submission should be made not later than one (1) month after the end of the period
- 13. Banks should publicly disclose relevant and adequate quantitative and qualitative information on their liquidity risk management and liquidity position on an annual basis. This is to enable market participants to make an informed assessment of the soundness of their liquidity risk management framework and ability to meet their liquidity needs and obligations.

2. ILAAP GOVERNANCE

2.1 Risk Governance Framework

- 14. Banks should develop and implement strategies, policies, and practices for the management of liquidity risk, taking into consideration their risk tolerance and risktaking capacity. The aim should be to ensure that the bank effectively manages its liquidity risk and maintains adequate liquidity buffers. These strategies, policies and practices should be approved by the board and reviewed at least annually.
- 15. The boards and senior management should be responsible for the implementation of an effective liquidity risk management process and this should be reflected in the internal governance arrangements.
- 16. The liquidity strategy should be communicated to all the business units whose activities have an impact on the liquidity position of the bank. The activities of such business units should also be consistent with approved policies, procedures, limits, and controls.

- 17. Banks should have reliable management information systems designed to provide the board, senior management and other members of staff involved in the management of liquidity risk with timely, relevant, accurate and complete information on the liquidity position of the bank. The management information system should also be able to generate forward-looking information based on a range of scenarios and assumptions.
- 18. The board and senior management should have a thorough understanding of the close linkages between funding liquidity risk and market liquidity risk, as well as how other risks, including credit, market, operational and reputation risks could affect the bank's overall liquidity risk position and strategy.
- 19. The board has overall responsibility for the implementation of the ILAAP, and it is expected to approve an ILAAP governance framework which should include clear and transparent assignment of responsibilities and a well-articulated approach to its regular internal review and validation to ensure that it continues to be fit-forpurpose.
- 20. The Board, senior management and relevant board and executive committees are expected to discuss and challenge the ILAAP in an effective way.
- 21. The Board is expected to produce and approve the Risk Appetite Statement (RAS) for liquidity and funding risk. The board is also expected to review and approve: the governance framework; the internal documentation framework; business model and strategy; liquidity contingency plan; liquidity stress testing framework etc.

2.2 Internal Review and Validation

- 22. The ILAAP outcomes and assumptions should be subject to regular internal review. The review should take due account of the limits and constraints arising from the methodologies employed, the underlying assumptions and the input data used in quantifying the risk.
- 23. The outcome of the review should be thoroughly assessed, documented, and reported to senior management and the Board. Any weaknesses identified should be addressed in an effective and timely manner.

2.3 Liquidity Adequacy Statement

24. The Board should on a quarterly basis provide its assessment of the liquidity adequacy of the bank through a Liquidity Adequacy Statement (LAS). The assessment should be supported by ILAAP outcomes and any other relevant information.

2.4 Risk Appetite Framework

- 25. Banks should set a liquidity risk tolerance that is appropriate for their business strategy. The liquidity risk tolerance should take into consideration business objectives, strategic direction, and overall risk appetite.
- 26. The set liquidity risk tolerance should be aimed at ensuring that the bank effectively manages its liquidity and that it is able to withstand a prolonged period of market-wide or bank-specific stress.
- 27. Banks are expected to widen the monitoring of the liquidity risks to metrics other than the regulatory limits, which may include; contractual maturity mismatch liquidity ratio, Liquidity Coverage Ratio (LCR).
- 28. Bank should incorporate liquidity costs, benefits and risks in the internal pricing, performance measurement and new product approval process for all significant business activities.
- 29. Banks should clearly articulate how the implementation and monitoring of its strategy and risk appetite are supported by its ILAAP, and how this effectively allows it to comply with the limits and thresholds set out in the Risk Appetite Statement (RAS).
- 30. The ILAAP outcome should inform the design of an effective risk monitoring and reporting system, and an adequately granular limit system that allocates specific limits to: individual risks, business segments, subsidiaries, etc. The limit system should include effective escalation procedures.

2.5 Business Model and Strategy

31. Banks are expected to consider their business model and strategy in all their liquidity management processes.

3. ESSENTIALS IN LIQUIDITY RISK IDENTIFICATION

3.1 Nature of Balance Sheet Structure

- 32. Banks should evaluate the cash flow characteristics, structure, and stability of asset and liability categories to determine their effect on operating and contingent liquidity risk.
- 33. Banks should ensure that their asset cash flow is stable and that it can be converted to cash without incurring unacceptable loss. Banks should also ensure

- the stability of funding liabilities and the ability to renew or replace them at favourable terms.
- 34. Banks that manage liquidity primarily with liabilities, especially from volatile funding sources, should develop very robust strategies and execute them more effectively as this carries more risk compared to banks that manage their liquidity by relying mainly on assets.

3.2 Operating Liquidity

- 35. Banks should develop cash flow projections using multiple scenarios. These scenarios should include bank-specific risks, market-wide risks, and a combination of the two.
- 36. The projection of operational cash flows including cash inflows (sources of funds) and outflows (uses of funds) should be based on reasonable assumptions.
- 37. Banks should be able to demonstrate the adequacy of their management of both contractual and behavioural mismatches in their assets and liabilities structure.

3.3 Asset Based Liquidity Sources

- 38. Banks should incorporate the best possible estimates of their cash-flows from their loan portfolio based on current and future development with the obligors (counterparties) rather than purely based on contractual cashflows.
- 39. Banks should be more prudent in their projection of cash flow from unsecured lines of credit as they may be unavailable under stressed liquidity conditions.
- 40. Banks should assess their collateral positions, including assets currently pledged in relation to the amount of security required and unencumbered assets available to be pledged to secure borrowings or credit line.
- 41. Banks should ensure that assets held as a contingent liquidity source under adverse liquidity circumstances must be unencumbered, be marketable, and have a low interest-rate and price-risk profile to be effective.

3.4 Liability based liquidity sources

42. Banks should recognise the fact that retail and wholesale liability funding sources react differently to changes in economic conditions and the financial condition of a bank.

- 43. Banks should implement appropriate measures aimed at ensuring a more diversified and stable funding base.
- 44. The introduction of Treasury Single Account (TSA) in Nigeria means that government deposits may no longer be relied upon as a source of funding for banks. Banks should therefore consider this limitation and the underlying sensitivities in their operational and contingency planning activities.
- 45. Banks that rely on borrowed funds for ongoing or contingent funding should maintain a good understanding of the credit standards of the funds' providers to enable it to properly estimate the amount of funding that would be accessible as its financial condition changes.
- 46. Banks should be cognizant of the fact that reliance on financial markets for funding¹ increases the level, uncertainty, and complexity of their liquidity risk profile.
- 47. When planning to access funding through the financial market, banks should assess the following: (i) volatility of global and domestic funds' supply and demand, (ii) unexpected disruptions in normal market trading and pricing, (iii) settlement and operational interruptions, and (iv) adjustments in a market's risk pricing and acceptance.

4. LIQUIDITY RISK MANAGEMENT

48. The board should develop and oversee a comprehensive liquidity risk management process that: identifies, measures, monitors, controls and reports a bank's liquidity risk exposure.

4.1 Policies, Procedures and Limits

- 49. Banks should have policies and procedures for identifying, measuring, monitoring, controlling, and reporting liquidity risk exposures. These policies and procedures should be consistent with the bank's business objectives, risk tolerances, and the applicable laws and regulations.
- 50. Banks' policies should include both quantitative and qualitative targets such as:
 - a) Definition and minimum level of high-quality liquid assets (HQLA);
 - b) Reliance on both short- and long-term funding sources, both on an ongoing basis and under contingent liquidity scenarios;

 $^{^{\}rm I}$ This may be in form of repurchase agreements and equity and debt issuances.

- c) Limits on the composition of assets and liabilities;
- d) Level of cash flow mismatches and controls over funding costs; and
- e) Convertibility of assets into cash to be used as contingent sources of liquidity.
- 51. Banks should assign the responsibility for managing liquidity on a solo and group basis and the internal policies should clearly articulate: the approach to managing liquidity and setting limits, and the extent to which the management of liquidity will be centralized or decentralized.
- 52. Banks' policies should identify the primary methods of meeting daily operating cash outflows, providing for cyclical cash flow fluctuations, and addressing various adverse liquidity scenarios. This should include plans for dealing with potential temporary, medium, and long-term liquidity disruptions.
- 53. Policies and procedures should define management responsibilities and address the lines of authority for the following:
 - a) Developing liquidity risk management policies, procedures, and limits;
 - b) Developing and implementing tactics and strategies for managing liquidity risk;
 - c) Conducting day-to-day liquidity management;
 - d) Establishing and maintaining liquidity risk measurement and monitoring systems;
 - e) Authorizing exceptions to limits; and
 - f) Identifying potential liquidity risk and related issues arising from the introduction of new products and activities.
- 54. Banks' policies and procedures should clearly identify the individual or the committee's duties and responsibilities, the extent of their decision-making authority, and the form and frequency of periodic reports to senior management and the board.
- 55. The bank's liquidity risk tolerances or limits should take into consideration its liquidity risk profile and should reflect both quantitative targets and qualitative guidelines and may include the following:
 - a) Limits on projected net cash flow positions (sources and uses of funds) over specified time horizons;
 - b) Limits on discrete or cumulative funding mismatches or gaps over specified short- and long-term time horizons;
 - c) Target amounts of highly liquid asset reserves;

- d) Limits or triggers on funding concentrations or guidelines that promote funding diversification; and
- e) Guidance on the minimum and maximum average maturity of different categories of assets and liabilities.

4.2 Liquidity Risk Quantification, Monitoring and Reporting

- 56. Banks should have a sound process for identifying, measuring, monitoring and controlling liquidity risk. This process should include a robust framework for comprehensively projecting cash flows arising from assets, liabilities, and off-balance sheet items over an appropriate set of time horizons.
- 57. Banks should actively monitor and control liquidity risk exposures and funding needs within and across legal entities, business lines and currencies, taking into consideration: legal, regulatory, and operational limitations to the transferability of liquidity.
- 58. Banks should actively manage their collateral positions, differentiating between encumbered and unencumbered assets. This includes monitoring the legal entity and physical location where collateral is held and how it may be mobilized in a timely manner.
- 59. The measurement of liquidity should be forward-looking and should incorporate all the cash flows and liquidity implications from all material assets, liabilities, off-balance-sheet positions, and other activities, including the potential optionality embedded in the bank's assets and liabilities.
- 60. Banks should evaluate each major on and off-balance sheet position that may affect the sources and uses of funds and determine how it can affect liquidity risk.
- 61. Banks should project their cash flows under different scenarios (business-as-usual and adverse) as part of their liquidity risk measurement approach.
- 62. Banks should ensure that all assumptions used in the generation of liquidity measures and in the projection of cash flows are reasonable and appropriate.
- 63. Banks that rely heavily on secured financing should have strong processes in place for the evaluation of asset liquidity under a variety of business-as-usual and stress conditions. This includes the process for determining whether an asset is available for use as collateral, assessment of market haircuts, and market capacity constraints.

- 64. Banks should ensure that methods used to measure, and monitor liquidity risk are robust and flexible to allow for timely computation of the metrics used in liquidity risk management. The frequency and scope of risk monitoring systems should also be developed in such a way that they are easily expandable during times of stress.
- 65. Banks should implement sufficiently detailed information systems that allow management to assess the sensitivity of the bank's liquidity position to changes in market conditions, its own financial performance, and other risk factors.
- 66. Banks and particularly those with material payment, settlement, and clearing activities are expected to maintain appropriate intraday liquidity management processes that allows them to actively manage their intraday liquidity positions and risks under both normal and stressed conditions.
- 67. Banks should capture the fact that asset valuations may deteriorate under market stress and that this could have an adverse impact on the feasibility of asset sales and their liquidity position.
- 68. Bank should identify, measure, monitor and control their liquidity risk positions while taking the following into consideration:
 - a) Future cash flows of assets and liabilities;
 - b) Sources of contingent liquidity demand and related triggers associated with off-balance sheet positions;
 - c) Currencies in which a bank is active; and
 - d) Correspondent, custody, and settlement activities.
- 69. Banks' dynamic cash flow forecasts should include assumptions on the likely behavioural responses of key counterparties to changes in economic and financial conditions and this should be carried out at a sufficiently granular level. The assumptions about future liquidity needs should be realistic and should reflect the nature of the underlying businesses, products, and markets.
- 70. Banks should consider factors that influence the "stickiness" of retail deposits, such as size, interest-rate sensitivity, geographical location of depositors and the deposit channel.
- 71. Banks should estimate the potential changes in cash flows related to undrawn loan commitments, letters of credit and financial guarantees (provided to customers) during periods of stress.

- 72. Banks should assess their aggregate foreign currency liquidity needs and determine acceptable level of currency mismatches. The size of foreign currency mismatches should take into consideration:
 - a) The bank's ability to raise funds in foreign currency markets;
 - b) The ability to transfer a liquidity surplus from one currency to another, and across jurisdictions and legal entities; and
 - c) Convertibility of currencies in which the bank is active.
- 73. Banks should appropriately identify and manage liquidity risk exposures arising from the use of foreign currency deposits and short-term credit lines to fund domestic currency assets as well as the funding of foreign currency assets with domestic currency. They should also consider the risks of sudden changes in foreign exchange rates or market liquidity, or both, which could sharply widen liquidity mismatches.
- 74. Banks should assess the likelihood of loss of access to the foreign exchange markets as well as the likely convertibility of the currencies in which the bank carries out its activities. A bank should negotiate a liquidity back-stop facility² for a specific currency, or develop a broader contingency strategy, if the bank runs significant liquidity risk positions in that currency.

4.3 Intraday Liquidity Management.

- 75. Banks should actively manage their intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis under both normal and stressed conditions.
- 76. Banks should adopt intraday liquidity management objectives that allow it to identify and prioritise time-specific and other critical obligations and to settle other less critical obligations as soon as possible.
- 77. The bank's strategy to achieve its intraday liquidity management objectives should incorporate the appropriate operational elements. These include:
 - a) Capacity to measure expected daily gross liquidity inflows and outflows;
 - b) Sufficient intraday funding to meet its intraday objectives;
 - c) Ability to manage and mobilise collateral as necessary to obtain intraday funds;

² A bank needs to carefully manage market access to ensure that liquidity sources including credit lines can be accessed when needed.

- d) Robust capability to manage the timing of its liquidity outflows in line with its intraday objectives; and
- e) Ability to deal with unexpected disruptions to its intraday liquidity flows.
- 78. Banks should have policies, procedures, and systems to support operational objectives in all the financial markets and currencies in which it has significant payment and settlement flows. The tools and resources applied should be tailored to the bank's business model and how it conducts its activities in a specific financial market.
- 79. Where a bank chooses to rely on correspondents or custodians to conduct payment and settlement activities, it should assure itself that this arrangement allows it to meet obligations on a timely basis and to manage its intraday liquidity risks under a variety of circumstances³.

4.4 Funding Diversification

- 80. Banks should establish a funding strategy that provides effective diversification in the sources and tenor of funding. They should also regularly gauge their capacity to raise funds quickly from each source.
- 81. Banks should identify the main factors that affect its ability to raise funds and monitor those factors closely to ensure that estimates of fund-raising capacity remain valid.
- 82. Banks' funding plans should take into consideration correlations between sources of funds and market conditions. The desired diversification should also include limits by: counterparty, secured versus unsecured market funding, instrument type, currency, and geographic market.
- 83. Banks should identify alternative sources of funding that strengthen their capacity to withstand a variety of severe yet plausible bank-specific and market-wide liquidity shocks. The potential sources of funding should take into consideration the nature, severity, and duration of the liquidity shock.
- 84. Banks that rely heavily on market-based funding sources should maintain an ongoing presence in their chosen funding markets and strong relationships with funds' providers to promote effective diversification of funding sources.

³ This include the potential for operational or financial disruptions at its correspondent or custodian.

4.5 Buffer of Highly Quality Liquid Assets (HQLA)

- 85. Banks should maintain a cushion of unencumbered, high quality liquid assets as a mitigant against a range of liquidity stress scenarios, including those that involve the loss or impairment of unsecured and typically available secured funding sources. There should be no legal, regulatory, or operational impediment to using these assets to obtain funding.
- 86. Banks should hold appropriate HQLA, subject to the minimum stated in the **CBN Guidelines on Liquidity Coverage Ratio**. The appropriate level of HQLA should take into consideration the estimates of liquidity needs based on the outcomes of the bank's stress testing and should be aligned with the bank's risk tolerance and profile.
- 87. Banks' estimates of liquidity requirements during periods of stress should incorporate both contractual and non-contractual cash flows, including the possibility of funds being withdrawn. The estimates should also assume the inability to obtain unsecured funding and the loss or impairment of access to funds secured by assets other than the safest, most liquid assets.
- 88. Banks should ensure that HQLA are readily available and are not pledged against any liability.

4.6 Contingency Funding Plans

- 89. Banks should formulate clear and unambiguous management actions to be taken in the event of crystallisation of liquidity risk and the proposed actions should take into consideration its risk profile and business strategy.
- 90. Banks should have a formal Contingency Funding Plan (CFP) that clearly sets out the strategies for addressing liquidity shortfalls in emergency situations.

91. The CFP should:

- a) Provide a plan for responding to various liquidity scenarios;
- b) Designate management responsibilities, crisis communication methods and channels, and reporting requirements;
- c) Identify a menu of contingent liquidity sources that a bank can use under various adverse liquidity circumstances; and
- d) Describe steps that should be taken to ensure that the bank's sources of liquidity are sufficient to fund scheduled operating requirements and meet the bank's commitments with minimal costs and disruption.

92. The CFP should also:

- a) Identify plausible stress events that could threaten a bank's ability to fund its obligations;
- b) Evaluate those stress events under different levels of severity including their expected impact on cash flows:
- c) Make a quantitative assessment of funding needs under stress events; and
- d) Provide for management processes, reporting, and internal as well as external communication throughout the stress event.
- 93. Banks should identify the series of actions they will take during a stress event and commit sources of funds for contingent needs in advance of those stress events.
- 94. Banks should evaluate the potential erosion in funding as well as the cash flow mismatches at alternative stages of the stress event. The evaluation should be based on realistic estimates of funds providers' behaviour and collateral expectations and should include both on and off-balance-sheet cash flows.
- 95. Banks should develop a process for identifying a potential liquidity risk event before it becomes a crisis. This process should involve the use of early warning indicators, limits and event triggers that are tailored to the bank's specific liquidity risk profile. Early warning indicators can be qualitative or quantitative in nature.
- 96. The CFP should be regularly tested and updated to ensure that it is operationally robust, and that it reflect current market conditions and bank-specific circumstances.

4.7 Internal Controls

- 97. Banks should put in place effective internal controls, consisting of procedures, approval processes, reconciliations, reviews, and other mechanisms designed to provide reasonable assurance that the bank achieves its liquidity risk management objectives.
- 98. Banks should ensure that operationally independent, appropriately trained, and competent personnel are responsible for implementing internal controls.
- 99. Independent reviews of various components of a bank's liquidity risk management processes should be conducted regularly. These reviews should test and document the current measurement processes, evaluate the system's accuracy, and recommend solutions for identified weaknesses.

100. Independent reviews should also assess compliance with policies and procedures and any non-compliance noted should be reported to senior management and the board.

4.8 Stress Testing

- 101. Banks should conduct stress tests on a regular basis based on a variety of short-term and protracted bank-specific and market-wide stress scenarios (individually and in combination) to identify sources of potential liquidity strain and to ensure that they continue to operate within the established liquidity risk tolerance.
- 102. Banks should use the outcomes of stress testing to adjust their liquidity risk management strategies, policies, and positions and to develop effective contingency plans.
- 103. The design of stress scenarios should take into consideration the nature of the bank's business, activities and vulnerabilities, and the defined scenarios should enable the bank to evaluate their potential adverse impact on its liquidity position.
- 104. Banks should specifically take into consideration the linkage between reductions in market liquidity and constraints on funding liquidity. Banks should also consider the insights and results of stress tests performed for other risk types when stress testing their liquidity position and the possible interactions between liquidity risk and these other types of risk.
- 105. The scenario design should be subject to regular reviews to ensure that the nature and severity of the selected scenarios remain appropriate and relevant to the bank. The review should take into consideration: (i) changes in market conditions, (ii) changes in the nature and size of the bank's business model and activities, and (iii) actual experiences in stress situations.
- 106. Banks should incorporate the results of stress tests in the assessment and planning for potential funding shortfalls in their CFP. Where the projected funding deficits are larger than (or projected funding surpluses are smaller than) implied by the bank's liquidity risk tolerance, banks should consider whether to adjust its liquidity position or to bolster the bank's contingency plan
- 107. Banks' liquidity stress testing framework should capture different time horizons (including intraday) and the relevant currency exposures.
- 108. Banks should define scenarios and sensitivities in a manner that best addresses its individual situation and assess their impact on liquidity inflows and outflows. Specifically:

- a) Banks should continuously analyze the impact of stress scenarios on Liquidity Coverage Ratio;
- b) Banks with significant cross-border activities should assess the transferability of liquidity within the group and take this into account in their stress-testing exercise:
- c) The range of adverse scenarios should adequately cover severe economic downturns, severe market disruptions and financial shocks;
- d) Banks should focus on their vulnerabilities in the definition of plausible adverse scenarios and should demonstrate the relationship between ICAAP and ILAAP stress tests;
- e) Banks should conduct reverse stress-testing assessments.
- 109. The reverse stress tests should be used to challenge the comprehensiveness and conservatism of the ILAAP framework assumptions and should be conducted at least once a year.
- 110. Reverse stress testing in the ILAAP context should inform the development of recovery planning scenarios.

ANNEX A: INFORMATION ON LIQUIDITY RISK MANAGEMENT FRAMEWORK

At a minimum, banks are expected to provide the following information in their ILAAP report:

1. Information on liquidity and funding risk management framework

- a) Description of the scope of the ILAAP including an overview of, and reasoning for, any deviations from the prudential scope of liquidity requirements.
- b) Description of the setup of the ILAAP explaining the relation between all its components and providing reasoning about how that setup ensures the bank has access to sufficient liquidity.
- c) The criteria applied by the bank for the selection of significant risk drivers for liquidity and funding risk, including the selection of significant currencies for monitoring the liquidity and the funding position.
- d) The criteria applied by the bank for the selection of appropriate tools and assumptions for ILAAP, such as the method of measuring and projecting current and future cash-flows of assets, liabilities, and off-balance-sheet items over appropriate time horizons.
- e) An assessment of the intragroup liquidity flows and funding positions, including any possible legal or regulatory impediments to the transfer of liquidity within the group.
- f) Reasoning for the selection of the significant risk drivers and a quantitative overview of these risk drivers, updated at an appropriate frequency.
- g) Quantitative overview of the funding profile and its perceived stability in all significant currencies.
- h) Evidence of the monitoring of compliance with minimum and additional prudential requirements related to liquidity and funding risk in accordance with Prudential Guidelines and the **CBN Guidelines on Liquidity Coverage Ratio**.

2. Information on Risk Appetite Framework

- a) Description of how the strategy and business model of the bank links with its risk appetite framework.
- b) Description of the process and governance arrangements, including the roles and responsibilities within the senior management and the board, in respect to the design and implementation of the risk appetite framework.
- c) Information on the identification of the material liquidity and related risks to which the bank is or might be exposed.

- d) Description of the risk appetite/tolerance levels, thresholds and limits set for the identified material liquidity and related risks, as well as the time horizons, and the process applied to keeping such threshold and limits up to date.
- e) Description of the limit allocation framework within the group, and, for example to, core business lines, markets, products, and subsidiaries.
- f) Description of the integration and use of the risk appetite framework in the risk and overall management, including links to business strategy, risk strategy, ICAAP and ILAAP, including capital and liquidity planning.

3. Information on intraday liquidity risk management

- a) Description of the criteria and tools for measuring and monitoring intraday liquidity risks;
- b) Description of the escalation procedures for the purpose of intraday liquidity shortfalls which ensure that payments due and settlement obligations are met on a timely basis under both 'business as usual' and stressed conditions.
- c) Where appropriate, quantitative overview of intraday liquidity risk over the past year at an appropriate frequency.
- d) Where applicable, the total number of missed payments and an overview with explanation of material payments missed or material obligations not met by the bank in a timely manner.

4. Information on Funding Strategy

- a) Description of the general set-up of the funding plan, including sources of funding, tenors, key markets, products used, etc.
- b) Where appropriate, a policy document on maintaining presence in markets to ensure and periodically test market access and fund-raising capacity of the bank, where relevant.
- c) A policy document on funding concentration risk, including on the principles for measuring and monitoring of correlation between funding sources and economic connection between depositors and other liquidity providers.
- d) Where appropriate, a policy on funding in foreign currencies, including the most relevant assumptions with regard to availability and convertibility of these currencies.
- e) The current funding plan and strategy.
- f) A quantitative overview of the characteristics, such as volumes, prices, and investor appetite, of recent funds raised and an analysis of the feasibility of the execution of the funding plan given (changes in) market volatility.

- g) A forward-looking view on the (desired) development of the funding position over a forward-looking time horizon.
- h) An assessment of the funding position and funding risk after execution of the funding plan.

5. Liquidity risk quantification, monitoring and reporting

This analysis, at a minimum, should address the following:

- a) The bank's sources and uses of cash and their relevant trends.
- b) Pro-forma cash flow statements and funding mismatch gaps over different time horizons.
- c) New products and their effect on liquidity.
- d) Trends and expectations in the volume and pricing of assets, liabilities, and off-balance-sheet items that may significantly affect the bank's liquidity.
- e) Trends in the relative cost of funds required by existing and alternative funds providers and the impact on net interest income and margin.
- f) The diversification of funding sources and trends in funding concentrations.
- g) Asset quality trends.
- h) The sensitivity of funds providers to both financial market and banking trends and events.
- i) The bank's exposure to both broad-based market and bank-specific contingent liquidity events.
- j) A discussion of highly liquid assets, trends in those assets, and the market dynamics that could affect their conversion to cash.
- k) The market's perception of the bank as indicated by excess spread paid relative to similar banks.
- I) If applicable, the impact of cash flows related to the repricing, exercise of embedded options, or maturity of financial derivatives contracts, including the potential for counterparties to demand additional collateral in the event of a weakening of the market's perception of the bank.
- m) If applicable, the impact on cash flows by providing correspondent, custodian, and settlement activities.
- n) If applicable, the bank's capacity to manage liquidity risk exposures arising from the use of foreign currency deposits and short-term credit lines to fund domestic currency assets, as well as the funding of foreign currency assets with domestic currency.

6. Information on Strategy Regarding Liquidity Buffers and Collateral Management

- a) The methodology for determining the internal minimum size of the liquidity buffer, including the bank's definition of liquid assets, the criteria it applies for determining the liquidity value of liquid assets and the constraints relating to concentration and other risk characteristics of the liquid assets.
- b) Policy document on collateral management, including principles in relation to the location and transferability of collateral as well as to their role in relation to meeting minimum prudential requirements.
- c) Policy document on asset encumbrance, including principles for measuring and monitoring both encumbered and unencumbered assets and linking the limit and control framework regarding asset encumbrance to the bank's (liquidity and funding) risk appetite.
- d) Principles for testing the assumptions relating to the liquidity value of, and time to sell or repo, assets included in the liquid asset buffer.
- e) Policy document on liquidity concentration risk in the liquidity buffer, including principles for measuring and monitoring of any potential loss of available liquidity due to this concentration.
- f) Quantification of the minimum volume of liquid assets considered adequate to meet internal requirements.
- g) Quantification of the current liquidity buffer, including its distribution over products, currencies, counterparties, regions/group entities, etc.
- h) Projections of the development of the internally required minimum volume of liquid assets and available liquid assets over appropriate time horizons under both 'business as usual' and stressed conditions.
- i) Quantitative overview and analysis of current and projected levels of asset encumbrance, including details of encumbered as well as unencumbered assets that could be used for generating liquidity.
- j) Assessment of the time it takes to convert liquid assets into directly usable liquidity, given legal, operational, or prudential impediments to the use of liquid assets to cover cash outflows.
- k) Analysis of the testing of assumptions in relation to the liquidity value of, and time to sell or repo, assets included in the liquid asset buffer.

7. Information on Liquidity Stress Testing

a) Description of the adverse scenarios applied, and the assumptions considered in liquidity stress testing, including any relevant items such as the number of scenarios used, the scope, internal reporting frequency to the management body,

- risk drivers (macro and idiosyncratic), the applied time horizons and, where relevant, the split in currencies/regions/business units.
- b) Description of the criteria for calibrating scenarios, selecting appropriate time horizons (including intraday, where relevant), quantification of the impact of stress on the liquidity value of buffer assets, etc.
- c) Quantitative outcome of the stress tests including an analysis of (the main drivers of) this outcome and a clear insight into the relevance of the outcome for the internal limits, liquidity buffers, reporting, modelling and risk appetite.
- d) Quantitative and qualitative analysis of the outcomes of stress testing on the funding profile.

8. Information on liquidity contingency plan

- a) Description of the lines of responsibilities for designing, monitoring, and executing the liquidity contingency plan.
- b) Description of the strategies for addressing liquidity shortfalls in emergency situations.
- c) Description of a tool to monitor market conditions that allow banks to determine in a timely manner whether escalation and/or execution of measures is warranted.
- d) Description of testing procedures, where available (e.g. examples of sales of new asset types, pledging of collateral, etc.).
- e) The current liquidity contingency plan.
- f) Information on the possible management actions including the assessment of their feasibility and liquidity generating capacity under different stress scenarios.
- g) The management view on the implications of all liquidity-related public disclosures made by the bank for the feasibility and timeliness of management actions included in the liquidity contingency plan.
- h) Recent analysis of testing, including conclusions on the feasibility of the management actions included in the liquidity contingency plan.
- i) Description of the internal view on the impact of executing the management actions included in the liquidity contingency plan, e.g. on the access the bank has to relevant markets and on the overall stability of its funding profile in the short and longer terms.

9. Information on risk data, aggregation, and IT systems

- a) Description of the framework and process used to gather, store and aggregate risk data across various levels of a bank, including flow of data from subsidiaries to the group.
- b) Description of data flow and structure of risk data used for ILAAP.
- c) Description of data checks applied for risk data used for ILAAP purposes.
- d) Description of IT systems used to gather, store, aggregate and disseminate risk data used for ILAAP.

10. Supporting Documentation

In addition to the information referred to in the above sections, banks are expected to provide the following:

- a) Evidence of approval of the overall set-up of the ILAAP.
- b) Evidence of approval of the key ILAAP elements, such as the funding plan, the liquidity contingency plan, the liquidity cost-benefit allocation mechanism, stress test assumptions and conclusions on outcomes, specific liquidity and funding risk appetite, targeted size and composition of liquid asset buffer, etc.
- c) Evidence of discussion on (changes in) the liquidity and funding risk profile, limit breaches, etc., including decisions on management actions or the explicit decision not to take any action.
- d) Examples of significant decisions in new product approval committees evidencing, if applicable, the use of the liquidity transfer pricing (LTP) and risk views in these decisions.
- e) Evidence of discussion of the analysis of the feasibility of the funding plan based on (changes in) market depth and volatility.
- f) Evidence of decisions on management actions related to intraday liquidity risk after internal escalation due to intraday liquidity events.
- g) Evidence of discussion of the outcome of liquidity stress tests and decision on any management (non-)action.
- h) Evidence of discussion on the regular testing of the liquidity contingency plan and decisions on adjusting the management actions listed in the liquidity contingency plan.
- i) Decision relating to the size and composition of the liquid asset buffer.
- j) Evidence of discussion regarding the testing of the liquidity value of, and of the time required to sell or repo, assets included in the liquid asset buffer.

k)	Where available, internal self-assessments in which banks can take the opportunity to justify their level of compliance against publicly available criteria regarding risk management and control that affect the ILAAP.

ANNEX B: ORGANIZATION OF THE ILAAP REPORT

- 1. Executive Summary
- 2. Structure and Operations
- 3. Governance Structure
- 4. Risk Appetite Statement
- 5. Risk Assessment and Liquidity Adequacy
- 6. Stress Testing
- 7. Funding Plan and strategy
- 8. Summary of Internal Liquidity Adequacy Assessment Process
- 9. Design, Approval, Review, and Use of ILAAP
- 10. Challenges and Further Steps
- 11. Use of Internal Models for Liquidity Assessment
- 12. Review of ILAAP