Regulation on Islamic Banking Liquidity Risk Management

Accountable Executive & Custodian	Islamic Banking Division
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Approved by DAB Governor:	Date ………………………………	DAB Board Secretary …………………………..

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ISLAMIC REPUBLIC OF AFGHANISTAN, DA AFGHANISTAN BANK, Regulation on Islamic Banking Liquidity Risk Management

PART A: PREAMBLE

1. Background

1.1 This Regulation on Islamic Banking Liquidity Risk Management Guideline (hereinafter referred to as "the Guideline") is issued by the Da Afghanistan Bank (hereinafter referred to as "DAB") which shall be adopted and become the Liquidity Risk Management for Islamic Financial Banks, Financial Banks operating with an Islamic Window and Financial Banks operating with an Islamic Unit (collectively referred to as "the Bank") in the Islamic Republic of Afghanistan offering Islamic financial products.

1.2 A sound liquidity risk management framework is important for the Banks because failure to maintain balance sheet liquidity can mean the failure of the Bank. Access to funding markets, whether retail or commercial, on balance sheet or off, depends on that market's confidence in the Bank itself. Identifying the funding markets to which a bank has access, understanding the nature of those markets, evaluating the bank's current and potential use of a given market, and monitoring markets for signs of confidence erosion are all parts of most liquidity management programs.

1.3 The asset side of the balance sheet provides a liquidity that can be drawn upon over time. The bank's ability to sell assets for cash in an orderly manner, in normal circumstances and in stress situations, is common to virtually all banks, although this understanding can be communicated in a number of ways.

1.4 Liquidity risk may include also sovereign risk if, for example, a bank were unable to repatriate funds from a foreign country which is experiencing an economic crisis.

2. Purpose

2.1 The purpose of this Guideline contained in this document is to provide a framework of principles on liquidity risk management approached, practices and processes to guide The Banks in performing its liquidity risk management function. This Liquidity Framework is intended to:

2.1.1 Ensure that the Banks have robust management of liquidity risk by Banks, as well as the awareness among Banks of their funding structure and their ability to handle short to medium-term liquidity problems;

2.1.2 Adopt a more efficient and on-going liquidity measurement and management for the Banks; and provide the Banks with a better means of assessing the present and future liquidity position of banking Banks.

2.1.3 Address both the Banks and market liquidity concerns on the ability of the Banks to meet all maturing obligations is assessed through the projection of the banking Banks' inflows; and gauges the ability of banking Banks to access funding from the market particularly under stress scenarios.

2.2 The principles as provided in this Guideline shall constitute a general guideline for the guidance to Banks and all Banks are expected to develop methodologies for managing and controlling liquidity risk suited to its business needs and capabilities, as well as the needs and interests of its customers and other stakeholders. The guidelines do fundamentally address what the management of liquidity risk should accomplish. Each Bank should have maximum flexibility to design a program to meet its needs within this Framework.

3. Scope of the Framework

3.1 This Guideline is issued pursuant to Article 2.2 of the Afghanistan Bank Law gazetted on 12/17/2003 (corresponding to 30/10/1382) in relation to the powers of DAB to regulate and supervise Banks in the Islamic Republic of Afghanistan and any amendments thereto.

3.2 The policy and guiding principles provided under this document are applicable to all Banks. Banks are expected to apply these principles taking into account the size, complexity, risk profile and nature of their activities

PART B: LIQUIDITY RISK MANAGEMENT

4. Defining of Liquidity Risk

4.1 *Liquidity risk* is the potential that the Banks will be unable to meet its obligations as they come due because of an inability to obtain adequate funding or liquidate assets, without incurring unacceptable costs and losses.

4.2 Liquidity risk can be categorised into two major types: funding and market liquidity risk. Funding liquidity risk is the risk that the Bank will not be able to meet efficiently both its expected and unexpected current and future cash flow and collateral needs without affecting either daily operations or the financial condition of the Bank. Market liquidity risk is the risk that the Bank cannot easily offset or eliminate a position at the market price because of inadequate market depth or market disruption.

4.3 Liquidity risk can arise due to funding or market risk, or various factors arising due to a combination of these risks, which might be linked to changes in Banking or systemic behaviour. The Bank may face funding liquidity risk due to unexpected withdrawals or transfers of funds by its investment account holders and depositors for several reasons, including reduced creditworthiness, displaced commercial risk, *Shariah* non-compliance risk or reputational risk. On the assets side, the Bank may face funding strain due to problems in its financing and investment portfolio for example, a fall in value of marketable assets held for trading or in the banking book, lack of liquid markets for holdings of *Sukuk* and other *Shariah* -compliant instruments, the impairment of Islamic financing assets due to the financial distress of customers, and large drawdowns under committed line-of-credit agreements. The bank may also face increased liquidity risk due to operational and information system failures of counterparties, or because of problems in a payment and settlement system resulting in late payment or non-payment of funds due.

4.4 In stressed conditions, deterioration in market liquidity may either impact the liquidity of a particular type of instrument or affect a wide range of assets in the market. All other risks of the Bank culminate in liquidity stress before ultimately resulting in insolvency. A bank could fail if its cash inflows from new investment accounts and deposits, repayment of financing, sale of assets and mobilisation of new funds are unable to meet its cash outflow obligations such as mandatory cash reserves, investment account and deposit withdrawals, operating expenses and payments to creditors.

4.5 From a funding liquidity risk perspective, the Bank cannot take an interest-based loan from the interbank market or other sources, and it is also not allowed to transfer its debt, other than at its face value. Shortage or unavailability of *Shariah* -compliant securities in may add to these problems, compelling the Bank to maintain a higher level of cash and non-earning liquid assets than conventional Banks. These factors affect the performance and competitiveness of IIFS vis-à-vis conventional financial Banks in several jurisdictions.

5. Liquidity Risk Management

5.1 Liquidity risk may not be seen in isolation, because financial risk are not mutually exclusive and liquidity risk often triggered by consequence of these other financial risks such as credit risk, market risk etc. For instance, a bank increasing its credit risk through asset concentration etc. may be increasing its liquidity risk as well. Similarly a large financing default or changes in interest/profit rate can adversely impact a bank's liquidity position. Further if management misjudges the impact on liquidity of entering into a new business or product line, the Bank's strategic risk would increase.

5.2 A liquidity risk management involves not only analyzing banks on and off-balance sheet positions to forecast future cash flows but also how the funding requirement would be met. The later involves identifying the funding market the bank has access, understanding the nature of those markets, evaluating banks current and future use of the market and monitor signs of confidence erosion.

5.3 The formality and sophistication of risk management processes established to manage liquidity risk should reflect the nature, size and complexity of a Bank's activities. Sound liquidity risk management employed in measuring, monitoring and controlling liquidity risk is critical to the viability of any Bank. Banks should have a thorough understanding of the factors that could give rise to liquidity risk and put in place mitigating controls.

5.5 The following twelve principles are central to the management of liquidity risk across a bank, within its business lines, and within specific risk categories. They include:

5.5.1 Board of Directors and Senior Management responsibility

5.5.2 Liquidity Risk Strategy

5.5.3 ALCO/Investment Committee

5.5.4 Liquidity Risk Management Process

5.5.5 Management Information System

5.5.6 Liquidity Risk Measurement and Monitoring

5.5.7 Early Warning Indicators of Liquidity Risk.

5.5.8 Contingency Funding Plan

5.5.9 Cash flow Projections.

5.5.10 Liquidity Ratios and Limits.

5.5.11 Internal Control

5.5.12 Monitoring and Reporting Risk Exposures.

6 Board Directors and Senior Management Oversight

6.1 The prerequisites of an effective liquidity risk management include an informed Board, capable management, staff having relevant expertise and efficient systems and procedures. It is primarily the duty of board of directors to understand the liquidity risk profile of the bank and the tools used to manage liquidity risk. The Board has to ensure that the bank has necessary liquidity risk management framework and bank is capable of confronting uneven liquidity scenarios. Generally speaking the board of a bank is responsible:

6.1.1 To position bank's strategic direction and tolerance level for liquidity risk.

6.1.2 To appoint senior managers who have ability to manage liquidity risk and delegate them the required authority to accomplish the job.

6.1.3 To continuously monitors the bank's performance and overall liquidity risk profile.

6.1.4 To ensure that liquidity risk is identified, measured, monitored, and controlled.

6.2 Senior management is responsible for the implementation of sound policies and procedures keeping in view the strategic direction and risk appetite specified by Board. To effectively oversee the daily and long-term management of liquidity risks senior managers should:

6.2.1 Develop and implement procedures and practices that translate the Board's goals, objectives, and risk tolerances into operating standards that are well understood by the Bank's personnel and consistent with the Board's intent.

6.2.2 Adhere to the lines of authority and responsibility that the board has established for managing liquidity risk.

6.2.3 Oversee the implementation and maintenance of management information and other systems that identify, measure, monitor, and control the bank's liquidity risk.

6.2.4 Establish effective internal controls over the liquidity risk management process.

7 Liquidity Risk Strategy

The liquidity risk strategy defined by Board should enunciate specific policies on particular aspects of liquidity risk management, such as:

7.1 **Composition of Assets and Liabilities:** The strategy should outline the mix of assets and liabilities to maintain liquidity. Liquidity risk management and asset/liability management should be integrated to avoid steep costs associated with having to rapidly reconfigure the asset liability profile from maximum profitability to increased liquidity.

7.2 **Diversification and Stability of Liabilities**: A funding concentration exists when a single decision or a single factor has the potential to result in a significant

and sudden withdrawal of funds. Since such a situation could lead to an increased risk, the Board of Directors and senior management should specify guidance relating to funding sources and ensure that the bank have a diversified sources of funding day-to-day liquidity requirements. An Bank would be more resilient to tight market liquidity conditions if its liabilities were derived from more stable sources. To comprehensively analyse the stability of liabilities/funding sources the Bank need to identify:

7.2.1 Liabilities that would stay with the Bank under any circumstances;

7.2.2 Liabilities that run-off gradually if problems arise; and

7.2.3 That run-off immediately at the first sign of problems.

7.3 **Access to Inter-bank Market:** The inter-bank market can be importantsource of liquidity. However, the strategies should take into account the fact that in crisis situations access to inter-bank market could be difficult as well as costly.

7.4 The liquidity strategy must be documented in a liquidity policy, and communicated throughout the Bank. The strategy should be evaluated periodically to ensure that it remains valid.

7.5 The Banks should formulate liquidity policies, which are recommended by senior management/Asset and Liability Management Committee (ALCO) and approved by the Board of Directors. While specific details vary across Banks according to the nature of their business, the key elements of any liquidity policy include:

7.5.1 General liquidity strategy (short- and long-term), specific goals and objectives in relation to liquidity risk management, process for strategy formulation and the level within the Bank it is approved;

7.5.2 Roles and responsibilities of individuals performing liquidity risk management functions, including structural balance sheet management, pricing, marketing, contingency planning, management reporting, lines of authority and responsibility for liquidity decisions;

7.5.3 Liquidity risk management structure for monitoring, reporting and reviewing liquidity; Liquidity risk management tools for identifying, measuring, monitoring and controlling liquidity risk (including the types of liquidity limits and ratios in place and rationale for establishing limits and ratios);

7.5.4 Contingency plan for handling liquidity crises.

7.6 To be effective, the liquidity policy must be communicated down the line throughout in the organization. It is important that the Board and senior management/ALCO review these policies at least annually and when there are any material changes in the Bank's current and prospective liquidity risk profile. Such changes could stem from internal circumstances (e.g. changes in business focus) or external circumstances (e.g. changes in economic conditions).Reviews provide the opportunity to fine tune the Bank's liquidity policies in light of the Bank's liquidity management experience and development of its business. Any significant or frequent exception to the policy is an important barometer to gauge its effectiveness and any potential impact on the bank's liquidity risk profile.

7.7 The Bank should establish appropriate procedures and processes to implement their liquidity policies. The procedural manual should explicitly narrate the necessary operational steps and processes to execute the relevant liquidity risk controls. The manual should be periodically reviewed and updated to take into account new activities, changes in risk management approaches and systems.

8 ALCO/Investment Committee

8.1 The responsibility for managing the overall liquidity of the bank should be delegated to a specific, identified group within the bank. This might be in the form of an Asset Liability Management Committee (ALCO) comprised of senior management, the treasury function or the risk management department. However, usually the liquidity risk management is performed by an ALCO. Ideally, the ALCO should comprise of senior management from each key area of the Bank that assumes and/or manages liquidity risk. It is important that these members have clear authority over the units responsible for executing liquidity-related transactions so that ALCO directives reach these line units unimpeded. The ALCO should meet monthly, if not on a more frequent basis. Generally responsibilities of ALCO include developing and maintaining appropriate risk management policies and procedures, Management information system reporting, limits, and oversight programs. ALCO usually delegates day-to-day operating responsibilities to the Bank's treasury department. However, ALCO should establish specific procedures and limits governing treasury operations before making such delegation.

8.2 Since liquidity risk management is a technical job requiring specialized knowledge and expertise, it is important that senior management/ALCO not only have relevant expertise but also have a good understanding of the nature and level of liquidity risk assumed by the Bank and the means to manage that risk.

8.3 To ensure that ALCO can control the liquidity risk arising from new products and future business activities, the committee members should interact regularly with the bank's risk managers and strategic planners.

9 Liquidity Risk Management Process

9.1 Besides the organizational structure discussed earlier, an effective liquidity risk management include systems to identify, measure, monitor and control its liquidity exposures. Management should be able to accurately identify and quantify the primary sources of a bank's liquidity risk in a timely manner. To properly identify the sources, management should understand both existing as well as future risk that the Bank can be exposed to. Management should always be alert for new sources of liquidity risk at both the transaction and portfolio levels.

9.2 Key elements of an effective risk management process include an efficient management information systems to measure, monitor and control existing as well as future liquidity risks and reporting them to senior management.

10 Management Information System.

10.1 An effective management information system (MIS) is essential for sound liquidity management decisions. Information should be readily available for day to-day liquidity management and risk control, as well as during times of stress. Data should be appropriately consolidated, comprehensive yet succinct, focused, and available in a timely manner. Ideally, the regular reports a bank generates will enable it to monitor liquidity during a crisis; managers would simply have to prepare the reports more frequently. Managers should keep crisis monitoring in mind when developing liquidity MIS. There is usually a trade-off between Managing liquidity risk accuracy and timeliness. Liquidity problems can arise very quickly, and effective liquidity management may require daily internal reporting. Since bank liquidity is primarily affected by large, aggregate principal cash flows, detailed information on every transaction may not improve analysis.

10.2 Management should develop systems that can capture significant information. The content and format of reports depend on a bank's liquidity management practices, risks, and other characteristics. However, certain information can be effectively presented through standard reports such as "Funds Flow Analysis, "and "Contingency Funding Plan Summary". These reports should be tailored to the bank's needs. Other routine reports may include a list of large funds providers, a cash flow or funding gap report, a funding maturity schedule, and a limit monitoring and exception report. Day-to-day management may require more detailed information, depending on the complexity of the bank and the risks it undertakes. Management should regularly consider how best to summarize complex or detailed issues for senior management or the board. Besides other types of information important for managing day-to-day activities and for understanding the bank's inherent liquidity risk profile include:

10.2.1 Asset quality and its trends.

10.2.2 Earnings projections.

10.2.3 The bank's general reputation in the market and the condition of the market itself.

10.2.4 The type and composition of the overall balance sheet structure.

10.2.5 The type of new deposits being obtained, as well as its source, maturity, and price.

10.3 As far as information system is concerned, various units related to treasuryactivities, the dealing, the treasury operation and risk management department should be integrated. Furthermore, management should ensure proper and timely flow of information among front office, back office and middle office in an integrated manner; however, their reporting lines should be kept separate to ensure independence of these functions.

11 Liquidity Risk Measurement and Monitoring

An effective measurement and monitoring system is essential for adequate management of liquidity risk. Consequently banks should institute systems that enable them to capture liquidity risk ahead of time, so that appropriate remedial measures could be prompted to avoid any significant losses. It needs not mention that banks vary in relation to their liquidity risk (depending upon their size and complexity of business) and require liquidity risk measurement techniques accordingly. For instance banks having large networks may have access to low cost stable deposit, while small banks have significant reliance on large size Bank deposits. However, abundant liquidity does not obviate the need for a mechanism to measure and monitor liquidity profile of the bank. An effective liquidity risk measurement and monitoring system not only helps in managing liquidity in times of crisis but also optimize return through efficient utilization of available funds. Discussed below are some (but not all) commonly used liquidity measurement and monitoring techniques that may be adopted by the banks.

12 Early Warning Indicators of Liquidity Risk.

12.1 An incipient liquidity problem may initially reveal in the Bank's financial monitoring system as a downward trend with potential long-term consequences for earnings or capital. Given below are some early warning indicators that not necessarily always lead to liquidity problem for a bank; however these have potential to ignite such a problem. Consequently management needs to watch carefully such indicators and exercise further scrutiny/analysis wherever it deems appropriate. Examples of such internal indicators are:

12.1.1 A negative trend or significantly increased risk in any area or product line.

12.1.2 Concentrations in either assets or liabilities.

12.1.3 Deterioration in quality of credit portfolio.

12.1.4 A decline in earnings performance or projections.

12.1.5 Rapid asset growth funded by volatile large deposit.

12.1.6 A large size of off-balance sheet exposure.

12.1.7 Deteriorating third party evaluation about the bank

13 Contingency Funding Plans

In order to develop a comprehensive liquidity risk management framework, Banks should have way out plans for stress scenarios. Such a plan commonly known as Contingency Funding Plan (CFP) is a set of policies and procedures that serves as a blue print for a bank to meet its funding needs in a timely manner and at a reasonable cost. A CFP is a projection of future cash flows and funding sources of a bank under market scenarios including aggressive asset growth or rapid liability erosion. To be effective it is important that a CFP should represent management's best estimate of balance sheet changes that may result from a liquidity or credit event. A CFP can provide a useful framework for managing liquidity risk both short term and in the long term. Further it helps ensure that a financial Bank can prudently and efficiently manage routine and extraordinary fluctuations in liquidity.

14 Cash Flow Projections

14.1 At the basic level banks may utilize flow measures to determine their cash position. A cash flow projection estimates a bank's inflows and outflows and thus net deficit or surplus (GAP) over a time horizon. The contingency funding plan discussed previously is one example of a cash flow projection. Not to be confused with the re-pricing gap report that measures interest rate risk, a behavioral gap report takes into account bank's funding requirement arising out of distinct sources on different time frames. A maturity ladder is a useful device to compare cash inflows and outflows both on a day-to-day basis and over a series of specified time periods. The number of time frames in such maturity ladder is of significant importance and up to some extent depends upon nature of bank's liability or sources of funds. Banks, which rely on short term funding, will concentrate primarily on managing liquidity on very short term. Whereas, other banks might actively manage their net funding requirement over a slightly longer period. In the short term, bank's flow of funds could be estimated more accurately and also such estimates are of more importance as these provide an indication of actions to be taken immediately. Further, such an analysis for distant periods will maximize the

opportunity for the bank to manage the GAP well in advance before it crystallizes. Consequently banks should use short timeframes to measure near term exposures and longer time frames thereafter. It is suggested that banks calculate daily GAP for next one or two weeks, monthly Gap for next six month or a year and quarterly thereafter. While making an estimate of cash flows, following aspect needs attention

14.1.1 The funding requirement arising out of off- Balance sheet commitments also need to be accounted for.

14.1.2 Many cash flows associated with various products are influenced by interest rates or customer behavior. Banks need to take into account behavioral aspects instead of contractual maturity. In this respect past experiences could give important guidance to make any assumption.

14.1.3 Some cash flows may be seasonal or cyclical.

14.1.4 Management should also consider increases or decreases in liquidity that typically occur during various phases of an economic cycle.

14.2 While the banks should have liquidity sufficient enough to meet fluctuations in loans and deposits, as a safety measure banks should maintain a margin of excess liquidity. To ensure that this level of liquidity is maintained, management should estimate liquidity needs in a variety of scenarios.

15 Liquidity Ratios and Limits

15.1 Banks may use a variety of ratios to quantify liquidity. These ratios can also be used to create limits for liquidity management. However, such ratios would be meaningless unless used regularly and interpreted taking into account qualitative factors. Ratios should always be used in conjunction with more qualitative information about borrowing capacity, such as the likelihood of increased requests for early withdrawals, decreases in credit lines, decreases in transaction size, or shortening of term funds available to the bank. To the extent that any asset-liability management decisions are based on financial ratios, a bank's asset-liability managers should understand how a ratio is constructed, the range of alternative information that can be placed in the numerator or denominator, and the scope of conclusions that can be drawn from ratios. Because ratio components as calculated by banks are sometimes inconsistent, ratio-based comparisons of Banks or even comparisons of periods at a single Bank can be misleading.

15.1.1 **Cash Flow Ratios and Limits:** One of the most serious sources of liquidityrisk comes from a bank's failure to "roll over" a maturing liability. Cashflow ratios and limits attempt to measure and control the volume of liabilities maturing during a specified period of time.

15.1.2 **Liability Concentration Ratios and Limits:** Liability concentration ratios and limits help to prevent a bank from relying on too few providers or funding sources. Limits are usually expressed as either a percentage of liquid assets or an absolute amount. Sometimes they are more indirectly expressed as a percentage of deposits, purchased funds, or total liabilities.

15.1.3 **Other Balance Sheet Ratios:** Total loans/total deposits, total loans/total equity capital, borrowed funds/total assets etc are examples of common ratios used by financial Banks to monitor current and potential funding levels.

15.2 In addition to the statutory limits of liquid assets requirement and cash reserve requirement, the board and senior management should establish limits on the nature and amount of liquidity risk they are willing to assume. The limits should be periodically reviewed and adjusted when conditions or risk tolerances change. When limiting risk exposure, senior management should consider the nature of the bank's strategies and activities, it's past performance, the level of earnings, capital available to absorb potential losses, and the board's tolerance for risk. Balance sheet complexity will determine how much and what types of limits a bank should establish over daily and long-term horizons. While limits will not prevent a liquidity crisis, limit exceptions can be early indicators of excessive risk or inadequate liquidity risk management.

16 Internal Controls

In order to have effective implementation of policies and procedures, banks should institute review process that should ensure the compliance of various procedures and limits prescribed by senior management. Persons independent of the funding areas should perform such reviews regularly. T he bigger and more complex the bank, the more thorough should be the review. Reviewers should verify the level of liquidity risk and management's compliance with limits and operating procedures. Any exception to that should be reported immediately to senior management / board and necessary actions should be taken.

17 Monitoring and Reporting Risk Exposures

Senior management and the board, or a committee thereof, should receive reports on the level and trend of the bank's liquidity risk at least quarterly. A recent trend in liquidity monitoring is incremental reporting, which monitors liquidity through a series of basic liquidity reports during stable funding periods but ratchets up both the frequency and detail included in the reports produced during periods of liquidity stress. From these reports, senior management and the board should learn how much liquidity risk the bank is assuming, whether management is complying with risk limits, and whether management's strategies are consistent with the board's expressed risk tolerance. The sophistication or detail of the reports should be commensurate with the complexity of the Bank.

18 Custodian of the Liquidity Risk Management Guideline

18.1 This Guideline shall be under the safe custody of the Islamic Banking Division ("IBD") of DAB. Any changes to this Guideline shall be made by the IBD with prior consultation with the SSB, as reviewed by the DAB Executive Board and upon approval by DAB Supreme Council. A copy of the amended Guideline shall be made available to all stakeholders and SSB members for reference and implementation.

18.2 Banks may further refine the Guideline to suit their particular structure and policies. Such amendments shall be approved by the Bank's Risk Management Committee at the Board level. The Bank's Risk Management Division will have custody over the Bank's Guiding Principles of Risk Management Guideline.

19 Effective Date of the Document

The Effective date of this Guideline is the ______ day of ______________ 20___