



SUPERVISORY AND REGULATORY GUIDELINES: PU68-0510
Management of Liquidity Risk
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GUIDELINES FOR THE MANAGEMENT OF LIQUIDITY RISK

1. INTRODUCTION

- 1.1 The Central Bank of The Bahamas (“the Central Bank”) is responsible for the licensing, regulation and supervision of banks and trust companies operating in and from within The Bahamas, pursuant to the Central Bank of The Bahamas Act, 2000 (“the CBA”) and the Banks and Trust Companies Regulation Act, 2000 (“the BCTRA”). Additionally, the Central Bank has the duty, in collaboration with financial institutions, to promote and maintain high standards of conduct and management in the provision of banking and trust services.
- 1.2 All licensees are expected to adhere to the Central Bank’s licensing and prudential requirements, ongoing supervisory programmes and regulatory reporting requirements, and are subject to periodic on-site examinations. Licensees are expected to conduct their affairs in conformity with all other Bahamian legal requirements.

2. PURPOSE

- 2.1 Liquidity is a licensee’s capacity to fund increases in assets or meet collateral obligations at a reasonable cost as they fall due, without incurring unacceptable losses. Maintaining an adequate level of liquidity depends on the licensee's ability to meet both expected and unexpected cash flows efficiently and collateral needs, without adversely affecting either daily operations or the financial condition of the licensee.
- 2.2 Liquidity risk is the risk that a licensee’s financial condition or overall safety and soundness is adversely affected by an inability—real or perceived—to meet its contractual obligations. A licensee's obligations and the funding sources used to meet them depend significantly on its business mix, balance sheet structure, and the cash-flow profiles of its on- and off-balance sheet obligations. In managing their cash flows, licensees confront various situations that can give rise to increased liquidity risk. These include funding mismatches, market constraints on the ability to convert assets into cash or in accessing sources of funds (i.e., market liquidity), and contingent liquidity events. Changes in economic conditions or exposure to credit, market,

operation, legal, and reputation risks also can affect a licensee's liquidity risk profile.

- 2.3 Lessons learned from the recent events in financial markets have pointed to the importance of liquidity and the need for improvement in liquidity risk management in financial institutions. To account for financial market developments, as well as the lessons learned from the recent financial market turmoil, the Central Bank undertook a fundamental review of the 2005 *Guidelines for the Management of Liquidity Risk* to bring them in conformance, where appropriate, with the [Principles for Sound Liquidity Risk Management and Supervision](#) issued by the Basel Committee on Banking Supervision in September 2008.
- 2.4 These revised Guidelines, therefore, provide guidance to licensees in relation to the Central Bank's expectations of their liquidity risk management practices, as well as outlining the Central Bank's approach to assessing the adequacy of licensees' liquidity risk management frameworks and their liquidity positions.

3. APPLICABILITY

- 3.1 These Guidelines apply to all public banks and/or trust companies. However, pursuant to Regulation 6(2) of the Banks and Trust Companies (Liquidity Risk Management) Regulations 2011 ("the LRMR"), the liquidity ratio shall not currently apply to licensees that are subject to the provisions of section 19 and 20 of the CBA ("commercial banks").
- 3.2 The Central Bank recognises that the degree of sophistication of a licensee's liquidity risk management framework will depend on the nature, scale of complexity of a licensee's activities, as well as the level of liquidity risk assumed. The Central Bank equally accepts that in the supervision of internationally active banks, account should also be taken of the global liquidity risk management frameworks of the head office and the home supervisor's assessment of the overall liquidity risk management framework and liquidity positions.

4. DEFINITIONS

- 4.1 Liquid assets have the same meaning as defined by Regulation 2 of the LRMR.
- 4.2 Liquidity ratio means the ratio of the sum of a licensee's liquid assets (in all currencies) expressed as a percentage of the sum of its deposit liabilities (in all currencies).

5. SOUND PRACTICES OF LIQUIDITY RISK MANAGEMENT

- 5.1 Because of its critical importance to the viability of a licensee, liquidity risk management should be fully integrated into the licensee's risk management processes. Therefore, licensees should have a comprehensive management process for identifying, measuring, monitoring and controlling liquidity risk, appropriate to the operations of the licensee. Critical elements of sound liquidity risk management are highlighted below:
- i. Effective corporate governance consisting of oversight by the board of directors and active involvement by senior management in an institution's control of liquidity risk;
 - ii. Appropriate strategies, policies, procedures, and limits used to manage and mitigate liquidity risk;
 - iii. Comprehensive liquidity risk measurement and monitoring systems (including assessments of the current and prospective cash flows or sources and uses of funds) that are commensurate with the complexity and business activities of the institution;
 - iv. Active management of intraday liquidity and collateral;
 - v. An appropriately diverse mix of existing and potential future funding sources;
 - vi. Adequate levels of highly liquid marketable securities free of legal, regulatory, or operational impediments that can be used to meet liquidity needs in stressful situations;
 - vii. Internal controls and internal audit processes sufficient to determine the adequacy of the institution's liquidity risk management process; and
 - viii. Appropriate contingency funding plans (“CFPs”) that sufficiently address potential adverse liquidity events to which the institution may be exposed and emergency cash flow requirements.
- 5.2 The Central Bank will review these critical elements in its assessment of a licensee’s liquidity risk management framework, during the course of its on-site examination of licensees and the risk assessment process, generally.

6. LIQUIDITY RISK MANAGEMENT FRAMEWORK

Board and Senior Management Responsibilities

- 6.1 Ultimate responsibility for the liquidity risk assumed by a licensee and the manner in which this risk is managed rest with the licensee’s Board of Directors (“the Board”). For branches of international banks, the responsibilities set forth in these Guidelines for the Board should be assumed by the head office of the local branch. Senior managers at head office should ensure that the standards set forth in these Guidelines are appropriately addressed by the senior management of the local branch. Where the Board of

a subsidiary or head office of a local branch utilises liquidity risk management programmes applicable to all group companies, such liquidity risk management programmes must be consistent with the requirements of these Guidelines and should be tailored to the local environment. In undertaking this responsibility, the Board should, inter alia:

- i. Approve the licensee's liquidity risk strategy and other significant policies related to liquidity risk management, including contingency fund planning;
 - ii. Review policies and procedures periodically, but at least annually;
 - iii. Establish and approve senior management lines of authority and responsibility for managing the licensee's liquidity risk;
 - iv. Understand the nature of the liquidity risks of the licensee and the tools used by senior management to monitor and control liquidity risk;
 - v. Ensure appropriate processes and systems are in place to identify, measure, monitor and control sources of liquidity risk; and
 - vi. Regularly monitor the performance and liquidity risk profile of the licensee, through periodic and timely reporting by senior management and internal auditors.
- 6.2 Senior management is responsible for ensuring that Board approved strategies, polices, and procedures for the day-to-day and long-term liquidity management are appropriately executed within the lines of authority and responsibility designated for managing and controlling liquidity risk. This involves overseeing the development, implementation and maintenance of:
- i. Appropriate policies and procedures that translate the Board's approved objectives and risk tolerances into operating standards;
 - ii. Management information and other systems that adequately identify, measure and control liquidity risk; and
 - iii. Effective internal controls over the liquidity risk management process, including review and assessment by an appropriately trained, competent and independent party, e.g. internal or external auditors.
- 6.3 Senior management should fully understand the nature and level of liquidity risk assumed by the licensee and the means of managing that risk. Senior management should also promptly communicate any material changes in the licensee's liquidity position to the Board, given that maintenance of adequate liquidity is fundamental to the ongoing viability of the licensee.
- 6.4 The close links between and among other risks, such as credit, market, operational and reputational, can significantly impact a licensee's liquidity risk strategy; therefore, senior management should communicate the liquidity risk strategy, key policies for implementing the strategy and the liquidity risk management framework throughout the organisation. Additionally, senior management should coordinate the licensee's liquidity risk management with

its business continuity arrangements (see also Contingency Planning section below).

Liquidity Risk Management Structure

- 6.6 Licensees should have in place an appropriate liquidity management structure that can effectively execute their liquidity risk management strategy, policies and procedures.
- 6.6 While the specific structure chosen by a licensee will depend on the nature, scale and complexity of its operations, responsibility for managing overall liquidity should be delegated to a specific group or individual within the licensee. This might be in the form of an Asset Liability Committee (“ALCO”), comprised of senior management, the treasury function or the risk management department. Ideally, the ALCO should have broad representation from across major business and operational lines that can influence, directly or indirectly, the licensee’s liquidity risk. It is important that members of the ALCO have clear authority over the units responsible for executing liquidity-related transactions, so that ALCO directives reach these line units unimpeded.
- 6.7 Liquidity risk may be managed on a group or sub-group basis, in the case of subsidiaries and branches of an international banking group. However, the licensee’s local Board and senior management (in the case of a subsidiary) or head office (in the case of a branch) retains ultimate responsibility for ensuring compliance with these Guidelines, by having arrangements in place to ensure that any liquidity issues specific to the licensee are appropriately identified and addressed by the licensee or those delegated with responsibility for managing the licensee’s liquidity risk.

Internal Controls and Audit

- 6.8 Licensees should have appropriate internal controls addressing relevant elements of the risk management process, including adherence to policies and procedures, the adequacy of risk identification, measurement, reporting and compliance with applicable rules and regulations.
- 6.9 Senior management should ensure periodic reviews and assessment of various components of the licensee’s liquidity risk management processes. A qualified independent party, e.g., internal or external auditors, should do such reviews and assessments. Any weaknesses or problems identified in the review should be brought to the attention to senior management for prompt corrective action.
- 6.10 The reviews and assessment should, inter alia, cover the following areas:

- i. adequacy of risk identification, measurement, reporting and compliance with supervisory guidance (including statutory liquidity ratios/limits) and industry sound practices;
- ii. suitability of the underlying assumptions for conducting cash flow and stress scenario analyses;
- iii. integrity and usefulness of management information system reports; and
- iv. adherence to established liquidity policies and procedures.

Management Information Systems

6.11 Licensees should have a reliable management information system (“MIS”), consistent with the size, nature and complexity of their operations, to measure, monitor and control liquidity risk under normal and stressed conditions. The MIS should be able capture all sources of liquidity risk, including contingent risks and the related triggers and those arising from new activities, and have the ability to deliver more granular and time sensitive information during periods of stress. The MIS should particularly be able to:

- i. analyse liquidity positions in all currencies in which the licensee conducts significant business¹, both on a stand-alone and on an aggregate group basis;
- ii. calculate liquidity positions, both on an intraday and day-to-day basis and over a series of more distant time periods;
- iii. calculate and project various liquidity related limits and ratios, including statutory requirements, and for internal risk management purposes;
- iv. set out clearly the assumptions and limitations underlying cash flow management reports and stress scenario analyses;
- v. generate timely reports on risk measures and liquidity trends for management; and
- vi. check compliance with established liquidity policies and limits, and generate exception reports.

6.12 While the precise content and format of MIS reports will largely depend on a licensee’s liquidity management framework and the size, nature and complexity of its activities, the reports should enable the Board and senior management to review and monitor the following:

- i. the maturity profiles of licensee’s cash flows under normal and stress conditions;
- ii. the stock of liquid assets available and their market values;

¹ The Central Bank will normally regard a currency position to be significant, if the amount of a currency represents more than 10% of total deposits.

- iii. the concentration in sources and application of funds;
 - iv. the compliance with liquidity management strategies and risk tolerance levels set by the Board;
 - v. compliance with the liquidity ratio;
 - vi. the ability to borrow or undertake asset sales in various markets;
 - vii. potential sources of volatility in assets and liabilities (and claims and obligations arising from off-balance sheet activities);
 - viii. the analysis of intra-group cash flows and accessibility to such funding;
 - ix. the capacity of providers of standby facilities to meet their obligations; and
 - x. the impact of adverse trends (e.g. decline in asset quality, market or operational disruptions etc.) on future cash flows and market confidence.
- 6.13 Reporting of risk measures should be done frequently (e.g., daily reporting to the senior/management/ALCO and each Board meeting during normal times, with reporting increasing during stress situations).

Liquidity Strategy, Policies and Procedures

- 6.14 Licensees should have comprehensive strategies for managing liquidity risk, which should be clearly documented in policies and procedures for limiting and controlling risk exposures that appropriately reflect the licensee's risk tolerances.
- 6.15 A licensee's liquidity strategy should be appropriate to the nature, size complexity of its activities, taking into consideration such issues as legal structures, key business lines, the breadth and diversity of markets, products and jurisdictions in which the licensee operates, and statutory/regulatory requirements. The strategy should address specific policies on particular aspects of liquidity risk management such as:
- i. the composition and maturity of assets and liabilities;
 - ii. the diversity and stability of funding sources;
 - iii. the approach to managing liquidity in different currencies, across borders, and across business lines and legal entities;
 - iv. the approach to intraday liquidity management; and
 - v. the assumptions on the liquidity and marketability of assets.
- 6.16 The strategy should also take account of liquidity needs under normal conditions as well as under periods of liquidity stress, the nature of which may be institution-specific or market-wide, or a combination of the two.

- 6.17 While the specific details of liquidity policies and procedures will vary across licensees, according to the nature scale and complexity of the licensee's activities, elements of any liquidity policy include, but are not limited to the following:
- i. 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 licensee it is approved;
 - ii. 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;
 - iii. Liquidity risk management structure for monitoring, reporting and reviewing liquidity;
 - iv. 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);
 - v. Policies with respect to transferring a liquidity surplus from one currency to another, and across jurisdictions and legal entities; and
 - vi. Contingency plan for handling liquidity crises.
- 6.18 To be effective, the liquidity policy must be communicated throughout the firm. 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 licensee'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 licensee's liquidity policies in light of its 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 licensee's liquidity risk profile.
- 6.19 Licensees should establish appropriate procedures and processes to implement their liquidity policies. The procedural manual should explicitly enunciate 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.

7. LIQUIDITY RISK MEASUREMENT AND MONITORING

Funding Requirements

- 7.1 The process for measuring liquidity risk should include robust methods for

comprehensively projecting cash flows arising from assets², liabilities and off-balance sheet activities over meaningful and multiple time horizons and under different operating conditions.

- 7.2 Given their significance in constructing cash flow projections, the assumptions underlying the behaviour of assets, liabilities and off-balance sheet activities should be consistent, reasonable, and appropriate to a licensee's business profile and be adequately documented in the liquidity risk management policies. Senior management/ALCO should periodically review and formally approve these assumptions.
- 7.3 Licensees should ensure that either a positive cash flow position is maintained or otherwise sufficient cash can be generated satisfy to their daily funding requirements. Licensees are therefore required to measure, monitor their net funding requirements by constructing a maturity profile—which must be reported to the Central Bank (maturity-wise analysis of liabilities and assets)³—that projects future cash flows arising from assets, liabilities and off-balance sheet commitments and other contingent liabilities. However, senior management/ALCO may approve the exclusion of certain cash flows from the maturity profile, if they are deemed immaterial. The rationale for such exclusions should be adequately documented in the liquidity risk management policies and periodically reviewed to ensure that they remain appropriate.
- 7.4 Licensees should set realistic and appropriate internal limits to control the size of their cumulative net mismatch positions (i.e., where cumulative cash inflows exceed cumulative outflows)⁴ for the short-term time buckets (i.e., “sight--less than 8 days”, “8 days--less than one month” and “1 month--less than 3 months”), commensurate with the nature, scale, and complexity of the firm's activities, as well as risk tolerances. Maturity mismatch limits should also be set for individual currencies in which a licensee has significant activity. The maturity mismatch limits should be adequately documented in the liquidity risk management policies and periodically reviewed to ensure that they remain appropriate. Any exceptions to the imposed limits should be approved by senior management/ALCO.
- 7.5 The Central Bank will discuss the appropriateness and adequacy of the internal limits and actual mismatches of licensees on, a case-by-case basis, during an on-site examination and/or risk assessment process, taking into account various factors, including:
- i. A licensee's stock a quality of liquid assets;
 - ii. The volatility and diversity of deposits;
 - iii. The quality and diversity of the loan book;

² Assets should be prudently valued according to relevant financial reporting standards and supervisory standards.

³ See Section 8 “Central Bank Reporting Requirements”

⁴ A cumulative net mismatch position is derived by accumulating the net mismatch position in each successive time bucket.

- iv. Contingent liabilities and loan commitments
- v. The availability and reliability of undrawn standby facilities;
- vi. The extent to which liquidity is managed and supervised, on an integrated global basis;
- vii. The ability and willingness of the parent/head office to provide liquidity; and
- viii. A licensee's market standing and the quality of its treasury management.

Liquidity Ratios and Limits

- 7.6 Licensees should maintain an appropriate cushion of liquid assets⁵ that can be sold or pledged for meeting liquidity needs in crises. While the amount and composition of these assets should be commensurate with the nature, scale and complexity of the licensee's activities, as well as its liquidity risk tolerances, key considerations include assumptions about the size of cash flow mismatches, the duration and severity of the stress event and the liquidation or borrowing value of the assets in stress situations.
- 7.7 Pursuant to Regulation 6(1) of the LRMR and as detailed in paragraph 3.1 of these Guidelines, every licensee shall maintain a liquidity ratio of not less than twenty (20) percent. In addition to the statutory requirement, licensees should establish a variety of ratios and limits to control the nature and amount of liquidity risk that they are willing to assume, taking into account the nature of a licensee's business (in terms of location, complexity of activities, nature of products, currencies and markets served), historical performance, and the level of earnings and capital available to absorb potential losses. These ratios and limits, including corresponding escalation procedures, should also be properly documented and periodically reviewed (see Section 6 under Internal Controls and Audit) and adjusted, as conditions or risk tolerances of a licensee change.
- 7.8 Liquidity ratios and limits will not prevent a liquidity crisis, but used in conjunction with more qualitative information, such as a licensee's funding capacity (e.g., in terms of a reduction in credit lines or an increase in requests for early withdrawals of deposits), exceptions or breaches can be early warning indicators of excessive risk or inadequate liquidity risk management. Accordingly, monitoring of ratios and limits should be assigned to a function independent of the funding areas, with breaches and exceptions appropriately escalated to senior management/ALCO.
- 7.9 Typical examples of ratios and limits used by licensees for liquidity risk monitoring and control include:

⁵ See Regulation 2 of the LRMR for definition of "liquid assets".

- i. Target liquidity ratio—licensees are encouraged to set a target liquidity ratio above the statutory requirement as an early warning indicator. This might be particularly useful for commercial banks, as they may be more vulnerable to early withdrawals of deposits in a liquidity crisis and those licensees that normally maintain a liquidity ratio relatively close to the statutory requirement;
- ii. Maturity mismatch limits for local and major foreign currencies;
- iii. Concentration limits in respect of the mix of assets and liabilities—this includes limits to avoid excessive exposure to market and other risks within the asset portfolios in respect of asset type, counterparty, geographic location and economic sector;
- iv. Loan to deposit ratio or other ratios appropriate to a licensee’s business activities

Foreign Currency Liquidity Management

7.10 Licensees should assess their foreign currency liquidity needs on an aggregate basis, and have adequate systems in place for measuring, monitoring and controlling cash flow and acceptable mismatch positions in each foreign currency in which they have significant activity⁶. Mismatch positions in foreign currencies should be analysed under both normal and stressed conditions. In managing individual currency funding needs, licensees should take into account the nature of their business activities and funding strategies. The size of mismatches for individual foreign currencies should take into account, inter alia, the following factors:

- i. the ability to transfer a liquidity surplus from one currency to another, and across jurisdictions and legal entities;
- ii. the availability of foreign currency back-up facilities to cater for circumstances in which normal access to individual currencies is disrupted;
- iii. the “stickiness” of foreign currency deposits under stressed conditions;
- iv. ability of borrowers to repay their foreign currency obligations under stressed conditions;
- v. the ability to raise funds in foreign currency markets; and
- vi. the convertibility of currencies in which the licensee is active, including the potential for impairment or complete closure of foreign exchange swap markets for particular currency pairs.

Diversified Funding

⁶ The Central Bank will normally regard a foreign currency position to be significant, if the amount of foreign currency represents more than 10% of total deposits.

- 7.11 Licensees should establish a funding strategy that provides effective diversification in the sources and tenor of funding, by maintaining an ongoing presence in its chosen funding markets and building strong and lasting relationships with key fund providers. As such, licensees should regularly gauge their capacity to raise funds rapidly from each fund provider, as well as frequently assess and closely monitor the most important factors affecting its ability to raise funds, to ensure that estimates of its funding capacity remain valid. The objective is to identify and build-up an appropriate level of “core” funding and to minimise reliance on volatile funding sources. In particular, licensees with a large deposit base should have systems to carry out statistical and behavioural analysis to detect any signs that the average life of retail deposits is shortening or that the deposit base is becoming volatile. Licensees should also be cautious about attracting deposits mainly by way of offering above market interest rates or promotional gift items, as such deposits may prove to be highly volatile.
- 7.12 As a general liquidity risk management practice, licensees should avoid any potential concentration in funding sources. Available funding sources should be diversified over multiple time horizons (e.g., short-, medium- and long-term). Diversification targets should be part of medium- to long- term funding plans and should be aligned with budgeting and business planning processes, as well as take into account correlations between sources of funds and market conditions. Funding should also be diversified across a full range of retail as well as secured and unsecured wholesale sources of funds, consistent with the nature and complexity of a licensee’s business activities. Concentration limits should be established, together with systems for monitoring compliance, so that over-reliance on a single counterparty (or group of related counterparties), secured versus unsecured market funding, instrument type, securitisation vehicle, currency and geographic market, may be prevented.
- 7.13 An essential component of ensuring funding diversity is maintaining market access. Market access is critical for effective liquidity risk management as it affects both the ability to raise new funds and to liquidate assets. Senior management should ensure that market access is being actively managed, monitored, and tested by the appropriate staff. Such efforts should be consistent with the licensee’s liquidity risk profile and sources of funding.
- 7.14 Licensees should identify alternative sources of funding that strengthen their capacity to withstand a variety of severe institution-specific and market-wide liquidity shocks. Depending upon the nature, severity, and duration of the liquidity shock, potential sources of funding include, but are not limited to, the following:
- i. Deposit growth
 - ii. Lengthening of maturities of liabilities
 - iii. Issuance of debt instruments

- iv. Intra-group transfers, new capital issues, sales of subsidiaries or lines of business
- v. Asset securitisation
- vi. Sale (outright or through repurchase agreements) or pledging of unencumbered highly liquid assets
- vii. Drawing-down committed facilities
- viii. Borrowing

Intra-day Liquidity Position Management

7.15 Structural and operational changes in payment systems have increased the importance of monitoring intra-day liquidity for licensees engaged in significant payment, settlement, and clearing activities. In this respect, the failure by a licensee to manage intra-day liquidity effectively, under normal and stressed conditions, could leave it unable to meet payment and settlement obligations in a timely manner, adversely affecting its own liquidity position and that of its counterparties. Among large, complex firms, the interdependencies that exist among payment systems and the inability to meet certain critical payments has the potential to lead to systemic disruptions that can prevent the smooth functioning of all payment systems and money markets. Licensees should take account of this in their stress testing and scenario analysis. Therefore, licensees with material payment, settlement and clearing activities should actively manage their intra-day liquidity positions and risks to meet payment and settlement obligations on a timely basis, under both normal and stressed conditions, in all of the financial markets and currencies in which they have significant payment and settlement flows. Senior management should develop and adopt an intra-day liquidity strategy that allows the licensee to:

- i. Monitor and measure expected daily gross liquidity inflows and outflows;
- ii. Identify and prioritize time-specific and other critical obligations in order to meet them when expected;
- iii. Settle other less critical obligations as soon as possible;
- iv. Control credit to customers, when necessary; and
- v. Ensure that liquidity planners understand the amounts of collateral and liquidity needed to perform payment-system obligations when assessing the institution's overall liquidity needs.

7.16 Where a licensee relies on correspondents or custodians to conduct payment and settlement activities, it should ensure that this arrangement allows it to meet its obligations on a timely basis and to manage its intra-day liquidity risks under a variety of circumstances. In particular, such licensees should recognise the potential for operational or financial disruptions at its correspondent or custodian to disrupt its own liquidity management, and

therefore should have alternative arrangements in place to ensure fulfilment of its obligations under such situations.

Intra-group Liquidity

- 7.17 Intra-group funds transfers could affect a licensee's liquidity in various ways. For example, a licensee may have to provide support to group companies experiencing liquidity shocks, while funding provided by other related entities to the licensee may be withdrawn in an emergency. Licensees should therefore have adequate policies and systems to manage their intra-group liquidity arrangements, including by establishing internal limits on intra-group liquidity risk to mitigate the risk of contagion in periods of stress. Internal limits may also be set for each currency in which the licensee operates.
- 7.18 Licensees should specify in their liquidity management strategy the treatment of intra-group liquidity and assumptions on intra-group dependencies. They should also be able to monitor and analyse how the funding positions of other group companies might affect their own liquidity, and to address any regulatory or legal impediments to accessing liquidity on a group basis.
- 7.18 Licensee should ensure that where they provide significant funding or liquidity support to other group or related entities (e.g., in the form of explicit guarantees or funding lines to be drawn at times of need), such support is appropriately accounted for in the measurement of their own liquidity positions.
- 7.19 Subsidiaries and branches of international banking groups should generally be able to rely on the support of their parent or head office in a liquidity crisis affecting only The Bahamas operations. Such support could however be called into question if the crisis affected the group as a whole. The local Board and senior management (in the case of a subsidiary) or head office (in the case of a branch) must demonstrate to the Central Bank how the liquidity of The Bahamas operation is to be supported and the degree of commitment of the parent or head office to provide liquidity in support in the event of a crisis.⁷ (See also paragraph on 6.13)
- 7.20 The Central Bank will monitor the level and trend of intra-group transactions. Where the Central Bank has reason to doubt the financial or liquidity position of the group, the Central Bank may set limits on intra-group transactions, including requiring that a licensee becomes self-sufficient in terms of its own liquidity adequacy.

Stress Testing and Scenario Analysis

⁷ The Central Bank may require letters of comfort or parental guarantees to be in place, depending on the circumstances, as proof of this commitment.

- 7.21 Licensees should conduct stress tests on a regular basis for a variety of short-term and protracted institution-specific and market-wide events across multiple time horizons, including on an intraday basis. The range and frequency of stress testing that is conducted by a particular firm should be commensurate with the nature, scale, complexity of the licensee's activities, size of a licensee's liquidity risk exposures, as well as the licensee's relative importance to the financial system in which it operates. Stress test outcomes should be used to identify and quantify sources of potential liquidity strain and to analyse possible adverse impacts on the licensee's cash flows, liquidity position, profitability, and solvency. Stress tests should consider the effects that losses and the resulting reduction in capital can have on the licensee's ability to maintain funding relationships. Stress tests should also be used to ensure that current exposures are consistent with the licensee's established liquidity risk tolerance. There should be an independent review (e.g., internal or external audit) of the adequacy of the design and effectiveness of the operations of a licensee's stress testing programme. The Central Bank will discuss the results of licensees' stress tests during the course of its on-site examinations.
- 7.22 Licensees should develop and utilise rigorous and challenging stress scenarios—the underlying assumptions should be reasonable and appropriate—when conducting stress tests and examine resultant cash-flow needs. Stress scenarios, as well as their underlying assumptions, should be properly documented.
- 7.23 While licensees are encouraged to cover stress scenarios of different types and levels of adversity commensurate with the nature, scale, complexity of their activities, they should, at a minimum, include the following:
- i. Institution-specific scenario—covering situations that might arise from a licensee experiencing problems (real or perceived), such as asset quality problems, solvency concerns, rumours about a licensee's credibility, or management fraud etc. This should represent the licensee's "worst-case" view of its cash flows in a crisis. Subsidiaries and branches of international banking groups should consider **two** types of institution-specific scenarios, namely, a crisis affecting only The Bahamas operations and a crisis that affects the global operations of the group. In the latter case, no intra-group or head office support should be assumed as available.
 - ii. Market-wide scenario—involves events where liquidity at numerous financial institutions in one or more markets is affected.
- 7.24 The Board (in case of subsidiaries) or head office (in the case of branches) has ultimate responsibility for the overall stress-testing programme and should be aware of the key findings from stress tests. Senior management's active involvement and support is critical to the effectiveness of the stress testing

process. Senior management should discuss the results of stress tests and take remedial or mitigating actions to limit the licensee's exposures, build up a liquidity cushion, and adjust its liquidity profile to fit its risk tolerance. Stress testing and contingency planning are closely entwined; therefore, the results of stress tests should be incorporated into the licensee's CFP.

- 7.25 Liquidity risk may be managed on an integrated basis in the case of subsidiaries and branches of an international banking group, with stress tests conducted on group or sub-group level. In these instances, the Central Bank may regard these arrangements for complying with stress test requirements as acceptable, provided that the licensee's local Board and senior management (in the case of a subsidiary) or head office (in the case of a branch) can demonstrate that the stress scenarios employed appropriately addresses specific risk characteristics of the licensee concerned. Licensees having such arrangements in place should discuss this with the Central Bank.

Contingency Planning

- 7.26 All licensees are expected to have a comprehensive CFP that clearly sets out the strategies for addressing liquidity shortfalls in crises. Comprehensive contingency plans delineate specific policies and procedures to manage a wide range of stress events, establish clear lines of responsibility, and articulate clear implementation and escalation procedures. The CFP should be regularly tested⁸ to ensure that it remains relevant and operationally sound. Senior management should also review and update the CFP, at least annually, for the Board's approval, or more often, as warranted by business or market conditions.
- 7.27 A CFP should cover at least the following components:-
- i. Specific reporting procedures to ensure timely and uninterrupted information flows to senior management. A clear division of responsibility should be in place so that all personnel understand their roles in a crisis situation, including designated personnel who would be responsible for identifying crises and crisis management as well as those for promptly notifying the Inspector of Banks and Trust Companies ("the Inspector") of the problems;
 - ii. Early warning indicators⁹ that are used to signal an approaching crisis event, the mechanisms to facilitate constant monitoring and reporting of these signals. Licensees should tailor these indicators to its specific risk profile;

⁸ The extent and frequency of such testing should be proportionate to the nature, scale and complexity of a licensee's activities, as well as to the size of its liquidity risk exposures.

⁹ See also [Principles for Sound Liquidity Risk Management and Supervision](#), Basel Committee on Banking Supervision (September 2008) for an indicative list of early warning indicators, which a licensee may wish to consider.

- iii. Action plans for altering asset and liability behaviours (i.e., market assets more aggressively, sell assets intended to hold, raise interest rates on deposit etc.) to deal with crisis events, which should include assessing the likely impact of particular courses of action;
 - iv. Procedures for making-up cash flow shortfalls during a crises. This should include identifying various sources of liquidity (including unused credit facilities), their availability, the conditions for their use, their reliability and the order of priority in which they are to be used. Licensees should also assess the cost of alternative funding sources and the potential impact on capital;
 - v. Procedures for determining the priority of customer relationships during a crisis, e.g. the order in which credit lines would be withdrawn from specific customers; and
 - vi. A communication plan for effectively communicating with employees, clients, market participants, creditors, counterparties, shareholders, the media and the Central Bank.
- 7.28 The results of stress tests and scenario analyses should be incorporated into the CFP. These results should be used as the basis for identifying various crises that could affect the licensee's liquidity and estimating its severity.
- 7.29 In the case of commercial banks, with extensive branch networks, the CFP should include contingencies to ensure the delivery of currency to their operations within a short period in a crisis. They may also consider the extent to which assets held with the Central Bank, pursuant to the statutory reserve and liquid assets requirements of Sections 19 and 20, respectively, of the CBA, are eligible to secure funding under the Central Bank's discount window.
- 7.30 For subsidiaries and branches of international banking groups, the CFP should deal with how the management of liquidity of The Bahamas operations is integrated into the global liquidity management of their respective parents or head office. The CFP should set out how the liquidity of The Bahamas operations is to be supported and the degree of commitment of the parent or head office to provide liquidity support in the event of a crisis.¹⁰
- 7.31 The CFP should be consistent with a licensee's business continuity plans and should be operational under situations where business continuity arrangements have been activated. Therefore, senior management should ensure effective coordination between teams managing liquidity crises and business continuity. As with business continuity plans, licensees should ensure that CFPs are readily accessible by liquidity crisis teams, both on- and off-site to facilitate quick implementation.

8. CENTRAL BANK REPORTING REQUIREMENTS

¹⁰ See footnote 7.

- 8.1 The Central Bank will monitor the liquidity position of a licensee on an ongoing basis to satisfy itself that the liquidity risk is being appropriately managed, taking into account the nature, scale and complexity of the licensee's activities. As a part of this process, licensees must provide the Central Bank with a copy of their liquidity risk management strategy in addition to Form 7 (Profit and Loss) and the Maturity-Wise Analysis of Liabilities and Assets of the Excel Reporting System (ERS).
- 8.2 Any change in a licensee's liquidity risk management strategy should be communicated to the Inspector within two weeks of being approved by the Board.
- 8.3 In addition, licensees should inform the Inspector, forthwith, of any concerns about their current or future liquidity position, as well as their plans to address these concerns. Where a licensee's liquidity ratio is below the statutory requirement, it should immediately notify the Inspector and provide the necessary details. The Inspector may enter into discussions with the licensee to determine what remedial action is required.

9. PUBLIC DISCLOSURE

- 9.1 Given that public disclosure improves transparency, facilitates valuation, reduces uncertainty in markets and strengthens market discipline, the Central Bank encourages licensees, as part of their periodic financial reporting, to disclose both quantitative and qualitative information, regarding their liquidity risk management frameworks to enable relevant stakeholders, particularly major creditors and counterparties, to make an informed judgement concerning their ability to meet liquidity needs.

10. SUPERVISION OF LIQUIDITY RISK MANAGEMENT

- 10.1 In fostering the establishment of sound and prudent liquidity risk management frameworks within licensees, the Central Bank, as a part of its ongoing supervisory responsibilities, intends to assess the degree of licensees' compliance with the principles set forth in these Guidelines, taking into account the nature, scale and complexity of the licensee's activities. Consequently, the Central Bank will examine the effectiveness, relevance of the strategies, policies and procedures adopted by licensees, including the quality of the supervision and control exercised by the Boards and senior management, during the course of its on-site examinations of licensees.
- 10.2 In the case of the commercial banks, the Central Bank will use the liquidity ratio as specified in Regulation 6(1) of the LRMR, amongst other indicators, for monitoring and assessing the overall liquidity positions of these licensees

and will be subject to discussion during the quarterly meetings held with these firms.

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