



BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Liquidity Risk

Applicable to:

1. Licensed banks
2. Licensed investment banks
3. Licensed Islamic banks
4. Licensed international Islamic banks
5. Prescribed development financial institutions
6. Financial holding companies engaged predominantly in banking or Islamic banking business

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PART A OVERVIEW

1 Introduction

- 1.1 Liquidity is the ability of a financial institution to fund assets and meet obligations as they come due. The fundamental role of financial institutions in the maturity transformation of short-term deposits into long-term loans or financing makes financial institutions inherently vulnerable to liquidity risk, both of institution-specific nature and that which affects financial markets as a whole. Effective liquidity risk management therefore helps ensure a financial institution is able to meet its cash flow obligations at all times.
- 1.2 This policy document sets out Bank Negara Malaysia's (the Bank) requirements and guidance on the management of liquidity risk to ensure that financial institutions are effective in assessing their exposures to liquidity risk and take appropriate measures to address their liquidity needs. This policy document has been developed based on the *Principles for Sound Liquidity Risk Management and Supervision* by the Basel Committee for Banking Supervision (BCBS)¹ and the *Guiding Principles on Liquidity Risk Management for Institutions Offering Islamic Financial Services*² by the Islamic Financial Services Board (IFSB). The requirements and guidance set out in this policy document also complement the *Liquidity Coverage Ratio* (LCR) and *Net Stable Funding Ratio* (NSFR) policy documents which set out minimum regulatory liquidity requirements.

2 Applicability

- 2.1 This policy document is applicable to all financial institutions as defined in paragraph 5.2.

3 Legal provisions

- 3.1 The requirements in this policy document are issued pursuant to—
- (a) section 47 of the Financial Services Act 2013 (FSA);
 - (b) section 57 of the Islamic Financial Services Act 2013 (IFSA); and
 - (c) section 41 of the Development Financial Institutions Act 2002 (DFIA).
- 3.2 The guidance in this policy document is issued pursuant to section 266 of the FSA, section 277 of the IFSA and section 126 of the DFIA.

¹ Issued in September 2008; <https://www.bis.org/publ/bcbs144.pdf>

² Issued in March 2012; https://www.ifsb.org/wp-content/uploads/2023/10/IFSB-12-March-2012_En.pdf

4 Effective date

- 4.1 This policy document comes into effect on 15 October 2025 except for paragraph 18.5 which will come into effect on 1 January 2025.
- 4.2 For the avoidance of doubt, paragraph 18.5 shall apply to LCR positions as at 31 December 2024 and onwards, that are published on or after 1 January 2025.

5 Interpretation

- 5.1 The terms and expressions used in this policy document shall have the same meanings assigned to them in the FSA, IFSA or DFIA, as the case may be, unless otherwise defined in this policy document.

- 5.2 For the purpose of this policy document—

“**S**” denotes a standard, an obligation, a requirement, specification, direction, condition and any interpretative, supplemental and transitional provisions that must be complied with. Non-compliance may result in enforcement action;

“**G**” denotes guidance which may consist of statements or information intended to promote common understanding and advice or recommendations that are encouraged to be adopted;

“**financial institution**” refers to—

- (a) a licensed bank under the FSA;
- (b) a licensed investment bank under the FSA;
- (c) a licensed Islamic bank under the IFSA;
- (d) a licensed international Islamic bank under the IFSA;
- (e) a prescribed development financial institution under the DFIA; or
- (f) a financial holding company under the FSA or IFSA engaged predominantly in banking or Islamic banking business, as the case may be;

“**board**” refers to the board of directors of a financial institution, including a committee of the board where the responsibilities of the board set out in this policy document have been delegated to such a committee;

“**business day**” refers to the opening hours of the relevant large value payment system (LVPS) or of correspondent banking services during which a financial institution can receive and make payments in the jurisdiction of the financial institution’s operations;

“**encumbered asset**” refers to an asset that is restricted by legal, regulatory, tax, Shariah, accounting or contractual encumbrances or other practical restrictions on the ability of a financial institution to liquidate, sell, transfer, or assign the asset;

“**high-quality liquid asset**” or “**HQLA**” refers to high-quality liquid assets as described in paragraph 10 and Appendix I of the policy document on *Liquidity*

Coverage Ratio, including with regard to encumbrance and transferability of assets;

“**intraday liquidity**” refers to funds which can be accessed by a financial institution during the business day;

“**senior management**” refers to the chief executive officer and senior officers of a financial institution.

6 Related legal instruments and policy documents

- 6.1 This policy document must be read together with other relevant legal instruments and policy documents that have been issued by the Bank, including any amendments or reissuance thereafter, in particular:
- (a) *Liquidity Coverage Ratio* issued on 25 August 2016;
 - (b) *Net Stable Funding Ratio* issued on 31 July 2019;
 - (c) *Risk Governance* issued on 1 March 2013; and
 - (d) *Stress Testing* issued on 15 June 2017;
 - (e) *Recovery Planning* issued on 28 July 2021;
 - (f) *Business Continuity Management* issued on 19 December 2022;
 - (g) *Financial Reporting* issued on 29 April 2022;
 - (h) *Financial Reporting for Islamic Banking Institutions* issued on 29 April 2022;
 - (i) *Investment Account* issued on 10 October 2017;
 - (j) *Reference Rate Framework* issued on 11 August 2021; and
 - (k) *Risk-Informed Pricing* issued on 16 December 2013.

7 Policy documents and circulars superseded

- 7.1 This policy document supersedes the Dear CEO letter on *Funds Transfer Pricing (FTP) Practices of Banking Institutions* dated 6 November 2014.

PART B POLICY REQUIREMENTS**8 Roles and responsibilities of the board and senior management**

- S Principle 1: The board and senior management must exercise effective oversight of the financial institution's liquidity risk. This entails establishing a liquidity risk management framework that includes strategies, policies and controls to ensure that the financial institution maintains sufficient liquidity to address its liquidity obligations and withstands a range of stress events.**
- S 8.1** The board shall have the overall responsibility for the liquidity risk assumed by the financial institution and the manner in which this risk is managed. This includes ensuring that senior management manages liquidity risk effectively. In fulfilling its responsibility, the board must:
- (a) approve a liquidity risk appetite³ which defines the level of liquidity risk that the financial institution is willing to assume;
 - (b) approve the financial institution's strategy as well as critical policies and processes related to the management of liquidity risk (including its funding strategy), and review these elements at least annually;
 - (c) ensure that the financial institution has the necessary resources and systems to identify, measure, monitor and control all sources of liquidity risk. This includes ensuring that senior management and other officers responsible for managing liquidity risk have the necessary expertise to execute their responsibilities effectively;
 - (d) regularly review reports on the liquidity position of the financial institution. This includes ensuring that senior management also provides timely updates to the board on new or emerging liquidity concerns;
 - (e) regularly review and challenge stress testing assumptions and results, even during periods when liquidity is abundant in the market;
 - (f) review and approve the financial institution's contingency funding plan annually, at minimum, or more often as warranted by changes in business or market circumstances;
 - (g) ensure that senior management takes appropriate and timely remedial actions to address any liquidity concerns raised (including those arising from liquidity stress tests and the testing of contingency funding plans); and
 - (h) develop clear and effective communication and disclosure strategies to relevant stakeholders, particularly during stress events.
- S 8.2** In relation to paragraph 8.1(a), the board must ensure that the liquidity risk appetite is:
- (a) appropriate in line with the business objectives, strategic direction and overall risk appetite of the financial institution and its role in the financial system;
 - (b) reflective of the financial condition and funding capacity of the financial institution;
 - (c) set with the aim of ensuring the financial institution manages liquidity robustly during normal day-to-day operations and is able to withstand stress when a shock occurs; and

³ This also includes the financial institution's risk tolerance.

- (d) articulated in a manner that allows all levels of senior management in the financial institution to clearly understand the trade-off between risks and profits.
- S** 8.3 Senior management shall be responsible for the day-to-day management of liquidity risk. This includes developing and implementing the strategy, policies and processes to manage liquidity risk in accordance with the liquidity risk appetite set by the board. In fulfilling its responsibility, senior management must:
- (a) determine the structure, responsibilities and controls for overseeing and managing the liquidity risks and positions of the financial institution, including across all its entities within the group (e.g. branches and subsidiaries);
 - (b) ensure that the responsibility for implementing internal controls for liquidity risk management is assigned to operationally independent⁴, appropriately trained and competent officers;
 - (c) define the specific procedures and internal approvals necessary for exceptions to the policies and processes as well as liquidity risk limits, including the escalation procedures and follow-up actions to be taken for breaches of such limits;
 - (d) ensure all officers responsible for liquidity risk management are aware of, and comprehend the liquidity strategy, key policies and processes for implementing the strategy, and the governance structure surrounding liquidity risk management to enable effective discharge of their responsibilities;
 - (e) review and update the financial institution's liquidity risk and funding strategies, key policies and processes to ensure that they continue to remain relevant and fit-for-purpose at all times. This includes to closely monitor information on internal and external liquidity developments, including current trends and potential market developments. It also includes ensuring the continued adequacy of stress tests, liquidity buffers, and contingency funding plans;
 - (f) ensure that liquidity costs, benefits and risks are explicitly attributed to the relevant business activity so that risk-taking incentives are consistent with and reinforce the overarching liquidity risk appetite and strategy of the financial institution;
 - (g) integrate liquidity stress test results into the financial institution's strategic planning process and day-to-day risk management practices (e.g. setting of internal limits);
 - (h) review and update the financial institution's contingency funding plan annually, at minimum, for the board's approval, or more often as warranted by changes in business or market circumstances; and
 - (i) report liquidity positions (including assessments of those positions) and liquidity-related developments to the board on a regular basis.
- S** 8.4 The internal audit function of a financial institution must regularly review the implementation and effectiveness of the liquidity risk management framework.

⁴ Refers to a separate department, unit, individual or external party that is free from any conflict of interest or potential conflict of interest that could impair the ability to objectively implement internal controls for liquidity risk management.

9 Identification, measurement, monitoring and control of liquidity risk

- S** **Principle 2: A financial institution must have a sound process for identifying, measuring, monitoring and controlling liquidity risk. This process must 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.**
- S** 9.1 A financial institution must employ a range of measurement tools and metrics to identify and measure liquidity risk⁵ arising from on- and off-balance sheet positions. These tools must be tailored to the circumstances of the financial institution, with the measurement of liquidity risk adapted to the financial institution's business mix, complexity and risk profile. The tools must also cover cash flows and liquidity implications arising from all material assets, liabilities, off-balance sheet positions and other activities of the financial institution, including across the dimensions set out in paragraphs 9.9 to 9.22.
- S** 9.2 A financial institution must also develop and employ a set of early warning indicators to identify the emergence of increased risks or vulnerabilities in its liquidity position or potential funding needs. Such early warning indicators must identify any material negative trend and prompt a timely assessment and potential response by the financial institution to mitigate its exposure to emerging risks (such as that in contingency funding plans or other management action triggers). Where relevant and appropriate, these early warning indicators must be aligned with liquidity-related recovery indicators in the financial institution's recovery plan.⁶
- G** 9.3 For the purpose of paragraph 9.2, a financial institution may be guided by examples of early warning indicators that include, but are not limited to:
- (a) rapid asset growth, especially when funded with potentially volatile liabilities;
 - (b) growing concentrations in assets or liabilities;
 - (c) increases in currency mismatches;
 - (d) decreases in weighted average maturity of liabilities;
 - (e) repeated incidents of positions approaching or breaching internal limits;
 - (f) negative trends or heightened risk, such as rising delinquencies, significant deterioration in the financial institution's earnings, asset quality and overall financial condition;
 - (g) negative publicity (e.g. social media chatter);
 - (h) a sell call on the financial institution's shares or downgrade of the financial institution's credit rating;
 - (i) persistent stock price declines or rising debt costs;
 - (j) widening debt or credit-default-swap spreads;
 - (k) rising wholesale or retail funding costs;
 - (l) requests by counterparties for additional collateral for credit exposures;
 - (m) resistance by counterparties to entering into new transactions;
 - (n) correspondent financial institutions eliminate or decrease their credit lines;

⁵ Across all entities within the group, including branches and subsidiaries.

⁶ This is in line with paragraph 13 of the policy document on *Recovery Planning*.

- (o) increasing retail deposit or investment account outflows, including those through online channels;
 - (p) increasing redemptions of term deposits before maturity; or
 - (q) difficulty in accessing market funding, be it short- or long-term funding.
- S** 9.4 A financial institution must set appropriate limits to control its liquidity risk, in line with its liquidity risk appetite. Such limits must also be relevant to the business of the financial institution in terms of the concentration of exposure to the activity, nature of products, currencies and markets served. The financial institution must regularly review such limits and corresponding escalation procedures.
- S** 9.5 A financial institution must use the limits set in accordance with paragraph 9.4 for managing day-to-day liquidity within and across lines of business and entities within the group. Breaches of liquidity risk limits must be subject to appropriate escalation to higher levels of senior management, the board, the Bank and/or other relevant supervisory or regulatory authorities, as the case may be.
- S** 9.6 A financial institution must establish an appropriate management information system that provides the board, senior management and other relevant officers timely and forward-looking information on its liquidity position. The management information system must be used in day-to-day liquidity risk management to monitor compliance with the financial institution's established policies, procedures and limits, as well as to identify any emerging pressures.
- G** 9.7 The management information system should capture all sources of liquidity risk, along all relevant dimensions (which include those set out in paragraphs 9.9 to 9.22) to surface relevant insights. This entails the ability to generate more granular and comprehensive reports as and when required (such as during stress events), at a higher reporting frequency and with a shorter reporting lag.
- G** 9.8 In developing and implementing the process for identifying and measuring liquidity risk, a financial institution may refer to and build on the design and parametrisation of the LCR or NSFR in the policy documents on *Liquidity Coverage Ratio* and *Net Stable Funding Ratio*, respectively. However, the financial institution should not solely (or overly) rely on the parameters of LCR and/or NSFR as these indicators may not reveal vulnerabilities beyond, or within, the 30-day and one-year horizons, respectively. The quantitative calibrations in both the LCR and NSFR may also not fully cater to the institution-specific circumstances and experiences of the financial institution. As such, the financial institution should consider alternative parameters, such as to apply a variety of outflow and inflow factors to assess maturity mismatches across different time horizons (e.g. intraday, daily, weekly and quarterly).

Future cash flows of assets and liabilities

- S** 9.9 A financial institution must measure and forecast its prospective cash flows for assets, liabilities, off-balance sheet commitments and derivatives over a variety of time horizons⁷ (e.g. intraday, short-, medium- and long-terms), under normal conditions and a range of stress scenarios, including that of severe stress. These forecasts must be used to produce a “cash flow mismatch” or “liquidity gap” analysis that provides the cumulative net excess or shortfall in liquidity faced by the financial institution over a given time frame.
- G** 9.10 In estimating the cash flows arising from its liabilities, a financial institution should assess the “stickiness” of its funding sources – that is, the funding sources’ tendency not to withdraw funding quickly under stress, including upon adverse news coverage on the financial institution. While the factors in the policy documents on *Liquidity Coverage Ratio* and *Net Stable Funding Ratio* are indicative of funding stability for various funding sources, these should not be the sole basis for a financial institution in ascertaining the stickiness of its liabilities (see paragraph 9.8). The financial institution should consider the following factors, among others, in assessing the behaviour of its funding sources:
- (a) For wholesale funding providers, the financial institution should assess the likelihood of fund providers continuing to roll-over funding lines under stress, the availability and conditions attached to term funding back-up facilities, and the possibility that both secured and unsecured funding may dry up in times of stress.
 - (b) For retail deposits, the financial institution should consider factors such as deposit size, interest-rate sensitivity, geographical location of depositors and the deposit withdrawal channel. In the case of digital channels, this includes to assess how factors such as online transaction limits affect the funding stickiness of deposits.
 - (c) The financial institution should consider how changes in the macroeconomic environment affect the behavioural profile of its funding providers (e.g. greater interest or profit rate sensitivity of certain classes of depositors at certain points of the business or financial cycle).
 - (d) The financial institution should assess the impact of deposit insurance regimes (where applicable), including the scope and extent to which deposits are protected, on the behaviour of depositors.
- G** 9.11 Given the critical role of assumptions in projecting future cash flows, a financial institution should take steps to ensure that such assumptions are reasonable and appropriate, documented in writing and periodically reviewed to remain up-to-date.

⁷ In determining the appropriate range of time horizons, a financial institution must take into account its vulnerabilities to events (e.g. large deposits maturing at the same time), activities and strategies that can put a significant strain on its internal cash generation capabilities.

Sources of contingent liquidity demand and related triggers associated with off-balance sheet positions

- S** 9.12 A financial institution must identify, measure, monitor and control potential cash flows relating to off-balance sheet commitments and other contingent liabilities. This includes identifying and analysing:
- (a) relevant liquidity trigger events⁸; and
 - (b) events that could expose the financial institution to liquidity risks resulting from market and public perceptions about its soundness.⁹
- S** 9.13 A financial institution must have a robust framework for projecting and measuring liquidity risks arising from contingent liquidity demands. The financial institution must measure how changes to underlying risk factors can cause drawdowns of committed facilities and the materialisation of other off-balance sheet obligations. This analysis must include appropriate assumptions on the behaviour of both the financial institution and its obligors or counterparties. The financial institution must project and measure contingent liquidity demand from sources which include:
- (a) drawdown of undrawn commitments;
 - (b) materialisation of potential non-contractual obligations which can give rise to the financial institution supporting related off-balance sheet vehicles in times of stress¹⁰, especially off-balance sheet vehicles where the financial institution considers such support to be critical to maintaining ongoing access to funding; and
 - (c) contingent liquidity demands related to the issuance of securitisation products, such as those arising from the existence of recourse provisions in asset sales, the extension of liquidity facilities to securitisation programmes and the early amortisation triggers of certain asset securitisation transactions.
- G** 9.14 In assessing the contingent liquidity demand arising from the drawdown of undrawn commitments under paragraph 9.13(a), a financial institution should consider the terms and conditions of the commitment and creditworthiness of the counterparty which may affect liquidity flows. The financial institution also should ascertain whether its exposures to counterparties in the same business and geographical sectors may amplify its liquidity risk, as counterparties in the same sectors may be affected by stress simultaneously.
- G** 9.15 For the purpose of paragraph 9.2, a financial institution should have early warning indicators that signal whether embedded triggers in certain products (e.g. callable public debt, over-the-counter (OTC) derivative transactions) are about to be breached or whether contingent risks are likely to crystallise which would warrant the financial institution providing additional liquidity support or shifting the assets onto the balance sheet.

⁸ Trigger events are events which enable commitments to be drawn upon (e.g. changes in economic variables or conditions, credit rating downgrades, country risk issues, specific market disruption and the alteration of contracts by governing legal, accounting or tax systems).

⁹ Liquidity risk can arise from both perceived and actual weaknesses, failures or problems in overall risk management.

¹⁰ In times of stress, reputational concerns might prompt a financial institution to purchase assets from money market or other investment funds that it manages or with which it is otherwise affiliated.

Currencies in which a financial institution is active

- S** 9.16 A financial institution must identify, measure, monitor and control its liquidity risk positions for currencies in which it is active.¹¹ This includes for the financial institution to be aware of and have the capacity to manage liquidity risk exposures arising from currency mismatches between its liabilities and assets.
- G** 9.17 A financial institution should take account of the risks of sudden changes in foreign exchange rates or market liquidity, or both, which could amplify liquidity mismatches and alter the effectiveness of foreign exchange hedges and hedging strategies. The financial institution should also consider the specific market characteristics and liquidity risks of positions in foreign currencies.
- G** 9.18 A financial institution should assess its aggregate foreign currency liquidity needs and identify currencies in which it has significant¹² activity on an ongoing basis.
- G** 9.19 For each currency in which a financial institution has significant activity, a financial institution should, in line with paragraphs 9.5¹³ and 9.6 of the policy document on *Liquidity Coverage Ratio*, undertake a separate analysis of its strategy and monitor its liquidity needs on an ongoing basis. This may include for the financial institution to negotiate a liquidity back-stop facility or establish contingency liquidity plans to meet obligations denominated in those currencies in the event of stress.
- G** 9.20 A financial institution should determine the acceptable foreign currency liquidity mismatches, and in turn, set appropriate liquidity risk limits for foreign currencies in aggregate and on individual currencies. The size of acceptable foreign currency liquidity mismatches should take into account:
- (a) the financial institution's ability and associated costs to access and raise funds in foreign currency markets;
 - (b) the extent of foreign currency back-up facilities available in Malaysia;
 - (c) the ability and associated costs to transfer a liquidity surplus from one currency to another, and across jurisdictions and entities within the group; and
 - (d) the likely convertibility of currencies in which the financial institution is active, during times of stress.

Correspondent, custody and settlement activities

- S** 9.21 A financial institution must understand and have the capacity to manage how the provision of correspondent, custodian and settlement bank services can affect its cash flows, especially over overnight and intraday horizons (also see Principle 3 on intraday liquidity risk management).

¹¹ This includes currencies in which a financial institution transacts in or has exposures to.

¹² Financial institutions may refer to the definition of "significant currency" in the policy document on *Liquidity Coverage Ratio* to guide their assessment of significance.

¹³ Financial institutions which are subject to the requirements in the policy document on *Liquidity Coverage Ratio* must continue to comply with such requirements, including paragraph 9.5.

- S** 9.22 A financial institution must understand and have the capacity to manage the potential liquidity needs it would face as a result of failure-to-settle procedures of payment and settlement systems in which it is a direct participant.

10 Intraday liquidity risk management

- S** **Principle 3: A financial institution must actively manage its intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis under both normal and stressed conditions, thus contributing to the smooth functioning of payment and settlement systems.**
- S** 10.1 A financial institution must have in place a sound framework, including clear internal policies and procedures, for managing intraday liquidity risk across the range of payment and settlement systems (including across different jurisdictions and currencies) in which it participates in. The framework must ensure that the financial institution is able to:
- (a) identify and prioritise time-specific and other critical obligations¹⁴ in order to meet such obligations when needed; and
 - (b) settle other less critical obligations as soon as possible.
- S** 10.2 A financial institution must ensure that the framework for managing intraday liquidity risk allows the financial institution to identify, measure, monitor and control intraday liquidity risk effectively, in accordance with Principle 2. This includes for the financial institution to:
- (a) measure the expected daily gross liquidity inflows and outflows, anticipate the intraday timing of liquidity inflows and outflows where possible, and forecast the range of potential net funding shortfalls that may arise at different points during the day;
 - (b) monitor intraday liquidity positions against expected activities and available resources (e.g. balances, remaining intraday credit capacity, available collateral);
 - (c) arrange to acquire or access sufficient intraday funding to meet its intraday objectives (e.g. central bank facilities);
 - (d) manage and mobilise collateral¹⁵ as necessary to obtain intraday funds;
 - (e) manage the timing of its liquidity outflows¹⁶ in line with its intraday objectives; and
 - (f) plan for dealing with unexpected disruptions to its liquidity flows (e.g. failure-to-settle procedures), such as to incorporate intraday considerations in its stress tests (see Principle 7) and contingency funding plans (see Principle 10).

¹⁴ For example, payment obligations that (i) have time-specific intraday deadlines; (ii) are required to settle positions in other payment and settlement systems; (iii) are related to market activities, such as the delivery or return of money market transactions or margin payments; and/or (iv) are critical to the financial institution's business or reputation.

¹⁵ See Principle 9 on collateral management.

¹⁶ This may include having (i) the ability to manage payment outflows of key customers; (ii) intraday credit procedures that are capable of supporting timely credit decisions; and (iii) internal coordination across business lines.

- G** 10.3 For the purpose of paragraph 10.2(a), a financial institution should:
- (a) understand and comply with the rules of relevant payment and settlement systems in which it participates in;
 - (b) identify key counterparties (and their correspondents or custodians) that act as the source of incoming or outgoing gross liquidity flows;
 - (c) identify key times, days and circumstances where liquidity flows and possible intraday credit needs may be particularly high; and
 - (d) understand the business needs underlying the timing of liquidity flows and intraday credit needs of internal business lines and key customers.¹⁷
- S** 10.4 For the purpose of paragraph 10.2(b), and in respect to its participation in relevant payment and settlement systems¹⁸, a financial institution shall, at minimum, monitor its intraday liquidity positions using the following metrics¹⁹:
- (a) for all financial institutions:
 - (i) daily maximum intraday liquidity usage;
 - (ii) available intraday liquidity at the start of the business day;
 - (iii) total payments; and
 - (iv) time-specific obligations;
 - (b) for financial institutions that provide correspondent banking services:
 - (i) value of payments made on behalf of correspondent banking customers; and
 - (ii) intraday credit lines extended to customers; and
 - (c) for financial institutions which are direct participants of LVPS such as RENTAS:
 - (i) intraday throughput.

11 Monitoring and control of liquidity risk across entities within the group and business lines

- S** **Principle 4: A financial institution must actively monitor and control liquidity risk exposures and funding needs within and across entities within the group and business lines, taking into account legal, regulatory, operational, Shariah and other limitations to the transferability of liquidity, including during periods of stress.**
- S** 11.1 Regardless of its organisational structure and degree of centralisation of liquidity risk management, a financial institution must actively monitor and control liquidity risks at the entity, consolidated and Islamic banking window (IBW) levels.²⁰ In addition, the financial institution must have processes in place to identify and

¹⁷ This may entail asking key customers, including customer banks, to forecast their own payment traffic to facilitate this process.

¹⁸ This includes the Real-time Electronic Transfer of Funds and Securities System (RENTAS) and retail payments systems (RPS).

¹⁹ These intraday monitoring metrics are based on the BCBS's *Monitoring tools for intraday liquidity management* issued in 2013; <https://www.bis.org/publ/bcbs248.pdf>

²⁰ The terms 'entity', 'consolidated' and IBW (previously known as 'Skim Perbankan Islam (SPI)') carry the same meaning as that stipulated in paragraph 8.2 of the policy document on *Liquidity Coverage Ratio*.

manage constraints in transferring liquidity across entities within the group, and business lines²¹ within both the entity and group.

- S** 11.2 For each country in which it is active – either through the operations of a foreign branch or subsidiary – a financial institution must ensure that it has the necessary knowledge and expertise about the operating environment of that country (e.g. country-specific features of the legal and regulatory regime) that influence liquidity risk management.
- G** 11.3 A financial institution should consider the possibility that an adverse event affecting one entity could lead to a liquidity strain across the whole group due to reputational contagion. At the same time, cross-entity funding channels can serve to either alleviate or amplify liquidity pressures through the group. As such, and in line with paragraph 13 of the policy document on *Recovery Planning*²², a financial institution should develop and monitor relevant liquidity-related recovery indicators related to intra-group funding needs.²³
- G** 11.4 A financial institution should take into consideration transferability constraints in establishing internal limits (e.g. those set out under Principle 5 on funding strategy) on intragroup funding for its branches, subsidiaries and other affiliates which are appropriate and consistent with its liquidity risk tolerance. These constraints may include legal, regulatory, Shariah, accounting, credit, tax, internal and other constraints that can affect the operational arrangements and time required to complete transfers of funding and collateral between entities within the group.

12 Funding strategy

- S** **Principle 5: A financial institution must establish a sound funding strategy. The funding strategy must not only provide for effective diversification in the sources and tenor of funding, but also a plan for growing its on- and off-balance sheet activities in a sustainable manner. The financial institution must maintain both an ongoing presence in its chosen funding markets and strong relationships with fund providers. A financial institution must regularly gauge its ability to raise funds quickly from each funding source, and identify and monitor factors that may affect that ability.**
- S** 12.1 A financial institution must develop and implement a funding strategy to ensure a stable supply of funds to support its on- and off-balance sheet activities. This includes a funding strategy that sets out credible and realistic plans for the financial institution to grow its funding sources in a sustainable manner through business and financial cycles. The funding strategy must also be developed as

²¹ Including IBW operations of a conventional licensed bank.

²² Financial institutions which are subject to the requirements in the policy document on *Recovery Planning* must continue to comply with such requirements, including paragraph 13.

²³ Liquidity-related recovery indicators pertaining to intra-group funding needs should serve as a barometer of potential liquidity stress within the group, which may indicate potential liquidity demands on the parent entity or other related entities within the group. Examples include deterioration of LCR and/or NSFR positions, or widening of cashflow mismatches at the branch and/or subsidiary level.

part of, or closely integrated with, the financial institution's strategic planning process (including its credit risk strategy and asset-liability management process) and be aligned with its risk appetite.

- G** 12.2 A financial institution should ensure that it grows its funding sources at a sustainable, measured, and gradual pace over time, without resorting to aggressive measures that impair its financial condition and affect orderly market functioning.²⁴
- S** 12.3 In developing a sound funding strategy, a financial institution must also implement strategies to diversify its funding sources and establish concentration limits to avoid over-reliance on any particular source or tenor for funding.
- G** 12.4 For the purpose of paragraph 12.3, a financial institution should monitor its funding exposures to counterparties and funding providers not only against names (e.g. top 20 largest funding providers), but also against groups of funding providers which may exhibit correlated behaviour (e.g. economic sector, geographical area) and in turn, should consider establishing concentration limits, as appropriate, in line with its approved liquidity risk appetite.
- G** 12.5 A financial institution should also actively build strong relationships with various key providers of funding, in order to attain insights into funding providers' behaviours, not only in normal times but also in times of idiosyncratic or market-wide shocks.
- S** 12.6 A financial institution must regularly assess its capacity to raise funds quickly from its target funding sources, including identifying and monitoring any key factors²⁵ that can affect its ability to raise funds from each of these funding sources as well as correlations between sources of funds and market conditions. This assessment must be consistent with, and integrated into, the financial institution's contingency funding planning (see Principle 10).
- G** 12.7 Based on the assessment in paragraph 12.6, a financial institution should continuously refine its funding strategy such that it can ensure accessibility to funds on an ongoing basis.
- S** 12.8 Regardless of the strength of its relationship with a given funding provider or market, a financial institution must take a prudent view of how these relationships might be strained during times of stress. Both market-wide disruptions and idiosyncratic shocks can impact the financial institution's cash flows and access to its funding markets. These effects must be taken into account in the financial institution's stress test scenarios (see Principle 7) and contingency funding plan (see Principle 10).

²⁴ This includes for a financial institution to have due regard for the possible effects that the measures it takes to grow its funding sources may have on the broader market. In this regard, the financial institution should avoid funding practices which are imprudent, incompatible with orderly market functioning and outside industry norms. An example of practice which should be avoided is the pricing of deposits that is not sustainable over the long term.

²⁵ This includes the lack of necessary systems or documentation, sporadic utilisation of, or previously untested, funding arrangements and the lack of official confirmation of any willing counterparties in chosen funding markets.

- G** 12.9 A financial institution that is active in multiple currencies²⁶ should establish a tailored and robust funding strategy that achieves effective diversification in each of those currencies, taking into consideration the possible difficulties in swapping from one currency to another especially during times of stress.

13 Liquidity costs, benefits and risks

- S** **Principle 6: A financial institution must incorporate liquidity costs, benefits and risks in the internal pricing, performance measurement and new product approval process for all its business activities (both on- and off-balance sheet), including contingent exposures, thereby aligning the risk-taking incentives of individual business lines with the liquidity risk exposures their activities create for the financial institution as a whole.**
- S** 13.1 In assigning liquidity costs, benefits and risks in accordance with this Principle²⁷, a financial institution must incorporate factors related to the tenor or anticipated holding periods of assets and liabilities²⁸, their market liquidity risk characteristics, and any other relevant factors.²⁹
- S** 13.2 The liquidity costs, benefits and risks assigned to positions, portfolios, or individual transactions³⁰ must be reviewed on a timely basis to reflect changing business and financial market conditions, as well as in consideration of potential stressed conditions.
- S** 13.3 A financial institution must ensure that the incorporation of liquidity costs, benefits and risks in its internal pricing of products and services are consistent with a sound funding strategy.³¹

²⁶ This refers to financial institutions that transact in, or have exposures to, more than one currency.

²⁷ The financial institution may refer to the BCBS's *Liquidity Transfer Pricing: A Guide to Better Practice*, issued in December 2011; <https://www.bis.org/fsi/fsipapers10.pdf>.

²⁸ For example, longer tenor funding sources (e.g. 1-year fixed deposits) should receive a higher reward compared to shorter tenor funding sources (e.g. short-term interbank borrowings), while longer tenor maturity transformations (e.g. 30-year mortgage) should receive a higher charge compared to shorter tenor maturity transformations (e.g. 5-year car loan).

²⁹ Such factors include, but are not limited to, whether a deposit is from a retail or wholesale customer, or the currency of the asset or liability.

³⁰ This could be effected by way of a system of internal transfer prices where a liquidity premium is charged to activities that consume liquidity or which create liquidity risks (e.g. loans/financing), while rewarding activities that generate liquidity (e.g. obtaining deposits).

³¹ Refer also to the policy documents on *Reference Rate Framework* and *Risk-Informed Pricing*.

14 Liquidity stress testing

- S** **Principle 7: A financial institution must conduct liquidity stress tests on a regular basis for a variety of short-term and protracted institution-specific and market-wide stress scenarios (individually and in combination) to identify sources of potential liquidity strain and to ensure that current exposures remain within its established liquidity risk tolerance. The financial institution must use liquidity stress test outcomes to adjust its liquidity risk management strategies, policies, and positions and to develop effective contingency plans.**
- S** 14.1 A financial institution must conduct liquidity stress tests.³²
- S** 14.2 A financial institution must ensure that its design and frequency of liquidity stress testing is commensurate with its size, nature and complexity as well as the level of liquidity risk exposures. The design and implementation of liquidity stress tests must also take into account the interlinkages and relative importance of the financial institution within the financial system.
- G** 14.3 A financial institution should have the ability to increase the frequency of its liquidity stress tests, as required. This should include to conduct additional liquidity stress tests as requested by the Bank, and if circumstances warrant (such as in volatile market conditions).
- S** 14.4 In addition to conducting liquidity stress tests at the entity and consolidated levels, a financial institution must assess whether additional tests are warranted for individual subsidiaries, branches or business lines that are exposed to significant liquidity risks. Regardless of the organisational structure of the financial institution and the degree of centralisation of liquidity risk management, the financial institution must understand where and how liquidity risks could arise and factor these risks into its liquidity stress tests.
- S** 14.5 When conducting liquidity stress tests, a financial institution must analyse the impact of stress scenarios on its liquidity position, as indicated by its LCR and NSFR positions, and other internal liquidity metrics. These assessments must encompass various relevant time horizons.³³
- S** 14.6 A financial institution must properly document and regularly review the design of liquidity stress scenarios and assumptions to ensure their appropriateness and relevance to the changes in the nature, size and complexity of the financial institution's business model and activities, changes in market conditions, business and financial cycles, as well as actual experience during liquidity stress events (either encountered by the financial institution or other financial institutions, including those operating in other jurisdictions).

³² For financial institutions subject to the policy document on *Stress Testing*, the requirements on liquidity stress tests in the policy document shall continue to apply.

³³ Liquidity stress testing time horizons must cover short-, medium-, and long-term horizons. Where relevant, time horizons may be adapted to take into account impending significant market or institution-specific events.

- S** 14.7 A financial institution must analyse the sensitivity of its liquidity stress test results to a single risk factor or several closely related risk factors. Such sensitivity analyses must provide additional indications of the financial institution's vulnerabilities to certain liquidity risk factors for further monitoring and control by the financial institution, if it deems necessary.
- S** 14.8 A financial institution must incorporate into its liquidity stress tests the outcomes of, and insights arising from, stress tests performed for other risk types. Specifically, a financial institution must take into account how different risks can interact with funding liquidity risk when designing its liquidity stress tests.
- G** 14.9 In assessing how different risks can interact with funding liquidity risk in the design of liquidity stress tests under paragraph 14.8, a financial institution may consider, for example:
- (a) the links between reductions in market liquidity and constraints on funding liquidity, particularly if a financial institution has a significant market share in, or heavy reliance on, specific funding markets;
 - (b) interactions between funding liquidity risk and other non-liquidity risks, such as the interplay between the financial institution's solvency/capitalisation and liquidity position; and
 - (c) the impact of operational risk (including reputational risk and Shariah non-compliance risk) on funding liquidity risk.
- G** 14.10 A financial institution should consider in its liquidity stress tests the likely behavioural responses of relevant stakeholders to a liquidity stress event and the extent to which their responses may amplify market movements or exacerbate the situation. In doing so, the financial institution should also account for the likely impact of its own behaviour on other market participants.
- G** 14.11 The determination of liquidity stress scenarios or assumptions should be informed by the timeframes which may materialise during liquidity stress events, bearing in mind that these timeframes may be delayed or accelerated in times of stress. For example, a financial institution should reflect the estimated timeframes for the settlement of assets that might be liquidated and the time required to transfer liquidity across borders. If the financial institution adopts a centralised liquidity management model (e.g. reliance on intra-group transfers) or relies on cash flows across settlement systems to meet obligations, it should consider the risk that operational or settlement disruptions may prevent or delay such transfers.
- G** 14.12 Examples of liquidity stress scenarios that a financial institution may consider include, but are not limited to:
- (a) simultaneous drying up of market liquidity in multiple markets that used to be highly liquid;
 - (b) simultaneous multiple, time-critical liquidity needs in different currencies and/or multiple payment and settlement systems³⁴;

³⁴ This includes liquidity needs arising from the financial institution's own roles, activities, customer banks and firms. For example, when a financial institution acts as a correspondent for other banks' settlement obligations or when a financial institution takes on special roles in a given settlement system such as acting as a back-up liquidity provider or settlement bank.

- (c) severe constraints in accessing secured and unsecured funding;
- (d) restrictions on currency convertibility;
- (e) severe withdrawal of deposits or redemption of investment accounts, particularly through digital channels;
- (f) severe operational and settlement disruptions affecting one or more payment or settlement systems;
- (g) severe disruptions to correspondent or custodian services; and
- (h) any other stress scenarios involving other risk types and their interactions with liquidity risk.

15 Liquid assets

- S Principle 8: A financial institution must maintain a cushion of unencumbered, liquid assets that can be converted easily or immediately into cash in a range of liquidity stress scenarios which may entail an institution-specific or market-wide shock or a combination of the two.**
- S** 15.1 A financial institution must evaluate the size of its cushion of unencumbered³⁵ liquid assets that should be held given its estimates of liquidity needed under stress³⁶, and consistent with its established risk tolerance.
- S** 15.2 A financial institution which is subject to the policy document on *Liquidity Coverage Ratio* must regularly assess the quality of its stock of HQLA (notwithstanding its classification based on the list of eligible HQLA set out in paragraph 10 of the policy document on *Liquidity Coverage Ratio*). This includes assessing whether liquid assets counted as HQLA for purposes of the LCR meet the characteristics of HQLA (as set out in Appendix 1 of the policy document on the *Liquidity Coverage Ratio*) on an ongoing basis.
- S** 15.3 A financial institution which is not subject to the policy document on *Liquidity Coverage Ratio* must identify and maintain an adequate stock of liquid assets. In doing so, the financial institution must consider adopting the list of eligible HQLA as set out in paragraph 10 of the policy document on *Liquidity Coverage Ratio*, as appropriate, while also assessing whether such liquid assets meet the characteristics of HQLA (as set out in Appendix 1 of the policy document on *Liquidity Coverage Ratio*) on an ongoing basis.
- G** 15.4 A financial institution should assess whether its cushion of unencumbered liquid assets is sufficient to cover a range of stress events over time horizons beyond or within the 30-day scenario underpinning the LCR. For stress events that are of lower intensity, a financial institution should identify additional (unencumbered) liquid assets (beyond those deemed eligible as HQLA under the LCR) and assess if they can be used to cover for such events without resulting in excessive losses or discounts.

³⁵ Free from any legal, regulatory, Shariah, tax, accounting or contractual encumbrances or other practical restrictions for the financial institution to liquidate, sell, transfer or assign the asset.

³⁶ These estimates should go beyond, but at minimum incorporate, the amount of liquidity needed based on the LCR's implied 30-day stress scenario.

- G** 15.5 Beyond assessing whether liquid assets meet the characteristics of HQLA (as set out in Appendix 1 of the policy document on *Liquidity Coverage Ratio*), a financial institution should assess other factors which may affect the marketability or value to which an instrument may be monetised in times of institution-specific or market-wide shocks. This may include, but is not limited to, evolving market conditions (e.g. market capacity constraints, sensitivity of prices, interest rate risk), jurisdiction-specific factors (e.g. haircuts, collateral requirements), institution-specific factors (e.g. the financial institution's own name and presence in relevant markets)³⁷ or concentrations in the financial institution's HQLA (e.g. instrument types, issuers or tenors).

16 Collateral management

- S** **Principle 9: A financial institution must actively manage its collateral positions, differentiating between encumbered and unencumbered assets. A financial institution must also monitor the legal entity and physical location where the collateral is held and how it may be mobilised in a timely manner.**
- S** 16.1 A financial institution must have the ability to manage its collateral positions, including assets currently deployed for use as collateral and unencumbered liquid assets available to be used as collateral.
- S** 16.2 A financial institution must ensure that relevant systems are in place to enable active and timely management of its collateral positions on an on-going basis. These include arrangements to:
- (a) calculate all of its collateral positions, segregated based on the eligibility and acceptability of collateral to counterparties and fund providers;
 - (b) monitor the level of available collateral by legal entity, jurisdiction and currency exposure;
 - (c) track the operational and timing requirements associated with accessing the collateral given its physical location³⁸; and
 - (d) monitor shifts between intraday and overnight or term collateral usage.³⁹
- G** 16.3 In determining the sufficiency of collateral to be pledged or delivered, a financial institution should consider, in tandem:
- (a) trigger events, including those that are contractually specified in financial instruments, that could impact the financial institution's liquidity position. For example, a financial institution may be required to pledge additional collateral should changes in market positions or its credit rating or financial position negatively impact its liquidity position;

³⁷ A financial institution should also recognise that the accounting treatment of an instrument may pose practical encumbrances and/or indirectly affect the marketability or value of the instrument.

³⁸ For example, the custodian bank or securities settlement system with which the collateral is held, including those held on a cross-border basis.

³⁹ For example, in some cases collateral pledged to a central bank can be used to support intraday, overnight or longer-term credit. However, a given asset can only provide collateral support for one type of credit facility at a time, thus requiring financial institutions to exercise effective collateral management to meet competing collateral demands.

- (b) the potential uncertainties around the timing of cash flows. For example, a financial institution may pledge additional collateral to meet its payment or settlement obligations if there is unexpected or delayed intraday flows; and
 - (c) any other operational or liquidity arrangements and/or disruptions that could necessitate additional collateral.
- G** 16.4 For assets that are part of a 'tied position'⁴⁰, where necessary, a financial institution should adjust measures of available collateral to account for such assets, including demonstrating ability to liquidate those assets or put on a substitute hedge.

17 Contingency funding plan

- S** **Principle 10: A financial institution must have a formal contingency funding plan (CFP) that clearly sets out the strategies for addressing liquidity shortfalls in emergency situations. The CFP must outline policies to manage a range of stress events, establish clear lines of responsibility, include clear invocation and escalation procedures and be regularly tested and updated to ensure that it is operationally robust.**
- S** 17.1 A financial institution must formulate a CFP that is commensurate with its complexity, risk profile, scope of operations and role in the financial system. The CFP must be sufficiently flexible to facilitate responses by the financial institution in a variety of adverse scenarios, in a timely manner and at reasonable cost.
- S** 17.2 A financial institution must set out in its CFP:
- (a) a clear description of a diverse set of viable, readily available and flexibly deployable potential contingency funding measures for preserving liquidity and making up cash flow shortfalls in various adverse scenarios;
 - (b) available potential contingency funding sources that these contingency funding measures will tap on and an estimate of the amount of funds that can be derived from each of these sources;
 - (c) the lead time needed to tap additional funds from each of the contingency funding sources; and
 - (d) clear policies and procedures that will enable timely and well-informed decision-making, swift execution of the contingency funding measures, and effective communication.
- S** 17.3 A financial institution must ensure that its CFP is closely integrated with its risk management framework, which must include other elements of its framework for managing liquidity risk (e.g. liquidity stress tests), recovery plan, business continuity plan and management action triggers.
- G** 17.4 The financial institution should also reflect, where relevant, the design of central bank liquidity facilities in its CFP (e.g. list of acceptable collateral and operational procedures). The financial institution should include in its CFP an assessment of

⁴⁰ For example, assets used as part of a hedge of an off-balance sheet or derivative position, such as an equity/debt position as a hedge to a total return swap or a negative basis trade.

potential reputational issues involved in accessing such facilities, and measures that can be taken to manage such risk.

Contingency funding measures

- G** 17.5 For the purpose of paragraph 17.2(a), the various adverse scenarios for which the contingency funding measures are designed for should include both institution-specific and more generalised market-wide stresses, as well as the potential interactions between them. These scenarios should incorporate:
- (a) stress scenarios over a range of different time horizons;
 - (b) the impact of stressed market conditions on a financial institution's ability to sell or securitise assets;
 - (c) the link between asset market and funding liquidity (e.g. the extensive or complete loss of typically available market funding options); and
 - (d) second round and reputational effects.⁴¹
- G** 17.6 A financial institution's CFP should also address intraday liquidity risk (see Principle 3). Specifically, the financial institution should:
- (a) have the ability to identify critical payments, sequence or schedule payments based on priority, and access contingent sources of intraday liquidity;
 - (b) consider that time-critical settlement needs may arise not only from its own transactions, but also those of its customers, and from its provision of services to payment and settlement systems (e.g. by acting as a contingency liquidity provider); and
 - (c) consider the risk management procedures of all relevant systems and have the ability to handle simultaneous disruptions in multiple payment and settlement systems.
- G** 17.7 A financial institution should take a prudent view as to the effectiveness of contingency funding measures in times of stress. For example:
- (a) a financial institution should critically assess whether identified potential funding sources (e.g. deposit growth and asset sales) can be feasibly executed at different points of a business or financial cycle, such as during a financial crisis. This includes to assess whether strong relationships with fund providers developed in normal times can continue to be preserved in times of stress, especially during systemic liquidity stress events;
 - (b) where assumed in the design of its contingency funding measures, a financial institution should assess the ability to transfer liquidity across entities within the group, jurisdictions and business lines (see Principle 4), taking into account legal, regulatory, Shariah, operational and time zone restrictions and constraints. In line with paragraphs 8.4 and 8.5⁴² of the policy document on *Recovery Planning*, a financial institution's CFP should also be coherent with and aligned across entities within the group,

⁴¹ Examples include, but are not limited to: (i) consequences from the execution of certain contingency funding measures; and (ii) reputational contagion from an intra-group institution-specific stress event which could lead to a liquidity strain across the whole group and/or rendering institution-specific CFPs non-viable.

⁴² Financial institutions which are subject to the requirements in the policy document on *Recovery Planning* must continue to comply with such requirements, including paragraphs 8.4 and 8.5.

- jurisdictions and business lines, giving due regard to Shariah requirements where Islamic financial institutions are involved; and
- (c) for the purpose of paragraph 17.2(c), a financial institution should account for the associated operational procedures in determining a realistic timeline for liquidity transfers. In doing so, a financial institution should consider how these lead times would change under various assumptions and stresses. A financial institution should incorporate these considerations in the design of its contingency funding measures.

Policies and procedures

- S** 17.8 A financial institution must ensure that its CFP contains clear policies and procedures that enable timely and well-informed decision-making, swift execution of contingency measures, and effective communication. These policies and procedures must include:
- (a) clear specification of roles and responsibilities⁴³, including the authority to invoke the CFP;
 - (b) clear decision-making processes (including escalation and prioritisation procedures) on which actions to activate, when and how these actions should be activated, and the appropriate level of authority required for approval for each action;
 - (c) names and contact details of members of the team responsible for implementing the CFP and the locations of team members;
 - (d) procedures to deliver effective internal coordination and communication across the financial institution's different business lines and locations;
 - (e) the designation of alternates for key roles;
 - (f) clear specifications of when and how to contact external parties, such as supervisors, central banks, or payments system operators; and
 - (g) plans for effective communication with counterparties, credit rating agencies and other stakeholders during a stress event.
- S** 17.9 For the purpose of 17.8(g), and in line with paragraph 16 of the policy document on *Recovery Planning*⁴⁴, a financial institution must ensure that its CFP includes a communication plan to keep customers, counterparties and other relevant external and internal stakeholders adequately informed of the relevant developments, so as to maintain customer and market confidence. The communication plan in the CFP must be closely integrated with the financial institution's crisis communications strategy and framework. The CFP must provide for the delivery of timely, clear and consistent communication to stakeholders under a variety of stress events. The financial institution must also ensure that the channel of communication, level of detail, timing and frequency of information provided is appropriate for each target stakeholder group.
- G** 17.10 A financial institution should ensure that its CFP is consistent with its business continuity management and recovery planning frameworks. The financial

⁴³ In addition to paragraph 8.7 of the policy document on *Business Continuity Management* which stipulates that a financial institution must set up a crisis management team to make key decisions during a crisis, the financial institution may choose to set up a liquidity-specific crisis management team, if appropriate, to facilitate internal coordination and decision-making during a liquidity crisis.

⁴⁴ Financial institutions which are subject to the requirements in the policy document on *Recovery Planning* must continue to comply with such requirements, including paragraph 16.

institution should also ensure that the CFP is operational under situations where business continuity arrangements or recovery plans have been invoked. To this end, the financial institution should ensure that there is effective coordination between the teams managing issues surrounding liquidity crises, business continuity management and recovery planning.

- S** 17.11 A financial institution must ensure that its CFP (and the associated policies and procedures) is readily accessible to relevant officers and that such officers are well-versed with the operational procedures of the CFP.

Testing, update and maintenance

- S** 17.12 For the purpose of paragraph 8.3(h), a financial institution must regularly review, test, and update its CFP to be relevant with market conditions and its circumstances in order to ensure the CFP's effectiveness and operational feasibility. This includes to:
- (a) ensure that roles and responsibilities are appropriate and understood by all relevant officers;
 - (b) ensure that all contact information remains up to date;
 - (c) validate the transferability of cash and collateral (especially across jurisdictions and entities within the group);
 - (d) ensure that the necessary legal and operational documentation is in place and remain relevant to execute the CFP at short notice; and
 - (e) ensure key assumptions remain relevant and valid, such as the ability to sell or repo certain assets or periodically draw down credit lines.
- G** 17.13 In line with paragraph 18.2 of the policy document on *Recovery Planning*, a financial institution should adopt approaches to review and test⁴⁵ its CFP that are appropriate to its circumstances.⁴⁶ This should include for the board to exercise effective oversight of the financial institution's CFP and for senior management to review and test the CFP regularly as outlined in paragraph 17.12.

18 Public disclosure

- S** **Principle 11: A financial institution must publicly disclose high-quality liquidity-related information on a regular and timely basis to enable market participants and relevant stakeholders to make informed judgements about a financial institution's ability to meet its liquidity needs.**

- S** 18.1 A financial institution must disclose qualitative information that provides market participants and relevant stakeholders insights into how it manages its liquidity risk. The qualitative disclosure shall, at minimum:

⁴⁵ In relation to central bank liquidity facilities, financial institutions could consider small, periodic utilisations of the various facilities, subject to engagements with the Bank and/or other relevant supervisory agencies and central banks, as the case may be.

⁴⁶ Rapid funding profile changes may necessitate more frequent review and testing of the CFP. For example, a financial institution that increases the share of its liabilities comprised of less stable funding should consider whether it needs to increase its capacity to borrow from contingency funding sources.

- (a) explain the financial institution's governance and organisational structure for managing liquidity risk.⁴⁷ This includes the roles and responsibilities of relevant officers, committees, functions and business units involved in managing liquidity, as well as the degree to which the treasury function and liquidity risk management is centralised or decentralised; and
 - (b) set out the approach adopted by the financial institution to identify, assess and manage liquidity-related risks.
- G** 18.2 In relation to paragraph 18.1, a financial institution may disclose:
- (a) its liquidity risk tolerance statement;
 - (b) its funding strategy, including policies on diversification in the sources and tenor of funding;
 - (c) the aspects of liquidity risk to which it is exposed and that it monitors;
 - (d) the diversification of its funding sources;
 - (e) metrics and targets as well as other techniques used to mitigate liquidity risk;
 - (f) the concepts utilised in measuring its liquidity position and liquidity risk, including additional metrics used internally for which the financial institution is not publicly disclosing data;
 - (g) an explanation of how asset market liquidity risk is reflected in its framework for managing funding liquidity;
 - (h) an explanation of how stress testing is used;
 - (i) a description of the stress testing scenarios modelled;
 - (j) an outline of its contingency funding plans and an indication of how the plans relate to stress testing;
 - (k) its policy on maintaining liquidity buffers;
 - (l) regulatory restrictions on the transfer of liquidity among entities within the group, including any Shariah restrictions; and
 - (m) the frequency and type of internal liquidity reporting.
- S** 18.3 A financial institution must disclose quantitative information about its liquidity position for market participants to form a view of the extent of its liquidity risk.
- G** 18.4 In addition to disclosing liquidity-related information on the analysis of assets and liabilities in relevant maturity tenures based on remaining contractual or behavioural maturities (as set out in paragraph 11.4(d) of the policy document on *Financial Reporting*⁴⁸ and paragraph 11.18 of the policy document on *Financial Reporting for Islamic Banking Institutions*⁴⁹), a financial institution may consider including, as appropriate, disclosures relating to the LCR, NSFR or other internal measurement tools or metrics.
- S** 18.5 A financial institution that publicly discloses its LCR must, at minimum, present the ratio as a simple average. The ratio shall be presented as averages of either

⁴⁷ For financial institutions which are locally incorporated foreign banks, this may include information about the global group-wide structure and liquidity risk management framework of the group.

⁴⁸ Financial institutions which are subject to the requirements in the policy document on *Financial Reporting* must continue to comply with such requirements, including paragraph 11.4(d).

⁴⁹ Financial institutions which are subject to the requirements in the policy document on *Financial Reporting for Islamic Banking Institutions* must continue to comply with such requirements, including paragraph 11.18.

daily or monthly observations representative of the financial reporting period, with the average being derived from no fewer than 12 observation points.

- G** 18.6 For the purposes of paragraphs 18.3 and 18.4, a financial institution should provide relevant accompanying narratives which explain and discuss quantitative disclosures to facilitate an understanding of the results and the accompanying data (e.g. factors driving results, evolution of indicators over time, and limitations to interpreting results).
- G** 18.7 A financial institution may expand on disclosures in existing disclosure publications (e.g. annual financial report) or publish liquidity-related information on the financial institution's website (in which case, disclosures from prior reporting periods should continue to be made available). A financial institution operating as, or as part of a, financial group in Malaysia may rely on group-level qualitative disclosures as required under paragraph 18.1, to the extent that the approach to managing liquidity risk at that financial institution is consistent with that at the group level.
- S** 18.8 While the Bank does not require the disclosures under this Principle to be audited by external auditors⁵⁰, a financial institution must be responsible for ensuring that the disclosures are accurate, verifiable and complete.
- S** 18.9 For the purpose of paragraph 18.8, where the Bank opines that it is necessary, the financial institution must obtain an independent audit of such disclosures by an external auditor at the financial institution's expense.

⁵⁰ With the exception of the disclosure on the analysis of assets and liabilities in the relevant maturity tenures based on remaining contractual maturities, for which paragraph 11.4(d) of the policy document on *Financial Reporting* and paragraphs 11.4 and 11.18 of the policy document on *Financial Reporting for Islamic Banking Institutions* require that it be audited (for financial institutions which are subject to these policy documents).