BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Liquidity Coverage Ratio
Concept Paper

Issued on: 30 September 2014

In 2011, the Bank outlined its plans to implement the Basel III reform package which comprises measures to further strengthen the existing capital and liquidity standards for banking institutions in Malaysia*. The liquidity standards comprise the Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR) and liquidity risk management standards.

This concept paper outlines the Bank's proposals to implement the LCR^, covering the following areas:

i. scope and level of application of the LCR;
ii. implementation timeline and the relevant transition arrangements;
iii. eligible stock of high-quality liquid assets; and
iv. treatment for cash-flow items for the purposes of the LCR computation.

The Bank will consult the industry at a later date on the implementation of other components of the global liquidity reforms, with a priority on further strengthening the liquidity risk management practices of banking institutions through the implementation of the Principles for Sound Liquidity Risk Management and Supervision issued by the Basel Committee on Banking Supervision (BCBS) and reducing funding risk over a longer time horizon with the implementation of the NSFR requirements.

<u>Submission of feedback</u>

i. The Bank invites written feedback on the proposed regulatory requirements, including suggestions on areas to be clarified and any alternative proposals that the Bank should consider. Each comment should be supported with a clear rationale, accompanying evidence, data or illustration, where relevant to facilitate the Bank's assessment.
ii. In addition to providing general feedback, banking institutions are required to respond to the specific questions outlined in this concept paper.
iii. Banking institutions are also required to compute their LCR positions (at both

entity and consolidated levels) for their 30 September 2014 financial position using the reporting template provided. For the avoidance of the doubt, banking institutions shall refer to Table 1a, 1b and 1c in paragraph 29.1.

For the avoidance of doubt, banking institutions shall continue to comply with the reporting requirements specified in the *Basel III Observation Period Reporting (Revised)* document issued in 29 July 2013, unless otherwise notified.

Feedback shall be submitted to the Bank by 30 November 2014:

Pengarah
Jabatan Dasar Kewangan Pruden
Bank Negara Malaysia
Jalan Dato' Onn
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In the course of preparing your feedback, kindly direct any queries to Chan Kah Som at chanks@bnm.gov.my or 03-26988044 (ext. 8634) and Nurhayati Mohd Khalid at nurhayati@bnm.gov.my or 03-26988044 (ext. 8289).

* *Implementation of Basel III*, Bank Negara Malaysia, December 2011.

^ *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, Basel Committee on Banking Supervision, January 2013, (“Basel III rules text”).

PART A OVERVIEW

1 Introduction

1.1. The Liquidity Coverage Ratio (LCR) is a quantitative requirement which seeks to ensure that banking institutions hold sufficient high-quality liquid assets (HQLA) to withstand an acute liquidity stress scenario over a 30-day horizon.

2 Applicability

2.1 The LCR is applicable to all banking institutions as defined in paragraph 5.2 of this document.

S 2.2 Unless otherwise specified, a banking institution shall comply with the LCR at the following levels:

i. entity level[1], referring to the global operations of the banking institution (i.e. including its overseas branch operations) on a stand-alone basis, and its Labuan banking subsidiary;

ii. consolidated level, which includes entities covered under the entity level requirement, and the consolidation[2] of all subsidiaries[3], except insurance and/or takaful subsidiaries; and

iii. *Skim Perbankan Islam*[4] (hereafter referred to as an "SPI") level, as if it were a stand-alone banking institution.

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[1] Also referred to as the "solo" or "stand-alone" level.

[2] Consolidation of financial reporting shall be in accordance with the Malaysian Financial Reporting Standards (MFRS).

[3] Refers to financial and non-financial subsidiaries. A financial entity refers to any entity, whether incorporated in Malaysia or otherwise, engaged substantively in, or acquiring holdings in other entities engaged substantively in, any of the following activities: banking, provision of credit, securities broking, fund management, asset management, leasing and factoring and similar activities that are ancillary to the conduct of these activities.

[4] Refers to the *Guidelines on Skim Perbankan Islam.*

The Bank intends to apply the LCR on a consolidated basis on financial holding companies, although this will take effect no earlier than 2018. Nonetheless, financial holding companies would be required to participate in an observation period reporting exercise beginning 2015.

Question 1

Please describe any major operational challenges that may be faced by your institution in consolidating the liquidity positions of branches and subsidiaries for purposes of computing and complying with the LCR at the consolidated level and measures that your institution would need to take to address these challenges.

Question 2

What approaches and methodologies are adopted at the group-level, if any, for the measurement and mitigation of liquidity risk arising from non-bank entities operations such as stock broking companies and fund management companies? Please explain the nature of liquidity risk exposures of these non-bank entities and how the liquidity risk management approach adopted may be different from liquidity risk management practices adopted for the banking entities in the group. Please also indicate whether any of the non-bank entities are subject to specific liquidity requirements imposed by a regulatory authority.

3 Legal provisions

3.1 The framework is issued pursuant to section 47 of the Financial Services Act 2013 (FSA) and section 57 of the Islamic Financial Services Act 2013 (IFSA).

4 Effective date

4.1 The LCR requirements in this document shall take effect on 1 June 2015, and are subject to the transition arrangements as set out in paragraph 9.1.

5 Interpretation

5.1 The terms and expressions used in this document shall have the same meanings assigned to them in the FSA and IFSA, unless otherwise defined in this document.

5.2 For purposes of this document:

"S" denotes a standard, requirement or specification that must be complied with. Failure to comply may result in one or more enforcement actions;

"G" denotes guidance which may consist of such information, advice or recommendation intended to promote common understanding and sound industry practices which are encouraged to be adopted;

"banking institutions" refers to licensed banks, licensed investment banks and licensed Islamic banks except for licensed international Islamic banks;

"debt securities" includes any sukuk structured under any Shariah compliant contract; and

"financial institutions" refers to any entity, whether incorporated in Malaysia or otherwise, engaged primarily in financial services[5].

6 Related legal instruments and policy documents

6.1 This document must be read together with the following:

i. Capital Adequacy Framework (Basel II – Risk-Weighted Assets);

ii. Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets);

[5] This shall include banking, investment banking, insurance/takaful, securities broking, fund management, asset management, leasing and factoring services.

iii. Classification and Impairment Provisions for Loans/Financing;

iv. Investment Account; and

v. Guidelines on Credit Transactions and Exposures with Connected Parties.

7 Policy documents superseded

7.1 This document supersedes the guidelines on *Liquidity Framework* issued on 1 July 1998.

PART B GENERAL REQUIREMENTS

8 Liquidity Coverage Ratio

S 8.1 A banking institution shall calculate its LCR in the following manner:

$$\text{LCR} = \frac{\text{Stock of HQLA}}{\text{Total net cash outflow over the next 30 calendar days}}$$

8.2 The liquidity parameters set out for the computation of the LCR assumes a scenario which entails a combined institution-specific and market-wide shock that would result in:

i. the run-off of a proportion of retail deposits;

ii. a partial loss of unsecured wholesale funding capacity;

iii. a partial loss of secured, short-term financing with certain collateral and counterparties;

iv. additional contractual outflows that would arise from a downgrade in a banking institution's public credit rating by up to and including three notches, including collateral posting requirements;

v. increases in market volatilities that impact the quality of collateral or potential future exposure of derivative positions and thus require larger collateral haircuts or additional collateral, or lead to other liquidity needs;

vi. unscheduled draws on committed but unused credit and liquidity facilities that a banking institution has provided to its customers; and/or

vii. the potential need for a banking institution to buy back debt or honour non-contractual obligations in the interest of mitigating reputational risk.

S 8.3 When calculating the LCR, a banking institution shall apply the rules and parameters as specified in this document to foreign operations, except for the areas specified in paragraph 8.4.

S 8.4 Where a banking institution operates in a jurisdiction which has implemented the Basel III LCR, the banking institution shall apply the host jurisdiction's parameters to foreign operations in the following areas when calculating its LCR:

i. run-off rate treatment of insured retail and small business deposits;

ii. eligible assets recognised by the host jurisdiction in accordance with Alternative Liquidity Approaches[6] as prescribed under the Basel III rules text (i.e. banking institution may count these assets toward the total stock of HQLA in computing the LCR at both the entity and consolidated level).

9 Minimum requirements

S 9.1 Subject to paragraphs 9.4 and 9.8, a banking institution shall hold, at all times, an adequate stock of HQLA such that it maintains its LCR at a level no lower than the levels specified below:

Year	1 June 2015	1 January 2016	1 January 2017	1 January 2018	1 January 2019 and thereafter
Minimum LCR	60%	70%	80%	90%	100%

S 9.2 Assets that may be counted toward the stock of HQLA shall be in accordance with the requirements in paragraphs 10.1 to 12.8.

S 9.3 Total net cash outflows over the next 30 calendar days shall be determined as total expected cash outflows less total expected cash inflows, which are calculated using the outflow and inflow rates provided in Parts D, E and F of this document. The amount of inflows that can offset outflows shall be capped at 75% of total expected cash outflows of a banking institution.

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[6] Refers to paragraphs 55 to 68 of the Basel III rules text, namely the recognition of the following as HQLA: (i) contractual committed liquidity facilities from the relevant central bank; (ii) foreign currency HQLA to cover domestic liquidity needs; or (iii) additional use of Level 2 assets with higher haircuts.

S 9.4 For a banking institution's liquidity risk exposures denominated in Ringgit, the banking institution shall only count the following towards its stock of HQLA to buffer for those exposures:

i. HQLA denominated in Ringgit;

ii. issuances by other sovereigns or central banks with whom the Bank has established a cross-border collateral arrangement (CBCA)[7],

subject to the requirements set out in paragraph 10.1.

S 9.5 Where a banking institution has liquidity risk exposures in foreign currency (i.e. other than the Malaysian Ringgit) that amount to 5% or more of its total on- and off-balance sheet liabilities (i.e. "significant currency"), the banking institution shall separately monitor the liquidity needs in that currency on an ongoing basis and establish liquidity plans to meet obligations denominated in foreign currency. The banking institution shall also report the LCR position for US dollars, Singapore dollars and other significant currencies as specified in paragraphs 30.5 to 30.7.

G 9.6 Such liquidity plans to meet obligations denominated in foreign currencies may include holdings of HQLA in each significant currency to generate liquidity in the currency and jurisdiction in which the net cash outflows arise in accordance with internal liquidity risk tolerance levels for foreign currency liquidity exposures. Banking institutions should consider the risk of their ability to swap currencies (e.g. swap facilities with counterparties to obtain required foreign currencies) and access to the relevant foreign exchange markets which may rapidly erode under stressed conditions. Banking institutions should also adequately account for sudden, adverse exchange rate movements that could sharply widen existing mismatched positions in their liquidity plans.

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[7] Refers to arrangements between two central banks or monetary authorities which enable financial institutions operating in one jurisdiction to obtain liquidity denominated in that jurisdiction's local currency from the local central bank by pledging securities issued by a foreign sovereign/central bank, which are denominated in that foreign currency.

S 9.7 A banking institution shall comply with any requirement to hold additional liquidity buffers as may be specified by the Bank after having regard to the liquidity risk profile of the banking institution and the adequacy of the risk mitigation measures that have been put in place by the banking institution.

S 9.8 In the event of financial stress resulting in a banking institution's non-compliance with the minimum prescribed LCR, a banking institution shall immediately notify the Bank, with an explanation of the following:

i. factors leading to non-compliance;

ii. measures which will be taken to restore the LCR position; and

iii. expected duration of the LCR remaining below the minimum prescribed level.

Based on an assessment of the banking institution and market-specific factors, the Bank may grant an institution temporary relief from having to comply with the minimum LCR requirements specified in paragraph 9.1.

S 9.9 A banking institution shall comply with any condition imposed by the Bank pursuant to paragraph 9.8, which may include specific actions to be taken by the banking institution to reduce its exposures to liquidity risk.

PART C STOCK OF HIGH-QUALITY LIQUID ASSETS

10 Eligible high-quality liquid assets

S 10.1 Assets to be included in the stock of HQLA shall comprise only Level 1, Level 2A and Level 2B assets which are defined as follows and in paragraph 10.2:

Category	Asset	Haircut
Level 1	Cash	0%
	Central bank reserves, to the extent that these reserves can be drawn down in times of stress[8]	
	Marketable securities representing claims on or claims explicitly guaranteed by sovereigns, central banks, PSEs[9], the Bank for International Settlements, the International Monetary Fund, the European Commission, or multilateral development banks that satisfy all of the following conditions: ▪ assigned a rating by a recognised external credit assessment institution (ECAI[10]) corresponding to a 0% risk-weight as set out in **Appendix III** of the *Capital Adequacy*	

[8] Including term placements with central banks, to the extent that they are explicitly and contractually repayable on notice from the depositing banking institution. For operations in Malaysia, the following reserves with the Bank shall qualify in this category: (i) overnight deposit placements; (ii) term deposit placements; (iii) direct money market borrowing; (iv) *Wadiah* acceptances; (v) commodity *Murabahah* programme; and (vi) surplus cash balances held in SPICK and RENTAS accounts. For term deposit placements with the Bank which will mature within the next 30 calendar days, the term deposit shall be counted as inflows at a rate of 100%. For the avoidance of doubt, balances held with the central bank to meet statutory reserve requirements shall not be counted toward the stock of HQLA.

[9] As defined in paragraph 2.20 of the policy document on *Capital Adequacy Framework (Basel II – Risk-Weighted Assets*), whereby PSEs which are assigned a 20% risk-weight refer to those which meet the criteria set out in paragraph 2.19 of that policy document. For the corresponding definition of PSEs for licensed Islamic banks, refer to paragraphs 2.24 and 2.23 respectively in the policy document on *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets).*

[10] As defined in the policy document on *Capital Adequacy Framework (Basel II – Risk-Weighted Assets*), and policy document on *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets)*.

Category	Asset	Haircut
	Framework (Basel II – Risk-Weighted Assets) or paragraph 2.22 of the *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets)*; ▪ traded in large, deep and active repurchase agreement (repo) [11] or cash markets characterised by a low level of concentration; ▪ proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions[12]; and ▪ not an obligation of a financial institution or any of its affiliated entities	
	For non-0% risk-weighted sovereigns, sovereign or central bank debt securities issued in <u>domestic currencies</u> by the sovereign or central bank[13]: ▪ in the country in which the liquidity risk is being taken[14] or in the banking institution's home country; or ▪ where the sovereign or central bank has established a CBCA[15] with the central bank of the country in which the liquidity risk is being taken	
	For non-0% risk-weighted sovereigns, domestic sovereign or central bank debt securities issued	

[11] Any reference to repo or repos in this document shall include all Shariah-compliant alternatives to repo such as Sell and Buy Back Agreement and Collateralised *Murabahah* instruments.

[12] Refer to Appendix 1: Characteristics of high-quality liquid assets.

[13] This includes marketable debt securities which represent a claim on or are guaranteed by the Federal Government of Malaysia (e.g. MGS, GII, MTB, MITB) and Bank Negara Malaysia (e.g. BNMN, BNMN-i).

[14] For example, MGS or GII held by banking institutions with operations in Malaysia, or Indonesian Government Securities held by banking institutions with operations in Indonesia.

[15] Refer to footnote 7.

Category	Asset	Haircut
	in foreign currencies, to the extent that the holdings of such debt matches the currency needs of the banking institution's operations in that jurisdiction[16]	
Level 2A	Marketable securities representing claims on or claims guaranteed by sovereigns, central banks, PSEs[17] or multilateral development banks that satisfy all of the following conditions: ▪ assigned a 20% risk weight under **Appendix III** of the *Capital Adequacy Framework (Basel II – Risk-Weighted Assets*) or paragraph 2.22 of the *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets)*; ▪ traded in large, deep and active repo or cash markets characterised by a low level of concentration; ▪ proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions[12]; and ▪ not an obligation of a financial institution or any of its affiliated entities	15%
	Debt securities issued by corporates[18], including commercial papers, that satisfy the following conditions:	

[16] For example, bonds or sukuk issued by the Government of Malaysia in USD held to meet USD liquidity needs of the Malaysian operations of a banking institution. This category shall also include sukuk issued by the International Islamic Liquidity Management Corporation (IILM) which have been approved by the Bank as Level 1 HQLA.

[17] Refer to footnote 9 for the definition of PSEs with a 20% risk-weight.

[18] Includes plain vanilla assets whose valuation is readily available based on standard methods and does not depend on private knowledge (unlike, for example, complex structured products or asset-backed securities). In the case of a merger, the assets issued by the new company should receive the liquidity value of the respective company whose assets had the least liquid characteristics before the merger.

Category	Asset	Haircut
	▪ in the case of debt securities issued by corporates, such debt securities are not issued by a financial institution or any of its affiliated entities; ▪ in the case of covered bonds[19]/sukuk, such bonds/sukuk are not issued by the banking institution itself or any of its affiliated entities; ▪ assigned a rating of AAA by a recognised ECAI or internally rated with a probability of default (PD) corresponding to a credit rating of AAA; ▪ traded in large, deep and active repo or cash markets characterised by a low level of concentration; and ▪ proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions[12]	
Level 2B	Debt securities issued by corporates[20], including commercial papers, that satisfy all of the following conditions: ▪ not issued by a financial institution or any of its affiliated entities (in the case of debt securities issued by corporates); ▪ not issued by the banking institution itself or any of its affiliated entities (in the case of covered bonds/sukuk);	20%

[19] Covered bonds are bonds issued and owned by a bank or mortgage institution and are subject by law to special public supervision designed to protect bond holders. Proceeds deriving from the issue of these bonds must be invested in conformity with the law in assets which, during the whole period of the validity of the bonds, are capable of covering claims attached to the bonds and which, in the event of the failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest.

[20] Refer to footnote 18.

Category	Asset	Haircut
	▪ assigned a rating of between AA- and AA+ by a recognised ECAI or internally rated with a PD corresponding to a credit rating of at least AA-; ▪ traded in large, deep and active repo or cash markets characterised by a low level of concentration; and ▪ proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions[12]	

S 10.2 A banking institution shall include the following assets in its stock of HQLA for its Malaysian operations:

Category	Asset	Haircut
Level 2A	Marketable debt securities issued by Cagamas Berhad which have been assigned a rating of AAA by a recognised ECAI or are internally rated as having a PD corresponding to a credit rating of AAA	15%
	Bankers' Acceptances (BAs) or Accepted Bills-i (AB-i) issued by institutions with a rating of AA/P2/MARC2 and above, excluding the banking institution's own issuances, subject to the transition arrangements set out in paragraph 10.3	
	Negotiable Instruments of Deposit (NIDs) or Islamic Negotiable Instruments (INIs) issued by institutions with a rating of AA/P2/MARC2 and above, excluding the banking institution's own issuances, subject to the transition arrangements set out in paragraph 10.3	

Level 2B	Residential mortgage-backed securities (RMBS) issued by Cagamas MBS Berhad, which have been assigned a rating of AAA by a recognised ECAI, or in the absence of a long term rating, a short-term rating equivalent in quality to the long-term rating.	15%

10.3 The recognition of BAs, AB-is, NIDs and INIs shall be progressively phased out by banking institutions according to the following levels during the transition period. Holdings of such instruments shall be fully de-recognised as HQLA in 2020:

Year	2015	2016	2017	2018	2019	2020 and thereafter
Total amount (after applying haircuts) recognised as HQLA	100%	80%	60%	40%	20%	0% (i.e. fully de-recognised)

S 10.4 The amount of HQLA held to meet the LCR shall be subject to the following limits:

Asset	Limit
Level 1	Unlimited
Levels 2A and 2B	In aggregate, no more than 40% of total HQLA held
Level 2B	No more than 15% of total HQLA held

S 10.5 The calculation of the 40% aggregate limit for Levels 2A and 2B, and 15% limit for Level 2B by a banking institution shall be determined after the application of the required haircuts, and assuming the unwinding of all short-term securities financing transactions[21] maturing within 30 calendar days that involve the exchange of HQLA. In this context, short-term transactions shall refer to transactions with a maturity date up to and including 30 calendar days.

21 These include repo, securities borrowing and lending and collateral swap transactions.

G 10.6 The portfolio of Level 2 assets held by any banking institution is expected to be well diversified in terms of type of assets, counterparty or issuer, and the economic sector in which the issuer participates.

S 10.7 In order to mitigate cliff effects that could arise, if an eligible liquid asset becomes ineligible (e.g. due to a rating downgrade), a banking institution shall be permitted to keep such assets in its stock of liquid assets for an additional 30 calendar days to adjust its stock as needed or replace the asset[22].

11 Operational requirements on the maintenance of stock of HQLA

S 11.1 A banking institution shall ensure that it is able to immediately use the stock of HQLA as a source of contingent liquidity convertible into cash through outright sale or repo, to address funding gaps that may arise at any time within the 30-day stress period, with no restriction on the use of the liquidity generated. In particular, a banking institution must:

i. have procedures and information systems which identify the legal entities, geographical locations, currencies and specific custodial or bank accounts where HQLA are held to determine the composition of the banking institution's stock of HQLA on a daily basis;

ii. ensure that the stock of HQLA is under the control[23] of the function charged with the responsibility to manage the liquidity of the banking institution[24], whereby the function shall have access to all necessary information to execute the monetisation of any asset at any time; and

iii. have processes to identify any liquidity transfer restrictions and to monitor legislative, regulatory and Shariah developments in the jurisdictions in

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22 For the avoidance of doubt, the requirements stated in paragraphs 10.4 and 10.5 will continue to apply during this 30-day window.

23 Control should be evidenced either by maintaining assets in a separate pool managed by the function with the sole intent for use as a source of contingent funds, or by demonstrating that the function can monetise the asset at any point in the 30-day stress period and that the proceeds are available to the function throughout the 30-day stress period.

24 Which is typically the treasury function.

which the branches and subsidiaries of the banking institution operate and assess their liquidity implications for the banking institution as a whole.

G 11.2 A banking institution is encouraged to test its access to the market and the effectiveness of its processes for monetisation to ensure the availability of the assets for the purpose of meeting liquidity needs in a timely manner and to minimise the risk of negative signalling during a period of actual stress. This may be done by periodically monetising a representative proportion of the assets through a repo or an outright sale.

12 Encumbrance and transferability of assets

S 12.1 A banking institution shall ensure that the stock of HQLA is free from any legal, regulatory, tax, accounting, contractual encumbrances or other practical restrictions on the ability of the banking institution to liquidate, sell, transfer, or assign the asset.

S 12.2 A HQLA shall be treated as encumbered when it is:

i. pledged (either explicitly or implicitly) to secure, collateralise or credit-enhance any transaction; **or**

ii. subject to operational constraints that may impede the monetisation of the assets (see paragraph 12.3) [25].

S 12.3 In considering the operational constraints stated in paragraph in paragraph 12.2, a banking institution shall also assess whether a HQLA is encumbered based on the following factors:

i. whether the monetisation of assets would directly conflict with internal

[25] A banking institution should exclude from the stock of HQLA those assets for which there are impediments to sale, such as large fire-sale discounts which would cause it to breach minimum solvency requirements, or requirements to hold such assets, including, but not limited to, statutory minimum inventory requirements for market making.

business or risk management strategy and policy (e.g. an asset should not be included in the stock if the sale of that asset, without replacement throughout the 30-day period, would remove a hedge that would create an open risk position to the banking institution in excess of internal limits);

ii. potential differences in financial market conventions in other jurisdictions, where applicable (e.g. settlement period, processing time, etc.) that may affect timely monetisation of assets; and

iii. whether the asset is internally designated to cover operational costs (e.g. rents and salaries).

S 12.4 Where a banking institution maintains HQLA in its overseas branch to meet the local LCR requirements set by the host supervisory authority, the eligible stock of HQLA held by the overseas branch shall be counted towards the stock of HQLA for purposes of computing the banking institution's entity and consolidated level LCR, **up to the total net cash outflows for the branch**.

S 12.5 Where a banking institution maintains HQLA in a banking subsidiary to meet the LCR requirements imposed either by the Bank or host supervisory authority of the banking subsidiary, the eligible stock of HQLA held by the banking subsidiary shall be counted towards the stock of HQLA for purposes of computing the banking institution's consolidated level LCR, **up to the total net cash outflows for the subsidiary**.

S 12.6 In respect of paragraphs 12.4 to 12.5, a banking institution shall recognise excess HQLA (e.g. assets held over and above the total net cash outflows of the branch or subsidiary) **only if** these excess HQLA meet the following conditions:

i. not subject to restrictions which impede the transferability of the HQLA and/or the liquidity generated from the HQLA between the banking institution and the branch or subsidiary (e.g. ring-fencing measures, non-convertibility of local currency, foreign exchange controls and differing Shariah interpretations); **and**

ii. not encumbered based on the considerations set out in paragraphs 12.1

to 12.3.

S 12.7 For the avoidance of doubt and subject to paragraph 12.8, the following assets shall not be considered as encumbered and shall therefore be included in the banking institution's stock of HQLA:

i. assets received by a banking institution in reverse repo and securities financing transactions that have not been re-hypothecated, and are legally and contractually available for the banking institution's use;

ii. assets received as collateral for derivatives transactions that are not segregated, and are legally and contractually available for the use or rehypothecation by the banking institution; and

iii. assets which qualify for the stock of HQLA that have been pre-positioned or deposited with, or pledged to, the central bank, a PSE[26] or a payment and settlement system[27] which have not been used to generate liquidity.

S 12.8 Where the banking institution has received an asset whereby the beneficial owner of that asset has the contractual rights to withdraw the assets during the next 30 calendar days, such an asset shall be excluded from the banking institution's stock of HQLA.

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[26] As defined in paragraph 2.20 of the Capital Adequacy Framework (Basel II – Risk-Weighted Assets), whereby PSEs with a 20% risk-weight refer to those which meet the criteria set out in paragraph 2.19 of that policy document. For the corresponding definition of PSEs for Islamic banks, refer to paragraphs 2.24 and 2.23 respectively in the *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets).*

[27] Including HQLA securities held in RENTAS collateral account or other settlement systems such as Clearstream and Euroclear, which have not been used to obtain liquidity.

PART D EXPECTED CASH OUTFLOWS

13 General computation requirements

S 13.1 Unless otherwise specified by the Bank, a banking institution shall calculate the total expected cash outflows by multiplying the outstanding balances of various categories of liabilities and off-balance sheet commitments by the run-off rates and drawdown rates as specified in paragraphs 14.1 to 20.2.

14 Retail deposits

S 14.1 Retail deposits shall consist of deposits placed with a banking institution by a natural person. Retail deposits subject to the LCR shall include all retail demand deposits and retail term deposits, whether denominated in Ringgit or other currencies, except for the qualifying retail term deposits that meet the criteria set out in paragraph 14.7 which are excluded from the calculation of total expected cash outflows.

S 14.2 A banking institution shall divide retail deposits that are subjected to the LCR into "stable" and "less stable" portions of funds and such retail deposits shall be assigned a minimum run-off rate in accordance with paragraphs 14.3 and 14.6.

Stable deposits

S 14.3 Stable deposits shall refer to retail deposits which are fully insured[28] by an effective deposit insurance scheme (i.e. up to the maximum coverage limit by

[28] "Fully insured" means that 100% of the deposit amount, up to the deposit insurance limit, is covered by an effective deposit insurance scheme. Deposit balances up to the deposit insurance limit can be treated as "fully insured" even if a depositor has a balance in excess of the deposit insurance limit. However, any amount in excess of the deposit insurance limit is to be treated as "less stable". For example, if a depositor has a deposit of 150 that is covered by a deposit insurance scheme, which has a limit of 100, where the depositor would receive at least 100 from the deposit insurance scheme if the financial institution were unable to pay, then 100 would be considered "fully insured" and treated as stable deposits while 50 would be treated as less stable deposits.

the deposit insurance scheme) or by a public guarantee[29], **and** fulfil either one of the following criteria:

i. depositors have one or more non-deposit relationships[30] with the banking institution for a period of at least 12 months; **or**

ii. deposits are in transactional accounts, which refer to accounts which are regularly credited or debited (e.g. accounts where salaries are automatically deposited).

A banking institution shall assign a run-off rate of 5% to stable deposits.

S 14.4 With respect to paragraph 14.3, a banking institution shall ensure that an effective deposit insurance scheme[31] refers to a scheme which fulfills the following criteria:

i. the scheme guarantees that it has the ability to make prompt payouts;

ii. clearly defined coverage; **and**

iii. public awareness of the scheme is high.

For the avoidance of doubt, all deposits insured by Perbadanan Insurans Deposit Malaysia (PIDM) shall be deemed as deposits insured by an effective deposit insurance scheme.

S 14.5 Banking institutions shall have an internal methodology in determining the regularity of crediting or debiting for purposes of classifying a deposit account as a transactional account as provided under paragraph 14.3(ii).

Question 3

Are there alternative criteria that can be considered for demonstrating an established relationship with your banking institution or transactional accounts

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[29] This refers to an explicit public guarantee with a clearly defined coverage. For the avoidance of doubt, a public guarantee which is recognised by a host jurisdiction as equivalent to an effective deposit insurance scheme shall be deemed to have fulfilled these criteria. In respect of Malaysian deposits, public guarantee shall refer only to an explicit guarantee by the Federal Government of Malaysia.

[30] This may include a borrowing relationship through mortgage or other long term loans.

[31] Generally, an effective deposit insurance scheme should conform to core principles for effective deposit insurance systems set out by the International Association of Deposit Insurers.

indicative of more stable deposits in the context of paragraph 14.3? Please provide relevant evidence or data to support the alternative criteria suggested.

Less stable deposits

S 14.6 A banking institution shall categorise retail deposits which do not meet the criteria set out in paragraph 14.3 as less stable deposits and shall assign a run-off rate of 10% to such deposits. These retail deposits shall include any amounts in excess of the maximum coverage limit by the deposit insurance scheme.

Question 4

In respect of foreign currency retail deposits, please indicate whether:

- such deposits may be withdrawn in the same foreign currency in which these deposits are denominated or another foreign currency;
- or must be withdrawn in Ringgit equivalent amount only by selling the foreign currency to your banking institution at the prevailing exchange rate.

Where foreign currency deposits may only be withdrawn in Ringgit, please provide the proportion of such foreign currency deposits as a percentage of the total foreign currency deposits accepted by your banking institution.

S 14.7 **Qualifying retail term deposits** shall refer to retail term deposits with a residual maturity or withdrawal notice period of greater than 30 days, **and** meeting one of the following criteria:

i. depositor has no legal right[32] to withdraw the deposits within the next 30 calendar days; **or**

ii. withdrawal prior to contractual maturity results in a significant penalty that is materially greater than the loss of interest or profit[33].

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[32] This shall include deposits which are pledged by retail depositors (whereby a lien is created on the deposits) to secure a credit facility from the banking institution.

[33] If a portion of the term deposit can be withdrawn without incurring such a penalty, that portion shall be treated as a demand deposit and included in the calculation of total expected cash outflows. Only the remaining balance of the deposit may be treated as a term deposit and excluded from total expected cash outflows.

A banking institution shall exclude qualifying retail term deposits from the calculation of total expected cash outflows.

S 14.8 Where there is evidence indicating that a banking institution has allowed a depositor to withdraw its deposit prior to maturity without applying the corresponding penalty, or despite the depositor having no legal right to withdraw, the banking institution shall treat the entire category of these funds as demand deposits (i.e. regardless of the remaining term) and subject these deposits to the run-off rates specified in paragraphs in 14.3 and 14.6, notwithstanding that the contractual features of the deposit meet the criteria specified in paragraph 14.7.

Question 5

Are there any specific classes of retail deposit products being offered by your banking institution whereby the treatment defined in paragraphs 14.1 to 14.7 may not be reflective of their relative stability?

Question 6

Please describe the internal classification methodology presently used by your banking institution, if any, to identify large-sized retail depositors/investment account holders (e.g. high net-worth individuals). Where such a methodology is adopted, what has been the observed withdrawal behaviour of large-sized retail depositors/investment account holders as compared to other retail depositors/investment account holders?

15 Unsecured wholesale funding

S 15.1 Unsecured wholesale funding shall consist of liabilities that are raised from non-natural persons (i.e. legal entities, including sole proprietorships, partnerships and small and medium-sized enterprises (SMEs)[34]) and are not collateralised by legal rights to specifically designated assets owned by the borrowing banking institutions in the case of bankruptcy, insolvency, liquidation or resolution. These shall include:

i. any liability which the banking institution expects to fulfil within the next 30 calendar days, notwithstanding its contractual maturity;

ii. all wholesale funding that is callable or has an earliest contractual maturity date within the next 30 calendar days; and

iii. funding with an undetermined maturity.

S 15.2 A banking institution shall identify the portions of unsecured wholesale funding which qualify as operational deposits, which is defined and assigned a minimum run-off rate in paragraphs 15.5 to 15.15. A banking institution shall treat other forms of unsecured wholesale funding based on the profile of the funds provider (i.e. small business customers, non-financial corporates, sovereigns, central banks, multilateral development banks, PSEs and other legal entity customers), and shall assign minimum run-off rates in accordance with paragraphs 15.17 to 15.24.

S 15.3 **Qualifying wholesale term funding** shall refer to unsecured wholesale funding with a residual maturity or redemption or withdrawal notice period of greater than 30 days, **and** meeting one of the following criteria:

i. funds provider has no legal right to call, redeem or withdraw the funds within the next 30 calendar days; **or**

ii. where the funding is a deposit, withdrawal prior to contractual maturity

[34] In Malaysia, small and medium-sized enterprises (SMEs) in the agriculture and services sector are defined as having annual sales of up to RM5 million or 50 full-time employees. For the manufacturing sector, SMEs have been defined as having annual sales of up to RM25 million or 150 full-time employees.

results in a significant penalty that is materially greater than the loss of interest/profit.

A banking institution shall exclude qualifying wholesale term funding from the calculation of total expected cash outflows.

Question 7

To the extent that your banking institution intends to offer qualifying retail term deposits or qualifying wholesale term funding products, the Bank intends to require banking institutions to submit an application for approval under the Guidelines on Introduction of New Products. Banking institutions will not be permitted to introduce changes to the terms of existing outstanding term deposit contracts to minimise potential disruptions to deposit holders. Please provide your comments on the implications of this restriction for your institution.

Question 8

To the extent that banking institutions intend to offer qualifying wholesale term funding products, what are the potential changes in wholesale funding behavior and their implications on your institution's existing wholesale funding structure (e.g. changes in terms of the preferred maturity of deposit placements by corporate customers and the expected pricing of funds at various maturities)?

S 15.4 Where there is evidence indicating that a banking institution has allowed the wholesale funds provider to call/redeem/withdraw its funding prior to maturity without applying the corresponding penalty, or despite the funds provider having no legal right to call/redeem/withdraw, the banking institution shall subject the entire category of these funds to the run-off rates specified in paragraphs in 15.4 to 15.24, notwithstanding that the contractual features of the funding meet the criteria specified in paragraph 14.7.

Operational deposits

S 15.5 **Operational deposits** shall refer to deposits placed by financial or non-financial customers with a banking institution arising from qualifying activities, namely clearing, custody or cash management activities (defined in paragraphs 15.10 to 15.12) that meet the criteria set out in paragraphs 15.7 to 15.9.

S 15.6 A banking institution shall assign a run-off rate of 25% to operational deposits. A banking institution shall apply a run-off rate of 5% on the portion of operational deposits which are fully covered by an effective deposit insurance scheme as referred to in paragraph 14.4.

S 15.7 To qualify for the treatment of operational deposits, a banking institution shall ensure that the customers of qualifying activities must be reliant on the banking institution as an independent third party to perform these services to fulfil its normal banking activities over the next 30 days, as evidenced by either one of the following criteria:

i. qualifying activities must be provided under a legally binding agreement whereby the termination of such agreements shall be subject to a notice period of at least 30 days; **or**

ii. significant switching costs (e.g. transaction, early termination or legal costs, or information technology costs arising from the integration between the customer and banking institution's infrastructure to enable operational transactions).

S 15.8 To ensure that the banking institution is informed of any potential changes in the relationship with customers of qualifying activities, a banking institution shall assess the degree of reliance through other factors, including the depth of relationship with the customer (e.g. length of relationship, other products and services provided, geographical coverage of services, other relationships with the customer's affiliates), as well as the materiality and frequency of the transactions processed for the customer.

Question 9
To the extent that your banking institution presently relies on a methodology or a set of criteria to determine operational deposits for the LCR, what indicators or criteria are applied, other than those described in paragraphs 15.7 to 15.8?

S 15.9 The operational deposits arising from clearing, custody or cash management activities shall be the deposits which are:

i. by-products of the underlying services provided by a banking institution which were not sought out in the wholesale market in the sole interest of offering interest income; **or**

ii. held in specifically designated accounts and priced without giving an economic incentive to a customer (not limited to paying market interest rates[35]) to leave any excess funds on these accounts.

S 15.10 A **clearing relationship** shall refer to a service arrangement that enables customers to transfer funds or securities through direct participants in domestic settlement systems to final recipients. Such services shall be limited to the following activities: transmission, reconciliation and confirmation of payment orders; overdraft, overnight financing and maintenance of post-settlement balances; and determination of intra-day and final settlement positions.

S 15.11 A **custody relationship** shall refer to the provision of services connected with the safekeeping, reporting, processing of financial assets on behalf of customers[36] that transact and hold financial assets. Such services shall be limited to the settlement of securities transactions, the transfer of contractual payments, the processing of collateral, and the provision of custody related cash management services[37]. Also included are the receipt of dividends and other income, client subscriptions and redemptions.

S 15.12 A **cash management relationship** shall refer to the provision of cash management and related services to customers for the purposes of payment remittance, collection and aggregation of funds, payroll administration, and

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[35] Other examples of economic incentives include rebates and reduction on fees for other services.

[36] Including trusts.

[37] Custodial services can be extended to the receipt of dividends and other income, client subscriptions, redemptions, asset and corporate trust servicing, treasury, escrow, funds transfer, stock transfer and agency services; including payment and settlement services (excluding correspondent banking); and depository receipts.

control over the disbursement of funds.

Question 10
Please provide your comments on whether the proposed definition of operational deposits, including the definition of clearing, custody and cash management activities is appropriate. Please highlight the specific activities of a similar nature undertaken by your banking institution that may not fall within the scope of the proposed definition of operational deposits.

S 15.13 A banking institution shall ensure that the amounts held in operational deposits are reasonably consistent with the amount needed by its customer to fulfil their operational activities. Where there is evidence of excess funds held in such accounts, the banking institution shall treat such excess balances in accordance with one of the categories set out in paragraphs 15.17 to 15.23 based on the profile of the funds provider. If the banking institution is unable to determine the amount of the excess balance, then the banking institution shall assume the entire deposit to be non-operational.

S 15.14 A banking institution shall determine a methodology or set of criteria/indicators for identifying excess deposits that are excluded from the treatment in paragraph 15.6. This assessment shall be conducted by the banking institution at a sufficiently granular level to adequately assess the risk of withdrawal in an institution-specific stress. In conducting the assessment, the banking institution shall take into account relevant factors such as the likelihood that wholesale customers have above average balances in advance of specific payment needs, and consider appropriate indicators (e.g. ratios of account balances to payment or settlement volumes or to assets under custody) to identify those customers who are not actively managing their account balances efficiently.

Question 11 What is the methodology or set of criteria/indicators currently being applied by your banking institution, if any, to segregate excess balances as highlighted in paragraph 15.13?

S 15.15 A banking institution shall treat deposits received under correspondent banking or prime brokerage services as non-operational deposits with a run-off rate of 100%.

S 15.16 In respect of paragraph 15.15, correspondent banking shall refer to arrangements under which one bank (correspondent) holds deposits owned by other banks (respondents) and provides payment and other services in order to settle foreign currency transactions[38], while prime brokerage shall refer to a package of services offered to large active investors, particularly institutional hedge funds[39].

Non-operational unsecured wholesale funding

(a) Small business customers

S 15.17 Small business customers shall refer to:

i. sole proprietorships, partnerships and SMEs[34]; **and**

ii. non-individual customers for whom total aggregate[40] funding raised from the customer is less than RM5 million (on a consolidated basis[41], where applicable) and where deposits from the customer are managed as retail deposits in the banking institution's internal risk management systems

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[38] For example, nostro and vostro accounts used to settle transactions in a currency other than the domestic currency of the respondent bank for the provision of clearing and settlement services.

[39] These services usually include: clearing, settlement and custody; consolidated reporting; financing (margin, repo or synthetic); securities lending; capital introduction; and risk analytics.

[40] "Aggregated funding" means the gross amount (i.e. not netting any form of credit extended to the legal entity) of all forms of funding (e.g. deposits or debt securities or similar derivative exposure for which the counterparty is known to be a small business customer).

[41] Applying the limit on a consolidated basis means that where one or more small business customers are affiliated with each other, they may be considered as a single creditor such that the limit is applied to the total funding received by the banking institution from this group of customers.

consistently over time, and not individually managed like large corporate deposits.

For the avoidance of doubt, a banking institution shall exclude funds providers in this category from the categories specified in paragraphs 15.19 to 15.24.

S 15.18 A banking institution shall treat non-operational unsecured wholesale funding provided by small business customers in the same way as retail deposits as described in paragraphs 14.3 and 14.6. The banking institution shall distinguish such funding between the "stable" and “less stable” portion of funding.

(b) Non-financial corporates, sovereigns, central banks, multilateral development banks, and PSEs[42]

S 15.19 A banking institution shall assign a run-off rate of 40% to funds received from non-financial corporate customers and (both domestic and foreign) sovereigns, central banks, multilateral development banks, and PSE customers, which are not held for operational purposes.

S 15.20 A banking institution shall assign a run-off rate of 20% to a deposit where the entire amount of the deposit is fully covered by an effective deposit insurance scheme or by a public guarantee.

(c) Other legal entity customers

S 15.21 A banking institution shall assign a run-off rate of 100% to non-operational unsecured funding from financial institutions, fiduciaries, beneficiaries, conduits and special purpose vehicles, affiliated entities of the banking institution[43] and other entities that are not included in the prior categories.

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42 As defined in paragraph 2.20 of the *Capital Adequacy Framework (Basel II – Risk-Weighted Assets)* policy document and paragraph 2.24 of the *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets)* policy document. For the avoidance of doubt, examples of PSEs under this category include Kumpulan Wang Simpanan Pekerja and Lembaga Tabung Haji.

43 Outflows on unsecured wholesale funding from affiliated entities of the bank are included in this category unless the funding is part of an operational relationship, a deposit in an institutional network of cooperative banks or the affiliated entity of a non-financial corporate.

S 15.22 In respect of paragraph 15.21:

i. a fiduciary refers to a legal entity that is authorised to manage assets on behalf of a third party. Fiduciaries include asset management entities such as pension funds and other collective investment vehicles which do not qualify as PSEs; and

ii. a beneficiary refers to a legal entity that receives, or may become eligible to receive, benefits under a will, insurance policy, retirement plan, annuity, trust, or other contract.

S 15.23 Except as provided in paragraph 15.24, a banking institution shall include all funding raised from the issuances of notes, commercial papers, bonds/sukuk and other debt securities by the banking institution which are maturing within 30 calendar days in this category regardless of the holder and assign a 100% run-off rate to such funding.

S 15.24 A banking institution shall assign a run-off rate of 10% to securities issued by the banking institution which are sold exclusively in the retail market to retail and small business customers, **and** cannot be bought and held by parties other than retail or small business customers.

16 Secured funding

S 16.1 Secured funding shall refer to those liabilities and obligations that are collateralised by legal rights to specifically designated assets owned by the banking institution in the case of bankruptcy, insolvency, liquidation or resolution. Repos, collateral swaps, collateral lending to customers[44] and any

[44] Typically, such a transaction is conducted to enable a banking institution's customers to cover their short positions. A customer short position in this context describes a transaction where a banking institution's customer sells a security it does not own, and the banking institution subsequently obtains the same security from internal or external sources to make delivery into the sale. Internal sources include the banking institution's own inventory of collateral as well as rehypothecatable collateral held in other customer margin accounts. External sources include collateral obtained through a securities borrowing, reverse repo, or like transaction.

other transaction with a similar form shall be considered as secured funding transaction.

S 16.2 A banking institution shall calculate the amount of outflow based on the **amount of funds raised** through the transaction and not the value of the underlying collateral. For collateral swap or collateral lending transactions, the amount of outflow shall be calculated based on the market value of the asset received.

S 16.3 A banking institution shall apply the following factors to all outstanding secured funding transactions with maturities within 30 calendar days:

Categories for outstanding maturing secured funding transactions	Amount to add to cash outflows[45]
Backed by Level 1 assets or with central banks	0%
Backed by Level 2A assets	15%
Backed by Level 2B RMBS[46]	15%
Backed by Level 2B corporate debt securities	20%
Secured funding transactions with domestic sovereign, PSEs[47] or multilateral development banks that backed by non-HQLA	25%[48]
All others	100%

45 Due to the high-quality of Level 1 assets, no reduction in funding availability against these assets is assumed to occur. Moreover, no reduction in funding availability is expected for any maturing secured funding transactions with the banking institution's domestic central bank. A reduction in funding availability will be assigned to maturing transactions backed by Level 2 assets equivalent to the required haircuts.

46 Only applicable to RMBS which is recognised under this policy document (i.e. AAA-rated Cagamas RMBS).

47 In this context, PSEs that receive this treatment should be limited to those that are 20% risk-weighted or better, and "domestic" is defined as a jurisdiction where a bank is legally incorporated.

48 In recognition that these entities are unlikely to withdraw secured funding from banks in a time of market-wide stress. This, however, gives credit only for outstanding secured funding transactions, and not for unused collateral or merely the capacity to borrow.

17 Liquidity needs from derivatives, financing transactions and other contracts

Calculation of derivatives cash outflows

S 17.1 A banking institution shall calculate the expected contractual derivative cash inflows and outflows[49] based on the mark-to-market values or valuation methodologies which are being applied for the purposes of financial reporting, where applicable.

S 17.2 A banking institution shall calculate cash flows on a net basis (i.e. inflows due from can offset outflows due to) by counterparty, only where a **valid and enforceable master netting agreement exists**. Where derivative payments are collateralised by HQLA, the banking institution shall calculate cash outflows **net of any corresponding cash or collateral**, which are contractually due and received from the derivative counterparty (all other things being equal), if the banking institution is legally entitled and operationally capable to re-use the collateral received to raise new cash.

S 17.3 A banking institution shall assign a 100% factor to the sum of all net cash outflows arising from derivative contracts in the calculation of the banking institution's expected cash outflows.

Collateral outflows

S 17.4 A banking institution shall include all contractually due or potential collateral outflows in the calculation of its expected cash outflows based on the contractual triggers and outflow rates as set out in paragraphs 17.5 to 17.11.

S 17.5 Where a banking institution has entered into collateralisation arrangements to secure against **mark-to-market exposures** on derivatives and other transactions, the banking institution shall include any outflows related to market

[49] All derivatives positions are assumed to be closed out within the next 30 calendar days. For the avoidance of doubt, options shall be assumed to be exercised when they are "in the money" to the option buyer.

valuation changes in the calculation of expected cash outflows.

S 17.6 A banking institution shall determine the amount of expected cash outflows by identifying the largest absolute net 30-day collateral flow realised during the preceding 24 months. The absolute net collateral flow shall be based on both realised outflows and inflows, regardless of the direction of these flows. To the extent that these transactions are executed under a valid and enforceable master netting agreement, the collateral inflows and outflows from the same counterparty shall be calculated by the banking institution on a net basis.

Question 12

With respect to liquidity needs arising from market valuation changes on derivatives and other contracts referred to in paragraph 17.5, please describe alternative methodologies presently being applied by your banking institution, if any, in determining such collateral flows as part of your collateral management practices.

S 17.7 A banking institution shall include 100% of the value of any collateral which is contractually due to a counterparty in the calculation of total expected cash outflows, even if the counterparty has not yet demanded the collateral to be posted.

S 17.8 Where downgrade triggers are embedded in derivatives, financing transactions and other contracts[50], a banking institution shall include 100% of additional collateral or cash that would be posted, in the calculation of total expected cash outflows for any downgrade **up to and including a 3-notch downgrade** of the banking institution's long-term credit rating. Triggers linked to the banking institution's short-term rating shall be assumed to be triggered at the

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[50] Often, contracts governing derivatives and other transactions have clauses that require the posting of additional collateral, drawdown of contingent facilities, or early repayment of existing liabilities upon the bank's downgrade by a recognised credit rating organisation. The scenario therefore requires that for each contract in which "downgrade triggers" exist, the bank assumes that 100% of this additional collateral or cash outflow will have to be posted for any downgrade up to and including a 3-notch downgrade of the bank's long-term credit rating.

corresponding long-term rating in accordance with published rating criteria. The banking institution shall assess the impact of its rating downgrade on all types of margin collateral requirements and contractual triggers that may change rehypothecation rights for non-segregated collateral.

S 17.9 To reflect potential valuation changes on **collateral posted** to secure against the mark-to-market valuation of derivatives positions and other transactions, a banking institution posting non-Level 1 HQLA collateral shall include 20% of the notional amount required to be posted, after applying the relevant haircuts[51], and net of collateral received (provided that such collateral received can be re-used or rehypothecated without restrictions), in the calculation of total expected cash outflows.

S 17.10 Where a banking institution holds **non-segregated collateral** in excess of the counterparty's current collateral requirements and the collateral can be contractually called at any time by the counterparty, the banking institution shall include 100% of the non-segregated collateral in the calculation of total expected cash outflows.

S 17.11 In cases where a banking institution enters into a contract which allows collateral received to be **substituted to non-HQLA assets** without the banking institution's consent, the banking institution shall include 100% of the collateral amount received in the calculation of total expected cash outflows if the collateral received is not segregated and is used to secure another transaction.

[51] Refer to haircuts as prescribed in this document.

18 Loss of funding from structured finance instruments

Asset-backed securities[52], covered bonds/sukuk and other structured financing investments

S 18.1 A banking institution shall assume that the existing funding raised from the issuance of asset-backed securities, covered bonds/sukuk and other structured finance instruments maturing within 30 calendar days to be unavailable. The banking institution shall assign a 100% outflow rate to the total outstanding amount of these instruments maturing within 30 calendar days

Asset-backed commercial paper, conduits, securities investment vehicles and other such financing facilities

S 18.2 Where a banking institution has structured financing facilities which remain outstanding, such as the issuance of short-term asset-backed commercial paper, the banking institution shall assume that it is potentially unable to refinance the maturing debt, and shall include 100% of the amount of the structured finance instrument maturing within the next 30 calendar days in its expected cash outflows.

S 18.3 In cases where derivatives or derivative-like components which may allow the **"return" of assets to a banking institution** or **require the banking institution ("asset originator") to provide liquidity[53]** are contractually written into the documentation associated with the structured financing facility, the banking institution shall include 100% of the amount of assets that could potentially be returned, or the liquidity required, in its expected cash outflows.

S 18.4 In applying the requirements set out in paragraphs 18.2 to 18.3, a banking institution shall look through to the maturity of the debt instruments issued by

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[52] To the extent that sponsored conduits/SPVs are required to be consolidated under liquidity requirements, their assets and liabilities will be taken into account.

[53] Effectively ending the financing arrangement within the next 30 calendar days.

an SPV[54] and any embedded options in financing arrangements that may potentially trigger the "return" of assets or the need for liquidity, irrespective of whether the SPV issuing the structured finance instrument is consolidated.

19 Drawdowns on credit and liquidity facilities

Committed credit facilities[55]

S 19.1 A credit facility shall refer to any contractually irrevocable (i.e. "committed") or conditionally revocable agreements to extend funds in the future.

S 19.2 A banking institution shall apply the following drawdown rates on the undrawn portion of the committed credit facilities:

Counterparty	Drawdown rate of credit facility (% of undrawn portion)
Retail and small business customers	5%
Non-financial corporates, sovereigns and central banks, PSEs and multilateral development banks	10%
Banks subject to prudential supervision	40%
Other financial institutions including securities firms, insurance companies, takaful operators, fiduciaries and beneficiaries	40%
Other legal entities (including SPEs[56], conduits and special purpose vehicles, and other entities not included in the prior categories)	100%

54 As defined in Appendix XXVII of the policy document on *Capital Adequacy Framework (Basel II – Risk-Weighted Assets)* and Appendix XXVII of the policy document on *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets)*.

55 These off-balance sheet facilities or funding commitments can have long- or short-term maturities, with short-term facilities frequently renewing or automatically rolling-over. In a stressed environment, it will likely be difficult for customers drawing on facilities of any maturity, even short-term maturities, to be able to quickly pay back the borrowings. Therefore, for purposes of this standard, all facilities are assumed to be drawn at the rates specified in paragraph 19.2, regardless of maturity.

56 The potential liquidity risks associated with the bank's own structured financing facilities should be treated according to paragraphs 18.1 to 18.4 of this document (100% of maturing amount and 100% of returnable assets are included as outflows).

S 19.3 To the extent that the counterparty has already posted HQLA to secure the facility or the posting of collateral (in the form of HQLA) is contractually required for the counterparty to draw down the facility, a banking institution shall calculate the undrawn portion of such facilities net of any HQLA posted, if:

i. the banking institution is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the facility is drawn; and

ii. there is no undue correlation between the probability of drawing the facility and the market value of the collateral.

The collateral shall be netted against the undrawn portion of the facility only if the collateral is not already counted in the stock of HQLA to avoid double-counting.

Liquidity facilities

S 19.4 A liquidity facility shall refer to any committed, undrawn back-up facility that would be utilised to **refinance the debt obligations of a customer** in situations where such a customer is unable to rollover that debt in financial markets (e.g. pursuant to a commercial paper programme, secured financing transactions, obligations to redeem units, etc.). This shall include any facility provided to hedge funds, money market funds and special purpose funding vehicles or other vehicles used to finance the banking institution’s own assets, but shall exclude:

i. the portion of a liquidity facility that is backing debt that does not mature within the 30-day period; and

ii. any additional amount of the liquidity facility over and above the amount required to backstop the currently outstanding debt issued. This additional amount shall be treated as a committed credit facility based on the corresponding drawdown rates as specified in paragraph 19.2.

For the avoidance of doubt, a banking institution shall treat facilities granted to corporate entities for general working capital purposes (e.g. revolving credit facilities) as committed credit facilities in accordance with paragraphs 19.1 to 19.3.

S 19.5 The amount of the undrawn commitment arising from a liquidity facility shall be the **amount of the currently outstanding debt issued** by the customer (or proportionate share, if a syndicated facility) maturing within a 30-day period that is backstopped by the facility. To calculate the expected cash outflows from the liquidity facility, a banking institution shall multiply this amount of outstanding debt issued with the following drawdown rates:

Counterparty	Drawdown rate of liquidity facility (% of undrawn portion)
Retail and small business customers	5%
Non-financial corporates, sovereigns and central banks, PSEs and multilateral development banks	30%
Banks subject to prudential supervision	40%
Other financial instututions including securities firms, insurance companies, fiduciaries and beneficiaries	100%
Other legal entities (including SPEs, conduits and special purpose vehicles, and other entities not included in the prior categories)	100%

S 19.6 A banking institution that is also the provider of liquidity facilities for financing programs referred to in paragraphs 18.1 to 18.4 that are maturing or have liquidity puts that may be exercised within 30 calendar days shall not count both the maturing financing instrument and the liquidity facility. The banking institution shall apply a 100% outflow rate to the amount of financing instrument maturing in the 30-day horizon, or the maximum amount of liquidity facility that would be extended, whichever is higher.

20 Other contractual obligations

S 20.1 A banking institution shall treat any other contractual obligations to **extend funds** within 30 calendar days not provided for elsewhere in this document as follows:

i. for any contractual obligations to extend funds to financial institutions, a 100% outflow rates shall be applied to the contractual amount; and

ii. for any contractual obligations to extend funds to retail, small business and non-financial corporate customers, a 100% outflow rate shall apply, if these obligations exceed 50% of the aggregated contractual inflows due from these customers in the next 30 calendar days. The 100% outflow rate shall be applied to the difference between the contractual outflow and the 50% of the total contractual inflows.

S 20.2 A banking institution shall assign a 100% outflow rate to any **other contractual cash outflows** within the next 30 calendar days, such as outflows to cover unsecured collateral borrowings, uncovered short positions, dividends or contractual interest payments. For the avoidance of doubt, the banking institution shall exclude outflows related to operating costs from the calculation of the LCR.

S 20.3 With respect to paragraph 20.2, in the case where a **banking institution enters into a short position** that is being covered by an unsecured securities borrowing, the banking institution shall assume that it will experience a cash outflow arising from the need to secure the borrowing with HQLA or to close out the short position by buying back the security.

21 Contingent funding obligations

S 21.1 A banking institution shall include in the calculation of total cash outflows for liquidity calls arising from **non-contractual contingent funding obligations** as follows:

Category	Outflow rate
Unconditionally revocable ("**uncommitted**") credit and liquidity facilities[57]	0%

[57] This refers to commitments which receive a 0% CCF under the *Capital Adequacy Framework (Risk-Weighted Assets)* and *Capital Adequacy Framework for Islamic Banks (Risk-Weighted Assets)*. Any commitments that are unconditionally and immediately cancellable and revocable by the banking institution or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness (for example, corporate overdrafts and other facilities), at any time without prior notice, will be subject to 0% CCF. To utilise the 0% CCF, the banking institution must

Contingent funding obligations **related to trade finance** (e.g. documentary trade letters of credit, documentary and clean collection, import bills and export bills, guarantees directly related to trade finance obligations)	3% of trade finance obligations
Non-contractual contingent funding obligations related to potential liquidity draws by unconsolidated **joint ventures or minority investments** in entities	10% of the investment value
Guarantees and letters of credit **unrelated to trade finance obligations**	10% of the amount of guarantees and letters of credit
Potential requests for **debt repurchases** of the banking institution's own debt or that of related conduits, SIVs and other such financing facilities	10% of the total outstanding amount
Structured products[58]	10% of total outstanding amount
Managed funds[59] that are marketed with the objective of maintaining a stable value (e.g. money market mutual funds, other types of stable value collective investment funds, etc.)	10% of total outstanding amount
Outstanding debt securities having maturities greater than 30 calendar days for whereby the banking institution or its affiliate is a **dealer or market maker**	10% of total outstanding amount
Non-contractual obligations where customer's **short positions are covered by other customers' collateral**, where the collateral does not qualify and Level 1 or Level 2 assets	50% of the collateral amount used to cover customer's short positions

demonstrate that legally, it has the ability to cancel these facilities and that its internal control systems and monitoring practices are adequate to support timely cancellations which the banking institution does in effect practice upon evidence of a deterioration in a borrower's creditworthiness. Banking institutions should also be able to demonstrate that such cancellations have not exposed the banking institution to legal actions, or where such actions have been taken, the courts have decided in favour of the banking institution.

58 Structured products refer to any investment products offered by a banking institution to customers with embedded derivatives (e.g. options) that are linked to the performance of an underlying asset such as interest rates, equities, foreign currency rates, etc. This shall also include structured products which are linked to securities as defined under the Guidelines on the Offering of Structured Products issued by Securities Commission Malaysia.

59 For the avoidance of doubt, this shall only include managed funds being sold by the banking institution, not funds which are distributed by the banking institution on behalf of a third party.

PART E EXPECTED CASH INFLOWS

22 Loans and other credit facilities

S 22.1 When calculating expected cash inflows from loans and other credit facilities, a banking institution shall only include **contractual cash flows** (including interest or profit payments) from outstanding credit facilities that are fully performing [60] and for which the banking institution has no reason to expect a default within the 30-day time horizon.

S 22.2 Inflow rates arising from loans and other credit facilities shall be determined by counterparty as follows:

Counterparty	Inflow rates
Retail and small business customers	50%
Non-financial corporates, sovereigns, multilateral development banks and PSEs	50%
Financial institutions and central banks	100%

S 22.3 Inflows from loans/financing that have no specific maturity (i.e. have no defined or open maturity) shall be excluded by a banking institution from the calculation of total cash inflows and **no assumptions shall be applied** by the banking institution as to when maturity of such loans/financing would occur. For revolving credit facilities, the banking institution shall assume that the existing loan/financing is rolled over and that no principal or interest/profit payment is received.

S 22.4 However, minimum payments of principal, fee or interest/profit associated with an open maturity loan/financing shall be recognised by a banking institution based on the inflow rates as prescribed in paragraph 22.2, provided that such payments are contractually due within the 30-day horizon.

[60] This shall exclude credit exposures which are defined as 'impaired' under paragraph 11.1 of the policy document on *Classification and Impairment Provisions for Loans/Financing*.

23 Secured lending or financing[61]

S 23.1 A banking institution shall assume that a reverse repo, securities borrowing or collateral swap transactions maturing in the next 30 calendar days will be rolled over (i.e. apply a cash inflow rate of 0%), if the collateral obtained from the secured lending transaction is **rehypothecated to cover the banking institution's short positions**[62] that could be extended beyond the 30-day horizon.

S 23.2 However, if the collateral obtained from secured lending transactions is **not used to cover the banking institution's short position**, a banking institution shall apply the following inflow rates from maturing reverse repurchase or securities borrowing agreements based on the type of asset securing the transaction:

Maturing secured lending transactions backed by the following asset category	Inflow rate[63] (if collateral is not used to cover short positions)
Level 1 assets	0%
Level 2A assets	15%
Level 2B RMBS	15%
Level 2B corporate debt securities	20%
Margin lending[64] backed by all other collateral	50%
Other collateral	100%

61 Including reverse repos and securities borrowing transactions.

62 This reflects its need to continue to cover the short position or to re-purchase the relevant securities. Short positions include both instances where in its 'matched book' the banking institution sold short a security outright as part of a trading or hedging strategy and instances where the banking institution is short a security in the 'matched' repo book (i.e. it has borrowed a security for a given period and lent the security out for a longer period).

63 The inflow rate shall be applied to the outstanding amount of the secured lending transaction, which is set based on the extent to which the secured lending transaction will be rolled over having regard to the riskiness of the underlying collateral securing the transaction.

64 Collateralised loans extended by banking institutions to customers for the purpose of taking leveraged trading positions (e.g. margin loans to purchase shares) are considered as a form of secured lending.

24 Derivatives transactions

S 24.1 The amounts of derivatives cash inflows shall be calculated by a banking institution in accordance with the methodology prescribed in paragraph 17.1 to 17.3. The banking institution shall assign a 100% inflow factor to the sum of all net cash inflows from derivatives.

S 24.2 Where derivatives are collateralised by HQLA, a banking institution shall calculate cash inflows net of any corresponding cash or contractual collateral outflows that would result, all other things being equal, from contractual obligations for cash or collateral to be posted by the banking institution, given these contractual obligations would reduce the stock of HQLA.

25 Facilities at other financial institutions

S 25.1 A banking institution shall assign a 0% inflow rate to all credit facilities, liquidity facilities or other contingent funding facilities that the banking institution has secured at other financial institutions.

26 Other cash inflows

S 26.1 A banking institution shall assign a 100% inflow rate on inflows from securities maturing within 30 calendar days (e.g. coupon payment) **not already included in the stock of HQLA** shall be assigned a 100% inflow rate. If an asset is included as part of the stock of HQLA, the cash inflows associated with that asset shall not be counted by the banking institution as cash inflows (i.e. part of the denominator).

S 26.2 Deposits held at other financial institutions for operational purposes, as outlined in paragraphs 15.5 to 15.15 (namely clearing, custody, and cash management purposes) shall be assumed by a banking institution to remain at those institutions for operational reasons, and therefore not available to the depositing banking institution. A 0% inflow rate shall be applied to operational deposits for the depositing banking institution.

S 26.3 A banking institution shall assign a 100% inflow rate to deposits held at other financial institutions for non-operational purposes, such as inter-bank deposits, which are redeemable within the next 30 calendar days. Similarly, to the extent that the banking institution is able to redeem, within the next 30 calendar days, any of its funds placed in investment accounts managed by another banking institution, the banking institution shall assign a 100% inflow rate to these funds.

S 26.4 Contingent cash inflows such as expected dividend payments from the banking institution's investments in equities or equity-like instruments shall not be included by the banking institution as expected cash inflows.

Question 13 Apart from the categories above, are there any other contractual cash inflows which should be included in the calculation of the LCR?

PART F INVESTMENT ACCOUNTS

27 Unrestricted Investment Account (URIA)

Calculation by funds

S 27.1 The banking institution shall calculate and report the LCR for URIA for **each individual** URIA fund. The calculation of LCR for each URIA fund shall only include the HQLA held specifically for that URIA fund, along with the expected cash outflows and expected cash inflows arising from that particular URIA fund.

S 27.2 For the avoidance of doubt, the banking institution shall not include HQLA held specifically for a particular URIA fund, the expected cash outflows and expected cash inflows of the URIA fund in the calculation of the LCR at the banking institution level (and the SPI level, where applicable) and for other investment account funds.

S 27.3 Where the LCR of a particular URIA fund is lower than the minimum level required in paragraph 9.1, the deficit amount shall be added by a banking institution to the total net cash outflows for the calculation of the LCR at the banking institution level (and the SPI level, where applicable). Where the LCR of a particular URIA fund is higher than the minimum level, the banking institution shall not recognise the surplus amount shall not in the calculation of the LCR at the banking institution level (and the SPI level, where applicable) and at other investment account funds.

S 27.4 A banking institution shall exclude a URIA fund from its computation of the LCR if the URIA fund meets one of the following criteria:

i. has a residual maturity or withdrawal notice period of greater than 30 days and where the investment account holder (IAH) has no legal right to withdraw the funds within the next 30 calendar days; **or**

ii. has other contractual features which significantly mitigate liquidity risks to the banking institution such as those applicable to Restricted

Investment Account (RIA) funds in paragraph 28.1. A URIA fund must be specifically approved by the Bank for exclusion from LCR requirements under this criterion.

High-quality liquid assets (HQLA)

S 27.5 The stock of HQLA to be included in the calculation of the LCR for a URIA fund shall be computed by a banking institution based on the definitions, haircuts and limits specified in Part C of this document.

Expected cash outflows

S 27.6 The expected cash outflows arising from retail and unsecured wholesale funding shall be calculated by a banking institution by multiplying the **net asset value (NAV)**[65] of the underlying assets of the URIA fund with the following run-off rates based on the type of investment account holder (IAH):

Type of IAH	Run-off rate
Retail and small business customers	10%
Sovereigns, PSEs, central banks, MDBs or non-financial corporates	40%
Other legal entities	100%

Question 14

The Bank is proposing for the expected cash outflow an investment account fund to be calculated by multiplying the specified outflow rates (based on the type of IAH) with the proportion of Net Asset Value (NAV) of the underlying assets of an investment account fund as at the reporting date. For example, if a fund's NAV is RM100 million and 30% of the fund is owned by a retail IAH, the expected cash outflows would be RM3 million (RM100 million x 30% x 10% run-off = RM3 million). Please provide your feedback on the following areas:

(i) Whether it is appropriate to use NAV to calculate the expected cash outflows and what are the potential practical issues in using NAV?

(ii) What would be the valuation policies that your institution intends to adopt for the purposes of administering the redemption and profit or loss distribution of

[65] Refer to paragraph 14.1 of the Investment Account policy document.

investment account funds? In particular, please describe the frequency with which investment account holders are paid and the methodology used to determine the amount payable to investment account holders under each of these redemption scenarios: (a) if redemption is requested prior to the maturity date; (b) if redemption is requested between profit or loss distribution intervals; and (c) if redemption is requested on the profit or loss distribution date.

Question 15

Please provide your assessment on the feasibility of using URIA funds to facilitate an investment account holder's operational activities (i.e. clearing, custody and cash management). To the extent that it is feasible, please provide details on how such funds would be structured and managed.

27.7 The treatment of expected cash outflows arising from funding other than retail and unsecured wholesale funding, if any, shall be calculated by a banking institution in accordance with paragraphs 16.1 to 21.1.

Question 16

Are there any categories of expected cash outflows specified under paragraphs 16.1 to 21.1 for which the prescribed treatment may not be appropriate for a URIA fund? Please provide an explanation.

Expected cash inflows

S 27.8 The total expected cash inflows of a URIA fund shall only include contractual cash inflows from the underlying assets and shall be computed based on the inflow rates set out in Part E of this document. A banking institution shall limit the recognition of expected cash inflows in the calculation of LCR to a maximum of 75% of the total expected cash outflows of the URIA fund.

Question 17
Other than the typical holdings of HQLA and financing contracts, what other types of marketable securities may be held under URIA funds based on the investment objectives and asset allocation strategies of various URIA funds that your institution intends to offer? For each of the URIA funds, please describe the fund strategy, type of marketable securities and the expected level of holdings of such marketable securities (i.e. significant, moderate or low).

28 Restricted Investment Account (RIA)

S 28.1 Unless otherwise specified by the Bank, RIA funds are not subject to LCR requirements as RIA funds are subject to redemption conditions that would significantly mitigate liquidity risk[66]. The redemption conditions include:

i. redeemable only upon maturity of the underlying assets;

ii. redeemable only upon the sale of the underlying assets to a third party (other than the banking institution); or

iii. redeemable only upon the replacement of funds from an Investment Account Holder (IAH) other than the banking institution.

S 28.2 For the avoidance of doubt, HQLA held specifically for a particular RIA fund and the expected cash outflows and expected cash inflows of the RIA fund shall not be included by a banking institution in the calculation of the LCR at the banking institution level (and at SPI level where applicable) and at other investment account funds.

[66] Please refer to paragraphs 22.16 to 22.18 of the Investment Account policy document.

PART G REPORTING REQUIREMENTS

29 Reportable information

S 29.1 A banking institution shall submit the following liquidity reports based on end-of-month positions in accordance with the reporting frequencies as follows:

Reports Required	Level of Reporting	Worksheet Reference	Frequency	First Submission
Table 1a: Liquidity Coverage Ratio	Consolidated	LCR_Consol	Monthly	21 July 2015
Table 1b: Liquidity Coverage Ratio • Entity (Global) • Skim Perbankan Islam (SPI)	Entity	LCR_Global LCR_SPI		9 July 2015
Table 1c: Liquidity Coverage Ratio by Currency • Malaysian Ringgit Exposures • US Dollar Exposures • Singapore Dollar Exposures • Significant Foreign Currencies		LCR_MYR LCR_USD LCR_SGD LCR_FX		9 July 2015
Table 1d: Liquidity Coverage Ratio • Unrestricted Investment Account fund (URIA)		LCR_URIA		9 July 2015
Table 2: Liquidity Position • Restricted Investment Account Fund (RIA)		LP_RIA		9 July 2015
Table 3: Contractual Maturity Mismatch		MT_CMM		9 July 2015
Table 4: Concentration of Funding • Significant Funding Sources by Counterparty • Significant Funding Sources by Product • [Funding Ratios]		MT_COF		9 July 2015
Table 5: Available Unencumbered Assets		MT_AUA		9 July 2015
Table 6: Detailed HQLA Holdings		MT_DHQLA	Made available upon request	Not applicable

S 29.2 A banking institution shall submit all completed reporting templates to the Bank through the Financial Institutions Network (FINET) based on the following timelines:

i. for entity level reporting, no later than seven working days from the reporting position date (i.e. end-of-month position date); and

ii. for consolidated level reporting, no later than fourteen working days from the reporting position date.

Hardcopy submissions are not required.

Question 18

Please describe the amount of time likely to be needed by your institution in establishing the necessary reporting infrastructure to comply with the reporting timelines stated in this paragraph 29.2, and the enhancements that will be undertaken by your banking institution during that period.

29.3 Further details on the reporting requirements are provided in paragraphs 30.3 to 30.20 below.

30 Specific reporting requirements

Application of host jurisdictions' parameters for specified items

S 30.1 A banking institution shall report, at both the entity and the consolidated level, eligible assets held in respect of its foreign operations which are recognised by host jurisdictions under the Alternative Liquidity Approaches, to the extent that the host jurisdiction adopts any of the Alternative Liquidity Approaches. The amounts reported shall be the amounts after applying any haircuts and limits as may be specified by the host jurisdiction.

S 30.2 A banking institution shall report, at both the entity and the consolidated level, insured retail and small business deposits raised by its foreign operations where a 3% run-off rate is applied by the host jurisdiction to such deposits.

Liquidity Coverage Ratio by individual investment account fund

S 30.3 A banking institution shall report the LCR positions for each investment account fund in accordance with the cash flow treatment as specified in Part F of this document. Any deficit amount from URIA funds calculated in this report shall be added to the total net cash outflows for the calculation of LCR at the banking institution level (and/or the SPI level, where applicable).

Liquidity Coverage Ratio by currency

S 30.4 A banking institution shall report its LCR position for liquidity risk exposures denominated in Ringgit separately.

S 30.5 A banking institution shall report its LCR position for each significant foreign currency, which is defined as any liquidity risk exposure denominated in a foreign currency amounting to 5% or more of a banking institution's total on- and off-balance sheet liabilities.

S 30.6 A banking institution shall report its LCR position for liquidity risk exposures denominated in US dollar and Singapore dollar separately, regardless of whether or not such exposures amount to 5% or more of the banking institution's total on- and off-balance sheet liabilities.

S 30.7 For the avoidance of doubt, the foreign currency exposures reported under paragraphs 30.5 and 30.6 shall also be included in the reporting of the LCR positions at consolidated and entity levels in Ringgit-equivalent terms.

Contractual maturity mismatch

S 30.8 A banking institution shall report all contractual cash and security outflows and inflows from all on- and off-balance sheet items, according to the specified time buckets. In reporting a contractual maturity mismatch, a banking institution shall assume that the existing liabilities will not be rolled over and that no new asset contracts will be entered into.

S 30.9 A banking institution shall report cash flows that have no specific maturity (i.e. undefined or open maturity) in the "No specific maturity" column as provided in Table 3, without any assumption applied as to when the maturity occurs.

S 30.10 For derivatives transactions where cash or security flows are contractually due and can be determined (e.g. interest/profit rate payments that would need to be exchanged, payment obligations under a forward contract), such flows shall be reported in the relevant maturity bucket.

Concentration of funding

S 30.11 A banking institution shall report the following concentration of funding data:

i. the amount of funding liabilities received from each counterparty, which accounts for the largest 20 funding exposures of the banking institution;

ii. the amount of funding sourced from each product which accounts for more than 5% of the banking institution's total funding; and

iii. funding ratios as described in paragraph 30.15.

(a) Significant sources of funding as indicated by the largest 20 funding exposures

S 30.12 The amount of funding liabilities shall be calculated by a banking institution by aggregating all funding products or instruments [67] provided by each counterparty.

S 30.13 Deposits and investment accounts raised from entities within the group (e.g. from subsidiaries or affiliates) and deposits and investment accounts from connected parties[68] shall be identified and reported separately in Table 4 by a banking institution, irrespective of its significance.

(b) Significant sources of funding by products or instruments

S 30.14 The amount of funding sourced from each significant funding product or instrument shall be calculated and categorised by a banking institution into retail and wholesale categories. For the purpose of this reporting requirement, a funding product or instrument is considered as significant if the amount of

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[67] A funding product or instrument shall include all types of liabilities as well as all other direct, secured (e.g. repos, collateralised borrowing/funding), unsecured borrowing/funding (e.g. overnight and term deposits, NIDs, INIs) and investment accounts.

[68] Refers to the definition of "connected party" under paragraph 2.1 of the *Guidelines on Credit Transactions and Exposures with Connected Parties*.

funding raised through the particular instrument or product accounts for more than 5% of total on- and off-balance sheet liabilities.

(c) *Funding ratios*

S 30.15 A banking institution shall report the following ratios, which shall include exposures in both Ringgit and foreign currency:

i. adjusted loans/financing [69] to adjusted deposits and investment accounts;

ii. net offshore borrowing/acceptance to [total domestic deposits and investment account funds];

iii. net domestic interbank borrowing/acceptance to [total domestic deposit and investment account funds] ratio;

iv. net domestic overnight interbank borrowing/acceptance as a percentage of total interbank borrowing/acceptance less overnight domestic interbank lending/placement; and

v. short-term domestic interbank borrowing/acceptance as a percentage of short-term domestic total funding.

S 30.16 The definitions for the items in paragraph 30.15 are as follows[70]:

i. "adjusted loans/financing" refers to the amount of loans/financing <u>less</u> banker's acceptances (BA) payable;

ii. "adjusted deposits and investment account funds" comprises deposits, investment accounts, non-interbank repos/sell-buy back agreements and non-interbank NIDs/INIs (<u>less</u> percentage set aside to meet the statutory reserve requirement), shareholders' funds, Tier 2 capital instruments, subordinated term loans and loans sold to Cagamas;

iii. "net offshore borrowing/acceptance" refers to all deposits, investment accounts, NIDs/INIs, repos/sell-buy back agreements and interbank

[69] For the avoidance of doubt, any reference to financing in paragraphs 30.11 to 30.16 shall exclude financing funded by URIA funds with contractual features that significantly mitigate liquidity risk and RIA funds specified in paragraphs 26.4(ii) and 26.5 respectively.

[70] The definitions of "resident" and "non-resident" shall have the same meanings assigned to them in section 213 of the FSA.

borrowing/acceptance (including vostro accounts from non-residents, less deposits placed, placement of funds in investment accounts, NIDs/INIs held, reverse repos/buy-sell back agreements and interbank lending/placement (including nostro accounts) with non-residents;

iv. “total domestic deposits and investment account funds**”** refers to all deposits, investment accounts, non-interbank repos and non-interbank NIDs/INIs from residents;

v. “net domestic interbank borrowing/acceptance” refers to interbank borrowing/acceptance, interbank repos/sell-buy back agreements, interbank NIDs/INIs and interbank investment accounts from residents, less interbank lending/placement, interbank reverse repos/sell-buy back agreements, interbank NIDs/INIs held and interbank investment account funds placed with residents;

vi. “net domestic overnight interbank borrowing/acceptance” refers to total overnight interbank borrowing/acceptance and interbank investment accounts from residents less total overnight interbank lending/placement to and interbank investment account funds placed with residents;

vii. “total domestic interbank borrowing less domestic overnight interbank lending” refers to total interbank borrowing/acceptance, interbank repos/sell-buy back agreements, interbank NIDs/INIs and interbank investment accounts from residents less overnight interbank lending/placement to and investment account funds placed with residents;

viii. “short-term domestic interbank borrowing/acceptance” refers to total interbank borrowing/acceptance, interbank repos/sell-buy back agreements, interbank investment account funds received and interbank NIDs/INIs from residents with remaining maturity up to 1 month; and

ix. “short-term domestic total funding” refers to all deposits, investment account funds placed, repos/sell-buy back agreements and NIDs/INIs and interbank borrowing/acceptance from residents with remaining maturity up to 1 month.

Available unencumbered assets

S 30.17 A banking institution shall report the available unencumbered assets which could be used as collateral to raise additional HQLA or secured funding in secondary markets and those which are eligible for secured funding transactions with the Bank through the standing facility. A banking institution shall report the asset class, issuer, credit rating (where applicable), market value, estimated haircut, currency, the geographical location where the asset is held and the business unit (e.g. treasury department of parent banking institution or treasury department of the reporting banking institution) which has access to those assets.

S 30.18 For the avoidance of doubt, assets which have already counted as HQLA for compliance with the LCR shall not be included in the reporting of available unencumbered assets.

S 30.19 A banking institution shall report separately the collateral received from customers that the banking institution is permitted to deliver or re-pledge and the part of such collateral that has not been delivered or re-pledged as of the reporting date.

Detailed HQLA holdings

S 30.20 A banking institution shall report a detailed list of HQLA holdings, including the asset class, issuer, credit rating (where applicable), market value, currency, the location where the asset is held and the business unit which has access to those assets in accordance with Table 6, as and when requested by the Bank.

APPENDICES

31 Appendix 1: Characteristics of high-quality liquid assets

Assets are considered to be high-quality liquid assets (HQLA) if they can be easily and immediately converted into cash at little or no loss of value. The liquidity of an asset depends on the underlying stress scenario, the volume to be monetised and the timeframe considered. Nevertheless, there are certain assets that are more likely to generate funds without incurring large discounts due to fire-sales even in times of stress.

This appendix outlines the factors that influence whether or not the market for an asset can be relied upon to raise liquidity when considered in the context of possible stresses.

Fundamental characteristics

i. Low credit and market risk: Assets that are less risky tend to have higher liquidity. High credit standing of the issuer and a low degree of subordination increases an asset's liquidity. Low duration, low volatility, low inflation risk and denomination in a convertible currency with low foreign exchange risk all enhance an asset's liquidity.

ii. Ease and certainty of valuation: An asset's liquidity increases if market participants are more likely to agree on its valuation. The pricing formula of a HQLA must be easy to calculate and not depend on strong assumptions. The inputs into the pricing formula must also be publicly available. In practice, this should rule out the inclusion of most structured or exotic products.

iii. Low correlation with risky assets: The stock of HQLA should not be subject to wrong-way (highly correlated) risk. For example, assets issued by financial institutions are more likely to be illiquid in times of liquidity stress in the banking sector.

iv. Listed on a developed and recognised exchange market: Being listed increases an asset's transparency.

Market-related characteristics

i. Active and sizable market: The asset should have active outright sale or repo (repo) markets at all times (which means having a large number of market participants and a high trading volume). There should be historical evidence of market breadth (price impact per unit of liquidity) and market depth (units of the asset that can be traded for a given price impact).

ii. Presence of committed market makers: Quotes will most likely be available for buying and/or selling a high-quality liquid asset.

iii. Low market concentration: A diverse group of buyers and sellers in an asset's market increases the reliability of its liquidity.

iv. Flight to quality: Historically, the market has shown tendencies to move into these types of assets in a systemic crisis.

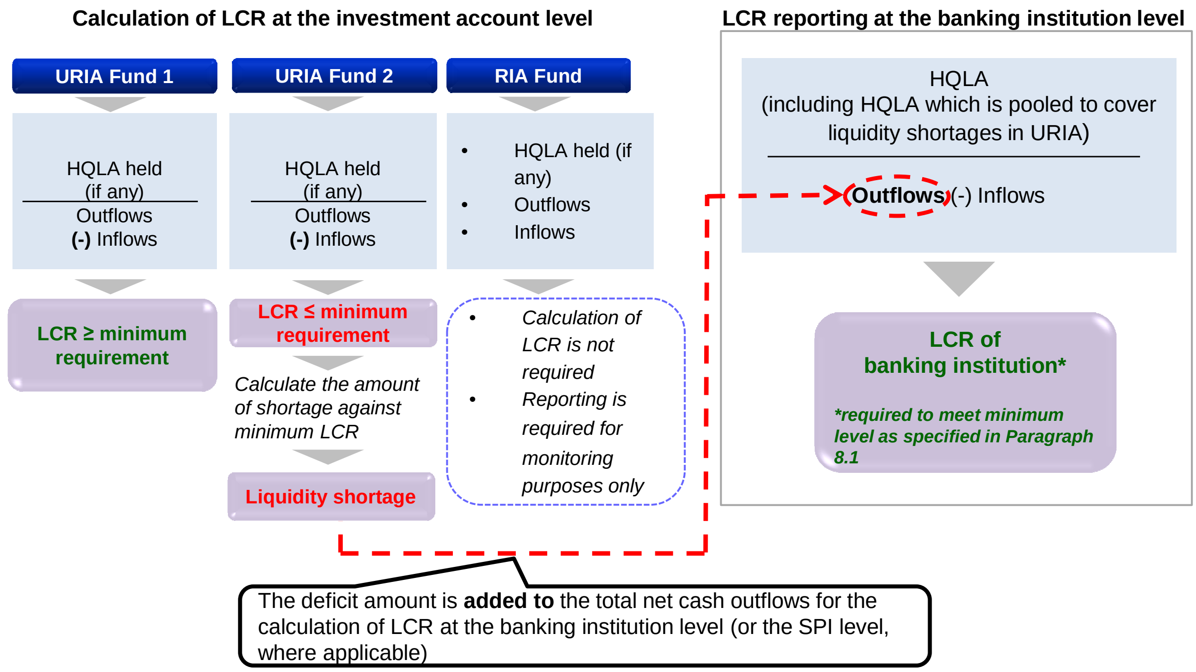
As outlined by these characteristics, the test of whether liquid assets are of "high-quality" is that, by way of sale or secured borrowing, their liquidity-generating capacity is assumed to remain intact even in periods of severe idiosyncratic and market stress. Such assets often benefit from flight to quality in these circumstances. Lower quality assets fail to meet that test. An attempt by a banking institution to raise liquidity from lower quality assets under conditions of severe market stress would entail acceptance of a large fire-sale discount or haircut to compensate for high market risk. That may not only erode the market's confidence in the banking institution, but would also generate mark-to-market losses for banking institutions holding similar instruments and add to the pressure on their liquidity position, thus encouraging further fire sales and declines in prices and market liquidity. In these circumstances, private market liquidity for such instruments is likely to disappear extremely quickly. Taking into account the system-wide response, only HQLA that meet the test can be readily converted into cash under severe stress in private markets.

HQLA should also ideally be eligible at central banks for intraday liquidity needs and overnight liquidity facilities. In the past, central banks have provided a further backstop to the supply of banking system liquidity under conditions of severe stress.

Central bank eligibility should thus provide additional confidence that banking institutions are holding assets that could be used in events of severe stress without damaging the broader financial system. This in turn would raise confidence in the safety and soundness of liquidity risk management in the banking system.

32 Appendix 2: Examples of LCR calculation and liquidity reporting for investment account funds

A. Illustrative Example



Notes:

1. The diagram illustrates the LCR calculation for investment accounts for an Islamic bank which operates two URIA funds (i.e. URIA Fund 1 and URIA Fund 2) and a RIA fund.
2. The LCR is calculated separately for each individual investment account fund. The LCR calculation for URIA Fund 1 shall only include the HQLA held specifically for URIA Fund 1, and the expected cash outflows and expected cash inflows arising from the fund. The same rule shall apply when calculating the LCR for URIA Fund 2.
3. In this example, the LCR for URIA Fund 2 is lower than the minimum level required in paragraph 9.1. The deficit amount shall therefore be **added to** the total net cash outflows for the calculation of the LCR at the banking institution level.

4. In the case of URIA Fund 1 where the LCR is higher than the minimum level, the surplus amount shall not be included in the calculation of the LCR at the banking institution level or in the calculation of the LCR for URIA Fund 1 and the RIA fund.

B. Numerical Example

The LCR requirement for each investment fund (i.e. URIA Fund 1, URIA Fund 2) is calculated separately:

Items (in RM'000)	**URIA Fund 1**	**URIA Fund 2**	**Banking institution's LCR calculation**
Stock of HQLA			
Level 1 asset	2,250	1,000	7,500,000
Level 2 asset	250	0	1,000,000
Total stock of HQLA	2,500	1,000	8,500,000
Net cash outflow			
Cash outflows	7,250	10,000	**40,001,400**
Cash inflows	5,000	6,000	32,000,000
Total net cash outflows	2,250	4,000	8,001,400
LCR			
Total stock of HQLA	2,500	1,000	8,500,000
Total net cash outflows	2,250	4,000	8,001,400
LCR	**111%**	**25%**	**106%**
Amount of surplus/(deficit)	**250**	**(3,000)**	

Shortage shall be included in the total net cash outflows of the banking institution's LCR

Deficit of RM3m from URIA Fund 2 increases cash outflows from RM39,998m to RM40,001m

Note: Assume 100% LCR requirement for the calculation of the surplus and deficit amounts

Notes:

1. URIA Fund 1 has a surplus amount of RM0.25mil which shall neither be included in the calculation of the LCR for any other investment account fund nor the calculation of the LCR at the banking institution level.
2. URIA Fund 2 has a deficit amount of RM3mil which shall be added to the total net cash outflows for the calculation of LCR at the banking institution level.