Jersey Financial Services Commission

Appendix B: HQLA Guide

Consultation Paper No.3 2017

Basel III: Liquidity Management

[Draft] Guide on the calculation and reporting of HQLA

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Contents

1 Overview

1.1 Consultation

1.1.1 This document outlines draft requirements relating to the calculation of *LCR* or *LMR* (as applicable) for prudential reporting purposes. It is intended to incorporate this within the *JFSC's* prudential reporting requirements from December 2018. (For more details see **Section 4.9** of the consultation paper.) It is intended to serve as a draft of the final requirements, neither omitting nor including additional text that relates to the consultation process only (excepting this paragraph, which will be omitted).

1.2 Introduction

1.2.1 This document specifies the prudential reporting of *HQLA*. *JIBs* are required to report consistently with it for each prudential period end date.

1.2.2 *JIBs* are also required to internally monitor *HQLA*. This monitoring must be consistent with these requirements as to the calculations of *HQLA* and the amounts relating to each level.

1.2.3 The requirements regarding the calculation and reporting of HQLA are based on those set out in paragraphs 24 to 54 of the *LCR Standard*. **Appendix A** addresses problems that arise where a jurisdiction has a shortage of qualifying assets (relevant for banks that have branches in jurisdictions where this is the case).

1.2.4 There are two categories that can be included in the stock of *HQLA*. Assets can be included in each category if the bank is holding them on the reporting date, irrespective of their residual maturity. *Level 1 HQLA* can be included without limit, while *Level 2 HQLA* can only comprise up to 40% of the stock.

1.2.5 Within *Level 2 HQLA*, there is an additional class – *Level 2B HQLA* (all other *Level 2 HQLA* being described as *Level 2A HQLA*). These can, in total, comprise no more than 15% of the total stock of *HQLA*. They must also be included within the overall 40% cap on *Level 2 HQLA*.

1.2.6 The 40% cap on *Level 2 HQLA* and the 15% cap on *Level 2B HQLA* must be determined after the application of required haircuts, and after taking into account the unwinding of short-term securities financing transactions and collateral swap transactions maturing within 30 calendar days that involve the exchange of *HQLA*.

1.3 General requirements

1.3.1 Assets are considered to be *HQLA* if they can be easily and immediately converted into cash and 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. There are certain assets that are more likely to generate funds (through an outright sale or a repo transaction) at or near face value even in times of stress.

1.3.2 **Appendix B** sets out 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. *JIBs* will be required to exclude potential *HQLA* items that do not have the requisite characteristics, even if they meet other criteria. These are based on the *LCR Standard*.

1.4 Operational requirements

1.4.1 All *HQLA* is subject to the operational requirements set out in **Appendix C** The purpose of the operational requirements is to recognise that not all assets outlined in **Sections 2**, **3** and **4**, i.e. that meet the asset class, risk-weighting and credit-rating criteria, should be eligible to be included in the stock of *HQLA*, because there are other operational restrictions that can prevent timely monetisation during a stress period.

1.4.2 These operational requirements are designed to ensure that the stock of *HQLA* is managed in such a way that the *JIB* can, and is able to demonstrate that it can, immediately use the stock of assets as a source of contingent funds that is available for the bank to convert into cash through outright sale or repo, to fill funding gaps between cash inflows and outflows at any time during the 30-day stress period, with no restriction on the use of the liquidity generated.

1.5 Diversification

1.5.1 The stock of *HQLA* should be well diversified across asset classes and within each. Although some asset classes are more likely to remain liquid irrespective of circumstances, it is not possible to know with certainty which ones will.

1.5.2 Each *JIB* is required to develop policies and put appropriate limits in place in order to avoid concentration of asset and issuer types and currencies (consistent with the distribution of net cash outflows by currency) within asset classes. This should be documented in its *LMP* and reflected in its *ICAAP* document, within a section on Liquidity risk.

1.6 Reporting specific guidelines

1.6.1 All reporting of amounts should be of the sterling equivalent amount, in round thousands.

1.6.2 For individual items, an *Unencumbered Holdings; Rehypothecated Holdings*, *Realisable Amount*, *Adjusted Amount* and *Haircut Amount* are required to be reported.

1.6.3 *Unencumbered Holdings* for each item, this is the total value of the *JIB's* own holding measured at their balance sheet value less any amounts pledged as collateral.

1.6.4 *Rehypothecated Holdings*: for each item, this is the total value of rehypothecated stock held by the *JIB* following the receipt of collateral (including as a result of securities financing transactions), less any amounts pledged as collateral, measured at nominal value.

1.6.5 *Realisable Value*: for each item this is the total value of all relevant holdings (i.e. holdings falling into the *Unencumbered Amount* or *Rehypothecated Amount*) measured at the higher of (if applicable) the:

1.6.5.1 *Repo value* (only assets for which a deep and active repo market exists): the maximum amount that would be received under a repo, applying prevailing market values and haircuts; and

1.6.5.2 *Sale value*: the current bid-price of the asset.

1.6.6 *Adjusted Amount*: for each item this is the amount that is eligible, after considering the general and operational requirements and the *JIB's* diversification policy and any resultant limits that are applicable.

1.6.7 *Haircut Amount***:** for each item this is calculated as the *Adjusted Amount* multiplied by (100% less the applicable haircut).

2 Level 1 HQLA

2.1 Coins and Banknotes

Item	***Level1:1***
LCR Standard	50 (a)
Description:	Coins and banknotes currently held by the bank.
Haircut	0%

2.2 Central bank reserves

Item	***Level1:2***
LCR Standard	50 (b)
Description:	Total amount held in central bank reserves (including required reserves) including any overnight deposits with the central bank, and term deposits with the central bank that: i. Are explicitly and contractually repayable on notice from the depositing bank or ii. That constitute a loan against which the bank can borrow on a term basis or on an overnight but automatically renewable basis. Other term deposits with central banks are not eligible for the stock of *HQLA* (If the term expires within 30 days, the deposit should be reflected in the inflows section (see LCR/LMR Guide: **Section 6** 'Inflows').
Haircut	0%

2.3 0% Risk Weight Government Securities

Item	***Level1:3***
LCR Standard	50 (c)
Description:	Marketable securities representing claims on or guaranteed by sovereigns, central banks, *PSEs*, the Bank for International Settlements, the International Monetary Fund, the European Central Bank and European Community, or multilateral development banks, and satisfying all of the following conditions:

- Assigned a 0% risk-weight according to the *JFSC's* requirements for the standardised approach to credit risk. In the case of sovereigns, central banks and *PSEs*, the relevant sovereign credit rating must be AA- or higher;
- Traded in large, deep and active repo or cash markets characterised by a low level of concentration;
- have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (i.e. maximum decline of price not exceeding 10% or increase in haircut not exceeding 10 percentage points over a 30-day period during a relevant period of significant liquidity stress); and
- Not an obligation of a financial institution or any of its affiliated entities. This means that securities issued by a financial institution would not qualify for the stock of *HQLA*, even where the issuance is government guaranteed.

Haircut 0%

2.4 Restricted Government Securities

Item ***Level 1:4***

LCR Standard 50 (d) and 50 (e)

Description: Sovereign or central bank debt securities, not eligible for inclusion in (3), that are:

- Issued by the States of Jersey in pounds sterling;
- Issued by a sovereign or central bank in domestic currencies in a country in which the *JIB* has a branch, provided that the amount recognised (the *Adjusted Amount*) is limited to the outflow required under the *LCR*/*LMR* for that branch; or
- Issued in foreign currencies, provided that the amount recognised (the *Adjusted Amount*) is limited to the outflow required under the *LCR*/*LMR* for that country and currency.

Haircut 0%

2.5 Adjustment for branches in regions with Limited *HQLA*

Item ***Level1:5***

Description: Report any amounts eligible under an approval granted with respect to a branch in a jurisdiction with limited *HQLA* availability (see **0**).

Haircut As applicable under the approval.

2.6 Total Level 1 HQLA

Item ***Level1:6***

Description: Sum of items ***Level1:1*** to ***Level1:5***, calculated for the *Haircut Amount* only.

3 Level 2A HQLA

3.1 20% Risk Weight Government Securities

Item	***Level2A:1***
LCR Standard	52 (a)
Description:	Marketable securities representing claims on or guaranteed by sovereigns, central banks, *PSEs* or multilateral development banks that satisfy all of the following conditions (and that are not eligible as *Level 1 HQLA*): › Assigned a maximum 20% risk weight for according to the *JFSC's* requirements for the standardised approach to credit risk; › Traded in large, deep and active repo or cash markets characterised by a low level of concentration; › Have a proven record as a reliable source of liquidity (via repo or sale) even during stressed market conditions (i.e. maximum decline of price not exceeding 10% or increase in haircut not exceeding 10 percentage points over a 30-day period during a relevant period of significant liquidity stress); and › Not an obligation of a financial institution or any of its affiliated entities. In practice, this means that securities issued by an affiliate of a financial institution would not qualify for the stock of *HQLA*, even where the issuance is government guaranteed.
Haircut	15%

3.2 Non-financial corporate bonds:

Item	***Level2A:2***
LCR Standard	52 (b)
Description:	Corporate debt securities (including commercial paper) that satisfy all of the following conditions: › Not issued by a financial institution or any of its affiliated entities; › The relevant credit rating (according to the *JFSC's* requirements for the standardised approach to credit risk) is at least AA-; › Traded in large, deep and active repo or cash markets characterised by a low level of concentration; and

› Have a proven record as a reliable source of liquidity (via repo or sale) even during stressed market conditions (i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 10%).

Haircut 15%

3.3 Covered bonds

Item ***Level 2A:3***

LCR Standard 52 (b)

Description: Covered bonds that satisfy all of the following conditions:

› Not issued by not issued by the *JIB* itself or any of its affiliated entities

› The relevant credit rating (according to the *JFSC's* requirements for the standardised approach to credit risk) is at least AA-;

› Traded in large, deep and active repo or cash markets characterised by a low level of concentration; and

› Have a proven record as a reliable source of liquidity (via repo or sale) even during stressed market conditions (i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 10%).

Haircut 15%

3.4 Adjustment for branches in regions with Limited *HQLA*

Item ***Level2A:4***

Description: Report any amounts eligible under an approval granted with respect to a branch in a jurisdiction with limited *HQLA* availability (see **0**).

Haircut As applicable under the approval.

3.5 Total Level 2A HQLA

Item ***Level2A:5***

Description: Total of items ***Level2A:1*** to ***Level2A:4***, calculated for the *Haircut Amount* only.

4 Level 2B HQLA

4.1 BBB Government Securities

Item	***Level2B:1***
LCR Standard	FAQ 3(a) in "*Frequently Asked Questions on Basel III's January 2013 Liquidity Coverage Ratio*", published by the *Basel Committee* in April 2014, available at www.bis.org/publ/bcbs284.htm.
Description:	Sovereign issued or guaranteed debt securities that satisfy all of the following conditions and are not included within *level 1 HQLA or level 2A HQLA* may be included here, subject to a 50% haircut: › Not issued by a financial institution or any of its affiliated entities; › The relevant credit rating (according to the *JFSC's* requirements for the standardised approach to credit risk) is at least BBB-; › Traded in large, deep and active repo or cash markets characterised by a low level of concentration; and › Have a proven record as a reliable source of liquidity (via repo or sale) even during stressed market conditions, i.e. a maximum decline of price not exceeding 20% or increase in haircut over a 30-day period not exceeding 20 percentage points during a relevant period of significant liquidity stress.
Haircut	50%

4.2 Residential mortgage backed securities

Item	***Level2B:2***
LCR Standard	54 (a)
Description:	*RMBS* that satisfy all of the following conditions: › Not issued by, and the underlying assets have not been originated by, the *JIB* itself or any of its affiliated entities; › The relevant credit rating (according to the *JFSC's* requirements for the standardised approach to credit risk) is at least AA; › Traded in large, deep and active repo or cash markets characterised by a low level of concentration;

- Have a proven record as a reliable source of liquidity (via repo or sale) even during stressed market conditions (i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 20%);

- The underlying asset pool is restricted to residential mortgages and cannot contain structured products;

- The underlying mortgages are "full recourse'' loans (i.e. in the case of foreclosure the mortgage owner remains liable for any shortfall in sales proceeds from the property) and have a maximum *LTV* of 80% on average at issuance; and

- The securitisations are subject to "risk retention" regulations which require issuers to retain an interest in the assets they securitise.

Haircut 25%

4.3 Lower rated corporate bonds

Item ***Level2B:3***

LCR Standard 54 (b)

Description: Non-financial corporate debt securities (including commercial paper) rated BBB- (according to the *JFSC's* requirements for the standardised approach to credit risk) or higher that satisfy all of the following conditions and are not included within *level 1 HQLA* or *level 2A HQLA* may be included here, subject to a 50% haircut:

- Not issued by a financial institution or any of its affiliated entities;

- The relevant credit rating for capital adequacy purposes is at least BBB-;

- Traded in large, deep and active repo or cash markets characterised by a low level of concentration; and

- Have a proven record as a reliable source of liquidity (via repo or sale) even during stressed market conditions, i.e. a maximum decline of price not exceeding 20% or increase in haircut over a 30-day period not exceeding 20 percentage points during a relevant period of significant liquidity stress.

Haircut 50%

4.4 Common equity shares

Item	***Level2B:4***
LCR Standard	54 (c)
Description:	Non-financial common equity shares that satisfy all of the following conditions may be included here, subject to a 50% haircut:

- Not issued by a financial institution or any of its affiliated entities;
- Exchange traded and centrally cleared;
- A constituent of the major stock index in the home jurisdiction or where the liquidity risk is taken, as decided by the supervisor in the jurisdiction where the index is located;
- Denominated in the pounds sterling or (if held in a branch) in the currency of the jurisdiction where the *JIB* has the branch;
- Traded in large, deep and active repo or cash markets characterised by a low level of concentration; and
- Have a proven record as a relatively reliable source of liquidity (via repo or sale) even during stressed market conditions, i.e. a maximum decline of share price not exceeding 40% or increase in haircut not exceeding 40 percentage points over a 30-day period during a relevant period of significant liquidity stress.

Haircut	50%

4.5 Adjustment for branches in regions with Limited *HQLA*

Item	***Level2B:5***
Description:	Report any amounts eligible under an approval granted with respect to a branch in a jurisdiction with limited HQLA availability (see **0**).
Haircut	As applicable under the approval.

4.6 Total Level 2B HQLA

Item	***Level2B:6***
Description:	Total of items ***Level2B:1*** to ***Level2B:5***, calculated for the *Haircut Amount* only.

5 HQLA

5.1 Overview

5.1.1 This Section addresses the derivation of total *HQLA*, including requirements with respect to caps on the inclusion of Level 2 assets, including those relating to the impact of *short term transactions* (those with a maturity date up to and including 30 calendar days).

5.2 Adjusted Level 1 HQLA

Item	***HQLA:1***
LCR Standard	47, 48 and Annex 1.
Description:	The amount of *Level 1 HQLA* that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any *HQLA* for any *Level 1 HQLA* items (including cash) that meet, or would meet if held unencumbered, the operational requirements for *HQLA* set out in **Appendix B**. Calculate and report the *Haircut Amount* only.

5.3 Adjusted Level 2A HQLA

Item	***HQLA:2***
LCR Standard	47, 48 and Annex 1.
Description:	The amount of *Level 2A HQLA* that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any *HQLA* for any *Level 2A HQLA* items that meet, or would meet if held unencumbered, the operational requirements for *HQLA* set out in **Appendix B**. Calculate and report the *Haircut Amount* only.

5.4 Adjusted Level 2B

Item	***HQLA:3***
LCR Standard	47, 48 and Annex 1.
Description:	The amount of *Level 2B HQLA* that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any *HQLA* for any *Level 2B HQLA* items that meet, or would meet if held **Appendix B**. Calculate and report the *Haircut Amount* only.

5.5 Adjustment for Level 2B cap

Item	***HQLA:4***
LCR Standard	47, 48 and Annex 1.
Description:	The adjustment should be calculated and reported for the *Haircut Amount* only, and be derived as the highest of the following:

- "*Adjusted Level 2B*" minus 15/85 multiplied by the sum of "*Adjusted Level 1*" and "*Adjusted Level 2A*", i.e.: ***HQLA:3*** - 15/85 x [***HQLA:1*** + ***HQLA:2***];
- "*Adjusted Level 2B*" minus 1/4 multiplied by "*Adjusted Level 1*", i.e.: ***HQLA:3*** - ¼ x ***HQLA:1***; and
- Zero (i.e. adjustment may not be negative).

5.6 Adjustment for Level 2 cap

Item	***HQLA:5***
LCR Standard	47, 48 and Annex 1.
Description:	The adjustment should be calculated and reported for the *Haircut Amount* only, and be derived as the highest of the following:

- *"Adjusted Level 2A"* plus *"Adjusted Level 2B"* minus*" Adjustment for Level 2B cap"* minus 2/3 multiplied by *"Adjusted Level 1 assets"*, i.e.: ***HQLA:2*** + ***HQLA:3*** – ***HQLA:4*** - 2/3 x ***HQLA:1***; and
- Zero (i.e. adjustment may not be negative).

5.7 Adjustment for branches in regions with Limited HQLA

Item	***HQLA:6***
Description:	Report any amounts eligible under an approval granted with respect to a branch in a jurisdiction with limited *HQLA* availability (see **0**).
Haircut	As applicable under the approval.

5.8 Total HQLA

Item	***HQLA:7***
Description:	The total should be calculated and reported for the *Haircut Amount* only, and be derived as:

› *“Total Level 1 HQLA”* plus *“Total Level 2A HQLA”* plus *“Total Level 2B HQLA”* minus *“Adjustment for Level 2B cap”* minus *“Adjustment for Level 2 cap”* plus “*Adjustment for branches in regions with Limited HQLA*”, i.e.: ***Level1:6*** + ***Level2A:5*** + ***Level2B:6*** – ***HQLA:4*** – ***HQLA:5*** + ***HQLA:6***.

Appendix A - Jurisdictions with Insufficient HQLA

A.1 Eligibility for alternative liquidity approaches

A.1.1 Some jurisdictions may have an insufficient supply of *Level 1 HQLA* (or all *HQLA*) in their domestic currency to meet the aggregate demand of banks with significant exposures in this currency. To address this situation, the *LCR Standard* sets out three alternative treatments for determining eligibility of *HQLA*, which are expected to apply to a limited number of currencies and jurisdictions.

A.1.2 Eligibility for such alternative treatment will be judged on the basis of the qualifying criteria set out in Annex 2 to the *LCR Standard*.

A.1.3 The *JFSC* does not consider that any of the *CDs* meet these criteria. However, it is recognised that *JIBs* may operate through branches that are in jurisdictions that both qualify and have adopted measures, which must then be subject to peer review.

To qualify for the alternative treatment, a jurisdiction would need to demonstrate that:

- There is an insufficient supply of *HQLA* in its domestic currency, taking into account all relevant factors affecting the supply of, and demand for, such *HQLA*;
- The insufficiency is caused by long-term structural constraints that cannot be resolved within the medium term;
- It has the capacity, through any mechanism or control in place, to limit or mitigate the risk that the alternative treatment cannot work as expected; and
- It is committed to observing the obligations relating to supervisory monitoring, disclosure, and periodic self-assessment and independent peer review of its eligibility for alternative treatment.

A.1.4 All of the above criteria have to be met to qualify for the alternative treatment.

A.2 Recognition of foreign use

A.2.1 Where one or more local alternative approaches have been established by a local supervisor and that approach has been determined to be appropriate by peer review, *JIBs* that have branches in that jurisdiction may utilise the local approach to the extent that the alternative assets held meet liquidity requirements arising from liabilities held in that jurisdiction that are not met by *HQLA* held in that jurisdiction.

A.2.2 Where no peer review has been published, a bank wishing to use a local treatment should provide the *JFSC* with full details of the local approach, including any self-assessment published by the relevant authority, any published plans to carry out such a peer review and the bank's own assessment of the approach versus the parameters set out in the *LCR Standard*, including the criteria set out in **0**.

A.2.3 Approval will depend on all relevant circumstances. Any request and the approval granted will address how the additional assets should be reported within the relevant lines set aside for this.

A.3 Outline of alternative approaches and reporting requirements

A.3.1 Three approaches are set out in the *LCR Standard*. Each has its merits and issues and the below is only an outline of them. The *LCR Standard* sets out parameters in full but for each relevant branch it is expected that this would be supplemented with detailed local rules and that, in some cases, only one or two of the approaches will be developed locally.

A.3.2 The request for approval would need to explain how the adjustments permitted under the local rules would be adjusted when calculating *HQLA*, taking into account the restriction in **A.2.1**.

A.3.3 Option 1 – Contractual committed liquidity facilities from the relevant central bank, with a fee.

JIBs would be granted access to contractual committed liquidity facilities provided by the relevant central bank (i.e. relevant to the currency in question), for a fee. These facilities should not be confused with regular central bank standing arrangements. In particular, these facilities are contractual arrangements between the central bank and the commercial bank with a maturity date which, at a minimum, falls outside the 30-day *LCR* window. Further, the contract must be irrevocable prior to maturity and involve no ex-post credit decision by the central bank. Such facilities are only permissible if there is also a fee for the facility which is charged regardless of the amount, if any, drawn down against that facility and the fee is set so that both banks which claim the facility line to meet the *LCR*, and banks which do not, have similar financial incentives to reduce their exposure to liquidity risk.

If approved, relevant amounts should be reported within ***Level1:5*** *"Adjustment for branches in regions with limited HQLA*".

A.3.4 Option 2 – Foreign currency *HQLA* to cover domestic currency liquidity needs.

› Option *2 would allow supervisors to permit banks that evidence a shortfall of HQLA in the domestic currency to hold HQLA in a currency that does not match the currency of the associated liquidity risk, provided that the resulting currency mismatch positions are controlled within limits agreed by their supervisors.*

› *To account for foreign exchange risk associated with foreign currency HQLA used to cover liquidity needs in the domestic currency, such liquid assets should be subject to a minimum haircut of 8% for major currencies that are actively traded in global foreign exchange markets. If the domestic currency is formally pegged to another currency under an effective mechanism, the haircut for the pegged currency can be lowered to a level that reflects the limited exchange rate risk under the peg arrangement.*

› *It is anticipated* that most approvals might relate to *Level 1 HQLA* and hence should be reported within ***Level1:5*** "*Adjustment for branches in regions with limited HQLA*". This will be confirmed (or otherwise) in any approval.

A.3.5 Option 3 – Additional use of *Level 2 HQLA* with a higher haircut.

This option addresses currencies for which there are insufficient *Level 1 HQLA*, as determined by reference to the qualifying principles and criteria, but where there is sufficient *Level 2A HQLA*. In this case, supervisors may choose to allow banks that evidence a shortfall of *HQLA* in the domestic currency to hold additional *Level 2A HQLA* in the stock. The additional *Level 2A HQLA* would be subject to a minimum haircut of 20%, i.e. 5% higher than the 15% haircut applicable to *Level 2A HQLA* that are included in the standard 40% cap. The higher haircut is applied to cover any additional price and market liquidity risks arising from increased holdings of *Level 2A HQLA* beyond the 40% cap, and to provide a disincentive for banks to use this option based on yield considerations.

If approved, relevant amounts should be reported within ***HQLA:6*** "*Adjustment for branches in regions with limited HQLA".*

HQLA - General Requirements

A.4 Introduction

A.4.1 *JIBs* should assess assets and exclude any that, despite meeting the criteria set out in **Sections 2, 3** and **4**, are not sufficiently liquid (setting aside liquidity provided by central banks or governments) to be included in the stock of *HQLA*. This assessment process must be described in the *JIB's LMP* and should cover the following:

› Fundamental characteristics (see **sub-section A.5**) and

› Market-related characteristics (see **sub-section A.6**).

A.4.2 The test of whether liquid assets are of "high quality" is that, by way of sale or repo, their liquidity-generating capacity is assumed to remain intact even in periods of severe idiosyncratic and market stress.

A.4.3 *HQLA* should ideally be eligible at central banks for intraday liquidity needs and overnight liquidity facilities. Central banks can provide a further backstop to the supply of banking system liquidity under conditions of severe stress. Central bank eligibility should thus provide additional confidence that banks are holding assets that could be used in events of severe stress without damaging the broader financial system.

A.4.4 *JIBs* that have direct access to central banks, including via overseas branches, should determine whether assets are eligible. *JIBs* that do not have direct access should still carry out the work but only consider assets to be eligible if (1) the assets are eligible at a central bank via a group counterparty and (2) there is a tried and tested operational route to access funding from that central bank via that counterparty.

A.5 Fundamental characteristics

A.5.1 **Low credit risk:** assets that are less risky tend to have higher liquidity. High credit standing of the issuer and a low degree of subordination increase an asset's liquidity. Low duration, low legal risk, low inflation risk and denomination in a convertible currency with low foreign exchange risk all enhance an asset's liquidity.

A.5.2 **Ease and certainty of valuation:** an asset's liquidity is aided if market participants are likely to agree on its valuation. Assets with more standardised, homogenous and simple structures tend to be more fungible, promoting liquidity. The pricing formula of a high-quality liquid asset 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.

A.5.3 **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.

A.5.4 **Listed on a developed and recognised exchange:** being listed significantly aids an asset's transparency.

A.6 Market-related characteristics

A.6.1 **Active and sizable market:** the asset should have active outright sale or repo markets at all times. This means that:

There should be historical evidence of market breadth and market depth. This could be demonstrated by low bid-ask spreads, high trading volumes, and a large and diverse number of market participants. Diversity of market participants reduces market concentration and increases the reliability of the liquidity in the market.

There should be robust market infrastructure in place. The presence of multiple committed market makers increases liquidity as quotes will most likely be available for buying or selling *HQLA*.

A.6.2 **Low volatility:** assets whose prices remain relatively stable and are less prone to sharp price declines over time will have a lower probability of triggering forced sales to meet liquidity requirements. Volatility of traded prices and spreads are simple proxy measures of market volatility. There should be historical evidence of relative stability of market terms (eg prices and haircuts) and volumes during stressed periods.

A.6.3 **Flight to quality:** historically, the market has shown tendencies to move into these types of assets in a systemic crisis. The correlation between proxies of market liquidity and banking system stress is one simple measure that could be used.

Appendix B Operational Requirements

B.1 General requirements

B.1.1 A *JIB* should periodically monetise a representative proportion of its stock of *HQLA* through repo or outright sale, in order to test its access to the market, the effectiveness of its processes for monetisation, the availability of the assets, and to minimise the risk of negative signalling during a period of actual stress.

B.1.2 All assets in the stock should be unencumbered. “Unencumbered” means free of legal, regulatory[1], contractual or other restrictions on the ability of the bank to liquidate, sell, transfer, or assign the asset. An asset in the stock should not be pledged (either explicitly or implicitly) to secure, collateralise or credit-enhance any transaction, nor be designated to cover operational costs (such as rents and salaries). Assets received in reverse repo and securities financing transactions that are held at the bank, have not been rehypothecated and are legally and contractually available for the bank's use can be considered as part of the stock of *HQLA*. In addition, assets which qualify for the stock of HQLA that have been pre-positioned or deposited with, or pledged to, the central bank or a PSE but have not been used to generate liquidity may be included in the stock.

B.1.3 A *JIB* should exclude from the stock those assets that, although meeting the definition of “unencumbered” specified in **paragraph B.1.2**, the *JIB* would not have the operational capability to monetise to meet outflows during the stress period. Operational capability to monetise assets requires having procedures and appropriate systems in place, including the function identified in **paragraph B.1.1**, with access to all necessary information to execute monetisation of any asset at any time. Monetisation of the asset must be executable, from an operational perspective, in the standard settlement period for the asset class in the relevant jurisdiction.

B.1.4 The stock should be under the control of the function charged with managing the liquidity of the *JIB* (e.g. the treasurer), meaning the function has the continuous authority, and legal and operational capability, to monetise any asset in the stock. Control must be evidenced either by maintaining assets in a separate pool managed by the function with the sole purpose being use as a source of contingent funds, or by documenting in its *LMP* how it has and will verify from time to time that (1) the function can monetise the asset at any point in the 30-day stress period and (2) the proceeds of doing so are available to the function throughout the 30-day stress period, without directly conflicting with a stated business or risk management strategy. For example, 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 in excess of internal limits.

B.1.5 A *JIB* is permitted to hedge the market risk associated with ownership of the stock of *HQLA* and still include the assets in the stock. If it chooses to hedge the market risk, the bank should take into account (in the market value applied to each asset) the cash outflow that would arise if the hedge were to be closed out early (in the event of the asset being sold).

1 Regulatory restrictions might include, for example, statutory minimum inventory requirements for entities that undertake market making.

B.1.6 In accordance with Principle 9 of the *Sound Principles*, a bank "*should monitor the legal entity and physical location where collateral is held and how it may be mobilised in a timely manner*". Specifically, it should have a policy in place that identifies legal entities, geographical locations, currencies and specific custodial or bank accounts where *HQLA* are held. In addition, the bank should determine whether any such assets should be excluded for operational reasons and therefore, have the ability to determine the composition of its stock on a daily basis.

B.1.7 *JIBs* should assess whether it has access to large, deep and active repo markets for each eligible asset class. Where this is not the case, assets can only be included if it is likely that they could be monetised through outright sale. In these circumstances, a bank should exclude from the stock of *HQLA* those assets where there are impediments to sale, such as large fire-sale discounts which would cause it to breach minimum solvency requirements, or any requirements to hold such assets, including, but not limited to, statutory minimum inventory requirements for market making.

B.1.8 In order to mitigate cliff effects that could arise if *HQLA* became ineligible (e.g. due to a rating downgrade), an asset remains eligible as *HQLA* for 30 calendar days from the date it fails to meet one or more criteria. This should allow the *JIB* sufficient additional time to adjust its stock as needed or replace the asset.

B.2 Consolidated reporting

B.2.1 The following is only relevant to *JIBs* where consolidated reporting of the bank is required.

B.2.2 Qualifying *HQLA* that are held to meet statutory liquidity requirements at the legal entity or sub-consolidated level (where applicable) may be included in the stock at the consolidated level to the extent that the related risks (as measured by the legal entity's or sub-consolidated group's net cash outflows in the *LCR*) are also reflected in the consolidated *LCR*. Any surplus of *HQL*A held at the legal entity can only be included in the consolidated stock if those assets would also be freely available to the consolidated (parent) entity in times of stress.

B.2.3 In assessing whether assets are freely transferable for regulatory purposes, banks should be aware that assets might not be freely available to the consolidated entity due to regulatory, legal, tax, accounting or other impediments. Assets held in legal entities without market access should only be included in the *HQLA* calculation to the extent that they can be freely transferred to other entities that could monetise the assets.

B.3 Rehypothecated assets

B.3.1 *JIBs* should not include in the stock of *HQLA* any assets, or related calculated liquidity generated by them that, they have received under right of rehypothecation, if the beneficial owner has the contractual right to withdraw those assets during the 30-day stress period.

B.3.2 Assets received as collateral for derivative transactions that are not segregated and are legally able to be rehypothecated may be included in the stock of *HQLA* provided that the *JIB* records an appropriate outflow for the associated risks.

B.4 Pricing, including for financial statements

B.4.1 In order to minimise the risk that a sale creates a loss, assets must normally be held at fair value in order to be eligible. However, if a *JIB* can demonstrate that a deep and active repo market exists, it may use an accruals basis for valuing assets in its financial statements but must compute the *Realisable Value* using the *repo value* – i.e. disregarding the *sale value.*

B.4.2 For assets held in the banking book, the *JIB* must put in place processes to ensure that it holds up to date information on bid prices and on repo haircuts applicable to assets that it wishes to designate as *HQLA*. Such information must be refreshed daily.