FINANSTILSYNET
THE FINANCIAL SUPERVISORY AUTHORITY OF NORWAY

Risk-based supervision

Liquidity Risk Module

Evaluation of management and control

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SECTION/DEPARTMENT:
BANKING SUPERVISION

Contents

INTRODUCTION

The liquidity risk module consists of guidance on Finanstilsynet's assessment of financial institutions' *liquidity risk level* and a guidance on Finanstilsynet's assessment of the institution's system for the *management and control* of liquidity risk[1]. The present document is the guidance on the assessment of the institution's management and control, and is intended for use at on-site inspections and as an aid in Finanstilsynet's SRV and SREP assessments[2]. The module has been drawn up primarily with a view to the assessment of large financial institutions. Where smaller institutions are concerned, the assessments must be tailored to the complexity and scale of the particular business (proportionality principle).

The guidance comprises five chapters: 1. Strategy and overarching guidelines, 2. Organisation and lines of responsibility, 3. Measurement tools, 4. Monitoring and reporting and 5. Independent control. Each chapter contains sections covering risk in sub-areas. Relevant assessment factors are given in each section. The assessment factors are based on Regulations on sound liquidity management (Liquidity Regulations), last amended on 20 December 2010[3]. The document also builds on important principles of liquidity management from the document "Principles for Sound Liquidity Risk Management and Supervision" by the Basel Committee of September 2008 (hereafter termed "the Basel document")[4]. The same applies to guidelines from the European Banking Authority (EBA) and the EU regulations referred to in this guidance. Beyond the above, the assessments are based on experience gained from the work on supervision, including thematic inspections of stress testing of liquidity and financing risks[5].

Every year, financial institutions shall assess their risk profile and capital requirements (ICAAP[6]) and their liquidity and funding risk (ILAAP[7]). The results of the process in the individual institutions shall be subject to a Supervisory Review Evaluation Process (SREP) at a frequency determined by Finanstilsynet based on the size and complexity of the institution. Further information about the process can be found in circular 12/2016 "Finanstilsynet's methodologies for assessing risk and capital needs".

As part of the SREP, a separate annual overall SREP assessment (TRA) is made for large institutions. As an aid in the work on the TRA, each section of this guidance ends with a table to classify the quality of management and control. Classification is four-tiered[8]: 1: Good control, 2: Satisfactory control, 3: Less than satisfactory control and 4: Unsatisfactory control. This classification is done for each section of the guide based on the conclusions reached about any deficiencies and flaws in management and control in the respective risk areas. The basis for the classification will normally be issues highlighted in the preliminary report and final comments from on-site inspections, aspects identified in the ICAAP/ILAAP, or other contact with the institution. The overall assessment of management and control of liquidity and funding risk focuses on significant flaws brought to light in connection with the classification of individual areas rather than on averages for the entire liquidity area. The classification is only for internal use by Finanstilsynet and is not communicated to the institutions.

[1] This module replaces the module dated June 2011.

[2] SRV (Norwegian: samlet risikovurdering) = overall SREP assessment, SREP = Supervisory Review Evaluation Process (see also footnote 8).

[3] In Finanstilsynet's proposal for an update of the regulations on capital requirements and national adaptation of CRR/CRD IV (CRR/CRD IV regulations), all the principles of the liquidity regulations are in the main incorporated, and it has been proposed to revoke the actual Liquidity Regulations. https://www.finanstilsynet.no/nyhetsarkiv/nyheter/2018/horingsnotat-om-norsk-gjennomforing-av-eus-soliditetsregelverk-crrcrd-iv/ (in Norwegian only)

[4] https://www.bis.org/publ/bcbs144.pdf Basel Committee (Basel Committee on Banking Supervision) issued a press release on 17 January 2019 The review confirms that the principles set out in the 2008 document are still appropriate and remain in force. The Basel Committee has therefore made no revision of the document from 2008 (see link at the start of the footnote).

[5] https://www.finanstilsynet.no/nyhetsarkiv/nyheter/2016/tematilsyn-om-stresstesting-av-likviditets--og-finansieringsrisiko/ (in Norwegian only)

[6] ICAAP – Internal capital adequacy assessment process

[7] ILAAP - Internal liquidity adequacy assessment process

[8] https://eba.europa.eu/documents/10180/2282666/Revised+Guidelines+on+SREP+%28EBA-GL-2018-03%29.pdf

1 STRATEGY AND OVERARCHING GUIDELINES

1.1 Strategy

The purpose of this section is to assess the institution's strategy/policy and strategy process for the liquidity area. Relevant factors follow below:

<u>Documentation and process</u>

- The institution shall have in place a documented liquidity strategy; see the Liquidity Regulations, section 2 first subsection. The strategy shall apply to the individual institutions and at consolidated level, and thus cover any branches and subsidiaries; see the Liquidity Regulations, section 1 second subsection. The strategy shall have been adopted by the board of directors, and the board's assessments and conclusions shall be set down in writing in board minutes; see the Liquidity Regulations, section 2 third subsection.
- The strategy should have been circulated to and understood by the organisation. All units of significance for liquidity risk must be aware of the strategy. Personnel with responsibility for risk management should maintain close links with those monitoring market developments as well as with those with access to critical information from the credit business; see paragraph 15 of the Basel document.
- The board of directors must review the strategy at least once a year; see the Liquidity Regulations, section 2 third subsection. The experience gained with stress tests must be utilised when the board assesses the liquidity strategy and adopts guidelines for liquidity risk and risk tolerance; see the Liquidity Regulations, section 8 second subsection and principle 10 of the Basel document.

<u>Strategy content</u>

- In the strategy the board of directors must clearly define the institution’s liquidity risk tolerance, i.e. the level of liquidity risk that the institution is willing to accept. This is to ensure that the institution manages its liquidity in normal times in such a way that it is able to withstand a prolonged period of stress; see principle 2 and paragraph 10 of the Basel document and the Liquidity Regulations, section 2 second subsection.
- The strategy document shall describe the organisation and lines of responsibility, provisions on reporting to the board of directors and management and on independent control; see the Liquidity Regulations, section 2 second subsection. The principles for management and control shall apply to the individual institutions and at consolidated level; see the Liquidity Regulations, section 1 second subsection.
- Residential mortgage companies have become an important funding vehicle for most banks. The strategy document should accordingly clarify the guidelines for the use of such companies, what requirements should be imposed to ensure an acceptable level of risk in the bank and to ensure flexible liquidity (volume of unencumbered negotiable assets).
- The strategy document should in particular clarify the institution's overarching guidelines regarding certain aspects of liquidity management; see the Liquidity Regulations, section 1 second subsection and paragraph 11 of the Basel document:

- o Guidelines for compliance with the minimum liquidity coverage requirement, cf. Section 8 of the CRR/CRDIV regulations and the institution's other holdings of liquid assets[9] (including the assets' negotiability).
- o Guidelines for stable long-term funding[10], including objectives or requirements for deposit-to-loan ratios[11]. Assessments should be made of how stable the different deposit categories are, for example in connection with an adjustment of deposit rates
- o Guidelines for liquidity risk in foreign currency, across borders and in the various units within the group (if called for by the level of activity and/or currency mismatch)
- o Guidelines for diversification and stability of funding sources (including market-making strategy).

SRV classification[12]

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The institution has good strategy processes. The strategy clearly defines liquidity risk tolerance. Also in other respects a good strategy for the liquidity area, well aligned with the institution's overarching strategy and risk appetite.	The institution has satisfactory strategy processes. The board of directors has a satisfactory definition of risk tolerance. Also in other respects a satisfactory strategy for the liquidity area, aligned with the institution's overarching strategy and risk appetite.	The institution's strategy process is flawed. The board of directors' definition of risk tolerance is somewhat unclear. Also in other respects obvious flaws in the strategy for the liquidity area.	The institution's strategy process has serious flaws. The board of directors has not defined its risk tolerance. Mismatch between the institution's overarching strategy and risk appetite. Also in other respects serious flaws in the strategy for the liquidity area.

1.2 Liquidity risk limits

The purpose of this section is to assess the limit structure established to manage the institution's liquidity and funding risk level. In the assessment of the institution's limits and targets for liquidity and funding risk, the complexity and scale of the business must be kept in mind. Relevant factors follow below:

<u>Documentation and process</u>

- If overarching limits are not set out in the strategy document, the institution shall have a separate limits document showing the overarching limit structure and limit level, and possibly targets, for liquidity and funding risk.
- The limits shall be adopted by the board of directors and be assigned to the CEO together with instructions for any further delegation.
- The board of directors shall at least once a year reassess the limits; see the Liquidity Regulations, section 2 third subsection. Experience gained from stress tests shall be utilised when the board of directors adopts liquidity risk limits; see the Liquidity Regulations, section 8 second subsection

[9] Banks dependent on capital market funding should maintain a higher proportion of unencumbered, highly liquid assets than banks which in the main rely on deposits from small businesses and retail market sources (for example customer deposits); see paragraph 66 of the Basel document.

[10] Cf. Net Stable Funding Ratio (NSFR), expected to be introduced in Norway no later than in 2021, with a minimum requirement of 100 per cent.

[11] When assessing the deposit-to-loan ratio, attention should be given to both the parent bank level and the level of recognised loans carried in the residential mortgage company's balance sheet.

[12] See explanation under the introduction.

Limit structure

- The board of directors must via the established limit structure ensure that the institution has sufficient control of liquidity risk. The limit structure should be tailored to the institution's level of activity and risk.
- To ensure appropriate maturity of the institution's funding, amount limits shall be set for various time horizons, including intraday; see the Liquidity Regulations, section 3[13].Limits should ensure sufficiently stable and diversified long-term funding; see the Liquidity Regulations, section 5. The limits structure shall be consistent with the established risk tolerance. In the definition of the limits, allowance shall be made for possible delays in incoming and outgoing payments; see the Liquidity Regulations, section 3.
- In order to allow for the possibility of unexpected events, the institution shall establish limits ensuring that it has an adequate cushion of unencumbered, high-quality liquid assets. The institution shall ensure that the assets can rapidly be realised or used for funding; see the Liquidity Regulations, section 4 and the minimum liquidity coverage ratio, LCR, cf. part IV of the CRR/CRD IV regulations. With respect to liquid assets in excess of the LCR requirement, there should be no legal, regulatory or operational impediments to using these assets to obtain funding; see principle 12 of the Basel document.
- Beyond the minimum requirement of LCR per significant currency, the institution should assess its aggregate foreign currency liquidity needs and determine acceptable currency mismatches. These analyses should make allowance for possible constraints in times of stress; see also paragraph 43 of the Basel document.
- The institution should establish limits or guidelines ensuring diversification of funding sources, including limits by counterparty, instrument type and geographical market; see paragraph 65 of the Basel document.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The institution's limits are well documented. The limit setting processes are sound. The limit structure ensures good management of liquidity risk. The limits and control thereof are good and consistent with the institution's risk strategy and tolerance.	The institution's limits are satisfactorily documented. The limit setting processes are satisfactory. The limit structure ensures satisfactory management of liquidity risk. The limits and control thereof are satisfactory and consistent with the institution's risk strategy and tolerance.	The institution's documentation of limits is somewhat inadequate. There are flaws in the limit setting processes. There are some flaws in the limit structure for managing liquidity risk. The limits and control thereof are somewhat flawed.	The institution's limits are not satisfactorily documented. There are serious flaws in the limit setting processes. There are serious flaws in the limit structure for managing liquidity risk. The limits are not consistent with the institution's risk strategy and tolerance. The limits and control thereof are flawed.

1.3 Contingency plans

The purpose of this section is to assess the institution's contingency plans for liquidity crises. In the assessment of the contingency plan, the complexity, risk profile and scope of operations must be kept in mind; see paragraph 111 of the Basel document. Finanstilsynet accepts that the contingency plan is included in the institution's resolution and recovery plan, provided that the requirements of the Liquidity Regulations are observed. Relevant factors to be included in the contingency plans follow below:

[13] Reference is made to footnote 10 about the NSFR, and to the reporting of maturity for several time bands (Maturity Ladder).

Documentation and process

- The institution shall have in place a documented contingency funding plan to address liquidity shortfalls in emergency situations. The plan shall have been adopted by the board of directors; see the Liquidity Regulations, section 6.
- The board of directors shall regularly revise the contingency funding plan in light of stress test results, and the plan should be in accordance with the assumptions used in these tests; see the Liquidity Regulations, section 6 and paragraph 112 of the Basel document.
- The contingency funding plan should be regularly tested to ensure that it is operationally robust; see principle 111 of the Basel document.

Content

- The contingency funding plan shall set out procedures for dealing with liquidity problems due to institution-specific events as well as liquidity shortfalls in the market; see the Liquidity Regulations, section 6.
- The contingency funding plan should contain clear activation and escalation procedures; see principle 11 of the Basel document. A set of early warning indicators should be established to identify the emergence of increased risk or vulnerabilities; see paragraphs 53 and 54 of the Basel document.
- The contingency funding plan should set out guidelines for addressing various stress situations and assuring a flexible response; see principle 11 and paragraph 111 of the Basel document. Requirements on additional reporting should be defined in order to assure an updated overview of possible emergency measures. Such requirements should also address the need for a wider-ranging description or analyses of liquidity developments.
- The contingency funding plan should provide a description of a diverse set of funding measures and the amount of funds an institution estimates can be derived from these sources; see paragraph 111 of the Basel document. The plan should also detail the lead time needed to tap funds from each of the contingency sources; see paragraph 111 of the Basel document. The plan should include steps to meet unexpected large disbursements on an intraday basis; see paragraph 119 of the Basel document.
- An institution should, when called for by its structure and activities, be aware of the operational procedures needed to transfer liquidity and collateral across different entities and systems and any restrictions on such transfers; see paragraph 120 of the Basel document.
- There should be a clear specification of roles and responsibilities for dealing with emergency situations, including the designation of alternates for key roles; see paragraph 114 of the Basel document. The plan should set out what issues need to be escalated to more senior levels in the organisation and procedures for assuring effective coordination and communication across the bank's different business lines and locations; see paragraph 115 of the Basel document.
- The contingency funding plan should address how to communicate internally and externally to support the general confidence in the institution and maintenance of customer relationships. Emphasis should be given to delivering clear, consistent communication with sufficient frequency and in a timely manner. The plan should ensure good communication with counterparties of great significance of the bank's access to liquidity, cf. paragraph 116 of the Basel document.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The institution's contingency funding plans are well documented.	The institution's contingency funding plans are satisfactorily documented.	The institution's contingency funding plans are less than satisfactorily documented.	The institution's contingency funding plans are unsatisfactorily documented.
The processes for adopting and testing the contingency funding plans are sound.	The processes for adopting and testing the contingency funding plans are satisfactory.	There are flaws in the process for adopting and testing the contingency funding plans.	There are serious flaws in the process for adopting and testing the contingency funding plans.
The contingency funding plans are sound.	The contingency funding plans are satisfactory.	There are some flaws in the content of the contingency funding plans.	There are serious flaws in the content of the contingency funding plans.

2 ORGANISATION AND LINES OF RESPONSIBILITY ETC.

2.1 Organisation and lines of responsibility

The purpose of this section is to assess the organisation and division of responsibilities in the institution’s liquidity and funding area. In this assessment the complexity, risk profile and scope of operations must be kept in mind. Relevant factors follow below[14]:

- The responsibility for the ongoing management and control of the institution's overall liquidity position shall be clearly defined and documented; see the Liquidity Regulations, section 9 first subsection.
- The institution should clearly define which organisational unit or which group/committee (for example an asset and liability committee) has responsibility for the overall management of the level of liquidity risk. The responsibility for managing the overall liquidity of the institution should be clearly defined and assigned to a specific unit.
- The institution should ensure that there are adequate communication between those individuals responsible for the ongoing liquidity management and central units/personnel in the organisation with access to critical information about the liquidity situation.
- The institution should ensure that sufficient independence and division of work exists between units and personnel with executive functions (treasury desk) and units and personnel with responsibility for monitoring, reporting and performance of back office functions such as recording, recognition in the profit and loss account and control of market data and positions; see the Liquidity Regulations, section 9 second subsection.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The responsibility for management and control is clearly defined. Good lines of communication are in place. Independence and division of work are good.	The responsibility for management and control is satisfactorily defined. Satisfactory lines of communication are in place. Independence and division of work are satisfactory.	There are flaws in the distribution of responsibilities for management and control. There are some flaws in the lines of communication in the organisation. Independence and division of work are less than satisfactory.	There are serious flaws in the distribution of responsibilities for management and control. There are serious flaws in the lines of communication. Independence and division of work are unsatisfactory.

2.2 Resources and expertise

The purpose of this section is to assess an institution's resources and expertise in the liquidity and funding areas. Relevant factors follow below:

[14] A general reference is made to EBA/GL/2017/11 "Guidelines on internal governance under Directive 2013/36/EU" https://eba.europa.eu/documents/10180/1972987/Final+Guidelines+on+Internal+Governance+%28EBA-GL-2017-11%29.pdf and to the Basel Committee's "Sound Practices for Managing Liquidity in Banking Organisations", February 2000, https://www.bis.org/publ/bcbsc135.pdf

- The institution's board and senior management should ensure that the institution has personnel with sufficient expertise to manage and control the relevant risks; see paragraph 11 of the Basel document.
- The number of staff should be appropriate to the business's complexity and scale. Resources should be sufficient to cover temporary absence of key personnel.
- The balance of strength between units and personnel with executive functions (treasury desk) and units and personnel in control functions should be such that the control units are able to implement effective and sound ongoing control of the business. It is critical that personnel in control functions have the skills and authority to challenge information and modelling assumptions provided by business lines (treasury desk); see paragraph 16 of the Basel document.
- The internal auditor's and other independent control functions' resources and skills in the liquidity area should be commensurate with the complexity and scale of operations.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The organisation's expertise is good in relation to the complexity and scale of operations. The number of staff and their distribution are good in relation to the complexity and scale of operations. Independent control functions' resources and expertise are good in relation to the complexity and scale of operations.	The organisation's expertise is satisfactory in relation to the complexity and scale of operations. The number of staff and their distribution are satisfactory in relation to the complexity and scale of operations. Independent control functions' resources and expertise are satisfactory in relation to the complexity and scale of operations.	The organisation's expertise is less than satisfactory in relation to the complexity and scale of operations. The number of staff and their distribution are less than satisfactory in relation to the complexity and scale of operations. Independent control functions' resources and expertise are less than satisfactory in relation to the complexity and scale of operations.	The organisation's expertise is unsatisfactory in relation to the complexity and scale of operations. The number of staff and their distribution are unsatisfactory in relation to the complexity and scale of operations. Independent control functions' resources and expertise are unsatisfactory in relation to the complexity and scale of operations.

3 MEASUREMENT TOOLS

3.1 Systems for risk measurement and forecasting

The purpose of this section is to assess systems and procedures for measuring and forecasting liquidity. Relevant factors follow below:

- The institution shall have methods for identifying and measuring liquidity risk at all times; see the Liquidity Regulations, section 7 first subsection. The measurement tools should be tailored to the institution's actual business, complexity and risk profile; see paragraph 48 of the Basel document.
- The institution must measure and forecast its prospective cash flows for assets, liabilities, non-contingent and contingent off-balance sheet commitments and derivatives; see the Liquidity Regulations, section 7 and paragraph 26 of the Basel document. The risk measurements should in aggregate provide a full picture of the liquidity situation, including liquidity risk related to various units within the group; see paragraph 22 of the Basel document.
- The forecasts for future net liquidity need should estimate the institution’s net funding requirement as the difference between expected cash inflows and outflows; see paragraph 26 of the Basel document. In the calculations care must be taken to apply conservative estimates when assessing cash flows; see paragraph 24 of the Basel document. The liquidity situation must be assessed over several time horizons, including intraday, day-to-day, and over intervals of up to one year and periods of more than one year; see paragraph 27 of the Basel document.

- If called for by its level of activity, the institution should have in place systems to identify and monitor conditions and constraints regarding the sale or repayment of assets as well as regarding mechanisms triggering financial guarantees or similar contingent liabilities; see paragraphs 31, 32 and 41 of the Basel document. The institution should also identify and measure non-contractual liabilities or factors which on reputational grounds might prompt an institution to purchase assets or provide extraordinary liquidity support; see paragraph 33 of the Basel document.
- If called for by its level of activity, the institution should identify and measure liquidity risk in foreign currency; see paragraph 43 of the Basel document.
- The definitions and assumptions underlying the risk measurements and forecasts should be well documented. Key assumptions should be periodically reviewed and approved; see paragraph 49 of the Basel document.
- Systems and data should be quality assured in accordance with clearly defined procedures; see the Liquidity Regulations, section 7 second subsection.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The institution has good systems and procedures for risk measurement. The institution has good systems and procedures for forecasting.	The institution has satisfactory systems and procedures for risk measurement. The institution has satisfactory systems and procedures for forecasting.	There are flaws in the institution's systems and procedures for risk measurement. There are flaws in the institution's systems and procedures for forecasting.	There are serious flaws in the institution's systems and procedures for risk measurement. There are serious flaws in the institution's systems and procedures for forecasting.

3.2 Stress tests

The purpose of this section is to assess the institution’s use of stress tests in the liquidity area. Relevant factors follow below:

- The EBA’ guidance on stress testing[15] defines the liquidity stress test for institutions to assess the impact of various developments from a funding and liquidity perspective The developments include both macro and microeconomic scenarios as well as shocks having a direct impact on the institution’s liquidity and funding position. The correlation between liquidity and funding stress and the institution’s capital situation is pointed out.[16]
- Norwegian institutions shall conduct stress tests to analyse the liquidity situation; see the Liquidity Regulations, section 8 first subsection. The stress tests must be conducted regularly to enable the institution to ensure that actual exposure remains in accordance with the board of directors’ established liquidity risk tolerance; see principle 10 of the Basel document. Best practice for the largest institutions is quarterly stress tests. However, it is pointed out that in order for the stress test(s) to be a meaningful part of the risk management system, they must be undertaken with appropriate frequency (for example, the institution should consider calculating the LCR daily, while falling house prices may be included in less frequent stress tests). The institution’s business model and size, as well as the severity of the outcome of the previous stress test, must be taken into account when determining the frequency, cf. paragraph 32 of the EBA’s guidelines on stress testing.
- The stress tests shall throw light on the situation at consolidated and institution level and include alternative scenarios covering institution-specific events, market-related events and combinations thereof; see the Liquidity Regulations section 1, first subsection and section 8,

[15] Cf. the EBA’s Guidelines on institutions' stress testing of 19 July 2018 EBA/GL/2018/04 testing
https://eba.europa.eu/documents/10180/2282644/Guidelines+on+institutions+stress+testing+%28EBA-GL-2018-04%29.pdf

[16] Reference is also made to the CEBS' (EBA’s) "Guidelines on Liquidity Buffers & Survival Periods" of 9 December 2009
https://eba.europa.eu/documents/10180/16094/Guidelines-on-Liquidity-Buffers.pdf
as a useful source of information.

first subsection, and paragraph 154 of the EBA's guidelines on stress testing. The scenarios should cover on- and off-balance sheet items, see the Liquidity Regulations, section 8 first subsection.

- The stress tests shall include scenarios with differing time horizons; see the Liquidity Regulations, section 8 first subsection, and paragraphs 155 and 156 of the EBA's guidelines on stress testing. The tests should, as a minimum, cover various time horizons, short and long intervals, from overnight up to 12 months. There should be separate stress tests to analyse intraday liquidity risk.
- The stress tests shall throw light on whether the institution's holding of liquid assets is sufficient to avoid payment problems in the short and long term; see the Liquidity Regulations, section 4. Such liquid assets should be eligible to be pledged as collateral with central banks, but not currently pledged, and they must be readily negotiable in the markets. There should be no constraints set by law or regulations or of an operational nature to the assets being used to obtain liquidity within set time horizons. Best practice is that the institution has an adequate liquidity cushion to survive 12 months "without stress", given the entity’s cash inflows and outflows, and possibly roll-over and issuance of covered bonds, but no refinancing of senior market funding.
- The institution's stress tests should, wherever relevant, use stricter assumptions than the ones that apply to the minimum liquidity coverage requirement, LCR, cf. the CRR/CRD IV Regulations, part IV. This should include using a stress scenario where the LCR has a 90-day time horizon, or calculating what the LCR will be three months ahead in time. Furthermore, it should be estimated how many days after day 30 it will take before the institution’s LCR is below 100 per cent. The institution should also consider how large reductions and extraordinary outflows the institution’s LCR can withstand before the minimum requirement is breached. Analyses should also be made of LCR in all of the institution’s significant currencies other than Norwegian kroner[17], if any.
- Institutions that are owned in whole or in part by covered-bond-issuing entities should conduct stress tests that include assumptions of a sharp fall in property prices and a significant increase in non-performing residential mortgages. Additional stressed conditions that should be factored in are links between the parent bank(s) and the covered-bond-issuing entities, including any liquidity facilities provided and implicit or explicit agreements on the transfer of residential mortgages from covered-bond-issuing entities to the parent bank(s).
- The institution should consider its ability to hold, or have access to, excess liquidity in the short term, medium term and long term in response to stress scenarios (counterbalancing capacity), cf. the EBA’s guidelines on stress testing, paragraphs 160 and 161.
- The institution shall regularly review the assumptions used in its stress test analyses; see the Liquidity Regulations, section 8 first subsection and the EBA’s guidelines on stress testing, paragraph 17.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The institution has good and appropriate stress tests.	The institution has satisfactory stress tests.	There are flaws in the institution's stress tests.	There are serious flaws in the institution's stress tests and they serve little purpose.
The institution makes extensive use of the stress test results when establishing its strategy and limits.	The institution makes some use of the stress test results when establishing its strategy and limits.	The institution makes little use of the stress test results when establishing its strategy and limits.	The institution does not use the stress test results when establishing its strategy and limits.
The institution’s stress tests are conducted at an appropriate frequency.	The institution’s stress tests are conducted at a satisfactory frequency.	The institution does not conduct stress tests quite often enough.	The institution conducts stress tests too infrequently.
The institution has good procedures for reviewing the stress tests.	The institution has satisfactory procedures for reviewing the stress tests.	There are flaws in the institution's procedures for reviewing the stress tests.	There are serious flaws in the institution's procedures for reviewing the stress tests.

[17] The institution may also consider whether the reporting of the NSFR and the maturity ladder may be used as a basis for appropriate stress tests for the institution.

3.3 Internal pricing of liquidity risk

The purpose of this section is to assess the institution's internal pricing mechanism for assessing the liquidity risk related to different activities. In this assessment, the complexity and scale of the operations must be kept in mind (proportionality principle). Relevant factors follow below:

- Institutions are expected to establish internal mechanisms that price liquidity risk for various activities in terms of the cost benefit they entail for the institution; see the Liquidity Regulations, section 2 first subsection and the EBA's "Guidelines on Liquidity Cost Benefit Allocation"[18]. The requirement on such systems applies internally within the institution and to the group[19].
- The internal pricing mechanism is an important part of liquidity management and should be consistent with the institution's framework of governance, risk tolerance and the decision-making process; see the EBA's Guidelines on Liquidity Cost Benefit Allocation, guideline 1.
- There should be an appropriate governance structure to support the internal pricing mechanism. The mechanism should be actively used and be appropriate to the business profiles of the institution; see the EBA's Guidelines on Liquidity Cost Benefit Allocation, guidelines 2 and 3. Important elements are management's ownership of the mechanism and that the unit responsible for carrying out pricing is independent of the business lines and does not have its own profit targets.
- The internal pricing mechanism should generate prices that can be used at an appropriate level of granularity, reflecting the size and sophistication of the institution. Internal prices should be fixed in an easy to grasp and consistent manner; see the EBA's Guidelines on Liquidity Cost Benefit Allocation, paragraph 14.
- Internal prices should be determined by robust methodologies, taking into account the various factors involved in liquidity risk. The internal pricing mechanism should be sufficiently comprehensive to cover all significant parts of assets, liabilities and off-balance sheet items regarding liquidity; see the EBA's Guidelines on Liquidity Cost Benefit Allocation, guidelines 4 and 5. For example, the institution should take into account any (explicit or implicit) guarantees in order to make necessary liquidity available to entities in the group or to other associated entities.
- Internal prices should be fixed such that the employment or use of liquidity reflects the cost of funding needed to finance the activity, or product, with a corresponding (expected) maturity. The internal prices that are set should reflect both the direct and indirect costs of the funding as well as costs of holding liquidity buffers. It is also important for pricing to be such that "deposit gatherers" are rewarded in keeping with the value of customer deposits for liquidity purposes; see the EBA's Guidelines on Liquidity Cost Benefit Allocation, paragraphs 15, 17 and 19.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The institution has good internal pricing systems.	The institution has satisfactory internal pricing systems.	There are flaws in the institution's internal pricing systems.	There are serious flaws in the institution's internal pricing systems.

[18] Cf. the EBA's "Guidelines on Liquidity Cost Benefit Allocation" of 27 October 2010:https://eba.europa.eu/documents/10180/16094/cebs18_Guidelines.pdf

[19] Pricing between group companies must comply with the Financial Institutions Act, Section 18-3.

4 MONITORING AND REPORTING

4.1 Monitoring procedures

The purpose of this section is to assess the institution's procedures for monitoring the liquidity situation and compliance with internal and external policies, including the first and second line of control. In the assessment of the procedures the complexity and scale of the activities must be kept in mind (proportionality principle). Relevant factors follow below:

Monitoring of liquidity risk, internal and external policies and requirements of laws and regulations

- Liquidity risk exposures and funding needs must be actively monitored within and across legal entities, business lines and currencies; see principle 6 of the Basel document.
- Senior management must continuously review information on the bank's liquidity developments; see principle 3 of the Basel document.
- Procedures shall be in place to monitor compliance with internal limits and policies; see the Liquidity Regulations, section 10 and principle 3 of the Basel document. Policies should clearly specify the scope, manner and frequency of reporting to higher levels of management and the board of directors; see paragraph 57 of the Basel document. Breaches of liquidity risk limits should normally be reported to the body that has adopted the limit concerned.
- In the event of repeated breaches of limits etc., it must be ascertained whether this is due to a lack of understanding of limits as management instruments or to unsatisfactory monitoring procedures.
- Procedures should be in place to monitor compliance with requirements of laws and regulations in the liquidity area. Procedures should also be in place to assess the institution's compliance with external procedures from supervisory bodies, including international bodies[20]. In the event of repeated rule breaches it must be ascertained whether this is due to a lack of respect for the rules or to unsatisfactory monitoring procedures.

SRV classification

Good control (1)	Satisfactory (2)	Less than satisfactory (3)	Unsatisfactory (4)
The institution's monitoring of liquidity risk is good.	The institution's monitoring of liquidity risk is satisfactory.	There are flaws in the institution's monitoring of liquidity risk.	There are serious flaws in the institution's monitoring of liquidity risk.
The institution's procedures for monitoring compliance with internal limits and policies are good.	The institution's procedures for monitoring compliance with internal limits and policies are satisfactory.	There are flaws in the institution's monitoring of compliance with internal limits and policies.	There are serious flaws in the institution's monitoring of compliance with internal limits and policies.
The institution's procedures for monitoring compliance with laws and regulations are good.	The institution's procedures for monitoring compliance with laws and regulations are satisfactory.	There are flaws in the institution's monitoring of compliance with laws and regulations.	There are serious flaws in the institution's monitoring of compliance with laws and regulations.

4.2 Reporting to the board of directors and senior management

The purpose of this section is to assess the reporting to the board of directors and senior management and the procedures for quality assurance of the reporting. In the assessment of the reporting the complexity and scale of the activities must be kept in mind. Relevant factors follow below:

[20] See for example Finanstilsynet's circulars, identical letters, guidelines, guidelines from the EBA and recommendations from the Basel Committee.

Content

- The institution should adopt a set of reporting criteria specifying the scope, manner and frequency of reporting for various recipients (such as the board, senior management, asset and liability committee and others); see paragraph 57 of the Basel document.
- Reporting to the institution's board and senior management should provide a full, updated picture of the institution's liquidity and funding situation, and of management and control, see the Liquidity Regulations, section 11.
- Reporting to the board and senior management should include measurement variables that are defined in the strategy, framework documents and overarching policies. The following are pertinent measurement variables:
    - Actual liquidity risk exposures relative to established limit levels and possible targets; see paragraph 57 of the Basel document. Maximum limit utilisation between reporting dates should also be included.
    - Breaches of liquidity risk limits, targets or threshold values.
    - Indicators describing the liquidity and funding situation, but where limits have not been set, for example funding cost developments or other early warning indicators; see paragraph 54 of the Basel document.
- The board and senior management should regularly receive reports showing the results of stress testing. In the presentation of various stress scenarios, assumptions should be clearly set out to enable the board and senior management to evaluate the validity of key assumptions and understand the implications of various stress scenarios; see paragraph 97 of the Basel document[21]. Moreover, it should be considered whether to mention the institution’s liquidity forecasts and funding position in the reports to the board and senior management.
- The board and senior management should regularly, at least once a year, receive reports showing any evaluations made of the system for management and control of liquidity risk, including matters to which the internal and/or external auditor and other independent bodies have drawn attention.

Frequency

- The institution's board and senior management should at least quarterly receive a liquidity report; see the Liquidity Regulations, section 11. The reporting frequency should be tailored to the various recipients of reports. Reporting should be most frequent (for example daily) for those who are responsible for the ongoing liquidity management, and reports must be made to the institution's board and senior management on a regular basis. Reporting on a more frequent basis is expected in stress situations; see paragraph 57 of the Basel document.

Quality assurance

- The institution should have in place established procedures for quality assurance of the reported data and the reporting systems. Reasonableness checks and random tests of the data should be conducted. The form, content and frequency of reporting should be reviewed on a regular basis.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
The institution's reporting to the board and management is good. The institution's reporting frequency to the board and management is good. The institution has good quality assurance procedures.	The institution's reporting to the board and management is satisfactory. The institution's reporting frequency to the board and management is satisfactory. The institution has satisfactory quality assurance procedures.	There are flaws in the reporting to the board and management. The institution's reporting frequency to the board and management is less than satisfactory. There are flaws in the institution's quality assurance procedures.	There are serious flaws in the reporting to the board and management. The institution's reporting frequency to the board and management is unsatisfactory. There are serious flaws in the quality assurance procedures.

[21] Plus paragraph 22 in the Basel Committee’s “Sound Practices for Managing Liquidity in Banking Organisations”.

4.3 External reporting

The purpose of this section is to assess the institution's procedures for quality assurance and reporting to the authorities. Relevant factors follow below:

- The institution should have in place procedures for quality assurance of data reported to the authorities.
    - o A pertinent example of such a procedure is where units/personnel responsible for the ongoing liquidity management quality assure the reporting.

SRV classification

Good control (1)	Satisfactory (2)	Less than satisfactory (3)	Unsatisfactory (4)
The institution has good quality assurance procedures.	The institution has satisfactory quality assurance procedures.	There are flaws in the institution's quality assurance procedures.	There are serious flaws in the quality assurance procedures.

5 INDEPENDENT CONTROL

The purpose of this chapter is to assess independent control functions. In the present context 'independent control functions' means specifically the internal auditor (third line of control) and the external auditors. Relevant factors follow below[22]:

Independent evaluations/controls

- The institution’s system for management and control of liquidity risk should be regularly evaluated by independent control functions, cf. Section 13-5 of the Financial Institutions Act, part VIII on risk management in the CRR/CRD IV regulations and circular 12/2016. Best practice for regular evaluation is at least every two years.
- This independent control shall be of use and support to the board and senior management.
- Such evaluations should over time cover:
    - o Assessments of whether the system for management and control of liquidity risk is appropriate to the business's complexity and risk level.
    - o Assessments of whether the responsibility for ongoing management and control of the institution's overall liquidity is clearly defined and whether the institution has established sufficient independence and work sharing between units/personnel with executive functions and units/personnel with control responsibilities.
    - o Assessments of whether the institution's liquidity unit has sufficient expertise and resources.
    - o Assessments of whether policies and procedures for managing and controlling liquidity risk are well documented.
    - o Controls on whether internal policies and procedures for management and control of liquidity risk are complied with. Controls on compliance with statutory requirements.
    - o Assessments of whether the assumptions underlying the measurement and forecasting of the liquidity situation are well documented and that quality assurance of underlying data is satisfactory.

[22] See also the EBA’s "Guideline on internal governance", cf. footnote 14.

<u>Follow up to independent evaluations/controls</u>

- Reports from independent control functions should be dealt with at a relevant level in the organisation.
- Procedures should be in place describing how matters to which independent control functions have drawn attention should be dealt with and acted on.

SRV classification

Good control (1)	**Satisfactory (2)**	**Less than satisfactory (3)**	**Unsatisfactory (4)**
Independent control functions' evaluations/controls are good. Follow up of independent evaluations/controls is good.	Independent control functions' evaluations/controls are satisfactory. Follow up of independent evaluations/controls is satisfactory.	There are some flaws in the institution's evaluations/controls. There are some flaws in the follow up of independent evaluations/controls.	There are serious flaws in the independent control functions' evaluations or the frequency of the evaluations is inadequate. There are serious flaws in the follow up of independent evaluations/controls