Standard 4.4d
Management of liquidity risk

Regulations and guidelines
How to read a standard

A standard is a collection of subject-specific regulations and guidelines which both obliges and guides supervised entities and other financial market participants, indicates the quality level expected by the supervisor, sets out the supervisor’s key principles of good practice and provides justification for regulation.

Each paragraph in a standard is furnished with a particular margin note:

- **Norm**: A reference to a current legal or regulatory provision.
- **Binding**: A FIN-FSA regulation that is legally binding on supervised entities or other financial market participants, issued by the FIN-FSA by virtue of its regulatory power based in Finnish law.
- **Recommendation**: FIN-FSA recommendatory guidance to supervised entities or other financial market participants.
- **Application guideline/example**: A practical application guideline or example related to a norm, binding regulation or recommendation. A reference to a FIN-FSA standard or a particular point in the standard.
- **Justifications**: An explanation of the background, purpose and objectives of a regulation or standard.

FIN-FSA standards may be accessed from www.fin-fsa.fi/eng
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1 APPLICATION

(1) This standard comprises the core principles of liquidity risk management as well as provisions on the establishment and maintenance of the function. The standard shall apply to the following entities:

- credit institutions
- investment firms governed by chapters 5–6 of the Credit Institutions Act (CIA) according to section 46 of the Investment Firms Act (IFA)
- fund management companies engaged in activities referred to in section 5, subsection 2 of the Mutual Funds Act (MFA)
- holding companies of credit institutions and investment firms
- the central body of the amalgamation of deposit banks
- Finnish branches of foreign credit institutions and investment firms.

(2) Provisions on the liquidity of Finnish branches of foreign credit institutions are laid down in section 166 m of the CIA. The Financial Supervisory Authority (FIN-FSA) supervises the liquidity of branches of foreign credit institutions authorised within the European Economic Area (EEA) in cooperation with the home country supervisory authority.

(3) The provisions marked as binding also oblige holding companies of financial and insurance conglomerates primarily engaged in financial activities.

(4) In this standard, the general expression supervised entity is used of all entities within the scope of the standard.

(5) In establishing and maintaining liquidity risk management, the standards 4.1 on internal control arrangements and 4.2 on the Internal Capital Adequacy Assessment Process ICAAP, included in the section Capital adequacy and risk management of the FIN-FSA set of regulations for the financial sector, must also be observed.
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OBJECTIVES

(1) This standard deals with the core principles and the establishment and maintenance of liquidity risk management. A change in the financial position of an individual supervised entity may have significant effects influencing the whole financial system. The global financial crisis has further emphasised the importance of a proactive liquidity risk management covering all operations of the supervised entity.

(2) The binding provisions of the standard shall also apply to investment firms. The use of derivative products and the securitisation, which both were reasons behind the financial crisis, have increased the significance of connections between investment bank and deposit bank operations. Diminishing availability of funding for systemically important investment firms may have significant contagious effects in the interaction between the banking and investment sectors.

(3) All functions and commitments of supervised entities can be considered to comprise factors affecting the liquidity position. Through an efficient management of its liquidity position, a supervised entity should aim to ensure its ability to fulfill its payment obligations regardless of external factors and factors dependent on other market participants.

(4) The objectives of the FIN-FSA regulation on liquidity risk management and control are to:

- ensure that supervised entities and entities belonging to their consolidation groups have adequate functions in place, commensurate with the nature and size of their activities, to identify, measure, mitigate, monitor and control liquidity risk as part of their overall business risk management and control
- ensure that the information on liquidity risks provided for the management of the supervised entity is reliable and correct
- provide information on matters of prime concern to FIN-FSA and the demands it places on entities under its supervision.
3 INTERNATIONAL FRAMEWORK

(1) This standard is mainly based on recommendations issued by the Basel Committee on Banking Supervision and the Committee of European Banking Supervisors (CEBS).

(2) In September 2008, CEBS issued its recommendations on liquidity risk management and supervision as part of its response to the consultation of the EU Commission.¹ In December 2009, CEBS issued more detailed liquidity buffer guidelines, related to the above-mentioned recommendations and titled Guidelines on Liquidity Buffers & Survival Periods.²

(3) In the standard, account has been taken of the liquidity risk management principles included in the following Basel Committee publications:

- Principles for Sound Liquidity Risk Management and Supervision, September 2008
- Liquidity Risk: Management and Supervisory Challenges, February 2008
- Core Principles for Effective Banking Supervision and Core Principles Methodology, October 2006.

(4) In addition, the standard takes the following publications into account:

- The Management of liquidity risks in financial groups (May 2006) by the Joint Forum’s Working Group on Risk Assessment and Capital

¹ Second part of CEBS’s Technical Advice to the European Commission on Liquidity Risk Management (the CEBS Advice).
² Below the CEBS Liquidity Buffer Guidelines.
4 Capital adequacy and risk management

4.4b Management of liquidity risk


(2) Nationally, the liquidity risk management is regulated through the following legal provisions:

- section 49, subsection 1 of the CIA (121/2007), comprising a general provision on risk management arrangements. An equivalent provision concerning parent companies and subsidiaries of credit institutions’ consolidation groups is included in section 74 of the same Act.

- section 52 of the CIA providing a general liquidity requirement

- section 166 m, subsection 2 of the CIA on Finnish branches of foreign credit institutions

- section 46, subsection 1 of the IFA (922/2007) laying down that sections 49 and 52 of the CIA also apply to investment firms as referred to in the mentioned section of the IFA

- section 15, subsection 1 of the Act on the Right of Foreign Investment Firms to Provide Investment Services in Finland (580/1996) on the liquidity of Finnish branches of foreign investment firms

- section 6, subsection 5 of the MFA (48/1999), according to which fund management companies, whose main activity is operations as referred to in section 5, subsection 2 of the same Act, shall fulfil the requirements laid down in section 46, subsection 1 of the IFA
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- section 30 a, subsection 1 of the MFA comprising requirements on internal control and adequate risk management systems
- section 30 b of the MFA, according to which the liquidity of fund management companies providing investment and financial advice or depository and management services shall be commensurate with the scope of operations
- section 18 of the Act on the Amalgamation of Deposit Banks (599/2010) comprising a general provision on ensuring liquidity
- section 18 of the Act on the Amalgamation of Deposit Banks, according to which internal control and risk management must fulfil the requirements in section 49 of the CIA

(3) The binding regulations issued by FIN-FSA in this standard are based on the following legal provisions:

- by virtue of section 93, subsection 1 of the CIA, FIN-FSA may issue more detailed regulations on application of the provisions laid down in chapter 5 of the CIA as required in order to implement the Credit Institutions Directive (2006/48/EC)
- as a consequence of section 46, subsection 1 of the IFA and section 6, subsection 5 of the MFA, the regulations issued by FIN-FSA on the basis of section 93, subsection 1 of the CIA in order to apply sections 49 and 52 of the CIA also oblige the investment firms, holding companies of investment firms and fund management companies referred to in the legal provisions mentioned
- as a consequence of section 18 of the Act on the Amalgamation of Deposit Banks, the regulations issued by FIN-FSA on the basis of section 93, subsection 1 of the CIA in order to apply section 49 of the CIA also oblige the central body of the amalgamation of the deposit banks referred to in the legal provisions mentioned
- by virtue of section 30 a, subsection 3 of the MFA, FIN-FSA may issue regulations on fund management companies’ risk management systems and other internal control as well as on requirements for
corporate governance

- by virtue of section 16 of the Act on Supervision of Financial and Insurance Conglomerates, FIN-FSA may issue regulations for parent companies of the conglomerates on internal control and risk management arrangements and requirements for corporate governance.
5 LIQUIDITY STRATEGY

5.1 Liquidity strategy

(1) Supervised entities shall have a liquidity strategy approved by the Board of Directors (Board) and detailed policies, processes and systems for the identification, measurement, management and control of liquidity risk. The strategy shall lay down the general framework for establishing and maintaining risk management and provide the supervised entity’s long-term risk-taking policy.3

(2) Liquidity risk strategies, policies, processes and systems shall be tailored to the supervised entity’s business lines, entities and currencies used.4

(3) Finnish branches of foreign credit institutions shall on request submit to FIN-FSA the general principles for liquidity risk management approved by the Board or a corresponding body of the credit institution, detailing the liquidity arrangements and control methods of the branch.5

(4) The liquidity risk management shall also include intraday liquidity management, to ensure that supervised entities maintain liquidity buffers at adequate levels.6

(5) Supervised entities shall have a liquidity strategy and control methods proportionate to the entity’s scope of operations, complexity, risk profile and risk-taking policy confirmed by the Board, which shall be communicated to all relevant business lines in the entity.7

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3 See point 14 of Annex V to Directive 2006/48/EC.
4 See point 14 of Annex V to Directive 2006/48/EC.
5 See section 166 m, subsection 2 of the CIA.
6 See point 14 of Annex V to Directive 2006/48/EC.
7 See point 14 a of Annex V to Directive 2006/48/EC and recommendation 1 in the CEBS Advice.
(6) The risk-taking strategy shall take account not only of the normal operating environment but also the special requirements of a persistent market disruption. The strategy shall be updated regularly and whenever required by significant changes.\(^8\)

(7) The strategy and policies shall include adequate mechanisms for allocation of liquidity costs, benefits and risks.\(^9\)

(8) Supervised entities should, for every business line, take liquidity management costs, benefits and risks into account in pricing their products, measuring performance and in their approval procedure for new products or services. In the assessment of costs, benefits and risks related to liquidity risk management, account should be taken of short and long term and indirect costs, characteristics of different balance sheet items in relation to market liquidity risk and other essential factors, such as certainty of access to funding sources.\(^10\)

(9) In allocating costs and benefits to different business lines, it should be ensured that there is no conflict of interest between incentive schemes used by the management and the risk-taking policy as set down in the supervised entity’s liquidity strategy.\(^11\)

5.2 Diversified funding base

(10) Funding sources of supervised entities shall be well diversified with funding sufficiently dispersed across maturities. Supervised entities shall regularly review the implementation of their funding plan and monitor factors affecting the availability of funding.\(^12\)

(11) Supervised entities should avoid excessive dependence on central bank funding as a principal source of liquidity. They should also monitor large concentrations and aim to diversify liquid assets, for example by issuer, maturity and currency. The importance of diversifying assets is underlined in the case of less liquid assets.

(12) Supervised entities should proportion their funding diversification goals to the rest of their financial planning process. In the funding plan, account should be taken of the influence of market conditions on the availability of different funding sources.

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\(^8\) See point 21 of Annex V to Directive 2006/48/EC.
\(^9\) See point 14 of Annex V to Directive 2006/48/EC.
\(^10\) See recommendation 2 in the CEBS Advice.
\(^11\) See recommendation 2 in the CEBS Advice.
\(^12\) See point 18 of Annex V to Directive 2006/48/EC and recommendation 17 in the CEBS Advice.
(13) To ensure diversified funding, supervised entities may set limits related to the liquidity risk management as applied to individual depositors or depositor types, the relation between secured and unsecured funding, financial instruments, currencies used and geographical areas.

(14) Supervised entities should maintain preparedness to ensure access to financial instruments and funding sources in compliance with their liquidity strategy. The preparedness should involve supervised entities’ allocation of staff resources and assets to the systems and processes required in order to utilise different market segments. The supervised entities should also ensure that the necessary legal documentation and IT systems are provided in an appropriate manner.¹³

(15) Supervised entities should maintain close and effective customer relations with parties on whose behavior the entities’ liquidity situation is dependent to a significant degree. The entities should aim to assess the reliability of normal funding sources in a general market disruption and when an entity’s own creditworthiness and reliability are questioned.

(16) Supervised entities should identify funding sources that they assess can help them cope with serious market disruptions and with their own particular liquidity problems. Depending on the nature, severity and duration of a disruption, the entities should employ at least the below listed measures for improving their funding position and regularly assess and test the effectiveness of these measures:¹⁴

- increasing deposits
- extending maturities of obligations
- issuing new debt instruments
- transferring assets within the group
- issuing new equity
- securitising receivables
- selling or accepting repurchases of highly liquid assets
- utilisation of credit facilities
- central bank funding.

¹³ See recommendation 5 in the CEBS Advice.
¹⁴ See recommendation 8 in the CEBS Advice.
6 ESTABLISHMENT AND MAINTENANCE OF LIQUIDITY RISK MANAGEMENT AND CONTROL

6.1 Responsibilities of the Board

(1) The Board shall adopt a liquidity strategy and general principles for liquidity risk management and control.\(^{15}\)

(2) The Board shall regularly review the liquidity strategy and update it in accordance with the supervised entity’s business plan, economic and financial position and in the event of a significant change in the operational environment.\(^{16}\)

(3) The Board should ensure that the managing director and other senior management adhere to the liquidity strategy and principles of risk management and control. The Board should regularly review the level of risk management and control.

(4) The Board should ensure that the managing director, other senior management and the staff responsible for liquidity risk management and control have the necessary knowledge and systems for measuring and monitoring all manifestations of liquidity risk.

(5) The Board should ensure that it gets up-to-date information on the supervised entity’s liquidity position and realised or expected liquidity problems and disruptions.

(6) Reporting to the Board should at least include information on the following items:\(^{17}\)

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\(^{15}\) See points 2 and 14 of Annex V to Directive 2006/48/EC.

\(^{16}\) See points 2 and 14 a of Annex V to Directive 2006/48/EC.

\(^{17}\) See chapter 8 of this standard for details on the liquidity buffer.
• developments of funding costs
• developments of funding deficits
• concentrations of funding sources
• significant and repeated limit overruns
• significant changes in volume and composition of the liquidity buffer
• possible exhaustion of alternative funding sources.

(7) The Board should ensure that the managing director and other senior management take adequate measures in case of a disruption.

### 6.2 Responsibilities of the managing director and other senior management

(8) The managing director and other senior management are responsible for practical implementation of the liquidity strategy and for establishing and maintaining liquidity risk management as part of the supervised entity’s internal control.\(^\text{18}\)

(9) The managing director and other senior management should approve procedures for identifying, measuring, monitoring, controlling and mitigating liquidity risk.

(10) The managing director and other senior management should specify the responsibilities of units, bodies and persons in the organisation of liquidity risk management and control, so that the tasks are sufficiently separated from each other to prevent conflicts of interest.

(11) The managing director and other senior management should take into account legal, regulatory or operational constraints on asset transferability between business units or states.\(^\text{19}\)

(12) The managing director and other senior management are responsible for that the supervised entity’s employees are familiar with the core principles of the liquidity strategy and risk control. All business units crucial to the liquidity situation should have adequate knowledge of the liquidity strategy and the principles and methods of risk control. Persons responsible for liquidity risk management should be in regular contact with the employees monitoring the market situation and other persons with essential market information.\(^\text{20}\)

\(^{18}\) See recommendation 1 in the CEBS Advice.

\(^{19}\) See recommendation 4 in the CEBS Advice.

\(^{20}\) See recommendation 4 in the CEBS Advice.
4 Capital adequacy and risk management
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(13) The managing director and other senior management should follow financial market events and trends that might have significant, unexpected or complex effects on the liquidity risk management.

6.3 Establishment and maintenance of liquidity risk management at group level

(14) A supervised entity’s liquidity risk control shall be arranged so that it covers not only group level risk management but also risks in individual legal units incl. branches within the group. When deciding on centralising or decentralising the risk control system, the supervised entity shall consider the significance of each business unit in terms of liquidity risk.21

(15) The risk control should be based on realistic assumptions about the transferability of liquid assets and collateral. The supervised entity should review not only external factors, such as the legal, regulatory and tax aspects, but also the effects of the entity’s internal constraints on the free transferability of assets and collateral between units in the group. The supervised entity should take into account the necessary practical arrangements for executing the transfers, and expected delays. The entity should have procedures in place for transferring assets and collateral in support of a unit in the group.22

(16) In the establishment and maintenance of risk management, it must be borne in mind that, regarding liquidity risk, the functions for risk control, compliance and internal audit shall be independent non-business functions.23

(17) The supervised entity should ensure that, as an organisation, it has sufficient knowledge of the operational environment in the states within its scope of operations, as special characteristics of the environment may have a potential effect on liquidity risk. Such matters are, for example, the regulation regarding problem banks, the deposit protection scheme and the terms for central bank funding.24

21 See points 2 and 14 of Annex V to Directive 2006/48/EC.
22 See recommendation 4 in the CEBS Advice.
23 See points 2 and 14 of Annex V to Directive 2006/48/EC and recommendation 3 in the CEBS Advice.
24 See recommendation 3 in the CEBS Advice.
7 LIQUIDITY RISK MANAGEMENT PROCEDURES

(1) Supervised entities must have an effective process in place for liquidity risk identification, measurement, monitoring and control. The entities shall be able to comprehensively assess cash flows related to balance sheet assets and liabilities and off-balance sheet commitments over different time horizons and possible reputation risk effects on the liquidity position.\(^{25}\)

7.1 Risk identification

(2) Supervised entities must identify the operationally significant liquidity risks in all legal units and functions.\(^{26}\)

(3) Supervised entities’ liquidity needs and liquidity sources largely depend on the entity’s business operations and product portfolio, its balance sheet structure and the maturity structure of its balance sheet items. The entity must assess the liquidity risk effects of all significant balance sheet and off-balance sheet items incl. derivatives and other commitments.

(4) Supervised entities should take into account the interaction between funding risk and market liquidity risk. The entities should also identify and take into account the connections between liquidity risk and other risks. For example, interest rate risk and credit risk, operational risk and reputation risk may affect the supervised entity’s liquidity position. Supervised entities should monitor events that might affect the prevailing opinion in the market about the entity’s economic situation.

(5) Market participants investing in financial market instruments in a crisis situation may require higher yields for their risk taking or provide refinancing

\(^{25}\) See point 15 of Annex V to Directive 2006/48/EC.
\(^{26}\) See point 14 of Annex V to Directive 2006/48/EC.
only for shorter terms than before. A weak market liquidity situation may affect sales of receivables and make the supervised entity more dependent on the financial market. Sales of assets at unfavourable prices in such circumstances may weaken general confidence in the entity and its possibilities to raise funding from the market.

7.1.1 Cash flows related to balance sheet assets and liabilities

(6) For the purposes of liquidity risk management, supervised entities should prepare sufficiently detailed cash flow projections, taking into account their most important counterparties’ expected operations in changed circumstances.27

(7) Supervised entities should aim to assess the stability of their funding sources, particularly in market disruptions. The entities should take into account factors affecting the life or stickiness of deposits, such as the interest rate level, sensitivity to changes in interest rates, and functioning of deposit protection. As regards deposits of large customers, the entities should assess the probability of renewed funding in exceptional market situations customer by customer.

(8) Supervised entities providing money transmission services should take into account the impact of customer payments on the volume of deposits and use of credit limits.

7.1.2 Liquidity risk related to off-balance sheet items

(9) Supervised entities shall identify, monitor and manage cash flows related to off-balance sheet items and other commitments.28

(10) Supervised entities should assess the impact of possible utilisation of unused credit limits, taking into account the nature of the commitment and the counterparty’s creditworthiness.

(11) Supervised entities should aim to assess liquidity-affecting events related to different contracts, if such events may result in realisation of conditional commitments involving the entities.29 The entities must take into account that weakened economic circumstances may lead to increased utilisation of credits granted. In addition, a deterioration of the creditworthiness of providers of guarantees, or of issuers of financial instruments to be used as collateral for credits acquired as liquidity support for supervised entities may weaken the

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27 See recommendation 13 in the CEBS Advice.
28 See point 15 of Annex V to Directive 2006/48/EC.
29 See recommendation 8 in the CEBS Advice.
entities’ liquidity position.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010
(12) Supervised entities should monitor risks related to the entire terms of commitments and caused by recourse conditions in asset sales or by securitisation arrangements. 30

7.1.3 Foreign currency activities

(13) Supervised entities must consider the significance of foreign currencies in their core operations and the limitations caused by currency positions in exceptional circumstances. 31

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010
(14) Supervised entities should assess the need for foreign currency denominated funding and specify acceptable currency imbalances. In the assessment of imbalances, account should at least be taken of the following factors:

- supervised entity’s capacity to raise funding from the currency market
- possibility to raise foreign currency denominated funding from local markets
- possibility to transfer excess liquidity between different currencies, states and legal units.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010
(15) Supervised entities should assess the risks caused by the use of short-term foreign currency denominated funding for the financing of euro receivables and the use of euro denominated funding for the financing of foreign currency denominated receivables. The entities should take into account the currency volatility impact on the liquidity position.

7.2 Measurement methodologies

(16) Supervised entities shall apply a variety of measurement methodologies to assess balance sheet structure and expected changes in liquidity risk. 32

(17) Through the methods used, supervised entities should aim to identify the vulnerabilities in their financial position over different time horizons in normal and exceptional circumstances. The entities should proportion cash outflows to their normal funding sources and take into account funding deficits over

30 See recommendation 8 in the CEBS Advice.
31 See point 14 of Annex V to Directive 2006/48/EC.
32 See point 15 of Annex V to Directive 2006/48/EC.
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(18) The measurement methods should be proportional to the nature and versatility of the supervised entity’s operations and the risk situation. The measurements should cover the cash flows caused by all significant receivables, obligations, off-balance sheet commitments and operations and other effects on the entity’s liquidity position. \(^{33}\)

(19) Supervised entities should aim to measure funding imbalances and related risks proactively. The entities should assess both capital and interest cash flows in different scenarios and aim to ensure access to funding to cover the related risks.

(20) Supervised entities should aim to ensure that their cash flow projections are well-founded, considering the nature of the entity’s operations. The projections should be checked regularly. In particular, the maturity of commitments and off-balance sheet items and the cash flow imbalances should be taken into account. \(^{34}\)

(21) Supervised entities may introduce proactive measurements, the purpose of which is to detect a weakened liquidity situation and changes in funding needs. Based on the projections made available through the measurements, the operating management should take measures to mitigate the risks.

(22) So-called early warning indicators may be used in monitoring, for example, changes in the following circumstances:

- rapid growth in receivables
- concentrations of receivables or commitments
- currency imbalances
- average maturity of commitments
- repeated internal limit overruns
- negative changes in performance indicators describing the supervised entity’s general economy
- negative publicity
- weakening of credit rating
- increased cost of retail or wholesale market funding
- widening credit default swap (CDS) spreads
- requirements of additional collateral by counterparties
- terminated or decreased credit limits of correspondent banks
- increasingly shrinking deposits

\(^{33}\) See recommendation 13 in the CEBS Advice.

\(^{34}\) See recommendation 13 in the CEBS Advice.
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- early redemptions of certificates of deposit
- increasing difficulties in issuing commercial paper.

7.3 Risk mitigation

(23) Supervised entities shall introduce a variety of risk mitigation tools, such as limits and liquidity buffers accumulated in support of the financial position. The risk mitigation tools shall be reviewed at regular intervals.\(^{35}\)

(24) When using netting systems as a risk mitigation tool, the supervised entities should consider the legal and operational risks related to such arrangements.\(^{36}\)

(25) The limits should be proportioned to the scope and nature of the supervised entity’s operations, the services and products offered and the currencies used in the entity’s operations. Limits should be applied in different business units to manage the normal intraday liquidity situation.

(26) Limits may, for instance, be set for the maximum accumulated cash flow imbalance. The limit may be based on, among other things, estimates of the realisation of credit limits and other commitments over different time horizons.

7.4 Monitoring systems

(27) Supervised entities shall have a reliable system for collecting information and reporting to the management. The system shall provide the Board, managing director and other senior management with timely and proactive information on the entity’s liquidity situation.\(^{37}\)

(28) Based on the monitoring systems, the supervised entities shall be able to calculate the liquidity position in all currencies significant to the business and at group, subsidiary and branch level in all countries where operations are carried out.\(^{38}\)

(29) The monitoring systems should cover the sources of liquidity risk related to the operations as a whole incl. off-balance sheet items and new products and services. The information reported to the management should be used in the daily risk control of compliance with internal instructions, manuals and

\(^{35}\) See point 18 of Annex V to Directive 2006/48/EC.
\(^{36}\) See recommendation 7 in the CEBS Advice.
\(^{37}\) See point 14 of Annex V to Directive 2006/48/EC.
\(^{38}\) See point 14 of Annex V to Directive 2006/48/EC.
limits.

Recommendation 
Issued on 9 December 2010
Valid from 31 December 2010

(30) The information gained from the monitoring should be sufficiently detailed for crisis management purposes, and it should include factors affecting the financing position over different time horizons.

Recommendation 
Issued on 9 December 2010
Valid from 31 December 2010

(31) The managing director and other senior management should see to it that the supervised entity has uniform reporting instructions specifying the contents and frequency of reports to be submitted to the Board, managing director and other operating management or other administrative bodies. The entity should also specify the parties responsible for preparing the reports.

Recommendation 
Issued on 9 December 2010
Valid from 31 December 2010

(32) In order to monitor a possible tightening of the liquidity situation and possible limit overruns, the supervised entity should, on the basis of the reported information, compare each liquidity position to its limits. There should be separate instructions for risk limit overruns, according to which non-compliance cases should be addressed in the entity's decision-making and risk control bodies.

7.5 Management of intraday liquidity risk

Binding 
Issued on 9 December 2010
Valid from 31 December 2010

(33) Supervised entities must have a functioning process for monitoring and control of intraday liquidity risk.39

Justifications 
Issued on 9 December 2010
Valid from 31 December 2010

(34) The supervised entity must manage its intraday liquidity risk and positions to be able to fulfil its obligations related to money transmission and clearing and settlement operations. Through efficient managing of its intraday liquidity risk, the entity contributes to efficiently and smoothly functioning money transmission and clearing and settlement systems. Faulty money transmission and failure to execute orders can weaken customers’ confidence in the supervised entity and further weaken the liquidity situation. In addition, faulty money transmission can weaken customers’ repayment capacity and cause changes in the volume and structure of funding needed by the supervised entity.

Justifications 
Issued on 9 December 2010
Valid from 31 December 2010

(35) Particularly in supervised entities providing money transmission and custody services, the volume and timing of cash flows may be subject to large uncertainty factors due to the volatility of the entity’s customer payments. The intraday timing of cash flows may also entail uncertainties related to the timing of customer payments.

39 See point 14 of Annex V to Directive 2006/48/EC.
Regardless of whether supervised entities use net or gross payment and settlement systems, they should carefully monitor the intraday liquidity situation.  

Through intraday liquidity management, supervised entities should aim to achieve the following objectives:

- The entities should measure the gross amounts of intraday cash inflows and outflows and aim to assess the timing of cash flows and the possible intraday funding deficits.
- The entities should continually monitor the liquidity situation to be able to assess the need for additional funding, manage cash outflows and allocate intraday liquidity to their different units and customer companies, incl. credit and financial institutions.
- The entities should have practical arrangements in place to ensure intraday funding.
- The entities should be able to manage and introduce collateral needed for raising intraday liquidity.
- Through efficient coordination between their different functions, the entities should ensure that the timing of cash outflows do not get into conflict with other objectives of their operations.
- The entities should have contingency funding plans with specified procedures and action models in place in case of an intraday liquidity crisis. In a contingency funding plan, the entities should pay special attention to the scope and timing of liquidity problems caused by disruptions in money transmission and clearing and settlement operations.

Supervised entities should have the necessary instructions, procedures and systems to achieve the above-mentioned objectives in different market segments and currencies. The intraday liquidity management should be proportioned to the scope and nature of the entity’s business operations. It should also be taken into account to what extent the entity participates in money transmission and clearing and settlement operations and whether it serves as a correspondent or custodian bank.

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40 See recommendation 11 in the CEBS Advice.
41 See recommendation 12 in the CEBS Advice.
42 See recommendation 10 in the CEBS Advice.
8

LIQUIDITY BUFFER

8.1 General

(1) Supervised entities shall have a buffer of unencumbered liquid assets in case of a quick and unexpected weakening of the liquidity situation. There shall be no legal or other operational constraints on using the assets in the buffer to support the liquidity situation.\(^{43}\)

(2) In the liquidity risk management, legal, regulatory or operational constraints on asset transferability between operationally significant business units or states should be considered. Decisions on where to locate the liquidity buffer should reflect the group structure and business operations of the supervised entity so that operational impediments to using the assets in the buffer can be minimised.\(^{44}\)

(3) Finnish branches of foreign credit institutions authorised in a non-EEA state must always have at least EUR 5 million in Finland for operating the branch.\(^{45}\)

(4) In the general principles of liquidity risk management of branches of foreign credit institutions, as referred to above in paragraph 3 of chapter 5.1, there must be a provision on a liquidity buffer for Finnish business operations to be held on the balance sheet of the branch. The buffer shall take into account the division of liabilities into different currencies.\(^{46}\)

(5) Supervised entities should primarily apply the 1-month survival period referred to in chapter 8.3 when specifying the adequate liquidity buffers for the chosen stress scenarios.

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\(^{43}\) See points 14 and 17–18 of Annex V to Directive 2006/48/EC.

\(^{44}\) See guideline 6 of the CEBS Liquidity Buffer Guidelines.

\(^{45}\) See section 166 m, subsection 2 of the CIA.

\(^{46}\) See section 166 m, subsection 2 of the CIA.
(6) The purpose should be to use the liquidity buffer only in exceptional and crisis situations. The liquidity buffer should be at the supervised entity’s disposal immediately for covering unexpected liquidity deficits so that the entity need not adjust its operations significantly. It should be possible to sell the liquid assets or use them as collateral for fund raising from the market or central bank so that use of the asset does not lead to excessive losses or impairments.

(7) Supervised entities should assess their short and long-term funding needs according to the special characteristics and market circumstances of their business operations. In addition to an entity’s accumulation of a liquidity buffer for a short and medium-term (1 week and 1–2 month) survival period, it should include in its up to 1-year operational plans preparations for long-term liquidity problems through other measures. These measures include the introduction of new funding sources, adjustment of operations, changes in business model and preparation of continuity plans.\(^47\)

### 8.2 Stress tests

(8) The size of the liquidity buffer should be proportioned to the supervised entity’s risk-taking policy. In assessing the adequacy of the buffer, the expected duration and severity of a crisis and the cash flow from asset sales or granting of assets as collateral should be taken into account.

(9) In order to establish an adequate liquidity buffer, the supervised entity should perform stress tests on the basis of different idiosyncratic and market specific risk scenarios and scenarios combining them.\(^48\)

(10) In idiosyncratic scenarios it is assumed that market confidence in the supervised entity has weakened significantly, thus influencing the availability and use of all funding sources of the entity. A considerable weakening of the entity’s credit rating can be considered as such an event.

(11) The scenario should assume that rollovers of unsecured wholesale funding are not possible and that some retail deposits will be withdrawn. The effect on secured funding can be assumed to be smaller. A significant weakening of the credit rating can trigger demands of additional collateral, which also affects the amount of unencumbered liquid assets.

(12) The assumptions in market specific scenarios concern negative effects caused by the general economic climate, such as simultaneous exhaustion of several funding sources, general uncertainty about the capital adequacy of

\(^{47}\) See paragraph 36 of the CEBS Liquidity Buffer Guidelines.

\(^{48}\) See guideline 2 of the CEBS Liquidity Buffer Guidelines; scenarios are also dealt with in chapter 9.1.
financial sector participants, decline in the value of financial assets or uncertainty about asset values.

(13) In market specific scenarios it should be assumed that the values of liquid assets decline and that access to wholesale funding is reduced, refinancing becomes more difficult and the maturity of available funding shortens. At the same time, liquidity needs related to off-balance sheet commitments are assumed to grow significantly.

(14) Changes in intraday liquidity risk, such as changes in the supervised entity’s funding position due to changes in customers’ clearing and settlement needs, should also be taken into account in assessing buffer adequacy.

8.3 Liquidity buffer composition

(15) Depending on the time horizon, stress situations can be divided into short and long-term disruptions. A shorter but serious disruption may last for one to two weeks. The duration of a longer and more persistent disruption may be one to two months.\(^{49}\)

(16) The liquidity buffer should be composed of cash and highly liquid assets, which should be used for covering shorter-term (1 week) funding deficits. The buffer may include other liquid assets for covering funding deficits over the longer survival period (1–2 months).\(^{50}\)

(17) Supervised entities should have in place a liquidity buffer composed of cash and central bank eligible and highly liquid market assets in case of the worst situations described in the liquidity scenarios. For example, low-risk highly credit rated government bonds and covered bonds that are liquid in the market are highly liquid assets that can be included in the core of the liquidity buffer.\(^{51}\)

(18) Cash that is unavailable due to normal business requirements, such as cash held in ATMs, should not be considered eligible for the liquidity buffer. Sight deposits held in the interbank market should be treated in compliance with assumptions made in the scenarios.

(19) To remedy longer-term liquidity problems, a wider set of assets is eligible for the liquidity buffer, if the supervised entity can demonstrate their liquidity also in exceptional market circumstances. Assets’ eligibility as central bank

\(^{49}\) See guideline 3 of the CEBS Liquidity Buffer Guidelines.
\(^{50}\) See guideline 4 of the CEBS Liquidity Buffer Guidelines.
\(^{51}\) See guideline 4 of the CEBS Liquidity Buffer Guidelines.
collateral cannot by itself be considered proof of liquidity of the assets. Issuer specific factors (issuer’s credit rating, supervised entity’s relative significance and activity in the market in question), issuance specific factors (maturity and size of issuance) and institutional factors (presence of market makers, trading in a deep and well-functioning market and diversified investor base) can be important when specifying the liquidity of an asset in normal and exceptional circumstances. The market eligibility of assets in the liquidity buffer is also affected by how easily the characteristics and risk exposure of the assets can be determined and how effortlessly and certainly their value can be assessed.

Application guideline
Issued on 9 December 2010
Valid from 31 December 2010

(20) To guard against short-term disruptions, supervised entities may in the liquidity buffer include all their reserves held at the central bank, that is including assets held to meet the minimum reserve requirement. As regards time horizons beyond one month, only liquid assets exceeding the minimum reserve obligation can be included in the liquidity buffer.

Application guideline
Issued on 9 December 2010
Valid from 31 December 2010

(21) The supervised entity should aim to be continually active in markets where assets included in its liquidity buffer are traded. Procedures, agreements and IT systems for the use of funding sources (such as repos or securitisation) should be established and tested to ensure the availability of funding.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(22) Supervised entities whose operations largely involve different currencies should hold assets denominated in those currencies in the liquidity buffer.\(^{52}\)

8.4 Management of collateral

(23) Because of possible crises, supervised entities must regularly monitor the amount of assets used as collateral. The amount of unencumbered collateral shall be monitored in respect of the different units of the group and the countries where the supervised entity operates. In particular, the entity shall monitor the size of the unencumbered portion of the collateral and the portion of the collateral that is eligible for central bank funding.\(^{53}\)

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(24) Supervised entities should have policies approved by the senior management in place for estimating their collateral needs over different time horizons. The level of unencumbered collateral should be monitored for different units in the group, for different currencies and to check how collateral is used over intraday and longer time horizons.\(^{54}\)

\(^{52}\) See guideline 6 of the CEBS Liquidity Buffer Guidelines.

\(^{53}\) See point 16 of Annex V to Directive 2006/48/EC.

\(^{54}\) See recommendation 9 in the CEBS Advice.
(25) Supervised entities should estimate legal and operational constraints on the eligibility of assets used as collateral for central bank funding and funding provided by other significant funding sources. The entity should aim to diversify the collateral used and take into account, among other things, the impact of concentration of funding and fluctuation of prices.
9 CONTINGENCY ARRANGEMENTS

9.1 Future scenarios

9.1.1 Stress testing

(1) Supervised entities shall regularly perform stress tests on the basis of different idiosyncratic and market specific risk scenarios and scenarios combining them.55

(2) Through stress tests, supervised entities shall aim to identify possible liquidity constraints, control instructions on risk management, ensure compliance with an approved risk profile in risk situations and prepare contingency funding plans to address liquidity risk.56

(3) Through stress tests, supervised entities should clarify the impact of different risk scenarios on the liquidity situation at group level and for individual business units and business lines. The entities should also consider the need for separate stress tests in business units such as subsidiaries and branches. In the tests, account should be taken of scenarios over different time horizons, including intraday transactions.

(4) The scope and frequency of testing may be proportioned to the supervised entity’s size and liquidity risk. The entity should be prepared to increase the number of stress tests in exceptional circumstances.

9.1.2 Scenarios and assumptions

(5) To ensure that large funding and market liquidity risks are taken into account, the scenarios shall reflect the nature of supervised entities’ operations and attendant vulnerabilities. Risks related to different functions, products and funding sources shall be included in the scenarios. Risks related

56 See point 21 of Annex V to Directive 2006/48/EC.
4.4b Management of liquidity risk

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(6) The connection between weakening market liquidity and the supervised entity’s funding position should be taken into account in preparing the scenarios, particularly in entities that are dependent on certain funding sources.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(7) In the tests performed, account should be taken of delays due to clearing and settlement operations and cross-border transactions and of delays due to possible system disruptions in transferring assets between the units within the group.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(8) The testing should consider assumptions of possible effects of measures making the crisis worse, that is measures taken by other market participants and by the supervised entity itself.

Application example
Issued on 9 December 2010
Valid from 31 December 2010

(9) Scenarios can be developed using, for example, the following variables:

- disruptions in the interbank market
- exit of a significant market participant
- weakening availability of wholesale market funding
- cost increases in wholesale market funding
- availability of central bank funding
- depreciation of foreign currencies crucial to the supervised entity’s funding and availability of foreign currency funding
- weakening credit rating of the supervised entity
- sudden increase in the use of credit limits
- rapid change in deposit structure or termination of deposits.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(10) Supervised entities should regularly assess the scenarios prepared to ensure that they reflect changes in the market situation and in the scope and diversity of the entity’s operations as well as the results of stress tests.

Use of test results in management

(11) The managing director and other senior management of the supervised entity shall regularly assess the scenarios forming the basis of the stress tests, the scenario assumptions and the results of the tests performed. The selected scenarios shall be carefully documented and they shall be treated in conjunction with the test results.\(^{58}\)

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\(^{57}\) See points 19–20 of Annex V to Directive 2006/48/EC and recommendation 14 in the CEBS Advice.

\(^{58}\) See point 20 of Annex V to Directive 2006/48/EC and recommendation 14 in the CEBS Advice.
4 Capital adequacy and risk management
4.4b Management of liquidity risk

(12) Supervised entities shall revise core strategies, internal instructions and liquidity limits when this is required by the final results of tests performed on the basis of the scenarios.  

(13) Vulnerabilities detected as a result of stress tests and decisions on corrective measures should be reported to the Board of the supervised entity.

(14) Supervised entities should take the stress test results into account in their strategic planning, development of risk management procedures and setting of internal limits.

9.2 Contingency funding plan

9.2.1 Structure of the plan and specification of authority

(15) Supervised entities shall have a written contingency funding plan approved by the Board in case of exceptional liquidity situations.

(16) The contingency funding plan shall include appropriate procedures and implementation measures to help the supervised entity cope with liquidity problems. The plans shall be tested regularly and updated on the basis of results of alternative forward-looking scenarios.

(17) The contingency funding plan should provide instructions on specific procedures that will help the management of the supervised entity make timely and well-founded decisions on the introduction of stand-by funding sources. The authority to introduce procedures in compliance with the contingency funding plan and the contacts that need to be kept between business lines and units should be clearly specified.

(18) The contingency funding plan should consider the continuous need for liquidity risk management, the results of scenario analyses and the assumptions used in stress tests. In the plan, several time horizons should be used, including intraday transactions, and the delay in availability of each funding source should be taken into account.

59 See point 21 of Annex V to Directive 2006/48/EC.
60 See point 22 of Annex V to Directive 2006/48/EC.
61 See point 22 of Annex V to Directive 2006/48/EC.
Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(20) The contingency funding plan should include a clear description of alternative stand-by funding sources that can be flexibly introduced to ensure the supervised entity’s liquidity position. The plan should also include an assessment of the amounts of funding available from different sources.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(21) The contingency funding plan should take into account the nature and scope of the supervised entity’s operations, its risk-taking policy and relative significance to the whole financial system.

9.2.2 Information

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(22) In case of exceptional circumstances, supervised entities should have an approved information plan, according to which clear and updated information can be timely distributed within the entity and to external interested parties.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(23) The information plan should specify how the supervised entity is to inform FIN-FSA of the liquidity situation in a funding crisis. In addition, information should be communicated to external parties whose operations can be crucial to the supervised entity’s liquidity situation.

9.2.3 Preparation of the contingency funding plan

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(24) In the preparation of the contingency funding plan, the supervised entity should at least take the following factors into account:

- an exceptional market situation’s impact on the supervised entity’s possibilities to sell or securitise its receivables
- the asset market situation’s impact on the availability of funding
- multiplier and reputation effects of using a backup plan
- legal, regulatory and operational constraints on transferring liquidity between units and business lines in the group and across borders.

Application guideline
Issued on 9 December 2010
Valid from 31 December 2010

(25) When central bank funding is included in the contingency funding plan, different forms of central bank funding, required collateral, operational procedures for acquiring the funding and possible reputation risks related to central bank funding should be taken into account.

Application guideline
Issued on 9 December 2010
Valid from 31 December 2010

(26) Supervised entities should specify the critical payments in their daily operations and arrange their commitments according to urgency. Commitments related to customer transactions of the supervised entity and intraday commitments related to money transmission and clearing and

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62 See recommendation 8 in the CEBS Advice.
settlement operations should also be considered in the contingency funding plan. In the plan, simultaneous disruptions in different money transmission and clearing and settlement systems should be taken into account.

(27) Supervised entities should see to it that the relevant employees are familiar with the procedures for transferring assets between units and business lines and with possible limitations of such transfers.

### 9.2.4 Testing and maintenance of the plan

(28) Supervised entities shall regularly assess and test contingency funding plans to ensure their efficiency and functionality.\(^{63}\)

(29) In testing the plan, at least the following should receive special attention:

- tasks and responsibilities should be appropriate and clear
- contact information should be up to date
- cash and collateral should be transferable across borders and between units
- necessary legal and other documentation related to the activities should be ready for swift execution of the plan.

(30) The supervised entity’s managing director and other senior management should go through the results of each test and ensure that the necessary corrective measures are taken. The managing director and other senior management should also assess and update the plan and present it to the Board for approval at least once a year, or more frequently if required by the market circumstances.

(31) Supervised entities should ensure that the contingency funding plan to address liquidity is compatible with the entity’s other business continuity plans and that it is realisable in connection with the implementation of the other plans. Sufficient coordination between the functions managing the contingency funding plan for liquidity and the business continuity plans should be ensured.

(32) The contingency funding plan should be easily available, also outside of office hours, to persons involved in the liquidity risk management. In case of a crisis, the contingency funding plan should be stored not only in the document archive at the supervised entity’s headquarters but also in the different operating units.

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\(^{63}\) See points 21–22 of Annex V to Directive 2006/48/EC and recommendation 15 in the CEBS Advice.
DISCLOSURE OF INFORMATION

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(1) In the notes to the financial statements or in the management report, supervised entities should disclose information on the basis of which market participants can reliably assess the entity’s liquidity risk management system and liquidity position.\(^{64}\)

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(2) The supervised entity should disclose how the liquidity risk management is organised and how the tasks and responsibilities of different administrative units, business units and functions are arranged.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(3) The information to be disclosed should include a report of the extent to which liquidity risk management concentration or diversification is brought into effect in the supervised entity's organisation. A concentration report should be provided particularly regarding fund raising, setting of limits and lending within the group.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(4) Supervised entities should regularly disclose quantitative information on their liquidity position. The information to be disclosed could, for example, include the following elements:

- size and composition of the liquidity buffer
- values of internal control limits and related preset alarm limits
- distribution of balance sheet and off-balance sheet items over different time horizons and related imbalances.

Recommendation
Issued on 9 December 2010
Valid from 31 December 2010

(5) Supervised entities should provide qualitative descriptions of, for example, the following factors influencing the liquidity risk management:

- diversification of funding sources and other risk mitigation methods
- tools used for measuring liquidity position and liquidity risk
- consideration of the market liquidity situation
- stress testing and related scenarios

\(^{64}\) See recommendation 18 in the CEBS Advice.
• contingency funding plan addressing liquidity
• liquidity buffer strategy
• legal and regulatory constraints on transfers of liquidity within the group
• description of internal liquidity reporting.
REPORTING TO FIN-FSA

(1) Arrangements of liquidity risk management and control do not involve a separate obligation of reporting to FIN-FSA.

(2) Liquidity risk should be reported according to the FIN-FSA standard RA4.7 on reporting of liquidity risk.
FURTHER INFORMATION

Please find the necessary contact information in the list of Persons in charge of standards on the FIN-FSA website. For further information, please contact:

- Prudential Supervision, Market and Operational Risks, tel. +358 10 831 5208.