

FIRST PART OF CEBS'S TECHNICAL ADVICE TO THE EUROPEAN COMMISSION ON LIQUIDITY RISK MANAGEMENT: SURVEY OF THE CURRENT REGULATORY FRAMEWORKS ADOPTED BY THE EEA REGULATORS

SUMMARY OF NATIONAL RESPONSES

DEFINITION OF LIQUIDITY RISK: REGULATORY AIMS

What explicitly is your liquidity regime trying to achieve (e.g. a defined maximum probability of failure, survival to a fixed horizon, or adherence to sound/best practices)? If the underlying aim is clearly defined, please provide the exact language - (Q 5)

Responses can be grouped in to three major categories of underlying aims as well as combinations of them as follows:

- "Credit institutions ensure that they are able to meet payment obligations at all times at a reasonable cost" (AT, IT, DE, NL);
- "Survival to a fixed horizon" (SI, DK, CY, NL (implicitly, in the context of quantitative requirements));
- "Adherence to best practices" (SK, SE, NO, MT, LU, IE, EE, RO, PL, LT, BG);
- Combinations of aims:
 - "Meet payment obligations and adherence to best practices" (PT, LV, HU, ES);
 - "Survival to a fixed horizon without destabilising asset markets or requiring extraordinary central bank funding" (UK);
 - "Survival to a fixed horizon and adherence to best practices" (BE (sufficient liquidity buffers), GR, FR, IC);
 - "Minimize systemic risk and adherence to best practices" (CZ);
 - "Limiting excessive risk taking and adherence to best practices" (FI).

In addition, some responses refer to the following:

- fulfilment of pillar 2 requirements, e.g. supervisory assessment of the risks and management practices of the institution (BG, BE);
- preparation of rules for the banks' normal operations under a "going concern" scenario and a "liquidity crisis" scenario (BG);
- protection of the interests of investors and depositors (IE, LV);
- promotion of the development and stability of the financial and capital markets (IE, LV);
- transparency and accountability of liquidity risk management (PL);
- determination of details on liquidity, methods for its identification and the indicators of liquidity for banks (SK).

In total, eight responses can be explicitly classified under the aim "meet payment obligations" although with some variations on wording e.g. "hold sufficient funds to meet payment obligations (HU)", "able to fulfil payment obligations on time without interfering with normal developments of markets (ES)", "available liquid funds to cover liquidity outflows (DE)", and "guarantee that each institution is in a sound liquidity position, on a going-concern basis, by monitoring closely its liquidity (PT)".

Eight responses state, directly or indirectly, the aim "survival to a fixed horizon" (SI, DK, CY, NL, UK, GR, FR, IC). For seven responses the aim "survival to a fixed horizon" could be implicitly inferred (BE: sufficient liquidity buffers, DE: hold sufficient highly liquid assets to cover unexpected withdrawal of deposits, LI: available means more than 33% of short term liabilities, LT: safeguarding minimum short term liquidity/ liquid assets ratio higher than 30%, PL: liquidity reserves adequate to risks taken by banks, RO: minimum liquidity ratio should be preserved by banks, and BG: adequacy of short-term liquidity/maintenance of liquid assets ratio).

For four regimes, each applying stock based ratios, responses do not make reference to the aim "survival to a fixed horizon" but explicitly or implicitly name the following aims:

- meet payment obligations (AT);
- adherence to best practices (LV, LU, MT).

Of particular interest is the U.K. regime which makes a distinction between the sterling stock regime aiming at survival to a fixed horizon and the mismatch regime aiming to meet payment obligations.

All responses refer explicitly or implicitly to the Sound Practices as they have been addressed by the BIS paper "Sound Practices for Managing Liquidity in Banking Organizations" (BE, BG, IE, NO, PT).

There are no striking differences in the responses between the old and new members of the EU.

There is agreement between the industry and supervisory authorities on one objective (underlying aim): "to make sure that a firm is able to fulfil all payment

obligations when they fall due/at any time – at reasonable costs” as compared to the supervisors’ objective “Credit institutions ensure that they are able to meet payment obligations at all times”. From the industry perspective the objective is more or less the same for all countries while from the supervisory perspective 8 responses make explicit reference to this objective.

Is the liquidity regime attempting to address specific market failures? – (Q 6)

Only two responses explicitly indicate “Yes” to the question (AT: about interest rate risk and “market conditions”; and UK: mitigation of market frictions that may prevent a solvent bank from attracting sufficient funds).

The majority of the responses (BE, BG, CZ, DE, DK, EE, ES, FR, GR, HU, IC, IE, LI, LV, LU, MT, NL, NO, PL, PT, SE, SK) explicitly indicate a “No”, which might, however, result from a lack of clarity in the question as some of those regimes consider market failures within the context of other aspects of liquidity risk management such as:

- stress testing (BE, ES);
- contingency funding plans (SK, FR, ES);
- alternative scenarios (FR);
- lender of last resort (PT);
- banks hold sufficient liquidity to withstand general and specific market failures (NL);
- sustainability of the banks and the whole system under conditions of liquidity shortages and/or stress (GR);
- shocks of deposit withdrawals (MT).

The remaining responses do not indicate explicitly either a “Yes” or a “No” but make reference to other aspects of liquidity risk management through which specific market failures are addressed:

- contingency funding plans (SI, RO);
- “What if” scenarios (SI, RO);
- shocks of deposit withdrawals (LT, CY);
- crisis scenarios for exogenous shocks (IT);
- liquidity supervision places emphasis on credit institutions which have an important role in the financial system (FI).

There are four responses on institutions other than banks:

- Investment firms:

- No (CZ);
 - To cover exposures in transactions cycles on the stock exchange (GR);
 - No (UK).
- Building societies: Panic withdrawals due to asymmetric information (UK).

REGULATORY REQUIREMENTS FOR LIQUIDITY RISK AT THE NATIONAL LEVEL

When they were introduced and recent changes

In what year was your current liquidity regime introduced? – (Q 1.1)

Periods of introduction are rather scattered, some younger, some older liquidity regimes; starting from 1975 up to 2007. 14 states introduced their regimes before 2000, 14 states introduced or at least amended their regimes after 2000.

Has the regime undergone material updates since then? If so, when? What was the purpose and nature of these updates? – (Q 1.2)

No updates/changes: AT, CY, DK, ES, FR, LT, LV, SK, LU.

Update: BE (revision of regime in 2006), BG, CZ, DE, EE (older ones), FI, GR, HU, IC, IE, IT, MT, NL (review in 2003), NO (drafted for 2007), PL, PT, RO, SE (2007), SI, UK (only list of acceptable collateral).

n.a.: LI.

Details of updates: addition of derivative transactions, foreign subsidiaries, new qualitative requirements, preclusion of intra-group transactions, new quantitative requirements (mismatch instead of stock approach), liberalisation clause (usage of own internal model), update of reporting requirements, deeper focus on on-site examinations and off-site analysis, recognition of foreign currencies, definition of liquid assets, list of acceptable collateral, and abolition of quantitative requirements.

Most of the countries have been reviewing and eventually updating their regulation. With regard to the countries that have proposed changes, it must be noted that in most cases the changes cannot be classified as material.

However, 5 countries have been (or are) implementing significant amendments:

- DE: allowing entities' internal measurement and management approaches, incl. models;
- IE: changing the quantitative approach (from a stock approach to a liquidity mismatch);

- PL: introducing standardized reporting of liquidity ratios and mandatory liquidity limits, while allowing for usage of internal models for calculating the ratios;
- BE: more explicitly articulating qualitative requirements, updating the reporting scheme and including the option of credit institutions to report consolidated internal management information on liquidity;
- GR: introducing standardized reporting of liquidity ratios and mandatory minimum limits for these ratios.

UK has not materially updated its liquidity risk regulation for banks, but in 2007 amended the provisions for investment firms aligning them with their requirements for banks. The same applies to building societies. PL has also reviewed its regulatory framework, strengthening liquidity risk supervision and reporting for those banks with a high liquidity risk level.

Scope of application

To credit institutions and investment firms – (before Q 1 + Q7.1)

Same requirements for credit institutions and investment firms	<p>a) <u>to all IF</u></p> <p>AT, HU, IT, MT, NO, UK.</p> <p>b) <u>to certain IF</u></p> <ul style="list-style-type: none"> • DE (IF that provide trading for own accounts, investment broking, contract broking or portfolio management); • IC (IF authorized to accept deposits from customers for investment); • SE (guidelines for all but reporting requirements for firms with total assets more than 5 bn SEK).
Different regulations or only a part of the regulation applicable	<ul style="list-style-type: none"> • ES (different regulation and different supervisory authority); • IE (IF are required to have policies and procedures in place for the management of funding positions under the CRD); • FI (no reporting requirements for IF); • FR (only qualitative); • GR (supervision by different authority); • LT

	<ul style="list-style-type: none"> • NL (only qualitative requirements consistent with Pillar 2 requirements); • PL (supervision by different authority); • PT (reporting requirements only to institutions authorized to receive deposits); • SE (guideline for all but reporting requirements for IF with total assets under 5 bn SEK, see above); • SI (other regime).
No explicit liquidity requirements for IF	BE, CY, CZ, DK, EE, LT, LV, LU, SK.
Not applicable	BG, LI, RO.

To credit institutions of different types and sizes – (Q 7.1)

Please list all types of banks and other institutions subject to the liquidity regime.

- Regime compulsory for all types of banks and financial institutions (investment firms, building societies etc.) – without any exemptions: HU, IT, LT, MT, NO.
- Regime compulsory for all types of banks and financial institutions – with some exemptions:
 - AT (money exchange and money transmitters);
 - BE (investment firms);
 - CZ (investment firms);
 - DE (branches that fall under a “liquidity concession”);
 - ES (investment firms: regime only applicable to brokers and dealers);
 - FI (reporting requirement applies only to banks/branches authorised to accept deposits);
 - FR (investment firms: only qualitative requirements);
 - GR (regime compulsory only for banks. Investment firms are regulated by another supervisory authority, the Capital Markets Committee);

- IC (applicable to investment firms authorized to accept deposits from customers for investment);
- IE (waiver for branches);
- LV (exemptions for foreign branches);
- PL (investment firms and banks are supervised by different authorities. Liquidity supervision regime for banks is more advanced and regulated than one for investment firms. Liquidity risk management of investment firms is supervised by Polish Financial Supervision Authority);
- PT (no liquidity reporting requirements for financial institutions and investment firms);
- RO (investment firms?);
- SE (liquidity reporting requirements. Only for institutions with total assets more than 5 bn SEK);
- SK (exemption for investment firms, however these are subject to liquidity reporting requirements),
- Regime compulsory for all banks: BG, CY, EE, LU, NL.
- Differentiated approach:
 - DK (differentiation between commercial banks and mortgage credit institutions – no regulation for investment companies);
 - SI (only banks and branches – other financial institutions are subject to other regimes);
 - UK (different approaches for retail deposit takers and all other banks, waiver assignments).
- n.a.: LI.

Institutions mentioned included: Credit institutions, Investment firms, Commercial banks, Savings banks, Clearing institutions, Cooperative credit institutions, Foreign branches, E-Money institutions, Money Transmitters, Leasing companies, Insurance companies, Building societies.

Is the home or host regime applied to domestic branches of cross-border banks? If appropriate, please distinguish between branches of EEA banks and third country banks. – (Q 8.1)

Home regime applicable to domestic branches of cross-border banks:

MT.

Host regime applicable to domestic branches of cross-border banks:

AT, BE, CY, DE (but waiver for home application), DK, EE, ES (but, possible arrangements with home supervisors under consideration), FI, FR, GR (global liquidity concession), HU, IE (but, arrangements with home supervisors), IT (waiver possible; it is possible that home and host country supervisors coordinate their activities where necessary to ensure that branches observe local liquidity requirements.), LT, LU, LV, NL (but global concession possible under certain conditions), PL, PT, SI, SK, UK (but waiver for home application), CZ (applicable appropriately, EEA branches supervised off-site only).

Both (Home and Host) applicable/responsible:

RO, SE.

Distinction between branches of EEA banks and third country banks:

RO: EEA banks follow home regime, third country branches follow host regime.

n.a.: BG, IC, LI, NO.

The vast majority of Member States apply the host regime to domestic branches of cross-border banks. The host regime has been chosen for EEA branches according to Article 41 of the Banking Directive 2006/48/EC. 2 Member States apply both, home and host rules and 2 out of 30 Member States apply home rules only. Apart from Romania, no other Member State makes a distinction between branches of EEA banks and third country banks. Seven jurisdictions can agree to a transfer of liquidity supervision on the basis of a global liquidity concession or a waiver.

Does your liquidity regime allow for deviation from the regime on a case-by-case or country-by-country basis? E.g. if your liquidity regime typically applies host rules to branches of cross-border banks, would it be possible to apply home rules to such branches under certain circumstances or conditions? – (Q 8.2)

Yes: DE (waiver for home application – conditions laid down by law), FI (deviation on a case-by-case basis possible, but only for the branches of Finnish banks' foreign branches and not for branches established in Finland), GR, IE (waiver for branches), IT (ad hoc examination on a case by case basis), LU (on case by case basis), MT (waiver for home application on a case by case basis for branches of third country banks), NL (possible for subsidiaries abroad to gain exemptions from group wide reporting - not used in practice - and possible for incoming branches to gain exemption from the host reporting requirements), NO (Ministry of Finance has the power to allow waivers and deviation), UK.

No: AT, BE, GB, CY, DK, EE, ES, FR, HU, IC, LT, LV, NO, PT, RO, SI, SK.

N.a.: CZ, LI, PL, SE.

The vast majority does not allow for deviation from home/host regulation.

Does the regime apply (with or without modifications) to trading activities? – (Q 10.1)

Yes: AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IC, IE, IT, LT, LU (with modifications), LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK.

No: LI (but short-term liabilities falling due within 1 month are covered in any case), UK (for building societies as they have no trading books).

All but one Member State includes trading book activities of their credit institutions and investment firms in their liquidity risk management regime.

Are the banking book and trading book treated differently from a supervisory perspective? If so, in what way and why? – (Q 10.2)

Yes: EE, FI, GR, IC, LU, SK.

The reasons for different treatment are: potential distress, different maturities, different reporting requirements, different risk weighting and eligibility.

No: AT, BE, BG, CY, CZ, DE, DK, ES, FR, HU, IE, IT, LI, LT, LV, MT, NL, NO, PL, PT, RO, SE, SI, UK.

n.a.: CZ (investment firms).

Consolidated versus solo

Does the regime apply on a solo and/or consolidated level? Please explain the rationale behind this application. – (Q 7.2)

Application on a solo-level: BG, IC, LV, SI, SK, LU.

Application on a solo-level, but also some requirements at a consolidated level: AT, CY, DE, EE, FR, GR, HU, PL, RO.

Application on a solo and consolidated level: BE, CZ, DK, ES, FI (reporting requirements are on solo level), IE, IT, LT, MT, NL (quantitative requirements on consolidated level, qualitative requirements on solo and consolidated level), NO, PT, UK.

Application on a consolidated level: SE.

n.a.: LI.

Out of the 30 responses, 17 countries apply regimes at consolidated and solo level, although in several cases (4 or 5 countries) quantitative reporting requirements are only required at solo level. 1 country only supervises at the consolidated level. 10 countries only apply regimes at the solo level, although the majority of these allow flexibility so that a bank may request to be supervised at a higher level of consolidation (which is then at the supervisor's discretion).

Rationales behind the regimes

Solo supervision:

- *technical reasons*: administrative burdens, practical difficulties for the timely collection of the information for consolidation, quarterly reporting period for groups is too long for evaluating their liquidity condition (EE, GR-banks);
- *historical reasons*: IC, LU (traditionally mostly a host country to larger institutions, with a number of smaller institutions with no subsidiaries outside the country; excess liquidity was generally carried by institutions established in Luxembourg; a consolidated view was not necessary or relevant);
- principal concern is the liquidity risk in the parent building society, and not considered adequate to hold liquidity downstream. Where there are subsidiary deposit-takers within the group, these should have their own liquidity and risk management (UK-BS).

(Also) consolidated supervision:

- transparency: takes the group dimension, in which some banks' liquidity management is embedded, into account in the qualitative and quantitative assessment of an individual bank's liquidity management; enables supervisor to identify liquidity risk to which credit institutions might be exposed because of their relationship with other institutions within their respective banking groups (BE, LI, MT, NL);
- responsibility of the CNB for the performance of supervision on a solo and consolidated level in accordance with EU legislation (CZ);
- rationale behind Article 69 (1) of Directive 2006/48/EC, which allows, subject to certain provisions, waiver of certain requirements at the solo level, has been transferred to the liquidity requirements (DE);
- consolidated supervision reflects the usually centralised treasury functions of banking groups (DK, IT, PT, SE);
- application on a consolidated basis is more consistent with the general philosophy underlying Pillar 2 (IT);
- facilitates banks management of their liquidity at the consolidated level (NL).

Which entities are consolidated (only entities belonging to the financial sector/all entities belonging to the group)? – (Q 7.2.1)

Consolidation only of entities belonging to the financial sector (excluding insurance companies): AT, CZ, DE, DK, EE, ES, FI, FR, HU, IE, IT, LT, MT, PT, RO, SE, UK.

Consolidation of all entities, but with some exemptions: BE (insurance companies, immaterial entities).

Consolidation of all entities:

N/A.: BG, CY, GR, IC, LI, LU, LV, NO, PL, SI, SK.

Does the regime allow waiving the requirements on a solo or group level? If yes, under what conditions? - (Q 7.2.2)

Yes: -

Yes, under certain circumstances: BE (several potential exemptions of requirements e.g. full exemption for financial holdings or exemption for inclusion of positions of non-material entities in reporting scheme), CZ (exemptions at the group level depending on size), FR (depending on size), IE (application for regime at a group level if liquidity is managed centrally), LU, NL (exemptions from group level reporting depending on size for very small and immaterial entities abroad), SE (possible but only one case in practice), SK (exemptions for branches of foreign banks).

No: AT (application only on a solo level), BG, DK, EE, ES, FI, HU, IC, IT, LT, LV, MT, NO, PT, RO, UK.

n.a.: CY, DE, GR, LI, PL, SI.

In most countries no exemptions are allowed. Some allow small foreign branches or subsidiaries to be excluded from the requirements if they do not have a material impact on the overall liquidity position of the group (individual entities must be less than 1% of total assets, and total of excluded entities must not be greater than 5%).

Large exposure limitations

What large exposure limits are applicable to short-term (less than one year) intra-group exposures? - (Q 9.1)

Yes, there are large exposure limits: CZ, GR, LI, LU, RO, SK, PT, UK.

No, there are not: AT, BE (no limits on intra-group exposures between banks or banks and investment firms), BG, CY (no large exposure limits on short-term or other intra-group exposures), DE, DK, EE, ES, FI (short-term limits are not applicable to all credit institutions, but FI requires limits for group companies other than subsidiary credit institutions, financial institutions or ancillary services undertakings), FR, HU, IT, LV, MT, NL, NO, PL, SE, SI.

Large exposure limits are not applicable to short-term intra-group exposures. Some countries have put in place special requirements for other intra-group exposures like BE (applicable to non-banks and investment firms within the group), IC (applicable to non-banks not part of consolidated prudential supervision), IE (applicable to entities not part of consolidated supervision - application currently subject to review)

and LT (applicable to entities not part of consolidated supervision), FI (short-term limits are not applicable to credit institutions, but limits are set for group companies other than subsidiary credit institutions, financial institutions and ancillary services undertakings).

Do large exposure limits apply to other intra-group exposures? – (Q 9.2)

Yes:

20 %	DE, IC, LI, LU, LV, NO, PL, PT, RO, SI, SK, FI (limit is not applied to subsidiary credit institutions, financial institutions or ancillary services undertakings), CZ (parent banks in host country, subsidiaries in host country and abroad excluded from limits).
25 %	MT

No: AT, BG, CY, CZ, DK, HU, IT, LI, NL, SE, FR (LE limits of 25% per LE apply in principle to intra-group exposures but have a material effect only in few cases due to the fact that this LE regime is generally applied on a consolidated basis), BE (no limits on intra-group exposures between banks or banks and investment firms).

n.a.: CZ (for investment firms), GR.

Special conditions: EE, ES, LT, UK as consolidated supervision is required for exemption. FI requires limits for other than subsidiary credit institutions, financial institutions and ancillary services undertakings.

Some Member States responded that there is a different treatment of limits depending on the supervision of the group entity.

Other than large exposure limits, are there other aspects of prudential regulation that influence the management of liquidity risk? For example, does your prudential regulation impose any standards or limits on the pledging of own assets? – (Q 9.3)

Yes: CY (FX deposits), DE (collateral), ES (own assets), GR (real estate), HU (large deposits), IE (funding spread), LI (FX assets), LT (yes, but no pledged assets), LU (valuation at purchase prices), MT (qualitative requirements), NL (cross-border transferability of funds imposed by some other countries), NO (special requirements for saving banks), RO (financing of shares), SI (special requirements for saving banks), SK (trading in Slovak Crowns), UK (parental guarantees).

No: AT, BE, BG, CZ, DK, EE, FI, FR, IC, IT, LV, PL, PT (only by company law – all transactions, including transactions within a banking group should be conducted on market terms and on arm's length pricing principle), SE.

Some of the respondents are limiting different business activities of the institutions differently.

Centralised versus decentralised – (Q 15)

Most of the countries replied that risk principles, policies, limits, contingency plans, measurement methods etc. were centralised but day-to-day liquidity management was decentralised. Overall liquidity exposure was monitored centrally by the parent bank and the parent bank may play a more active role in securing long-term funding for the group. Over half of the respondents mostly had this kind of administrative arrangements in place (AT, BG, CY, CZ, DE, EE, FR, HU, IT, LT, LV, MT, NL, PT, UK).

In the Nordic countries quite a high level of centralisation was detected (DK, FI, NO, SE). Few countries replied that a centralised approach was used by banks operating nationally or when managing liquidity in Euro-area branches/subsidiaries. Mixed approaches were in place in seven countries (BE, EE, ES, GR, IE, LU, SI, SK). Decentralised management was reported to be in place in two countries (IC, PL).

Neither pure centralisation nor decentralisation was observed but the trend in few countries was towards more centralised approaches. Differences in the level of centralisation were observed between cross-border banks and banks operating nationally and between liquidity management of branches and subsidiaries. Banks operating nationally and with cross-border branches tend to have more centralised approaches than cross-border banking groups with foreign subsidiaries. Geographical areas or markets (EU, USA, emerging markets, time zones) and currencies (convertible, non-convertible, Euro-area) affect the organisation of liquidity management as well and liquidity management is often organised according to geographical or currency areas.

In AT the parent bank usually acts as a lender of last resort for its foreign subsidiaries/branches (strategies vary between banks). Depending on the group and its origin, they can act as lender of last resort to subsidiaries in LU too.

According to the responses banks have many different rationales for either centralising or decentralising liquidity management.

Rationales for centralised management:

- more efficient utilisation of group's liquid assets;
- obtaining funding at more favourable terms (economies of scale);
- ensure group-wide consistency and coordination in crisis;
- advantage of adding central management resources and expertise to local knowledge;
- more transparent liquidity management for the assessments of investors and rating agencies;
- counterparty risk management.

Rationales for decentralised management:

- to increase the responsibility of the local managers;
- the local staff knows the local market better, maximum utilisation of local funding;
- in a crisis situation each subsidiary is self-sufficient;
- barriers to cross-border collateral pooling, restrictions on transfer of funds;
- specifics of national supervisory frameworks.

No respondent stated that there are explicit requirements to report how collateral management is organised. Many of the supervisors however had the information on how collateral management is usually organised.

DETAILS OF REGULATORY REQUIREMENTS AS AT 2007

Approach to quantitative requirements:

21 countries (AT, BG, CY, DE, DK, FR, GR, IC, IE, LI LU, LT, LV, MT, NL, PL, PT, RO SI, SK, UK) have implemented quantitative requirements in the form of liquidity ratios, time horizons etc.

The other respondents (BE, CZ, EE, ES, FI, HU, IT, NO, SE) have not set out explicit liquidity ratios or other quantitative requirements. However, these Member States have implemented reporting requirements to gather quantitative information for monitoring purposes. Moreover, quantitative requirements may be set on a case-by-case basis in response to shortcomings detected in the liquidity risk management of individual institutions.

NB: In order to achieve a comparable and meaningful result the following only reflects the responses of the 21 countries that explicitly follow a quantitative approach. Responses by the other nine respondents are shown separately and are not taken into account in the interpretation of the result.

Please describe the quantitative requirements placed on banks. – (Q 11.1)

Mismatch of assets/liabilities according to contractual maturity

14 countries require banks to assess mismatches according to contractual maturity in order to comply with mismatch ratios (BG, CY, FR, DE, GR, IC, IE, MT, PL, PT, RO, SK, SI, UK).

2 countries expect firms to use their own approaches to assess mismatches according to contractual maturities. These countries do not set limits, but nonetheless undertake assessments. (AT, DK).

LI, LU and LV have no explicit requirements or expectations.

FI does not set limits, but is assessing risk ratios based both on regulatory reporting and banks' own internal reports.

Mismatch according to cash flows

11 countries assess mismatches according to the behaviour of cashflows. Some of the behaviours are predetermined and others are chosen by firms. The behaviours are validated by supervisors and incorporated into the mismatch ratios (BG, FR, DE, GR, IC IE, NL, PT, SK, SI, UK).

3 countries expect firms to use their own approaches to assess mismatches according to the behaviour of cashflows. They are assessed but not part of any mismatch ratios (AT, DK, PL).

4 countries do not assess mismatches according to cashflows (CY, LV, LU, MT).

Survival period approach

The UK's Sterling Stock regime's explicit aim is for banks to survive for a 5 day period, given a liquidity risk type event.

The UK's mismatch regime has no survival period.

The other respondents do not explicitly mention a survival period; it might, however, be an implicit aim.

Supervisory assessments of liquidity management

27 countries carry out assessments of firms' liquidity risk management, regardless of the supervisory approach (quantitative or qualitative).

Other approaches

4 countries (AT, DK, LV, and LU) have stock approaches.

5 countries (BG, IC, GR, MT and NL) use both a stock and mismatch approach to assess their firms' liquidity risk management. The same requirements apply to all firms.

UK has a stock approach for the big retail deposit takers and a mismatch approach for other banks; two different requirements for two categories of firms.

DE has adopted a mixed approach (mismatch and stock approach) with the option to use internal models instead (liberation clause).

Are quantitative requirements set for individual institutions or types of institution? How do supervisors ensure consistency? – (Q 11.2)

12 countries have the same quantitative requirements for all credit institutions. (AT – banks, BG, DK, FR, GR, IC, IE, LV, LI, LU, MT, NL, SI).

RO – same requirements for all.

PL – all institutions except foreign branches and smaller banks.

SK sets its quantitative requirements for all banks, except the limits on fixed and illiquid assets.

CY sets its quantitative requirements for all domestic banks and different requirements for foreign banks.

DE has the same quantitative requirements for all banks, with the option to use internal models instead.

UK stock regime is same for all retail deposit takers. Mismatch requirements are set for all other banks, but with the possibility of modifying them for individual firms.

PT sets quantitative requirements for individual institutions.

CZ requires all institutions to submit the same report and then assesses them. FI makes assessments of banks' own ratio limits.

The extent to which the level of the liquidity requirement is based on the assumption that calendar items that have fallen due are not reinvested (e.g. contractual maturity versus actual behaviour approach for items such as savings, sight deposits, and early redemption of mortgage loans) – (Q 11.4)

6 countries allow behavioural analysis of cashflows in reporting (BG, FR, DE, IC, PT, IE). IE, for example, permits credit institutions to apply behavioural assumptions in limited specific circumstances. Assumptions may be applied to a limited number of specified products such as retail and corporate deposits – such assumptions must be documented, applied consistently and available for inspection when required by the Financial Regulator. Where behavioural assumptions are allowed, such flows are subject to the application of specific haircuts.

IC, NL: preset behaviours for most cashflows which are incorporated into reporting.

GR: 20% sight/15% saving deposits overnight band – for reporting.

RO: behavioural adjustments on sight deposits for reporting.

SK allows behavioural analysis on the following items for reporting: estimation of average maturity of deposits, volume of assets to be sold before maturity, repayment of past due loans and early redemption of loans.

SI allows the following behavioural analysis to be done for reporting: 50% sight deposits, credit lines up to 100% and analysis on credit card flows.

UK – for the stock approach behavioural adjustment is 5% retail deposits drawdown over 5 days and wholesale net outflow over 5 days, and other behavioural allowances for mismatch approach to be agreed with supervisors and incorporated into reporting.

CY, MT, LU and LV do not allow behavioural analysis to be incorporated into reporting; but LU expects banks to use their own approaches.

What other assumptions are made about the behaviour of counterparties? – (Q 11.5)

IC and NL – predetermine behaviour for most assets and liabilities.

DE – subject to the approval of the supervisory authority, firms may use own models.

UK – the sterling stock regime (applicable to the major deposit takers) assumes 5% drawdown of retail deposits over 5 days (no wholesale rollover of funding and no access to renewed funding over 5 days); the mismatch regime allows behavioural adjustments in most areas subject to supervisory review.

CY – undrawn overdrafts (15% inclusion).

FR – certain haircuts statutorily determined to reflect behavioural assumptions.

GR – 50% of current account loans in the 1 month band.

IT – stress testing process relies on 2 scenario assumptions:

- 1st scenario assumption: the 5 major customers draw 25% facilities, 25% deposits, 2% contingent liabilities;
- 2nd scenario assumption: 20% of loans with residual maturity up to 1 month and 5% of loans with residual maturity between 1 month and 12 months are not paid back, the 5 largest banks withdraw 75% of deposits, inter-bank facilities are revoked and depositors withdraw 10% of the stock of deposits.

The following countries make assumptions in the following areas and allow them to be included in reporting:

- AT – period of notice, material maturities.
- BG – committed facilities, past experience.
- FR – haircuts on certain items.

- RO – guarantee schemes can be excluded from sight.

If quantitative requirements are only applied to one class of institution, or different requirements are placed on different classes of institutions, how are the classes defined? – (Q 11.6)

CY – foreign vs domestic.

DK – commercial banks vs mortgage lenders.

PL – Large banks vs other banks.

UK – Retail deposit takers and other banks.

MT – credit institutions, except branches of foreign institutions.

DE, GR, FI, AT, FR, PT, IC, IE, LV, LI, LU, RO, SK, SI, NL do not have different classes of credit institution.

BG – equal quantitative requirements are applied to all institutions.

Please indicate whether and in what way the following factors are taken into account in the liquidity regime's quantitative requirements – (Q 12):

Again, according to the heading the questions refer to the liquidity supervision regimes with quantitative requirements. Some regimes applying formal quantitative requirements to banks or investment firms, do not take into account any of the factors mentioned below in detail (LV, LI, LU - except for irrevocable commitments, MT, UK - Sterling Stock regime). The relevant requirements are based on ratios of (specified) assets to (specified) liabilities or to total assets. However, some regimes apply in addition more or less flexible requirements with regard to the size of maturity mismatches, based on a maturity ladder based monitoring system (e.g. MT...)

a) Liabilities – (Q 12.1)

Access to funds and/or lines of credit (advised or committed) - (Q 12.1.1)

No: AT, BG, LU, UK Sterling Stock regime. - these regimes apply quantitative requirements in the form of stock ratios or requirements to maturity ladder mismatches but do not take into account off balance sheet positions such as access to funds or lines of credit.

Regimes that take into account committed lines of credit: CY, DK-banking regime, FR-banking regime, GR, IE, NL-banking regime, PL-banking regime, PT, SI-banking regime, UK-banking mismatch regime).

Advised lines of credit: No regime includes advised/revocable lines of credit in their quantitative requirements. PL – banks are required to estimate possible cash outflow stemming from usage of advised, revocable lines of credit.

Access to funds: DE, FR-banking regime, NL-banking regime, and PL-banking regime - access to funds is taken into account in the quantitative requirements in these cases only if certain conditions are met and/or to a certain extent (by weighting).

Some regimes not applying formal quantitative requirements require reporting on scenario analysis for monitoring purposes, taking into account the afore-mentioned off-balance-sheet items: IT.

In other cases the issue is addressed (only) by qualitative requirements.

Funding structure (e.g. market vs. retail funding) and diversification/concentration of funding sources – (Q 12.1.2)

Yes with regard to market vs. retail funding: NL-banking regime, UK-banking mismatch regime. These regimes include the relevant funding structure (market vs. retail funding) in the quantitative requirements by (weightings/stress) factors determining the liquidity risk that should be covered.

Other regimes do not take into account the specific funding structure in their quantitative requirements.

No regime has requirements to maintain a specific funding structure.

With regard to diversification/concentration:

- On a client level: no regime has included in their quantitative requirements concentration of funding sources by client or group of connected clients. PL requires banks calculating a stable part of funding (retail or market) i.a. also to monitor concentration of liabilities.
- By type of funding: diversification by type of funding is implicitly included by the regimes that take into account market vs. retail funding.

Diversification/concentration is monitored by standard reporting: NL-banking regime, PT-banking regime.

Diversification/concentration of funding sources is assessed in most cases on-site and/or off-site, but is not specifically weighted in the quantitative requirement Concentration/diversification is explicitly addressed by qualitative requirements by most of the liquidity supervision regimes.

Volatility of deposits (e.g. rate of reinvestment of fixed term deposits) – (Q 12.1.3)

Yes: AT- banking regime implicitly, DE by standard weightings or internal system, FR-banking regime by standard weightings, GR-banking regime by standard weightings, LT to a certain extent by standard weightings, NL-banking regime by standard weightings, PL by internal weightings, SI to a certain extent by standard weightings, SK by internal weightings, UK-banking mismatch regime with behavioural adjustments (internal weightings).

No: LU.

IT- by monitoring system.

Trends and projections in the deposit structure with respect to growth patterns, stability and costs. – (Q 12.1.4)

Yes:, GR-banking regime, implicitly by annually reported internally projected maturity ladder, UK-banking mismatch regime, PL banks could incorporate trends and projections into their internal models, but overestimation of stable funding is penalized by temporary increase in requirements with respect to level of liquid assets.

No: All other regimes (with regard to quantitative requirements).

Views of rating agencies and market perceptions – (Q 12.1.5)

Yes: BG with regard to assessment of liquid assets, FR-banking regime, NL implicitly.

No: All other regimes apply the ECB haircuts on ECB eligible collateral which are based on agency ratings.

Drawn and undrawn portions of committed facilities by customers (conditional/unconditional and irrevocable) – (Q 12.1.6)

Yes, committed (irrevocable) facilities: BG, CY, DE, FR-banking regime, IE, GR-banking regime, LT unspecified, LU, NL, SK, UK-banking mismatch regime, PL internal models.

No: All other regimes.

IT-monitoring.

Funding with covenants attached (e.g. related to a bank's capital ratios or liquidity ratios, or more general material adverse change clauses) – (Q 12.1.7)

Yes: NL with regard to the modelling of potential margin calls, UK-banking mismatch regime behavioural adjustments, PL internal models.

No: All other regimes.

Shortfall in secured funding resulting from changes in market value or haircuts (e.g. on account of credit rating downgrade) – (Q 12.1.8)

Yes: NL with regard to the modelling of potential margin calls, GR haircuts, PL internal models.

No: All other regimes.

b) Assets – (Q 12.2.)

Treatment of liquid/marketable assets. What assets are eligible to meet the requirements? (Q 12.2.1)

In this context stock approaches, maturity mismatch approaches and mixed approaches have to be distinguished. If a stock approach is applied the “eligible assets” are those assets taken into account in the numerator of the ratio. If a pure maturity mismatch approach is applied, only projected incoming cash flows are taken into consideration. If a mixed approach is applied, the sum of specified “eligible” assets and projected incoming cash flows in the relevant period have to match the requirements for that period (horizon).

Some regimes apply different ratios, for different liquidity horizons. For example, to cover the liquidity requirements on a short horizon only very liquid assets are eligible, while for a longer horizon less liquid assets are sufficient.

The majority of the respondents have indicated that eligibility requirements/provisions apply to the recognition of assets. Most supervisors list eligible types of assets whilst a minority apply also/instead a set of overriding or minimum liquidity criteria which assets must satisfy in order to be deemed liquid.

Eligible assets are valued at market value or nominal value, with or without haircuts.

The following “listed” eligible assets are mentioned:

- cash in hand: all regimes;
- cash balances with central banks and post office banks: LU, GR, PT;
- freely convertible foreign currency: all regimes;
- coined precious metals: AT very liquid, BG, DE very liquid T1, NL with haircut;
- gold/bullion: AT very liquid, BG, NL with haircut;
- Treasury bills and other bills eligible for refinancing with central banks (a 90% weighting is to be applied): GR with haircuts, LU;
- balances (loans and advances) with own central bank: AT very liquid, BG, PL (excluding minimum reserves), LU, PT;
- balances (loans and advances) with the European Central Bank for minimum reserve purposes: AT very liquid, LU, PT;
- balances (loans and advances) with other central banks (with restrictions, if group wide supervision is applied): NL, LU, PT;
- loans and advances to multilateral banks which are repayable on demand: LU, PT;
- loans and advances to other credit institutions which are repayable on demand: LU, PT;

- loans and advances to other credit institutions with a remaining maturity under one year: LU, PT;
- cheques: AT;
- bonds due: AT, NL as an incoming cash flow within the liquidity horizon;
- due interest coupons: AT, NL optional as an incoming cash flow within the liquidity horizon;
- profit participation coupons: AT, NL as an incoming cash flow within the liquidity horizon;
- dividend coupons: AT, NL as an incoming cash flow within the liquidity horizon;
- *spot deposits (current accounts) held in credit institutions: ES;*
- marketable assets with low credit risk (definitions related to CRD): PL;
- assets of a regulated entity, whose credit rating weighting under the standardized approach for calculating credit risk (CRD) would be 0%, 20% or 50% with payment date of up to 1 month: PL (this also includes spot deposits mentioned in another part of the list);
- advised lines of credit (committed by an institution with good financial standing, at least for 6 months, irrevocable, callable within a short time period): PL;
- Bills of Exchange rediscountable with own central bank: AT;
- demand moneys and forward deposits with credit institutions subject to periods of notice of less than six month: AT;
- fully secured and liquid demand deposits with credit institutions and insurance companies: DK;
- bonds issued by bank members of the European System of Central Banks: AT;
- Treasury bills and bonds of own government: AT whose term lasts from 6 to 36 month, BG;
- tradable debt securities issued by institutions with a 20% or better solvency risk weight: BG, NL with haircut, PT with haircut;
- tradable debt securities issued by international development banks/organizations: BG, NL with haircut;
- marketable securities issued by a government or bank with maximum duration of 10 years: CY;
- marketable securities traded on a "regulated market" according Directive 2004/39/EC or listed on a recognised exchange, DE if daily valuation at market prices, otherwise at book value with a haircut;
- readily marketable unencumbered securities and credit funds: DK;

- CIU's (mutual funds) under certain conditions: AT, GR with haircuts, NL with haircut;
- Government bonds/securities (in general), GR EU/G10 area with haircut, NL with haircut, PT with haircut;
- Government debt instruments eligible as collateral by ESCB: NL with appropriate ECB haircut, PT;
- debt securities and other fixed income securities issued by public bodies (a 90% weighting is to be applied); LU, PT with haircut;
- securities issued by banks: NL with haircut;
- debt securities and other fixed income securities issued by credit institutions (an 80% weighting is to be applied): LU;
- corporate bonds: GR with haircut, NL with haircut;
- equity traded in organized markets in certain areas (e.g. EEA/G10): GR, NL with haircut;
- positive net balances by virtue of proprietary trading pending settlement: ES, NL settlement date within liquidity horizon;
- *forward deposits held in credit institutions with a residual maturity of less than one month: ES;*
- *fixed income stock admitted to trading with residual maturity of less than 18 months: ES;*
- stakes in money market mutual funds: ES, NL with haircut;
- banking Commercial Paper with residual maturity of less than 3 months: ES, NL with haircut;
- total Treasury balance (if a lender position) and assets with a remaining maturity of 1 month: FR-banking regime (Treasury balance: lending, Treasury bills, bonds and other fixed income securities, shares and similar securities quoted on an official French market or on an organised foreign market offering the same assurance of liquidity);
- other assets which are short term receivables: LU;
- collectibles: PT;
- derivative financial instruments: PT;
- irrevocable commitments of third parties: PT.

(Please note that this list is not exhaustive and would necessitate a specific survey to be fully completed and analysed.)

Do any conditions or restrictions apply, e.g. based on location of assets, or the legal entity within the group that owns the assets? – (Q 12.2.2)

Yes, with regard to location or legal entity abroad, if supervision is applied on a consolidated/cross border group level:

- NL: convertibility and transferability criteria must be met before aggregating the total of defined available liquid assets. Liquidity requirements of local regimes and ring fencing measures must be taken into account to meet transferability criteria with respect to liquid assets on a group level.
- UK-BS: liquidity must be held in the UK by or to the order of the society itself.

Please note that the question above is primarily relevant for countries that a) follow a quantitative approach and b) apply liquidity supervision (also) at a consolidated level. Accordingly, a number of countries have either not answered the question or indicated they have not implemented any restrictions regarding the location of assets (CY, CZ, DK, EE, ES, FI, IC, IT, LU, NO, PL, PT, SI, SK (only LE limits), UK (banks)). These countries follow either a qualitative approach or only apply liquidity supervision on a solo level expecting the liquidity to be located at the supervised entity. AT requires very liquid assets (T 1) to be held at the national or another ESCB central bank.

Yes, with regard to other restrictions:

- CY -
 - in relation to foreign currency stock liquidity requirements, deposits with one bank or investment securities issued by the same bank, or the total of the two, where applicable, cannot exceed 5% of the total liquid funds, or the equivalent of CY£2 million whichever is greater. (This limitation also applies to investment securities issued by governments with credit ratings less than AAA.);
 - deposits and other balances with banks qualify to be included in liquid funds only if the said banks bear a minimum credit rating of A-1 (Standard& Poors) or equivalent.
- HU – branches of third country credit institutions have to have an asset maintenance of 100 % on a continuous basis.
- IE - deposits maintained in a deposit protection account at the central bank are not eligible as liquid assets.
- LI - only assets denominated in Swiss francs are eligible as liquid assets, or the payment in a foreign currency to LI is secured.
- LT - both the means in the banks of higher risk countries (i.e. not belonging to Zone A countries) and the securities issued by higher risk countries are not included in the bank's liquid assets base.
- MT – conditions and/or restrictions mentioned in Annex 4 of Liquidity Rule BD/05.

- NL - In order to be counted as actual liquidity at a central level, in both the first week and first month, assets must actually be available within the institution and transferable without restriction.
- PT – claims of branches against head office may not be included in calculation of the liquidity ratio.

Does the liquidity regime specify how the assets are to be valued for purposes of meeting the quantitative requirements? If so, please elaborate. – (Q 12.2.3)

Responses referring to accounting standards/IFRS in general: BG, FR, LT, NL, LV.

Responses referring to market prices for marketable assets, with or without haircuts: DE, DK, GR, HU, NL with haircut, PL if appropriate with haircut for the relevant liquidity horizon (assets' marketability analysis carried out by a bank must at least include: price volatility, credit risk and influence of market turnover on time required to liquidate an asset), SI, UK-BS marked to market at least weekly for smaller societies, daily for the larger ones.

The German regime accepts nominal prices instead of market prices of the defined liquid assets only with a haircut, if daily market prices are not available. IT (monitoring system) applies ad hoc haircuts to securities and bonds before slotting into maturity ladder. LU valuation of fixed financial assets at purchase price as long as this does not adversely affect institution's liquidity. The amount of securities valued at purchase price cannot exceed the bank's own funds. Securities exceeding this limit have to be valued at lower of cost or market. In SI non-marketable assets are valued at nominal amount. In MT the liquidity rules specify the way assets are to be valued, that could be market, nominal or book value. SK introduced the application of market liquidity haircuts.

Do the requirements assign haircuts, and if so how are these calculated? – (Q 12.2.4)

Yes: AT by internal models, CY, DE if nominal valuation is applied, FR, GR, IE, IT in the monitoring system, LU, MT, NL, PL (internal models with a minimal regulatory haircut for options), PT, SK, UK-mismatch regime.

To what extent are assets eligible as central bank collateral taken into account as fully liquid, or 'marketable' assets? Are the haircuts defined by central banks applied to eligible collateral? – (Q 12.2.5)

Yes, as fully liquid or marketable assets: AT, CY, DE, FR with haircut, HU, IE not automatically, only if overriding regulatory liquidity criteria are met and with ECB haircuts, IT in monitoring system, LI, LT only on a case-by-case basis, LV, LU with haircuts, MT, NL with ECB haircuts, PL own estimated haircuts taking into account at least factors defined by the regulator, PT, SI, UK (banks and BS).

Contingent outflows – (Q 12.3)

Cash or securities margin payments on derivative contracts (OTC or exchange traded), repo, securities financing, securitisation structures etc. arising from (a) market price changes or (b) credit rating downgrade or other credit event. – (Q 12.3.1)

Yes: IT monitoring system: market price changes on repos and securities financing are included, NL requires modelling of potential margin requirements, PL a minimal haircut of 10% of delta equivalent is imposed on options with regard to a decreased value of cash inflow from bought options or an increased possible outflow from written options, PT in the annually projected cash flow scheme this should be taken into account, SK only in very general terms.

No: the other regimes address this in their qualitative requirements.

Drawn and undrawn portions of committed facilities to customers (conditional/unconditional and irrevocable) – (Q 12.3.2)

Yes: BG, CY, DE, FR (5%), GR, IE, IT (different weights), LU, MT (50%), NL (2,5%,10%, 100%), PL banks could use either internal models to calculate potential cash outflow (increase in illiquid assets) stemming from usage of committed lines of credit or use weightings imposed by regulator (related to credit risk equivalents of CRD), PT in the annually projected cash flow scheme, RO with a certain factor, SI (5%, 20 %, 100 %), UK-mismatch regime.

Aggregate/gross daily payment outflows/inflows from all sources. – (Q 12.3.3)

It seems that no regime includes the aggregate/gross daily payment outflows/inflows from all sources (nor in reporting). Some regimes explicitly require the maintenance of the ratios/minimum liquidity on a daily basis (which is a different question).

Stress testing and scenario analysis

Please note that the following responses again refer to all respondents regardless whether they follow a quantitative or a qualitative approach.
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Are banks required or expected to conduct stress testing or scenario analysis of their liquidity position? – (Q 14.1)

Yes: BE, BG, CY, CZ (banks), DE, DK, EE, ES, FI, FR, GR (banks), HU, IE, LT, LV, NL, NO, PL, PT, RO, SE, SI (depending on size and complexity), SK, UK (banks, IF, bs).

Expected/encouraged/in use by institution: AT, IC, IT, MT.

No: LI.

Other: Not required at present but will be implemented in context of roll out of Pillar 2 (LU).

What implicit or explicit scenarios do supervisors consider in their assessment of the liquidity position of a bank (e.g. market, bank-specific crisis and/or counterparty crisis)? – (Q 14.2)

Obligatory/Set Scenarios

- BE (for the largest Belgian banking groups only):
 - 3 notch downgrade long term rating;
 - 3 notch downgrade long term rating in adverse market conditions;
 - operational problem(s) drastically impacting liquidity position of banks.
- SK:
 - decrease of value of government bonds by 10%;
 - decrease of volume of client deposits by 20%;
 - decrease of deposits by non-residential banks by 90%;
 - systemic risk.
- MT (central bank):
 - aggregated basic sensitivity analysis on liquidity risks and basic macro scenarios.

Expected scenarios

Bank specific	AT, DK, ES, FI, GR (banks), IE, IT, LI, NL, NO, PL, PT, SE, SI, UK (banks), UK (bs)
Market related	DK, ES, FI, GR (banks), IE, IT, NL, NO, PL, PT, SE, SI, UK (banks), UK (bs)
Mix of bank specific and market related	NL, UK (banks)
Counterparty risk/default; Rating downgrade/downgrade of	BG, DE, BG, ES, FI, GR (banks), IE, PL

rating of parent organisation	
Longer term deterioration of bank's own liquidity condition	EE
Interbank/market crisis/longer term unfavourable economic impact	BG, DE, EE, IE, IT
Emerging market and systemic crisis	DE
Overall financial sector basis	LU
Deposit withdrawals/deposit run	DE, FI, IE, IT
Funding concentrations	IE
Operational risk events	DE
Payments systems difficulties	IE
Changes in interest rates	ES
Activity level	ES
Strategies for liquidity crisis (responsibilities of senior management)	EE
Temporary liquidity pressure	EE
Illiquid assets	IE
Level of potential assets/asset tradability	RO
Development of balance sheet liabilities under normal and crisis conditions	RO
Development of off balance sheet items	RO
Business continuity aspects	FR
Move of key customer	UK(IF)

Downturn in revenues	UK(IF)
Delays in receipt of payments or additional cash demands	UK(IF)

No explicit/implicit scenarios; responsibility of institution CY, CZ, HU, LT, LV.

No assessment of institution's stress testing MT.

How do supervisors assess the resiliency of a banks' funding liquidity to stressed market liquidity conditions? – (Q 14.3)

Through inclusion of market crisis scenario in liquidity stress tests organised for larger Belgian banking groups	BE
Through information obtained by liquidity stress test conducted by central bank	DE
Through information obtained when approving and auditing internal models under new liquidity regulation	DE
Stress scenario to assess bank short-term liquidity based on extremely pessimistic assumptions used	FR
Use of liquidity risk assessment model to consider adequacy of liquidity under normal conditions and possible exogenous shocks (adverse coincidence scenario and weak bank scenario)	IT
During on-site examination inspectors verify consistency of liquidity risk models, scope of stress test scenarios used and comprehensiveness of contingency plans.	PL
Independent evaluation of bank's strategies, policies etc	LV
Use of entities' internal information (Results of entities' internal measurements and contingency plans with quantitative results of maturity gaps/information from banks' internal	BE (largest banking groups), ES, FI, NL, NO, PT, UK (banks, bs), PL (during on-site examination)

reports/banks' liquidity reports/reports on stress tests conducted and dry runs)	
Through calculation of prudential ratios/capital adequacy ratio/computation of indicators	BE, FI, NO, PL
Dependence on interbank borrowing; funding sources/structure and borrowing markets	CZ, DK, FI, IE, LT, PL, PT, SE
Review of contingency funding/activity/crisis plans	FI, IE, LT, NL, PL (during on-site examination)
Possibility of using back up financial resources	CZ
Assets/liabilities/off balance sheet items analysis	FI

No assessment CY.

Not applicable CZ (IF), GR (IF).

Other:

- GR (banks) – no cases identified.
- LU – credit institutions need to run liquidity policies and adopt risk practices that are commensurate with the risks they face and the liquidity situation they are exposed to.
- RO – credit institutions shall maintain stable relationships with credit suppliers and shall ensure adequate diversification of financing sources in order to avoid their concentration.
- SI – assessed individually by the bank.

What shortcomings are perceived to exist in these supervisory assessments? – (Q 14.3.1)

- BE:
 - actual behaviour of other market participants and markets in general cannot be predicted/modelled perfectly;
 - actual effects on liquidity of assets, withdrawal of credit lines, access to markets etc. cannot be predicted/modelled perfectly.
- NL:
 - difficult to assess market conditions and behaviour in stressed situation;

- unclear if banks will be able in stressed situations to transfer available liquidity in a timely manner to place where needed, especially with respect to intra-day liquidity;
- not every bank holds dry runs. They may give out wrong signals.
- DE, ES, IE, FI:
 - lack of data at supervisory level .
- PT:
 - off-site supervision provides only a partial view of the ability of institutions to withstand shocks and it is not possible to constantly monitor the liquidity position of an institution. Due to the liquidity risk features, this is a major challenge as a liquidity crisis can arise suddenly.
- EE:
 - no preparations to use alternative liquidity resources other than parent banks.
- IT:
 - absence of multi-currency crisis scenarios;
 - lack of early warning thresholds on total interbank funding;
 - lack of linkage between liquidity shortages and “flight to quality” phenomena.
- LT:
 - banks’ insufficiently conservative assumptions/too high confidence in assistance from parent institution.
- MT:
 - contagion risk and secondary effects not included (central bank stress tests);
 - assumptions do not necessarily reflect the individual bank’s risk perception with top-down approach (central bank);
 - exclusion of any mitigation factors taken by banks in line with their contingency plan (central bank).

None perceived BG (regarding subsidiaries of foreign banks), CZ, DK, FR, HU, LI, SK, UK (IF) overall firms do not pose systemic risk (except maybe some investment banks).

Not applicable AT, CY, GR (IF), NO, PL, SE not enough experience of new regime, UK (banks) still assessing new rules for perceived shortcomings.

Other

- LU – liquidity supervision fragmented. There does not yet exist a formalized evaluation scheme allowing for the ranking of different credit institutions across all relevant qualitative and quantitative dimensions. Final objective is to align more closely supervision of liquidity risks with existing banking practice and supervisory concerns.

What actual shortcomings have been observed in banks' ability to manage liquidity risk under stressed market conditions? – (Q 14.3.2)

- CZ, ES, IT, MT (central bank):
 - insufficient or absence of contingency plans/contingency funding.
- CZ, IE, MT (central bank):
 - way of assessing certain assets' liquidity under stressed market conditions.
- IE, MT (central bank):
 - difficult to fully incorporate the danger of contagion risk.
- CZ:
 - inclusion of uncommitted credit lines into back-up financial resources available under stressed market conditions.
- DE:
 - management of liquidity risks stemming from off balance sheet items as impact on liquidity under stressed market conditions is difficult to quantify;
 - lack of modelling;
 - non-transferability of certain types of collateral across borders;
 - managing liquidity between different time zones;
 - currency issues.
- IE:
 - legal enforceability of some funding arrangements in a stressed situation is untested.
- IT:
 - lack of early warning threshold does not allow Italian banks to manage liquidity risk under stressed market conditions in an accurate way.
- NL:

- dry runs have shown one bank that it was more difficult to transfer liquidity intra group than expected.
- MT (central bank):
 - absence of interbank market;
 - under stressed conditions, a slight increase in obligations would result in liquidity shortfall.
- LT:
 - insufficient planning and balancing of cashflows;
 - too high dependence on a few big depositors.
- ES:
 - some banks have not implemented correctly the maturity gap measurement system;
 - liquidity policies and measures for emergency situations not as well documented as desirable;
 - internal auditors do not verify the liquidity control and measurement systems.

None BE, BG, ES no practical examples to draw on but general considerations set out above, FI increasing dependence on market based funding which could potentially lead to problems among smaller banks which often depend on too few counterparties or instruments, FR, HU, IE no practical examples but general considerations set out above, LI, LU, PL, PT, SE, SK, UK (IF, BS).

Not applicable AT, CY, GR (IF), NO.

Other EE according to banks' crisis scenarios the banks will manage their liquidity risk under stressed market conditions well unless unexpected circumstances like force major arise.

The time horizons covered by quantitative requirements – (Q 11.3)

This question was related to quantitative requirements in general and not to time horizons of stress testing.

6 countries require reports to cover from 1 day onwards, i.e. 1 week, 1, 3, 6, 12 months and 1 year, etc.

6 countries require reports to cover from 1 week onwards. i.e. 1, 3, 6, 12 months and 1 year, etc.

11 countries require reports to cover 1 month onwards.

LV and LI require reports of only 1 month.

Banks in ES, NO, EE and LU use their own approaches. ES has qualitative requirements.

Foreign currency management – (Q 17)

Majority of supervisors are setting only qualitative requirements on foreign currency management. Reporting of foreign currency positions is done either by reporting liquidity risk by currencies or by reporting liquidity risk in all currencies in aggregate and reporting separately FX-risks. One third of the supervisors treat foreign currencies (and especially non-convertible currencies) differently when calculating supervisory ratios.

Foreign currency related requirements - (Q 17.1)

All currencies in aggregate	BG, CY, DE, DK, EE, FI, FR, GR, HU, IC, IE, IT, LI, LT, LU, LV, NO, PT, RO, SE, SI, UK
Domestic / all other currencies in aggregate	
Domestic only	AT
Groups of currencies (convertible/non-convertible, time zones etc.)	BE, CZ, ES, PL, NL
Each currency individually	MT, SK (CZ, ES)
Qualitative requirements for currency management (mentioned in the answer)	BE, ES, FI, HU, IE, LT, LV, NL, NO, PT, RO, SK

Most of the supervisors have not set any requirements for foreign currencies but are tackling the issue by setting qualitative requirements for foreign currency liquidity management. In many countries foreign currency positions are reported as part of FX-risk reporting.

Some of the countries requiring more detailed reporting requiring information on non-convertible currencies are BE, CZ, ES, PL.

Are foreign currencies treated differently than domestic currency? – (Q 17.2)

Yes: 10 countries (AT, BE, CY, CZ, DE, LI, NL, PL, SK, UK).

No: 20 countries (BG, DK, EE, ES, FI, FR, GR, HU, IC, IE, IT, LT, LU, LV, MT, NO, PT, RO, SE, SI).

One third of the supervisors require foreign currencies to be treated differently when calculating different supervisory ratios. A stricter treatment is usually applied for non-convertible currencies.

Treatment of currency mismatches – (Q 17.3)

Majority of respondents answered that no explicit quantitative requirements are set. Qualitative requirements mentioned were, among others, that banks must set limits on currency mismatches and analyse mismatches and relevant market conditions affecting the bank's access to the foreign exchange market. Banks in NL treat convertible and non-convertible currencies (or currencies that are not freely transferable) differently when calculating group's liquidity deficit.

Assumptions about currency convertibility – (Q 17.4)

No assumptions (or all currencies treated as aggregate and fully convertible)

AT, BG, CY, DE, DK, EE, ES, FI, FR, GR, IC, IE, IT, LI, LT, LU, LV, MT, NO, PT, RO, SE, SI, SK, UK.

Full convertibility to group of currencies

BE in its reporting scheme (G10, EEA countries, Australia and New Zealand), NL (same group of convertible currencies as mentioned by BE), CZ, HU (all major currencies), PL.

Approach to Qualitative Requirements

Qualitative criteria / contingency planning

Does the liquidity regime require banks to have a formal written liquidity policy? – (Q 13.1)

Yes: BE, BG, CY, CZ (banks and IF), DK, ES, FI, FR, GR (banks, not applicable to IF), IE, LT, LV, NL, NO, PL, RO, SE, SI, SK, UK (banks, building societies).

Other/implicit arrangements; guidance; encouraged; expected etc.: AT, DE, EE, HU, IC, IT (contingency funding plan), LI, LU, MT, PT.

No: UK (IF).

If so, which areas are required to be covered? For example (but not limited to):

Domestic versus non-domestic currency management	BE, BG, CZ (banks), ES, FI, IE, LV, NL, NO, PL, SI, SK, UK (bs)
Contingency arrangements	BE, BG, CY, CZ (banks), ES, FI, FR, GR (banks), IE, LT, NL, NO, PL, SE, SI, SK, UK (bs)
Internal holding limits of particular assets or currencies	BE, BG, CY, CZ (banks), ES, FI, FR, GR (banks), IE, LT, LV, NL, NO, SE, SI, SK, UK (bs)

Other areas covered

Reporting systems (LT, SE), identification of responsibilities (ES, IE, LT), systematic analyses of liquidity risks (NL), implementation of policy (NL), internal monitoring (NL, SE), definition of risk tolerance (NO), analysis of long term funding (PL), policy on operational and settlement risk matters (UK – bs), and outsourcing (UK – bs).

At what level should the policy be approved and sponsored within the institution? – (Q 13.2)

Board: AT, BE, CY, CZ (banks and IF), DE, DK, EE, FI, GR (banks), IE, IT, LT, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK (bs).

Senior Management/ Managing Body: BG, LU.

Other: Top management and Board (FR), Board and ALCO (HU), depends on structure (LV), not specified (UK – banks), at the right level (usually it is expected to be the Board) (ES).

No response/information not available: IC, LI.

Is supervisory approval of the policy required? – (Q 13.3)

Yes: CZ (if).

No: AT, BE, BG, CY, CZ (banks), DK, EE, ES, FI, FR, GR (banks), HU, IE, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK (banks and bs).

Other: Use of institution's own procedures for purposes of liquidity monitoring under new liquidity regulation requires approval (DE).

Please describe any other qualitative requirement – (Q 13.4)

19 countries have not given any additional qualitative requirement.

3 have mentioned that Basel sound practices were directly applicable in their jurisdictions.

8 countries have mentioned specific qualitative requirements mainly focused on:

- management rules and procedures: governing body and managing body's responsibilities in the process of liquidity management (fixing limits, daily monitoring) must be documented, and in one case (BG) submitted to the supervisor;
- information system, with or without direct reference to IT system; the availability of quick and appropriate information on liquidity position is required;
- stress scenario and contingency planning;
- assessment and monitoring of access to the market in order to ensure their funding capacity.

Use of internal models

To what extent are banks required or permitted to use quantitative models to meet defined liquidity targets set by the supervisor? – (Q 18.1)

Only in a small number of member countries are regulatory requirements based explicitly on quantitative models (NL) and internal approaches (FI, SK). In NL the potential liquidity drain due to derivatives and margin requirements for settlement systems is required to be modelled. In BE banks' internal ratios can be accepted for prudential reporting instead of the standardised reporting scheme.

In DE the liberation clause allows institutions to use their own internal liquidity risk measurement and management procedures. If an institution is authorized by the supervisor to use its own internal procedure for regulatory purposes, it is no longer obliged to calculate the liquidity and observation ratios of the standard approach.

In some member countries the use of quantitative models to meet regulatory requirements is not permitted at all (BG, CY, LU) or not included explicitly (CZ, GR, LI, MT, PT) in the liquidity regime.

In countries with more quantitative approaches banks have to meet those quantitative requirements. In addition most large credit institutions use quantitative models for the management of liquidity risk even if the models are not accepted for supervisory purposes (FR).

In most instances member countries include a wide variety in their supervisory regime's acceptance of quantitative models.

Under current liquidity regulation most supervisory authorities accept quantitative methodologies for supervisory purposes in terms of calculating behavioural assumptions and/or flows which are difficult to quantify precisely as well as cash flow projections, limit systems, gap analysis and stress testing (AT, BE, DE, DK, ES, HU, IE, LT, LV, PL, SE, SI, NO, UK (banks), UK (BS)). In some cases authorities focus on a special subject for supervisory approval of bank's internal liquidity model (e.g. core deposits, derivatives).

Within the implementation of Pillar 2 of the Basel Accord some countries (DE, DK, IE, IT) allow for a more principles-based approach to managing liquidity risk and accept quantitative items in banks' own LRM Systems.

Numerous countries are in fact expecting and encouraging banks to use their own methodologies/models to manage liquidity risk in order to comply with the requirements for adequate risk management systems.

What explicit expectations exist for banks' own validation of such models? – (Q 18.2)

Most supervisory authorities have no specific expectations for the validation of bank's models (19 of 25 countries accepting internal models in some way).

Expectations for validation of bank's internal models exist in the following countries:

- behavioural maturities have to be in accordance with the accepted rules of statistics (AT);
- certain conditions have to be completed e.g. sufficient coverage of ratios, high frequency of calculation of the ratios, conservative assumptions, utility and efficiency of ratios in order for the internal ratios to be accepted for prudential reporting (BE);
- certain conditions have to be considered e.g. regular review of the adequacy of the calculation and monitoring procedures, analyzing short-term net outflows of funds, possibility of unsecured borrowing, effects of stress scenarios, definition of benchmarks (DE);
- validation should be independent of the risk taking function (following the generally accepted best risk management principles according to the risk management guidelines (BCBS)) (FI);
- calculation of stable sight deposits: a reliable and accurate database, the validity of assumptions shall be tested with different scenarios, stress test scenarios are tested quarterly, data observation period shall be at least five years, periodic back-testing (SI);
- the bank's internal control and audit department have to perform a regular and independent verification of the LRM system (SK).

Supervisory validation of models – (Q 21)

On the whole, internal models are not formally approved by supervisors.

Only one supervisor (DE) formally approves models in order to allow the bank not to fulfil the standard quantitative approach. In BE, the supervisors examine banks' internal ratios before accepting them for prudential reporting instead of the standardised reporting scheme.

Several supervisors answered that they would assess the model when it exists, since these models are a way of fulfilling the qualitative requirements relative to liquidity risk management procedures. In these cases, assessments of models are done in the normal course of the supervisory process.

Liquidity reporting – (Q 22)

Completeness/Consistency of information:

All EEA countries have in place specific liquidity reporting requirements for credit institutions with the exception of ES (but currently under consideration), IT and NO where credit institutions' regular prudential reporting schemes already include information on maturity ladders and liquid assets that enable the prudential monitoring of banks' liquidity positions. In general, all credit institutions including the branches of foreign banks are subject to these reporting regimes although some countries can provide waivers for incoming branches that fulfil certain conditions (DE, GR, IE, NL, UK and LU under which branches can obtain a lighter reporting regime). In addition, SE applies a size threshold that determines whether a credit institution is subject to the requirements.

By contrast, only a limited number of countries have in place a specific liquidity reporting regime for investment firms (CZ, DE and SE (partially), FR, HU, ES and IT (but again no specific liquidity report)). These regimes appear to be lighter than the regimes for credit institutions.

In some countries, other (financial) institutions such as financial holding companies, e-money institutions, building societies, leasing and asset management companies, clearing institutions etc. are subject to similar liquidity reporting requirements to those for credit institutions.

A distinction can be made between, on the one hand, countries where the reporting regimes are related to quantitative requirements and where supervisors regularly check compliance to prudential liquidity ratios on the basis of standardized reporting schemes (AT, BG, CY, DE, DK, FR, GR, IC, IE, LI, LU, LV, MT, NL, PL from 2008 onwards, PT, RO, SI, SK, UK-banks and building societies) - roughly two thirds of EEA countries - and on the other hand countries with no quantitative liquidity requirements that monitor institutions' liquidity positions on the basis of prudential reporting (BE, CZ-banks and IF, EE, FI, HU, ES and, IT and, NO with no specific liquidity report, and LV branches of foreign banks only). In both instances, the reporting consists of relatively similar information on (liquid) assets, maturity mismatches and contingent assets and liabilities that is used in the process of calculating supervisory liquidity ratios (either binding or monitoring ratios). Notwithstanding the fact that the general building blocks of the reporting schemes are quite similar, the degree of detail, the definitions of the reported items, the

degree to which institutions are allowed to apply their own (behavioural) assumptions and haircuts to the reported items and the level of aggregation of positions in different currencies vary considerably across jurisdictions. Some supervisors ask banks to detail modelling assumptions (SE, SK).

In a number of jurisdictions, banks can comply with the reporting regime through the submission of banks' internally used management information instead of the standardised reporting scheme. In BE, banks have the option to report internally applied liquidity ratios instead of the standardised reporting scheme at a consolidated level if certain conditions are met. In DE, the larger banks can report the outcome of internal liquidity models instead of the standardised reporting scheme. In EE, banks are required to submit their internal risk reports to the supervisor in addition to the standardised reporting scheme.

Three jurisdictions additionally require banks to regularly report on the qualitative features of their liquidity risk management (HU, RO).

In line with the overall prudential approach to liquidity risk, the majority of EEA countries expect institutions to report on a company basis only (AT, BG, CY, CZ, DE, EE, FI, FR, GR, HU, LI, LU, LV, MT, NO but no specific report, PL, RO, SI, SK, UK-other banks, IF and building societies), although an increasing number of countries require institutions to report at the consolidated level (FR optional, CZ and MT when deemed necessary, NL, SE, UK major retail deposit takers) or both levels (BE, DK, ES and IT but no specific liquidity report, IE, PT).

The reporting frequency varies from monthly (AT, BG, CY, CZ, DE, EE, ES IF, HU, IC, IT solo LT solo, LU, LV, MT, NL, NO, PL, UK-building societies) to quarterly (BE, CY, DK, ES, FIN, FR, GR, IE, LI, LT consol, PT, SE) and semi-annually (IT cons) or even daily (SI) with the option to increase the frequency under certain conditions in some countries (BE, BG, FR).

There is significant diversity in the associated guidelines on who signs off the prudential reporting.