BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY

Consultation Paper | CP4/19

Liquidity risk management for insurers

March 2019

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Responses are requested by Wednesday 5 June 2019.

Please address any comments or enquiries to:
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Contents

1 Overview

1.1 In this consultation paper (CP) the Prudential Regulation Authority (PRA) seeks views on a draft supervisory statement (SS) 'Liquidity risk management for insurers' (see Appendix) and the consequential supersession of a legacy supervisory statement on collateral upgrade transactions.[1]

1.2 The proposals are relevant to all UK Solvency II firms, including in respect of the Solvency II groups provisions, the Society of Lloyd's ('the Society') and its managing agents, and non-directive insurers (collectively, 'insurers').

Background

1.3 Conditions Governing Business 1.2 in the PRA Rulebook defines 'liquidity risk' as 'the risk that a firm is unable to realise investments and other assets in order to settle its financial obligations when they fall due.' Liquidity risk is inherent to the business model of banks (because of the mismatch between liabilities (usually demand deposits) and assets (usually long-term loans). This risk is typically less pronounced for insurers than for banks as insurers receive premiums upfront and pay claims later, upon the occurrence of an insured event (the so-called 'inverted production cycle'). The regular inflow of liquidity through premiums can, however, cause insurers to consider liquidity risk a second order concern and to potentially underestimate, or fail to recognise, the risks to a positive liquidity position in times of market stress.

1.4 There have been a number of changes in the insurance sector and financial markets more broadly that have increased liquidity risk for insurers. In David Rule's speech in July 2017, he observed that a potential concern for the life industry is the shift towards direct investment in illiquid assets, and the potential that this might in future lead to exposure concentrations.[2] In addition, structural changes appear to have reduced liquidity in some markets, thus potentially exacerbating market volatility if certain assets are downgraded or during broader market stress.[3] On the liability side, the pension reforms in the 2014 Budget abolished compulsory annuitisation,[4] which has affected profitability for insurers and the predictability of insurers' liabilities. In addition, increased use of derivatives by insurers, and mandatory central clearing of certain contracts, have transformed capital risks into liquidity risk through margining requirements.[5] Insurers need to understand the implications of these changes on their liquidity position and manage their liquidity risk.

1.5 Liquidity stress may materialise through insurance obligations. One potential mechanism is through an increase in policyholder withdrawals following, for example, a decrease in consumer confidence with respect to a particular insurer or business model. A sudden, unexpected increase in claims as a result of a catastrophe or pandemic event may also produce

1 Legacy SS2/13, 'Collateral upgrade transactions and asset encumbrance: expectations in relation to firms' risk management practices', April 2013 https://www.bankofengland.co.uk/prudential-regulation/publication/2013/collateral-upgrade-transactions-and-asset-encumbrance-expectations-in-relation-to-firms-risk-lss.

2 'Changing risks and the search for yield on Solvency II capital', speech presented at Association of British Insurers NEDs & Chairs Network dinner, London, available at: https://www.bankofengland.co.uk/speech/2017/changing-risk-and-the-search-for-yield-on-solvency-2-capital.

3 Financial Conduct Authority (2017). *New evidence on liquidity in UK corporate bond markets*. Retrieved from https://www.fca.org.uk/publications/research/new-evidence-liquidity-uk-corporate-bond-markets, Bank of England (2016). *Financial Stability Report*. Issue 39. Retrieved from https://www.bankofengland.co.uk/financial-stability-report/2016/july-2016.

4 HM Treasury (2014). *Budget 2014* (HC 1104). Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/293759/37630_Budget_2014_Web_Accessible.pdf.

5 European Markets Infrastructure Regulation (EU) No 648/2012 of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories (EMIR).

unexpected liquidity needs. Claims settlement delays with reinsurers may delay insurers' access to these funds during such events, potentially leading to liquidity strains.

1.6 Non-insurance obligations may also contribute to liquidity stress at an insurer. Collateral upgrade transactions may pose risks to an insurer's liquidity position by encumbering a significant portion of the insurer's balance sheet (where the insurer is either a borrower or lender) or as a result of the potential for counterparties to withdraw funding (where the insurer is a borrower). Insurers with material derivatives positions, even those insurers using such contracts to hedge market risk in their insurance liabilities, may face unexpected liquidity demands if the value of the derivative moves against the insurer. While potentially improving the insurer's solvency position, this could create unexpected liquidity needs through additional collateral or margin requirements. Centrally cleared derivatives will likely require insurers to post cash variation margin against such movements. Additionally, market movements may reduce the value of posted collateral, requiring additional assets to make up the shortfall. In the November 2018 Financial Stability Report (FSR), the Bank of England's (Bank's) Financial Policy Committee (FPC) discussed liquidity risk from the use of derivatives by non-banks, including insurers, in its assessment of the risks of leverage in the non-bank financial system.[6]

1.7 While insurers benefit from the inverted production cycle, they are not immune to liquidity risk. Insurers have experienced financial distress or failed in other jurisdictions because of liquidity concerns, for example as access to wholesale funding has reduced. Insufficient liquidity in the insurance sector may impact the PRA's general safety and soundness objective, its insurance objective and the Bank's financial stability objective. The PRA takes the view that this is a serious risk for the sector, and one that may rise further in the future.

1.8 As explained in 'The PRA's approach to insurance supervision,'[7] the PRA expects all insurers to take responsibility for ensuring that there is no significant risk that they cannot meet their liabilities as they fall due, and to have appropriate risk management strategies and systems in place for managing their liquidity. An insurer is expected to ensure sufficient liquidity resources on a group-basis, even under stressed conditions, to cover group liabilities as they fall due.

1.9 The draft SS sets out the PRA's expectations as to how insurers might go about complying with applicable liquidity risk management requirements, including Conditions Governing Business 3.1(2)(c)(iv) (transposing Article 44(2)(d) of the Solvency II Directive (2009/138/EC) ('Solvency II')), Group Supervision 17.1(1)(b) (transposing Article 246(1) of Solvency II) and Insurance Company – Overall Resources and Valuation 2.5(3) in the PRA Rulebook.

1.10 The draft SS draws on recent engagements with stakeholders in the insurance sector and the PRA's regulatory experience, including through reviews of Own Risk and Solvency Assessment (ORSA) reports and liquidity risk reviews of PRA-regulated firms, to identify some key issues for insurers to consider when managing liquidity risk, and to which the PRA pays close attention in the conduct of its supervision. It is not intended to be an exhaustive guide to liquidity risk management. The PRA recognises that liquidity risks are unique to each individual firm and group. An insurer is expected to understand the liquidity risk it faces and to apply the guidance contained in the draft SS proportionately, in light of the scale, nature and complexity of its activities.

6 Available at: https://www.bankofengland.co.uk/financial-stability-report/2018/november-2018.
7 October 2018: https://www.bankofengland.co.uk/prudential-regulation/publication/2018/pra-approach-documents-2018.

Implementation

1.11 The PRA proposes that the expectations in the draft SS would apply from the date of final publication, which is expected in the second half of 2019.

Responses and next steps

1.12 This consultation closes on 5 June 2019. The PRA invites feedback on the proposals set out in this consultation. Please address any comments or enquiries to CP4_19@bankofengland.co.uk.

1.13 The proposals in this CP have been designed in the context of the current UK and EU regulatory framework. The PRA will keep the policy under review to assess whether any changes would be required due to changes in the UK regulatory framework, including those arising once any new arrangements with the European Union take effect.

2 Proposals

2.1 The draft SS in the Appendix to this CP sets out the PRA's expectations for liquidity risk management by insurers. These include the key elements of an insurer's liquidity risk management framework, the consideration of material sources of liquidity risk to which an insurer may be exposed, expectations of the design and conduct of a stress testing programme, considerations for assessing asset liquidity, quantitative metrics and tools for measuring and monitoring liquidity risk, and effective liquidity contingency planning.

Liquidity risk management framework

2.2 In Chapter 2 of the draft SS the PRA lays out what it would expect of an insurer regarding the fundamental components of a liquidity risk management framework that is compliant with PRA rules and applicable EU standards, for instance Conditions Governing Business 2.2 and 3.1, Group Supervision 17.1, Investments 2.1, Non-Solvency II Firms – Governance 2.5, 3.2, 7.2 and 7.3 and Insurance Company – Overall Resources and Valuation 2.3 in the PRA Rulebook and Article 259 of Commission Delegated Regulation EU 2015/35 ('the Delegated Act').

Material sources of liquidity risk

2.3 In Chapter 3 of the draft SS, the PRA proposes a number of sources of liquidity risk for an insurer to consider. However, as sources of liquidity risk will vary from business to business, this list should not be considered exhaustive. An insurer is expected to understand the sources of liquidity risk it faces, and should assess the proposed sources of liquidity risk in light of the scale, nature and complexity of its activities.

2.4 In the draft SS, the PRA highlights certain activities of particular focus, where the impact on an insurer's liquidity risk profile may subject it to risks from a number of the categories mentioned in Chapter 3. The PRA proposes that:

- An insurer engaging in collateral upgrade and other transactions, both where the insurer is a lender and a borrower of liquidity, consider the impact of such transactions on its liquidity profile.

- Life insurers consider liquidity risk arising from number of sources related to the matching adjustment portfolio and unit-linked funds. For a life insurer, liquidity considerations are relevant both in the portfolio as a whole and in individual funds. This includes not only the shareholders' funds, non-profits funds and with-profits funds, but also unit-linked funds.

- Insurers that are part of a group consider additional group-specific risks, particularly the use of intragroup transactions and their impact on an operating company's liquidity position or the liquidity position of the group as a whole.

2.5 By providing a list of the potential sources of liquidity risk that it considers in its supervision, the PRA aims to improve risk identification and to assist firms in recognizing potential sources of liquidity risk in their business and mix of activities.

Stress testing

2.6 Article 259(3) of the Delegated Act requires that a UK Solvency II firm, the Society and managing agents conduct stress testing and scenario analysis for relevant risks, which includes liquidity risk. This dovetails with the obligation in Conditions Governing Business 3.1(2)(c) in the PRA Rulebook to have in place an effective risk-management system that covers liquidity risk. Non-directive firms have a similar obligation under Insurance Company – Overall Resources 2.5 and Valuation and Non-Solvency II Firms – Governance 7.3(5) and (6) in the PRA Rulebook. Consistent with these obligations, the PRA would expect, as described in Chapter 4 of the draft SS, that an insurer conduct liquidity stress tests and to have in place proper systems and data processes to enable it to carry out stress testing.

2.7 An insurer's stress tests should capture all material risk drivers, relevant to its business, and use a range of severe but plausible stress scenarios over different horizons.

2.8 By setting out its expectations in the draft SS, the PRA aims set out PRA expectations with respect to firm compliance with relevant obligations in the PRA Rulebook and the Delegated Act.

Liquidity buffers

2.9 In Chapter 5 of the draft SS, the PRA sets out considerations an insurer should bear in mind when determining which assets to hold as part of its liquidity buffer. Under Investments 2.1 in the PRA Rulebook, a UK Solvency II firm, the Society of Lloyd's and managing agents are expected to invest in such a manner as to ensure the liquidity of the portfolio of assets of the firm. Similarly, Article 260(1)(d)(ii) of the Delegated Act requires an insurer to document the appropriateness of the liquidity of its assets. Finally, paragraphs 1.63(b) and (c) of European Insurance and Occupational Pensions Authority (EIOPA) Guideline 26 require an insurer to consider its total liquidity needs, including an appropriate liquidity buffer and to consider the level and monitoring of liquid assets, including potential haircuts that could be imposed on their sale. A non-directive firm, under Insurance Company – Overall Resources and Valuation 2.3 and Friendly Society – Financial Prudence 4.1 in the PRA Rulebook, must maintain sufficient liquidity to meet its liabilities as they become due.

2.10 These proposals are intended to provide a common language for both firms and supervisors for assessing an insurer's liquidity position. The PRA is of the view that articulating a set of principles will promote a better understanding among firms of the liquidity of their investments and thus raise standards with regard to firm compliance with relevant obligations in the PRA Rulebook and the Delegated Act.

Risk monitoring and reporting

2.11 Consistent with Conditions Governing Business 3.1 and Non-Solvency II Firms – Governance 7.3 in the PRA Rulebook, the PRA would expect an insurer to define its own risk metrics for measuring and monitoring liquidity risk. These metrics should also include an assessment by the firm of its available liquidity sources against stressed liquidity needs, as defined by its refreshed stress test scenarios. Regardless of the metric chosen, an insurer should be able to justify its use and, where applicable, to apply it consistently group-wide. An insurer would also be expected to set target liquidity buffers appropriately in excess of its projected, stressed liquidity needs, in line with its risk appetite, consistent with Articles 259(3) and 260(1)(d)(ii) of the Delegated Act and Non-Solvency II Firms – Governance 7.3 in the PRA Rulebook. General risk monitoring metrics, along with stress test results, are expected to be produced regularly and with more frequent reporting in the event of changes in the firm's activities or the operational environment.

2.12 Through these proposals, the PRA intends to provide guidance on the use of metrics that will be useful to firms in managing their liquidity risk consistent with obligation set out in relevant PRA rules.

Liquidity contingency plan

2.13 In line with Conditions Governing Business 3.6 and Non-Solvency II Firms – Governance 2.6 in the PRA Rulebook, the PRA proposes that an insurer, other than a small non-directive insurer,[8] maintain a clear process for recognising and addressing a liquidity stress, which include maintaining a documented liquidity contingency plan that details how the insurer would respond to a liquidity stress event.

2.14 By clearly setting out its expectations on contingency planning in the draft SS, the PRA is providing insurers with a greater understanding of the PRA's expectations of the ways in which they can satisfactorily meet their obligations under the PRA Rulebook and other relevant standards.

Supersession of a legacy supervisory statement

2.15 Legacy SS2/13 'Collateral upgrade transactions and asset encumbrance: expectations in relation to firms' risk management practices' sets out the PRA's expectations of banks and insurers engaging in collateral upgrade transactions and described a number of considerations in their management of the associated risk. Upon publication, it is proposed that the new SS would supersede the legacy SS, including the expectation therein to notify the PRA in advance of significant transactions.

2.16 Through this proposal, the PRA expects to retain the substance of the risk management components of the legacy supervisory statement.

3 The PRA's statutory obligations

3.1 The PRA is required by the Financial Services and Markets Act 2000 (FSMA) to consult when setting its general policies and practices.[9] In doing so, it is required to comply with several statutory and public law obligations. The PRA meets these obligations by providing the following in its consultations:

8 As defined in the Glossary of the PRA Rulebook.
9 Section 2L of FSMA

- a cost benefit analysis;
- an explanation of the PRA's reasons for believing that making the proposed rules is compatible with the PRA's duty to act in a way that advances its general objective,[10] insurance objective[11] (if applicable), and secondary competition objective;[12]
- an explanation of the PRA's reasons for believing that making the proposed rules are compatible with its duty to have regard to the regulatory principles;[13] and
- a statement as to whether the impact of the proposed rules will be significantly different to mutuals than to other persons.[14]

3.2 The Prudential Regulation Committee (PRC) should have regard to aspects of the Government's economic policy as recommended by HM Treasury.[15]

3.3 The PRA is also required by the Equality Act 2010[16] to have due regard to the need to eliminate discrimination and to promote equality of opportunity in carrying out its policies, services and functions.

Cost benefit analysis

3.4 The proposals set out in the draft SS provide guidance on the PRA's expectations of firms to comply with its existing rules and do not introduce additional requirements. The proposals could lead to additional costs to some firms relative to their current practice, both one-off and ongoing. These may vary depending on firm size, complexity and current approaches to liquidity stress testing and contingency planning. The PRA does not view these costs as a result of this draft SS, but rather they are costs associated with compliance with the existing PRA Rules, the Delegated Act and relevant EIOPA Guidelines.

3.5 Based on feedback from our engagement with insurance sector stakeholders, the PRA does not expect these costs, when compared with firms' current practices, to be significant. Though the sample was small, the discussions indicated that a number of firms, a majority of those attending discussions and those taking part in an external survey, already engage in liquidity stress testing,. Moreover, the Solvency Capital Requirement standard formula is a scenario-based calculation.[17] As such, it is expected that insurers already have the framework in place to implement liquidity stress testing.

3.6 The proposals in the draft SS are expected to help promote the safety and soundness of insurers by improving their understanding and management of liquidity risk; by minimising the adverse effects of the failure of an insurer on the UK financial system; and increasing consistency with and transparency in the application of the PRA's regulatory approach.

3.7 The supersession of Legacy SS2/13 is expected to reduce redundancy. The PRA does not consider that retiring Legacy SS2/13 would pose a significant risk. This is because, since its publication, the PRA has developed the tools used to supervise banks' liquidity risk, including its approach to Pillar 2 liquidity. In addition, the information necessary for supervision of such

10 Section 2B of FSMA.
11 Section 2C of FSMA.
12 Section 2H(1) of FSMA.
13 Sections 2H(2) and 3B of FSMA.
14 Section 138K of FSMA.
15 Section 30B of the Bank of England Act 1998.
16 Section 149.
17 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0035&from=EN.

transactions would continue to be collected through the Solvency and Financial Condition Report and Regular Supervisory Report. Moreover, the draft SS would help ensure insurers prudently manage the risk associated with collateral upgrade transactions.

Compatibility with the PRA's objectives

3.8 By setting out clearly the PRA's expectations around liquidity risk management and by ensuring that insurers are managing their liquidity risk properly, these proposals help promote the safety and soundness of insurers and contribute to ensuring appropriate protection for policyholders.

3.9 When discharging its general functions in a way that advances its objectives, the PRA has, as a secondary objective, a duty, as far as reasonably possible, to act in a way that facilitates effective competition in markets for services provided by PRA-regulated firms carrying on regulated activities. Ensuring that all insurers are managing their liquidity risk properly helps facilitate effective competition.

Regulatory principles

3.10 In developing the proposals in this CP, the PRA has had regard to the regulatory principles as set out in FSMA. The following principles are particularly relevant:

- The principle that a burden should be proportionate to the benefits which are expected to result from the imposition of that burden: analysis of current practice and engagement with stakeholders have indicated further guidance on liquidity risk management would be useful. The PRA considers supervisory guidance would ensure that insurers are managing their liquidity risk properly, while allowing sufficient flexibility for insurers to implement their own approaches, in line with their business model and risk tolerance.

- The principle that the PRA should use its resources in the most efficient and economical way: clarifying the PRA's supervisory expectations in respect of liquidity risk management would result in better and more efficient engagement between PRA and insurers.

- The principle of the desirability of the PRA exercising its functions in a way that recognises differences in the nature of, and objectives of, businesses carried on by different firms: the PRA makes clear in its proposal that insurers should develop their own liquidity risk management approaches, taking into account their own business model and risk appetite, so long as they can adequately explain their approach and justify its compatibility with the PRA's rules.

- The principle that the PRA should exercise their functions as transparently as possible: the PRA considers that the draft SS enhances the transparency of its expectations of insurers with respect to liquidity risk management.

Impact on mutuals

3.11 The PRA considers that the impact of the proposed rule changes on mutuals is expected to be no different from the impact on other firms.

HM Treasury recommendation letter

3.12 On 8 March 2017, HM Treasury made recommendations to the Prudential Regulation Committee about aspects of the Government's economic policy to which the Committee should have regard when considering how to advance the objectives of the PRA and apply the regulatory principles set out in FSMA.[18] The PRA considers the following aspects to be of particular relevance to these proposals:

- The PRA believes that the proposals setting out its expectations of liquidity risk management by insurers will help to sustain the reputation of London as a leading international financial centre by ensuring the robustness of insurers and the resilience of the financial system in the United Kingdom.
- The PRA considers that the proposals are consistent with delivering better outcomes for consumers, by ensuring that insurers are fully aware of the PRA's expectations of their liquidity risk management, and against which the PRA can take actions to address any weaknesses identified in insurer's risk management and governance.
- The PRA considers that the proposals will not hamper innovation in the financial services sector, as insurers will be able to develop their own business models within a clearly articulated framework to manage their ongoing financial soundness, taking account of their own risk appetite and risk profile.

Equality and diversity

3.13 The PRA considers that the proposals do not give rise to equality and diversity implications.

[18] The HM Treasury recommendation letter can be found at: https://www.bankofengland.co.uk/about/people/prudential-regulation-committee.

Appendix: Draft Supervisory Statement 'Liquidity risk management for insurers'

Contents

1 Introduction

1.1 This supervisory statement (SS) sets out the Prudential Regulation Authority's (PRA's) expectations concerning the development and maintenance of an insurer's liquidity risk management framework as required under relevant rules, standards and guidelines, including Conditions Governing Business 3.1(2)(c)(iv) (transposing Article 44(2)(d) of the Solvency II Directive (2009/138/EC) ('Solvency II')), Group Supervision 17.1(1)(b) (transposing Article 246(1) of Solvency II) and Insurance Company – Overall Resources and Valuation 2.5(3) in the PRA Rulebook.

1.2 It is addressed to all UK Solvency II firms, including in respect of the Solvency II groups provisions, to the Society of Lloyd's ('the Society') and its managing agents, and to non-directive insurers (collectively referred to as 'insurers').

1.3 The areas addressed in this SS include:

- the development and maintenance of proper policies, systems, controls and processes (Chapter 2);
- the identification of material liquidity risk drivers (Chapter 3);
- the design and undertaking of forward-looking scenario analysis and stress testing programmes (Chapter 4);
- considerations for the inclusion of highly liquid assets in the liquidity buffer (Chapter 5);
- the use of quantitative metrics and tools for measuring and monitoring liquidity risk drivers (Chapter 6); and
- effective contingency planning (Chapter 7).

1.4 This SS draws on the PRA's regulatory experience to identify some key issues for an insurer to consider when managing liquidity risk. It is not intended to be an exhaustive guide to liquidity management. The PRA recognises that the mix of sources of liquidity risk is unique to each individual firm and group, and that liquidity risk management practices will vary. An insurer, therefore, is expected to understand the drivers of the liquidity risk it faces and to apply the guidance contained in this SS in light of the scale, nature and complexity of its activities.

1.5 This SS should be read in conjunction with:

- the Conditions Governing Business, Group Supervision, and Investments Parts of the PRA Rulebook for Solvency II firms;[19]
- the Friendly Society – Financial Prudent, Insurance Company – Overall Resources and Valuation and Non-Solvency II Firms – Governance Parts of the PRA Rulebook for non-

[19] http://www.prarulebook.co.uk/rulebook/Content/Part/212969, http://www.prarulebook.co.uk/rulebook/Content/Part/213031 and http://www.prarulebook.co.uk/rulebook/Content/Part/212926 (respectively)

Directive firms;[20]

- Commission Delegated Regulation (EU) 2015/35 ('the Delegated Act'), including Articles 258 – 267 (System of Governance);[21]
- European Insurance and Occupational Pensions Authority (EIOPA) Guidelines on system of governance;[22]
- 'The PRA's approach to insurance supervision';[23]
- SS14/15 'With-profits';[24]
- SS41/15 'Solvency II: applying EIOPA Set 2, System of Governance and ORSA Guidelines';[25]
- SS5/16 'Corporate Governance: Board responsibilities';[26]
- SS19/16 'Solvency II: ORSA';[27]
- SS5/17 'Dealing with a market turning event in the general insurance sector';[28]
- SS4/18 'Financial management and planning by insurers';[29] and
- SS7/18 'Solvency II: Matching adjustment'.[30]

2 Liquidity risk management framework

2.1 Conditions Governing Business Parts 2 and 3 of the PRA Rulebook, supplemented by Articles 258 and 259 of the Delegated Act, and Non-Solvency II Firms – Governance 2, 3 and 7 Parts of the PRA Rulebook require an insurer to establish an effective system of governance and prudential risk management systems. An insurer is required to have a risk appetite or tolerance for risk, a process to identify, measure, and monitor risk and appropriate systems to convey information to management or the board.

2.2 An insurer's system of governance and risk management framework is required, under Conditions Governing Business 2.3 and Non-Solvency II Firms – Governance 2.2 and 3.3 in the PRA Rulebook, to be proportionate to the nature, scale and complexity of its operations.

20 http://www.prarulebook.co.uk/rulebook/Content/Part/318921/11-02-2019, http://www.prarulebook.co.uk/rulebook/Content/Part/318826 and http://www.prarulebook.co.uk/rulebook/Content/Part/319262/08-02-2019 (respectively).
21 https://eur-lex.europa.eu/eli/reg_del/2015/35/oj.
22 https://eiopa.europa.eu/publications/eiopa-guidelines/guidelines-on-system-of-governance-solvency-ii.
23 https://www.bankofengland.co.uk/prudential-regulation/supervision.
24 March 2015: https://www.bankofengland.co.uk/prudential-regulation/publication/2015/with-profits-ss.
25 October 2015: www.bankofengland.co.uk/prudential-regulation/publication/2015/solvency2-applying-eiopa-set2-system-of-governance-and-orsa-guidelines-ss.
26 March 2016: www.bankofengland.co.uk/prudential-regulation/publication/2016/corporate-governance-board-responsibilities-ss.
27 November 2016: www.bankofengland.co.uk/prudential-regulation/publication/2016/solvency2-orsa.
28 July 2017: www.bankofengland.co.uk/prudential-regulation/publication/2017/dealing-with-a-market-turning-event-in-the-general-insurance-sector-ss.
29 May 2018: https://www.bankofengland.co.uk/prudential-regulation/publication/2018/financial-management-and-planning-by-insurers-ss.
30 July 2018: https://www.bankofengland.co.uk/prudential-regulation/publication/2018/solvency-2-matching-adjustment-ss.

2.3 The PRA considers the following elements to be fundamental components of an insurer's liquidity risk management framework:

- a clearly defined liquidity risk appetite which is owned and approved by the board;
- a liquidity risk management strategy and documented liquidity risk policy(ies) consistent with its stated risk appetite;
- clear and proper allocation and appropriate segregation of responsibilities for liquidity risk across the business areas and business units of the insurer and, in the case of groups, across the entities of the group;
- proper systems to report management information that is timely and adequate, both under normal circumstances and in periods of stress in order to measure and assess all material sources of liquidity risk;
- actions to be taken to take into account short term and long term liquidity risk (as required by Article 260(d)(i) of the Delegated Act);
- in the case of groups, clear reporting lines within the group and effective systems for ensuring that information flows in the group both top-down and bottom-up;
- forward-looking scenario analysis and liquidity stress testing programmes, which are based on severe but plausible assumptions (elaborated on further in Chapter 4);
- quantitative metrics and tools for measuring liquidity risk drivers and to serve as early warning indicators (elaborated on further in chapters 6 and 7); and
- proper systems to report management information that is timely and adequate, both under normal circumstances and in periods of stress in order to measure and assess all material sources of liquidity risk.

2.4 As laid out in Group Supervision 17.1 in the PRA Rulebook, liquidity risks must be managed at an individual entity level as well as on a group-wide basis where relevant. Under Group Supervision 17.1(2) in the PRA Rulebook, the liquidity risk management framework must be applied consistently across all companies within the relevant group.

2.5 An insurer, although solvent on a balance-sheet basis may nevertheless find itself short of cash or funding options to meet its liabilities as they fall due, and therefore insolvent on a cash-flow basis. Although capital may be available to mitigate liquidity risk over longer time horizons, for example through the sale of assets at a loss, this is not always the case as liquidity risk may materialise very rapidly. In addition, events that have a significant impact on capital may not have significant implications for liquidity, and so, demonstrating resilience to the former, could encourage a false sense of security. Hence, reliance on an existing capital management framework is not generally sufficient or appropriate for assessing liquidity risk.

2.6 It is important that an insurer critically examine its liquidity needs and sources, in both benign circumstances and under stress. As set out in Article 260(1)(d)(ii) of the Delegated Act and Insurance Company – Overall Resources and Valuation 2.3 in the PRA Rulebook an insurer must maintain sufficient liquid assets to enable it to meet its liabilities as they fall due. In designing its liquidity risk management framework, the PRA expects an insurer to consider its risk exposure in normal market conditions and also in severe but plausible stressed situations resulting from general market-wide turbulence, idiosyncratic difficulties, and combinations of both.

2.7 For a life insurer, liquidity considerations are relevant both in the portfolio as a whole and in individual funds including not only the shareholders' funds, non-profits funds and with-profits funds, but also unit-linked funds.

2.8 The effectiveness of an insurer's liquidity risk management framework is expected to be regularly reviewed and evaluated by individuals unconnected with day-to-day liquidity risk management to ensure that the insurer is operating in accordance with its risk appetite and other risk management policies and procedures.

2.9 Under Article 258(1)(h) of the Delegated Act and Non-Solvency II Firms – Governance 7.1 in the PRA Rulebook, an insurer must establish systems for the management of risk. Article 259(1)(d) of the Delegated Act and Non-Solvency II Firms – Governance 2.5 and 3.2 in the PRA Rulebook require the establishment of reporting processes and procedures to ensure that the necessary information is available to decision-makers. With these obligations in mind, the PRA expects an insurer to have an effective system of monitoring and reporting liquidity risk which provides clear, concise, timely and accurate liquidity risk reports to relevant functions within the insurer. Liquidity risks are often fast moving, a characteristic which is expected be reflected in an insurer's reporting system. Design of metrics and reporting is set out in more detail in Chapter 6.

Liquidity risk appetite statement and risk limits

2.10 Article 259(1)(c) of the Delegated Act requires UK Solvency II firms, the Society and managing agents to implement and maintain a risk management system that includes approved risk tolerance limits that implement an insurer's risk strategy and facilitate control mechanisms. Consistent with this obligation, the PRA expects a UK Solvency II firm, the Society and managing agents to establish and maintain a clearly defined liquidity risk appetite statement and prudent risk limits for each material source of liquidity risk to which they are or could be exposed. For non-directive firms, Non-Solvency II Firms – Governance 7.3(2) in the PRA Rulebook requires an insurer to document its policies in relation to liquidity risk, including its appetite or tolerance for this risk.

2.11 In addition to the considerations set out in SS4/18,[31] the PRA expects the insurer's risk appetite statement to define the duration, types and severity of liquidity stresses it aims to survive. The risk appetite statement should define the:

- timescales over which identified risks are expected to crystallise with multiple tenors considered, where appropriate;
- acceptable level of risk that the insurer is willing to bear for each material liquidity risk identified. This can be expressed through either quantitative and/or qualitative risk tolerance limits; and
- types of assets which the insurer deems liquid and available to cover liquidity needs in the time horizon considered in the specific scenario.

31 PRA Supervisory Statement 4/18, 'Financial management and planning by insurers', May 2018: https://www.bankofengland.co.uk/prudential-regulation/publication/2018/financial-management-and-planning-by-insurers-ss.

2.12 The structure of risks to which an insurer is exposed emphasizes the need for adequate systems and controls to guard against a spectrum of possible risks, from those arising in day-to-day liquidity risk management to those arising in stressed conditions. Prudent limits are expected to be established for each material source of liquidity risk to which the insurer is or could be exposed, including:

- potential liquidity needs (eg claims or withdrawals) arising from insurance liabilities;
- the amount of non-insurance liabilities that mature or can be withdrawn within various time horizons;
- off-balance sheet exposures that could create liquidity strains during stress events; and
- concentrations of liquid assets and sources of funding, for example, by instrument type, single counterparty, counterparty type, currency, and security.

2.13 An insurer is expected to regularly review its limits and make appropriate adjustments when its risk tolerances or broader market conditions change. An insurer, other than a small non-directive insurer, should consider reviewing these at least annually as part of the broader review of its risk management policies as required under Conditions Governing Business 2.4(4) and Non-Solvency II Firms – Governance 3.4(4) in the PRA Rulebook.

Liquidity risk management strategy

2.14 Pursuant to Conditions Governing Business 3.1 and Non-Solvency II Firms – Governance 7.2 in the PRA Rulebook, the PRA expects an insurer to have in a place a well-documented liquidity risk management strategy which sets out its overall approach for managing liquidity risk. It is expected to cover the insurer's day-to-day and longer term management of liquidity risk.

2.15 An insurer's liquidity risk management strategy should, at a minimum, include:

- the identification of all material sources of liquidity risk to which the insurer is exposed, and the level of acceptable quantitative and qualitative risk tolerance limits for each type of these risks (elaborated on in Chapter 3);
- a clearly established methodology and key underlying assumptions for making cash flow projections of all material liquidity uses (out-flows) and sources (out-flows), in line with paragraph 1.63(a) of EIOPA Guideline 26;
- the approach to liquidity stress testing, including clearly established and documented methodologies and assumptions (set out in more detail in Chapter 4);
- an assessment of the insurer's overall liquidity needs over various durations and the target levels of liquidity buffers it expects to hold, based on the insurer's assessment of its actual and stressed liquidity positions (elaborated on further in Chapters 4 and 5);
- where applicable, an assessment of any restrictions on liquidity transferability that could limit or delay the use of intra-group transactions to meet liquidity needs;
- the composition of its liquidity buffer, including the quantities of each asset type which can be included and the monitoring arrangements in place, taking into account any potential costs or financial losses arising from forced sales (discussed further in

Chapter 5);

- the insurer's policy for adjusting its risk tolerance limits, and the process to set and review early warning indicators to determine nascent stresses affecting key risk drivers. Where appropriate, these should capture the internal and external environment and deteriorating trends; and

- the responsibilities and obligations of employees and the functions dealing with liquidity risk, including risk escalation and reporting.

2.16 The liquidity risk management strategy should make reference to all other relevant liquidity risk policies, to ensure all related documentation is accessible from one place.

2.17 In order to limit the potential for wider group risk or contagion to affect an insurer, pursuant to Group Supervision 17.1 of the PRA Rulebook, similar standards of liquidity risk management as those that apply at insurance undertakings should be adhered to across the relevant group. To that end, the PRA generally expects the liquidity risk management strategy for the group to be consistent with the group's structure, size and the specificities of the entities in the group. The liquidity risk management strategy should be implemented consistently across the entities within the group. To the extent that a legal entity's liquidity management relies on group support, this should be accounted for in the liquidity risk strategy for the group and the arrangements for transfer of liquidity are expected to be documented, practised and operable within the timeframes needed to be effective in a stress. An insurer that is part of a group should review the extent and conditions of existing intra-group transactions and assess the reliance of subsidiaries on such transactions to meet their liquidity needs.

2.18 An insurer's liquidity risk profile and approach to liquidity risk management should also be referenced in appropriate detail in other reports including its Own Risk and Solvency Assessment (ORSA), business plan, Solvency and Financial Condition Report (SFCR) and Regular Supervisory Report (RSR) as required by the relevant requirements transposing Solvency II.

3 Sources of liquidity risk

3.1 The PRA expects an insurer to understand the sources of liquidity risk it faces. To this end, an insurer should consider the relevance of the sources of liquidity risk listed in paragraph 3.2, including the implications of these risks on its liquidity position under both normal and stressed conditions. However, the mix of liquidity risk drivers is unique to each business, and hence this list should not be considered exhaustive, nor are all of the elements necessarily relevant to all insurers.

3.2 Material sources of liquidity risk may include:

- **Liability-side risks:** For a life insurer, this may include sudden, unexpected increases in lapse rates or surrenders of life insurance or investment policies within a short period or a sudden increase in the volume of claims triggered following, for example, a pandemic. A general insurer may consider the nature, frequency and severity of its exposure to insurable events, including market turning events.[32] A reinsurer should consider the

[32] PRA Supervisory Statement 5/17, 'Dealing with a market turning event in the general insurance sector' July 2017: https://www.bankofengland.co.uk/prudential-regulation/publication/2017/dealing-with-a-market-turning-event-in-the-general-insurance-sector-ss.

above risks, where applicable, and also where contractual terms in reinsurance contracts could cause unexpected liquidity needs, for instance, required funding of reinsurance trusts or forced commutation clauses.

- Following a significant insured event, an insurer should consider the extent to which reinsurance payments could be used to satisfy liquidity needs. Consistent with paragraph 1.59(d) of EIOPA Guideline 22, this should involve an assessment of the likelihood and extent to which reinsurance claims will be adjusted downward by the reinsurer and of claims settlement delays and whether payments will be available in a timely manner. Some of these risks may be mitigated where reinsurance claims are pre-paid, assets are placed in trust for the benefit of the cedant or the contract is conducted on a funds withheld basis.

- An insurer should, in line with paragraph 1.63(e) of EIOPA Guideline 26, also consider the extent of reliance on premium receipts from business not yet written or renewal business as a source of liquidity and whether their assumptions regarding the availability of such premiums are consistent with stressed conditions.

- **Asset-side risks:** An insurer should consider how its assets could be monetised, including as acceptable collateral, in both benign and stressed market conditions by taking into account factors such as market depth and access, the time required to monetise an asset (eg time to settlement, delays in finding a willing buyer), haircuts and the likelihood and extent of forced-sale losses. Operational constraints may limit an insurer's ability to monetise even the most liquid assets in sufficiently short timeframes. In stressed market conditions, it may not be feasible to properly value or sell some types of assets. Other types of assets may only be able to be sold at a significant discount.

- **Concentration risks:** Liability-side concentrations may include: the term structure of an insurer's liabilities; their sensitivity to an insurer's own credit rating; the mix of secured and unsecured funding; concentrations among funding providers and policyholders or related groups of funding providers and policyholders; reliance on particular instruments or products; and the geographical location of funding providers and policyholders. Asset concentrations may include significant concentrations in relation to: individual counterparties or groups of related counterparties; credit ratings of the assets in an insurer's portfolio; instrument types; geographical regions; and economic sectors. In the context of liquidity risk, these asset concentrations may be relative to the insurer's own portfolio and relative to the amount of a particular asset in the market. In the case of the former, there is a risk that a significant portion of its assets may become illiquid when they are needed most. In case of the latter, such assets may be thinly traded and thus the insurer may not be able monetise them in stress.

- **Off-balance sheet risks:** An insurer should consider how its off-balance sheet activities affect its cash flows and liquidity risk profile under both normal and stressed conditions. For example, risks associated with holding derivatives positions are often overlooked (and are discussed further below). The impact of a downgrade in the insurer's own credit rating should also be considered. Downgrades may trigger the early redemption of funding instruments or collateral or margin obligations and may impact an insurer's ability to roll over wholesale funding. Any other contingent obligations for cash or collateral should be assessed and monitored. An insurer may need to consider the impact of maintaining liquidity facilities to support securitisation or internal asset restructuring programmes.

- Consistent with Article 260(1)(c)(iii) of the Delegated Act, the PRA expects an insurer to pay particular attention to the liquidity risks associated with material use of derivatives. While hedging programs may limit the impact of market shocks on capital, they can also lead to liquidity risk. A liquidity need will arise where the value of the derivative moves against the insurer and requires extra collateral to be posted. This risk was the focus of the Bank of England's Financial Policy Committee (FPC) assessment of the risks from leverage in the non-bank financial system.[33] Stress may be amplified where derivatives are centrally cleared, as these contracts will require an insurer to post cash variation margin, as opposed to securities, against movements in their value. An insurer should be aware of the conditions in any credit support annexes that could restrict acceptable assets for collateralisation or initial margin.

- **Funding risk:** Flows arising from secured funding sources, including collateral upgrade transactions, could incur a number of risks. For both secured and unsecured funding sources, stress assumptions should conservatively assess an insurer's ability to roll over funding at maturity or at the earliest possible termination date, where such a date is not in the insurer's control.

- **Cross-currency risk:** An insurer should consider foreign currency liquidity needs, both in each individual currency and in aggregate. The risk of non-convertibility of currencies over short time periods (ie market lockout) should also be considered.

- **Intra-day risk:** Where relevant to its business model an insurer should maintain systems capable of monitoring intra-day liquidity positions and cash needs (i.e. those arising at particular times during a single day), and to take appropriate steps to ensure it holds sufficient funds to cover intra-day risk in both cash accounts and the cash side of securities accounts.

- **Franchise risk:** Liquidity resources may be required to make payments on claims to maintain an insurer's core business franchise and reputation, even where an insurer has the right to defer or delay such payments. An insurer should assess the extent to which it can and realistically will defer or delay payments, including claims, surrenders, dividends or share buybacks, without significantly damaging its core business franchise and reputation.

Collateral upgrade and other transactions

3.3 A collateral upgrade transaction is a collateralised borrowing transaction where there is a material difference in the quality of assets exchanged. This difference in quality may be a function of differences in liquidity, credit quality or another risk parameter. In such transactions, a 'borrower' receives higher quality assets (eg cash or gilts) from a 'lender', and in return, the borrower posts collateral to the lender. Examples include repo and reverse repo transactions, stock lending and borrowing, and any form of collateralised borrowing that is in substance economically similar, including synthetic transactions (eg a sale plus a collateralised and margined total return swap).

3.4 For the lender of liquidity, the value of the less liquid and/or lower quality collateral being taken may be difficult to assess, both before and in the event of a borrower default. An

33 Bank of England (2018). *Financial Stability Report*. Issue 44. Retrieved from https://www.bankofengland.co.uk/financial-stability-report/2018/november-2018.

insurer, generally as the lender in such transactions, is expected to have adequate systems and controls in place to appropriately value and manage collateral, including:

- ensuring the collateral is individually identifiable, and suitably diversified with adequate information available about the underlying assets held through any securitisation vehicle; and
- establishing an independent and robust challenge process in agreeing valuations with the borrower.

3.5 If the collateral received by the insurer is relatively illiquid and has been re-used, there may be difficulties in realising its value within a reasonable timescale, for example if the borrower wishes to substitute collateral or to terminate the transaction, or in matching the insurer's liabilities in the event of counterparty default. There may also be additional risks for the insurer resulting from any leveraging of the collateral received. The insurer is expected to take into account any mismatch between the type, quality and liquidity of the assets held by the insurer following re-use of the collateral, and the collateral that would need to be returned to the borrower.

3.6 The insurer should carefully consider whether the collateral may expose it to wrong-way risk (ie the risk that the collateral declines in value as the health of the counterparty deteriorates). A prudent assumption is that higher price volatility of the collateral will likely correspond to greater correlation with other assets during stress.

3.7 The scale and concentration risk of any collateral upgrade transaction may potentially exacerbate the risks associated with such transactions. An insurer is expected to have appropriate limits in place to manage these risks, including limits on: the scale of transactions; the type of assets lent and collateral received; the credit and liquidity correlation with the credit quality of the counterparty; and other model sensitivities, eg minimum levels of haircuts by asset class.

3.8 Liquidity provided to the insurer, through these transactions, may decline in stressed times as counterparties may be less willing or able to extend new funding or roll over existing funding. Moreover, the dynamic nature of margining in these transactions means that a fall in the value of the posted collateral may result in the insurer having to encumber more assets. Triggers within transaction agreements may lead to additional margin calls, further reducing liquidity. This is likely exacerbated in periods of stress. The PRA expects an insurer to be particularly mindful of situations where it has pledged assets and falls in their market value are likely to be closely correlated with the insurer entering into a liquidity stress.

3.9 Whether as a borrower or lender of liquidity, depending on the scale of such transactions, an insurer may be encumbering a significant proportion of its assets. The insurer is expected to be mindful of the extent of asset encumbrance and the extent to which those assets may or may not be available to meet liquidity needs during a period of market stress. If a material part of an insurer's liquid assets are borrowed or lent under a collateral upgrade transaction, it is expected to conduct a thorough analysis of the potential liquidity risks under stressed scenarios.

Fungibility considerations

3.10 An insurer is expected to be mindful of any applicable restrictions on fungibility that may limit its ability to access or monetise assets under stress. Of particular note are Matching Adjustment (MA) and with-profits funds.

3.11 Although many of the material liquidity risks mentioned will be relevant, the MA involves unique considerations with regard to liquidity risk. Conditions Governing Business 3.1(3) in the PRA Rulebook requires an internal liquidity condition to be satisfied for an MA portfolio, and an insurer is required to develop a specific liquidity plan for this purpose. In particular, an insurer should be mindful that there can be no subsidy to the rest of the business from the MA portfolio, that is, MA assets will not be available to meet losses elsewhere in the business. The insurer is also expected to manage the liquidity implications of any change in the MA portfolio or in the underlying assumptions, such as longevity. For example, any potential liquidity strains on the business as a result of a change in the MA portfolio will need to be managed properly, and the insurer should consider the need to obtain eligible assets to maintain MA approval.

3.12 The with-profits fund can pose similar challenges to a firm's liquidity management. Like MA funds, an insurer should be mindful that assets in the with-profits fund will be unavailable to cover the risks of the rest of the firm. Firms should also be mindful of the liquidity implications of any applicable support arrangements that could require a firm to provide support to a with-profits fund.

3.13 Further guidance on the liquidity planning required in connection with the application by an insurer of the MA can be found in SS7/18 'Solvency II: Matching Adjustment'.[34] Further guidance on with-profits funds can be found in SS14/15 'With-profits'.[35]

Unit-linked business

3.14 Unit-linked products present different risks to an insurer's liquidity position. In general, the policyholder bears the risk, including liquidity risk, associated with the underlying investments in unit-linked funds. An insurer should refer to Financial Conduct Authority rules and guidance on the management of liquidity within unit-linked funds.

3.15 Liquidity risks may generally arise from unit-linked funds through operational costs. Some examples may include the terms, charges and processes associated with unit redemptions, with switching investments or for payments for operational errors. The insurer is expected to maintain sufficient liquidity to carry out these operations without material disruption. Where feasible, liquidity for such operational purposes and for non-linked funds should be segregated from liquidity held for policyholders in unit-linked funds.

3.16 In some instances, for example where policy documentation provides for a specified time to payment, an insurer may be expected or required to provide supporting liquidity when liquidity buffers within funds are depleted. An insurer is expected to consider the possible actions it can take to meet such short term liquidity needs and to take such circumstances into account in its liquidity risk management strategy.

3.17 Where liquidity risk management is shared between functional areas such as fund managers, portfolio managers, operations, treasury, pricing and client relationship management the roles and responsibilities of each should be set out clearly.

3.18 An insurer should review its rights to apply fair value pricing adjustments, suspend fund redemptions or liquidate investments, including any contractual provisions that may limit these rights. Where these rights are not consistent between funds and the insurance product in which the fund units are held the insurer is expected to ensure it understands the liquidity implications and takes this into account in its risk management.

34 July 2018: https://www.bankofengland.co.uk/prudential-regulation/publication/2018/solvency-2-matching-adjustment-ss.
35 March 2015: https://www.bankofengland.co.uk/prudential-regulation/publication/2015/with-profits-ss.

3.19 Invoking any of the aforementioned rights may have fairness and consumer protection implications. The insurer should be aware of the effects of such actions on policyholders and whether such rights would likely be available to be exercised in the circumstances where doing so could raise concerns about the equitable treatment of policyholders, both present and future.

Group-specific risks

3.20 Liquidity is not always freely transferable around a group, and may be transferred away from one area which needs it in order to support other areas. In general, the PRA expects an insurer that is part of a group to consider how intra-group transactions affect its individual liquidity position. As discussed in SS4/18 'Financial management and planning by insurers', any planned reliance by an insurer on support from other entities within its group should be assessed carefully.[36] Where liquidity is managed centrally the PRA expects that there are no legal or regulatory impediments to liquidity being available, in both benign and stressed conditions, to the regulated entities where and when it is needed.

3.21 At the parent entity level, there may be shareholder expectations and debt obligations that require funding. Servicing these obligations may rely on cash flows from subsidiaries. For example, the parent entity may rely on up-streaming of dividends or intra-group loan repayments to meet such obligations. Hence, the cash flow implications of a firm's financial projections should be considered at group level. An insurer that is part of a group should assess whether there is the ability to generate sufficient cash flows in stress to cover group liabilities as they fall due.

3.22 In line with Group Supervision 17.1(3) in the PRA Rulebook, mechanisms should be in place to identify, monitor and manage significant risk concentrations and intra-group transactions that could threaten the group's liquidity position.

4 Stress testing

4.1 Article 259(3) of the Delegated Act, which further specifies Solvency II obligations transposed in Conditions Governing Business 3.1(2)(c) in the PRA Rulebook, establishes an obligation that a UK Solvency II firm, the Society and managing agents conduct stress testing and scenario analysis with regard to all relevant risks in their risk management system. A non-directive insurer must conduct stress testing and scenario analysis as part of its risk management system under Non-SII firms – Governance 7.3(5) in the PRA Rulebook. Based on these requirements, an insurer is expected to conduct liquidity stress tests to identify sources of liquidity strain, and ensure its current liquidity profile continues to conform to its liquidity risk appetite, as approved by the board.

4.2 The stress tests should analyse separate and combined impacts of a range of severe but plausible liquidity stresses on an insurer's cash flows, both cash inflows (sources) and cash outflows (uses), as well as the insurer's overall liquidity position. The details of, and justification for, the methods and assumptions used in stress testing should be included in an insurer's liquidity risk management strategy.

4.3 An insurer is expected to have in place adequate management information systems and data processes to enable it to collect, sort and aggregate data and information related to its liquidity stress testing.

[36] May 2018: https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/supervisory-statement/2018/ss418.

4.4 In conducting stress tests, an insurer is expected to capture all relevant, material risk drivers. Noting the restriction on selling assets from an MA portfolio to generate liquidity outlined in SS7/18 'Matching Adjustment', stress tests should be performed separately on MA portfolios and the non-MA business. An insurer should be aware of how an MA portfolio can obtain the necessary liquidity, and how liquidity management for an MA portfolio interacts with liquidity management for the rest of the firm.

4.5 To facilitate its understanding of whether solo entities could rely on the parent for liquidity where such arrangements exist, the insurer should conduct stress tests separately at both the individual entity level and on a group basis.

4.6 Varying degrees of stressed conditions should be considered in a range of stress scenarios. Each are expected to be severe yet plausible, and consider the potential:

- impact of idiosyncratic, market-wide and combined scenarios;
- adverse effects of market disruptions; and
- actions of counterparties, and other market participants experiencing liquidity stresses that could adversely affect the insurer, for instance by recalling sleeper collateral,[37] not posting collateral required, or opening valuation disputes.

4.7 In the case of groups, an insurer should define separate stress scenarios on a group basis in order to encompass group-specific risks.

4.8 Liquidity risk can emerge over a number of timeframes. Hence, liquidity stress tests are expected to span a variety of liquidity events over different time horizons. This includes both fast moving scenarios as well as more sustained scenarios where the insurer's liquidity deteriorates slowly. An insurer should consider appropriate durations for stress testing, including 7, 30, 90 days and one year, as appropriate in light of its business model, risk appetite and liquidity risk profile. For example, an insurer with significant activity in capital markets or volatile cash flows that could generate short term liquidity needs should consider intraday and daily time horizons. In its analysis of longer-term stresses, the insurer should consider and be able to justify its appetite for capital erosion.

4.9 The PRA expects an insurer to consider the impact of chosen market stresses on the appropriateness of its assumptions relating to the following elements, as relevant to its business model and liquidity risk profile:

- estimates of future balance sheet growth and premium income from both new and renewal business;
- additional margin calls and collateral requirements, especially in respect of assumed continued diversification of markets in stress;
- reliance on committed lines of credit;
- the continued availability of liquidity, including in currently highly liquid markets;

37 Sleeper collateral refers to the value of collateral that an insurer is contractually obligated to post to a counterparty, but has not yet posted as it has not yet been called by the counterparty.

- policyholder behaviour, including surrender rates;
- correlations between funding markets and the effectiveness of diversification across its chosen sources of funding;
- access to secured and unsecured funding;
- currency convertibility; and
- in the case of groups, the firm's ability to access cash pooling arrangements and intra-group loans.

4.10 When designing scenarios, an insurer should also consider the appropriateness of their calibration. Regulatory capital requirements are calibrated to a confidence level of 99.5% over a one-year period, while liquidity stresses tend to occur over significantly shorter time horizons. An insurer should be mindful that converting one-year stresses to shorter time periods for liquidity stresses may not be as simple as linearly scaling them down. The PRA expects the insurer to assess the appropriateness of its stress assumptions, for example, in the light of past liquidity events.

4.11 The frequency of stress testing is expected to be proportionate to the nature, scale and complexity of an insurer's activities, as well as the size of its liquidity risk exposures. Consistent with Conditions Governing Business 2.4 and Non-Solvency II Firms – Governance 3.4 in the PRA Rulebook, an insurer, other than a small non-directive insurer, is expected to review its risk management policies annually. In light of these obligations, an insurer, other than a small non-directive insurer, would be expected to conduct a holistic review and refresh of the appropriateness of its stress testing approach and stress scenarios (including board review) on a similar frequency. More frequent reviews may be warranted when changes in an insurer's business, strategy, nature or scale of its activities or operational environment indicate its approach is no longer valid. A small non-directive insurer would be also expected to review its approach when such changes indicate that its approach is no longer valid.

4.12 The PRA expects an insurer's approach to liquidity stress testing, including the stresses and scenarios tested to be regularly reviewed and approved by senior management and the board to ensure their nature and severity remains appropriate. As required by paragraph 1.53(e) of EIOPA Guideline 18 and Non-Solvency II Firms – Governance 7.3(6) in the PRA Rulebook, the frequency, approach, methodologies and assumptions should be adequately documented as part of the insurer's liquidity risk management strategy.

5 Liquidity buffers

5.1 Under Investments 2.1 in the PRA Rulebook, a UK Solvency II firm, the Society and managing agents are required to invest assets as to ensure the liquidity of their investment portfolio and, under Article 260(1)(d)(ii) of the Delegated Act, to consider the appropriateness of their assets in order to meet obligations as they fall due. Under paragraphs 1.63(b) and (c) of EIOPA Guideline 26 an insurer is required to consider its total liquidity needs, including an appropriate liquidity buffer and to consider the level and monitoring of liquid assets, including potential haircuts that could be imposed on their sale. A non-directive insurer, under Insurance Company – Overall Resources and Valuation 2.3 or Friendly Society – Financial Prudence 4.1 in the PRA Rulebook must maintain adequate liquidity to ensure there is no significant risk that its liabilities cannot be met as they fall due. An insurer must therefore maintain an adequate stock of liquid assets sufficient to meet liabilities as they fall due, and is expected to do so under both benign and stressed conditions.

5.2 Through Group Supervision 17.1(1)(b) and Conditions Governing Business 3.4 in the PRA Rulebook, an insurer that is part of a group must ensure sufficient liquidity on a group basis to meet group liabilities as they fall due and is expected to do so under both benign and stressed conditions.

5.3 An insurer may consider it appropriate to have in place graduated levels of buffers, composed of different assets, depending on the nature and duration of the stresses it may potentially be exposed to.

5.4 The liquidity required to respond to stress events is distinct from any committed cashflows or amounts held for known future cashflows. An insurer is expected to avoid counting funds committed for future payments or investments used for regular income generation, such as fees, dividends or interest, as part of its liquidity buffer.

5.5 An insurer is expected to tailor its liquidity buffer to the needs of its business and the liquidity risks that it faces, taking into account a number of factors, some of which are elaborated on in existing EIOPA Guidelines (for instance Guidelines 26 and 29), and include:

- assets of primary and secondary liquidity (discussed below);
- the need to have a well-diversified range of liquid assets;
- whether the assets in the liquidity buffer can be accessed and controlled by the insurer's liquidity management function at all times;
- the appropriateness of haircuts applied to less liquid assets, informed by an insurer's own stress tests. This should include both the potential costs and financial losses arising from their sale; and
- the consistency of the currency denomination of its liquid assets and net liquidity outflows.

5.6 Where applicable, to avoid double counting intra-group transactions should be excluded from analysis of the insurer's liquidity position on a group basis.

5.7 Assets of secondary liquidity are not generally usable for shorter duration stress periods, as an insurer may be unable to monetise these assets soon enough. For stresses of 90 days or shorter, it is good practice for an insurer to rely on high quality liquid assets only. For longer-term stresses, an insurer may be able to rely on a broader spectrum of assets to meet its liquidity needs, though it may incur substantial losses in the process of monetising these. An insurer should consider the potential losses arising from asset sales and may wish to explicitly define its appetite for capital erosion in such situations.

Criteria for liquid assets

5.8 The PRA considers that 'high quality liquid assets' means assets that are unencumbered,[38] of a high credit quality, readily marketable, and that have a proven record as a reliable source

38 'Unencumbered' means free of material legal, regulatory, contractual or other restrictions on the ability of the insurer to liquidate, sell, transfer, or assign the asset.

of liquidity during stressed market conditions. Liquid assets should be easy to value with a high degree of certainty (ie low likelihood of material disagreement between transacting parties in a sale) and will either be listed on recognised exchanges or tradable on large, deep and active cash or repurchase markets with a large number of participants, low concentration, high trading volume and timely and observable market prices.

5.9 Assets of primary liquidity generally include:

- cash held at highly rated institutions;
- highly rated securities issued or unconditionally guaranteed by sovereigns or central banks; and
- certain money market funds which hold high levels of cash or liquid assets and have an objective to provide liquidity on demand.

5.10 Assets of secondary liquidity generally include:

- other investment-grade securities issued or guaranteed by sovereigns;
- highly rated and publicly issued covered bonds;
- investment-grade, vanilla corporate debt securities;
- common equity shares traded within a major stock index;[39] and
- any other assets that an insurer deems to be sufficiently liquid that demonstrably meet the criteria set out in paragraph 5.8.

5.11 To ensure that assets in the insurer's liquidity buffer remain suitable, the PRA expects an insurer to review and regularly test its access to the markets for its liquid assets. The appropriate frequency of testing will depend on the mix of assets included in the liquidity buffer. Buffers comprised primarily of assets of primary liquidity may likely need less frequent testing than buffers with more assets of secondary liquidity.

5.12 Market access should be assessed under both normal and stressed conditions. In particular, an insurer is expected to consider carefully the extent of its reliance on repo and other secured funding transactions, as the availability of liquidity in these markets may not be guaranteed, particularly in the event of short duration severe stresses.

5.13 An insurer should consider whether assets it has borrowed or lent are appropriate to include in its liquidity buffer. It should be emphasised that any liquid assets that have been lent or posted as collateral to secure a transaction should be considered encumbered and will not be available to meet liquidity needs. Moreover, the insurer should be mindful of circumstances where it has borrowed liquid assets that could be withdrawn or recalled. It is prudent to assume that counterparties will withdraw such assets at the first opportunity in stress.

39 For instance, as defined under PRA Supervisory Statement 24/15, 'The PRA's approach to supervising liquidity and funding risks' June 2015: https://www.bankofengland.co.uk/prudential-regulation/publication/2015/the-pras-approach-to-supervising-liquidity-and-funding-risks-ss.

5.14 An insurer is also expected to consider the extent to which access to liquidity in money market funds may be limited in stress. As collective investment undertakings, the money market fund structure creates a layer between the insurer and the underlying asset, which could create additional risk. When investing in money market funds, an insurer should look through to the fund's underlying assets to establish its liquidity during stress. This includes assessing the extent to which money market fund holdings may increase concentration risk, particularly with the banks in which the insurer maintains deposits.

5.15 An insurer should also be mindful of its use of securities issued by financial institutions in its liquidity buffer as these assets are more likely to become illiquid during stress events.

Funding arrangements with third-parties

5.16 An insurer is expected to test its access to committed facilities regularly to ensure their availability for use in stressed conditions. Where practical, the insurer may consider maintaining facilities with a number of diverse providers to ensure that it can still obtain funding, even if a lender fails to honour its commitment. Uncommitted facilities are highly unlikely to be available in stressed situations and therefore should not be considered as sources of liquidity. An insurer should, however, also avoid undue reliance on committed facilities to meet stressed liquidity needs as they might not be available when required.

5.17 The PRA acknowledges that liquidity carries a cost, for example holding liquid assets directly may be reduce investment returns and profitability. However, relying on third-parties for liquidity mitigate this opportunity cost, but may introduce explicit commitment fees. The PRA expects that firms will consider the trade-offs between the two.

6 Risk monitoring and reporting

6.1 Conditions Governing Business 3.1(1) and Non-Solvency II Firms – Governance 7.3(2) in the PRA Rulebook require an insurer to define procedures to measure, monitor and assess its risk exposures. As part of its risk management framework, an insurer should define its own risk metrics in its day-to-day operations, reflecting its own circumstances and risk profile. An insurer is expected to use a set of metrics such that it can clearly see it is within its risk appetite and risk tolerance limits. Monitoring these metrics against a number of time horizons, both short term and long term, is generally viewed as good practice as different sources of liquidity risk may crystallise over different time periods.

6.2 The PRA expects an insurer to maintain minimum governance standards when defining risk metrics. All metrics, including ownership, frequency, timeliness and distribution, should be approved by the board, along with the insurer's liquidity risk appetite. This will help to ensure that the board is approving the methods and operational means by which the insurer manages its liquidity risk. Moreover, the use of metrics is expected to be applied consistently across relevant areas within an insurer, and where relevant, across the group.

6.3 The insurer is expected to assess its liquidity buffer in light of its chosen stress scenarios. Assessments should typically capture low points within the chosen time horizons, rather than relying on end-point analysis to minimize the risk of a cashflow mismatch. One metric that an insurer may use in its assessment is a liquidity coverage ratio, which may be defined as the ratio of high quality liquid assets to net stressed cash outflows (stressed out-flows less stressed in-flows). An alternative is an excess liquidity metric, which is the difference between high quality liquid assets and net stressed cash outflows. An insurer may define other metrics for this purpose, but the PRA expects it to be aware of and be able to document the benefits and shortcomings of such metrics. Using these metrics, an insurer should set target liquidity buffer(s) which are consistent with its risk appetite. As noted previously, the insurer is expected to periodically conduct a holistic review and refresh of its stress testing approach and stress scenarios. The insurer is expected to regularly monitor its liquidity position and liquidity buffer against its risk appetite based on the refreshed stress scenarios.

6.4 The PRA expects regular reports on liquidity to be provided to senior management and the board. These reports should address the insurer's compliance with its risk management strategy and policies, as well as alert management when the insurer approaches or breaches its risk appetite or risk limits. Risk reporting should be undertaken by an insurer with an appropriate frequency that is proportionate to the level of liquidity risk in its activities. At a minimum, however, the PRA expects risk monitoring metrics, along with stress test results and information on the insurer's liquidity buffer, to be produced for management on a monthly basis, though more frequent reporting may be appropriate when the operational environment or the nature or scale of the insurer's activities changes.

6.5 The PRA views stress testing as a useful tool for an insurer to understand its exposure to risks. As such, the PRA expects stress test results to be:

- reported to senior management, the board and any risk committee of the board, highlighting any vulnerabilities identified and proposing appropriate remedial action;
- in the case of insurers that are part of a group, reported to the group level board and any risk committee of the group level board;
- integrated in the insurer's business planning process and day-to-day risk management;
- taken into account when setting internal risk limits for the management of liquidity risk exposures;
- used to update the insurer's liquidity risk management strategy and relevant policies (elaborated on in Chapter 2);
- used to support the establishment of the insurer's risk monitoring metrics and any liquidity buffer(s) held by the insurer (set out in more detail in Chapter 5);
- inform the insurer's plan to deal with changes in expected cash in-flows and out-flows, as required by Article 260(1)(d)(iii) of the Delegated Act; and
- used to inform the development of the insurer's liquidity contingency plan (elaborated on in Chapter 7).

6.6 The insurer's liquidity risk profile and adherence to its liquidity risk appetite and risk tolerance limits are expected to be considered regularly during meetings of the board and any risk committee of the board. More frequent reporting may also be necessary if market conditions require or there are material changes to the insurer's liquidity profile.

6.7 In accordance with Solvency II regulatory reporting requirements, an insurer is required to report, on a group basis, risk concentrations that could threaten the group liquidity risk position. An insurer is also required to report intra-group transactions that materially influence the liquidity position of the group or one of the undertakings involved in these transactions.

7 Liquidity contingency plan

7.1 As laid out in Conditions Governing Business 2.6 and Non-Solvency II Firms – Governance 3.6 in the PRA Rulebook, an insurer, other than a small non-directive insurer, [40] must take reasonable steps to ensure continuity and regularity in the performance of its activities, including the development of contingency plans. In light of this obligation, an insurer, other than a small non-directive insurer, is expected to develop a liquidity contingency plan.

7.2 As part of its liquidity contingency plan, an insurer, other than a small non-directive insurer, is expected to maintain a clear process and plan for recognising and addressing a liquidity stress. This includes maintaining a documented liquidity contingency plan that sets out the strategies for preserving liquidity and making up cash flow shortfalls in adverse situations. The liquidity contingency plan should set a framework with a high degree of flexibility so that an insurer can respond quickly to a variety of liquidity stresses which disrupt its ability to fund some or all of its activities in a timely manner and at a reasonable cost.

7.3 A liquidity contingency plan should:

- be consistent with paragraph 1.63(d) of EIOPA Guideline 26 and set out alternative sources of funding, assessing the amount that can be raised from particular sources, the costs involved and the time needed to raise the funds and the applicability to different scenarios;
- set out the process to invoke the plan, consistent with an insurer's risk appetite and tolerance. This includes how an insurer would identify a liquidity stress event, using a range of early warning indicators;
- set out a decision-making process on what actions to take in response to a liquidity stress and set out clear escalation and prioritisation procedures detailing when and how each of the actions can and should be activated;
- assign roles and responsibilities to specific decision-makers and set out clear reporting lines; and
- set out clear communication plans for both internal and external stakeholders.

7.4 In the development of its liquidity contingency plan, an insurer should take into account:

- its ongoing analysis of liquidity risk and the outcomes of its own stress tests, including the impact of stressed market conditions on its ability to monetise assets or require market-imposed haircuts;
- the extent to which typically available market funding options are not available;
- the risk of non-enforceability of contingent funding arrangements, such as 'Materially Adverse Change' or 'MAC' clauses or 'Conditions Precedent' or other covenants, that may limit their use in stressed conditions;
- the financial, reputational or other consequences for the insurer of executing its liquidity contingency plan; and

40 As defined in the Glossary of the PRA Rulebook.

- its ability to transfer liquidity between entities, considering any legal, regulatory or operational constraints, including where relevant, cross-border constraints.

7.5 In the case of groups, the PRA expects an insurer to develop a liquidity contingency plan that limits intra-group contagion in a stress event. This could involve limiting individual entities' reliance on other group entities for liquidity and treating the parent company as a lender of last resort. A liquidity contingency plan for the group is also expected to be consistent with those of the relevant individual legal entities.

7.6 To ensure it remains operationally robust, an insurer should periodically test and update its liquidity contingency plan through simulation exercises. The appropriate frequency of testing will depend on the scale and complexity of the firm's activities of its contingency plan. Key aspects of this testing should include:

- ensuring that roles and responsibilities are appropriate and understood;

- testing key assumptions and identification of dependencies, such as the ability to sell or repo assets, or periodically draw down credit lines. Further contingencies should be identified if those dependencies are unavailable; and

- evaluating the accessibility of committed facilities and whether contractual or operational constraints could limit the insurer's ability to access them.