BANK OF ENGLAND
PRUDENTIAL REGULATION
AUTHORITY

Consultation Paper | CP21/17

Solvency II: Matching adjustment

October 2017

Prudential Regulation Authority
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Responses are requested by Wednesday 31 January 2018.

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1 Overview

1.1 In this consultation paper (CP) the Prudential Regulation Authority (PRA) sets out its proposed expectations of firms in respect of the application of the matching adjustment (MA). The MA allows firms to adjust the relevant risk-free interest rate term structure for the calculation of a best estimate of a portfolio of eligible insurance obligations.

1.2 This CP has been developed by the PRA as part of its work on adjustments to the insurance prudential framework in the light of experience following the UK introduction of Solvency II, including in areas recommended for reform by the Association of British Insurers (ABI) and discussed with the Treasury Committee.

1.3 In addition to the adjustments mentioned above, this CP proposes to consolidate and update material previously set out in Directors' letters, Executive Director's letters and feedback statements ('Directors' letters') published in the period 1 April 2013 to 15 February 2016 in a new supervisory statement (SS) (see Appendix 1). This CP will allow firms to provide feedback to the earlier published material and updated guidance, provide greater clarity on the PRA's expectations in relation to the MA, and help firms realise the intended benefits of MA.

1.4 This consultation is relevant to all UK Solvency II firms and to the Society of Lloyd's and its managing agents where they are applying or have applied to use the MA.

Background

1.5 Prior to the implementation of the Solvency II Directive ('the Directive')[1], the PRA published Directors' letters in the period prior to (and shortly after) the Directive came into effect to share information, including its developing thinking on issues raised by firms during their preparation for Solvency II, as quickly and as transparently as possible. This ensured that all firms had access to the information they were likely to need to prepare for compliance with the Directive from 1 January 2016.

1.6 Following Solvency II implementation, the PRA reviewed the effectiveness of certain aspects of the MA regime. This review, together with the recent discussions with the ABI and industry participants has resulted in some proposed updates to the PRA's guidance.

1.7 In addition, the PRA has reviewed the Directors' letters and has considered the extent to which any of that preparatory material should be carried forward, post-implementation of Solvency II, to become ongoing supervisory expectations of firms. The PRA consulted on and published final policy in November 2016 on a number of issues.[2] This CP is part of the PRA's review of Directors' letters and sets out proposals in the context of the PRA's expectations in relation to the application of the MA. The PRA proposes to incorporate that material into a SS.

Responses and next steps

1.8 This consultation closes on Wednesday 31 January 2018. The PRA invites feedback on the proposals set out in this consultation. Please address any comments or enquiries to CP21_17@bankofengland.co.uk.

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1 Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (recast).

2 Policy Statement 33/16 'Solvency II: consolidation of Directors' letters': www.bankofengland.co.uk/pra/Pages/publications/ps/2016/ps3316.aspx.

2 Proposals

2.1 The proposed expectations in the draft SS cover two areas: i) incorporation of existing Director's letters, and ii) the introduction of updated guidance in relation to aspects of the MA.

Directors' letters

2.2 Appendix 2 provides a summary of the Director's letters the PRA proposes to incorporate into the draft SS, as well as the location in the draft SS of that material.

Additional guidance

2.3 The PRA proposes additional guidance in the following areas (with references to the relevant chapter in the draft SS):

- asset eligibility – demonstrating cash flow fixity (Chapter 2);
- criteria for assessing 'sufficient compensation' (Chapter 2);
- restructuring asset cash flows using special purpose vehicles (SPVs) (Chapter 2);
- trading in the MA portfolio (Chapter 7);
- consequences of breaches of MA requirements (Chapter 8); and
- changes to MA portfolio approval (Chapter 9).

Asset eligibility – demonstrating cash flow fixity

2.4 The PRA proposes that firms may be able to consider that asset cash flows for which the timing is uncertain but bounded, can be regarded as fixed for the purpose of demonstrating cash flow matching, provided that those cash flows are recognised at the latest contractual date and that any additional amount contingent on the timing of cash flows (eg additional interest charges) is excluded.

2.5 The PRA considers that the principles of the approach it used for callable bonds can be applied to other (otherwise eligible) MA assets, for example loans where the timing of the start of repayments of interest and/or principal can vary within a contractually bounded period, as long as the firm assumes that payments start at the latest possible contractual date and are limited so that any additional amounts of interest or principal, or any other compensation for late payment are excluded. Firms should be able to demonstrate suitable arrangements are in place to ensure that if cash flows are received at an earlier date than that assumed in the matching, they can be invested to ensure that liability cash flows at a later date can still be matched. This approach may be appropriate for loans with an initial 'construction phase' provided that the other MA criteria are satisfied. To the extent such assets' cash flows are consistent with the above approach, the proposal would allow firms to include these assets within the MA portfolio and benefit from the MA on eligible cash flows from the time of investment, rather than hold them outside the MA portfolio until the timing of repayment has been confirmed; this will support firms' ability to invest in these projects.

Criteria for determining sufficient compensation

2.6 In the event that an asset's cash flows are fixed, but can be changed by the obligor, firms may be able to include them as eligible asset cash flows if, in accordance with Solvency 2 Regulations ('Regulations'), they can demonstrate[1] that the asset would pay sufficient compensation to cover any future reinvestment risk with the purchase of an asset of at least as good quality as the original, so that liability cash flows will remain matched. Many firms demonstrate 'sufficient compensation' by setting a maximum make-whole spread over a suitable reference gilt so that assets with make-whole spreads in excess of this level would not be eligible to include in the MA portfolio. The PRA has previously given guidance that, in principle, this could be an acceptable approach.

2.7 The PRA proposes that firms may devise criteria for assessing 'sufficient compensation' that accommodate an approach whereby sufficiency is assessed by reference to the relevant MA liabilities being matched and by the ability to purchase an asset of at least as good quality as the original, ie to ensure that this matching continues. This may, in practice, mean that only part of an asset's cash flows is recognised as eligible to match MA liabilities.

2.8 The proposal would allow firms to reconsider their own eligibility criteria in relation to sufficient compensation. The outcome of applying those criteria must provide for sufficient compensation as described above. Similarly, firms may devise criteria which anticipate foreseeable events such as credit upgrades, again so long as the compensation is sufficient as described. This revised approach allows firms to consider whether a wider range of assets would provide sufficient compensation in manner described and compliant with Regulation 42(6).

Changes to the MA portfolio

2.9 If a firm proposes to include new assets or liabilities that do not have the same features as those already within the (approved) MA portfolio, this change would not be considered within scope of the existing approval for the purposes of Article 7(5) of the Implementing Technical Standard.[2] The PRA would expect a firm to apply for a new MA approval in that case. Firms therefore should consider whether the features of a new asset or liability are the same as those in the existing approved MA portfolio or whether they need to make a further approval application before making changes to the MA portfolio.

2.10 The PRA proposes updated guidance to provide examples to assist firms in the assessment of features.

2.11 The PRA also proposes providing clarity on the potential effect of breaching the requirement in the PRA rules for prior supervisory approval of the use of the MA (such requirement applying in cases set out in 2.9 above where it is proposed to introduce assets or liabilities with new features). This would be considered to be a breach of PRA rules, but not necessarily of itself a breach of the MA conditions as set out in Regulation 42(4).

Breaches of MA requirements

2.12 In cases where a firm ceases to comply with the conditions set out in Regulation 42(4), compliance needs to be restored within two months. The PRA has previously issued guidance that firms should engage with the PRA as early as possible where there is a possibility that the conditions have been breached. The PRA proposes that firms must have appropriate processes in place to ensure that breaches will be detected on a timely basis. The PRA also proposes that

1 Regulation 42(6) of the Regulations (2015/575): www.legislation.gov.uk/uksi/2015/575/contents/made.
2 Commission Implementing Regulation (EU) 2015/500.

in cases where a breach is reasonably only determined after the date it has occurred (ie identified by the firm, or notified to the firm by the PRA), then the PRA may consider the start of the two-month remediation period to commence from the point where a breach is detected or confirmed.

Asset restructuring

2.13 Regulation 42(4) requires that the cash flows of the assigned portfolio of assets are fixed and cannot be changed by the issuers of the assets or any third parties. In order to seek to meet this condition firms often choose to restructure their assets. The PRA is proposing guidance for firms that are looking to restructure assets in order to create fixed cash flow notes intended to meet the MA eligibility conditions. Chapter 2 of the draft SS covers features and risks of the restructuring which the PRA expects firms to consider (in the 'Asset restructuring' section).

2.14 The proposals should help firms to improve their own assessment of whether an asset restructuring is likely to be appropriate for the purposes of demonstrating that MA requirements have been met, and whether proposals to restructure are likely to be acceptable to the PRA.

Trading in the MA portfolio

2.15 The MA portfolio must be constructed based on the requirement that the assets are purchased on a buy and hold basis. However, the legislation, including in Regulation 42(4)(b) acknowledges that some trading in the portfolio may be needed in order to maintain the matching required in the portfolio. The PRA is proposing guidance on the limited degree of trading which should be permitted within the MA portfolio. This builds on the principle already set out in the Directors' letters that assets in the MA portfolio should be held to maturity, while recognising that some degree of trading may be needed in order to maintain matching, and specifically for the purpose of good risk management. The updated guidance should assist firms in developing their policies to manage the MA portfolio, and specifically the trading of assets, so that they are consistent with PRA guidance.

3 The PRA's statutory obligations

3.1 In carrying out its policy making functions, the PRA is required to comply with several legal obligations.

3.2 In discharging its general functions the PRA must, as far as it is reasonably possible, act in a way that advances its general objective and its insurance objective.

3.3 The PRA is required by the Financial Services and Markets Act 2000 ('FSMA') to consult when setting its general policies and practices.[1] 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:

- 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,[2] insurance objective[3] (if applicable), and secondary competition objective;[4]
- 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;[5] and
- a statement as to whether the impact of the proposed rules will be significantly different to mutuals than to other persons.[6]

3.4 The Prudential Regulation Committee (PRC) should have regard to aspects of the Government's economic policy as recommended by HM Treasury.[7]

3.5 The PRA is also required by the Equality Act 2010[8] 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

3.6 The proposals contained in the draft SS clarify the PRA's expectations of firms and do not impose additional requirements. The overall economic effects of the Solvency II requirements in this area have been considered previously, in the Financial Services Authority's (FSA's) CP11/22[9] and the PRA's CP16/14.[10] They have also been considered in the impact assessment undertaken by HM Treasury.[11] The economic effects on areas where the guidance has been updated is considered below.

1 FSMA s2L.
2 FSMA s2B.
3 FSMA s2C.
4 FSMA s2H(1).
5 FSMA s2H(2) and s3B.
6 FSMA s138K.
7 Section 30B of the Bank of England Act 1998.
8 Section 149.
9 'Transposition of Solvency II: Part 1', November 2011; www.bankofengland.co.uk/publications/Documents/other/pra/policy/2013/transportationofsolvency2-1cp11-22.pdf.
10 'Transposition of Solvency II: Part 3', August 2014; www.bankofengland.co.uk/pra/pages/publications/cp/2014/cp1614.aspx.
11 HM Treasury Impact Assessment, 'Transposition of Solvency II Directive (2009/138/EC) and Omnibus II', December 2014, RPC11-HMT-1094(3); www.legislation.gov.uk/ukia/2015/143/pdfs/ukia_20150143_en.pdf.

3.7 The proposed draft SS clarifies the PRA's expectations of firms and does not impose additional requirements. Furthermore, most of the PRA's expectations contained within the draft SS have been issued previously in the form of Director's letters, so firms should already be familiar with the content. Therefore, the PRA does not expect additional costs to firms.

3.8 In those areas where the PRA is updating its current guidance, the PRA considers that these should not result in significant additional cost to firms. The proposals have been designed to improve the effectiveness of existing practice and allow firms to invest in assets which they may previously have avoided because of lack of guidance. In particular, the proposed guidance on extensions to MA portfolios and breaches of MA requirements is designed to improve the efficiency of firms' decision making processes. The proposals giving updated guidance on asset eligibility should benefit firms by giving clarity on the range of assets which firms could consider meeting MA requirements.

Compatibility with the PRA's objectives

3.9 The PRA believes that the proposals in this CP are compatible with the PRA's statutory objectives to promote the safety and soundness of PRA-authorised firms;[1] and in the context of insurance, to contribute to policyholder protection.[2] The PRA is seeking to ensure the delivery of the main objective of the Directive as described in Article 27 (ie the protection of policyholders and beneficiaries) by providing guidance to firms.

3.10 The PRA also has a duty to facilitate effective competition as a secondary objective subordinate to its general safety and soundness objective. The PRA expects the proposals in this CP will help to facilitate effective competition. The effect on competition of the implementation of the Directive has already been considered in the FSA's CP11/22 and the PRA's CP16/14.[3] In addition, the impact of the transitional measures was considered further in HM Treasury's impact assessment on the transposition of the Directive.[4]

Regulatory principles

3.11 In developing the proposals in this CP, the PRA has had regard to the regulatory principles as set out in FSMA.[5] Two of the principles are of particular relevance:

- the principle that a burden or restriction which is imposed on a person, or on the carrying on of an activity, should be proportionate to the benefits, considered in general terms, which are expected to result from the imposition of that burden or restriction. The PRA has followed this principle in consolidating the PRA's expectations contained in Directors' letters and providing updated guidance in some areas to enable firms to better realise the benefits of the MA appropriately for their portfolio structures; and

- the principle that the regulators should exercise their functions as transparently as possible. The PRA has followed this principle by issuing a consultation on the expectations that are already in the public domain and setting out its new proposals. Where this is a restatement of existing guidance, the historic documents will be maintained in an archive that includes signposting to where the new material is to be found.

1 See s.2B(1) and s.2B(2) FSMA.
2 See s.2C FSMA.
3 See footnotes 8 and 9 on page 9.
4 See footnote 11 on page 9.
5 See s.2H and s.3B FSMA.

Impact on mutuals

3.12 The PRA considers that the impact of the proposals on mutuals is no different from the impact on other firms.

HM Treasury recommendation letter

3.13 HM Treasury has made recommendations to the Prudential Regulation Committee (PRC) about aspects of the Government's economic policy to which the PRC should have regard when considering how to advance the objectives of the PRA and apply the regulatory principles as set out in FSMA.[1]

3.14 The aspects of the Government's economic policy most relevant to the proposals in this CP are:

- competition;
- growth;
- competitiveness;
- innovation; and
- better outcomes for consumers.

3.15 Competition, growth and better outcomes for consumers have been considered in the 'compatibility with the PRA's objectives' and 'regulatory principles' sections above. Where consideration has been given to the aspects that extend beyond the PRA's objectives and the regulatory principles, these are set out below.

Innovation

3.16 While not reducing the prudential requirements for MA portfolio maintenance and adjustment, innovation will be enhanced by the proposals on the process for approving changes to a MAP with existing approval, and in the proposals for extending approval to the MAP. This ability will be enhanced as more capital may be available for product innovation.

Competitiveness

3.17 Competitiveness is encouraged through the updated guidance in that it enables firms to apply for MA approval where this is appropriate for their liability structure. While still prudent, the added guidance enables firms to be competitive in the international sector by allowing for a more efficient and effective use of capital to be used where it is most effective within the firm.

Equality and diversity

3.18 The PRA has performed an assessment of the policy proposals and does not consider that the proposals give rise to equality and diversity implications.

1 Information about the PRC and the recommendations from HM Treasury are available on the Bank's website at www.bankofengland.co.uk/about/Pages/people/prapeople.aspx.

Appendices

1	**Draft supervisory statement 'Solvency II: Matching adjustment'**
2	**Mapping table for Directors' letters included in the draft SS**

Appendix 1 Draft supervisory statement 'Solvency II: Matching adjustment'

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Appendix

1 Introduction

1.1 In this Supervisory Statement (SS), the Prudential Regulation Authority (PRA) sets out its expectations of firms in respect of application of the matching adjustment (MA). The MA allows firms to adjust the relevant risk-free interest rate term structure for the calculation of a best estimate of a portfolio of eligible insurance obligations.

1.2 The scope of this SS includes the assessment of eligibility for assets and liabilities, demonstrating compliance with the matching requirements, calculation of the MA benefit, ongoing management and compliance of MA portfolios, applications for MA approval and subsequent changes to an MA portfolio, and the implication of changes to the MA portfolio that are outside the scope of an existing MA approval.

1.3 This SS is relevant to all UK Solvency II firms and to the Society of Lloyd's and its managing agents, where they are applying or have applied to use the MA. This statement should be read in conjunction with the PRA's rules in the Solvency II Sector of the PRA Rulebook, in particular the Technical Provisions Part 6 and 7, the PRA's approach to insurance supervision,[1] SS9/14,[2] SS15/15[3] and SS3/17[4] and Regulation 42 of the Solvency II Regulations[5] ('the Regulations'[6]).

1.4 The PRA expects that, as well as needing to meet the requirements of Regulation 42, firms should assess carefully, and be able to demonstrate, their compliance with all other relevant requirements, including the requirements for risk management and the prudent person principle (PPP) that are set out in the Conditions Governing Business Part and the Investments Part of the PRA Rulebook.

1.5 The PRA will assess firms' use of the MA taking into account the fundamental rationale underpinning the use of the MA, as described in Recital 31 of the Omnibus Solvency II Directive.[7]

1 PRA's approach to insurance supervision available at www.bankofengland.co.uk/publications/Pages/other/pra/supervisoryapproach.aspx.
2 'Valuation risk for insurers', November 2015: www.bankofengland.co.uk/pra/Pages/publications/ss/2015/ss914update.aspx.
3 'Solvency II: approvals', March 2015; www.bankofengland.co.uk/pra/Pages/publications/ss/2015/ss1515.aspx.
4 'Solvency II: matching adjustment – illiquid unrated assets and equity release mortgages', July 2017: www.bankofengland.co.uk/pra/Pages/publications/ss/2017/ss317.aspx.
5 Regulation 42 of The Solvency 2 Regulations 2015 (2015/575) is the main transposition of Article 77b of the Solvency II Directive: www.legislation.gov.uk/uksi/2015/575/contents/made.
6 References to 'the Regulations' in this SS are to The Solvency 2 Regulations 2015 (2015/575) unless otherwise stated.
7 Directive 2014/51/EU of the European Parliament and of the Council and of the Council of 16 April 2014 amending. Directives 2003/71/EC and 2009/138/EC and Regulations (EC) No 1060/2009, (EU) No 1094/2010 and (EU) No 1095/2010 in respect of the powers of the European Supervisory Authority (European Insurance and Occupational Pensions Authority) and the European Supervisory Authority (European Securities and Markets Authority).

2 Asset eligibility

2.1 Approval for use of the MA is subject to the conditions set out in Regulation 42, including eligibility conditions for assets matching liabilities to which the MA is applied. This section sets out the PRA's expectations in relation to the asset eligibility conditions.

2.2 The eligibility conditions in Regulation 42 define the features that the asset portfolio, and in some cases the individual assets within it, must have. These features determine eligibility, not the notional class to which an asset (or group of assets) belongs. For this reason, there is no prescribed 'closed list' of eligible assets for MA purposes. Instead, the PRA expects firms to demonstrate that their portfolios satisfy the asset eligibility conditions.

2.3 The PRA will review each asset portfolio on a case-by-case basis as part of the approval process, taking into account the evidence provided by the firm in its application.

2.4 For the purposes of demonstrating satisfaction of the asset eligibility conditions in Regulation 42, firms are expected to consider all the features of the assets against all of the relevant conditions in Regulation 42, not just the requirement(s) that the firm considers to be most material.

Screening process

2.5 The PRA expects firms to have a robust screening process in place to identify those asset features that could affect MA eligibility.

2.6 For non-traded assets, firms should review the relevant terms and conditions or prospectuses. For traded assets, where reliance is being placed on third-party data providers, firms should perform some validation checks; for example, by comparing against another set of external data, or by examining a random sample of prospectuses.

2.7 The MA eligibility conditions should be clearly reflected in the investment mandates for MA portfolios and the screening processes should be applied automatically when the firm is considering new asset purchases. The PRA expects firms to evidence these governance processes within their final applications. The PRA does not expect firms to submit validation test results or underlying asset prospectus data as part of the application.

Pairing or grouping of assets

2.8 Regulation 42(4)(e) requires that the asset portfolio's expected cash flows replicate each of the expected liability cash flows in the same currency. The PRA does not consider that this requires individual assets being denominated in a particular currency, provided that replication can be demonstrated by considering the cash flows of assets in aggregate. The PRA's view is that the requirement in Regulation 42(4)(a) that the portfolio must consist of 'bonds or other assets with similar cash flow characteristics' could also be satisfied by considering relevant pairings or groupings of assets. For example, a foreign currency bond with an appropriate currency swap could be used in combination to generate a cash flow in the relevant currency of the liabilities.

2.9 In the case of pairings or groupings of assets, firms should consider carefully how any such arrangements satisfy all the relevant requirements, including whether the assets on a paired or grouped basis satisfy all the eligibility conditions and whether such arrangements comply with the requirements on risk management and on the Prudent Person Principle (PPP). This includes considering the reliability and predictability of such arrangements under stressed conditions.

2.10 For example, for the purposes of assessing the eligibility of assets paired with derivatives, this would include firms identifying any break clauses that allow the counterparty to change the cash flows at its option and, if so, the basis on which such features do not disqualify the assets from admissibility under Regulation 42(4)(k)(i) (for example, because the terms provide sufficient compensation within the meaning of Regulation 42(6)).

2.11 The PRA expects firms to explain carefully and to justify the method by which pairing or grouping arrangements have been reflected in the assessment of matching and the calculation of the MA. For example, firms should explain whether all the individual elements of the arrangement have been de-risked and mapped to fundamental spreads separately, or whether instead the combined asset has been de-risked and mapped onto a single fundamental spread.

2.12 If a firm provides a line-by-line itemisation of the proposed assets for an MA portfolio, one way of demonstrating that this has been considered at a sufficient level of granularity is to indicate clearly those cases where pairs or groups of assets need to be considered in combination to demonstrate that the portfolio has fixed cash flows.

Fixed cash flows

2.13 Regulation 42(4)(k) requires firms to demonstrate that the overall cash flows from the portfolio are fixed in terms of timing and amount, and cannot be changed by the issuers of the assets or any third parties. For this purpose, it is not sufficient for a portfolio of assets to provide cash flows that are predictable in aggregate to a very high degree.

2.14 Regulation 42 sets out two exceptions to the requirement that the cash flows at the level of the portfolio be fixed. This is where firms have used:

- inflation-linked assets to match the cash flows of inflation-linked obligations in a matching portfolio (Regulation 42(4)(k)(ii)); or

- assets with cash flows that may be changed at the request of the issuer or a third party, provided that in such an event the firm receives sufficient compensation to allow it to obtain the same cash flows by re-investing in assets of an equivalent or better credit quality (Regulation 42(6)).

Partial recognition of an asset's cash flows

2.15 In meeting the requirement for fixed cash flows, the PRA considers that assets that produce both fixed and non-fixed cash flows would not necessarily be excluded under the eligibility conditions in Regulation 42 in cases where only the fixed cash flows are taken into account for the purpose of demonstrating cash flow matching. For example, firms may be able to demonstrate that the cash flows from callable bonds up to the first call date are fixed, thus allowing them to be recognised partially in the demonstration of cash flow matching (provided that the asset also meets the other eligibility criteria).

2.16 In cases where only part of an asset's cash flows are taken into account for the purposes of demonstrating cash flow matching, firms should attribute the full market value of the asset to a matching portfolio, and take the full asset value into account when calculating the MA in accordance with Technical Provisions 7.2(1)(a) of the PRA Rulebook.

Redemption or termination clauses

2.17 The PRA understands that many bonds (and other assets with similar cash flow characteristics) will be subject to terms and conditions that allow the issuer of the asset to redeem or terminate the contract prior to maturity.

2.18 The PRA considers that the requirement in Regulation 42(4)(k)(i) that 'the cash flows of the assigned portfolio of assets are fixed and cannot be changed by the issuers of the assets or any third parties' does not necessarily disqualify all assets that are subject to early redemption or termination rights at the option of the issuer or a third party.

2.19 Certain categories of early redemption or termination rights would clearly not meet the eligibility criterion in Regulation 42(4)(k)(i), for example rights of redemption or termination that are entirely at the discretion of the issuer or third party (subject to the exceptions in Regulation 42(6)).

2.20 But there are other categories of rights of redemption or termination that the PRA considers are less likely to undermine the requirement for predictability of cash flows that underlies the requirement in Regulation 42(4)(k)(i). In particular, rights of early redemption or termination at the option of the issuer which are only triggered by events that are outside the control of, and cannot be avoided by, the issuer, and where such events would arguably change the nature or substance of the underlying contract. For example, corporate bonds will typically be subject to early redemption at the option of the issuer in the event of a tax change that results in the issuer having to pay additional amounts under or as a result of the bond. It is also typical for index-linked bonds to contain early redemption rights at the option of the issuer where the relevant index is no longer available.

2.21 In light of the points above, when making arguments for the inclusion of an asset within an MA portfolio, the PRA expects firms to demonstrate that any right of redemption or termination is not at the unfettered discretion of the issuer or third party, but is triggered only by events that:

- are outside the issuer or third party's control;
- cannot be avoided by the issuer or third party; and
- would otherwise materially change the nature or substance of the obligations of the issuer or counterparty under, or as a result of, the contract.

2.22 Further, the PRA expects firms to demonstrate that they have considered the extent of reinvestment or other risks posed by any such redemption or termination rights, and have considered whether and how this could be mitigated. Such consideration should form part of a firm's own risk and solvency assessment (ORSA).

Extension on default clauses

2.23 The PRA would expect the matters in paragraph 2.21 also to be relevant in assessing the eligibility of assets with extension on default clauses particularly with respect to the trigger for the extension of cash flows under such clauses.

Reinsurance assets

2.24 The PRA considers that the requirement in Regulation 42(4)(k)(i) will not necessarily disqualify reinsurance assets, provided that firms can demonstrate the following:

- any variation in timing, duration, and/or quantum of cash flows from the reinsurance asset (that is not otherwise captured by Regulation 42(4)(c) to (f)), is solely attributable to and reflects the variation in the timing, duration, and/or quantum of cash flows of the underlying (re)insurance obligations that are covered by the reinsurance asset;
- the cash flows of the reinsurance asset replicate the cash flows of the underlying (re)insurance obligations covered without giving rise to material mismatch risk;
- the insurance and/or reinsurance obligations that are covered under the reinsurance asset are properly included in an MA portfolio (ie they satisfy all the relevant eligibility conditions in Regulation 42);
- the reinsurance asset satisfies all the other conditions for eligibility of matching assets in Regulation 42(4) (eg including that it is structured in such a way that it produces cash flows with similar characteristics as the cash flows of bonds); and
- the inclusion of the reinsurance asset in an MA portfolio is consistent with the assumptions underlying the MA. In particular, that it is consistent with the assumption underlying Regulation 42 that insurance and reinsurance undertakings will hold the matching assets to maturity.

2.25 The PRA expects that, at a minimum, a similar demonstration would be provided by firms for any other asset where cash flows vary with the underwriting risks in Regulation 42(4)(h).

2.26 For the purposes of calculating the MA and satisfying its eligibility conditions (including cash flow matching), firms should risk adjust the reinsurance cash flows on the basis of Technical Provisions 11 of the PRA Rulebook. The adjustment made for the purposes of the MA calculation should be the same as that made for the purposes of calculating the value of the reinsurance recoverable. For the avoidance of doubt, the PRA does not expect firms to map the reinsurance to a fundamental spread.

Cash flows dependent on certain risks (including morbidity risk)

2.27 Assets with cash flows that depend on risks that are not included in the underwriting risks referred to in Regulation 42(4)(h) are not likely to be eligible. For example, where assets have cash flows dependent on morbidity risk, it would be difficult to demonstrate that the cash flow variability introduced by the morbidity dependence reflects corresponding variability in the liability cash flows, since morbidity risk is not one of the underwriting risks to which eligible liabilities can be exposed (as set out in Regulation 42(4)(h)).

Use of foreign exchange (FX) forwards

2.28 The PRA considers that the paired or grouped assets that result from using FX forwards to hedge non-sterling bond exposures do not provide fixed cash flows (as required by Regulation 42(4)(k)(i)) because in their current form the cash flows on these paired or grouped assets are only contractually fixed for a few months rather than over the full duration of the underlying bond. Therefore, they are unlikely to satisfy the eligibility requirements for MA.

2.29 The PRA does not consider that the rolling of the forwards on expiry, combined with the purchasing or selling of the underlying bonds (ie rebalancing), together produce fixed cash flows over the full duration of the bond. Such an interpretation depends on two significant assumptions: regular rolling and rebalancing of an MA portfolio; and reliance on the firm's continuing ability over a long time period to access the FX forward markets.

2.30 Relying on such assumptions is not consistent with the Solvency II Directive requirement for an MA portfolio of assets to have fixed cash flows, as transposed in Regulation 42(4)(k). The assigned portfolio of matching assets may change only in limited circumstances which are out of the control of the firm (eg on early repayment of an asset within the conditions set out in Regulation 42(6), and where expected liability cash flows have materially changed due to, say, changes in underlying longevity assumptions (Regulation 42(4)(a) and (b)). The PRA considers that these circumstances do not encompass the use of assumed management actions or rebalancing on the potentially significant scale that would be needed to overcome the maturity mismatch between firms' foreign currency bonds and the associated short-term forwards.

2.31 The PRA notes that some other strategies to hedge currency exposure, and specifically the use of significantly longer-dated cross currency swaps, would be more consistent with the MA eligibility conditions. Firms currently using FX forwards in an MA portfolio should explore longer-dated cross-currency swaps or other approaches including potential portfolio restructures.

Cash flows with uncertain but bounded timing

2.32 The PRA will assess on a case-by-case basis the eligibility of different types of assets which may contain cash flows where the timing is uncertain, but is bounded, for example final redemption payments on callable bonds, or bonds where the timing at which repayments start can vary within a contractually bounded period.

2.33 The PRA's view is that, in addition to recognition of cash flows up to the first call date (as set out in paragraph 2.15), firms may also be able to demonstrate that the redemption payment from a callable bond can be regarded as being fixed (provided that the asset also meets the other eligibility conditions) if, for the purposes of demonstrating matching, it is only recognised at its final redemption date (and providing such a fixed date is specified in the bond's contractual terms).

2.34 For bonds where the start of repayments is uncertain but has a fixed latest point (and provided such latest date is specified in the bond's contractual terms), for example bonds with an initial construction phase, subject to other eligibility conditions being met firms may be able to demonstrate that cash flows are fixed for the purposes of matching liabilities, if the cash flows are recognised at their latest date. The fixed amounts should not include any amount contingent on the timing of the cash flows, ie cash flows must be certain to be available to meet the matched liabilities; for example any additional interest payments which result from a later start date of repayment would not be considered to be 'fixed'. Firms would also need to demonstrate how cash flows received at an earlier date will be invested so that they will be available to meet the liability cash flows as assumed in the matching assessment.

2.35 In considering alternative treatments for assets with uncertain cash flow timing to that set out in this section and the section on partial recognition, for example a 'yield to worst' approach, firms should note that where assumptions need to be made about the future cash flows they will receive on an asset, this may expose the firm to the risk of these assumptions changing over time and to the risk of actual cash flows being lower than assumed. The PRA considers both of these risks would pose an obstacle to firms being able to demonstrate matching as required by Regulation 42(4)(e) and (f).

Cash flows dependent on realisable property values

2.36 Where a cash flow is directly dependent on the realisable value of property, such uncertain cash flows should not be regarded as fixed in terms of Regulation 42(4)(k) (irrespective of whether a firm proposes only to recognise a 'prudent estimate' of the cash flow's value).

Sufficient compensation

2.37 For the purposes of the derogation in Regulation 42(6) (referred to in paragraph 2.14), firms must demonstrate clearly that the compensation they would receive in the event of a change in the cash flows would allow them to obtain the same cash flows by reinvesting in assets of equivalent or better credit quality. The PRA considers that firms may be able to satisfy this requirement by demonstrating that sufficient compensation will be received on the basis of an adequate contractual compensation clause. In assessing adequacy of compensation, the PRA expects firms to take into account whether relevant insurance or reinsurance obligation cash flows would continue to be matched out of assets acquired with the compensation payable.

2.38 Where firms rely on a compensation clause in the form of a standard[1] Spens clause (or equivalent), the PRA expects firms to demonstrate that the:

- reference gilt used is suitable given, for example, the term to maturity of the asset in question; and/or
- remaining cash flows that are discounted correspond to those assumed in the demonstration of cash-flow matching.

2.39 Where firms rely on modified Spens clauses (or equivalent), one method of assessing the impact of make-whole clauses on a firm's assets would be for firms to determine a maximum make-whole spread such that cash flows on assets with spreads in excess of this maximum would not be considered to fixed for the purposes of cash flow matching.

2.40 The PRA expects firms to put in place robust governance arrangements around assessing the adequacy of compensation including determining of maximum make-whole spreads, and expects firms to notify their supervision team of any changes to these sufficiency criteria.

2.41 The PRA's view is that it may be possible for firms' criteria for assessing 'sufficient compensation' to be devised by reference to the relevant MA liabilities being matched by the recognised asset cash flows together with the ability to purchase an asset of at least as good quality as the original to replace these cash flows in the event these are changed by the issuer, ie to ensure that this matching continues. The PRA expects firms to be able to demonstrate the same level of confidence in their ability to replace cash flows as in their assessment in paragraph 2.39 above. This may, in practice, mean that the firm would recognise part of the asset's cash flows up to the level of contractual compensation payable, subject to the considerations relating to partial recognition set out in paragraphs 2.15-16 above.

2.42 The PRA expects firms to consider how their own criteria for assessing 'sufficient compensation' cater for foreseeable events such as an asset being upgraded. The PRA considers that in such upgrade events, the firm would not necessarily need to remove the asset from the MA portfolio, if their own criteria provide for this (and to the extent that those

1 Here, 'standard' is taken to mean that the remaining cash flows are discounted using a reference gilt rate.

criteria were effective in assessing whether compensation would be sufficient, taking into account paragraph 2.37, above). For example, where sufficiency of compensation criteria follow the approach described in paragraph 2.41, the firm might continue to recognise the asset's cash flows up to the level of the compensation payable, ie so that the asset's compensation would remain sufficient to replace the cash flows needed to match relevant MA eligible liabilities.

2.43 In addition to demonstrating the suitability of the reference gilt used in both standard and modified Spens clauses, firms should also demonstrate that:

- The adequacy of the compensation clause or maximum make-whole spreads has been assessed at a suitable level of granularity. For example, an assessment only at the asset class level (as opposed to further subdivisions by rating and duration) would need strong justification. Where holdings of individual assets are material, firms should carry out this assessment at asset level.

- Explicit consideration has been given to the impact of asset spread narrowing and/or gilt spread widening scenarios on the sufficiency of the compensation. The scenarios considered should be extreme enough to demonstrate that there is negligible risk of the modified Spens clause not providing sufficient compensation in the future.

- There is sufficient liquidity in the market (taking into account stressed conditions) to be able to buy an asset in the same class and credit quality with the compensation provided, or if not, that the compensation is otherwise sufficient (for example, it is sufficient to buy a corporate bond of the same or higher rating).

2.44 The PRA accepts that there is a range of possible approaches that can be used to calibrate the maximal spreads. The PRA considers that scenario testing would provide a useful sense-check as well as a means of ensuring a consistent standard is applied across firms. For example, the PRA would expect firms to investigate a scenario where spreads return to historically low levels over the period for which spread data is readily available and appropriate to the exposures in question and consider whether compensation would be sufficient in that case. Firms should consider explicitly such a scenario test in arriving at their maximum make-whole clauses.

2.45 Firms should also take into account the following in calibrating the maximal spreads :

- where firms are using index data in their analysis it should be noted that while there is no requirement to replace cash flows using the 'average' bond which the index represents, equally firms should not rely on being able to replace cash flows with the cheapest bond in the index;

- in assessing whether sufficient replacement bonds are available to replace cash flows, firms should confirm that the replacement bonds under consideration would be MA-eligible;

- the maximum make-whole clauses should be kept under active review to ensure that any new purchases of bonds with prepayment options would provide adequate compensation; and

- firms should consider carefully the impact of extreme spread-narrowing scenarios beyond those considered in setting their maximum make-whole spreads. These scenarios should also involve consideration of wide-scale upgrading of asset ratings. The risk of mass early

redemptions in such scenarios should be explicitly considered in firms' ORSAs, along with their plans to manage or mitigate the risk in these extreme scenarios.

2.46 If there is no make-whole clause as described above, an alternative arrangement may be appropriate if it has an equivalent effect. However, the effectiveness of the arrangement will need to be demonstrated and firms will also need to take account of the considerations set out above.

Equity release mortgages (ERMs)

2.47 It is not possible to give a definitive view on the MA eligibility of ERMs as an asset class because of the wide variation in the features that such assets possess. However, some features are common to most investments in ERMs, such as cash flows that depend on longevity, morbidity, the realisable value of property (where the mortgage contains a No Negative Equity Guarantee (NNEG)), and exposure to prepayment risk. In the PRA's view, an asset with this combination of features is unlikely to be compatible with the eligibility criteria in Regulation 42. The PRA expects that firms will need to undertake restructuring, pairing or grouping of assets to transform the cash flows of ERM assets into an eligible format. For the avoidance of doubt, the PRA does not have a preference for the way in which firms choose to restructure, pair or group their ERM assets for the purposes of satisfying the MA eligibility criteria.

Cash items

2.48 Although it may be possible to demonstrate that cash items are compatible with the eligibility conditions in Regulation 42, the PRA does not consider that expected future cash interest can satisfy these eligibility conditions. Future cash interest payments will depend on a number of variables, and the variability and uncertainty of future cash interest are incompatible with the requirement of Regulation 42(4)(k) for cash flows to be fixed.

2.49 In considering whether to include cash items in an MA portfolio, firms should assess carefully and be able to demonstrate their compliance with all other relevant requirements, including the requirements for risk management and the PPP.

Collective investment schemes

2.50 Where a firm proposes to include holdings in collective investment schemes or mutual funds within the assigned portfolio of assets, the PRA expects the firm to 'look through' to the underlying assets and demonstrate that these meet all of the eligibility conditions.

2.51 Further, firms should demonstrate that, notwithstanding that the assets are held within a collective investment scheme or mutual fund structure rather than held directly, this does not in any way compromise the firm's ability to ensure that the underlying assets are managed in a way that satisfies the requirements in Regulation 42. For example, the firm needs to demonstrate that the collective investment scheme or mutual fund would not have discretion to invest in assets that are not eligible for the MA.

Asset restructuring

2.52 The PRA recognises firms may be planning to undertake certain risk transformation transactions in order to obtain a portfolio of eligible assets. In particular, firms may be considering entering into securitisation transactions or putting in place hedging arrangements, specifically to secure compliance with the Regulation 42 conditions. Firms that intend to engage in such restructuring, pairing or grouping of assets should discuss their plans with their supervisor at the earliest opportunity and should also be considering contingency options in

case it is not possible to transform the asset cash flows in a way that meets the eligibility criteria.

2.53 The PRA reminds firms that, as well as needing to meet the requirements of Regulation 42, firms are expected to assess carefully, and be able to demonstrate, their compliance with the Directive's requirements for risk management and with the PPP. In particular, firms are expected to be able to identify, measure, and manage risks within their asset portfolios, to invest in the best interest of all policyholders and beneficiaries, including managing potential conflicts of interest, and only to use derivative instruments where they genuinely contribute to a reduction in risk or facilitate efficient portfolio management.

2.54 The PRA expects firms to consider carefully the prudence of any transactions or arrangements they enter into for the purposes of the MA, including their behaviour under stress, and whether the associated risks are well understood and appropriately managed. Securitisation transactions, for example, can vary in their features, and firms should refer to initiatives of international bodies and evolving standards to understand the features that underpin high-quality securitisations. Firms also should have considered any new risks generated by risk transformation arrangements, such as counterparty exposure, and how to account for these. In all considerations about asset eligibility, one of the key questions the PRA expects firms to consider is whether they are exposed to the risk of changing spreads on the underlying asset, contrary to the fundamental rationale for the MA (Recital 31 of the Omnibus Solvency II Directive).[1]

2.55 Restructuring of assets through a subsidiary company set up for this purpose, wholly owned within the insurance group may be acceptable, provided that proposals comply with applicable requirements. It is important, however, that the restructure is appropriately recognised within the firm and the group, including any changes in the risk profile of entities affected by the asset transformation. Given the additional complexity and consequential risks which restructuring gives rise to, the PRA's expectation is that these arrangements will only be used exceptionally.

2.56 The extent to which transactions within the insurance group (including loans or derivatives) can be used to restructure assets in order to include in the MA portfolio depends on whether the restructured assets thereby created can satisfy the MA eligibility conditions. The PRA notes that some assets by their very nature may have characteristics that make it unfeasible to restructure them as MA eligible assets. The PRA expects firms to demonstrate that such transactions are not used to circumvent MA eligibility conditions and that sufficient reliance can be placed upon them to ensure the continuing satisfaction of the eligibility conditions. The PRA expects firms to have regard to the underlying assets being restructured when they consider whether the eligibility conditions will be satisfied. The PRA would not expect firms to apply arrangements as set out in paragraph 2.55, or arrangements which in substance have that effect, to assets which in un-restructured form would in any event not meet all applicable Solvency II requirements, including those of the PPP.

2.57 The PRA's expectations set out in paragraph 2.9, in relation to the pairing or grouping of assets apply equally to asset restructurings.

1 Directive 2014/51/EU of the European Parliament and of the Council of 16 April 2014 amending Directives 2003/71/EC and 2009/138/EC and Regulations (EC) No 1060/2009, (EU) No 1094/2010 and (EU) No 1095/2010 in respect of the powers of the European Supervisory Authority (European Insurance and Occupational Pensions Authority).

2.58 In assessing the suitability of arrangements set out in 2.55 in this context, the PRA expects firms to consider whether the un-restructured asset is likely to remain appropriate over time, consistent with the duration of the restructuring arrangement, and as operating conditions might change. For example, ERMs with a NNEG with a high loan to value ratio, or written to younger age borrowers, may be riskier assets, and over time may be more similar to a property investment than a bond, and therefore may not be a suitable match for the liabilities of the MA portfolio.

2.59 For the purposes of demonstrating the reliability and efficacy of such arrangements, the PRA expects firms to demonstrate (among other things):

- the arrangements will not give rise to conflicts of interest and will be subject to transparent and robust governance arrangements that afford sufficient certainty that the transaction will deliver the promised fixity of cash flows;

- a robust rating process of the SPV (or any notes issued by the SPV), including total return swaps (TRS), to provide sufficient assurance that the required fixity of cash flows will be delivered and the rating is a factor in the MA benefit claimed; and

- the arrangement is in line with the Directive's requirements on risk management and the associated requirements under the PPP.

2.60 For example, a TRS paired with a loan asset having variable cash flows could not be relied upon to 'cure' the failure of such an asset to satisfy the fixed cash flow requirements for MA unless the arrangement provides sufficient assurance that the promised fixity of cash flows will in fact be delivered. The PRA considers that a TRS transaction entered into with an unfunded, unrated and unregulated SPV would be unlikely to provide sufficient assurance as to the SPV's sustained ability to satisfy its obligations to make fixed payments under the TRS on an ongoing basis for the purposes of MA eligibility.

2.61 In the case of a transaction with an intra-group SPV, the PRA would also be concerned to see that robust and transparent governance arrangements are in place in relation to extraction of assets from the SPV by the group, so as to ensure that there is no impairment of the SPV's ability to make the required fixed payments to the firm.

Group consolidation

2.62 The Commission Delegated Regulation[1] requires the best estimates of group insurance and reinsurance undertakings, and consolidated group own funds to be calculated net of any intra-group transactions. Where an asset portfolio has been restructured within an insurance group so that substantially all the risks and rewards of ownership of the asset receivables remain within the same entity within the group, this raises the question whether, in fact, there is an intra-group transaction that would be required to be netted out upon group consolidation. In the case of an asset portfolio that has been restructured through a form of securitisation using a subsidiary company specifically set up for this purpose within an insurance group, and where all tranches of cash flows and the equity in the subsidiary are held by the same insurance entity (albeit that junior tranches are held outside the associated MA portfolio), it is likely that the arrangement would not be recognised as an 'intra-group' transaction, with the result that there would be no intra-group transaction to be netted out at group level.

1 Article 335(3) of the Commission Delegated Regulation (EU) 2015/53 (the 'Delegated Regulation').

Governance

2.63 Any restructuring of the assets for the purposes of transforming the assets into MA eligible cash flows will need to be appropriately reflected in firms' risk management frameworks. It is important that firms have in place, and are able to demonstrate, the necessary governance and expertise to manage any additional risks arising from the restructure, including the exposures to or within each of the SPV, the associated MA portfolio and the holder of the junior tranches and/or equity.

Rating and valuation of assets

2.64 As noted in the SS on Solvency II approvals (SS15/15),[1] as part of deriving the MA, it is anticipated that firms may seek to use internal rating systems to assign a rating category. The PRA expects firms to be able to demonstrate the appropriateness of any internal rating model used.

2.65 Firms should take into account the PRA's SS on valuation risk for insurers (SS9/14)[2] and on illiquid unrated assets (SS3/17)[3] when valuing and rating the assets. In addition, firms should recognise the risk of valuation uncertainty within their ORSA and, where appropriate, allow for this risk in determining their capital requirements.

Liquidity facilities

2.66 If reliance is being placed on additional liquidity facilities to maintain the ability of the issuer to support the fixity of cash flows and the liquidity of the structure, the PRA expects the firm to demonstrate, among other issues, that these facilities will be available over the expected lifetime of the special purpose entity, as well as under stressed conditions. The PRA understands that in rating an SPV undertaking securitisations, external rating agencies would generally require liquidity providers for SPVs to be of high credit rating, with provisions for replacement on credit downgrade. Where the provider of the liquidity facility is internal and not externally rated, the PRA expects the firm to explain and justify why any reliance on additional liquidity facilities is appropriate, including:

- stress testing of the availability of the liquidity facility to at least equivalent degree to that which would be required of liquidity providers by rating agencies, including the likelihood of the liquidity facility no longer being available or being reduced; and

- how the liquidity facility will operate in practice and, in particular, sufficient evidence that funds will be available if they are needed from an operational perspective.

Future loans

2.67 If firms intend using the structure to include new loans in future (including incremental drawdown on existing policies), the application for approval will need to set out the process for doing so. This should include an assessment of the volume of additional loans which will need to be accumulated before further tranches of notes of sufficient quality can be issued.

2.68 Firms will need to identify the sources of funding for any additional loans for the interim period ahead of the issuance of further tranches of notes, and demonstrate how this complies with the relevant liquidity management policies.

1 March 2015: www.bankofengland.co.uk/pra/Pages/publications/ss/2015/ss1515.aspx.
2 November 2015: www.bankofengland.co.uk/pra/Pages/publications/ss/2015/ss914update.aspx.
3 'Solvency II: matching adjustment - illiquid unrated assets and equity release mortgages', July 2017: www.bankofengland.co.uk/pra/Pages/publications/ss/2017/ss317.aspx.

2.69 The PRA expects that any assumption that an MA portfolio will make an advance commitment to purchase additional tranches of senior notes will be demonstrated to be compliant with the asset and liability management (ALM) and liquidity policies of an MA portfolio, including potential scenarios of closure or material restriction in volumes of new annuity business, and/or increase in additional drawdowns on existing equity release policies. Firms should consider whether a commitment fee should be made for such a facility.

Capital requirements

2.70 In cases where the restructure involves the pooling and transformation of cash flows from a defined set of underlying exposures into a series of 'tranches' of separate cash flows which are distinguished by an increasing scale of risk posed to the investor (from senior to junior tranche), the PRA considers that such a structure is, in substance, a securitisation. Following this approach, the calculation of the model-based capital requirements should consider the substance, rather than rely solely on the technical classification of the structure by product or securitisation type.

2.71 In the case of exposures to securitisation vehicles, firms proposing to use the standard formula to calculate the Solvency Capital Requirement (SCR) will need to treat the notes issued by the SPV as a Type 2 securitisation where they fail to satisfy the criteria for Type 1 securitisations (for example, where they are unrated).[1]

2.72 The PRA anticipates that given the bespoke nature of the (restructured) ERM investment, firms using the standard formula may wish to develop a partial internal model (PIM) for this risk exposure. The PRA anticipates this would be a situation in which use of a PIM would be appropriate, provided firms satisfy the relevant requirements to use a PIM.

2.73 For firms applying for approval to use an internal model, the PRA expects the asset transformation as a result of the restructure to be reflected in the model. This will require a comprehensive consideration of the risks of asset transformation as well as the underlying ERMs and any diversification restrictions between the associated MA portfolio and the rest of the entity or group. The PRA expects models will also need to make allowance for default, spread and concentration risks arising from investment in the notes issued by the entity.

2.74 For structures which result in the creation of junior or equity tranches or exposures, the PRA expects firms to hold capital appropriate for the specific nature of the investment, noting the long tail and expected volatility of the risk exposure.

1 Article 177(2) of the Solvency II Commission Delegated Regulation (EU) 2015/35 of 10 October 2014, supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II).

3 Liability eligibility

3.1 This section sets out the PRA's expectations in relation to the liability eligibility conditions in Regulation 42.

3.2 To demonstrate that the liabilities satisfy the eligibility conditions for the MA, a firm's application should include a comprehensive breakdown of their liabilities and should identify all policyholder options and relevant contractual terms (such as the ability of the policyholder to surrender their policy, or the potential for future premium adjustments). A high level description of the liabilities would generally not be sufficient to enable the PRA to assess the satisfaction of the relevant conditions.

3.3 The PRA expects firms to submit a sufficiently comprehensive quantitative breakdown as part of their applications showing, for example, the number and value of each type of insurance contract.

3.4 For the purposes of demonstrating satisfaction of the liability eligibility conditions in Regulation 42, firms are expected to consider all the features of the liabilities against all of the relevant conditions in Regulation 42, not just the requirement(s) that the firm considers to be most material.

Mortality risk

3.5 The PRA expects firms to provide quantitative evidence to demonstrate compliance with the mortality risk threshold in Regulation 42(4)(i).

Deferred premiums

3.6 Some contracts of insurance include an option for the premium to be paid as an initial sum followed by a series of further (smaller) instalments. Some firms have argued that for the purposes of the requirement in Regulation 42(5), such contracts can be treated as consisting notionally of two parts; a 'paid up' part, and a part on which additional premiums are yet to be paid. The PRA does not view any approach that notionally splits a contract into parts as being compatible with Regulation 42(5). The PRA's view is that such a treatment would also undermine the ability of the insurer to manage its MA portfolio separately from the rest of the business, as required by Regulation 42(4)(c).

Premium adjustment clauses

3.7 Some contracts of insurance include a premium adjustment clause that permits the initial premium paid to be adjusted post-contract inception, eg following a data cleansing exercise. The PRA does not consider that a premium adjustment clause will necessarily lead to a contract giving rise to future premium payments for the purposes of Regulation 42(4)(g) if the adjustment is made only to correct for an overpayment or underpayment of a defined premium (resulting from inaccurate information at the contract inception) and does not have the effect of varying the contract.

Policyholder options or surrender options

3.8 The PRA expects firms to submit strong quantitative evidence to in Regulation 42(4)(j) (policyholder options).

3.9 In assessing the risks associated with the exercise of surrender options, the PRA expects firms to consider (among other things):

- the processes and controls in place to manage surrenders;
- the likelihood of peaks and troughs in surrenders, and the drivers of these;
- historic surrender experience;
- the impact of increased or reduced surrenders on cash flow matching; and
- any liquidity strain associated with increased or reduced surrenders.

3.10 The PRA expects these considerations to form a part of a firm's risk and liquidity management of an MA portfolio and for this to be evidenced in the application.

3.11 In the case of deferred annuity contracts that are subject to a right of surrender before the start of the annuity payments, the PRA does not consider that the absence of a contract-level surrender basis will necessarily disqualify the obligations for the purposes of Regulation 42(4)(j)(i) and (ii). When demonstrating compliance with this requirement, the PRA expects firms to, at least:

- undertake a qualitative assessment of each contract that is proposed for inclusion in an MA portfolio to identify those contracts where the surrender basis is non-discretionary (or only contains limited discretion).[1] Such contracts should be considered carefully to assess the extent of surrender risk posed, and may need to be excluded from the portfolio on that basis;
- demonstrate that none of the contracts proposed for inclusion could cause a surrender loss that is material in the context of an MA portfolio, including under stressed conditions. This is expected to include consideration of possible correlation effects between contracts. One possible mitigation for larger or more material policies could be to demonstrate that an individual surrender basis can and will be used for these policies;
- provide evidence that the management of the surrender basis has not historically led to losses at portfolio level; and
- provide a detailed description of how the surrender basis is set and the controls in place around this to manage the risk of loss on surrender. If an individual surrender basis would be used for specific contracts then this should be described separately in each case.

3.12 Where a single contract covers a number of individual scheme members or beneficiaries, the PRA would expect the points above to be considered in respect of these individual members or beneficiaries when demonstrating compliance with Regulation 42(4)(j)(i) and (ii).

3.13 For the purposes of assessing whether the surrender value exceeds the value of the assets held, the PRA's preferred approach is for the surrender value to be compared against the best estimate of liabilities (BEL). Where firms have compared against the BEL plus risk margin, the PRA expects firms clearly to demonstrate that the contribution of an MA portfolio to any surrender pay-out would be limited to the amount of assets held in that MA portfolio in respect of the surrendered contract(s), in order to demonstrate compliance with Regulation 42(4)(j)(ii). For the avoidance of doubt, the PRA considers that including the

1 Here 'non-discretionary' means the surrender basis is stipulated in the contract and the insurer cannot change the surrender basis. 'Limited discretion' means the surrender basis has a discretionary element but there is a limit placed on the amount of discretion that can be used.

contract's contribution to the SCR in the cost-neutrality assessment would be appropriate only in exceptional circumstances.

4 Matching

Demonstration of matching

4.1 The PRA expects firms to include in their applications evidence showing that they comply with both parts of the matching requirement in Regulation 42(4)(e) and (f).

4.2 To demonstrate that 'the expected cash flows of the assigned portfolio of assets replicate each of the expected cash flows of the portfolio of insurance or reinsurance obligations in the same currency', firms should carry out a quantitative cash flow based projection assessing the extent of any cash flow surplus or deficit arising in each future year.

4.3 To demonstrate that 'any mismatch does not give rise to risks which are material in relation to the risks inherent in the insurance or reinsurance business to which the matching adjustment is applied', the PRA expects firms to submit a quantitative assessment of the interest rate, currency, inflation or other relevant risks that arise as a result of any cash flow mismatch and an assessment of the materiality of these risks when compared to the risks of an MA portfolio as a whole.

4.4 The PRA recognises that some firms' liabilities may be significantly longer dated than the assets generally available to match them, or can increase in line with an inflation index for which there are currently no specific matching assets available. In such cases, the PRA expects firms to provide evidence to justify how these liabilities are matched in accordance with the requirements in Regulation 42(4)(e) and (f).

4.5 For the purpose of assessing the overall level of matching, one possible method is to split the assigned portfolio of assets into the following components:

- component A – assets where cash flows replicate the expected liability cash flows after being adjusted for the component of the fundamental spread that corresponds to the probability of default;
- component B – additional assets that, when added to component A, result in the value of the assigned portfolio (ie components A and B combined) being equal to the BEL within an MA portfolio (when discounted at the risk-free rate plus MA); and
- component C – further assets that are deemed 'surplus' for the purpose of covering the liabilities, but which may or may not still be needed to demonstrate compliance with the other MA requirements.

4.6 To assist the PRA to adopt a consistent approach to assessing whether any mismatch gives rise to risks which are material in relation to the risks inherent in the insurance business to which the MA is intended to be applied, firms are asked to provide cash flow and statistical information for each MA portfolio in their application submissions, in the form of three specified 'tests' ('PRA matching tests') (see the Appendix for the tests).

4.7 The PRA matching tests seek to assess:

- the extent to which firms may be forced sellers of assets to meet liability cash flows;
- the materiality of mismatch in relation to interest rate, currency or inflation risks; and
- whether firms are materially under-matched.

4.8 The PRA has also calibrated a set of indicative thresholds for each PRA matching test, which is aimed at identifying material mismatches. The PRA expects firms to submit the results of the three tests with their applications and to monitor compliance against the thresholds on a regular basis. Where a firm does not fall within the threshold in any one of the tests, it should notify the PRA immediately. In this case, the PRA would expect the firm to demonstrate how it continues to satisfy the eligibility conditions, in particular Regulation 42(4)(e) and (f).

4.9 The PRA would like firms to submit details of their actual asset and liability cash flow projections (together with other relevant information) as part of their MA application to the PRA in order to validate the results of PRA Matching Test 1 (the discounted accumulated cash flow shortfall test) and carry out other cash flow tests that the PRA considers relevant.

4.10 The PRA also expects firms to explain how they have treated each asset (including reinsurance assets and derivatives) within the PRA matching tests and in particular what reinvestment assumptions they have made (if any) in the cash flows presented. However, the PRA expects that for the purposes of projecting future cash flows to demonstrate cash flow matching firms:

- do not assume any future management actions. This includes items such as entering into derivative contracts at some future point in time or selling assets to meet cash flow requirements; and

- assume that all asset cash flows arrive on their contractual date - any surplus assets cannot be assumed to be reinvested and realised at a future date. This implies that, where cash is used to demonstrate matching, the cash balance should be assumed to be realised in full in year 1 of the cash flow projection.

4.11 The PRA expects firms to carry out the PRA matching tests on a 'net of reinsurance' basis for all three tests (including both the numerator and denominator) and to separately consider the extent to which an MA portfolio's reinsurance assets and liabilities are appropriately matched.

4.12 Where assets are grouped or paired as referred to in paragraphs 2.8 to 2.12 in their applications, firms should explain:

- how cash flows from the component A hedging assets are treated in the assessment of matching, particularly in relation to PRA Matching Test 1;

- whether the cash flows of the underlying asset(s) in a pairing or grouping have been hedged based on their contractual cash flows or expected cash flows. If the latter, firms should explain what they are taking as 'expected' cash flows; for example, cash flows that have been de-risked for the default component of the fundamental spread; and

- how the paired or grouped assets have been mapped to fundamental spreads, and in particular whether the mapping is done for the combined asset or individually. For example, a floating rate note (FRN) or interest rate swap pair could be mapped as one fixed cash flow asset, or the FRN and the swap could be mapped individually, with different fundamental spreads then potentially applying to each part.

5 Calculation of the MA

5.1 The PRA expects firms' applications to include a sufficient level of detail for the MA calculation to be verified. For example, firms may choose to use asset and liability cash flows at the most granular level available (eg monthly), and to show the details of these cash flows.

5.2 Possible approaches to demonstrate that excess assets (where cash flows are not required in order to demonstrate matching) have been excluded for the purposes of the MA calculation are:

- explicitly identifying the sub-portfolio of assets where expected cash flows are used in the demonstration of cash-flow matching; and
- a 'notional swap' approach, which emulates a perfectly matched position by scaling the market value of the assigned portfolio of assets up or down such that asset cash flow excesses and shortfalls, when discounted at the risk-free rate, sum to zero.

5.3 The PRA does not have a preference as to the approach used in the calculation but where firms propose to use an alternative approach to that described in the first bullet point such as a 'notional swap', the PRA expects full details of the calculation methodology to be provided in the application to enable the calculation to be verified.

5.4 The PRA expects firms using a sub-portfolio approach to indicate, via the line-by-line asset listing, which of their assets form part of the sub-portfolio.

5.5 The PRA does not currently have a preferred approach as to how firms should reflect the fundamental spread (see also paragraphs 5.6 to 5.11 for more details) within the MA calculation, or how firms should apply the cap on the MA for sub-investment grade assets. All firms are expected to justify their chosen approach and to ensure that the detailed calculations are provided and are easily followed.

5.6 In relation to reflecting the fundamental spread within the MA calculation, the PRA notes that one method of performing the MA calculation is by extending the annual effective rate approach set down in Technical Provisions 7.2(1) of the PRA Rulebook, so that it incorporates all components of the fundamental spread and not only the part corresponding to the probability of default (or 30% of the long-term average spread). The PRA recognises that this approach has advantages from the point of view of consistency, as all of the components of the fundamental spread are allowed for in the same way.

5.7 In relation to the cap on the MA for sub-investment grade assets, the PRA considers that the intention of this requirement is to ensure that the MA for assets of credit quality step 4 or below does not exceed the MA for assets of the same asset class and duration that are of credit quality step 3.[1]

Use of the European Insurance & Occupational Pensions Authority's fundamental spreads

5.8 The PRA expects firms to explain in their applications how they map assets to the relevant asset classes and credit quality steps for the purpose of assigning a fundamental spread. In particular, firms are expected to explain the reliance they place on external credit ratings. The

1 See Technical Provisions 7.2(3) of the PRA Rulebook.

PRA expects firms to map assets based on the issue rating of an asset. Where such a rating does not exist, firms are expected produce an internal rating which is broadly consistent with the expected issue rating were it produced by an ECAI (External Credit Assessment Institution). Firms should take into account the PRA's guidance on internal ratings in SS3/17.

5.9 The PRA expects hedging assets included in component A (see paragraph 4.5) to be included both in the matching tests and in the MA calculation. All such assets should be mapped to a fundamental spread – either in isolation or on a grouped basis (as appropriate). However, in any scenarios where an MA portfolio is required to make net cash flow payments to the counterparty in respect of such assets (eg payments due under a swap contract), then these payments should not be adjusted for default.

5.10 Firms should pay careful attention to the fact that fundamental spreads vary for each maturity of cash flow for any given asset. The PRA expects firms to take this into account in both the default adjustment and in any 'residual' fundamental spread deduction (cost of downgrade subject to LTAS (long-term average spread) floor). Simplifications, for example using a single fundamental spread based on the duration of the asset, would be inconsistent with the way in which the fundamental spreads are intended to be applied in practice.

5.11 For the purposes of calculating the MA, the PRA expects firms to apply those fundamental spreads laid down in technical information published in accordance with Article 77(e) of the Solvency II Directive. In the event that an asset held by a firm does not correspond exactly to one of the asset classes or other categories laid down in this technical information, the firm should treat that asset as falling within the respective class or category identified in such technical information that most closely reflects that asset, and justify this decision in their application.

Reinsurance of MA business

5.12 The PRA considers that, regardless of whether the insurer and reinsurer are within the same group, Solvency II Directive requires that the ceding entity's balance sheet must be valued independently of the reinsurer and similarly, the reinsurer's balance sheet must be valued independently of the cedant's one in order to meet the requirements of Technical Provisions 2.1 of the PRA Rulebook. In particular, the cedant should not take credit for any MA benefit available to the reinsurer.

5.13 In the case where an insurer has reinsured part of an insurance portfolio for which it has obtained approval to use the MA, then that approval relates only to the valuation of technical provisions of that insurer and does not automatically extend to any reinsuring entity to which it may cede risks. A reinsurance undertaking can only take credit for MA benefit where it has been granted MA approval.

Group consolidation

5.14 As noted in paragraph 2.62, the Delegated Regulation[1] requires that the best estimates of group insurance and reinsurance undertakings and consolidated group own funds be calculated net of any intra-group transactions.

5.15 More generally, the Solvency II Directive regime for group solvency calculations, of which the Delegated Regulation requirements regarding intra-group netting are a part, indicate that the elimination of both the double use of eligible own funds and the intra-group creation of

1 Article 335(3) of the Solvency II Commission Delegated Regulation.

capital are key elements in its design. The PRA expects that the absence of either of these factors from any intra-group transactions designed to secure MA eligibility will be relevant in determining whether preservation of any MA benefit obtained at solo level is justified when consolidating assets and liabilities at group level.

5.16 For the purposes of group solvency calculated on the basis of Method 1 (accounting/consolidation), the PRA does not consider that Article 339 of the Delegated Regulation requires a re-assessment of MA eligibility at the group level where an MA has been approved at a solo level in respect of an insurance or reinsurance undertaking in the group. This is particularly relevant to intra-group reinsurance. For example, where a reinsurance undertaking has the benefit of an MA that would be lost as a result of the netting referred to in Article 339 of the Delegated Regulation, the PRA considers that an adjustment to the group consolidated BEL would be appropriate to reflect the value of the reinsurer's MA benefits that would otherwise be lost, provided this does not result in intra-group creation of capital or double-counting of own funds within the group.

6 Liquidity plan

6.1 Applications for MA approval must include a copy of the liquidity plan that is required under the Implementing Technical Standards (ITS) on the MA.[1]

6.2 While the PRA considers it acceptable for firms to manage liquidity at entity level, firms should clearly demonstrate the processes in place to ensure that there is sufficient liquidity available to an MA portfolio, taking account of any lack of fungibility. Firms should show 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.

6.3 The PRA does not consider that the selling of assets from an MA portfolio to generate liquidity would be consistent with the requirements of Regulation 42(4)(b), in particular the requirement that the assignment of assets should be maintained over the lifetime of the obligations except where cash flows change materially.

6.4 The liquidity plan will form part of a firm's own risk management, so should reflect the firm's own assessment and management of liquidity risk.

6.5 Without prescribing the format of the evidence required by the Regulations for the MA, the PRA considers that it would be helpful to include or address the following points in a firm's application:

- a clear definition of liquidity risk in the context of the MA. By explicitly identifying the sources of liquidity risk, and providing a detailed consideration of how the liquidity plan would be used for risk management and decision-making in relation to an MA portfolio, firms can demonstrate that they have understood and identified that portfolio's risks;

- an accurate forecast of cash inflows and outflows, setting out any key assumptions made (eg reinvestment rates, FX hedging requirements, and use of repos). Also, the PRA considers that it is good practice to include a process of regularly reviewing liquidity plans, taking into account all timing requirements, including those that ensure the restoration of compliance with MA in the event of a breach;

- the tools to be developed to monitor and manage liquidity risk, including what stress and scenario testing would be performed and what mitigation options are available (eg additional sources of liquidity);

- a consideration of how any existing liquidity risk management framework could be adapted for the specific liquidity requirements of an MA portfolio. The PRA considers that it is useful to understand how the liquidity management of an MA portfolio interacts with the wider liquidity risk management framework. However, the PRA would not view a liquidity plan that only covered, eg the overall liquidity buffers held by the firm or its holding companies, or syndicated lines of credit, as being adequate to satisfy the requirements of the Conditions Governing Business 3.1(3) of the PRA Rulebook;

- policies on the extraction of surplus, taking into account paragraphs 7.19 to 7.21, in the liquidity plans of firms that manage this risk at entity level;

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1 Commission Implementing Regulation (EU) 215/500 of 24 March 2015 laying down implementing technical standards with regard to the procedures to be followed for the supervisory approval of the application of a matching adjustment in accordance with Directive 2009/138/EC of the European Parliament and the Council.

- liquidity and the assets in an MA portfolio; and
- a consideration of the liquidity of collateral posted to an MA portfolio, including in a stress scenario.

7 Management of an MA portfolio

Collateral management

7.1 The PRA considers that for the purposes of Regulation 42(4)(c), firms must ensure that their collateral arrangements do not undermine the requirement for firms to manage their MA portfolios separately from the rest of their business.

7.2 The PRA considers that separate collateral arrangements in respect of an MA portfolio would most obviously be conducive to ensuring the separate portfolio management. For example, in the case of title transfer collateral arrangements, separate netting arrangements in respect of an MA portfolio would ensure that that MA portfolio is not exposed to the non-MA business of the firm. However, it is for firms to evidence in their MA applications how their arrangements and processes ensure that an MA portfolio is managed separately and is not exposed to the non-MA business. In evidencing this the PRA would expect firms to:

- explain the options they have considered and the benefits or risks of each of these;
- clearly set out the reasons for selecting their chosen approach; and
- explain the controls they have put in place to ensure successful operation of their processes.

7.3 The PRA also expects firms to review their collateral arrangements and to evidence in their MA applications that these arrangements will be effective and enforceable. The PRA would expect the evidence provided to include consideration of how the arrangements would operate in a range of scenarios, including the default of one or more significant counterparties.

7.4 In the case of stock lending activities relating to assets of an MA portfolio where collateral is received against the resulting counterparty exposure, the PRA considers that unless the collateral comprises only MA eligible assets, there is a risk that that MA portfolio would cease to satisfy the MA requirements in the event of a collateral call. In that case, it may not be possible to rectify this within the required two-month period.

7.5 The PRA considers that an approach of over-collateralising exposures to counterparties using appropriately liquid and marketable assets could potentially mitigate the risk associated with collateral calls.

7.6 While the PRA is open to considering different approaches, in all cases the PRA expects firms to demonstrate that the overall matching position of an MA portfolio could be restored were a call on the collateral to result in the MA requirements (including the matching of cash flows) no longer being satisfied. The PRA expects this evidence to include a review by firms of their collateral arrangements and a demonstration of why they consider that these arrangements will be effective in a range of very adverse scenarios. These include scenarios that result in the failure of one or more large counterparties, with the expected consequential market dislocations and reduced ability to sell significant volumes within the two-month time frame.

7.7 Collateral arrangements may give flexibility to a firm's counterparty to return assets that are not identical to those posted. The PRA expects that in such cases, the counterparties must return equivalent (though not necessarily the same) assets (eg in the case of financial instruments, financial instruments of the same issuer or debtor, forming part of the same issue or class and of the same nominal amount, currency and description, and in the case of cash, a

payment of the same amount and in the same currency). If there are other elements of flexibility in the arrangements, the PRA would expect firms to explain this and demonstrate the appropriateness of the arrangements. In any event:

- where liquid assets are posted as collateral, firms must consider whether the requirement to return equivalent assets is sufficiently narrowly defined to ensure that upon return, an MA portfolio will continue to satisfy all the requirements including those covering asset eligibility and liability cash flow matching; and
- for illiquid assets, unless the collateral arrangement requires the return of identical assets, firms should consider whether such assets should be excluded from their cash flow matching assessment. For the purposes of calculating the PRA matching tests published in the Appendix, illiquid assets posted as collateral must be excluded unless the collateral arrangement requires the return of identical assets.

7.8 The PRA expects that collateral arrangements relating to an MA portfolio that require over-collateralising positions or that restrict the type of assets that can be posted as collateral, could restrict the ability of firms to extract surplus or to use those assets to meet other MA liabilities. The PRA expects firms to demonstrate in their applications that they have considered these issues and explain what impact this has on their ability to extract surplus from their MA portfolios.

Demonstration that an MA portfolio is identified, organised and managed separately

7.9 The PRA understands that the processes used to identify, organise and manage MA portfolios will vary across firms. However, the PRA expects all firms to demonstrate that separate processes have been put in place relating to:

- accounting systems;
- investment policy and mandates;
- processes and controls, including controls to ensure that the assets within the portfolio will not be used to cover losses arising elsewhere;
- governance; and
- management information.

7.10 The PRA understands that for practical reasons, firms may wish to administer eligible and ineligible business together for some purposes. The PRA does not consider that such joint administration of eligible and ineligible business would in itself be inconsistent with the requirements of Regulation 42(4)(c) and (d), provided the firm can show that systems and controls are in place at a sufficient level of granularity to ensure that an MA portfolio can be identified, managed and organised separately from the other activities of the firm and that the assets in an MA portfolio cannot be used to meet losses arising from the other activities of the undertaking.

7.11 The PRA does not consider that the notional splitting of assets (such as individual derivative contracts) between MA and non-MA portfolios is consistent with the requirements of Regulation 42(4)(c) and (d) in terms of managing each MA portfolio separately from the rest of the business. If assets were notionally split then an MA portfolio would be reliant on the rest of the business to some extent as a result of the joint management of the assets. Where

risk exposures are managed and netted across the MA and non-MA portfolios, this could result in exposures emerging between portfolios. These exposures could in turn lead to MA benefit being lost in the event of counterparty default, if the remaining business does not have sufficient eligible assets to make good any losses in an MA portfolio.

7.12 It would not be appropriate therefore, for firms to manage derivatives forming part of an MA portfolio at a level higher than the level of the MA portfolio under consideration. Assets of an MA portfolio would need to be allocated exclusively to that MA portfolio and firms would need to put in place systems to allow them to manage exposures at the level of that MA portfolio.

Demonstration of the appropriateness of the investment policy

7.13 For the purposes of demonstrating that the requirements of Regulation 42(4)(a) and (b) are satisfied, the PRA expects applications to evidence that:

- The investment policy for the assets in an MA portfolio is based on a buy-to-hold strategy (subject to the exception provided in Regulation 42(4)(b)). The investment policy should distinguish this approach from speculative strategies designed to benefit from anticipated price movements over short-term investment horizons.

- There is a regular (eg monthly) process which, allowing for new business written, ensures close cash flow matching. This process should identify whether the cash flow matching is within accepted tolerances and define the actions to address any situation where matching falls outside of accepted tolerances.

- There is a regular (eg monthly) process that also takes into account all other requirements, including the requirement to compare the value of the assigned portfolio of assets (components A, B and C referred to in paragraph 4.5) with the best estimate of the MA liabilities.

Rebalancing assets in an MA portfolio

7.14 The PRA expects firms to demonstrate that the governance and controls around investment management, including the investment strategy and the discretion given to investment managers, ensures that any rebalancing of assets within MA portfolios is strictly for the purposes of good risk management.

7.15 Keeping in mind the constraints of the requirement in Regulation 42(4)(b), the PRA recognises that firms may wish to undertake asset rebalancing in an MA portfolio as a result of changes in expectations of future asset cash flows. The PRA also accepts that there may be circumstances where some asset trading is required in order to implement a change to the firm’s risk and investment management strategy, for example to de-risk (or re-risk) a portfolio and to manage the MA portfolio in line with the overall credit risk appetite for the MA portfolio. Where it is specifically for the purposes of good risk management, trading an asset for one with the same yield but lower risk or a higher-yielding asset for the same risk is not necessarily precluded so long as a firm can demonstrate robust principles and practices around risk management and governance. Firms should set out how the policy on asset trading interacts with the firm’s:

- risk management objectives; and

- investment policy for the MA portfolio to hold any asset to maturity.

7.16 The PRA also expects firms to provide evidence of a process by which trades made within an MA portfolio are reported regularly to senior management. The PRA expects to be able to review such information as part of its ongoing supervision of firms applying the MA.

The following sections highlight examples of some good practices.

Investment strategy

7.17 The investment strategy is drafted to reflect a buy to hold strategy with limited discretion to trade. This investment strategy is described in detail and includes:

- the target asset allocation by broad asset class;
- the extent to which each broad asset class is being held on a buy-and-hold basis (eg long-term illiquid assets) or as a short-/medium-term position to maintain the matching position or level of aggregate risk (eg derivatives);
- appropriate limits within the investment management agreement on the turnover of the fund in the normal course of events; and
- adequate governance arrangements, appropriate to the firm's size and investment strategies that apply to any changes to the investment strategy and policy or to any trades that go beyond discretion granted to investment managers.

Discretion given to the investment managers

7.18 The investment agreement and mandates clearly set out levels of discretion available to the investment managers and include:

- the average credit quality for the various asset classes by term bucket;
- key features required or not allowed for each of the classes (eg no bonds allowing early repayment without adequate Spens clauses);
- the target duration by term bucket and target cash flow profiles;
- concentration limits by sector and counterparty;
- levels of turnover at sufficiently granular levels, categorised by reason for trading;
- tolerances for deviations from the above targets;
- permitted use of derivatives ;
- requirements on the receipt and provision of collateral in respect of derivatives within an MA portfolio (eg credit quality, and/or strength of collateral agreements);
- restrictions on the use of gearing (eg investing cash collateral received into bonds);
- any other permitted investment activities and limits on them (eg stock-lending);
- frequency with which management information is provided;
- management information on a trade-by-trade basis:

  - the reason for the trading (eg changes to target cash flow profiles, maintaining risks within limits, and/or consistency with investment policy) This could be on a set of grouped trades (eg bonds and derivatives) where necessary;
  - a reconciliation of assets purchased or transferred in against the eligibility conditions for assets within the matching portfolio;
- management information on a regular basis:
  - summary of the trade-by-trade information; and
  - a reconciliation with the limits within the investment mandate (covered above).

Extraction of surplus

7.19 In their applications, firms should describe the process by which they will maintain an MA portfolio on an ongoing basis, to demonstrate compliance with Regulation 42(4)(c). The PRA expects the governance process around any extraction of surplus to be robust, and to include:

- an assessment of the firm's ability to continue to meet the MA requirements post-extraction;
- a rigorous profit and loss (P&L) attribution for an MA portfolio that clearly shows how the surplus has arisen (ie that it has arisen due to a change in either the expected asset or liability cash flows); and
- clear threshold(s) for assessing whether a change in cash flows is 'material'.

7.20 The PRA considers that where surplus has arisen only due to asset values changing (but there is no corresponding change in expected asset or liability cash flows) it would not be appropriate for such surplus to be extracted.

7.21 Where a surplus has arisen over time due to favourable experience (such as underwriting experience), the PRA's view is that it may be possible for firms to demonstrate that cash flows have materially changed and that it is appropriate for the firm to substitute assets to allow for the fact that they now have surplus or extra cash flows.

Transferability and recognition of diversification

7.22 When assessing transferability and scope for diversification within an internal model, the PRA expects firms to demonstrate that their assumptions are consistent with their policies on the ongoing maintenance of an MA portfolio, and in particular that any restrictions on the extraction of surplus are taken into account.

7.23 If firms consider that any restriction on transferability or diversification to be either immaterial or irrelevant to them, they need to provide convincing evidence to justify this.

7.24 Firms should also consider whether the following could limit the scope for diversification:

- whether sufficient eligible assets exist outside an MA portfolio, or can be sourced quickly, in the circumstances that assets need to be injected into that MA portfolio. If there are insufficient eligible assets available, this could result in the full or partial loss of the MA; and

- whether, in scenarios that generate large surpluses in an MA portfolio, firms are able to extract the MA surplus in time to offset losses elsewhere. If firms cannot extract an MA surplus, the biting capital scenario could change from one that results in large deficits in that MA portfolio to one which results in large surpluses.

Treatment of new business

7.25 Where firms expect to write new business in an MA portfolio, their applications will need to describe the processes in place to ensure that:

- the MA portfolio under consideration will continue to satisfy all of the MA conditions at all times. This should include explicit consideration of ongoing asset eligibility (ie screening new assets) and cash flow matching (ie integrating new assets and liabilities); and

- new assets and liabilities will only be included in an MA portfolio where they have the same features as the assets and liabilities in the approved MA portfolio, unless PRA approval has first been granted.

8 Ongoing MA compliance

8.1 Firms need to ensure that their existing approved MA portfolios satisfy the MA conditions on an ongoing basis. The PRA expects a robust process to assess this to form part of a firm's risk governance. As part of its supervision of firms, the PRA may periodically review a firm's ongoing compliance with MA requirements, including:

- documentation relating to the MA portfolio's compliance with relevant requirements; and
- management information with regards to the ongoing monitoring of the MA portfolios.

8.2 The PRA takes this opportunity to remind firms of the requirements in Technical Provisions 6.4 of the PRA Rulebook in cases where a firm has ceased to comply with the relevant conditions set out in Regulation 42(4) and is unable to restore compliance with these conditions within two months of the date of non-compliance. Firms should ensure that they have appropriate processes in place to identify and investigate any potential breaches of these MA conditions on a timely basis, and engage with the PRA as early as possible where there is a risk that they will be breached.

8.3 The PRA will need to consider the circumstances of a firm's possible breach of MA requirements on a case-by-case basis. In cases where a breach is reasonably only determined after the date it has occurred (eg either identified by the firm or notified to the firm by the PRA), the two month period to remedy a breach of the MA conditions starts from the point at which the breach is detected or confirmed to have happened.

9 Changes to MA portfolios

9.1 This section sets out the PRA's expectations of firms in relation to changes to their MA portfolios after an MA has been approved.

9.2 Firms need to consider the implications of any change to their MA portfolios, including whether such a change will require a new application for prior supervisory MA approval. The circumstances under which firms will need to consider whether a new application is required include, but are not limited to:

- restructurings, mergers or disposals;
- the entry into new, or changes to existing, reinsurance and other risk transfer arrangements;
- changes to the way firms maintain and manage their MA portfolios; and
- changes to the scope of the MA portfolios, including the addition or removal of MA assets or liabilities and changes to the features of any MA asset or liability covered by the original application.

9.3 In the first instance a firm should form its own judgement on whether a change to its MA portfolio(s) requires it to apply for a new MA approval. The PRA expects a robust process to be in place to assess the changes to a firm's MA portfolio.

9.4 The PRA expects that any material change to MA portfolios after approval has been granted will require a new application for approval. In assessing whether or not a change is material such that a new approval is required, it will be necessary for firms to consider (among other things) whether any new asset and/or liability has the same features as those included in the scope of the firm's existing MA portfolio for the purposes of Article 7(5) of the ITS.[1] The PRA notes that in cases where a firm invests in a new asset class, or seeks to include assets or liabilities with more bespoke characteristics, the more difficult it is likely to be to show that such assets or liabilities have the same features as existing assets and liabilities.

9.5 Examples of circumstances in which assets and liabilities may have new features as compared to those of assets and liabilities in the existing approved MA portfolio, and for which the PRA expects that a new application is likely to be needed include, but are not limited to:

- bulk purchase annuities with collateralisation where any existing bulk purchase annuities within the MA portfolio are not collateralised;
- assets involving restructuring, pairing or grouping as referred to in the asset restructuring section above (paragraph 2.52 - 61above);
- infrastructure investments funding a materially different underlying project; and/or
- assets with a different form of [compensation clauses] to those already included in the MA portfolio. For example, assets with modified Spens clauses when existing assets in the MA portfolio only have full Spens clauses.

1 http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.079.01.0018.01.ENG.

9.6 The PRA also notes that reinsurance arrangements are often bespoke. For this reason the PRA expects that it is unlikely that new reinsurance arrangements will have the same features as assets covered within the scope of an existing MA approval. In most cases, the PRA expects that the inclusion of new reinsurance arrangements in an MA portfolio will require prior supervisory approval.

9.7 If any proposed changes are such that a new MA approval is needed then the firm should approach its application as it would for the approval of a completely new MA portfolio. In particular, the firm will need to provide the PRA with sufficient information in order for the PRA to be able to assess whether the MA portfolio, on the changed basis, will satisfy the MA requirements. The PRA should be informed as soon as possible where a firm with an existing MA approval considers a new approval is required.

9.8 Where a firm considers that a change to its MA portfolio will not require a new application for MA approval, the PRA expects the firm to be able to demonstrate the basis for its determination if required. The PRA may also ask the firm to demonstrate that the requirements of Article 7(5)(a) and (b) of the ITS are satisfied.

9.9 If a firm makes changes to its MA portfolio without prior supervisory approval, and if these changes are outside the scope of what is contemplated in Article 7(5) of the ITS this would not of itself necessarily amount to a breach of the relevant MA conditions as set out in Regulation 42(4) but would constitute a breach of Technical Provisions 6 of the PRA rules, in respect of which the PRA would consider exercising its relevant supervisory powers under s.55M of FSMA. If changes made to the MA portfolio result in a breach of MA conditions in Regulation 42(4) then the firm will need to restore compliance with the relevant condition(s) within two months.

9.10 The PRA expects a firm making a change to its MA portfolio without first making a new application for MA approval to have appropriate contingency plans in place to mitigate the implications of a subsequent determination that prior approval was required. The PRA may require that the firm suspends the effect of the changes to the MA portfolio pending consideration of a new application for MA approval.

9.11 The PRA expects firms to engage with the PRA on the process for submitting such applications, and these will be dealt with on a case-by-case basis. The PRA expects firms to have early sight of the matters which will require a new MA approval and to plan accordingly. Firms are reminded that the six-month period for determining an application commences from the date the PRA receives a complete MA application. Firms should also bear in mind that applications for MA approval are resource intensive. Firms should plan their MA applications in the light of their own timescales, and prepare such applications carefully and to a sufficiently high quality, in order to assist the PRA to apply its resources as efficiently and effectively as possible when reviewing these.

Appendix Cash flow tests

In previous communications with firms, the PRA has described other versions of these tests. The tests described below are the most recent versions.

Test 1: Accumulated Cash Flow Shortfall Test

A description of this test is as follows. Firms should:

- project best estimate liability cash flows in an MA portfolio at annual intervals;
- project cash flows from assets in component A, after being adjusted for that part of the fundamental spread that corresponds to the probability of default, at annual intervals;
- calculate any cash flow surpluses and shortfalls arising in the year and accumulate them at the risk free rate;
- note the highest accumulated shortfall from all future years in the projection; and
- calculate the present value of liabilities in an MA portfolio (at the valuation date) discounted at the risk free rate.

Threshold rate: The maximum accumulated shortfall in any year of the projection should not exceed 3% of the present value of liabilities.

Firms should carry out this this test on a regular basis (monthly if they are writing new business in the fund and quarterly otherwise).

Test 2: 99.5th Percentile Value at Risk (VaR) Test

A description of this test is as follows:

- firms should calculate the 99.5th percentile 1-year VaR of an MA portfolio for each of the following risks: interest rate, inflation and currency;
- the calculations should consider the change in the value of both the assets and the liabilities within the portfolio as a result of each stress;
- the PRA expects firms to calculate undiversified capital requirements corresponding to a confidence level of 99.5% over a 1-year period for each of the risks specified in the first bullet point above. Where firms split a risk into components (such as might be the case for interest rate and currency risk), the PRA asks firms to aggregate these components into a single capital number for that risk, and to explain the approach adopted in determining this single number;
- the PRA expects firms to set out the best estimate liabilities of an MA portfolio, calculated by discounting at a rate equal to the relevant basic risk-free interest rate plus the MA;
- firms should then compute six statistics: the undiversified 99.5th percentile 1-year VaR capital requirement for an MA portfolio for each of interest rate, inflation and currency risks, and the result of dividing each of these capital requirements by the best estimate liabilities of that MA portfolio; and

- for the purposes of this calculation, the assets to be included are those hypothecated to components A and B, ie those that are required to cover the best estimate value of the liabilities.

Threshold rate: the undiversified 99.5th percentile 1-year VaR capital requirement should not exceed 1% of the firm's calculated best estimate liabilities for any of the three risks.

Firms should carry out this test on a regular basis (at least quarterly in line with SCR calculations).

Test 3: Notional Swap Test

The aim of this test is to establish by how much the MA would change if the firm were able to eliminate any surplus or shortfall in its net (asset less liability) cash flows by investing in a 'notional swap' which simulates a perfectly matched position.

Firms are asked to set out:

- the notional MA calculated by using the actual assets hypothecated to component A only (ie firms should state the amount of MA in bps);

- the notional MA calculated by scaling the market value and cash flows (after being adjusted for that part of the fundamental spread that corresponds to the probability of default) of the assets in component A either up or down by a single factor until the present value of the future surpluses and shortfalls is zero when discounted at the basic risk-free interest rate (also referred to as the 'notional swap approach'); and

- the market value of the assets in component A after they have been scaled in accordance with the above.

The frequency of the time intervals used for the cash flows in this calculation should be consistent with the method the firm uses to conduct its matching.

Threshold rate – There would be no specific hurdle rate set for this test but we would expect firms to explain where the scaling factor as calculated above showed a ratio above 100% or below 99%.

Firms should carry out this test on a regular basis (at least quarterly in line with SCR calculations).

Appendix 2 Mapping table for Directors' letters included in the draft SS

To be helpful to readers, the table below shows where the Directors' letters relating to the matching adjustment can be found on the Bank's website.

Date	Title	URL
13 June 2014	PRA insurance matching adjustment asset eligibility letter	www.bankofengland.co.uk/pra/Documents/solvency2/matchingadjustmentasseteligibilityjune2014.pdf
25 July 2014	Solvency II: An update on implementation	www.bankofengland.co.uk/pra/Documents/solvency2/solvency2updatejuly2014.pdf
19 August 2014	PRA Insurance Directors' update letter	www.bankofengland.co.uk/pra/Documents/solvency2/insurancedirectorsupdateaugust2014.pdf
15 October 2014	Solvency II: matching adjustment	www.bankofengland.co.uk/pra/Documents/solvency2/matchingadjustmentletteroct2014.pdf
19 December 2014	PRA Insurance Directors' update ARCHIVED	www.bankofengland.co.uk/pra/Documents/solvency2/insurancedirectorsupdatedecember2014.pdf
12 February 2015	PRA Insurance Directors' update	www.bankofengland.co.uk/pra/Documents/solvency2/insurancedirectorsupdatefebruary2015.pdf
20 February 2015	Letter from Paul Fisher on Solvency II: equity release mortgages	www.bankofengland.co.uk/pra/Documents/solvency2/fisherermletterfeb15.pdf
9 March 2015	Solvency II internal model and matching adjustment update ARCHIVED	www.bankofengland.co.uk/pra/Documents/solvency2/intmodmaupdatemar2015.pdf
28 March 2015	Solvency II: feedback on firms' matching adjustment pre-application submissions	www.bankofengland.co.uk/pra/Documents/about/praletter280315.pdf
1 June 2015	Solvency II: matching adjustment update	www.bankofengland.co.uk/pra/Documents/solvency2/maletter1June2015.pdf
6 November 2015	PRA Insurance Directors' update letter ARCHIVED	www.bankofengland.co.uk/pra/Documents/solvency2/insdirectorsletter11nov2015.pdf
15 January 2016	Reflections on the 2015 Solvency II internal model approval process ARCHIVED	www.bankofengland.co.uk/pra/Documents/solvency2/edletter15jan2016.pdf