BANK OF ENGLAND

March 2017

Stress testing the UK banking system: 2017 guidance for participating banks and building societies

1 Background

The Bank of England's (hereafter 'the Bank') concurrent stress-testing framework was established following a Recommendation from the Financial Policy Committee (FPC) in March 2013.(1) The main purpose of the stress-testing framework is to provide a forward-looking, quantitative assessment of the capital adequacy of the UK banking system as a whole, and individual institutions within it. In doing so, it aims to support both the FPC and Prudential Regulation Authority (PRA) in meeting their statutory objectives.(2)

In 2015 the framework was developed further in 'The Bank of England's approach to stress testing the UK banking system',(3) and in 2016 the Bank implemented its first annual cyclical scenario (ACS).

In 2017 the Bank is running the ACS for the second time. It is also implementing its first biennial exploratory scenario (BES). Further details on each of these scenarios are provided in the 'Key Elements of the 2017 Stress Test' (hereafter the 'Key Elements').(4)

The 2017 stress test and methodology have been designed and calibrated by Bank staff, under the guidance of the FPC and Prudential Regulation Committee (PRC). Ultimately, the results of the stress test will inform both system-wide policy interventions by the FPC and bank-specific supervisory actions by the PRA.

2 Objectives of this guidance

This document provides participating banks with guidance for conducting their own analysis for the 2017 stress test.(5) The document begins with guidance that relates to both the ACS and BES in Sections 1 to 7. ACS-specific guidance is then provided in Sections A8 to A14, followed by BES-specific guidance in Sections B8 to B14. Detailed guidance related to the traded risk element of the test is provided in the annex.(6)

The templates used for collecting data, along with the document setting out definitions of data items, have been provided to participating banks. The Key Elements, 'Stress testing the UK banking system: variable paths for the 2017 stress test' (hereafter 'Variable paths for the 2017 stress test') and 'Stress testing the UK banking system: traded risk scenario for the 2017 stress test (hereafter 'Traded risk scenario for the 2017 stress test') are also published separately.(7) These documents should be read in conjunction with this guidance.

This document does not cover the full approach taken by the Bank to arrive at the final stress-test results. In addition to banks' own analysis, Bank staff will perform analysis to independently assess the impact of the baseline and stress scenarios on banks' profitability and capital and leverage ratios. Accordingly, the final stress-test results may differ from banks' own submissions.

3 Banks participating in the 2017 stress test

The 2017 stress test will cover seven major UK banks and building societies (hereafter 'banks'): Barclays, HSBC, Lloyds Banking Group, Nationwide, The Royal Bank of Scotland Group, Santander UK and Standard Chartered. This is the same group of banks that participated in the 2016 stress test. Unless agreed otherwise with the Bank, participating banks should complete all aspects of the 2017 stress test.

4 Scope of consolidation

Banks should provide results at the highest level of UK consolidation. The scope of consolidation is the perimeter of the banking group as defined by the Capital Requirements Regulation (CRR)/Capital Requirements Directive (CRD) IV, which includes investment banks. Insurance activities are excluded, although banks are expected to assess the impact of the scenarios on their insurance activities and model the impact on any dividend streams, significant investments or minority interest capital deductions and risk weightings.

5 Definitions of capital and leverage ratios

Banks are expected to submit starting point capital positions and projected capital positions in the baseline and stress scenarios. The adequacy of banks' capital resources will be judged with reference to risk-weighted capital ratios and leverage ratios. Banks should submit projections of both risk-weighted capital ratios and leverage ratios using the following definitions:

- Common equity Tier 1 (CET1), Tier 1 and Total capital ratios as defined in the CRR; and

- End-point Tier 1 leverage ratio as defined in the Leverage Ratio part of the PRA Rulebook.(8) The FPC announced in

(1) See 'Financial Policy Committee statement from its policy meeting, 19 March 2013', available at www.bankofengland.co.uk/publications/pages/news/2013/013.aspx.
(2) Unless otherwise stated, references to the Bank or Bank of England throughout this document include the PRA.
(3) See www.bankofengland.co.uk/financialstability/Documents/stresstesting/2015/approach.pdf.
(4) www.bankofengland.co.uk/financialstability/Documents/stresstesting/2017/keyelements.pdf.
(5) The term 'bank' is used throughout this document to refer to banks and building societies.
(6) In the 2015 and 2016 stress tests, detailed guidance relating to the traded risk element of the ACS was provided in a separate document to the main guidance document.
(7) www.bankofengland.co.uk/financialstability/Documents/stresstesting/2017/variablepaths.xlsx and www.bankofengland.co.uk/financialstability/Documents/stresstesting/2017/tradedrisk2017.xlsx.
(8) See www.prarulebook.co.uk/rulebook/Content/Part/319681.

August 2016 that it had decided to exclude central bank reserves from the exposure measure in the current UK leverage ratio framework and that it intends to recalibrate the UK leverage ratio standard to offset this impact. The leverage ratio definition and threshold against which banks will be assessed in the 2017 stress test will be updated to reflect any recalibration that has been announced by the FPC and implemented by the PRA before the publication of the stress-test results. The FPC intends to adjust the UK leverage ratio framework at its meeting in 2017 Q2.

6 Publication of results

The results of the 2017 stress test will be published towards the end of 2017 Q4.

7 Submission

Submission instructions are outlined in the Operating Model for the Collection of Stress Test Data that was communicated to all banks with the data request in January 2017. These instructions need to be followed for both structured and unstructured data requests.

Section A: Annual cyclical scenario-specific guidance

A8 Time horizon and reference date

The 2017 ACS will cover a five-year horizon. Unless otherwise agreed, and with the exception of some traded risk elements (see annex), the reference date will be 31 December 2016 and banks are expected to submit projections as at 31 December for each subsequent year end.

A9 Macroeconomic scenario

Banks should follow the guidance outlined in this section to assess the impact of the baseline and annual cyclical scenarios. In order to do this, it is likely that banks will need to expand the set of macroeconomic and financial variables provided alongside the Key Elements document. For example, banks may need to derive variable paths for some additional macroeconomic variables (such as different measures of aggregate household income gearing) or to expand the scenario paths across a broader range of geographies, or at a regional level within geographies. In doing so, banks should adhere to certain standards. In particular, banks are expected to:

- Ensure that the paths of any additional macroeconomic or financial variables that are required by their models are derived in a way that is consistent with the ACS framework. The key feature of the ACS framework is that severity varies in line with risks in credit and financial markets. When these risks are elevated — for example, as they were prior to the global financial crisis — the severity of the scenario should become more severe. And similarly when risks are subdued — for example, following a crisis — the severity of the scenario should become less severe. This calibration framework might be applied at a country level, as well as in specific markets;

- Be able to explain the calibration of any key additional variables in both an absolute sense and relative to their previous ACS stress-test submissions; and

- Use robust statistical techniques as a starting point to derive additional variable paths. These should be calibrated using long periods of historical data in order to capture a full credit cycle, and should ensure that any correlation assumptions are consistent with the negative tail of potential outcomes. Banks are expected to deviate from purely statistical techniques if, for example, there is a lack of historical data that is relevant to conditions today or to account for specific conditions envisaged as part of the stress scenario. Where banks deviate from such statistical techniques, they are expected to explain how and why such judgements were made (see Section A13).

Banks should project the countercyclical capital buffer (CCyB) for all relevant jurisdictions in baseline and stress. Banks should project CCyB rates based on statements provided in those jurisdictions, or with reference to the Basel Committee's guidance for national authorities operating the CCyB.(1) Banks should assume that the UK CCyB rate is zero in the ACS stress scenario, consistent with the hurdle rate framework and previous FPC statements on the nature of the buffer.

A10 Guidance on modelling risks and income

A10.1 Balance sheet modelling

Banks are expected to report baseline and stress projections using their reporting currency. Banks should use actual balance sheet data at the reference date as the starting point for their submissions. After that point, banks should submit projections based on the baseline and stress scenarios (**Figure 1**).

The macroeconomic scenarios begin in 2017 Q1. Banks should not replace projections with actuals where data for actuals exist. Submission of actual rather than projected data should only be considered selectively and in exceptional circumstances, where:

- There is a sale of a material asset scheduled, and completed, immediately after the end of 2016; and

- There are assets for which a sale has been agreed at the end of 2016 such that: the timetable for sale was agreed; the contractual terms and price were certain; the contractual terms were binding under a stress; and there is evidence that the counterparty could honour the contract under stress.

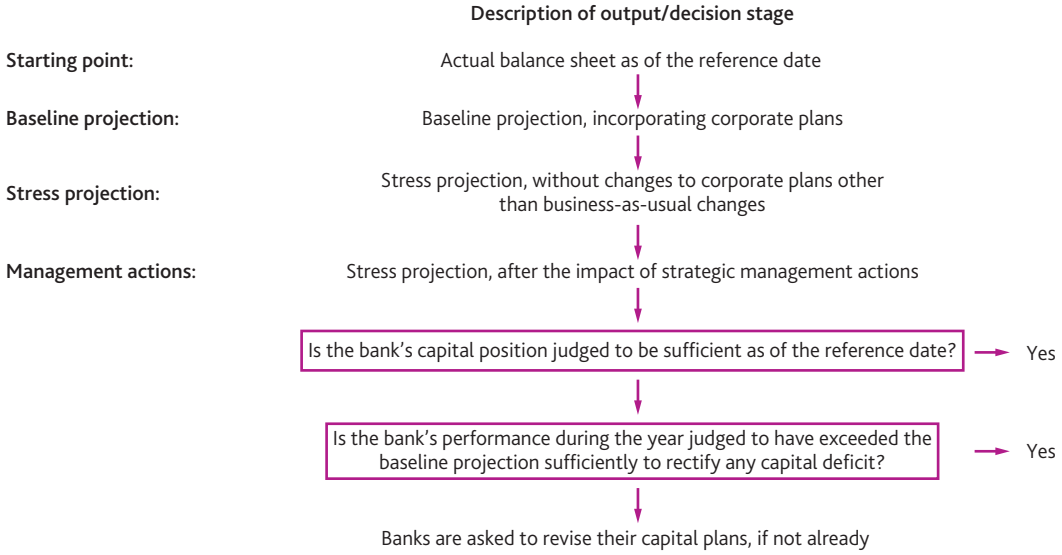
In these exceptional cases, the Bank may allow banks to include the asset in their data for the end of 2016 only, and for the bank to exclude the asset from the projections submitted as part of the detailed data templates. The same principles, in reverse, should be followed for asset purchases.

The 2017 ACS will be performed on a dynamic balance sheet basis. This means that banks' projections will take into account changes in the size and the composition of their balance sheet, both in the baseline and in the stress scenario.

Banks' submissions should reflect their corporate plans, including any costs and business changes. These should be adjusted appropriately to reflect changes in the expected

(1) www.bis.org/publ/bcbs187.pdf.

Figure 1 Stylised stages of the stress-testing process



performance and execution of these plans in each scenario, including business-as-usual changes in the stress scenario (also see Section A11).

Banks should clearly set out their assumptions for forecast balance sheet growth or contraction in the baseline and stress scenarios. These assumptions should be consistent with the macroeconomic scenarios and variable paths for lending provided. To ensure comparability and consistency between banks, the Bank is providing the following guidance on the overall approach to balance sheet growth:

- To the extent that a bank's corporate plan includes a reduction in the size of their balance sheet (or certain portfolios within it), either via outright asset sales or a reduction in new business, they may incorporate that reduction into their baseline and stress projections.(1)

- **Where the Bank has provided a variable path for lending** in the Variable paths for the 2017 stress test, banks' market share of the stock of lending in each year of the stress scenario should be at least as large as their corresponding market share in the baseline scenario. Banks should calculate their market share in each year of the baseline and stress for each of the lending categories by dividing their own stock of lending by the overall stock of lending as implied by the published growth rates.(2)

- **Where the Bank has not provided a variable path for lending and where banks have assumed positive asset growth in the baseline scenario**, banks may assume slower growth in the stress scenario but should not assume a contraction of these portfolios except as a result of higher impairments. Banks can report the impact of reducing these portfolios relative to their end-2016 position as a potential management action (Section A11).

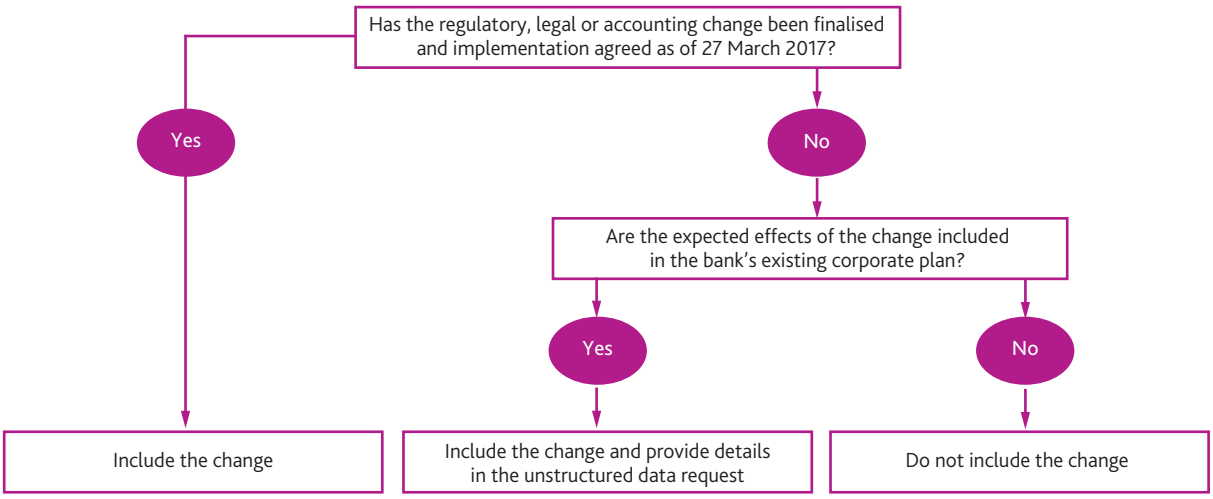
- **Where the Bank has not provided a variable path for lending and where banks have assumed a contraction in the size of assets in the baseline scenario**, relative to the end of 2016, banks should not assume further contraction in the stress scenario except as a result of higher impairments. Banks can report the impact of reducing these portfolios further as a potential management action (Section A11).

- Banks are expected to consider the impact of the stress scenario on the timing and price of any planned asset sales that are included in their baseline submissions and should document the reasoning behind the impact. In particular, banks are expected to provide clear supporting evidence in cases where the bank has assumed that an asset disposal in the stress scenario would improve the bank's capital position.

Banks should include the effects of regulatory, legal or accounting changes in their projections where final requirements and implementation or effective dates have been announced or endorsed publically by the relevant authority on or before 27 March 2017. Where relevant, these changes should be modelled in line with their respective implementation dates. Banks' projections should also reflect the expected effects of such changes where requirements or implementation details have not been finalised, to the extent

(1) Balance sheet plans in the baseline scenario are not expected to differ materially from those in a bank's most recent corporate plan.
(2) For more information see the footnotes in the 'Sources and definitions' tab in the variable paths document; www.bankofengland.co.uk/financialstability/Documents/stresstesting/2017/variablepaths.xlsx.

Figure 2 Stylised guidance for including the effects of regulatory, legal and accounting changes in banks' submissions



that these effects are included in banks' existing corporate plans.

Banks should include in their projections the expected effects of their current view of ring-fencing arrangements. Banks are not required to provide separate submissions for their ring-fenced and non-ring-fenced entities in the concurrent stress-testing exercise, but their projections should include the expected costs associated with structural reform (one-off and ongoing), and banks should be able to explain any impact of structural reform on their business planning assumptions.

Banks should not model the 2017 ACS on an IFRS 9 basis. A separate exercise to collect information on IFRS 9 is being conducted alongside the 2017 stress test.(1)

Banks that have modelled the impacts of future regulatory, legal and accounting changes that are not finalised should clearly identify these as part of the unstructured data request, and should include details of the impact of the change and their rationale for including the change in their projections. **Figure 2** summarises this overall approach.

A10.2 Credit risk

Banks should use their own stress-testing methodologies to translate the macroeconomic scenarios provided into projections for impairments and risk-weighted assets (RWAs), categorised by both asset class and country of exposure. In doing so, banks are expected to follow the high-level guidance outlined in Section A9. Moreover, banks should not assume that there is a material lag between the macroeconomic shock materialising and credit quality deteriorating that might delay the impact of the scenario. This does not preclude instances where it may be appropriate to apply a natural lag between certain variables and the emergence of defaults. For example, some firms have previously observed an initial lag between rising unemployment and mortgage defaults.

When modelling the impact of the rise in interest rates on impairments, banks should take into account a borrower's total borrowing exposure. For example, banks might consider whether borrowers exposed to interest rate risk on secured mortgage debt would default on unsecured or other debt as a result of the rise in interest rates. Banks' unstructured submissions should explain how borrowers' cross-product holdings have been captured.

Banks should provide details of the assumed impact of any unwind of acquisition-related fair value adjustments relating to impairment losses on loans and advances as part of the unstructured data request, split by asset class and year. Banks should describe any material assumptions used to determine the timing of that impact.

In line with the calculation of capital requirements for all risks:

- Banks should not assume changes to their approach to calculating credit risk capital requirements after the scenario start point, whether anticipated or realised (eg adoption of, or changes to, IRB models) unless by prior agreement with the Bank; and

- Banks' baseline projections should be consistent with the credible execution of their business plans in the baseline scenario. Similarly, banks' RWA projections in the stress scenario should take into account the impact of the stress scenario on the risk profile of the positions associated with these RWAs and of the bank's ability to execute its business plan.

(1) For more information on 2017 data collections including IFRS 9, see www.bankofengland.co.uk/financialstability/Pages/fpc/update2017datacollections.aspx.

Banks are expected to articulate the following judgements clearly and with justification as part of the unstructured data request (see Section A13):

- Any choices about statistical or judgement-based approaches used to produce banks' projections, including evidence of the effectiveness of their governance process. Governance processes should include effective challenge from senior officials and the use of expert judgement to confirm or adjust key assumptions used within their models or affecting the outputs of models; and

- Assumptions affecting banks' forbearance practices or provisioning model assumptions that have been included within their projections.

A10.3 Traded risk

This section provides banks with summary guidance for calculating stressed losses, income statement projections and RWAs for fair value positions that are the subject of the traded risk scenario. For the 2017 stress test, the Bank has produced a set of financial variable shocks that can be applied to such positions that are consistent with the ACS approach.(1) More detailed guidance is provided in the annex.

The approach covers all fair value positions on the group balance sheet, excluding securitisation positions and covered bonds. In so doing it extends beyond regulatory Trading Book positions to include fair valued assets in the Available For Sale (AFS) and Fair Value Option (FVO) accounting categories such as the Liquid Asset Buffer.

Banks are expected to assess the impact on both fair and prudent value under stress due to: market risk exposures arising in both the Trading and Banking Books; the default of vulnerable counterparties; changes to valuation adjustments such as the increase in Credit Valuation Adjustment (CVA) due to the deterioration in the creditworthiness of counterparties; and regulatory adjustments under stress such as the impact on the Prudent Valuation Adjustment (PVA) related to investing and funding.

In addition, banks are expected to assess the franchise impacts on revenues and costs for their investment banking activities (a principal source of trading income). Banks should also assess the impact on capital requirements by projecting their RWAs under stress for market risk, CVA risk and counterparty credit risk.

A10.4 Structured finance

For the purpose of the 2017 stress test, structured finance (covering Trading Book and non-Trading Book assets) includes the following assets:

- Exposures to third-party cash or synthetic securitisations, including liquidity lines for securitisation transactions, as specified in Chapter 5 Part 3 of the CRR;

- Exposures to own-originated securitisations which have achieved significant risk transfer; and

- Exposures to third-party covered bonds that are risk weighted as per CRR Articles 120, 121 or 129.

The structured finance component should exclude: securitisations issued or guaranteed by international organisations, multilateral development banks, governments, or government agencies; covered bond exposures capitalised under Value-at-Risk (VaR); and derivatives related to eligible assets that are not capitalised under the relevant securitisation or covered bond framework as per the CRR.

Own-originated securitisations should only be treated as securitisations during the period that these are expected to achieve significant risk transfer. If banks expect this to cease during the scenario horizon, then parameters pertaining to the underlying assets should be considered for the parts of banks' submissions relating to the remainder of the scenario horizon.

Banks should provide details of these considerations as additional comments as part of the relevant structured finance data templates.

For individual structured finance assets, banks should produce projections of the following variables for each year of each scenario:

- Regulatory carry value, which should be gross of impairment charges and, for fair value and AFS assets, should be net of market value movements and AFS reserve balances, respectively;

- Incremental market value movements (ie the annual change in market value) for fair value and AFS assets;

- Annual impairment charges for held-to-maturity (HtM), AFS, and loans and receivables assets. These should take into account the impact of credit enhancements and other structural features;

- AFS reserve balances (ie the balance sheet value of AFS reserves), which should be consistent with projected market value movements and impairment charges;

(1) www.bankofengland.co.uk/financialstability/Documents/stresstesting/2017/tradedrisk2017.xlsx.

- Expected losses over the full economic life of the asset (re-estimated at the end of each projection year), for HtM and loans and receivables assets; and

- RWAs should be calculated after impairment charges and market value movements have been estimated. Market value and AFS reserve balance movements should be applied before the RWA calculation and impairment charges should be applied in accordance with the relevant approach.

Banks should use their own stress-testing methodologies to translate the macroeconomic scenarios provided into projections for the variables detailed above. In doing so, banks are expected to follow the same high-level guidance set out in Section A9. Moreover, banks should not assume that there is a material lag between the macroeconomic shock materialising and credit quality deteriorating that might delay the impact of the scenario.

Banks are expected to articulate the following judgements clearly and with justification as part of the unstructured data request (see Section A13):

- Any choices about statistical or judgement-based approaches used to produce banks' projections, including evidence of the effectiveness of their governance process. Governance processes should include effective challenge from senior officials and the use of expert judgement to confirm or adjust key assumptions used within their models or affecting the outputs of models; and

- Any choices regarding asset prepayment rate assumptions, default rate assumptions and other cash flow related assumptions.

As part of the unstructured data request, banks should provide details of the assumed impact of any unwind of acquisition-related fair value adjustments relating to impairment losses, split by asset class and year. Banks should describe any material assumptions used to determine the timing of that impact.

For the purpose of the 2017 stress test, projections for any structured finance positions included in the Trading Book should be made using a firm's stress-testing methodology and the relevant macroeconomic scenario and not using the traded risk scenario.

A10.5 Interest income and interest expense

Banks should assess the vulnerability of projected net interest income (NII) under the baseline and stress scenarios. Banks will be expected to demonstrate that they have analysed the potential impacts of the interest rate and economic environments set out in the Key Elements document in detail.

In particular:

- Some banks may expect that the rise in UK Bank Rate in the 2017 ACS translates into higher net interest margins. However, banks should critically analyse any potential benefit from rising interest rates, and should not automatically assume that historic examples of margin-widening in a rising rate environment are applicable in the ACS;

- Banks should not assume that they will benefit from a 'flight to quality' in the stress scenario;

- Banks should consider the possible effects that reduced liquidity and higher risk premia in wholesale funding markets might have on competition in the retail saving markets and on deposit volumes and pricing; and

- Banks should also consider a range of related effects, including the likely impact of credit quality and demand when pricing assets and liabilities.

In addition, banks are expected to assess the impact of the following factors on NII in all material currencies:

- Balance sheet evolution;
- Funding mix and pricing, including consideration of liabilities issued to meet total capital requirements and minimum requirements for own funds and eligible liabilities (MREL);
- Product interest rate and margin movements;
- Foreign exchange movements; and
- Structural hedging programmes.

The data submitted should be consistent with that supplied for other workstreams and be aligned with FINREP reporting.

Banks should separately assess the impact of their liquidity position under the baseline and stress scenarios. Banks will be expected to demonstrate that they have analysed the potential impacts of the traded risk shock in the short term and movements in their balance sheet over the stress scenario in the longer term. Specifically, banks should explain if movements in their liquidity position (assets as well as projected outflows and inflows) are a result of the stress or due to any management actions taken.

Banks should separately identify and provide details of any existing use of central bank facilities (including the Bank of England's Funding for Lending Scheme, Term Funding Scheme and liquidity insurance facilities and the European Central Bank's longer-term refinancing operations). Banks that intend to make additional use of central bank facilities, in either the baseline or stress scenarios, should calculate the marginal effect on funding costs and interest expenses of using these facilities compared with wholesale market funding. This should be identified separately as a strategic management action (see Section A11).

Table A Guidance for estimating stressed projections of misconduct costs

Existing treatment of the misconduct issue	Approach to modelling stressed future misconduct costs
An accounting provision has been raised. There is a high degree of certainty over the eventual cost.	The stressed projection will equal the existing IAS 37 provisions.
An accounting provision has been raised. There is not a high degree of certainty over the eventual settlement cost. Whilst the IAS 37 provision strikes a balance between potential upside and downside, the likelihood of adverse outcomes exceeding existing provisions is greater than remote.	The stressed projection shall exceed the existing IAS 37 provision. Banks are expected to provide a stressed projection, even if they are unable to reliably quantify the full range of potential outcomes, by exercising expert judgement and targeting a high level of confidence (90%)[(a)] of settling at or below their stressed projection.
An accounting provision has not been raised. Whilst a settlement cost is not probable, there is sufficient evidence to determine a range of settlement outcomes and the possibility of a significant settlement cost is greater than remote.	A stressed estimate should be determined by evaluating a range of settlement outcomes and assigning probabilities to these outcomes.
An accounting provision has not been raised. Current evidence is insufficient to be able to reliably quantify any actual or potential liability, or range of liabilities, that may exist. The possibility of a significant settlement cost is greater than remote.	A stressed projection should be determined by exercising expert judgement and targeting a high level of confidence (90%) of settling at or below the stressed projection.

(a) The Bank of England accepts that for the majority of misconduct issues significant judgement over and above statistical methods is required to achieve a specified level of confidence; however, specifying a target level is believed to be the most appropriate way to achieve greater consistency in the interpretation of a 'high level of confidence'.

A10.6 Other income and costs

Banks are expected to model the impact of the baseline and stress scenarios on their 'Other income', such as income from fees and commissions on both retail and wholesale products, and how this relates to the variable paths for activity (GDP, unemployment etc).

Banks may include lower costs where there is a direct relationship with profitability and may also include business-as-usual cost reductions. However, these reductions are expected to be modest. Significant cost reductions that would require additional senior management or board decisions, such as redundancy programmes in response to a stress event, should be included as a strategic management action and should not be included as part of banks' pre-management action submissions (see Section A11). Banks should provide details of how they expect to achieve any cost reductions, including key judgements affecting their ability to achieve these, as part of the unstructured data request.

A10.7 Operational risks and misconduct costs

Banks should project operational risk losses (excluding misconduct costs, which are covered below) and RWAs (in line with their current Pillar 1 approach). In addition banks should provide details of the methodology used to produce these projections, in line with the guidance that accompanied the unstructured data request.

Banks should not include any additional misconduct costs beyond their end-2016 IAS 37 provisions in their baseline projections. In the stress scenario banks should include a stressed projection of all potential costs relating to known misconduct risks, in excess of existing IAS 37 provisions, allocated to time periods on a systematic basis. Banks' stressed projections of future misconduct costs should be determined, irrespective of whether a provision has been recognised, by evaluating a range of settlement outcomes and assigning probabilities to these outcomes. On a case by case basis, stressed projections are expected to exceed provisions, unless there is a high degree of certainty over the eventual cost (**Table A** provides further details).

Banks may ignore individual risks and outcomes where the likelihood of settlement is remote. However, banks should assess the need to include costs in the stressed projections to cover the possibility that, at the aggregate level, one or more remote settlement outcomes crystallise. Banks should provide the Bank with any information they have used in forming this assessment.

Misconduct costs for known issues may vary as a result of the impact of the macro-economic stress scenario. For example, the amount of redress or damages due may depend mechanically upon market prices such as securities prices, interest rates or foreign exchange rates. Such impacts should be included in the stressed projections and identified separately in the projections template.

Banks should provide a breakdown of the stressed projection by material misconduct risks. Banks are expected to identify each risk that amounts to 10% or more of the total additional misconduct costs each year during the stress-test horizon. Banks should also provide quantitative and qualitative information to support material assumptions underlying their stressed projections of misconduct costs. For example, where future customer redress is estimated using statistical data, banks should provide details (by vintage) of the volume and value of past business written, the proportion of business that the bank expects to pay redress for, and the average expected value of redress.

In rare cases where a bank is unable to provide a stressed projection for an individual misconduct risk due to the extent of uncertainty, banks should clarify that this is the case and provide evidence to support their assessment.

A10.8 Pension risk

Banks are expected to apply a stress across all balance sheet assets and liabilities. This includes banks' pension schemes. Banks must therefore model the change in their pension scheme surplus or deficit in each year of the scenario, as measured using the IAS 19 accounting standard. Remeasurements of the pension scheme should flow through into 'Other Comprehensive Income' thereby affecting banks' retained earnings. Other changes to the value of pension schemes should be recorded as a cost within banks' income statement. Banks should also take account of the restriction that disallows any pension scheme surplus when calculating capital resources.

This restriction means that banks will need to consider how contributions to a pension scheme might change over the projected period, since additional contributions to a scheme already in accounting surplus will act to reduce capital resources. For UK schemes, it will be necessary to estimate a future funding position and recovery plan. The sophistication required for this estimate will depend on the timing of the expected future triennial valuations and likely interaction with the scenario. This in turn will require particular care that the contributions to the scheme are consistent with projections of the non-pensions items of the balance sheet.

Banks should take appropriate account of the scenario and narrative when modelling pension assets and liabilities and should pay particular attention to profiles for gilt yields, inflation, expected inflation and equity prices.

A10.9 UK impact

As set out in 'The Bank of England's approach to stress testing the UK banking system', stress-test results are one input to the FPC's decision regarding the level at which to set the UK CCyB rate.(1) To help inform this decision, it is important to isolate the 'UK impact' of the stress scenario.

As in 2016, banks have been requested to provide a 'UK' and 'non-UK' split for some profit and loss and balance sheet items that affect capital resources and requirements. In addition, as part of the Basis of Preparation request (see Section A13), banks should supply information on the methodology adopted for splitting these items.

A11 Management actions

Banks are asked to consider what realistic strategic and business-as-usual management actions could be taken in response to the stress scenario:

- Strategic management actions are defined as extraordinary actions taken in response to the stress scenario. Typically, the Bank would expect these to include any actions that require Board sign-off before they can be undertaken. These actions should not be included within banks' projections. Instead they should be set out separately in the management actions section of the projections templates. Banks are asked to provide all the strategic management actions that they could take in the stress, along with the triggers for taking each action, and indicate in their submissions which actions they would choose to enact based on their projected results; and

- Business-as-usual management actions represent any other actions that the banks could and would take in response to the stress scenario. These actions would be in the control of the bank and would be a natural response to weakening economic conditions.

A qualitative listing of all material business-as-usual actions should be submitted alongside banks' projections (also see the unstructured data request).

Banks should ensure that the strategic management actions they propose:

- Are consistent with a market-wide stress. For example, attempts to raise capital in a stress scenario are unlikely to be permitted;

- Have a material benefit to the bank's capital position and can be executed, in practice, with no material impediments envisaged. For example, the sale of a business unit may not be executable in the stress scenario or may not yield the full capital benefit the bank expects; and

- Are part of, or consistent with, the bank's recovery plan. A bank's recovery plan details the range of actions it could take in a stress. The Bank will ordinarily only accept actions that meet its expectations set out in the Supervisory Statement on recovery planning, to reflect the strong link between banks' strategic management actions and their recovery plans.(2)

The Bank will assess whether the management actions proposed by banks are realistic actions that a bank could and would take in the stress scenario. For these purposes, banks should provide: a detailed qualitative assessment of the main risks to executing a management action; a numerical trigger for authorising each action; and an accompanying explanation for why the numerical trigger has been selected. Banks should

(1) www.bankofengland.co.uk/financialstability/Documents/stresstesting/2015/approach.pdf.
(2) www.bankofengland.co.uk/pra/Documents/publications/ss/2015/ss1813update.pdf.

also provide a quantitative assessment of the impact of actions across the balance sheet and capital position.

Banks should take into account the time necessary for full implementation of a management action (due to the normal governance process of identifying an issue, deciding an action and implementing an action), and the time it takes for the action to take effect (such as the lag between changing lending standards and observed changes in arrears). Banks should also consider how modelled actions would be perceived by market participants. Actions that are likely to evoke a negative market reaction — such as ceasing discretionary coupons on preference shares — are unlikely to be permitted unless supported by conclusive evidence to the contrary.

The following areas of specific guidance should be noted:

- Under stress, banks should model ordinary dividend payments as moving in line with their publicly quantified payout ratio range. Where a public payout range does not exist, then stressed annual ordinary dividend payments should be fixed at the level projected in the baseline scenario. Any further reductions in the payment of ordinary dividends should be classified as a strategic management action and should be: consistent with banks' payout policies; in line with historical precedent; and supported by a qualitative explanation for the approach taken.

- Asset disposals that have not been publicly announced prior to 2017 will generally only be considered if they have been included in banks' recovery plans with sufficient details on the technicalities of the sale and an analysis of the plausibility of the sale under stress together with appropriate haircuts.

- When proposing strategic cost cuts, banks should take into consideration whether these: would be damaging to the bank's franchise; result in offsetting reductions in income or lead to additional risk for the business; and are plausible in the context of other continuing or past cost-cutting programmes.

- Banks should categorise any regulatory restrictions on distributions in relation to the Maximum Distributable Amount (MDA) as strategic management actions (see Section A12).

- Banks should ensure that any proposed actions that might lead to a reduction in lending in the stress scenario are in line with the guidance outlined in Section A10.1.

A12 Capital actions

Where a bank does not meet its combined buffer in the stress before strategic management actions, it should not include in its projections any regulatory restrictions on distributions that would ordinarily be required in relation to the MDA. Restrictions on distributions up to the MDA should only be modelled where a bank does not meet its combined buffer after strategic management actions, and the restrictions should be submitted separately in the management actions section of the capital projections templates.

Banks should model their Tier 1 and Total Capital positions and their MREL resources. This will include assumptions for the issuance, redemption, amortisation and maturity of Additional Tier 1 (AT1) and Tier 2 capital instruments and MREL-eligible liabilities. In the baseline banks should set out the assumptions they make in this regard. In the stress banks should consider the impact of the scenario on the feasibility, timing and pricing of any issuances and redemptions.

Banks should also consider whether they would be able to undertake other capital management exercises that rely on third parties, including capital injections from parent institutions. Written justification must be provided by banks to support the inclusion of any of these capital actions as part of their submissions for the stress scenario. The Bank's default position is that such exercises are unlikely to be realistic in the stress scenario.

Banks should not model the impact of any contingent capital instruments being triggered as part of their pre-management action submission. Banks should supply the impact of a trigger event as part of the management actions template; this should be supplied regardless of whether the banks model a trigger event to have occurred in their projections.

A13 Basis of Preparation

In January 2017, participating banks received a Basis of Preparation request. This request, consisting of both structured and unstructured elements, includes the following key requests:

- Methods and governance arrangements related to the extrapolation of scenario variables and risk factor shocks;

- An assessment of the key sensitivities of the results, including the impact of limitations to data availability, an assessment of the variables to which the results are most sensitive and details of the impact of foreign exchange rate movements over the stress horizon;

- Details of how the baseline and stress scenarios have been translated into impacts on the income statement and balance sheet, including details of the assumptions made in applying methodologies and any deviations from the methodologies and frameworks that were provided; and
- Specific details for selected retail and commercial portfolios, pension schemes, tax rates, deferred tax assets, dividends and management actions.

The request was updated in March 2017 to ask banks for further scenario specific information in relation to their results. Banks should refer to this request for the specific documentation and data required.

A14 Qualitative review

A key objective of the Bank's stress-testing framework is to contribute to an improvement in banks' risk and capital management practices. The Bank has highlighted in previous concurrent stress tests areas where banks have strengthened their stress-testing framework and their delivery of stress-test data and credible analysis, as well as areas where the Bank expects further improvements. In 2017, the Bank will again undertake a qualitative assessment covering key aspects of banks' approach to stress testing and will focus on whether banks have adequately addressed or are making progress on the areas that were in need of improvement.

The Bank has also written to banks to provide a set of stress testing model management principles.(1) These principles should be viewed as a guide to support and enhance banks' risk management abilities. Banks will not be assessed against these principles in the 2017 stress test. The Bank will invite discussion and feedback from banks to ascertain how useful the principles have been in informing their stress testing model management processes and internal governance. The Bank will use this feedback to carry out further work to refine the principles on stress-test model management. Should the Bank decide that adherence to the principles be set as a supervisory expectation the Bank will consult in the normal way.

Similar to previous years, Bank staff will continue to evaluate the quality of stress-test results delivery, which will be assessed based on the quality of stress-test data and result submissions, methodology used for deriving stress-test results, appropriate use of judgement, supporting documentation and engagement with Bank staff.

(1) www.bankofengland.co.uk/pra/Pages/publications/letters.aspx.

Section B: Biennial exploratory scenario-specific guidance

B8 Time horizon and reference date

The exploratory scenario has been calibrated over a ten-year horizon. Banks are requested to submit results for the first seven years of the scenario. The final three years are provided to help the banks produce their projections.

Unless otherwise agreed, the reference date will be 31 December 2016 and banks are expected to submit projections as at 31 December for each subsequent year end up to and including 31 December 2023.

B9 Macroeconomic scenario

Banks should follow the guidance outlined in this section to assess the impact of the baseline and exploratory scenarios. The baseline scenario is the same in the ACS and BES for the first five years, and banks should only submit one set of baseline projections for this period. Banks should extend their baseline projections to years six and seven for the BES.

It is likely that banks will need to expand the set of macroeconomic and financial variables provided alongside the Key Elements document. In doing so, banks should ensure they are consistent with all the features of the exploratory scenario as expressed in the Key Elements document. Banks are specifically asked to set out in the unstructured data request how they have extrapolated average market rates for their key UK retail lending and deposit products in the exploratory scenario (see Section B10.1).

Banks should project the CCyB for all relevant jurisdictions in baseline and stress. Banks should project CCyB rates based on statements provided in those jurisdictions, or with reference to the Basel Committee's guidance for national authorities operating the CCyB.(1) For the purposes of this stress-test exercise, and consistent with the FPC's published intention for the expected level of the UK CCyB rate when risks are judged to be neither subdued nor elevated,(2) banks should assume that the UK CCyB rate increases gradually to 1% by no later than the mid-point of their seven year projections for the BES stress scenario.

B10 Guidance on modelling risks and income

B10.1 Balance sheet modelling

Banks are expected to report baseline and stress projections using their reporting currency. Banks should use actual balance sheet data at the reference date as the starting point for their submissions. After that point, banks should submit projections based on the baseline and stress scenarios.

The 2017 BES will be performed on a dynamic balance sheet basis. This means that banks' projections will take into account changes in the size and the composition of their balance sheet, both in the baseline and in the stress scenario.

Banks' submissions should reflect their corporate plans, including any costs and business changes. These should be adjusted appropriately to reflect changes in the expected performance and execution of these plans in each scenario, including any management actions taken in the stress scenario (also see Section B11).

Banks should clearly set out their assumptions for forecast balance sheet growth or contraction in the baseline and stress scenarios. These assumptions should be consistent with the macroeconomic scenarios, as well as the increased competitive pressure and falling cross-border banking activity of the exploratory scenario, as set out in the Key Elements document.

Unlike the ACS, there are no restrictions on balance sheet growth in the exploratory scenario. Instead, banks should have regard to the following guidance when modelling their balance sheet in the exploratory scenario:

- For UK lending and deposits, banks are expected to consider the impact of UK competition in three areas:
  - In relation to UK deposits, increased frequency of households moving their bank deposits between products and the declining brand power of larger banks;
  - In relation to UK retail lending, the persistence of recent levels of competition; and
  - In relation to UK corporate lending, a reduction in volumes as credit demand is low, and within that corporates increasingly opt to issue market debt rather than borrow directly from banks.
- The Bank has published market volumes for each of these markets, and average quoted market rates for one UK retail lending and one UK retail deposit product. Banks should take the published paths as indicative of broader conditions in each market, and so should assume similar competitive pressures on market volumes, rates and fees for products where no paths have been published. For example, the published two-year 75% LTV fixed-rate mortgage rate should be taken as indicative of pressures across UK retail lending markets, including unsecured. Banks are asked to provide in the unstructured data request their assumptions for average market prices in all their key UK lending and

(1) www.bis.org/publ/bcbs187.pdf.
(2) www.bankofengland.co.uk/financialstability/Documents/fpc/policystatement050416.pdf.

deposit markets where average market prices have not been published by the Bank.

- Banks should explain how they respond to these competitive pressures, in terms of their market share, pricing, risk profile and any other relevant factors:
  - In UK retail lending markets, if a bank prices above the average quoted rate they should expect to lose market share in the exploratory scenario. This applies at all dates over the scenario horizon. Any deviation from this guidance should be explained by other product features or credit terms. In line with the scenario narrative, banks should not assume that their existing competitive advantages that are not related to pricing or other product features continue to apply in the BES.
  - In UK retail deposit markets, if a bank prices below the average quoted rate they should expect to lose market share in the exploratory scenario. In contrast to lending markets, this applies only from 2022, although in the years leading up to this date banks should assume that any ability to maintain market share while pricing below the market average is gradually diminished. As for lending markets, any deviation from this guidance should be explained by other product features or terms.
  - In UK corporate lending markets, banks should describe how their market share, product features and credit terms are consistent with the competitive pressures in the exploratory scenario.
- For non-UK lending, banks' projections in the exploratory scenario should be consistent with the weak economic growth prospects in local markets. Demand for direct cross-border lending to foreign counterparties and trade finance is depressed, as set out in the Key Elements document; and
- In no market in which they currently operate should banks assume any increase in brand power. Any increase in market share should be explained by pricing, other product features or credit terms.

Banks are expected to consider the impact of the stress scenario on the timing and price of any planned asset sales that are included in their baseline submissions and should document the reasoning behind the impact.

Banks should include the effects of regulatory, legal or accounting changes in their projections where final requirements and implementation or effective dates have been announced or endorsed publically by the relevant authority on or before 27 March 2017. Where relevant, these changes should be modelled in line with their respective implementation dates. Banks' projections should also reflect the expected effects of such changes where requirements or implementation details have not been finalised, to the extent that these effects are included in banks' existing corporate plans.

Banks should include in their projections the expected effects of their current view of ring-fencing arrangements. Banks are not required to provide separate submissions for their ring-fenced and non-ring-fenced entities in the concurrent stress-testing exercise, but their projections should include the expected costs associated with structural reform (one-off and ongoing), and banks should be able to explain any impact of structural reform on their business planning assumptions.

Banks should not model the 2017 BES on an IFRS 9 basis. A separate exercise to collect information on IFRS 9 is being conducted alongside the 2017 stress test.

Banks that have modelled the impacts of future regulatory, legal and accounting changes that are not finalised should clearly identify these as part of the unstructured data request, and should include details of the impact of the change and their rationale for including the change in their projections.

B10.2 Credit risk

Banks should use their own stress-testing methodologies to translate the macroeconomic scenarios provided into projections for impairments and RWAs, categorised by both asset class and country of exposure. In doing so, banks are expected to follow the high-level guidance outlined in Section B9.

Banks should provide details of the assumed impact of any unwind of acquisition-related fair value adjustments relating to impairment losses on loans and advances as part of the unstructured data request, split by asset class and year. Banks should describe any material assumptions used to determine the timing of that impact.

In line with the calculation of capital requirements for all risks:

- Banks should not assume changes to their approach to calculating credit risk capital requirements after the scenario start point, whether anticipated or realised (eg adoption of, or changes to, IRB models) unless by prior agreement with the Bank; and
- Banks' baseline projections should be consistent with the credible execution of their business plans in the baseline scenario. Similarly, banks' RWA projections in the stress scenario should take into account the impact of the stress scenario on the risk profile of the positions associated with these RWAs and of the bank's ability to execute its business plan.

Banks are expected to articulate the following judgements clearly and with justification as part of the unstructured data request (see Section B13):

- Any choices about statistical or judgement-based approaches used to produce banks' projections, including evidence of the effectiveness of their governance process. Governance processes should include effective challenge from senior officials and the use of expert judgement to confirm or adjust key assumptions used within their models or affecting the outputs of models; and

- Assumptions affecting banks' forbearance practices or provisioning model assumptions that have been included within their projections.

B10.3 Traded risk

The 2017 BES does not include a severe market shock applied to trading positions. Banks are therefore not required to submit projections for Market Risk, Counterparty Credit Risk Defaults, Stressed X-Valuation Adjustment (XVA)[1] or Stressed PVA for the BES scenario. Banks are asked to submit results for Other Fair Valued Items, Revenue and Costs, and RWAs. Detailed guidance on these components is provided in the annex, which broadly applies to both the ACS and the BES scenarios (subject to the longer horizon of seven years applying to the BES). There are, however, some specific overrides to the guidance in the annex, as set out below.

Other Fair Valued Items

Banks should relax the assumptions regarding no ageing or changing of positions, no re-hedging (except FX) and no changing to the weighting of constituents in the liquidity buffer. Where realistic, all such assumptions are permitted and should be reflected directly in projections, and included within the list of management actions (see Section B11). Projections should extend to seven years.

Revenues and costs

Banks should build early-year projections in line with their standard budgeting process and provide details of this process. They should then extend the projections beyond their standard budgeting horizon out to seven years by taking due account of the scenario narrative and variable profiles. For example, banks might use the historical correlation between their client revenues and scenario variables such as yield curve level and slope. Simplistic projection methodologies that are not aligned to the content of the narrative and variables — for example holding revenues flat at preceding year levels with no supporting rationale or evidence — will not be accepted. Cost projections are expected to be equally detailed and focused on both direct and indirect costs. Banks should also consider any projected cost savings carefully in light of realised historical success in their past cost-saving programmes and provide supporting evidence of such success.

The revenue and costs projections over the longer horizon will be of particular importance in the Bank's review of submissions. This will include the complexity of the models and methodologies employed by banks to build these longer-term projections, and how they vary from those used in their standard budget forecasts.

In the exploratory scenario, banks should explain how they have modelled the impact of the decline in cross-border banking activity on investment banking revenues and costs described in the Key Elements.

Risk-weighted assets

As the BES includes no market shocks or counterparty defaults, there is no expectation regarding VaR and SVaR increases and any guidance relating to counterparty replacement does not apply. Banks should nonetheless model the impact of the BES scenario variables on their RWAs as they would do for the ACS scenario and to the same standard.

B10.4 Structured finance

For the purpose of the 2017 stress test, structured finance (covering Trading Book and non-Trading Book assets) includes the following assets:

- Exposures to third-party cash or synthetic securitisations, including liquidity lines for securitisation transactions, as specified in Chapter 5 Part 3 of the CRR;

- Exposures to own-originated securitisations which have achieved significant risk transfer; and

- Exposures to third-party covered bonds that are risk weighted as per CRR Articles 120, 121 or 129.

The structured finance component should exclude: securitisations issued or guaranteed by international organisations, multilateral development banks, governments, or government agencies; covered bond exposures capitalised under Value-at-Risk (VaR); and derivatives related to eligible assets that are not capitalised under the relevant securitisation or covered bond framework as per the CRR.

Own-originated securitisations should only be treated as securitisations during the period that these are expected to achieve significant risk transfer. If banks expect this to cease during the scenario horizon, then parameters pertaining to the underlying assets should be considered for the parts of banks' submissions relating to the remainder of the scenario horizon.

(1) Changes in various valuation adjustments (described in Section T5 of the Traded risk annex) such as Funding Valuation Adjustment (FVA) and Credit Valuation Adjustment (CVA), which are collectively categorised under XVA.

Banks should provide details of these considerations as additional comments as part of the relevant structured finance data templates.

For the BES, banks may submit projections at either an individual structured finance asset level or a portfolio level for the following variables for each year of the baseline and stress scenarios:

- Regulatory carry value, which should be gross of impairment charges and, for fair value and AFS assets, should be net of market value movements and AFS reserve balances, respectively;
- Incremental market value movements (ie the annual change in market value) for fair value and AFS assets;
- Annual impairment charges for held-to-maturity (HtM), AFS, and loans and receivables assets. These should take into account the impact of credit enhancements and other structural features;
- AFS reserve balances (ie the balance sheet value of AFS reserves), which should be consistent with projected market value movements and impairment charges;
- Expected losses over the full economic life of the asset (re-estimated at the end of each projection year), for HtM and loans and receivables assets; and
- RWAs should be calculated after impairment charges and market value movements have been estimated. Market value and AFS reserve balance movements should be applied before the RWA calculation and impairment charges should be applied in accordance with the relevant approach.

Banks should use their own stress-testing methodologies to translate the macroeconomic scenarios provided into projections for the variables detailed above. In doing so, banks are expected to follow the same high level guidance set out in Section B9.

Banks are expected to articulate the following judgements clearly and with justification as part of the unstructured data request (see Section B13):

- Any choices about statistical or judgement-based approaches used to produce banks' projections, including evidence of the effectiveness of their governance process. Governance processes should include effective challenge from senior officials and the use of expert judgement to confirm or adjust key assumptions used within their models or affecting the outputs of models; and
- Any choices regarding asset prepayment rate assumptions, default rate assumptions and other cash flow related assumptions.

As part of the unstructured data request, banks should provide details of the assumed impact of any unwind of acquisition-related fair value adjustments relating to impairment losses, split by asset class and year. Banks should describe any material assumptions used to determine the timing of that impact.

For the purpose of the 2017 stress test, projections for any structured finance positions included in the Trading Book should be made using a firm's stress-testing methodology and the relevant macroeconomic scenario and not using the traded risk scenario.

B10.5 Interest income and interest expense

Banks should assess the vulnerability of projected net interest income under the baseline and stress scenarios. Banks will be expected to demonstrate that they have analysed the potential impacts of the interest rate, economic and competitive environments set out in the Key Elements document in detail. In doing so, banks should have regard to the detailed guidance set out in Section B10.1. Further:

- Banks should not assume that they will benefit from a 'flight to quality' in the stress scenario; and
- Banks should also consider a range of related effects, including the likely impact of credit quality and demand when pricing assets and liabilities.

In addition, banks are expected to assess the impact of the following factors on NII in all material currencies:

- Balance sheet evolution;
- Funding mix and pricing including consideration of liabilities issued to meet total capital requirements and MREL;
- Product interest rate and margin movements;
- Foreign exchange movements; and
- Structural hedging programmes.

The data submitted should be consistent with that supplied for other workstreams and be aligned with FINREP reporting.

Banks should separately identify and provide details of any existing use of central bank facilities (including the Bank of England's Funding for Lending Scheme, Term Funding Scheme and liquidity insurance facilities and the European Central Bank's longer-term refinancing operations). Banks that intend to make additional use of central bank facilities, in either the baseline or stress scenarios, should calculate the marginal effect on funding costs and interest expenses of using these facilities compared with wholesale market

funding. This should be identified as a management action (see Section B11). Banks should assume that current central bank facilities remain in place for their existing terms and conditions, but there is no renewal, replacement or addition to these facilities over the horizon.

B10.6 Other income and costs

Banks are expected to model the impact of the baseline and stress scenarios on their 'Other income', such as income from fees and commissions on both retail and wholesale products, and how this relates to the variable profiles for activity (such as GDP) as well as the pressure from UK competition and the decline in cross-border banking activity in the BES. Banks' interpretation of the decline in cross-border banking should not be limited only to lending. Banks should also consider the impact of the scenario on other sources of income and costs dependent on counterparties or exposures in other jurisdictions.

Banks may include lower costs where there is a direct relationship with profitability. Other cost cutting exercises may be included in banks' submissions as a management action, and should be described in the unstructured data request (see Section B11). Banks should provide details of how they expect to achieve any cost reductions, including key judgements affecting their ability to achieve these, as part of the unstructured data request.

In the exploratory stress scenario, banks should gradually increase their costs for systems and business processes in relation to managing cyber risk and preventing misconduct, as well as for overall IT investment, to reach from year three a level of cost that is unlikely to be exceeded. Banks should be able to explain their considerations in creating these projections, including any involvement of the Board.

B10.7 Operational risks and misconduct costs

Banks should project operational risk losses (excluding misconduct costs, which are covered below) and RWAs (in line with their current Pillar 1 approach). In addition banks should provide details of the methodology used to produce these projections, in line with the guidance that accompanied the unstructured data request.

Banks should not include any additional misconduct costs beyond their end-2016 IAS 37 provisions in their baseline projections. In the exploratory scenario banks should include the same stressed projection of costs relating to known misconduct risks, in excess of existing IAS 37 provisions, that they include in their ACS projections. Banks are not expected to project additional costs relating to misconduct risks for years six and seven of the scenario.

B10.8 Pension risk

Banks are expected to apply a stress across all balance sheet assets and liabilities. This includes banks' pension schemes. Banks must therefore model the change in their pension scheme surplus or deficit in each year of the scenario, as measured using the IAS 19 accounting standard.

Remeasurements of the pension scheme should flow through into 'Other Comprehensive Income' thereby affecting banks' retained earnings. Other changes to the value of pension schemes should be recorded as a cost within banks' income statement. Banks should also take account of the restriction that disallows any pension scheme surplus when calculating capital resources.

This restriction means that banks will need to consider how contributions to a pension scheme might change over the projected period, since additional contributions to a scheme already in accounting surplus will act to reduce capital resources. For UK schemes, it will be necessary to estimate a future funding position and recovery plan. The sophistication required for this estimate will depend on the timing of the expected future triennial valuations and likely interaction with the scenario. This in turn will require particular care that the contributions to the scheme are consistent with projections of the non-pensions items of the balance sheet.

Banks should take appropriate account of the scenario and narrative when modelling pension assets and liabilities and should pay particular attention to profiles for gilt yields, inflation, expected inflation and equity prices.

B10.9 UK impact

Banks have not been requested to provide a UK and non-UK split of their projections for the exploratory scenario.

B10.10 Return on equity and cost of equity

As set out in the Key Elements document, banks will be expected to aim for their overall Return on Equity (RoE) to meet or exceed their Cost of Equity (CoE) in the exploratory scenario.

For the purposes of this exercise, banks should calculate their overall RoE on a statutory basis, defined as net income attributable to shareholders divided by average shareholders' equity. If banks use a different definition of RoE internally, they should also submit this as part of their unstructured data request.

Banks should project CoE according to their own existing methodologies, and provide details of their estimates in the unstructured data request. Banks should assume that their CoE falls in line with UK long-term risk-free rates in the scenario, absent any other change in the bank's risk profile. The scenario does not feature any change in market-wide equity risk premia.

B11 Management actions

Banks should consider what realistic management actions they would take in response to the exploratory scenario. Unlike for the ACS, banks should include these actions within their projections.

Banks' submitted projections should therefore reflect a comprehensive and consistent view of both the impacts of the exploratory scenario and the actions taken by the bank in response to the scenario. As banks' responses to the scenario are a focus of the 2017 test, banks will be expected to explain their decision-making process and modelling of any management actions.

Banks are asked in the unstructured data request to set out the management actions they have taken in the exploratory scenario and provide a qualitative and quantitative description of these actions. For the purposes of the BES, a management action is defined as any change relative to the baseline projections that is within the control of the bank, including changes at a business level (eg pricing decisions) and at a board level (eg major cost reductions or strategic changes).

For the purposes of the unstructured data request, management actions should be allocated to one of the following categories. Where an action impacts several categories, it should be allocated according to the primary purpose of the action:

- UK lending criteria, volumes and pricing;
- Non-UK lending criteria, volumes and pricing;
- Funding mix and pricing;
- Investment banking;
- Other non-interest income;
- Costs (including IT);
- Acquisitions and disposals;
- Capital distributions and issuances;
- Banks' targets; and
- Any other material changes.

The Bank expects that the type, scale, range and timing of management actions taken by banks in the exploratory scenario will differ from the ACS, reflecting the prolonged nature of the exploratory scenario as opposed to the shorter, cyclical nature of the ACS. The package of actions in the exploratory scenario may be presented as a strategic realignment of the corporate plan, rather than as the execution of a recovery plan. As such, banks' actions do not need to be part of their recovery plan.

Banks are not constrained in what actions they can take in the exploratory scenario, but the Bank sets out the following expectations:

- Management actions should reflect a realistic view of how the bank would expect to react in the exploratory scenario;

- Where one set of actions has been favoured over others, banks should explain how this decision was made, with reference to the bank's targets, and internal and external stakeholders;

- Actions should be plausible within the conditions specified by the scenario and consistent in the context of each bank's strategic plan. As part of its review, the Bank will determine whether the actions taken by all banks are consistent at a system level;

- Given the prolonged nature of the scenario, the Bank would not ordinarily expect banks to propose actions that have a short-term benefit but may have long-term negative impacts, such as cancellation or postponement of major IT development projects or cost reductions that damage the core franchise; and

- Any actions that involve significant restructuring of a bank's business should be modelled with the associated costs.

Banks should take into account the time necessary for the implementation of an action (due to normal governance process of identifying an issue, deciding an action and implementing an action), and the time it takes for the action to take effect (such as the lag between changing lending standards and observed changes in arrears). Banks should also consider how modelled actions would be perceived by market participants.

B12 Capital actions

Banks should model their Tier 1 and Total Capital positions and their MREL resources. This will include assumptions for the issuance, redemption, amortisation and maturity of AT1 and Tier 2 capital instruments and MREL-eligible liabilities. In the baseline banks should set out the assumptions they make in this regard. In the stress banks should consider the impact of the scenario on the feasibility, timing and pricing of any issuances and redemptions.

Banks should model the impact of any contingent capital instruments being triggered or any regulatory restrictions on distributions in relation to the MDA as part of their submissions, and report the impact within the unstructured data request.

B13 Basis of Preparation

In January 2017, participating banks received a Basis of Preparation request. This request, consisting of both structured and unstructured elements, includes the following key requests:

- Methods and governance arrangements related to the extrapolation of scenario variables and risk factor shocks;
- An assessment of the key sensitivities of the results, including the impact of limitations to data availability, an assessment of the variables to which the results are most sensitive and details of the impact of foreign exchange rate movements over the stress horizon;
- Details of how the baseline and stress scenarios have been translated into impacts on the income statement and balance sheet, including details of the assumptions made in applying methodologies and any deviations from the methodologies and frameworks that were provided; and
- Specific details for selected retail and commercial portfolios, pension schemes, tax rates, deferred tax assets, dividends and management actions.

The request was updated in March 2017 to ask banks for further scenario-specific information in relation to their results. Banks should refer to this request for the specific documentation and data required.

B14 Qualitative review

A key objective of the Bank's stress-testing framework is to contribute to an improvement in banks' risk and capital management practices.

This year, particular focus will be on the banks' ability to consider future adaptations to their business model in the BES. While the quantitative analysis will focus on banks' responses given the macroeconomic conditions in the BES, the qualitative review will focus on how the banks have reached those decisions both at the business line and Board level.

Similar to the ACS, Bank staff will evaluate the quality of stress-test results delivery. This will be primarily to gauge the ability of firms to run multiple stress scenarios.

Traded risk annex

T1 Overview

T1.1 Introduction

This annex describes the approach that banks are expected to take in the execution of the 2017 ACS stress test with respect to fair valued and Trading Book positions as defined in the Position scope Section T2.1.(1) As set out in Section B10.3 of this document, some parts of the traded risk guidance should also be applied in the 2017 BES stress test.

More specifically, this annex describes:

- The overall approach that banks should adopt in the execution of the traded risk stress test; and
- Outlines how the stress and baseline scenarios should be translated into specific loss numbers(2) and financial and regulatory metrics reported via the templates.

In addition, this annex defines certain terms and concepts that are used in the templates in the context of the methodology that should be applied. The annex does not outline the baseline and stress scenarios themselves, as they are described in the Key Elements, Variable paths for the 2017 stress test and Traded risk scenario for the 2017 stress test.(3)

The traded risk stress-test methodology outlined in this annex expects banks to exercise judgement in the application of the method to their exposures. For example, banks may exercise judgement on the likely time period over which a material, illiquid trading position could be liquidated or hedged under the stress scenario. Banks are expected to explain the judgements that they have made as part of the unstructured data request.

T1.2 Key design features

The Bank's approach to stress-testing traded risk is similar to the approach taken in the 2015 and 2016 stress tests. The traded risk element of the 2017 stress test incorporates experience of previous historical episodes that is linked to the forward-looking macroeconomic scenario.

The 2017 traded risk stress scenario continues to be linked to the macroeconomic aspects of the stress test. The market risk factor shocks are broadly aligned to the global and regional impacts of the macroeconomic scenario. Reflecting the ACS framework, the calibration of the shocks takes into account the severity associated with the state of the financial cycle.

The Bank's approach continues to recognise the importance of market and position liquidity when assessing loss projections under a stress scenario. Banks are expected to apply risk factor shocks that correspond to the likely liquidity of each position under the stress scenario, and hence the time for which each position is exposed to the scenario.

Finally, the Bank's approach to counterparty credit risk asks banks to identify and default counterparties that are particularly vulnerable to the stress scenario. This approach creates consistency between the counterparty credit risk losses and the macroeconomic stress scenario. The overall approach to ranking and defaulting counterparties is similar to last year, but the number and regional distribution of the defaults are expected to vary to align to the nature of the 2017 stress scenario.

T2 Preliminaries

This section sets out the scope of application and how the different components of the stress test fit together, and outlines several general features of the stress test.

T2.1 Position scope

Broadly, the scope of positions to which the traded risk stress test is applied is: all Fair Value Through Profit and Loss ('FVTPL')(4) and Available For Sale ('AFS') accounted positions. The assets to which the stress is applied can be broken down into several parts as follows:

- All positions that fall within the perimeter of the regulatory Trading Book;
- Other Held For Trading assets that are not included in the regulatory Trading Book perimeter, such as accounting hedges;
- The AFS part of the regulatory Banking Book, which includes banks' Liquid Asset Buffers (LABs), and associated hedge positions; and
- The FVO part of the regulatory Banking Book and associated hedge positions.

Exceptions to the scope of the traded risk stress are as follows:

- Where a position has a prudential filter that eliminates the impact of changes in its value from capital, then such

(1) Throughout this annex the term 'traded risk stress test' refers to the part of the Bank 2017 stress test that captures traded risk positions; similarly, 'market risk stress test' (or similar) refers to a particular component (or components) of the traded risk stress test.
(2) The outcome of the traded risk stress test or of a particular component of the stress test is often referred to as a loss. However, it is recognised that the outcome of some components of the stress test may, in fact, result in profits.
(3) The traded risk stress scenario comprises the shocks to be applied to a set of market risk factors (the various market rates and prices that drive the valuation of traded risk positions), at different time horizons, and is described in the 'Traded risk shocks' tab of the Traded risk scenario for the 2017 stress test. The macroeconomic stress scenario (described in the Key Elements and the Variable paths for the 2017 stress test) comprises mainly the paths of macroeconomic variables such as GDP, unemployment, etc; however, the paths of a small number of key market risk factors are also included (for example, short-term interest rates, long-term interest rates, equity indices).
(4) Including positions accounted for under the Fair Value Option (FVO).

positions should be omitted in line with the filtering applied in the capital treatment unless explicitly noted otherwise.

- Securitisation positions (per the CRR Chapter 5 definition) and covered bonds are excluded from the traded risk stress test. These are captured as part of the credit stress test but any non-Chapter 5 hedges to these positions should be included. For example, a Collateralised Loan Obligation (CLO) hedged with an untranched index Credit Default Swap (CDS) would result in the inclusion of losses from the CLO in the credit stress test and the gains from the CDS hedge in the traded risk stress test.

- Securities financing transactions held at amortised cost in the Banking Book should be included for the purpose of calculating counterparty default losses. This includes all collateral types, even Chapter 5 securities. For clarity, all other types of amortised cost lending are excluded, as they will be captured via the Banking Book stress test.

- Hedges to amortised cost loans are excluded.

T2.2 Components of the stress test

The traded risk stress scenario will have an impact on both capital resources (which would be depleted in the event of losses being incurred) and capital requirements (which may increase in response to rises in market volatility and counterparty default risk).

The impact of the traded risk stress test on capital resources is calculated to take into account the separate impacts arising from:

- Market risk losses (described in Section T3) arising in the Trading Book due to adverse moves in risk factors (market prices and rates) and issuer default;

- Counterparty credit risk default losses (described in Section T4);

- Changes in various valuation adjustments (described in Section T5) such as to the Funding Valuation Adjustment (FVA), and Credit Valuation Adjustment (CVA), which are collectively categorised under the banner of XVA losses;

- Regulatory adjustments due to stressed Prudent Valuation Adjustment (PVA) changes (described in Section T6);

- Other Fair Valued Items losses such as AFS and FVO losses (described in Section T7); and

- Revenue and cost changes in the bank's investment banking business (described in Section T8).

The impact of the traded risk stress test on capital requirements is calculated as the sum of the separate impacts from:

- Market risk and CVA Risk-Weighted Assets (RWAs) (described in Section T9); and

- Counterparty credit risk RWAs (described in Section T9).

The overall impact on a bank's capital ratios will reflect the impact of the traded risk stress test on both capital resources and capital requirements.

T2.3 Effective date

The stress test should be applied to banks' fair value positions as of a specified effective date. The effective date for running the stress test is different for different components of the traded risk stress test (and hence for the corresponding templates), as indicated in the table below.

Template[(a)]	Position scope	Effective date
Market Risk Stressed P&L projections	All Trading Book	25 Jan. 2017
Counterparty Credit Risk Losses projections	All Trading Book and Banking Book	25 Jan. 2017
Stressed XVA projections	All Trading Book and Banking Book	25 Jan. 2017
Stressed PVA projections	All Trading Book and fair valued Banking Book	31 Dec. 2016
Other Fair Valued Items projections (formerly called AFS/FVO gains and losses)	Fair valued Banking Book	31 Dec. 2016
Revenues & Costs for Investment Banking Divisions projections	All Investment Banking activities	31 Dec. 2016
Market Risk and CVA RWA template and Counterparty Credit Risk RWAs template	All Trading Book (and Banking Book for counterparty credit risk and CVA only)	31 Dec. 2016

(a) The Reconciliation template is omitted from this table, as it spans across the templates (and hence the effective dates) enumerated in the table above.

An effective date of 25 January 2017 was chosen for market risk, counterparty credit risk and XVA exposures because banks typically reduce their traded positions at year end. Using 25 January 2017 as the effective date instead of 31 December 2016 is more likely to provide a representative view of banks' traded risk positions.

T2.4 Reporting currency

For traded risk positions that would generate P&L under the stress scenario in currencies other than banks' reporting currency, such P&L should be translated into the bank's reporting currency via FX spot rates that are consistent with:

- The stress scenario; and

- The liquidity (and hence the liquidation horizons) of the positions that generate the P&L, which will determine the time at which the foreign currency P&L is generated and the rate at which it is to be translated into the reporting currency.

T2.5 Loss allocation and management actions

The ACS stress-test horizon is five years and, in line with this, banks should model the stress impact on their AFS and FVO positions, the impact on PVA for positions held in the Banking Book and the impact on investment banking revenues and costs for each year of the stress scenario. Further details on this are provided in the relevant sections of this annex.

In relation to market risk, counterparty credit defaults, XVA movements and PVA movements on Trading Book positions, banks should assume that all losses are incurred in the first year of the stress. This is because losses on trading activities would typically be concentrated in the early part of a stress scenario, since market prices tend to reflect worsening conditions relatively quickly.

The allocation of losses over the five years of the ACS stress scenario is summarised in the table below.

Losses	2017	2018	2019	2020	2021
Market risk	100%	0%	0%	0%	0%
Counterparty credit risk losses	100%	0%	0%	0%	0%
Stressed XVA	100%	0%	0%	0%	0%
Stressed PVA (Trading Book)	100%	0%	0%	0%	0%
Stressed PVA (Banking Book)	Gains/losses on these positions to be calculated in each year of the stress scenario.				
Other Fair Valued Items	Gains/losses on these positions to be calculated in each year of the stress scenario.				
Revenues and Costs	Gains/losses on these positions to be calculated in each year of the stress scenario.				

Consistent with the stress-test results only being collected at an annual frequency, allocations within quarters are not required. However, the intra-year distribution may impact the timing of any assumed management actions, and as a point of reference banks should equally distribute the full year losses across the four quarters and take this as a floor to possible actions. Banks should then motivate their actions by reference to the liquidity horizon of the positions, and the evolution of the underlying market as represented in the traded risk and macroeconomic scenarios, subject to this floor.

For example, in a real period of market stress, liquid market risk losses may manifest in only a short interval of a few days but structural liquid and illiquid losses will be incurred over several quarters. Uncollateralised counterparty losses are subject to one year shocks because it is expected these defaults will not occur immediately but only on a lag in quarter four. As a result, the losses incurred in the first year of the stress event may be weighted towards the latter end of the first year of the stress rather than being equally distributed across the quarters. The timing of any management actions that are necessitated by these losses are therefore expected to be late in the first year. An action should not be motivated by an allocation of losses to quarter one that is larger than would occur under an equal-quarters loss allocation.

T3 Market risk stress

T3.1 Position types

Banks' Trading Books comprise trading positions of varying liquidity. As was apparent in the global financial crisis, the most illiquid positions can inflict the greatest damage to banks' P&L and capital resources. For this reason, banks are expected to clearly identify illiquid positions and distinguish them from liquid positions.

For the purpose of the traded risk stress test, banks are requested to classify Trading Book positions into three categories:

1. **Liquid positions** are defined to be those which would take two weeks or less to liquidate or hedge under the stress scenario;

2. **Illiquid positions** are defined to be those that would take more than two weeks to liquidate or hedge under the stress scenario. This longer liquidation period may arise due to the bespoke features outlined in Section T3.6; and

3. **Structural Liquids** is a further designated position type that is intended to capture positions which, although possibly reduced or neutralised when an adverse stress scenario has its initial impact, may need to be subsequently reopened in order to preserve a bank's ability to provide financial products in a particular market, for example market-making positions. By virtue of reopening such a position, a bank exposes itself to further losses associated with further adverse market movements. The bank's financial and RWA projections, and any suggested management actions, should be consistent with the existence and sizing of these positions.

Stresses applied to Structural Liquids and Illiquids are incremental to the Liquids stress test.

T3.2 Assessment of position liquidity

Banks are expected to make their own assessments of the liquidity horizons of their positions. General guidance on the

degree of market liquidity that characterises the stress scenario is provided in the Key Elements. More specifically, banks should judge how quickly they would be able to exit positions in view of likely market trade volumes under the stress scenario; however, banks should not assume a liquidity horizon shorter than one day. The Bank will assess banks' judgements regarding the liquidity of their traded positions.

T3.3 Calibration of risk factor shocks

The risk factor shocks that comprise the traded risk scenario are included in Variable paths for the 2017 stress test and in the 'Traded risk shocks' tab of the Traded risk scenario for the 2017 stress test. The Bank is specifying a core set of risk factor shocks that are intended to induce an overall shock to the entire set of in-scope positions. The Bank has specified a number of key risk factor shocks in each material geography and market to provide a secure foundation for the elaboration of the stress scenario in terms of all risk factors that would drive banks' P&L. Moreover, risk factor shocks are specified for a range of different liquidity horizons.

However, the risk factor shocks provided by the Bank are unlikely to include all risk factors to which banks are exposed, and so banks are expected to identify other risk factors that would contribute to their P&L under the stress scenario and to calibrate shocks for these risk factors. These risk factors should be identified based on banks' understanding of the material risk factors that would be expected to drive P&L under the stress scenario. Further, these additional risk factor shocks should be calibrated with reference to the risk factor shocks and scenario narrative that have been provided by the Bank. If this proves insufficient, banks should gauge the severity of shocks applied to these factors with reference to the worst market moves observed in the historical periods per region detailed in the following table.

Geographical region of positions	Historical period
Asia and Emerging Markets	2008 H2
Europe excluding United Kingdom	2011 H2
United Kingdom	2008 H2
United States	2008 H2
FX (globally)	2015 H2

The Bank has provided a separate reference period for the FX asset class; this overrides the other periods in the table above and applies globally to that asset class.

Daily, two-weekly and monthly shocks can be directly sampled from these half-year periods to identify the worst shocks. To identify the worst yearly shock, banks should calculate the yearly shock as at each day of the specified half-year period, by subtracting the value on the given day from its value one year prior, and then choose the worst such shock from this set.

Whether market risk factor shocks are provided by the Bank or identified and calibrated by banks themselves, banks should apply the shocks appropriate to the liquidity of each position. The Bank will assess the appropriateness of the shocks that banks apply to their traded positions.

When applying risk factor shocks to any part of their portfolios, banks should consider whether the resulting losses are realistic. Where the profit or loss is material and unrealistic banks should highlight this and provide a realistic assessment of stress results (eg where the size of a position under stress would exceed limits and necessarily be reduced or hedged).

The remaining parts of this section describe the approach that banks are expected to take in the calculation of loss per position type in greater detail.

T3.4 Liquids stress

Having identified all the risk factors that drive the P&L of liquid portfolios, banks should apply the risk shock (whether supplied by the Bank or calculated by the banks themselves) appropriate to the liquidity of each risk factor and thereby obtain the total loss generated by liquid portfolios under the stress scenario. This is to be reported in the 'Liquids' column of the 'Totals' tab in the 'Market Risk Stressed P&L' template. The total loss should be disaggregated and reported at the level of granularity specified in the template, which is by overall asset class, such as equity or interest rates.

T3.5 Structural liquids stress

Structural Liquids positions may suffer a loss at the onset of a stressed market environment. This is likely to cause a bank to reduce its inventory in the associated products. However, for the franchise reasons noted in Section T3.1, such positions may be reopened and thereby expose the bank to further losses associated with adverse market moves later in the stress scenario. Banks are expected to take due account of this exposure in building their financial and RWA projections under stress over year one and in calculating the loss sustained by these structural liquid positions under the scenario. The approach banks are expected to take is detailed as follows:

- Banks should identify desks or position types that are significant for strategic reasons, eg they require a minimum level of inventory in order to maintain a credible market-making franchise. For example, this could be a bond or swaps market-making desk whose relative standing in the market (as indicated by rankings or otherwise) needs to be preserved;

- For each such desk or position type, and the risk factors they are exposed to, banks should identify the risk factor that typically has the greatest market risk and identify a typical level of exposure to it. This may coincide with the value as

of the effective date or be a representative trailing average calculated as of the effective date;

- As the exposure will be present throughout year one, albeit potentially run down and replenished throughout on a rolling basis, it is reasonable to consider that a longer liquidity horizon, and as a result a larger shock should be applied to this position. This is because even though the position could in principle be liquidated faster, the size of the position is not discretionary because of its strategic importance for the overall franchise. Therefore, the loss should be calculated by following a two stage procedure as follows.

- In stage one the loss should be estimated by applying the risk factor one year shock to the typical structural liquid exposure and adding together the losses from each of the structural liquids identified. The one year shock should not to be downscaled to account for the proportion of the shock already suffered in the Liquids stress (eg if the risk factor has a one day liquidity horizon and the one day shock is 20%, while the one year shock is 30%, the Structural Liquids shock to be applied is 30% and not 30% minus 20%). The rationale for this is that the overall size of the one year shock is used as a proxy measure to capture the effect of multiple repeat losses and also to account for any significant deviations in exposure away from the typical level.

- In stage two, banks should assess whether there are any material artefacts in the loss that make it unrealistic. For example, material gains that would not occur in a real stress and are a by-product of using a point in time stress approach. When identifying such artefacts banks should consider, but not be limited to, the following:

  – Significant differences between the inventory size on the effective date and the typical size;

  – Changes to the P&L if the one-year shock were to be realised over the period of several days, rather than instantaneously;

  – The cost of re-establishing positions at (increasingly) stressed levels over the course of a year; and

  – Whether option positions would be re-established at current strikes as the stress progresses.

As an example, if a firm expects to be persistently carrying a certain amount of short-dated variance swap or option risk with an average expiry of three months then the application of a one year shock with no offsetting adjustments would not be realistic. The bank should consider the instances where it would have to rollover the three month position and the fact that the purchase price may be increasing, and use this to adjust the one year shock results.

It is not considered necessary at the current time for banks to model the detailed intra-year profile of risk to combat the artefact problem. However, banks should assess the results for the existence of material artefacts, identify and report them in their submissions, and make approximate adjustments for their effect. The Bank does not expect banks to be generating large gains from structural liquids.

T3.6 Illiquids stress

The loss sustained by each portfolio of illiquid positions should be identified separately and reported in the Illiquids column of the 'Totals' tab in the market risk template. Banks should clearly articulate their approach to the identification of illiquid portfolios. As noted in Section T3.1, a position is designated as illiquid if it is likely to take more than two weeks to liquidate or hedge under the stress scenario. For guidance purposes, examples of illiquid positions are provided as follows:

- Positions that would take longer than two weeks to liquidate or hedge, whether complex or not. This could, for example, include a corporate bond held in large size relative to the amount of the bond in issue;

- Positions for which there are only thin or one-way hedging markets available, and so the ability to ascribe a liquidity horizon to the position may be compromised;

- Positions that are difficult to value and consequently may have significant non-modelled characteristics that are not captured in the stressed value such as legal enforceability risk and rating downgrade contingencies; and

- Positions for which values may be modelled, but with significant uncertainty.

Banks should articulate their approach when calculating the Illiquids stress-test loss in sufficient detail to put the Bank in a position to understand, in respect of each illiquid portfolio:

- The nature of the positions that comprise the portfolio;
- The risk factors that drive portfolio P&L;
- The risk factor shocks utilised (and how they were calibrated to be consistent with the scenario);
- The details of the stress loss calculation applied;
- The loss outcome itself; and
- Which trading desk manages the portfolio.

In identifying the risk factors that drive P&L of illiquid portfolios and in calibrating the corresponding risk factor shocks, banks should take due account of:

- The risk factor shocks and scenario narrative published by the Bank;[1] and

- The market structure and dynamics for the products that comprise the illiquid positions. Banks are expected to take into account that illiquid product valuations are heavily influenced by other broker-dealer activity, and to reference the market dynamics in the historical calibration periods given in the table in Section T3.3.

As with structural liquids, banks should review their results for material artefacts and apply appropriate adjustments to these. The Bank does not typically expect banks to generate large gains from Illiquids in the stress.

T3.7 Issuer default

The market risk template includes a tab relating to 'Issuer Default' losses. Such losses would be associated with those counterparties identified as defaulting in the counterparty credit risk stress described in Section T4.[2] That is, if a counterparty were to default under the counterparty credit risk stress, then any issuer exposure to that name arising in the Trading Book (from bonds, equities, traded loans, and derivatives where the defaulting counterparty is referenced as an issuer, eg CDSs) should also be assumed to default and be reported in the 'Market Risk Stressed P&L' template.

T3.8 Bid/offer reserve

Banks are expected to calculate a bid/offer reserve change under stress. This reserve is intended to measure the cost of exiting their positions.

Banks should assess the impact on bid/offer spreads arising from the Liquids stress, applying the level of granularity that they would apply to their own internal analysis and using their own netting method. The historical calibration periods used to determine the bid/offer increases should be the same as the periods noted in Section T3.3. Bid/offer increases should be calculated as averages over those stressed periods for each of the regions. In order to maintain scenario consistency, other averaging, for example over unrelated periods or combining multiple periods, should not be used. The loss should be reported in the 'Market Risk Stressed P&L' template.

In addition, banks are expected to include in their assessment of specific illiquid positions any changes in bid/offer spreads and any pricing model valuation adjustments.

T4 Counterparty risk default stress

This section discusses counterparty default loss, which comprises two parts: portfolio-wide default losses across particular cohorts of uncollateralised sub-investment grade clients, and additional losses arising from the default of specifically named, large counterparties that are deemed to be vulnerable to default under the stress scenario. The Bank will carefully assess the appropriateness of banks' choices as to which counterparties to default under the stress scenario (both in terms of the sub-investment grade sector and specific names).

T4.1 Definition of vulnerable counterparties

The selection of vulnerable counterparties requires expert judgement regarding the creditworthiness of counterparties, and banks are expected to consider multiple factors in making this determination. For example, banks should consider both the current creditworthiness of counterparties, and how that creditworthiness might deteriorate under the stress scenario. Banks should also consider the nature of the exposure and, in particular, whether it exhibits wrong-way risk. Therefore, the selection of vulnerable counterparties should not be based solely on simple application of measures such as banking book PDs (or external ratings), but should also take into account idiosyncratic credit factors arising from the stress scenario itself.

T4.2 Portfolio default losses

Regarding portfolio losses, banks are expected to:

- Identify their most significant geographical cohort of uncollateralised sub-investment grade exposure under the stress scenario.[3] The significance of a cohort should be judged in terms of both the materiality and the vulnerability of the exposure under the stress scenario;

- Estimate a cohort default loss that would arise from a portion of this portfolio defaulting at the end of the first year of the stress scenario, and with no further losses beyond the one year point. Banks should estimate this cohort default loss as follows:

- Calculate the stressed exposures of the counterparties in the cohort by applying one-year market risk factor shocks.

- Calculate the stressed expected loss, using market-implied stressed Probability of Default (PD) and Loss Given Default (LGD) rather than those used to project impairments in the Banking Book.

- Using the stressed PD implied from the cohort's stressed expected loss, estimate the proportion of pre-stress CVA that relates to the defaulted portion of the overall cohort

(1) As described in the documents 'Key elements of the 2017 stress test', 'Variable paths for the 2017 stress test', and the 'Traded risk shocks' tab of 'Traded risk scenario for the 2017 stress test.
(2) Counterparty credit default losses should be reported via the 'Counterparty Credit Risk Losses' template.
(3) For the avoidance of doubt, the counterparty country or region allocation is to be determined using the 'ultimate risk' approach that applies to all credit exposures for this year's stress test, in line with the definition of 'Country of Exposure' of the STDF dictionary.

and deduct this from the stressed expected loss to arrive at the cohort default loss.

T4.3 Specific name default losses

Banks are also expected to default a number of specifically named, vulnerable counterparties under the stress scenario. Details of the minimum number of counterparties that banks should default will be provided as part of the traded risk scenario. The approach to determining the default loss varies according to whether a bank's exposures to a counterparty are collateralised or uncollateralised.

For uncollateralised counterparty losses, banks should:

- Estimate stressed current exposure by applying one-year market risk factor shocks and assuming the default occurs at the end of the one-year period (and with no additional losses beyond the one-year point);
- Identify and rank their top exposures under the stress scenario as detailed in the traded risk scenario. Banks should rank counterparties by stressed current exposure;
- Identify and default vulnerable counterparties from these rankings according to the minimum numbers set out in the traded risk scenario. A bank should default more than the minimum of counterparties if it deems that more than the minimum number is likely to default under the scenario; and
- For calculating default losses, use the severity rate from the Banking Book analysis to inform their choice of LGD, with appropriate consideration of the specific name being defaulted.

For collateralised counterparty losses, banks should:

- Assume the counterparty does not post any additional margin or honour existing margin calls that are still unpaid;
- Assess the total time to close out all the open positions for each of the counterparties, including allowance for any delays in exercising collateral rights. Depending on the strength of the collateralisation this close out period may not be the same for all counterparties;
- Apply market risk shocks to the exposures and collateral that are appropriate to the close out period identified;
- Calculate stressed current exposure for each counterparty;
- Rank the top exposures as detailed in the traded risk scenario. Banks should rank their counterparties by stressed current exposure (net of stressed collateral);
- Identify and default vulnerable counterparties from these rankings according to the minimum numbers set out in the traded risk scenario; and
- Note that banks should use the severity rate from their Banking Book analysis to inform their choice of LGD, with appropriate consideration of the specific name being defaulted.

Where a counterparty is treated as having defaulted, no additional impact on the market due to the default of that name needs to be modelled, and the pre-stress CVA should be deducted from the default loss. For all counterparties chosen to default, banks should consider the impact on other templates consistent with guidance in Section T3.7 and Section T7.1.

T5 Stressed XVA

Banks' fair value positions are subject to various types of valuation adjustment. It is likely that these valuation adjustments will be impacted by the traded risk stress scenario, and so the following sections provide guidance to banks on how these adjustments should be modified under the stress scenario. The Bank has provided a new XVA template to capture a number of fair value adjustment impacts together, removing them from either implicit or explicit capture in other templates as noted in the accompanying template guidance.

T5.1 Credit Valuation Adjustment (CVA)

In their trading activities banks enter into derivative contracts with counterparties. If a derivative contract gives rise to credit exposure for a bank — in other words, the contract has produced or is predicted to produce a mark-to-market profit for the bank — then there is a risk that the counterparty will default and fail to pay what is owed under the contract. The Credit Valuation Adjustment measures the negative adjustment to the contract's value today in order to take account of this risk of default by the counterparty. Under the traded risk stress scenario, credit quality will deteriorate for some counterparties and credit spreads will widen and so the CVA should be modified to reflect this and other aspects of the stress scenario.

CVA should be reported in two traded risk templates, with consistency between the entries:

- The 'Counterparty Credit Risk Losses' template should show CVA before and after the application of the risk factor shocks and exclusive and inclusive of all associated hedges (credit and market risk hedges); and
- The 'Stressed XVA projections' template should report the change in the CVA under the stress both with and without associated hedges.

Banks are asked to note the following when calculating the CVA impact:

- When calculating the adjustment to CVA to reflect the impact of the stress scenario, banks should maintain consistency with the calculation of CVA in their accounts. Specifically, banks should use either market-implied or actual measures of PD and LGD, in line with their accounting CVA;

- Shocks to the risk factors that drive CVA should be calibrated to a one-year liquidity horizon for both CVA and the associated credit and market risk hedges in place at the effective date, regardless of the frequency of hedge-adjustment used by the CVA hedging desk;

- For collateralised counterparties, banks should assume the counterparty continues to post additional margin;

- Banks should pay particular attention to the more complex CVA risks, such as rate/credit-spread cross gamma and index/single-name proxy basis. Further to this, in specifying the credit-spread shocks for individual counterparts, banks should conservatively explore how proxy hedges may react differently from the underlying credit and how the maturity of hedges may differ from the underlying exposures.

- Banks should decompose the aggregate CVA loss in their accompanying submissions so that the incremental contributions of these bespoke illiquid CVA risk factor shocks are apparent; and

- Banks should provide detailed commentary on the resulting CVA adjustment to support the calculations that they have made.

T5.2 Debit Valuation Adjustment (DVA)

In symmetry with CVA, which adjusts valuations to account for the risk of counterparty default, the Debit Valuation Adjustment (DVA) adjusts valuations to reflect variations in a bank's own credit quality.

The approach that banks are expected to follow in respect of DVA under the stress test requires that any impact of DVA is not recognised in the ultimate bottom line loss reported in traded risk templates. This is because regulatory capital treatment assumes that any DVA benefit cannot be realised and so any impact of DVA is not recognised in the calculation of regulatory capital resources. Nonetheless, because of the complications of how DVA is related to and managed alongside FVA and particularly in circumstances where a bank is hedging its DVA, banks are asked to report DVA gross in the XVA template and show the explicit deduction taken to remove the DVA in the bottom line loss number. Hedges are also separately included.

T5.3 Funding Valuation Adjustment (FVA)

The stress scenario will impact a bank's own cost of funding and should induce a funding loss, to the extent that funding costs are partly or wholly reflected in the bank's mark-to-market accounting. Banks should ensure that this funding loss is included in the XVA template. To determine the loss, the bank should estimate its stressed funding curve in line with the overall narrative and severity of the macroeconomic scenario, and with the funding shocks supplied in the Traded risk scenario. This stressed funding curve should then be used to determine any fair values that are a function of it, in line with banks' existing valuation methodologies.

To the extent that there is also a PVA against funding costs (specifically, the Investment and Funding Cost component of PVA), then there may be additional capital erosion due to changes in PVA under the stress scenario. This additional PVA amount should be calculated according to banks' existing methodologies and reported in the Stressed PVA template. Further details are provided in Section T6.

T6 Stressed Prudent Valuation Adjustment (PVA)

The scope of the traded risk stress test is fair valued positions. However, fair value may fall short of what would be considered prudent in the context of regulatory capital resources. For example, when valuation of a security is subject to a large degree of uncertainty — perhaps because liquidity in the market for the security is thin — fair value would require the security to be marked within the range of possible prices for the security, whereas prudence would require the security to be marked at a lower (upper) estimate of price if the position were long (short).

As the detailed requirements for banks to produce a PVA have been introduced recently, banks are expected to report only changes to the Investing and Funding Cost component of PVA,(1) via the 'Stressed PVA' template. This ensures that a material impact from stressed PVA is captured. In future years, the Bank may extend the scope of the traded risk stress test to include other parts of PVA.

Changes to Investing and Funding Cost should be partly captured in the XVA template, given that a bank's own cost of funding increases in the stress scenario, and this will alter the accounting mark-to-market valuations. However, banks may be carrying PVA on the part of the Investing and Funding cost that is not currently recognised in accounting value, and the PVA stress test is intended to capture this incremental amount.

(1) Also known as the Investing and Funding Costs Additional Valuation Adjustment (AVA).

The approach for stressing funding costs is identical to that laid out in Section T5.3 and banks should use the same stressed funding curve. The PVA should be calculated according to banks' existing methodologies and reported in the 'Stressed PVA' template.

For Trading Book related losses (ie PVA in relation to FVTPL Trading Book positions), the resulting loss should be allocated to year one with no recovery assumed in subsequent years. For Banking Book related losses (ie PVA in relation to AFS or FVO positions), the resulting losses should be projected over the scenario horizon in accordance with the funding conditions implied by the macroeconomic and traded risk scenarios.

T7 Other Fair Valued Items

The AFS & FVO template has been renamed 'Other Fair Valued Items projections' in the 2017 stress test. This provides a more precise distinction between templates that are directly linked to trading activity and those that mostly capture fair valued positions that are not held with trading intent. It also emphasises that the content of this template is meant as a comprehensive balancing item to capture a wide variety of fair valued items that might not otherwise fit in, or be excluded from, other traded risk templates. Banks should therefore seek to comprehensively populate this 'Other Fair Valued Items' template.

T7.1 AFS and FVO losses

Losses for AFS and FVO positions under the stress scenario should be calculated with respect to each year of the scenario. Banks should revalue positions for each year end.

In constructing the stress scenario to be applied to the AFS and FVO positions, banks are expected to refer to:

- The macroeconomic scenario, published in the Key Elements; and Variable paths for the 2017 stress test, which provide full paths for a small number of the market risk factors relevant to AFS and FVO positions; and

- The 'Traded risk shocks' tab of the Traded risk scenario for the 2017 stress test, which provides more detailed risk factor shocks for the first year of the scenario, for more of the risk factors relevant to AFS and FVO positions.

Banks are expected to infer from these parts of the Bank's stress scenario the complete scenario horizon that should be applied to AFS and FVO positions.

Calculation of losses for the AFS and FVO positions should be conducted in two stages:

1. Banks should revalue the positions they held as at 31 December 2016 as at each year end, and thereby produce gain or loss projections for each year of the scenario. In calculating the valuations for each year, banks should not age nor change any of the positions. For instance, if a bank holds a ten-year gilt this position should be revalued each year-end as a ten-year gilt; it should not be re-valued in year one of the stress scenario as a nine-year gilt.

2. For businesses where a bank makes material changes to the balance sheet in the stress scenario in such a way as to impinge on the AFS and FVO books, the bank should make corresponding adjustments to the gains or losses calculated under step 1. However, banks should not adjust individual positions in the AFS and FVO books.

Where banks wish to make material changes to the weightings of the constituents of their liquidity buffers, these should be identified as a management action and their impact noted in the unstructured data submission.

Where banks have in place written procedures requiring the sell down of foreign currency gains or losses from AFS/FVO positions, then banks should follow these procedures in their stress-test calculation. This is the only type of rehedging permitted in stress-testing AFS/FVO positions.

Note the following points of clarification regarding the treatment of the default risk of AFS and FVO positions:

- The 'Counterparty Credit Risk Losses' template only covers derivative and Security Financing Transaction (SFT) counterparty defaults, and excludes both unsecured lending and issuer defaults on bond and equity holdings. Positions where the loan is designated at fair value under FVO are also excluded. No default losses should therefore be reported in the Counterparty Credit Risk template for AFS and FVO assets. These should instead be reported in the 'Issuer Default Loss' tab of the 'Other Fair Valued Items';

- However, counterparty default losses on derivative hedges to AFS and FVO items should be reported in the Counterparty Credit Risk template, as this template covers all Trading Book and Banking Book derivatives; and

- Unlike market risk losses on AFS and FVO positions, which are allocated across the full five years of the stress scenario, default losses for AFS and FVO positions should be allocated to year one of the stress scenario.

For private equity investments in AFS and FVO, banks should as a starting point consider the methodologies used in their current valuation approach, for example their pre-existing choices of comparable assets (eg listed securities), and any adjustments already taken into account for the difference between the position held and a comparable listed asset.

Application of the stress scenario may require approximations such as the use of betas to simplify one or more of the steps in the valuation approach, when applied under the stress scenario. Where these approximations are employed, they should be calibrated to the stressed historical reference periods identified in Section T3.3, and clearly identified in the unstructured data submission. Banks' methodology should also consider any impairments under the stress scenario.

T7.2 Other FVTPL assets

Banks should use this category to capture any other fair valued items that have not been otherwise captured. All underwriting commitments should be included in this category. This includes equity, bond, loan and pre-securitisation syndication pipelines that are FVTPL, as well as all FVTPL hedges against these commitments. In this context, loan commitments refer to conditional agreements to proceed to full loan documentation, where the commitment has a fair value, but is not yet fully documented or funded. An example of equity commitment risk would be the underwriting of rights issues. Pre-securitisation syndication pipeline refers to whole loans warehousing, gestation repo, or other pre-issuance activity where the associated exposure is FVTPL and not subject to amortised cost accounting; if accounted for at amortised cost, then the exposures should be excluded.

T8 Revenue and cost projections

Banks should provide baseline and stress scenario revenue and cost projections for IFRS 8 operating segments that include investment banking activities such as trading and capital markets activity, and also for non-core segments if relevant. This is in the form of FINREP compliant income statements for each year of the scenario. Investment banking activity is defined as one or more of the following items:

- **Markets** cash and derivatives trading activity including for example products such as FX, Rates, Credit, Equities, Commodities and Prime Finance.
- **Capital Markets** activity such as Advisory, Debt Capital Markets, Equity Capital Markets, and Syndicate desks; and
- **Banking book** activity that is readily identifiable inside the bank as supporting Markets and Capital Markets activity, and which is internally managed alongside it with this exclusive aim eg a dedicated relationship lending book for large corporate or institutional clients. If there is no such clear segregation then this activity can be omitted.

Reconciliations are required between the income in the segments reported in the traded risk templates and income information supplied in other non-traded risk templates eg at group level. Where material fair valued income is captured in segments not in traded risk templates, the balancing items need to be reported in the reconciliation section of the revenue and costs template so that the fair value percentage coverage of the revenue and costs template is evident.

The traded risk templates capture separate income statement information at a deeper level of granularity than these segments, narrowing on the investment banking activities in isolation and requesting product and geographical level splits of the FINREP income statement for these on a standalone basis to the extent they can be built. This is consistent with the need to challenge the underlying, bottom-up assumptions that have been used to build the baseline and stressed projections. Banks are expected to present the top level segment and these more granular views and to assign direct and indirect costs at a level that is consistent with their business as usual processes.

The income and expense projections should reflect the plausible execution of a bank's business plan under both the baseline and stress scenarios. The projections should be also consistent with the assumptions made for RWAs in baseline and stress.

Banks should assess and model the impact of the scenario on trading and capital markets activity separately, which may for example lead to specific regional assumptions about decreasing market volumes, and constraints on the amount of revenue that can realistically be earned from the high volatility trading environment during the early onset of the stress. Simplistic forecasts that are not motivated in line with the scenario or are built without detailed supporting evidence should not be used. This includes cases where the projections return to the pre-stress base case rapidly after the initial stress has passed. Banks should not assume an increase in revenues, as was observed in some business lines in the years following the Lehman default, and the bid/offer widening assumptions used to calculate the bid/offer stress in Section T3.8 do not apply. Banks should also justify the use of any caps or floors in their approach eg in maintaining certain revenues flat at year zero levels with no modelled decreases. Banks should assume that there is no reduction in the aggregate investment banking sector capacity as a consequence of the stress scenario.

T9 Risk-weighted assets (RWA) projections

Banks should submit information on their starting RWAs (ie as at the effective date defined in Section T2.3) and projected RWAs under the baseline and stress scenarios for each year end date over the time horizon via the following two structured data templates:

- 'Market Risk and CVA RWA'; and
- 'Counterparty Credit Risk RWAs'.

The 'Market Risk and CVA RWA' template captures starting and projected capital requirements for both market risk and CVA risk, while the 'Counterparty Credit Risk RWAs' template captures starting and projected capital requirements for counterparty default risk. Other traded risk related components of RWA (such as settlement risk and large exposures) are not captured in the traded risk templates, but are captured in other templates.

T9.1 General guidance

The starting values as at the effective date should reflect reported year end values corresponding to the prescribed time period of the stress test. RWA projections should:

- For both the baseline and stress scenario, be consistent with the scenario as at the year end calculation dates;
- For the stress scenario, reflect a plausible execution of a bank's business plan under the stress scenario (including the bank's ability to execute its business plans). Otherwise, the projections should reflect plausible variation to the bank's business plan, where these variations are clearly identified; and
- For both the baseline and stress scenario, be consistent with balance sheet and income and expense growth assumptions. Specifically, an increase in projected balance sheet size should be reflected in an increase in RWAs. Similarly, a bank's plans to increase risk appetite should be reflected in an increase in RWAs.

Banks should provide a narrative for their baseline and stress scenario RWA projections. The narrative should be produced at a level of granularity that allows for a meaningful explanation of the trend for each reported component of Market Risk, CVA and CCR RWA. In particular, the narrative should explain:

- How the material Market Risk, CVA and CCR RWA trends are consistent with the revenue and cost projections, as well as the firm's risk appetite over the scenario horizon;
- The impact on Market Risk, CVA and CCR RWAs for each of the planned management actions; and
- Any other business model considerations used to project Market Risk, CVA and CCR RWAs which have not been explicitly mentioned elsewhere.

T9.2 Specific guidance

Further details of the methodology that banks are expected to apply in the production of RWA projections under the baseline and stress scenarios are provided in the following table:

Risk type	Capital component	Expectations regarding RWA projections
Market risk	Structural FX	To the extent that the scenario includes sustained and significant changes in exchange rates that are relevant to material positions held by a bank (eg USD/GBP), the risk and capital measures are expected to be adjusted accordingly.
	Standardised approach	RWAs calculated under standard rules approaches are expected to increase in line with projected growth in business.
	Value-at-Risk (VaR) and Stressed VaR (SVaR)	Projected combined (VaR and SVaR) capital components should increase to reflect increases in scenario volatility. Where projected VaR calculations are not based on a recalculation under scenarios, the Bank's expectation is that combined VaR- plus SVaR-based capital requirements increase to at least twice current SVaR when the scenario is characterised by an increase in market volatility.
	Risk Not in VaR (RNIV)	Banks should produce RNIV measures consistent with the scenario. RNIVs calculated using a VaR-type methodology should be scaled in a comparable way to VaR under the scenario. Stress-test type RNIVs should be assessed for whether their calibration is consistent with the traded risk stress scenario and, if inconsistent, should be recalibrated appropriately.
	Incremental Risk Charge (IRC)	A bank should adjust its IRC capital measure to be consistent with the scenario and, at the very least, scale its IRC capital measure in a way that is consistent with the uplift in capital due to credit rating movements applied to comparable wholesale credit assets under the scenario.
	Comprehensive risk measure (CRM)	There is no expectation that modelled CRM-derived RWAs should increase as a result of the stress scenario if the standardised credit risk floor is binding. If the scenario results in losses against CRM positions, CRM RWAs should be reduced to reflect the loss in value of the positions.
	Trading Book securitisations	RWAs related to securitisations held in the trading book are considered as part of the securitisation stress test, not the traded risk stress test. If the market risk RWA submission includes trading book securitisations, this should be made clear and quantified to avoid double counting.
CVA risk	Overall	In respect of defaulted counterparties, there should be no corresponding reduction in CVA RWAs, as it should be assumed that the defaulted positions are replaced on a like-for-like basis. However, in respect of a highly material counterparty default (for example, the assumed default of a large uncollateralised counterparty), the potential decrease in CVA that this would occasion should be noted as a memo item.
	Standardised method	Other relevant quantities that are used to calculate the CVA charge using the standardised method, for example exposures and projected credit rating downgrades under the scenario, should inform the projected capital component. Increases in credit risk capital due to increases in risk weights arising from downward credit migration are expected to be reflected in the weights used to calculate CVA RWAs using the standardised method.
	Advanced method	Stressed measures of other relevant quantities, namely the stressed VaR and stressed exposure calculations, should inform the stressed CVA RWA. It is expected that the VaR component of CVA approach is consistent with the market risk approach. It is expected that firms maintain the consistency between projected exposures used for CVA RWAs and counterparty credit risk RWAs as specified in the CRR. Where the scenario has an impact on credit spreads, this impact should be reflected in a change in the level of CVA RWAs.
Counterparty credit risk	Collateralised counterparties	For exposures calculated using the counterparty credit risk mark-to-market (MtM) method, there is no expectation that exposure will change since the add-ons used to calculate exposure do not change with the scenario and the MtM is offset by collateral for the purposes of RWA calculation. It is assumed that margin agreements with non-defaulting counterparties will perform and collateral is received accordingly. Since the Internal Model Method (IMM) exposure is the maximum of current and stressed measures, exposures are expected to increase if sustained market volatilities in the scenario are larger than those used to calibrate the Effective Expected Positive Exposure (EEPE) component of exposure. For the purpose of RWA calculation, it is assumed that margin agreements with non-defaulting counterparties will perform and collateral is received accordingly. It is also assumed that extended margin period of risk criteria are not triggered. Risk weights are expected to be adjusted in line with the credit risk RWA calculation for all scenarios.
	Uncollateralised counterparties	For exposures calculated using the counterparty credit risk MtM method, projected increases in position MtM should be incorporated into the exposure. For exposures calculated using the IMM method, projected increases in position MtM should be incorporated into the exposure. Since IMM exposure is the maximum of current and stressed measures, exposures are expected to increase if sustained market volatilities in the scenario are larger under the scenario than those used to calibrate the current and stressed EEPE component of exposure. Risk weights are expected to be adjusted in line with the credit risk RWA calculation for all scenarios.
	Treatment of unilateral accounting CVA under CRR Article 273(6)	Projected accounting unilateral CVA (as defined in CRR Article 273 para 6) that is deducted from exposures, should be consistent with the projected accounting unilateral CVA losses as at the end-of-year reporting dates and correspond to accounting unilateral CVA utilised for exposure at default (EAD) offset. The Bank permits banks that calculate counterparty level projected accounting unilateral CVAs to reduce EAD for the calculation of projected RWAs under the scenarios. Increased projected CVAs can provide RWA relief, if the bank calculates projected accounting CVA on a counterparty-specific basis. Otherwise, for the purposes of the RWA projection, the RWA-mitigating impact of increased projected accounting CVA would not be expected to be reflected in the projected RWAs.

Glossary

ACS – annual cyclical scenario.
AFS – available for sale.
AT1 – additional Tier 1.
AVA – additional valuation adjustment.
BES – biennial exploratory scenario.
CCyB – countercyclical capital buffer.
CDS – credit default swap.
CET1 – common equity Tier 1.
CLO – collateralised loan obligation.
CoE – cost of equity.
CRD IV – Capital Requirements Directive IV.
CRM – comprehensive risk measure.
CRR – Capital Requirements Regulation.
CVA – credit valuation adjustment.
DVA – debit valuation adjustment.
EAD – exposure at default.
EEPE – effective expected positive exposure.
FPC – Financial Policy Committee.
FVA – funding valuation adjustment.
FVO – fair value option.
FVTPL – fair value through profit and loss.
GDP – gross domestic product.
HtM – held-to-maturity.
IAS – International Accounting Standards.
IFRS – International Financial Reporting Standards.
IMM – internal model method.
IRB – internal ratings based.
IRC – incremental risk charge.
LAB – liquid asset buffer.
LGD – loss given default.
LTV – loan to value.
MDA – Maximum Distributable Amount.
MREL – minimum requirement for own funds and eligible liabilities.
MtM – mark-to-market.
NII – net interest income.
PD – probability of default.
PRA – Prudential Regulation Authority.
PRC – Prudential Regulation Committee.
PVA – prudent valuation adjustment.
RNIV – risks not in VaR.
RoE – return on equity.
RWA – risk-weighted asset.
SFT – securities financing transaction.
STDF – stress-test data framework.
SVaR – stressed Value-at-Risk.
VaR – Value-at-Risk.
XVA – X-valuation adjustment.