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Guidelines

on common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing

Consolidated version

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Executive summary

These guidelines, drawn up pursuant to Article 107(3) of Directive 2013/36/EU, are addressed to competent authorities and are intended to promote common procedures and methodologies for the supervisory review and evaluation process (SREP) referred to in Article 97 et seq. of Directive 2013/36/EU and for assessing the organisation and treatment of risks referred to in Articles 76 to 87 of that Directive. The guidelines cover all aspects of the SREP in detail; this is an ongoing supervisory process bringing together findings from all supervisory activities performed on an institution into a comprehensive supervisory overview.

These guidelines also aim at achieving convergence of practices followed by competent authorities in supervisory stress testing across the EU. They provide guidance with a view to ensuring convergence for supervisory stress testing in the context of SREP performed by competent authorities in accordance with Article 100 of Directive 2013/36/EU. These guidelines are issued partially to cover and update the EBA guidelines on institution's stress testing, which will be repealed and replaced by these guidelines, and partially on the basis of Article 100(2) of Directive 2013/36/EU to cover supervisory stress testing. It is noted that supervisory stress testing is established in Article 100 of Directive 2013/36/EU as an obligation of competent authorities independent and distinct from the official sector Union-wide stress test already foreseen since 2010 in the Article 22 of Regulation (EU) 1093/2010.

The common SREP framework introduced in these guidelines is built around:

- a. business model analysis;
- b. assessment of internal governance and institution-wide control arrangements;
- c. assessment of risks to capital and adequacy of capital to cover these risks; and
- d. assessment of risks to liquidity and adequacy of liquidity resources to cover these risks.

Regular monitoring of key indicators is used to identify material changes in the risk profile and to support the SREP framework. The specific elements of the SREP framework are assessed and scored on a scale of 1-4. The outcome of the assessments, both individually and considered as a whole, forms the basis for the overall SREP assessment, which represents the up-to-date supervisory view of the institution's risks and viability. The summary of the overall SREP assessment should capture this view; it should also reflect any supervisory findings made over the course of the previous 12 months and any other developments that have led the competent authority to change its view of the institution's risks and viability. It should form the basis for supervisory measures and dialogue with the institution.

These guidelines make a link between ongoing supervision, as addressed in Directive 2013/36/EU, and determining whether the institution is 'failing or likely to fail', as addressed in Directive 2014/59/EU. This is through the SREP assessment of the institution's viability, as measured by the overall SREP assessment and overall SREP score. The overall SREP score has four positive grades to be applied to viable institutions (1-4) and one negative grade ('F') indicating that the competent authority has determined that the institution is 'failing or likely to fail' within the meaning of Article 32 of Directive 2014/59/EU, which activates the procedure for interaction with resolution authorities stipulated in that Article.

These guidelines recognise the principle of proportionality by:

- a. categorising institutions (in four distinct categories) according to their systemic importance and the extent of any cross-border activities; and
- b. building a minimum supervisory engagement model, where the frequency, depth and intensity of the assessments vary depending on the category of the institution.
- c. recognising several types of stress testing ranging from simple portfolio level sensitivity or individual risk level analyses to comprehensive institution-wide scenario stress testing.

The minimum engagement model also helps to structure the dialogue with institutions to assess individual SREP elements and the overall SREP assessment.

These guidelines introduce consistent methodologies for the assessment of risks to capital and risks to liquidity, and for the assessment of capital and liquidity adequacy. This is essential both for achieving more consistent prudential outcomes across the European Union and for reaching joint decisions on the capital and liquidity adequacy of cross-border EU banking groups.

Background and rationale

The EBA is mandated to foster sound and effective supervision and to drive supervisory convergence across the EU arising from the requirements specified in Directive 2013/36/EU and more generally from its obligations under its founding regulation.

Article 107 of Directive 2013/36/EU addresses the consistency of supervisory reviews, evaluation and supervisory measures, mandating the EBA to draw up guidelines for competent authorities to specify, in a manner that is appropriate to the size, structure and internal organisation of institutions, and the nature, scope and complexity of their activities, the common procedures and methodologies for the supervisory review and evaluation process (SREP) and for the assessment of the organisation and treatment of the risks referred to in Articles 76-78 of that Directive. Additionally Article 100(2) of Directive 2013/36/EU empowers EBA to issue guidelines to ensure that common methodologies are used by competent authorities when conducting annual supervisory stress tests for SREP purposes.

In accordance with Article 16 of the EBA Regulation, the EBA issues guidelines addressed to competent authorities, with a view to establishing consistent, efficient and effective supervisory practices and ensuring there is common, uniform and consistent application of European Union law.

As such, the mandate covers common procedures and methodologies for the SREP as defined in Article 97 of Directive 2013/36/EU, building on the technical criteria listed in Article 98, including assessment of the organisation and treatment of risks. In particular, it is expected that the guidelines should cover overall risk management and governance arrangements (Article 76), the use of internal approaches for risk calculation (Articles 77 and 78), credit and counterparty risk (Article 79), residual risk (Article 80), concentration risk (Article 81), securitisation risk (Article 82), market risk (Article 83), interest rate risk arising from non-trading activities (Article 84), operational risk (Article 85) and liquidity risk (Article 86). Furthermore these guidelines cover supervisory stress testing for SREP purposes in accordance with Article 100, and supervisory assessment of the institution' own stress testing.

The supervisory review and evaluation process, and the wider Pillar 2 components of the Basel framework, vary to a fairly large degree globally and throughout the EEA. The transposition of the Basel framework into EU legislation in relatively general terms left room for various approaches to supervision, reflecting the wide variation in banking systems, national laws and supervisory models, resources and traditions across jurisdictions.

In interpreting the mandate of Article 107(3) of Directive 2013/36/EU, to 'further specify' common procedures and methodologies for the SREP, the EBA defines its primary objective as the drawing up of guidelines that improve the quality and consistency of SREP practices, and consequently of their outcomes.

This means that the observable effect of adoption of the guidelines should be that institutions with similar risk profiles, business models and geographic exposures are reviewed and assessed by competent authorities consistently and subject to broadly consistent supervisory expectations, actions and measures, where applicable, including institution-specific prudential requirements.

To achieve this objective, in addition to specifying SREP procedures and methodologies as required by Directive 2013/36/EU, these guidelines also provide guidance for subsequent supervisory measures that a competent authority should consider, including prudential measures as specified in Directive 2013/36/EU.

The aim of the guidelines is to harmonise the SREP framework, which currently varies significantly at the national level, as far as possible, but not to impose restrictive granular SREP procedures and methodologies, as this would not be seen as in line with the level 1 text mandating the issuing of guidelines rather than of binding technical standards. In any case, these guidelines, as any other EBA guidelines, should be seen as guiding and not as restricting or limiting supervisory judgment as long as it is in line with applicable legislation.

Competent authorities should, however, apply these guidelines in a way that will not compromise the intended harmonisation and convergence thereof, particularly ensuring that higher supervisory standards are implemented across the EU. Additional procedures or methodologies employed by competent authorities should not compromise the harmonised overall SREP framework as provided in these guidelines. These additional procedures and methodologies should satisfy the requirements of high supervisory quality and should not encourage regulatory arbitrage.

Article 107 of Directive 2013/36/EU also mandates the EBA with monitoring and assessment of convergence of supervisory practices with particular emphasis on SREP practices and methodologies. Such convergence monitoring and assessment activities should also lead to the EBA keeping these guidelines up-to-date that results, and the update of these guidelines in 2017 also reflects the EBA findings from the convergence monitoring and assessment.

These guidelines set out the scope of application of the common SREP framework, taking into account the general framework and principles defined in Regulation (EU) 575/2013 and Directive 2013/36/EU. Competent authorities may apply these guidelines by analogy to other types of financial institutions not covered by Regulation (EU) 575/2013 at their own discretion.

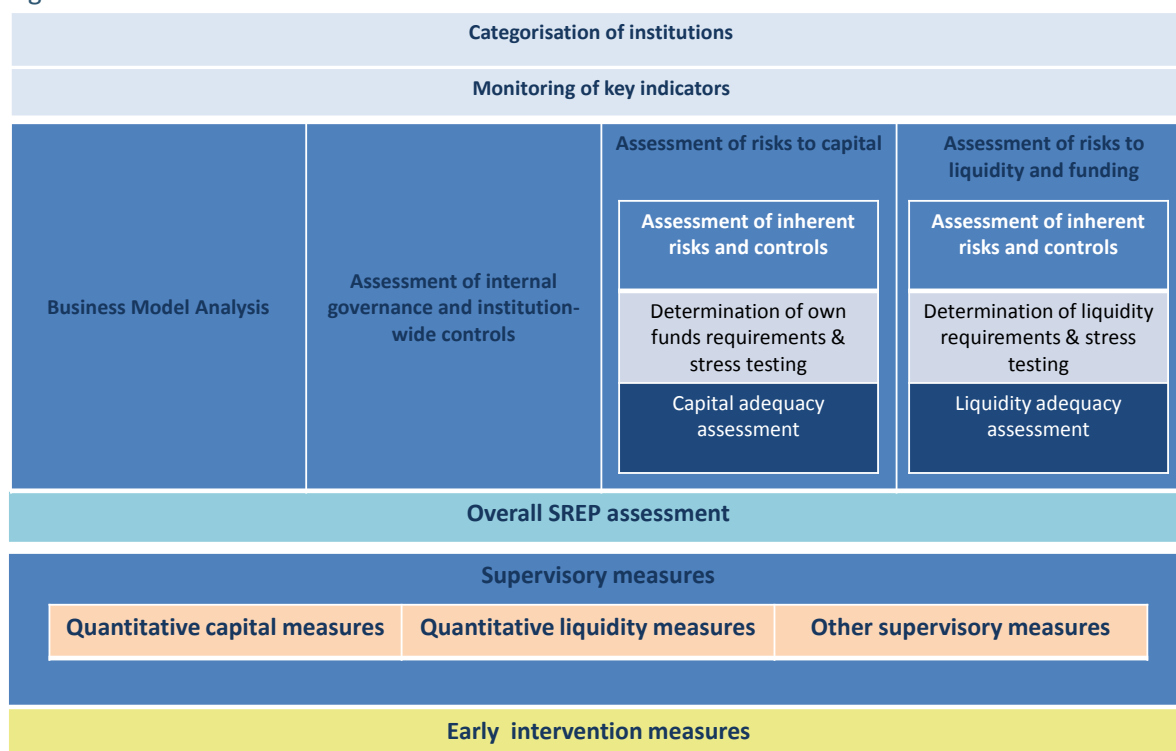
The common SREP framework

The common SREP framework introduced in these guidelines is built around the following major components (see also Figure 1):

1. categorisation of the institution and periodic review of this categorisation;
2. monitoring of key indicators;
3. business model analysis;

4. assessment of internal governance and institution-wide controls;
5. assessment of risks to capital;
6. assessment of risks to liquidity and funding;
7. assessment of the adequacy of the institution's own funds;
8. assessment of the adequacy of the institution's liquidity resources;
9. the overall SREP assessment; and
10. supervisory measures (and early intervention measures where necessary).

Figure 1. Overview of the common SREP framework



- The categorisation of institutions into four categories should be based on their size, structure, internal organisation and scope, and on the nature and complexity of their activities. The categorisation should therefore also reflect the level of systemic risk posed by an institution. For the proportionate application of these guidelines, the frequency, intensity and granularity of SREP assessments, and the level of engagement, should depend on the institution's category. The categorisation of institutions also supports the introduction of the minimum engagement model, which should drive the dialogue with an institution for the purposes of assessing individual SREP elements and of the overall SREP assessment.
- Regular monitoring of key financial and non-financial indicators supports the SREP. It should allow competent authorities to monitor changes in the financial conditions and risk

- profiles of institutions. It should prompt updates to the assessment of SREP elements where it brings to light new material information outside of planned supervisory activities.
- Without undermining the responsibility of the institution's management body for organising and running its business, the focus of the business model analysis (BMA) should be the assessment of the viability of the institution's current business model and the sustainability of its strategic plans. This analysis should also assist in revealing key vulnerabilities facing the institution that may not be revealed by other elements of the SREP. Competent authorities should score the risk to the viability of an institution stemming from its business model and strategy keeping in mind that the aim of the BMA is not to introduce supervisory rating of various business models.
 - The focus of the assessment of internal governance and institution-wide controls should be (i) to ensure that internal governance, including the internal audit function, and institution-wide controls are adequate for the institution's risk profile, business model, size and complexity, and (ii) to assess the degree to which the institution adheres to the requirements and standards of good internal governance and risk controls arrangements.

As part of the risk management framework under the internal governance and institution-wide controls assessment, competent authorities should review the internal capital adequacy assessment process (ICAAP) and internal liquidity adequacy assessment process (ILAAP) frameworks, and in particular the institution's ability to implement risk strategies that are consistent with the risk appetite and sound capital and liquidity plans. This assessment should include the institution's own assessment of the adequacy and allocation of internal capital, as well as determination of the reliability of internal estimates to support the supervisory determination of capital and liquidity adequacy. Furthermore, as part of the internal governance and institution wide controls assessment, competent authorities should also assess institutions' stress testing capabilities, programmes and outcomes. Competent authorities should score the risk to the viability of an institution stemming from the deficiencies identified with regard to governance and control arrangements.

- The focus of the assessment of risks to capital and risks to liquidity and funding should be the assessment of the material risks the institution is or might be exposed to. This is in terms of both the risk exposure and the quality of management and controls employed to mitigate the impact of the risks. Competent authorities should score the scale of the potential prudential impact on the institution posed by the risks.
- Since an institution may face risks that are not covered or not fully covered by the minimum own funds requirements in accordance with the Regulation (EU) 575/2013 or the capital buffers specified in Directive 2013/36/EU, through assessment of the adequacy of the institution's own funds, competent authorities should determine the quantity and composition of additional own funds required to cover such risks ('Pillar 2 capital requirements'). Such requirements should be set in a legally binding way and institutions should be expected to meet them at all times. The guidelines establish minimum composition requirements for own funds requirements covering certain risk types, but competent authorities are not prohibited from applying stricter requirements to cover such

risks if they believe them to be appropriate. However, they should not apply less strict requirements, as this would be perceived as non-compliant with Directive 2013/36/EU.

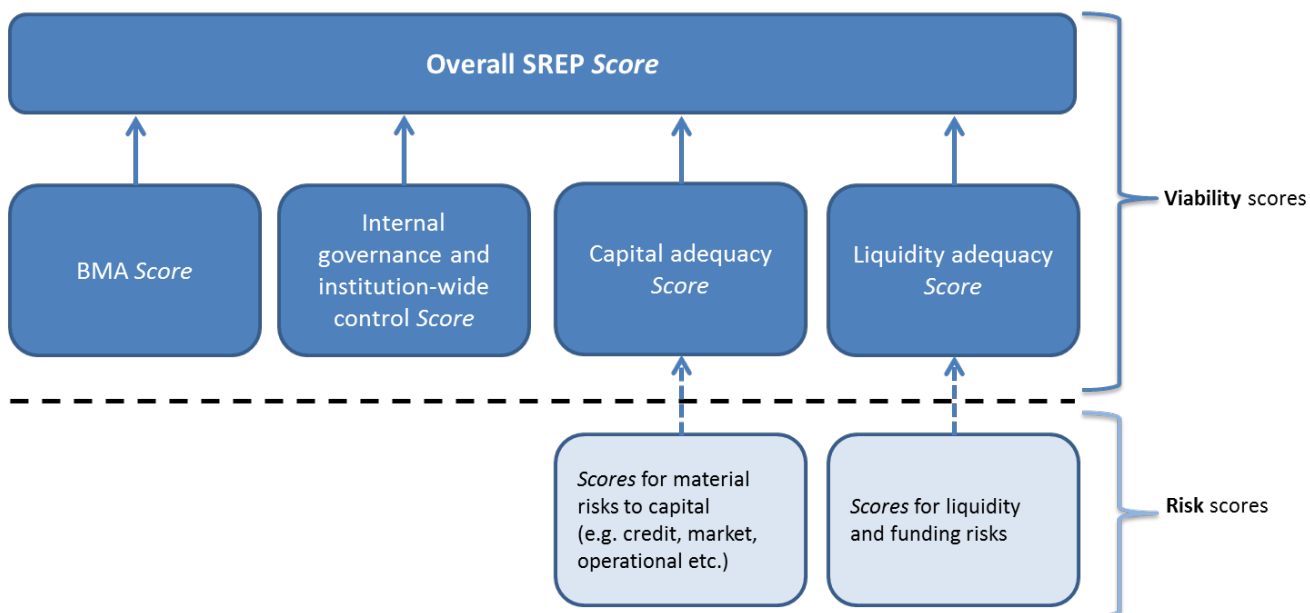
As part of the assessment of capital adequacy, competent authorities should also determine whether applicable own funds requirements can be met in stressed conditions. Where the quantitative outcomes of relevant stress tests suggest that an institution may not be able to meet the applicable own funds requirements in stressed conditions, or is excessively sensitive to the assumed scenarios, competent authorities should take appropriate supervisory measures to ensure that the institution is adequately capitalised. These include communicating expectations to institutions to have own funds over and above their overall capital requirements and which are not subject to the restrictions on distributions provided for in Article 141 of Directive 2013/36/EU – ‘Pillar 2 capital guidance’ (P2G). In particular, these guidelines outline how competent authorities should establish and set Pillar 2 capital guidance based on supervisory stress test results (see Section 7.7). As P2G is positioned above the combined buffer requirement, a failure to meet P2G does not trigger automatic restrictions on distributions provided for in Article 141 of Directive 2013/36/EU. In addition to the determination of TSCR and setting P2G, competent authorities should score the viability of the institution given the quantity and composition of own funds held.

- Through assessment of the adequacy of the institution’s liquidity resources, competent authorities should determine whether the liquidity held by the institution ensures an appropriate coverage of risks to liquidity and funding. Competent authorities should determine whether the imposition of specific liquidity requirements is necessary to capture risks to liquidity and funding to which an institution is or may be exposed. Competent authorities should score the viability of the institution stemming from its liquidity position and funding profile.
- Having conducted the assessment of the above SREP elements, competent authorities should form a comprehensive view on the risk profile and viability of the institution — the overall SREP assessment — and summarise this view in the summary of the overall SREP assessment. This summary should reflect any supervisory findings made over the course of the previous 12 months and any other developments that have led the competent authority to change its view of the institution's risks and viability. The outcome of the overall SREP assessment should be the basis for taking any necessary supervisory measures to address concerns.

To help facilitating communication within the competent authorities and colleges of supervisors, fostering comparability and level playing field between institutions as well as to prioritise supervisory resources and measures, in the assessment of SREP elements, competent authorities should score from a range of ‘1’ (low risk) to ‘4’ (high risk), to reflect the ‘supervisory view’ for each element-specific title of the guidelines. These guidelines introduce two types of scores: (1) risk scores to be applied to individual risks to capital, liquidity and funding that indicate likelihood that the risk will have a significant prudential impact on the institution (e.g. potential loss), and (2) viability scores to be applied to the four SREP elements and Overall SREP score that indicate the

magnitude to risk to the institution's viability stemming from a SREP element assessed (see also Figure 2).

Figure 2. Overview of the scoring framework



This guidance does not mean that the scoring is automatic: scores are assigned on the basis of supervisory judgment. Competent authorities should use the accompanying 'considerations' provided for guidance to support supervisory judgment. Competent authorities are not prohibited from applying more granular scoring on top of the base requirements specified in the guidelines if they believe it is useful for supervisory planning.

The guidelines also provide practical guidance on the application of the supervisory measures listed in Articles 104 and 105 of Directive 2013/36/EU, including the application of additional own funds requirements and institution-specific quantitative liquidity requirements, which is an important step in further harmonising supervisory practices for reaching a joint decision on institution-specific prudential requirements under Article 113 of Directive 2013/36/EU. These guidelines do not suggest any automatic link between the scores and the level of supervisory response, nor do they link additional own fund requirements to the scores.

Interaction between SREP and other supervisory processes, in particular assessment of recovery plans

Competent authorities should reflect in the SREP assessments available information and outcomes from all other supervisory activities, including on-site inspections, approvals of internal models, fit & proper and other authorisation approvals, assessment of recovery plans market conduct and consumer protection activities, AML/CTF activities, etc. Likewise, the findings from the assessment of SREP elements should inform other supervisory processes. Such integration of supervisory activities and cross-utilisation of findings from various activities to inform each other allows for

truly integrated analysis and supervision of institutions enhancing overall supervisory view on institutions, their viability and risks, as well as maximises synergies in various (as sometimes overlapping) areas of assessments.

An important example of such synergies and complementarity of the analysis, is the interaction between SREP and the assessment of recovery plans, where the outcomes of the assessment of the recovery plans feed into the SREP assessment of institution's internal governance and institution-wide controls, and information from the recovery plan itself would support supervisors in their business model analysis, assessment of internal governance and controls as an additional source of information. On the other hand, findings from the assessment of SREP elements, including internal governance and institution-wide controls, business model analysis, capital and liquidity adequacy assessment, including setting additional capital and liquidity requirements, should feed into the assessment of recovery plans.

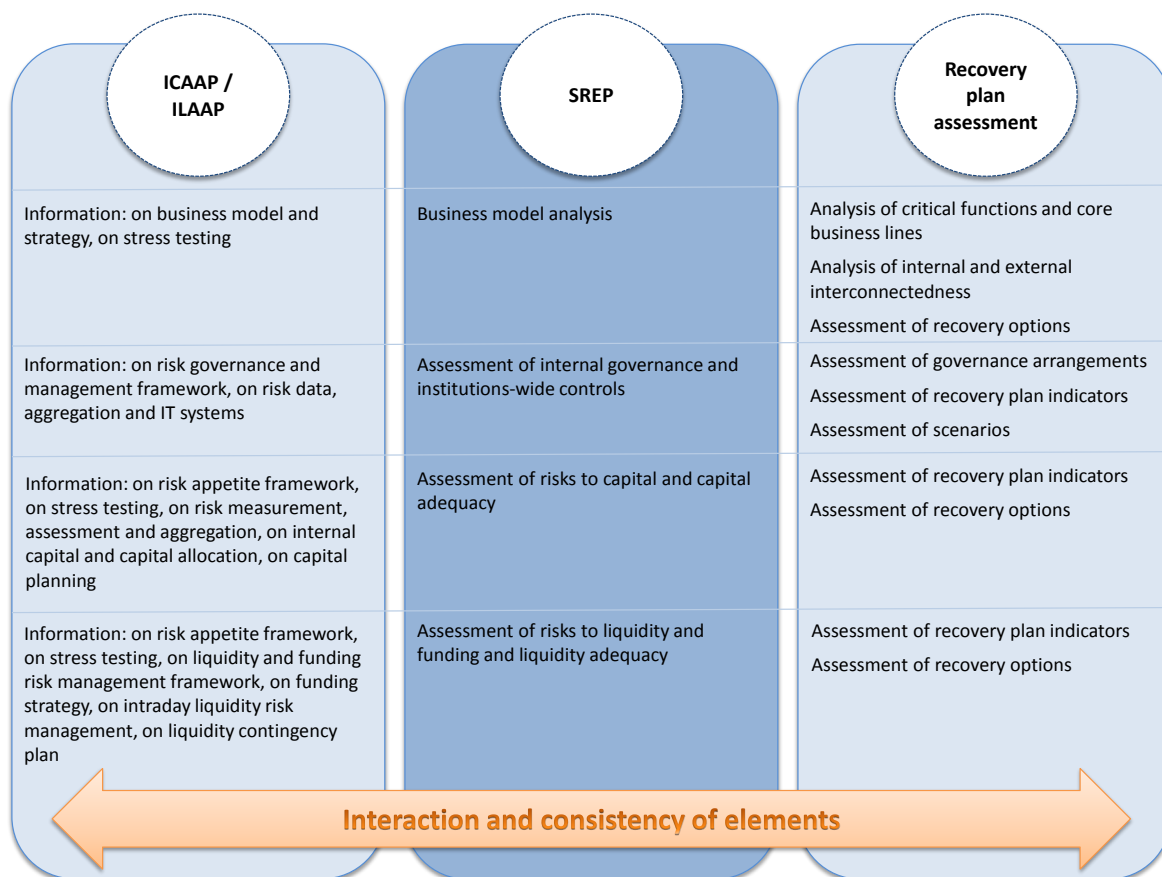
Such interaction between the SREP and recovery plan assessments also aligns with the principle that institutions' own recovery planning activities should be embedded into their risk management framework. Furthermore, competent authorities should expect from institutions that such integration be also noticeable in relation to ICAAP/ILAAP and various aspects of recovery planning, in particular governance arrangements, recovery plan indicators, analysis of recovery options, and scenario testing used in recovery planning (see Figure 3 for more details).

With respect to the stress testing, it should be noted that although the ICAAP/ILAAP stress testing and scenario testing in recovery plans have different objectives, this does not preclude that some elements of the stress tests, especially the methodologies and models, are the same. In particular, should institutions when identifying their 'severe, but plausible' scenarios for ICAAP and ILAAP stress testing¹ already meet the requirements for the recovery planning scenario testing², in particular in terms of severity and choice of scenarios, they can use such scenarios as one element in the scenario testing in recovery planning. On the supervisory assessment side, competent authorities should use the outcomes of the assessment of the institutions' stress testing programmes and capabilities under SREP also to help their assessment of scenario testing when assessing recovery plans.

¹ EBA Guidelines on institution's stress testing

² EBA Guidelines on scenarios to be used in recovery plans ([EBA/GL/2014/06](#))

Figure 3. Interaction between the elements of ICAAP/ILAAP, SREP and recovery plan assessment



Link between SREP and early intervention and resolution

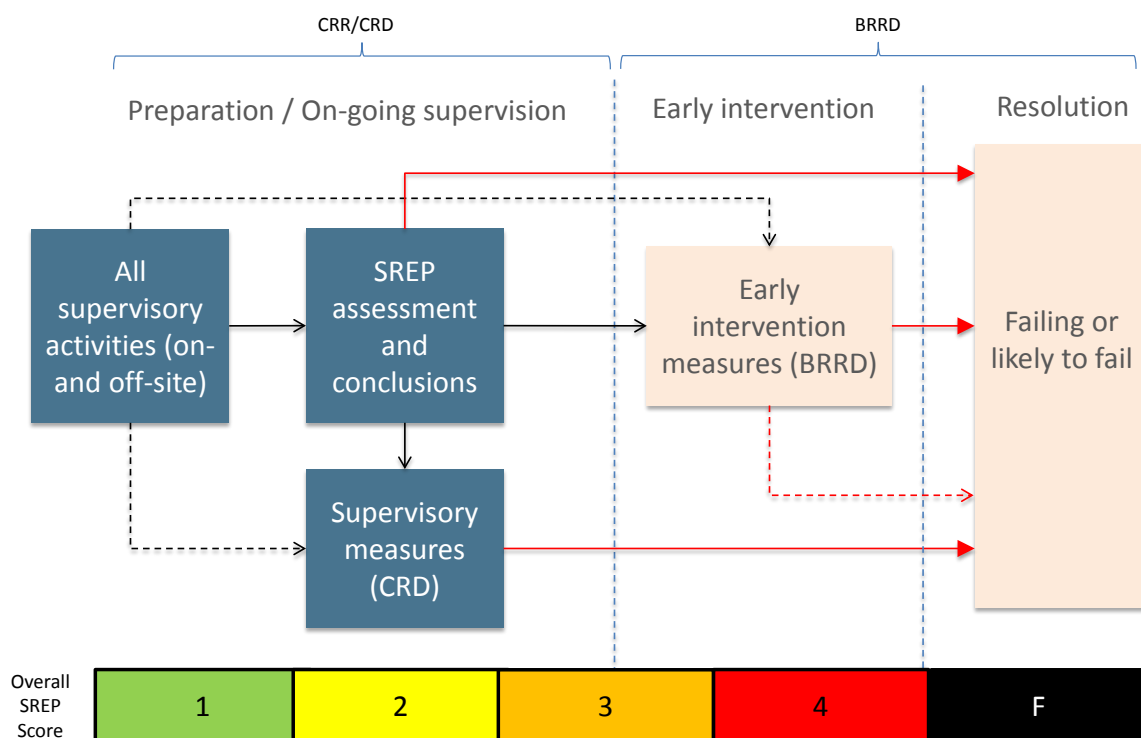
The assessment through the SREP of the viability of an institution and its ability to meet the requirements of Regulation (EU) 575/2013 and Directive 2013/36/EU allows for the use of the outcomes of the SREP assessment in setting triggers for early intervention measures, as provided in Article 27 of Directive 2014/59/EU. It also allows for the determination of whether an institution can be considered to be 'failing or likely to fail' pursuant to Article 32 of Directive 2014/59/EU, which activates the formal interaction procedure with resolution authorities as provided in Article 32 of Directive 2014/59/EU, based on the outcomes of the SREP assessment, when such a determination is made by a competent authority.

This link between SREP and application of early intervention measures and determination whether an institution is 'failing or likely to fail' is based on the viability focus of the Overall SREP assessment and assessment of individual SREP elements as expressed by viability scores, and consideration that outcomes of all supervisory activities are taken into account in the SREP assessments as explained above.

In particular, (as illustrated by Figure 4), the outcomes of the SREP assessments may lead competent authorities to take supervisory measure or decide on the application of early intervention measures, in particular, when the Overall SREP score acts as a trigger for the decision on whether to apply early intervention measures (Overall SREP score of '4' or combination of the Overall SREP score of '3' and SREP elements score of '4'). In certain cases (explained EBA Guidelines on triggers for use of early intervention measures³), competent authorities may also decide on the application of early intervention measures based on the immediate findings from supervisory activities or significant events without the need for updating the SREP assessments.

Furthermore, should the competent authority assess as part of SREP an institution as not being viable (as expressed in an Overall SREP score 'F'), competent authorities would consider that institution as 'failing or likely to fail'. The inability of an institution to comply with previous supervisory and/or early intervention measures may indicate that that particular measure was exhausted and form part of the argumentation for the competent authority's to consider the institution 'failing or likely to fail'

Figure 4. Link between on-going supervision, early intervention and failing or likely to fail



To this end these guidelines should be read together with the EBA Guidelines on triggers for use of early intervention measures and Guidelines on the interpretation of the different circumstances when an institution shall be considered as failing or likely to fail⁴.

³ EBA Guidelines on triggers for use of early intervention measures ([EBA/GL/2015/03](#))

⁴ EBA Guidelines on the interpretation of the different circumstances when an institution shall be considered as failing or likely to fail ([EBA/GL/2015/07](#))

Link between SREP and macroprudential framework

These guidelines also accommodate the interaction between institution-specific supervisory measures based on the outcomes of the SREP and macro-prudential measures. This is necessary as Directive 2013/36/EU allows Pillar 2 to be used for macro-prudential purposes. It requires competent authorities to take systemic risks, including the risks that an institution poses to the financial system, into account when carrying out the SREP. The European Systemic Risk Board (ESRB) has provided guidance on the use of Pillar 2 for macro-prudential purposes, including the role of the SREP, in its *Handbook on Operationalising Macro-prudential Policy in the Banking Sector*. It advises, amongst other things, that competent authorities coordinate with the national macro-prudential (designated) authority when evaluating systemic risks under the SREP and when addressing systemic risks by using Pillar 2 measures.

When additional own funds requirements are applied to institutions subject to Article 113 of Directive 2013/36/EU using the provisions specified in Article 103 of Directive 2013/36/EU, the additional own funds requirements are set subject to the joint decision process specified in Article 113.

These guidelines primarily cover the application of supervisory measures to address institution-specific risk exposure and deficiencies. Where competent authorities take additional measures based on institutions having similar risk profiles, business models or geographic locations of exposure, these measures should be taken through the provisions specified in Article 103 of Directive 2013/36/EU, taking into account the fact that the additional own funds requirements of Article 104(1)(a) of Directive 2013/36/EU in the context of Article 103 of that Directive should be applied in accordance with the joint decision process provided in Article 113 of that Directive.

Link between SREP and supervisory stress testing

Since the issue of the EBA Guidelines on institution's stress testing, there have been a number of developments in stress testing with regard to its methodologies and usage. The financial crisis and the several negative events in the financial sector since 2010 provided significant lessons in relation to the stress testing practices. Several important conclusions were drawn from the 2013 EBA peer review on the implementation of the stress testing guidelines, where one of the aims was to compare the implementation of related provisions by competent authorities⁵. In particular, the results of the peer review suggested competent authorities often focused on the largest institutions in their respective jurisdictions, and devoted far less attention to other institutions. Moreover, many of the competent authorities have shown evidence of substantial work on top-down stress testing, from both a micro- and macroprudential perspective.

These guidelines are designed to identify the relevant building blocks required for an effective supervisory stress testing programme from simple sensitivity analysis on single risk factors or portfolios to complex macroeconomic scenario stress testing on an institution-wide basis.

⁵ [Report on the peer review of the EBA Stress Testing Guidelines \(GL 32\)](#)

The supervisory stress testing section focuses on different forms of supervisory stress testing and objectives, the respective use for SREP purposes, the aspects related to the organisation, resources and communication, and possible methodologies. In particular, the supervisory stress testing section complements Section 7.7 by further clarifying and operationalising procedures for dealing with instances, where the results of stress tests would suggest that an institution will not be able to meet its applicable capital requirements.

Proportionality in SREP

These guidelines recognise the principle of proportionality by:

- a. categorising institutions (in four distinct categories) according to their systemic importance and the extent of any cross-border activities;
- b. building a minimum supervisory engagement model, where the frequency, depth and intensity of the assessments vary depending on the category of the institution; and
- c. varying scope of stress testing from simple portfolio level sensitivity or individual risk level analyses to comprehensive institution-wide scenario stress testing.

Given that the focus of the guidelines is on the supervisory process and on interaction between the competent authorities and the institution for the SREP, these guidelines do not address questions of transparency and public disclosure of SREP outcomes and supervisory measures, particularly in relation to additional own funds requirements and Pillar 2 Guidance.

These guidelines do not introduce any additional reporting obligation and assume that the assessments specified in the guidelines are made on the basis of information already being collected by competent authorities as part of regular reporting, or to which competent authorities have access (e.g. internal risk reports, management body documents, etc.). However, where necessary, competent authorities should be able to request additional information from the institution.

Update of the guidelines in 2017

The comprehensive common SREP framework introduced in these guidelines is well established since 2014 and has been applied in practice since 2016. In the EBA's view the framework remains robust and serves the purpose of ensuring convergence of supervisory practices well, but in the light of the recent developments in the EU and international fora, as well as EBA findings from the ongoing monitoring and assessment of convergence of supervisory practices, a number of changes have been identified to further reinforce the SREP framework. To this end, in 2017 the EBA updated the guidelines refining and introducing the following (see Annex 3 for a detailed overview of updates): (1) Pillar 2 capital guidance and supervisory stress testing, (2) supervisory assessment of institution's stress testing, (3) alignment of supervisory assessment of IRRBB with the revision of the IRRBB Guidelines, (4) scoring framework, (5) interaction between SREP elements, (6)

articulation of total SREP capital requirements (TSCR) and overall capital requirements (OCR) and communication of supervisory capital expectations to the institutions , and (7) Consistency with recently published legislation on internal governance.

The updates introduced in the 2017 revision of the guidelines will apply from 1 January 2019 and therefore the new provision should be applied in the 2019 cycle of SREP and joint decisions on institutions-specific prudential requirements.

EBA Guidelines on common procedures and methodologies for the supervisory review and evaluation process and supervisory stress testing

Status of these guidelines

This document contains guidelines issued pursuant to Article 16 of Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/78/EC ('the EBA Regulation'). In accordance with Article 16(3) of the EBA Regulation, competent authorities and financial institutions must make every effort to comply with the guidelines.

The guidelines specify the EBA's view of appropriate supervisory practices within the European System of Financial Supervision or of how Union law should be applied in a particular area. The EBA therefore expects all competent authorities and financial institutions to which the guidelines are addressed to comply with the guidelines. Competent authorities to which the guidelines apply should comply by incorporating them into their supervisory practices as appropriate (e.g. by amending their legal framework or their supervisory processes), including where the guidelines are directed primarily at institutions.

Reporting requirements

Pursuant to Article 16(3) of the EBA Regulation, competent authorities must inform the EBA of whether they comply or intend to comply with these guidelines, and if not, of their reasons for non-compliance, by 20 February 2015. In the absence of any notification by this deadline, competent authorities will be considered by the EBA to be non-compliant. Notifications should be sent by submitting the form provided at the end of this document to compliance@eba.europa.eu with the reference 'EBA/GL/2014/13'. Notifications should be submitted by persons with appropriate authority to report compliance on behalf of their competent authorities.

Notifications will be published on the EBA website, in line with Article 16(3).

Title 1. Subject matter, definitions and level of application

1.1 Subject matter

1. These guidelines specify the common procedures and methodologies for the functioning of the supervisory review and evaluation process (SREP) referred to in Articles 97 and 107(1)(a) of Directive 2013/36/EU, including those for the assessment of the organisation and treatment of risks referred to in Articles 76 to 87 of that Directive and processes and actions taken with reference to Articles 98, 100, 101, 102, 104, 105 and 107(1)(b) of that Directive as well as . In addition, these guidelines aim to provide common methodologies to be used by competent authorities when conducting supervisory stress tests in the context of their SREP as referred to in Article 100(2) of Directive 2013/36/EU.
2. These guidelines do not set methodologies for the stress tests conducted by the EBA in cooperation with other competent authorities in accordance with Article 22 of Regulation (EU) No 1093/2010; however, they do describe the range of stress tests help to set the appropriate context for the consideration of future EBA stress tests as one part of the suite supervisory stress tests.
3. These guidelines are addressed to the competent authorities referred to in Article 4(2) of the EBA Regulation.

1.2 Definitions

4. Unless otherwise specified, terms used and defined in Regulation (EU) No 575/2013, Directive 2013/36/EU, Directive 2014/59/EU or the EBA Guidelines on institution's stress testing⁶, have the same meaning in the guidelines For the purposes of the guidelines, the following definitions apply:

'Capital buffer requirements' means the own funds requirements specified in Chapter 4 of Title VII of Directive 2013/36/EU.

'Consolidating institution' means an institution that is required to abide by the prudential requirements on the basis of the consolidated situation in accordance with Part 1, Title 2, Chapter 2 of Regulation (EU) No 575/2013.

'Conduct risk' means the current or prospective risk of losses to an institution arising from inappropriate supply of financial services including cases of wilful or negligent misconduct.

⁶EBA Guidelines on institution's stress testing

‘Counterbalancing capacity’ means the institution’s ability to hold, or have access to, excess liquidity over short-term, medium-term and long-term time horizons in response to stress scenarios.

‘Credit spread risk’ means the risk arising from changes in the market value of debt financial instruments due to fluctuations in their credit spread.

‘Funding risk’ means the risk that the institution will not have stable sources of funding in the medium and long term, resulting in the current or prospective risk that it cannot meet its financial obligations, such as payments and collateral needs, as they fall due in the medium to long term, either at all or without increasing funding costs unacceptably.

‘FX lending’ means lending to borrowers, regardless of the legal form of the credit facility (e.g. including deferred payments or similar financial accommodations), in currencies other than the legal tender of the country in which the borrower is domiciled.

‘FX lending risk’ means the current or prospective risk to the institution’s earnings and own funds arising from FX lending to unhedged borrowers.

‘Internal capital adequacy assessment process (ICAAP)’ means the process for the identification, measurement, management and monitoring of internal capital implemented by the institution pursuant to Article 73 of Directive 2013/36/EU.

‘Internal liquidity adequacy assessment process (ILAAP)’ means the process for the identification, measurement, management and monitoring of liquidity implemented by the institution pursuant to Article 86 of Directive 2013/36/EU.

‘Institution’s category’ means the indicator of the institution’s systemic importance assigned based on the institution’s size and complexity and the scope of its activities.

‘Interest rate risk’ (IRR) means the current or prospective risk to the institution’s earnings and own funds arising from adverse movements in interest rates.

‘Intraday liquidity’ means the funds that can be accessed during the business day to enable the institution to make payments in real time.

‘Intraday liquidity risk’ means the current or prospective risk that the institution will fail to manage its intraday liquidity needs effectively.

‘Information and communication technology (ICT) risk’ means the risk of loss due to breach of confidentiality, failure of integrity of systems and data, inappropriateness or unavailability of systems and data, or inability to change IT within a reasonable time and costs when the environment or business requirements change (i.e. agility).

‘Macro-prudential requirement’ or ‘measure’ means a requirement or measure imposed by a competent or designated authority to address macro-prudential or systemic risk.

‘Material currency’ means a currency in which the institution has material balance-sheet or off-balance-sheet positions.

‘Overall capital requirement (OCR)’ means the sum of the total SREP capital requirement (TSCR), capital buffer requirements and macro-prudential requirements, when expressed as own funds requirements.

‘Overall SREP assessment’ means the up-to-date assessment of the overall viability of an institution based on assessment of the SREP elements.

‘Overall SREP score’ means the numerical indicator of the overall risk to the viability of the institution based on the overall SREP assessment.

‘Pillar 2 guidance (P2G)’ means the level and quality of own funds the institution is expected to hold in excess of its OCR, determined in accordance with the criteria specified in these guidelines.

‘Pillar 2 requirement (P2R)’ or ‘additional own funds requirements’ means the additional own funds requirements imposed in accordance with Article 104(1)(a) of Directive 2013/36/EU

‘Reputational risk’ means the current or prospective risk to the institution’s earnings, own funds or liquidity arising from damage to the institution’s reputation.

‘Risk appetite’ means the aggregate level and types of risk the institution is willing to assume within its risk capacity, in line with its business model, to achieve its strategic objectives.

‘Risk score’ means the numerical expression summarising the supervisory assessment of an individual risk to capital, liquidity and funding representing the likelihood that a risk will have a significant prudential impact on the institution (e.g. potential loss) after considering risk management and controls and before consideration of the institution’s ability to mitigate the risk through available capital or liquidity resources.

‘Risks to capital’ means distinct risks that, should they materialise, will have a significant prudential impact on the institution’s own funds over the next 12 months. These include but are not limited to risks covered by Articles 79 to 87 of Directive 2013/36/EU.

‘Risks to liquidity and funding’ means distinct risks that, should they materialise, will have a significant prudential impact on the institution’s liquidity over different time horizons.

‘SREP element’ means one of the following: business model analysis, assessment of internal governance and institution-wide risk controls, assessment of risks to capital, SREP capital assessment, assessment of risks to liquidity and funding, or SREP liquidity assessment.

‘Structural FX risk’ means the risk arising from equity held that has been deployed in offshore branches and subsidiaries in a currency other than the parent undertaking’s reporting currency.

‘Supervisory benchmarks’ means risk-specific quantitative tools developed by the competent authority to provide an estimation of the own funds required to cover risks or elements of risks not covered by Regulation 2013/575/EU.

‘Survival period’ means the period during which the institution can continue operating under stressed conditions and still meet its payments obligations.

‘Total risk exposure amount (TREA)’ means total risk exposure amount as defined in Article 92 of Regulation 2013/575/EU.

‘Total SREP capital requirement (TSCR)’ means the sum of own funds requirements as specified in Article 92 of Regulation (EU) 575/2013 and additional own funds requirements determined in accordance with the criteria specified in these guidelines.

‘Unhedged borrowers’ means retail and SME borrowers without a natural or financial hedge that are exposed to a currency mismatch between the loan currency and the hedge currency; natural hedges include in particular cases where borrowers receive income in a foreign currency (e.g. remittances/export receipts), while financial hedges normally presume that there is a contract with a financial institution.

‘Viability score’ means the numerical expression summarising the supervisory assessment of a SREP element and representing an indication of the risk to the institution’s viability stemming from the SREP element assessed.

1.3 Level of application

5. Competent authorities should apply these guidelines in accordance with the level of application determined in Article 110 of Directive 2013/36/EU following the requirements and waivers used pursuant to Articles 108 and 109 of Directive 2013/36/EU.
6. For parent undertakings and subsidiaries included in the consolidation, competent authorities should adjust the depth and the level of granularity of their assessments to correspond to the level of application established in the requirements of Regulation (EU) 575/2013 specified in Part One, Title II of that Regulation, in particular recognising waivers applied pursuant to Articles 7, 10 and 15 of Regulation (EU) 575/2013 and Article 21 of Directive 2013/36/EU.
7. Where an institution has a subsidiary in the same Member State, but no waivers specified in Part One of Regulation (EU) 575/2013 have been granted, a proportionate approach for the assessment of capital and liquidity adequacy may be applied by focusing on the assessment of allocation of capital and liquidity across the entities and potential impediments to the transferability of capital or liquidity within the group.
8. For cross-border groups, procedural requirements should be applied in a coordinated manner within the framework of colleges of supervisors established pursuant to Article 116 or 51 of

Directive 2013/36/EU. Title 11 explains the details of how these guidelines apply to cross-border groups and their entities.

9. When an institution has established a liquidity sub-group pursuant to Article 8 of Regulation (EU) 575/2013, competent authorities should conduct their assessment of risks to liquidity and funding, and apply supervisory measures, for the entities covered by such sub-group at the level of the liquidity sub-group.

Title 2. The common SREP

2.1 Overview of the common SREP framework

10. Competent authorities should ensure that the SREP of an institution covers the following components:

- a. categorisation of the institution and periodic review of this categorisation;
- b. monitoring of key indicators;
- c. business model analysis (BMA);
- d. assessment of internal governance and institution-wide controls;
- e. assessment of risks to capital;
- f. assessment of risks to liquidity;
- g. assessment of the adequacy of the institution's own funds;
- h. assessment of the adequacy of the institution's liquidity resources;
- i. overall SREP assessment; and
- j. supervisory measures (and early intervention measures, where necessary).

2.1.1 Categorisation of institutions

11. Competent authorities should categorise all institutions under their supervisory remit into the following categories, based on the institution's size, structure and internal organisation, and the nature, scope and complexity of its activities:

- ▶ Category 1 – institutions referred to in Article 131 of Directive 2013/36/EU (global systemically important institutions (G-SIIs) and other systemically important institutions (O-SIIs)) and, as appropriate, other institutions determined by competent authorities, based on an assessment of the institution's size and internal organisation and the nature, scope and complexity of its activities.
- ▶ Category 2 – medium to large institutions other than those included in Category 1 that operate domestically or with sizable cross-border activities, operating in several business lines, including non-banking activities, and offering credit and financial products to retail and corporate customers. Non-systemically important

specialised institutions with significant market shares in their lines of business or payment systems, or financial exchanges.

- ▶ Category 3 – small to medium institutions that do not qualify for Category 1 or 2, operating domestically or with non-significant cross-border operations, and operating in a limited number of business lines, offering predominantly credit products to retail and corporate customers with a limited offering of financial products. Specialised institutions with less significant market shares in their lines of business or payment systems, or financial exchanges.
 - ▶ Category 4 – all other small non-complex domestic institutions that do not fall into Categories 1 to 3 (e.g. with a limited scope of activities and non-significant market shares in their lines of business).
12. The categorisation should reflect the assessment of systemic risk posed by institutions to the financial system. It should be used by competent authorities as a basis for applying the principle of proportionality, as specified in Section 2.4, and not as a means to reflect the quality of an institution.
13. Competent authorities should base the categorisation on supervisory reporting data and on information derived from the preliminary business model analysis (see Section 4.2). The categorisation should be reviewed periodically, or in the event of a significant corporate event such as a large divestment, an acquisition, an important strategic action, etc.

2.1.2 Continuous assessment of risks

14. Competent authorities should continuously assess the risks to which the institution is or might be exposed through the following activities:
- a. monitoring of key indicators as specified in Title 3;
 - b. business model analysis as specified in Title 4;
 - c. assessment of internal governance and institution-wide controls as specified in Title 5;
 - d. assessment of risks to capital as specified in Title 6; and
 - e. assessment of risks to liquidity and funding as specified in Title 8.
15. The assessments should be conducted in accordance with the proportionality criteria specified in Section 2.4. The assessments should be reviewed in light of new information.
16. Competent authorities should ensure that the findings of the assessments outlined above:
- a. are clearly documented in a summary of findings;

- b. are reflected in a score assigned in accordance with the specific guidance provided in the element-specific title of these guidelines;
- c. support the assessments of other elements or prompt an in-depth investigation into inconsistencies between the assessments of these elements;
- d. contribute to the overall SREP assessment and score; and
- e. result in supervisory measures, where appropriate, and inform the decisions taken for these measures.

2.1.3 Periodic assessment of capital and liquidity adequacy

17. Competent authorities should periodically review the adequacy of the institution's own funds and liquidity to provide sound coverage of the risks to which the institution is or might be exposed through the following assessments:
 - a. SREP capital assessment as specified in Title 7; and
 - b. SREP liquidity assessment as specified in Title 9.
18. The periodic assessments should occur on a 12-month to 3-year basis, taking into account the proportionality criteria specified in Section 2.4. Competent authorities may perform more frequent assessments. Competent authorities should review the assessment in light of material new findings from the SREP risk assessment where competent authorities determine that the findings may have a material impact on the institution's own funds and/or liquidity resources.
19. Competent authorities should ensure that the findings of the assessments:
 - a. are clearly documented in a summary;
 - b. are reflected in the score assigned to the institution's capital adequacy and liquidity adequacy, in accordance with the guidance provided in the element-specific title;
 - c. contribute to the overall SREP assessment and score; and
 - d. form the basis for the supervisory requirement for the institution to hold own funds and/or liquidity resources in excess of the requirements specified in Regulation (EU) 575/2013, or for other supervisory measures, as appropriate.

2.1.4 Overall SREP assessment

20. Competent authorities should continuously assess the risk profile of the institution and its viability through the overall SREP assessment as specified in Title 10. Through the overall SREP assessment, competent authorities should determine the potential for risks to cause the failure of the institution given the adequacy of its own funds and liquidity resources,

governance, controls and/or business model or strategy, and from this, the need to take early intervention measures, and/or determine whether the institution can be considered to be failing or likely to fail.

21. The assessment should be continuously reviewed in light of findings from the risk assessments or the outcome of the SREP capital and SREP liquidity assessments.
22. Competent authorities should ensure that the findings of the assessment:
 - a. are reflected in the score assigned to the institution's overall viability, in accordance with the guidance provided in Title 10;
 - b. are clearly documented in a summary of the overall SREP assessment that includes the SREP scores assigned (overall and for individual elements) and any supervisory findings made over the course of the previous 12 months; and
 - c. form the basis for the supervisory determination of whether the institution can be considered to be 'failing or likely to fail' pursuant to Article 32 of Directive 2014/59/EU.

2.1.5 Dialogue with institutions, application of supervisory measures and communicating findings

23. Following the minimum engagement model, as specified in Section 2.4, competent authorities should engage in dialogue with institutions to assess individual SREP elements, as provided in the element-specific titles.
24. Based on the overall SREP assessment and building on assessments of the individual SREP elements, competent authorities should take supervisory measures as specified in Title 10. Supervisory measures in these guidelines are grouped as follows:
 - a. capital measures;
 - b. liquidity measures; and
 - c. other supervisory measures (including early intervention measures).
25. Where findings from the monitoring of key indicators, assessment of SREP elements or any other supervisory activity necessitate the application of supervisory measures to address immediate concerns, competent authorities should not wait for the completion of the assessment of all SREP elements and update of the overall SREP assessment, but decide on the measures required to rectify the situation assessed, and then proceed with updating the overall SREP assessment.
26. Competent authorities should also engage in dialogue based on the outcomes of the overall SREP assessment, alongside associated supervisory measures, and inform the institution at the

end of the process about supervisory measures with which it is obliged to comply as outlined in Section 2.4.

2.2 Scoring in the SREP

27. Competent authorities should assign risk and viability scores to summarise the outcomes of the assessment of various risk categories and elements in the SREP framework. The following paragraphs describe the general approach to scoring that is further detailed in the element-specific titles.
28. Competent authorities should assign risk scores to individual risks to capital in accordance with the criteria specified in Title 6, and scores to risks to liquidity and funding in accordance with the criteria specified in Title 8. These scores represent the likelihood that a risk will have a significant prudential impact on the institution (e.g. potential loss), before consideration of the institution's ability to mitigate the risk through available capital or liquidity resources.
29. Competent authorities should separately assign scores to summarise the level of risk posed to the viability of the institution based on the outcomes of the assessment of the four SREP elements:
 - ▶ business model and strategy, in accordance with the criteria specified in Title 4;
 - ▶ internal governance and institution-wide controls, in accordance with the criteria specified in Title 5;
 - ▶ capital adequacy, in accordance with the criteria specified in Title 7; and
 - ▶ liquidity adequacy, in accordance with the criteria specified in Title 9.
30. For capital adequacy and liquidity adequacy, these scores represent the supervisory view of the capacity of the institution's capital and liquidity resources to mitigate/cover individual risks to capital and liquidity and funding, as set out in Titles 6 and 8, and /or other elements for which additional own funds have been determined as set out in Title 7.
31. Competent authorities should also assign an overall SREP score in accordance with the criteria specified in Title 10. This score should be assigned based on supervisory judgement and represent the supervisory view of the overall viability of the institution on the basis of the aggregate view of the threats to viability from the four SREP elements (business model and strategy, internal governance and institution-wide controls, capital adequacy, and liquidity adequacy), taking into account the outcomes of the assessment of individual risks to capital, liquidity and funding.
32. Competent authorities should ensure that all these scores are regularly reviewed, at least with the frequency defined in Section 2.4 and without undue delay on the basis of material new findings or developments.

33. In the assessment of the individual SREP elements, competent authorities should use a range of scores - 1 (low risk), 2 (medium-low risk), 3 (medium-high risk), and 4 (high risk) - reflecting the supervisory view based on the relevant scoring tables in each element-specific title. Competent authorities should use the accompanying 'considerations' provided in these tables for guidance to support supervisory judgment (i.e. it is not necessary for the institution to fulfil all the 'considerations' linked to a score of '1' to achieve a score of '1'), and/or further develop them or add additional considerations. Competent authorities should assign a score of '4' to reflect the worst possible assessment (i.e. even if the institution's position is worse than that envisaged by the 'considerations' for a score of '4', a score of '4' should still be assigned).
34. In their implementation of the guidelines, competent authorities may introduce aggregation methodologies for aggregating individual risks to capital and liquidity and funding scores. Competent authorities may also introduce more granular scoring for their internal purposes, such as planning of resources, provided that the overall scoring framework set out in these guidelines is respected.

2.2.1 Risk scores

35. Competent authorities should ensure that through the scoring of individual risks to capital, liquidity and funding they provide an indication of the potential prudential impact of a risk to the institution after considering the quality of risk controls to mitigate this impact (i.e. residual risk) but before considering capital or liquidity resources.
36. Competent authorities should determine the risk score predominantly through an assessment of inherent risk, but they should also reflect considerations about risk management and controls. In particular, the adequacy of management and controls may increase or – in some cases – reduce the risk of significant prudential impact (i.e. considerations relating to inherent risk may under- or overestimate the level of risk depending on the adequacy of management and controls). The assessment of inherent risk and the adequacy of management and controls should be made with reference to the considerations specified in Tables 4 to 7 and 9 and 10.
37. In implementing these guidelines, competent authorities may use different methods to decide on individual risk scores. Inherent risk levels and the quality of risk management and controls may be scored separately (resulting in an intermediate and a final scores) or in aggregate.

2.2.2 Viability scores

38. Competent authorities should ensure that the scoring of the business model, internal governance and institution-wide controls, capital adequacy and liquidity adequacy achieves the following objectives:
 - ▶ providing an indication of the risks to the institution's viability stemming from the SREP elements assessed, given their individual assessments as set out in Titles 4, 5, 7 and 9;

- ▶ indicating the likelihood that supervisory measures may need to be taken to address concerns in accordance with the criteria specified in Title 10⁷;
- ▶ acting as a trigger for the decision on whether to apply early intervention measures in accordance with the *EBA Guidelines on triggers for use of early intervention measures*⁸; and
- ▶ helping with the prioritisation and planning of supervisory resources and the setting of priorities in the supervisory examination programme (SEP).

2.2.3 Overall SREP score

39. Competent authorities should ensure that the overall SREP score assigned on the basis of the aggregate view of the threats from the four SREP elements achieves the following objectives:

- ▶ providing an indication of the institution's overall viability and whether the institution is 'failing or likely to fail' in within the meaning of Article 32 of Directive 2014/59/EU;
- ▶ indicating the likelihood that supervisory measures may need to be taken to address concerns in accordance with the criteria specified in Title 10;
- ▶ acting as a trigger for the decision on whether to apply early intervention measures in accordance with the *EBA Guidelines on triggers for use of early intervention measures*; and
- ▶ helping with the prioritisation and planning of supervisory resources and the setting of priorities in the SEP.

40. Competent authorities should base the overall SREP score on a scale of '1' to '4' reflecting the overall viability of the institution. When the outcome of the Overall SREP assessment suggests that an institution can be considered to be 'failing or likely to fail' within the meaning of Article 32 of Directive 2014/59/EU, competent authorities should apply a score of 'F' and follow the process of engaging with resolution authorities as specified in Article 32 of Directive 2014/59/EU.

2.3 Organisational arrangements

41. Competent authorities should ensure that, for conducting the SREP, their organisational arrangements include at least the following:

⁷ Irrespective of the score for capital adequacy, additional own funds requirements should be imposed as specified in Title 7 and Title 10.3

⁸ [EBA Guidelines on triggers for use of early intervention measures \(EBA/GL/2015/03\)](#)

- a. a description of the roles and responsibilities of their supervisory staff with respect to performing the SREP, as well as the relevant reporting lines, in both normal and emergency situations;
 - b. procedures for documenting and recording findings and supervisory judgments;
 - c. arrangements for the approval of the findings and scores, as well as escalation procedures where there are of dissenting views within the competent authority, in both normal and emergency situations;
 - d. arrangements for organising dialogue with the institution following the model of minimum engagement as stipulated in Section 2.4 to assess individual SREP elements; and
 - e. arrangements for communicating the outcomes of the SREP to the institution, also reflecting the interaction within colleges of supervisors for cross-border groups and their entities. These communication arrangements should specifically address provisions for consultation with an institution prior to the finalisation of the SREP outcomes in the form of capital and liquidity joint decisions pursuant to the requirements of Commission Implementing Regulation (EU) No 710/2014 of 23 June 2014 specifying implementing technical standards with regard to conditions for application of the joint decision process for institution-specific prudential requirements pursuant to Directive 2013/36/EU.
42. When defining arrangements for dialogue with institutions, competent authorities should consider the form and granularity of information provided as outcomes of the SREP, including whether the overall SREP score and scores for individual SREP elements can be communicated. For these purposes, competent authorities should also consider the implications of providing the scores to the institutions in terms of their disclosure obligations pursuant to the requirements of Regulation (EU) No 596/2014 and Directives 2014/57/EU and 2004/109/EC.

2.4 Proportionality and supervisory engagement

43. Competent authorities should apply the principle of proportionality in the scope, frequency and intensity of supervisory engagement and dialogue with an institution, and supervisory expectations of the standards the institution should meet, in accordance with the category of the institution.
44. For the frequency and intensity of the supervisory engagement aspect of proportionality, when planning SREP activities, competent authorities should adhere to a minimum level of engagement model, as follows (and as outlined in Table 1):

2.4.1 Category 1 institutions

- ▶ Competent authorities should monitor key indicators on a quarterly basis.

- ▶ Competent authorities should produce a documented summary of the overall SREP assessment at least annually.
- ▶ Competent authorities should update the assessments of all individual SREP elements at least annually. For risks to capital and risks to liquidity and funding, this should include assessment of at least the most material individual risks.
- ▶ Competent authorities should inform the institution of the outcome of the overall SREP assessment at least annually, and particularly provide:
 - a statement on the quantity and composition of the own funds the institution is required to hold in excess of the requirements specified in Chapter 4 of Title VII of Directive 2013/36/EU and in Regulation (EU) No 575/2013 relating to elements of risks and risks not covered by Article 1 of that Regulation;
 - a statement on the liquidity held and any specific liquidity requirements set by the competent authority; and
 - a statement on other supervisory measures, including any early intervention measures, that the competent authority intends to take.
- ▶ Competent authorities should have ongoing engagement and dialogue with the institution's management body and senior management, as defined in paragraph 3(9) of Directive 2013/36/EU, to assess each SREP element.

2.4.2 Category 2 institutions

- ▶ Competent authorities should monitor key indicators on a quarterly basis.
- ▶ Competent authorities should produce a documented summary of the overall SREP assessment at least annually.
- ▶ Competent authorities should update the assessments of all individual SREP elements at least every 2 years. For risks to capital and risks to liquidity and funding, this should include assessment of at least the most material individual risks.
- ▶ Competent authorities should inform the institution of the outcome of the overall SREP assessment at least every 2 years, and particularly provide:
 - a statement on the quantity and composition of the own funds the institution is required to hold in excess of the requirements specified in Chapter 4 of Title VII of Directive 2013/36/EU and in Regulation (EU) No 575/2013 relating to elements of risks and risks not covered by Article 1 of that Regulation;

- a statement on the liquidity held and any specific liquidity requirements set by the competent authority; and
 - a statement on other supervisory measures, including any early intervention measures, that the competent authority intends to take.
- ▶ Competent authorities should have ongoing engagement and dialogue with the institution's management body and senior management to assess each SREP element.

2.4.3 Category 3 institutions

- ▶ Competent authorities should monitor key indicators on a quarterly basis.
- ▶ Competent authorities should produce a documented summary of the overall SREP assessment at least annually.
- ▶ Competent authorities should update the assessments of all individual SREP elements at least every 3 years, or sooner in light of material new information emerging on the risk posed. For risks to capital and risks to liquidity and funding, this should include assessment of at least the most material individual risks.
- ▶ Competent authorities should inform the institution of the outcome of the overall SREP assessment at least every 3 years, and particularly provide:
- a statement on the quantity and composition of the own funds the institution is required to hold in excess of the requirements specified in Chapter 4 of Title VII of Directive 2013/36/EU and in Regulation (EU) No 575/2013 relating to elements of risks and risks not covered by Article 1 of that Regulation;
 - a statement on the liquidity held and any specific liquidity requirements set by the competent authority; and
 - a statement on other supervisory measures, including any early intervention measures, that the competent authority intends to take.
- ▶ Competent authorities should have risk-based engagement and dialogue with the institution's management body and senior management (i.e. where necessary) to assess the material risk element(s).

2.4.4 Category 4 institutions

- ▶ Competent authorities should monitor key indicators on a quarterly basis.
- ▶ Competent authorities should produce a documented summary of the overall SREP assessment at least annually.

- ▶ Competent authorities should update the assessments of all individual SREP elements at least every 3 years, or sooner in light of material new information emerging on the risk posed. For risks to capital and risks to liquidity and funding, this should include assessment of at least the most material individual risks.
- ▶ Competent authorities should inform the institution of the outcome of the overall SREP assessment at least every 3 years, and particularly provide:
 - a statement on the quantity and composition of the own funds the institution is required to hold in excess of the requirements specified in Chapter 4 of Title VII of Directive 2013/36/EU and in Regulation (EU) No 575/2013 relating to elements of risks and risks not covered by Article 1 of that Regulation;
 - a statement on the liquidity held and any specific liquidity requirements set by the competent authority; and
 - a statement on other supervisory measures, including any early intervention measures, that the competent authority intends to take.
- ▶ Competent authorities should have engagement and dialogue with the institution's management body and senior management at least every 3 years.

Table 1. Application of SREP to different categories of institutions

Category	Monitoring of key indicators	Assessment of all SREP elements (at least)	Summary of the overall SREP assessment	Minimum level of engagement/dialogue
1	Quarterly	Annual	Annual	Ongoing engagement with institution's management body and senior management; engagement with institution for assessment of each element.
2	Quarterly	Every 2 years	Annual	Ongoing engagement with institution's management body and senior management; engagement with institution for assessment of each element.
3	Quarterly	Every 3 years	Annual	Risk-based engagement with institution's management body and senior management; engagement with institution for assessment of material risk element(s).
4	Quarterly	Every 3 years	Annual	Engagement with institution's management body and senior

Category	Monitoring of key indicators	Assessment of all SREP elements (at least)	Summary of the overall SREP assessment	Minimum level of engagement/dialogue
				management at least every 3 years.

45. Where competent authorities determine that institutions have similar risk profiles, they may conduct thematic SREP assessments on multiple institutions as a single assessment (e.g. a BMA may be conducted on all small mortgage lenders given that it is likely to identify the same business viability issues for all these institutions).
46. Competent authorities should determine an additional level of engagement based on the findings from previous assessments of SREP elements, whereby more extensive supervisory resources and a higher intensity should be required, regardless of the category of the institution, for institutions with a poor overall SREP score (at least on a temporary basis).
47. For institutions covered by the supervisory examination programme required by Article 99 of Directive 2013/36/EU, competent authorities should ensure that the level of engagement and application of the SREP is determined by that programme, which supersedes the above requirements.
48. When planning SREP activities, competent authorities should pay special attention to coordinating activities with other parties directly or indirectly involved in the assessment, in particular when input is required from the institution and/or other competent authorities involved in the supervision of cross-border groups as specified in Title 11.
49. For the scope of proportionality, when conducting the SREP by applying these guidelines, competent authorities should recognise that different elements, methodological aspects and assessment components as provided in Titles 4, 5, 6 and 8 do not have the same relevance for all institutions; competent authorities should, where relevant, apply different degrees of granularity to the assessment depending on the category to which the institution is assigned and to the extent appropriate for the size, nature, business model and complexity of the institution.

Title 3. Monitoring of key indicators

51. Competent authorities should engage in regular monitoring of key financial and non-financial indicators to monitor changes in the financial conditions and risk profiles of institutions. Competent authorities should also use this monitoring to identify the need for updates to the assessment of SREP elements in light of new material information outside of planned supervisory activities. Where monitoring reveals a material change in the risk profile of the institution, or any anomalies in the indicators, competent authorities should investigate the causes, and, where relevant, review the assessment of the relevant SREP element in light of the new information.
52. Following the model of minimum engagement discussed in Title 2, competent authorities should monitor key financial and non-financial indicators at least on a quarterly basis for all institutions. However, depending on the specific features of the institutions or situation, competent authorities may establish more frequent monitoring, taking into consideration the availability of the underlying information (e.g. market data).
53. Competent authorities should establish monitoring systems and patterns allowing for the identification of material changes and anomalies in the behaviour of indicators, and should set thresholds, where relevant. Competent authorities should also establish escalation procedures for all relevant indicators (or combinations of indicators) covered by the monitoring to ensure that anomalies and material changes are investigated.
54. Competent authorities should tailor the set of indicators and their thresholds to the specific features of individual institutions or groups of institutions with similar characteristics (peer groups). The framework of indicators, monitoring patterns and thresholds should reflect the institution's size, complexity, business model and risk profile and should cover geographies, sectors and markets where the institution operates.
55. Competent authorities should identify the indicators to be tracked through regular monitoring primarily from regular supervisory reporting and using definitions from common reporting standards. Where relevant, EBA dashboards or indicators being monitored by the EBA may be used as a source of information against which individual institutions can be monitored.
56. The framework of indicators established and the outcomes of the monitoring of key indicators should also be used as input for the assessment of risks to capital and risks to liquidity and funding under the respective SREP elements.
57. Indicators used for monitoring should include at least the following institution-specific indicators:
 - a. financial and risk indicators addressing all risk categories covered by these guidelines (see Titles 6 and 8);

- b. all the ratios derived from the application of Regulation (EU) No 575/2013 and from the national law implementing Directive 2013/36/EU for calculating the minimum prudential requirements (e.g. Core Tier 1 (CT1), liquidity coverage ratio (LCR), net stable funding ratio (NSFR), etc.);
 - c. the minimum requirements for own funds and eligible liabilities (MREL) as specified by Directive 2014/59/EU;
 - d. relevant market-based indicators (e.g. equity price, credit default swap (CDS) spreads, bond spreads, etc.); and
 - e. where available, recovery indicators used in the institution's own recovery plans.
58. Competent authorities should accompany institution-specific indicators with relevant macro-economic indicators, where available, in the geographies, sectors and markets where the institution operates.
59. Identification of material changes or anomalies in indicators, especially in cases where changes are outliers to the peer-group performance, should be considered by competent authorities as a prompt for further investigation. Specifically, competent authorities should:
- a. determine the cause and make an assessment of materiality of the potential prudential impact on the institution;
 - b. document the cause and the outcome of the assessment; and
 - c. review the risk assessment and SREP score, where relevant, in light of any new findings.
60. Competent authorities should also consider supplementing the regular monitoring of key financial and non-financial indicators with review of independent market research and analysis, where this is available, which can be a helpful source of alternative points of view.

Title 4. Business model analysis

4.1 General considerations

61. This title specifies criteria for the assessment of the business model and strategy of the institution. Competent authorities should apply this assessment to an institution at the same level as the overall SREP assessment, but it can also be applied at business or product-line level, or on a thematic basis.
62. Without undermining the responsibility of the institution's management body for running and organising the business, or indicating preferences for specific business models, competent authorities should conduct regular business model analysis (BMA) to assess business and strategic risks and determine:
 - ▶ the viability of the institution's current business model on the basis of its ability to generate acceptable returns over the following 12 months; and
 - ▶ the sustainability of the institution's strategy on the basis of its ability to generate acceptable returns over a forward-looking period of at least 3 years, based on its strategic plans and financial forecasts.
63. Competent authorities should use the outcome of the BMA to support the assessment of all other elements of the SREP. Competent authorities may assess specific aspects of the BMA, in particular the quantitative assessment of the business model, as part of the assessment of other SREP elements (e.g. understanding the funding structure can be part of the risks to liquidity assessment).
64. Competent authorities should also use the BMA to support the identification of the institution's key vulnerabilities, which are most likely to have a material impact on the institution/lead to its failure in the future.
65. Competent authorities should undertake the following steps as part of the BMA:
 - a. preliminary assessment;
 - b. identification of the areas of focus;
 - c. assessment of the business environment;
 - d. quantitative analysis of the current business model;
 - e. qualitative analysis of the current business model;

- f. analysis of the forward-looking strategy and financial plans (including planned changes to the business model);
 - g. assessment of business model viability;
 - h. assessment of sustainability of the strategy;
 - i. identification of key vulnerabilities to which the institution's business model and strategy expose it or may expose it; and
 - j. summarising of the findings and scoring.
66. To conduct the BMA, competent authorities should use at least the following sources of quantitative and qualitative information:
- a. institution's strategic plan(s) with current-year and forward-looking forecasts, and underlying economic assumptions;
 - b. financial reporting (e.g. profit and loss (P&L), balance-sheet disclosures);
 - c. regulatory reporting (common reporting (COREP), financial reporting (FINREP) and credit register, where available);
 - d. internal reporting (management information, capital planning, liquidity reporting, internal risk reports);
 - e. recovery and resolution plans;
 - f. third-party reports (e.g. audit reports, reports by equity/credit analysts); and
 - g. other relevant studies/surveys (e.g. from the International Monetary Fund (IMF), macro-prudential authorities and institutions, European institutions).

4.2 Preliminary assessment

67. Competent authorities should analyse the institution's main activities, geographies and market position to identify, at the highest level of consolidation in the jurisdiction, the institution's:
- a. major geographies;
 - b. major subsidiaries/branches;
 - c. major business lines; and
 - d. major product lines.

68. For this purpose, competent authorities should consider a range of relevant metrics at the point of assessment and changes over time. These metrics should include:
- a. contribution to overall revenues/costs;
 - b. share of assets;
 - c. share of TREA; and
 - d. market position.
69. Competent authorities should use this preliminary assessment to:
- a. determine materiality of business areas/lines: competent authorities should determine which geographies, subsidiaries/branches, business lines and product lines are the most material based on profit contribution (e.g. based on P&L), risk (e.g. based on TREA or other measures of risk) and/or organisational/statutory priorities (e.g. specific obligations for public sector banks to offer specific products). Competent authorities should use this information as a basis for identifying what the BMA should focus on (covered further in Section 4.3);
 - b. identify the peer group: competent authorities should determine the relevant peer group for the institution; to conducting a BMA, the competent authority should determine the peer group on the basis of the rival product/business lines targeting the same source of profits/customers (e.g. the credit-card businesses of different institutions targeting credit card users in country X);
 - c. support the application of the principle of proportionality: competent authorities may use the outcomes of the preliminary assessment to help with the allocation of institutions to proportionality categories on the basis of the identified complexity of the institutions (as specified in Section 2.1.1).

4.3 Identifying the areas of focus for the BMA

70. Competent authorities should determine the focus of the BMA. They should focus on the business lines that are most important in terms of viability or future sustainability of current business model, and/or most likely to increase the institution's exposure to existing or new vulnerabilities. Competent authorities should take into account:
- a. the materiality of business lines – whether certain business lines are more important in terms of generating profits (or losses);
 - b. previous supervisory findings – whether the findings for other elements of the SREP can provide indicators on business lines requiring further investigation;

- c. findings and observations from internal or external audit reports – whether the audit function has identified specific issues regarding the sustainability or viability of certain business lines;
- d. importance to strategic plans – whether there are business lines that the institution wishes to grow substantially, or decrease;
- e. outcomes of thematic supervisory reviews – whether a sector-wide analysis has revealed common underlying issues that prompt additional institution-specific analysis;
- f. observed changes in the business model – whether there are observed de facto changes in the business model that have occurred without the institution declaring any planned changes or releasing new strategic plans; and
- g. peer comparisons – whether a business line has performed atypically (been an outlier) compared to peers.

4.4 Assessing the business environment

71. To form a view on the plausibility of an institution's strategic assumptions, competent authorities should undertake an analysis of the business environment. This takes into consideration the current and future business conditions in which an institution operates or is likely to operate based on its main or material geographic and business exposures. As part of this assessment, competent authorities should develop an understanding of the direction of macro-economic and market trends and the strategic intentions of the peer group.
72. Competent authorities should use this analysis to develop an understanding of:
- a. the key macro-economic variables within which the relevant entity, product or segment being assessed operates or will operate based on its main geographies. Examples of key variables include gross domestic product (GDP), unemployment rates, interest rates and house price indices.
 - b. the competitive landscape and how it is likely to evolve, considering the activities of the peer group. Examples of areas for review include expected target-market growth (e.g. residential mortgage market) and the activities and plans of key competitors in the target market.
 - c. overall trends in the market that may have an impact on the institution's performance and profitability. This should include, as a minimum, regulatory trends (e.g. changes to retail banking product distribution legislation), technological trends (e.g. moves to electronic platforms for certain types of trading) and societal/demographic trends (e.g. greater demand for Islamic banking facilities).

4.5 Analysis of the current business model

73. To understand the means and methods used by an institution to operate and generate profits, competent authorities should undertake quantitative and qualitative analyses.

4.5.1 Quantitative analysis

74. Competent authorities should undertake an analysis of quantitative features of the institution's current business model to understand its financial performance and the degree to which this is driven by its risk appetite being higher or lower than peers.

75. Areas for analysis by competent authorities should include:

- a. profit and loss, including trends: competent authorities should assess the underlying profitability of the institution (e.g. after exception items and one-offs), the breakdown of income streams, the breakdown of costs, impairment provisions and key ratios (e.g. net interest margin, cost/income, loan impairment). Competent authorities should consider how the above items have evolved in recent years and identify underlying trends;
- b. the balance sheet, including trends: competent authorities should assess the asset and liability mix, the funding structure, the change in the TREA and own funds, and key ratios (e.g. return on equity, Core Tier 1, funding gap). Competent authorities should consider how the above items have evolved in recent years and identify underlying trends;
- c. concentrations, including their trends: competent authorities should assess concentrations in the P&L and balance sheet related to customers, sectors and geographies. Competent authorities should consider how the above items have evolved in recent years and identify underlying trends; and
- d. risk appetite: competent authorities should assess the formal limits put in place by the institution by risk type (credit risk, funding risk, etc.) and its adherence to them to understand the risks that the institution is willing to take to drive its financial performance.

4.5.2 Qualitative analysis

76. Competent authorities should undertake an analysis of qualitative features of the institution's current business model to understand its success drivers and key dependencies.

77. Areas for analysis by competent authorities should include:

- a. key external dependencies: competent authorities should determine the main exogenous factors that influence the success of the business model; these may include third-party providers, intermediaries and specific regulatory drivers;

- b. key internal dependencies: competent authorities should determine the main endogenous factors that influence the success of the business model; these may include the quality of IT platforms and operational and resource capacity;
- c. franchise: competent authorities should determine the strength of relationships with customers, suppliers and partners; this may include the institution's reliance upon its reputation, the effectiveness of branches, the loyalty of customers and the effectiveness of partnerships; and
- d. areas of competitive advantage: competent authorities should determine the areas in which the institution has a competitive advantage over its peers; these may include any of the above, such as the quality of the institution's IT platforms, or other factors such as the institution's global network, the scale of its business or its product proposition.

4.6 Analysis of the strategy and financial plans

- 78. Competent authorities should undertake a quantitative and qualitative forward-looking analysis of the institution's financial projections and strategic plan to understand the assumptions, plausibility and riskiness of its business strategy.
- 79. Areas for analysis by competent authorities should include:
 - a. overall strategy: competent authorities should consider the main quantitative and qualitative management objectives;
 - b. projected financial performance: competent authorities should consider projected financial performance, covering the same or similar metrics as those covered in the quantitative analysis of the current business model;
 - c. success drivers of the strategy and financial plan: competent authorities should determine the key changes proposed to the current business model to meet the objectives;
 - d. assumptions: competent authorities should determine the plausibility and consistency of the assumptions made by the institution that drive its strategy and forecasts; these may include assumptions in areas such as macro-economic metrics, market dynamics, volume and margin growth in key products, segments and geographies, etc.; and
 - e. execution capabilities: competent authorities should determine the institution's execution capabilities based on the management's track record in adhering to previous strategies and forecasts, and the complexity and ambition of the strategy set compared to the current business model.

80. Competent authorities may conduct parts of this analysis concurrently with the quantitative and qualitative analysis of the current business model, particularly the analysis of the projected financial performance and of the success drivers of the strategy.

4.7 Assessing business model viability

81. Having conducted the analyses covered in Sections 4.4 and 4.5, competent authorities should form, or update, their view on the viability of the institution's current business model on the basis of its ability to generate acceptable returns over the following 12 months, given its quantitative performance, key success drivers and dependencies and business environment.
82. Competent authorities should assess the acceptability of returns against the following criteria:
 - a. return on equity (ROE) against cost of equity (COE) or equivalent measure: competent authorities should consider whether the business model generates a return above cost (excluding one-offs) on the basis of ROE against COE; other metrics, such as return on assets or risk-adjusted return on capital, as well as considering changes in these measures through the cycle, may also support this assessment;
 - b. funding structure: competent authorities should consider whether the funding mix is appropriate to the business model and to the strategy; volatility or mismatches in the funding mix may mean that a business model or strategy, even one that generates returns above costs, may not be viable or sustainable given the current or future business environment; and
 - c. risk appetite: competent authorities should consider whether the institution's business model or strategy relies on a risk appetite, for individual risks (e.g. credit, market) or more generally, that is considered high or is an outlier amongst the peer group to generate sufficient returns.

4.8 Assessing the sustainability of the institution's strategy

83. Having conducted the analyses covered in Sections 4.4 to 4.6, competent authorities should form, or update, their view on the sustainability of the institution's strategy on the basis of its ability to generate acceptable returns, as defined above, over a forward-looking period of at least 3 years based on its strategic plans and financial forecasts and given the supervisory assessment of the business environment.
84. In particular, competent authorities should assess the sustainability of the institution's strategy based on:
 - a. the plausibility of the institution's assumptions and projected financial performance compared to the supervisory view of the current and future business environment;

- b. the impact on the projected financial performance of the supervisory view of the business environment (where this differs from the institution's assumptions); and
- c. the risk level of the strategy (i.e. the complexity and ambition of the strategy compared to the current business model) and the consequent likelihood of success based on the institution's likely execution capabilities (measured by the institution's success in executing previous strategies of a similar scale or the performance against the strategic plan so far).

4.9 Identification of key vulnerabilities

85. Having conducted the BMA, competent authorities should assess the key vulnerabilities to which the institution's business model and strategy expose it or may expose it, considering:
 - a. poor expected financial performance;
 - b. reliance on an unrealistic strategy;
 - c. excessive concentrations or volatility (e.g. of earnings);
 - d. excessive risk-taking;
 - e. funding structure concerns; and/or
 - f. significant external issues (e.g. regulatory threats, such as mandating of 'ring-fencing' of business units).
86. Following the above assessment, competent authorities should form a view on the viability of the institution's business model and the sustainability of its strategy, and any necessary measures to address problems and concerns.

4.10 Summary of findings and scoring

87. Based on the assessment of the viability and sustainability of the business model, competent authorities should form an overall view on the business model viability and strategy sustainability, and any potential risks to the viability of an institution stemming from this assessment. This view should be reflected in a summary of findings, accompanied by a viability score based on the considerations specified in Table 2.

Table 2. Supervisory considerations for assigning a business model and strategy score

Score	Supervisory view	Considerations
1	The business model and strategy pose low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution generates strong and stable returns which are acceptable given its risk appetite and funding structure.

Score	Supervisory view	Considerations
		<ul style="list-style-type: none"> • There are no material asset concentrations or unsustainable concentrated sources of income. • The institution has a strong competitive position in its chosen markets and a strategy likely to reinforce this. • The institution has financial forecasts drawn up on the basis of plausible assumptions about the future business environment. • Strategic plans are appropriate given the current business model and management execution capabilities.
2	The business model and strategy pose a medium-low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution generates average returns compared to peers and/or historic performance which are broadly acceptable given its risk appetite and funding structure. • There are some asset concentrations or concentrated sources of income. • The institution faces competitive pressure on its products/services in one or more key markets. Some doubt about its strategy to address the situation. • The institution has financial forecasts drawn up on the basis of optimistic assumptions about the future business environment. • Strategic plans are reasonable given the current business model and management execution capabilities, but not without risk.
3	The business model and strategy pose a medium-high level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution generates returns that are often weak or not stable, or relies on a risk appetite or funding structure to generate appropriate returns that raise supervisory concerns. • There are significant asset concentrations or concentrated sources of income.

Score	Supervisory view	Considerations
		<ul style="list-style-type: none"> • The institution has a weak competitive position for its products/services in its chosen markets, and may have few business lines with good prospects. The institution's market share may be declining significantly. There are doubts about its strategy to address the situation. • The institution has financial forecasts drawn up on the basis of overly optimistic assumptions about the future business environment. • Strategic plans may not be plausible given the current business model and management execution capabilities.
4	The business model and strategy pose a high level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution generates very weak and highly unstable returns, or relies on an unacceptable risk appetite or funding structure to generate appropriate returns. • The institution has extreme asset concentrations or unsustainable concentrated sources of income. • The institution has a very poor competitive position for its products/services in its chosen markets and participates in business lines with very weak prospects. Strategic plans are very unlikely to address the situation. • The institution has financial forecasts drawn up on the basis of very unrealistic assumptions about the future business environment. • Strategic plans are not plausible given the current business model and management execution capabilities.

Title 5. Assessing internal governance and institution-wide controls

5.1 General considerations

88. Competent authorities should assess whether or not an institution's internal governance, are adequate for and commensurate with the institution's risk profile, business model, nature, size and complexity. They should identify the extent to which the institution complies with the applicable EU requirements regarding sound internal governance arrangements. Competent authorities should evaluate in particular whether or not the internal governance arrangements ensure the sound management of risks and include appropriate internal controls. Competent authorities should establish if there are material risks posed by poor internal governance arrangements and their potential effect on the sustainability of the institution.
89. For SREP, the assessment of internal governance and institution-wide controls should include an assessment of the following areas:
- a. the overall internal governance framework;
 - b. the composition, organisation and functioning of the management body and its committees, where established;
 - c. corporate and risk culture;
 - d. remuneration policies and practices;
 - e. the internal control framework, which should include a clear organisational structure and well-functioning independent internal risk management, compliance and audit functions;
 - f. the risk management framework, including ICAAP, ILAAP and new product approval process;
 - g. administrative and accounting procedures;
 - h. outsourcing arrangements;
 - i. information systems and business continuity; and
 - j. the consistency and credibility of recovery planning.
90. The assessment of internal governance should inform the assessment of risk management and controls as specified in Titles 6 and 8, as well as the assessment of ICAAP and ILAAP in the SREP capital assessment (Title 7) and the SREP liquidity assessment (Title 9). Likewise, a risk-by-risk

analysis of ICAAP calculations/capital estimates reviewed under Title 7, and any deficiencies identified thereby, should inform the assessment of the overall ICAAP framework assessed under this title.

5.2 Overall internal governance framework

91. In line with the EBA Guidelines on internal governance, the Joint ESMA and EBA Guidelines on the assessment of the suitability of members of the management body and key function holders and the EBA Guidelines on disclosure requirements⁹, the assessment of the internal governance framework by competent authorities should include an assessment of whether the institution demonstrates at least that:
- a. the duties of the management body are clearly defined, distinguishing between the duties of the management (executive) function and of the supervisory (non-executive) function and that appropriate governance arrangements have been implemented;
 - b. a robust and transparent organisational structure with clearly defined responsibilities, including those of the management body and its committees has been set up;
 - c. the management body has set and ensured the implementation of a business and a risk strategy, including the setting of the institution's risk appetite, on an individual and a consolidated basis with the appropriate involvement of the management body in its supervisory function;
 - d. risk policies and their implementation, including communication and training, are appropriate;
 - e. a selection and suitability assessment process for key function holders has been implemented;
 - f. an adequate and effective internal governance and internal control framework have been implemented that includes a clear organisational structure and well-functioning independent internal risk management, compliance and audit functions that have sufficient authority, stature and resources to perform their functions;
 - g. a remuneration policy and remuneration practices that are in line with the remuneration principles set out in Articles 92 to 95 of Directive 2013/36/EU and the EBA Guidelines on sound remuneration policies under Articles 74(3) and 75(2) of Directive 2013/36/EU¹⁰ have been implemented;

⁹ EBA Guidelines on internal governance ([EBA/GL/2017/11](#)), Joint ESMA and [EBA Guidelines on the assessment of the suitability of members of the management body and key function holders \(EBA/GL/2017/12\)](#) and [EBA Guidelines on disclosure requirements under Part Eight of Regulation \(EU\) No 575/2013 \(EBA/GL/2016/11\)](#).

¹⁰ [EBA guidelines on sound remuneration policies \(EBA/GL/2015/22\)](#)

- h. arrangements aimed at ensuring the integrity of the accounting and financial reporting systems, including financial and operational controls and compliance with the law and relevant standards have been implemented;
- i. an outsourcing policy and strategy that consider the impact of outsourcing on the institution's business and the risks it faces have been implemented¹¹;
- j. the internal governance framework is set, overseen and regularly assessed by the management body; and
- k. that the internal governance framework is transparent to stakeholders, including shareholders.

5.3 Organisation and functioning of the management body

92. In accordance with Articles 74 and 91(12) of Directive 2013/36/EU and with the EBA Guidelines on internal governance and Joint ESMA and EBA Guidelines on the assessment of the suitability of members of the management body and key function holders, competent authorities should assess whether:

- a. arrangements aimed at ensuring that the individual and collective suitability of the management body and the individual suitability key function holders are implemented and carried out effectively upon appointment, when material changes happen (e.g. those having an impact on the conditions assessed in the context of the initial fit and proper assessment) and on an ongoing basis, including notification to the relevant competent authorities¹²;
- b. the composition and succession planning of the management body are appropriate and the number of members of the body adequate;
- c. diversity has been taken into account when recruiting members of the management body;
- d. effective interaction exists between the management and the supervisory functions of the management body;
- e. the management body in its management function appropriately directs the business and the supervisory function oversees and monitors management decision-making and actions;
- f. members act with independence of mind;

¹¹ [CEBS Guidelines on outsourcing](#) published 14.12.2006; the CEBS GL is due to be updated and replaced by EBA Guidelines on Outsourcing.

¹² See also the Joint ESMA and EBA Guidelines on the assessment of the suitability of members of the management body and key function holders ([ESMA/2016/1529](#))

- g. there is sufficient time commitment by the members of the management body to perform their functions;
- h. the limitation on the number of directorship for significant institutions as set out in Article 91(3) of Directive 2013/36/EU is complied with;
- i. appropriate internal governance practices and procedures are in place for the management body and its committees, where established; and
- j. the management body in its management function and in its supervisory function and the risk committee, where established, have appropriate access to information on the risk situation of the institution.

5.4 Corporate and risk culture

93. Competent authorities should assess whether the institution has an appropriate and transparent corporate structure that is ‘fit for purpose’ and a sound corporate and risk culture that is comprehensive and proportionate to the nature, scale and complexity of the risks inherent within the business model and the institution's activities and consistent with the institution’s risk appetite.
94. In line with the EBA Guidelines on internal governance, competent authorities should assess whether:
- a. the management body knows and understands the legal, organisational and operational structure of the institution (‘know your structure’) and ensures that it is consistent with its approved business and risk strategies and risk appetite;
 - b. institutions have not set up opaque or unnecessarily complex structures that have no clear economic rationale or legal purpose, and when setting up structures the management body understands them, their purpose and the particular risks associated with them and ensures that the internal control functions are appropriately involved;
 - c. institutions have developed an integrated and institution-wide risk culture, based on a full understanding and holistic view of the risks they face and how they are managed, taking into account the institution’s risk appetite;
 - d. the institution’s ethical corporate and risk culture creates an environment of effective challenge in which decision-making processes promote a range of views (e.g. by including independent members in the management body committees);
 - e. institutions have implemented independent whistleblowing processes and procedures;
 - f. institutions appropriate manage conflicts of interests at an institutional level and have established a conflict of interest policy for staff to manage conflicts between the personal interest of the staff and the interest of the institution; and
-

- g. there is clear, strong and effective communication of strategies, corporate values, the code of conduct, risk and other policies to all relevant staff, and the risk culture is applied across all levels of the institution.

5.5 Remuneration policies and practices

95. Competent authorities should assess whether the institution has a remuneration policy and practices, as specified in Articles 92 to 95 of Directive 2013/36/EU, for staff whose professional activities have a material impact on the institution's risk profile and appropriate remuneration policies for all staff members. In line with the EBA Guidelines on internal governance and the EBA Guidelines on sound remuneration policies¹³, competent authorities should assess whether:

- a. the remuneration policy is consistent with the institution's business and risk strategies, corporate culture and values, the long-term interests of the institution and the measures taken to avoid conflicts of interest, does not encourage excessive risk taking and is maintained, approved and overseen by the management body;
- b. staff whose professional activities have a material impact on the institution's risk profile (identified staff) are appropriately identified and Regulation (EU) No 604/2014 is properly applied, in particular with regard to:
 - i. the application of the qualitative and quantitative criteria for the identification of staff; and
 - ii. the provisions on exclusion of staff who are identified only under the quantitative criteria specified in Article 4 of Regulation (EU) No 604/2014;
- c. the combination of variable and fixed remuneration is appropriate, the provisions on the limitation of the variable remuneration component to 100% of the fixed remuneration component (200% with shareholders' approval) are complied with and variable remuneration is not paid through vehicles or methods that facilitate non-compliance with Directive 2013/36/EU or Regulation (EU) No 575/2013; and
- d. variable remuneration for identified staff is based on performance, the requirements on deferral, retention, pay out in instruments and the application of malus and claw back are respected and the institution does not use vehicles or practices to circumvent remuneration requirements.

¹³ EBA Guidelines on sound remuneration policies and disclosures [EBA/GL/2015/22](#)

5.6 Internal control framework

96. Competent authorities should assess whether the institution has an appropriate internal control framework. This assessment should include, at least whether:
- a. the institution has adequate written internal control policies in place and has implemented an internal control framework within the business units and within independent control functions;
 - b. there is a clear decision-making process with a clear allocation of responsibilities for implementation of the internal control framework and its components;
 - c. there is an adequate segregation of duties with regard to conflicting activities;
 - d. all independent control functions are effective and have sufficient resources, authority and stature to fulfil their mission, as well as direct access to the management body, including in its supervisory function;
 - e. the internal control framework is implemented in all areas of the institution, with business and support units being responsible in the first instance for establishing and maintaining adequate internal controls and risk management procedures;
 - f. there is exchange of the necessary information in a manner that ensures that the management body, business lines and internal units, including each internal control function, are able to carry out their duties;
 - g. the institution has a new product approval policy and process (NPAP), including a process for material changes, with a clearly specified role for the independent risk management and compliance functions, approved by the management body;
 - h. the institution has the capacity to produce risk reports, uses them for management purposes and such risk reports are:
 - i. accurate, comprehensive, clear and useful; and
 - ii. produced and communicated to the relevant parties with the appropriate frequency; and
 - i. audit recommendations are subject to a formal follow-up procedure by the appropriate levels of management to ensure and report on their effective and timely resolution.

5.6.1 Internal audit function

97. In line with the EBA Guidelines on internal governance, competent authorities should assess whether the institution has established an effective independent internal audit function that:

- a. is set up in accordance with national and international professional standards;
- b. has its purpose, authority and responsibility defined in a mandate that recognises professional standards and that is approved by the management body;
- c. has adequate resources and stature to perform their tasks;
- d. has its organisational independence and the internal auditors' objectivity protected, including by an appropriate segregation of duties, having an independent head with sufficient stature and access and direct reporting lines to the management body;
- e. assesses the appropriateness of the institution's governance framework, including whether existing policies and procedures remain adequate and comply with legal and regulatory requirements, with decisions of the management body and with the risk appetite and strategy of the institution;
- f. assesses whether procedures are correctly and effectively implemented (e.g. compliance with conduct requirements of transactions, compliance of the level of risk effectively incurred with the risk appetite and limits, etc.);
- g. assesses the adequacy, quality and effectiveness of the controls performed and the reporting done by the business units and the internal risk management and compliance functions;
- h. adequately covers all areas in a risk-based audit plan, including ICAAP, ILAAP and (NPAP); and
- i. determines if the institution adheres to internal policies and relevant EU and national implementing legislation and addresses any deviations from either.

5.7 Risk management framework

98. Competent authorities should assess whether the institution has established an appropriate risk management framework and risk management processes. Competent authorities should review, at least:
- a. whether the risk strategy, risk appetite and risk management framework are appropriate and implemented on an individual and a consolidated basis;
 - b. the ICAAP and ILAAP frameworks;
 - c. stress testing capabilities and results;
 - d. whether the institution has established an independent risk management function covering the whole institution, which is actively involved in drawing up the institution's

- risk strategy and all material risk management decisions, and which provides the management body and business units with all relevant risk-related information;
- e. whether the institution has a head of the risk management function with sufficient expertise, independence and seniority, and, where necessary, direct access to the management body in its supervisory function;
 - f. whether the independent risk management function ensures that the institution's risk measurement, assessment and monitoring processes are appropriate; and
 - g. whether the institution has put in place policies and procedures to identify, measure, monitor, mitigate and report risk and associated risk concentrations and whether these are in line with the institution's risk limits and risk appetite or are approved by the management body.

5.7.1 Risk appetite framework and strategy

99. When assessing the risk management framework, competent authorities should consider the extent to which it is embedded in, and how it influences, the overall strategy of the institution. Competent authorities should, in particular, assess if there are appropriate and consistent links between the business strategy, the risk strategy, risk appetite and risk management framework, and the capital and liquidity management frameworks.
100. When reviewing the risk strategy, risk appetite and risk management framework of an institution, competent authorities should assess whether:
- a. the responsibility of the management body in respect of the risk strategy, risk appetite and risk management framework is exercised in practice by providing appropriate direction and oversight;
 - b. the risk strategy and risk appetite consider all material risks to which the institution is exposed and contain risk limits, tolerances and thresholds;
 - c. the risk strategy and risk appetite are consistent and implemented;
 - d. the risk appetite framework is forward-looking, in line with the strategic planning horizon set out in the business strategy and regularly reviewed;
 - e. the risk strategy and appetite appropriately consider the risk tolerance and financial resources of the institution (i.e. the risk appetite should be consistent with supervisory own funds and liquidity requirements and other supervisory measures and requirements); and
 - f. the risk strategy and risk appetite statement are documented in writing and there is evidence that they have been communicated to the staff of the institution.

5.7.2 ICAAP and ILAAP frameworks

101. Competent authorities should periodically review the institutions' ICAAP and ILAAP based on the information collected from the institutions in accordance with the EBA Guidelines on ICAAP and ILAAP information collected for SREP purposes¹⁴ and determine their (1) soundness, (2) effectiveness and (3) comprehensiveness according to the criteria specified in this section. Competent authorities should also assess how ICAAP and ILAAP are integrated into overall risk management and strategic management practices, including capital and liquidity planning.
102. These assessments should contribute to the determination of additional own funds requirements and the assessment of capital adequacy as outlined in Title 7, as well as to the evaluation of liquidity adequacy as outlined in Title 9.

Soundness of the ICAAP and ILAAP

103. To evaluate the soundness of the ICAAP and ILAAP, competent authorities should consider whether the policies, processes, inputs and models constituting the ICAAP and ILAAP are proportionate to the nature, scale and complexity of the activities of the institution. To do so, competent authorities should assess the appropriateness of the ICAAP and ILAAP for assessing and maintaining an adequate level of internal capital and liquidity to cover risks to which the institution is or might be exposed and to make business decisions (e.g. in relation to allocating capital under the business plan), including under stressed conditions in line with the EBA Guidelines on institutions' stress testing¹⁵.
104. In the assessment of the soundness of the ICAAP and ILAAP, competent authorities should consider, where relevant:
- a. whether methodologies and assumptions applied by institutions are appropriate and consistent across risks, are grounded in solid empirical input data, use robustly calibrated parameters and are applied equally for risk measurement and capital and liquidity management;
 - b. whether the confidence level is consistent with the risk appetite and whether the internal diversification assumptions reflect the business model and the risk strategies;
 - c. whether the definition and composition of available internal capital or liquidity resources considered by the institution for the ICAAP and ILAAP are consistent with the risks measured by the institution and are eligible for the calculation of own funds and liquidity buffers; and
 - d. whether the distribution/allocation of available internal capital and liquidity resources among business lines or legal entities properly reflects the risk to which each of them is

¹⁴ EBA Guidelines on ICAAP and ILAAP information collected for SREP purposes([EBA/GL/2016/10](#))

¹⁵ [EBA Guidelines on Institutions' Stress Testing](#)

or may be exposed, and properly takes into account any legal or operational constraints on the transferability of these resources.

Effectiveness of the ICAAP and ILAAP

105. When assessing the effectiveness of the ICAAP and ILAAP, competent authorities should examine their use in the decision-making and management processes at all levels in the institution (e.g. limit setting, performance measurement, etc.). Competent authorities should assess how the institution uses the ICAAP and ILAAP in its risk, capital and liquidity management (use test). The assessment should consider the interconnections and interrelated functioning of the ICAAP and ILAAP with the risk appetite framework, risk management, and liquidity and capital management, including forward-looking funding strategies, and whether they are appropriate for the business model and complexity of the institution.

106. To this end, competent authorities should assess whether the institution has policies, procedures and tools to facilitate:

- a. clear identification of the functions and/or management committees responsible for the different elements of the ICAAP and ILAAP (e.g. modelling and quantification, internal auditing and validation, monitoring and reporting, issue escalation, etc.);
- b. capital and liquidity planning: the calculation of capital and liquidity resources on a forward-looking basis (including in assumed stress scenarios) in connection with the overall strategy or significant transactions;
- c. the allocation and monitoring of capital and liquidity resources among business lines and risk types (e.g. risk limits defined for business lines, entities or individual risks are consistent with the objective of ensuring the overall adequacy of the institution's internal capital and liquidity resources);
- d. the regular and prompt reporting of capital and liquidity adequacy to senior management and to the management body (in particular, the frequency of reporting should be adequate with respect to risks and business-volume development, existing internal buffers and the internal decision-making process to allow the institution's management to put in place remedial actions before capital or liquidity adequacy is jeopardised); and
- e. senior management or management body awareness and actions where business the strategy and/or significant individual transactions may be inconsistent with the ICAAP and available internal capital (e.g. senior-management approval of a significant transaction where the transaction is likely to have a material impact on available internal capital) or with the ILAAP and available internal liquidity resources ILAAP.

107. Competent authorities should assess whether the management body demonstrates appropriate commitment to and knowledge of the ICAAP and ILAAP and their outcomes. In particular, they should assess whether the management body approves the ICAAP and ILAAP

frameworks and outcomes and, where relevant, the outcomes of internal validation of the ICAAP and ILAAP.

108. Competent authorities should assess the extent to which the ICAAP and ILAAP are forward-looking in nature. Competent authorities should do this by assessing the consistency of the ICAAP and ILAAP with capital and liquidity plans and strategic plans.

Comprehensiveness of the ICAAP and ILAAP

109. Competent authorities should assess the ICAAP's and ILAAP's coverage of business lines, legal entities and risks to which the institution is or might be exposed, and the ICAAP's and ILAAP's compliance with legal requirements. In particular, they should assess:

- a. whether the ICAAP and ILAAP are implemented homogeneously and proportionately for all the relevant institution's business lines and legal entities with respect to risk identification and assessment;
- b. whether the ICAAP and ILAAP cover all material risks regardless of whether the risk arises from entities not subject to consolidation (special-purpose vehicles (SPVs), special-purpose entities (SPEs)); and
- c. where any entity has different internal governance arrangements or processes from the other entities of the group, whether these deviations are justified (e.g. the adoption of advanced models by only part of the group may be justified by a lack of sufficient data to estimate parameters for some business lines or legal entities, provided that these business lines or legal entities do not represent a source of risk concentration for the rest of the portfolio).

5.7.3 Assessment of institutions' stress testing

110. Competent authorities should review and assess institutions' stress testing programmes and their compliance with the requirements of the EBA Guidelines on institutions' stress testing in particular in relation to the assessment of stress testing programmes, governance arrangements, data infrastructure, use of stress testing in ICAAP and ILAAP and management actions as referred to in Title 4 of those guidelines.

111. Competent authorities should perform a qualitative assessment of stress testing programmes, as well as a quantitative assessment of the results of stress tests. Competent authorities should consider the outcomes of qualitative and quantitative assessments together with the results of supervisory stress tests (see Title 12) for the purposes of assessing capital and liquidity adequacy and determining the appropriate supervisory response to the deficiencies identified.

112. Furthermore, supervisory assessments of institutions' stress testing programmes, and the outcomes of various stress tests performed by an institution as part of its stress testing programme, could inform the assessment of various SREP elements and, in particular:

- a. The identification of possible vulnerabilities or weaknesses in risk management and controls on individual risk areas. These should be used as an additional source of information to be taken into account by the competent authorities when assessing individual risks to capital as referred to in Title 6 of these Guidelines, or risks to liquidity and funding as referred to in Title 8 of these Guidelines. For example, sensitivity analyses and scenario analyses performed by an institution can be used to assess the sensitivity and adequacy of the models used and the quantification of the individual risks.
- b. The identification of possible deficiencies in overall governance arrangements or institution-wide controls. These should be considered by competent authorities as an additional source of information for the purposes of the SREP assessment of internal governance and institution-wide controls. Furthermore the results of an institution's stress tests can be used in assessing the institution's capital planning, and in particular its time dimension.
- c. The quantification of specific quantitative liquidity requirements in the context of the assessment of liquidity adequacy, especially where a competent authority has not developed specific supervisory benchmarks for liquidity requirements, or does not apply liquidity supervisory stress testing.

Qualitative assessment of institutions' stress testing programmes

113. To facilitate the qualitative assessment, competent authorities should require institutions to submit information regarding the organisation of their stress testing programme in relation to all the aspects specified above. The information submitted by institutions should cover data architecture and IT infrastructure, governance arrangements, methodologies, scenarios, key assumptions, results and planned management actions.
114. Competent authorities should consider all relevant sources of information about stress testing programmes and methodologies, including institutions' own internal assessments and validation or reviews undertaken by independent control functions, as well as information and estimations provided by third parties, where available.
115. Competent authorities should also engage in dialogue with the management body and senior management of institutions in relation to major macroeconomic and financial market vulnerabilities, as well as institution-specific threats to institutions' ongoing business, to assess how institutions manage their stress testing programmes.
116. When assessing stress testing programmes, and the results of stress tests, competent authorities should pay specific attention to the appropriateness of the selection of the relevant scenarios, and the underlying assumptions and methodologies, as well as of the use of stress test results in institutions' risk and strategic management. In particular, competent authorities should assess:

- a. the extent to which stress testing is embedded in an institution's risk management framework;
- b. the involvement of senior management and of the management body in the stress-testing programme;
- c. the integration of stress testing and its outcomes into decision-making throughout the institution; and
- d. the institution's ability and the infrastructure available, including with regard to data, to implement the stress testing programme in individual business lines and entities and across the group, where relevant.

117. When assessing stress testing programmes, the results of stress tests and proposed management actions competent authorities should consider both idiosyncratic and system-wide perspectives. In particular, management actions should be primarily assessed from an internal perspective with regard to their plausibility, considering the specificities of an individual institution. Competent authorities should also consider management actions from a system-wide perspective, as other institutions are likely to consider similar actions, which in a system-wide context may be implausible.

118. When assessing management actions with an effect on an institution's capital or general financial position, competent authorities should consider the timelines for the implementation of the action. In particular, management actions should be completed and implemented during the time horizon of the stress test. Competent authorities may also consider, where relevant, management actions that will be completed later than the time horizon of the stress test.

119. Competent authorities should take into account the effectiveness of institutions' stress testing programmes in identifying relevant business vulnerabilities and take this into consideration when assessing institutions' business model viability and sustainability of their strategies (see Title 4).

120. When assessing stress testing programmes and their results in the case of cross-border groups, competent authorities should consider the transferability of capital and liquidity between the legal entities or business units during stressed conditions, as well as the functioning of any established intra-group financial support arrangements, taking into account the funding difficulties that might be expected in stressed conditions.

Quantitative assessment of institutions' stress tests done for ICAAP and ILAAP purposes

121. Competent authorities in addition to carrying out the qualitative assessment specified above, should assess and challenge the choice and use of scenarios and assumptions, their severity and their relevance to the business model of the institution, as well as the results of such stress

tests, in particular with regard to stress tests performed for ICAAP and ILAAP purposes (see also Section 5.7.2).

122. Competent authorities should ensure that in a stress scenario used for ICAAP purposes the capital ratio is negatively affected as the result of, for example, credit rating migrations, a reduction in net interest margins or trading losses. Competent authorities should have access to the details of the institution's main assumptions and risk drivers and should challenge these, also based on supervisory stress tests, as specified in Title 12 of these guidelines.
123. In their reviews of stress tests for ICAAP and ILAAP purposes, competent authorities should carry out a combined assessment of the impact of stress test outcomes on capital and liquidity needs, as well as on other relevant regulatory requirements. To that end, competent authorities should assess whether the institution is able to maintain the applicable TSCR, at all times, in an adverse scenario and if it has identified a set of management actions to address any potential breaches of TSCR.
124. Competent authorities should duly challenge the scenarios, assumptions, and methodologies used by an institution. When challenging scenarios, assumptions, and the outcomes of institutions' stress tests done for ICAAP and ILAAP purposes, competent authorities should use, where appropriate, the outcomes, scenarios and assumptions from supervisory stress tests, including relevant regional stress test exercises done by various authorities, such as the EBA, the IMF and the ESCB/ESRB, as well the qualitative assessment as specified above, to determine the extent to which the institution's stress testing programme and its outcomes can be relied on.
125. If competent authorities identify deficiencies in the design of the scenarios or assumptions used by institutions, they may require institutions to re-run their stress tests, or some specific parts of the stress testing programme using modified assumptions provided by the competent authorities, or specific prescribed scenarios (e.g. the anchor scenarios defined in the EBA Guidelines on institutions' stress testing).
126. Competent authorities should also consider the impact of stress tests on an institution's leverage ratio, as well as its eligible liabilities held for the purposes of minimum requirements for eligible liabilities (MREL) as referred to in Directive 204/59/EU.
127. In the assessment of stress test results, competent authorities should also consider all known future regulatory changes affecting institutions within the scope and time horizon of the stress test exercise. Likewise, competent authorities should also consider all known changes in future capital requirements (e.g. fully loaded assessments) when assessing stress test results and business model viability.

5.7.4 New products and significant changes

128. Competent authorities should assess whether the institution should have in place a well-documented NPAP, approved by the management body, that addresses the development of

new markets, products and services, and significant changes to existing ones, as well as exceptional transactions.

129. Competent authorities should assess whether the internal risk management function and compliance function are appropriately involved in approving new products or significant changes to existing products, processes and systems.

5.8 Information systems and business continuity

130. In line with the EBA Guidelines on internal governance, competent authorities should assess whether the institution has effective and reliable information and communication systems and whether these systems fully support risk data aggregation capabilities at normal times as well as during times of stress. In particular, competent authorities should assess whether the institution is at least able to:

- a. generate accurate and reliable risk data for business units and the entire institution;
- b. capture and aggregate all material risk data across the institution;
- c. generate aggregate and up-to-date risk data in a timely manner; and
- d. generate aggregate risk data to meet a broad range of on-demand requests from the management body or competent authorities.

131. Competent authorities should assess whether the institution has established effective business continuity management with tested contingency and business continuity plans, as well as disaster recovery plans, for all its critical functions and resources and whether those plans can credibly recover these.

5.9 Recovery planning

132. To assess internal governance and institution-wide controls, competent authorities should consider any findings and deficiencies identified in the assessment of recovery plans and recovery planning arrangements conducted in accordance with Articles 6 and 8 of Directive 2014/59/EU.

133. Similarly, findings from the assessment of SREP elements, including internal governance and institution-wide control arrangements, should inform the assessment of recovery plans.

5.10 Application at the consolidated level and implications for group entities

134. At the consolidated level, in addition to the elements covered in the sections above, competent authorities should assess whether:

- a. the management body of the consolidating institution understands both the organisation of the group and the roles of its different entities, and the links and relationships among them;
- b. the organisational and legal structure of the group – where relevant – is clear and transparent, and suitable for the size and the complexity of the business and operations;
- c. the institution has established an effective group-wide management information and reporting system applicable to all business units and legal entities, and this information is available to the management body of the institution's parent undertaking on a timely basis;
- d. the management body of the consolidating institution has established consistent group-wide strategies, including a group wide risk strategy and appetite framework;
- e. group risk management covers all material risks regardless of whether the risk arises from entities not subject to consolidation (including SPVs, SPEs, and property firms) and establishes a comprehensive view on all risks;
- f. the institution carries out regular stress testing covering all material risks and entities in accordance with the EBA Guidelines on institutions' stress testing; and
- g. the group-wide internal audit function is independent, has a group-wide risk based auditing plan, is appropriately staffed and resourced, has appropriate stature and has a direct reporting line to the management body of the consolidating institution.

135. When conducting the assessment of internal governance and institution-wide controls at subsidiary level, in addition to the elements listed in this title, competent authorities should assess whether group-wide policies and procedures are implemented consistently at subsidiary level and whether group entities have taken steps to ensure that their operations are compliant with all applicable laws and regulations.

5.11 Summary of findings and scoring

136. Following the above assessments, competent authorities should form a view on the adequacy of the institution's internal governance arrangements and institution-wide controls. This view should be reflected in a summary of findings, accompanied by a viability score based on the considerations specified in Table 3.

Table 3. Supervisory considerations for assigning a score for internal governance and institution-wide controls

Score	Supervisory view	Considerations
1	Deficiencies in internal governance and institution-wide control arrangements pose a low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution has a robust and transparent organisational structure with clear responsibilities and separation of risk taking from risk management and control functions. • There is a sound corporate culture, management of conflicts of interest and whistleblowing processes. • The composition and functioning of the management body are appropriate. • The time commitment of members of the management body is appropriate and, where relevant, they comply with the limitation on the number of directorships, where relevant. • The institution has adopted a diversity policy that fosters a diverse board composition and complies with the targets set. • The remuneration policy is in line with the institution's risk strategy and long-term interests. • The risk management framework and risk management processes, including the ICAAP, ILAAP, NPAP, stress testing framework, capital planning and liquidity planning, are appropriate. • The internal control framework and internal controls are appropriate. • The internal risk management, compliance and audit functions are independent and have sufficient resources and the internal audit function operates effectively in accordance with established international standards and requirements.

Score	Supervisory view	Considerations
		<ul style="list-style-type: none"> • Information systems and business continuity arrangements are appropriate. • The recovery plan is credible and recovery planning arrangements are appropriate.
2	Deficiencies in internal governance and institution-wide control arrangements pose a medium-low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution has a largely robust and transparent organisational structure with clear responsibilities and separation of risk taking from risk management and control functions. • There is a largely sound corporate culture, management of conflicts of interest and whistleblowing processes. • The composition and functioning of the management body are largely appropriate. • The time commitment of members of the management body is largely appropriate, and, where relevant, they comply with the limitation on the number of directorships. • The institution has adopted a diversity policy that fosters a diverse board composition, and largely complies with the targets set or has implemented appropriate measures to achieve the targets defined in the policy. • The remuneration policy is largely in line with the institution's risk strategy and long-term interests. • The risk management framework and risk management processes, including the ICAAP, ILAAP, NPAP, stress testing framework, capital planning and liquidity planning, are largely appropriate. • The internal control framework and internal controls are largely appropriate.

Score	Supervisory view	Considerations
		<ul style="list-style-type: none"> • The internal risk management, compliance and audit functions are independent and their operations are largely effective. • Information systems and business continuity arrangements are largely appropriate. • The recovery plan is largely credible. The recovery planning arrangements are largely appropriate.
3	<p>Deficiencies in internal governance and institution-wide control arrangements pose a medium-high level of risk to the viability of the institution.</p>	<ul style="list-style-type: none"> • The institution's organisational structure and responsibilities are not fully transparent and risk taking is not fully separated from risk management and control functions. • There are doubts about the appropriateness of the corporate culture, management of conflicts of interest and/or whistleblowing processes. • There are doubts about the appropriateness of the composition and functioning of the management body. • There are doubts about the appropriate time commitment of members of the management body and where relevant they do not comply with the limitation on the number of directorships. • The institution has not adopted a diversity policy or has not put measures in place to achieve an appropriate level of diversity. • There are concerns that the remuneration policy may conflict with the institution's risk strategy and long-term interests. • There are doubts about the appropriateness of the risk management framework and risk management

Score	Supervisory view	Considerations
		<p>processes, including the ICAAP, ILAAP, NPAP, stress testing framework, capital planning and/or liquidity planning.</p> <ul style="list-style-type: none"> • There are doubts about the appropriateness of the internal control framework and internal controls. • There are doubts about the independence and effective operation of the internal risk management, compliance and audit functions. • There are doubts about the appropriateness of information systems and business continuity arrangements. • The recovery plan was assessed as potentially having material deficiencies and/or having material impediments to its implementation and supervisory concerns have not been fully addressed. There are doubts about the appropriateness of arrangements for recovery planning.
4	Deficiencies in internal governance and institution-wide control arrangements pose a high level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution's organisational structure and responsibilities are not transparent and risk-taking is not separated from risk management and control functions. • The corporate culture, management of conflicts of interest and/ or whistleblowing processes are inappropriate. • The composition and functioning of the management body are inappropriate. • The time commitment of members of the management body is insufficient, and, where relevant, they do not comply with the limitation on the number of directorships. • The institution has not adopted a diversity policy, the management body is not diverse and the institution has not

Score	Supervisory view	Considerations
		<p>put measures in place to aim for an appropriate level of diversity.</p> <ul style="list-style-type: none"> • The remuneration policy conflicts with the institution’s risk strategy and long-term interests. • The risk management framework and the risk management processes, including the ICAAP, ILAAP, NPAP, stress testing framework, capital planning and/or liquidity planning, are inappropriate. • The internal risk management, compliance and/or audit function is not independent and/or the internal audit functions are not operating in accordance with established international standards and requirements; operations are not effective. • The internal control framework and internal controls are inappropriate. • The information systems and business continuity arrangements are inappropriate. • The recovery plan was assessed as having material deficiencies and/or having material impediments to its implementation and supervisory concerns have not been fully addressed. The recovery planning arrangements are inappropriate.

Title 6. Assessing risks to capital

6.1 General considerations

137. Competent authorities should assess and score the risks to capital that have been identified as material for the institution.

138. The purpose of this title is to provide common methodologies to be considered for assessing individual risks and risk management and controls. It is not intended to be exhaustive and gives leeway to competent authorities to take into account other additional criteria that may be deemed relevant based on their experience and the specific features of the institution.

139. This title provides competent authorities with guidelines for the assessment and scoring of the following risks to capital:

- a. credit and counterparty risk;
- b. market risk;
- c. operational risk;
- d. interest rate risk from non-trading activities (IRRBB).

140. The title also identifies a set of sub-categories within each risk category above, which need to be taken into account when risks to capital are assessed. Depending on the materiality of any these sub-categories to a particular institution, they can be assessed and scored individually.

141. The decision on materiality depends on the supervisory judgment. However, for FX lending risk, in light of the ESRB Recommendation on lending in foreign currencies¹⁶, materiality should be determined taking into account the following threshold:

Loans denominated in foreign currency to unhedged borrowers constitute at least 10% of an institution's total loan book (total loans to non-financial corporations and households), where such total loan book constitutes at least 25% of the institution's total assets.

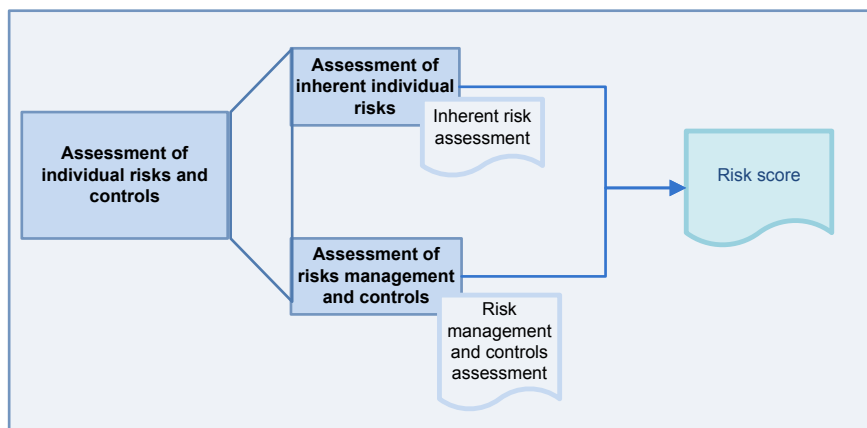
142. For the purpose of the guidelines, when identifying the sub-categories of a risk, competent authorities should consider the nature of the risk exposure rather than whether they are defined as elements of credit, market or operational risk in Regulation (EU) No 575/2013 (e.g. equity exposures in the banking book may be considered under a market risk assessment despite being considered as an element of credit risk in Regulation (EU) No 575/2013).

¹⁶ ESRB Recommendation on lending in foreign currencies (ESRB/2011/1), OJ C 342, 22.11.2011, p. 1.

143. Equally, competent authorities may decide upon breakdowns other than the one presented in these guidelines, provided that all material risks are assessed and that this is agreed within the college of supervisors, where relevant.
144. Competent authorities should also assess other risks that are identified as material to a specific institution but are not listed above (e.g. pension risk, insurance risk or structural FX risk). The following may assist with the identification process:
- a. drivers of TREA;
 - b. risks identified in the institution's ICAAP;
 - c. risks arising from the institution's business model (including those identified by other institutions operating a similar business model);
 - d. information stemming from the monitoring of key indicators;
 - e. findings and observations from internal or external audit reports; and
 - f. recommendations and guidelines issued by the EBA, as well as warnings and recommendations issued by macro-prudential authorities or the ESRB.
145. The above elements should also be taken into account by competent authorities when they are planning the intensity of their supervisory activity in relation to the assessment of a specific risk.
146. For credit, market and operational risk, competent authorities should verify the institution's compliance with the minimum requirements specified in the relevant EU and national implementing legislation. However, these guidelines extend the scope of the assessment beyond those minimum requirements to allow competent authorities to form a comprehensive view on risks to capital.
147. When evaluating risks to capital, competent authorities should also consider the potential impact of funding cost risk following the methodology included in Title 8 and may decide on the necessity of measures to mitigate this risk.
148. In their implementation of the methodologies specified in this title, competent authorities should identify relevant quantitative indicators and other metrics, which could also be used to monitor key indicators, as specified in Title 3.
149. For each material risk, competent authorities should assess and reflect in the risk score:
- a. inherent risk (risk exposures); and
 - b. the quality and effectiveness of risk management and controls.

150. This assessment flow is represented in Figure 2 below.

Figure 5. Assessment workflow for risks to capital



151. When performing their assessments, competent authorities should use all available information sources, including regulatory reporting, ad-hoc reporting agreed with the institution, the institution's internal metrics and reports (e.g. internal audit report, risk management reports, information from the ICAAP), on-site inspection reports and external reports (e.g. the institution's communications to investors, rating agencies). While the assessment is intended to be institution-specific, comparison with peers should be considered to identify potential exposure to risks to capital. For such purposes, peers should be defined on a risk-by-risk basis and might differ from those identified for BMA or other analyses.

152. In the assessment of risks to capital, competent authorities should also evaluate the accuracy and prudence of the calculation of minimum own fund requirements to identify situations where minimum own funds calculations may underestimate the actual level of risk. This assessment would inform the determination of additional own funds requirements as provided in Section 7.2.3.

153. The outcome of the assessment of each material risk should be reflected in a summary of findings that provides an explanation of the main risk drivers, and a risk score, as specified in the following sections.

6.2 Assessment of credit and counterparty risk

General considerations

154. Competent authorities should assess credit risk arising from all banking book exposures (including off-balance sheet items). They should also assess the counterparty credit risk and the settlement risk.
155. In assessing credit risk, competent authorities should consider all the components that determine potential credit losses, and in particular: the probability of a credit event (i.e. default), or correlated credit events, that mainly concerns the borrowers and their ability to repay relevant obligations; the size of exposures subject to credit risk; and the recovery rate of the credit exposures in the event of borrowers defaulting. For all these components, competent authorities should take into account the possibility that these components may deteriorate over time and worsen compared to expected outcomes.

6.2.2 Assessment of inherent credit risk

156. Through the assessment of inherent credit risk, competent authorities should determine the main drivers of the institution's credit risk exposure and evaluate the significance of the prudential impact of this risk for the institution. The assessment of inherent credit risk should therefore be structured around the following main steps:
- a. preliminary assessment;
 - b. assessment of the nature and composition of the credit portfolio;
 - c. assessment of portfolio credit quality;
 - d. assessment of the level and quality of credit risk mitigation; and
 - e. assessment of the level of provisions and of credit valuation adjustments.
157. Competent authorities should assess credit risk in both current and prospective terms. Competent authorities should combine the analysis of the current portfolio credit risk with the assessment of the institution's credit risk strategy (potentially as part of the wider assessment of strategy carried out as part of the BMA) and consider how the expected, as well as the stressed, macro-economic developments could affect those elements and ultimately the institution's earnings and own funds.
158. Competent authorities should primarily conduct the assessment at both portfolio and asset-class level. Where relevant, competent authorities should also conduct a more granular assessment, potentially at the level of single borrowers or transactions. Competent authorities may also use sampling techniques when assessing portfolio risk.

159. Competent authorities may perform the assessment vertically (i.e. by considering all the dimensions for relevant sub-portfolios) or horizontally (i.e. by considering one dimension, for example credit quality, for the overall portfolio).

Preliminary assessment

160. To determine the scope of the assessment of credit risk, competent authorities should first identify the sources of credit risk to which the institution is or may be exposed. To do so, competent authorities should leverage the knowledge gained from the assessment of other SREP elements, from the comparison of the institution's position to peers and from any other supervisory activities.

161. As a minimum, competent authorities should consider the following:

- a. the credit risk strategy and appetite;
- b. the own funds requirement for credit risk compared to the total own funds requirement, and – where relevant – the internal capital allocated for credit risk compared to the total internal capital, including the historical change in this figure and forecasts, if available;
- c. the nature, size and composition of the institution's on- and off-balance sheet credit-related items;
- d. the level and change over time of impairments and write-offs and of the default rates of the credit portfolio; and
- e. the risk-adjusted performance of the credit portfolio.

162. Competent authorities should perform the preliminary analysis considering the change in the above over time to form an informed view of the main drivers of the institution's credit risk.

163. Competent authorities should focus their assessments on those drivers and portfolios deemed the most material.

Nature and composition of the credit portfolio

164. Competent authorities should assess the nature of the credit exposure (i.e. the types of borrowers and exposures) to identify the underlying risk factors and they should analyse the composition of the institution's credit portfolio risk.

165. In performing this assessment, competent authorities should also consider how the nature of credit risk exposure can affect the size of exposure (e.g. credit lines/undrawn commitments drawn down by borrowers, foreign currency denomination, etc.), taking into consideration the institution's legal capacity to unilaterally cancel undrawn amounts of committed credit facilities.

166. To assess the nature of credit risk, competent authorities should consider at least the following sub-categories of credit risk:

- a. credit concentration risk;
- b. counterparty credit risk and settlement risk;
- c. country risk;
- d. credit risk from securitisations;
- e. FX lending risk; and
- f. specialised lending.

Credit concentration risk

167. Competent authorities should form a view on the degree of credit concentration risk, as referred to in Article 81 of Directive 2013/36/EU, to which the institution is exposed. Specifically, competent authorities should assess the risk that the institution will incur significant credit losses stemming from a concentration of exposures to a small group of borrowers, to a set of borrowers with similar default behaviour or to highly correlated financial assets.

168. Competent authorities should conduct this assessment considering different categories of credit concentration risk, including:

- a. single-name concentrations (including a client or group of connected clients as defined for large exposures);
- b. sectoral concentrations;
- c. geographical concentrations;
- d. product concentration; and
- e. collateral and guarantees concentration.

169. To identify credit concentrations, competent authorities should consider the common drivers of credit risk across exposures and should focus on those exposures that tend to exhibit similar behaviour (i.e. high correlation).

170. Competent authorities should pay particular attention to hidden sources of credit concentration risk that can materialise under stressed conditions, when the level of credit-risk correlation can increase compared to normal conditions and when additional credit exposures can arise from off-balance sheet items.

171. For groups, competent authorities should consider the credit concentration risk that can result from consolidation, which may be not evident at an individual level.

172. When assessing credit concentrations, competent authorities should consider the possibility of overlaps (e.g. a high concentration to a specific government will probably lead to a country concentration and single-name concentration), and should therefore avoid applying a simple aggregation of the different types of credit concentration, and should instead consider underlying drivers.

173. To assess the level of concentration, competent authorities can use different measures and indicators, the most common being the Herfindahl-Hirschman Index (HHI) and Gini coefficients, which may then be included in more or less complex methodologies to estimate the additional credit risk impact.

Counterparty credit and settlement risks

174. Competent authorities should assess the counterparty credit and settlement risks faced by institutions arising from exposures to derivatives and transactions in financial instruments.

175. For this assessment, the following aspects should be considered:

- a. the quality of counterparties and relevant credit valuation adjustments (CVAs);
- b. the complexity of the financial instruments underlying the relevant transactions;
- c. the wrong-way risk arising from the positive correlation between the counterparty credit risk and the credit risk exposure;
- d. the exposure to counterparty credit and settlement risks in terms of both current market values and nominal amount, compared to the overall credit exposure and to own funds;
- e. the proportion of transactions processed through financial market infrastructures (FMIs) that provide payment versus delivery settlement;
- f. the proportion of relevant transactions to central counterparties (CCPs) and the effectiveness of loss protection mechanisms for them; and
- g. the existence, significance, effectiveness and enforceability of netting agreements.

Country risk

176. Competent authorities should assess:

- a. the degree of concentration within all types of exposures to country risk, including sovereign exposures, in proportion to the whole institution's credit portfolio (per obligor and amount);
- b. the economic strength and stability of the borrower's country and its track record in terms of punctual payment and occurrence of serious default events;
- c. the risk of other forms of sovereign intervention that can materially impair the creditworthiness of borrowers (e.g. deposit freezes, expropriation or punitive taxation); and
- d. the risk arising from the potential for an event (e.g. a natural or social/political event) affecting the whole country to lead to default by a large group of debtors (collective debtor risk).

Competent authorities should also assess the transfer risk linked to cross-border foreign currency lending for material cross-border lending and exposures in foreign currencies.

Credit risk from securitisation

177. Competent authorities should assess the credit risk related to securitisations where institutions act as originators, investors, sponsors or credit-enhancement providers.

178. To appreciate the nature of relevant exposures and their potential development, competent authorities should:

- a. understand the strategy, risk appetite and business motivations of institutions in terms of securitisations; and
- b. analyse securitisation exposures taking into consideration both the role played and the seniority of tranches held by institutions, as well as the type of securitisation (e.g. traditional vs. synthetic, securitisation vs. re-securitisation).

179. In assessing the credit risk arising from securitisation exposures, competent authorities should assess, as a minimum:

- a. the appropriateness of allocation of securitisation exposures to the banking book and trading book and the consistency with the institution's securitisation strategy;
- b. whether the appropriate regulatory treatment is applied to securitisations;
- c. the rating and the performance of the securitisation tranches held by the institution, as well as the nature, composition and quality of the underlying assets;
- d. the consistency of the capital relief with the actual risk transfer for originated securitisations. Competent authorities should also verify whether the institution

provides any form of implicit (non-contractual) support for the transactions and the potential impact on own funds for credit risk;

- e. whether there is a clear distinction between drawn and undrawn amounts for liquidity facilities provided to the securitisation vehicle; and
- f. the existence of contingency plans for Asset-Backed Commercial Paper conduits managed by the institution in the event that an issuance of commercial paper is not possible because of liquidity conditions, and the impact on the total credit risk exposure of the institution.

FX lending risk

180. Competent authorities should assess the existence and materiality of the additional credit risk arising from FX lending exposures to unhedged borrowers, and, in particular, any non-linear relationship between market risk and credit risk where exchange rates (market risk) may have a disproportional impact on the credit risk of an institution's FX loans portfolio. However, where relevant, competent authorities should extend the scope of this assessment to other types of customers (i.e. customers other than retail or SME borrowers) that are unhedged. In particular, competent authorities should assess the higher credit risk arising from:

- a. an increase in both the outstanding value of debt and the flow of payments to service such debt; and
- b. an increase in the outstanding value of debt compared to the value of collateral assets denominated in the domestic currency.

181. In evaluating FX lending risk, competent authorities should consider:

- a. the type of exchange rate regime and how this could affect the changes in the FX rate between domestic and foreign currencies;
- b. the institution's risk management of FX lending, measurement and control frameworks, policies and procedures, including the extent to which they cover non-linear relationships between market and credit risk. In particular, competent authorities should assess whether:
 - i. the institution explicitly identifies its FX lending risk appetite and operates within the specified thresholds;
 - ii. the FX lending risk is taken into account when borrowers are assessed and FX loans are underwritten;
 - iii. the FX lending risk, including risk concentration in one or more currencies, is appropriately addressed in the ICAAP;

- iv. the institution periodically reviews the hedging status of borrowers;
- v. the impact of exchange rate movements is taken into account in default probabilities;
- c. the sensitivity impact of exchange rate movements on borrowers' credit ratings/scoring and debt-servicing capacities; and
- d. possible concentrations of lending activity in a single foreign currency or in a limited number of highly correlated foreign currencies.

Specialised lending

182. Competent authorities should assess specialised lending separately from other lending activities since the risk of such exposures lies in the profitability of the asset or project financed (e.g. commercial real estate, energy plant, shipping, commodities, etc.) rather than the borrower (which is generally a special purpose vehicle).

183. Generally, these exposures tend to be of a significant size relative to the portfolio and so represent a source of credit concentration, of long maturity, which makes it difficult to make reliable projections of profitability.

184. In assessing the relevant risk, competent authorities should consider:

- a. the profitability of the projects and the conservativeness of the assumptions underlying the business plans (including the credit risk of the main customers);
- b. the impact of changes in regulation, especially for subsidised sectors, on future cash flows;
- c. the impact of changing market demand, where relevant, and the existence of a market for the potential future sale of the object financed;
- d. the existence of a syndicate or of other lenders sharing the credit risk; and
- e. any form of guarantee pledged by the sponsors.

Assessment of the portfolio credit quality

185. In assessing inherent credit risk, competent authorities should consider the quality of the credit portfolio, by carrying out an initial analysis to distinguish between performing, non-performing and forborne exposure categories.

186. Competent authorities should assess the overall credit quality at portfolio level and the different quality grades within each of the above categories to determine the institution's overall credit risk. Competent authorities should also consider whether the actual credit quality is consistent with the stated risk appetite, and establish reasons for any deviations.

187. When assessing portfolio credit quality, competent authorities should pay particular attention to the adequacy of the classification of credit exposures and assess the impact of potential misclassification, with the subsequent delay in the provisioning and recognition of losses by the institution. In conducting this assessment, competent authorities may use peer analysis and benchmark portfolios, where available. Competent authorities may also use sampling of loans when assessing portfolio credit quality.

Performing exposures

188. In evaluating the credit quality of performing exposures, competent authorities should consider the change in the portfolio in terms of composition, size and creditworthiness, its profitability and the risk of future deterioration, by analysing the following elements, where available, as a minimum:

- a. borrowers' credit grade distribution (e.g. by internal and/or external ratings or other information suitable for measuring creditworthiness, such as leverage ratio, ratio of revenues devoted to the payment of instalments, etc.);
- b. growth rates by types of borrowers, sectors and products and consistency with credit risk strategies;
- c. sensitivity of borrowers' credit grades, or more generally of borrowers' repayment capacities, to the economic cycle;
- d. historical migration rates across credit grades, delinquency and default rates for different time horizons; and
- e. profitability (e.g. credit spread vs. credit losses).

189. In performing these analyses, competent authorities should consider both the number of obligors and the relevant amounts and take into account the level of portfolio concentration.

Forborne exposures

190. Competent authorities should assess the extent of forborne loans, and the potential losses that may stem from them. As a minimum, this should include:

- a. the forbearance rates per portfolio and changes over time, also compared to peers;
- b. the level of collateralisation of forborne exposures; and
- c. the migration rates of forborne exposures to performing and non-performing exposures, also compared with peers.

Non-performing exposures

191. Competent authorities should assess the materiality of non-performing loans per portfolio and the potential losses that may stem from them. As a minimum, this should include:

- a. the non-performing rates per portfolio, industry, geography and changes over time;
- b. the distribution of the exposures across classes of non-performing assets (i.e. past-due, doubtful, etc.);
- c. the types and level of residual collateral;
- d. the migration rates from non-performing classes to performing, forborne exposures, and across non-performing classes;
- e. foreclosed assets and changes over time;
- f. historical recovery rates by portfolio, industry, geography or type of collateral and the duration of the recovery process; and
- g. the vintage of the non-performing loan portfolio.

192. In conducting the above analysis, competent authorities should employ peer analysis and use benchmark portfolios (i.e. portfolios of borrowers common to groups of institutions) where appropriate and possible.

Assessment of the level and quality of credit risk mitigation

193. To assess the potential impact of credit risk on the institution, competent authorities should also consider the level and quality of guarantees (including credit derivatives) and of available collateral that would mitigate credit losses where credit events occur, including those not accepted as eligible credit risk mitigation techniques for own funds calculations.

194. Specifically, competent authorities should consider:

- a. the coverage provided by collateral and guarantees by portfolio, borrower type, rating, industry and other relevant aspects;
- b. historical recovery ratios by type and amount of collateral and guarantees; and
- c. the materiality of the dilution risk (see Article 4 of Regulation (EU) 575/2013) for purchased receivables.

195. Competent authorities should also assess the materiality of the residual risk (see Article 80 of Directive 2013/36/EU) and in particular:

- a. the adequacy and enforceability of collateral agreements and of guarantees;
- b. the timing and the ability to realise collateral and execute guarantees under the national legal framework;
- c. the liquidity and volatility in asset values for collateral;
- d. the recoverable value of collateral under any credit enforcement actions (e.g. foreclosure procedures); and
- e. the guarantors' creditworthiness.

196. Competent authorities should also assess the concentration of guarantors and collateral, as well as the correlation with borrowers' creditworthiness (i.e. wrong-way risk) and the potential impact in terms of the effectiveness of protection.

Assessment of the level of loan loss provisions and credit valuation adjustments

197. Competent authorities should assess whether the level of loan loss provisions and credit valuation adjustments are appropriate for the quality of the exposures and, where relevant, for the level of collateral. Competent authorities should assess:

- a. whether the level of loan loss provisions is consistent with the level of risk in different portfolios, over time and compared with the institution's relevant peers;
- b. whether the credit valuation adjustments to derivatives' market values reflect the creditworthiness of relevant counterparties;
- c. whether accounting loan loss provisions are in line with applicable accounting principles and are assessed as sufficient to cover expected losses;
- d. whether non-performing, forbore and foreclosed assets have been subject to sufficient loan loss provisions, taking into account the level of existing collateral and the vintage of such exposures; and
- e. whether loan loss provisions are consistent with historical losses and relevant macro-economic developments and reflect any changes to relevant regulations (e.g. foreclosure, repossession, creditor protection, etc.).

198. Where deemed necessary, competent authorities should use on-site inspections or other appropriate supervisory actions to assess whether or not the level of loan loss provisioning and risk coverage is adequate, by assessing a sample of loans, for example.

199. Competent authorities should also take into consideration any findings raised by internal and external auditors, where available.

Stress testing

200. When evaluating the inherent credit risk of an institution, competent authorities should take into account the results of stress tests performed by the institution to identify any previously unidentified sources of credit risk, such as those emerging from changes in credit quality, credit concentrations, collateral value and credit exposure during a stressed period.

6.2.3 Assessment of credit risk management and controls

201. To achieve a comprehensive understanding of the institution's credit risk profile, competent authorities should also review the governance and risk management framework underlying its credit activities. To this end, competent authorities should assess:

- a. the credit risk strategy and appetite;
- b. the organisational framework;
- c. policies and procedures;
- d. risk identification, measurement, management, monitoring and reporting; and
- e. the internal control framework.

Credit risk strategy and appetite

202. Competent authorities should assess whether the institution has a sound, clearly formulated and documented credit risk strategy, approved by the management body. For this assessment, competent authorities should take into account:

- a. whether the management body clearly expresses the credit risk strategy and appetite, as well as the process for their review;
- b. whether senior management properly implements and monitors the credit risk strategy approved by the management body, ensuring that the institution's activities are consistent with the established strategy, that written procedures are drawn up and implemented, and that responsibilities are clearly and properly assigned;
- c. whether the institution's credit and counterparty risk strategy reflects the institution's appetite levels for credit risk and whether it is consistent with the overall risk appetite;
- d. whether the institution's credit risk strategy is appropriate for the institution given its:
 - business model;

- overall risk appetite;
 - market environment and role in the financial system; and
 - financial condition, funding capacity and adequacy of own funds;
- e. whether the institution's credit risk strategy covers its credit-granting activities and collateral management, as well as the management of non-performing loans (NPLs), and whether this strategy supports risk-based decision-making, reflecting aspects that may include, for example, exposure type (commercial, consumer, real estate, sovereign), economic sector, geographical location, currency and maturity, including concentration tolerances;
- f. whether the institution's credit risk strategy broadly covers all the activities of the institution where credit risk can be significant;
- g. whether the institution's credit risk strategy takes into account cyclical aspects of the economy, including under stress conditions, and the resulting shifts in the composition of the credit risk portfolio; and
- h. whether the institution has an appropriate framework in place to ensure that the credit risk strategy is effectively communicated to all relevant staff.

Organisational framework

203. Competent authorities should assess whether the institution has an appropriate organisational framework to enable effective credit risk management, measurement and control, with sufficient (both qualitative and quantitative) human and technical resources to carry out the required tasks. They should take into account whether:

- a. there are clear lines of responsibility for taking on, measuring, monitoring, managing and reporting credit risk;
- b. the credit risk control and monitoring systems are subject to independent review and there is a clear separation between risk takers and risk managers;
- c. the risk management, measurement and control functions cover credit risk throughout the institution; and
- d. the staff involved in credit-granting activities (both in business areas and in management and control areas) have appropriate skills and experience.

Policies and procedures

204. Competent authorities should assess whether the institution has appropriate policies for the identification, management, measurement and control of credit risk. For this assessment, competent authorities should take into account whether:

- a. the management body approves the policies for managing, measuring and controlling credit risk and discusses and reviews them regularly, in line with risk strategies;
- b. senior management is responsible for drawing up and implementing the policies and procedures for managing, measuring and controlling credit risk, as defined by the management body;
- c. the policies and procedures are sound and consistent with the credit risk strategy, and cover all the main businesses and processes relevant to managing, measuring and controlling credit risk, in particular:
 - credit granting and pricing: for example, borrowers, guarantors and collateral eligibility; credit limits; selection of FMIs, CCPs and correspondent banks; types of credit facilities available; terms and conditions (including collateral and netting agreements requirement) to be applied;
 - credit-risk measurement and monitoring: for example, criteria for identifying groups of connected counterparties; criteria for assessing borrowers' creditworthiness and collateral evaluation and frequency for their review; criteria for quantifying impairments, credit valuation adjustments and provisions; and
 - credit management: for example, criteria for reviewing products, terms and conditions; criteria for applying forbearance practices or restructuring; criteria for loan classification and management of NPLs;
- d. such policies are compliant with relevant regulations and adequate for the nature and complexity of the institution's activities, and enable a clear understanding of the credit risk inherent to the different products and activities under the scope of the institution;
- e. such policies are clearly formalised, communicated and applied consistently across the institution; and
- f. these policies are applied consistently across banking groups and allow proper management of shared borrowers and counterparties.

Risk identification, measurement, monitoring and reporting

205. Competent authorities should assess whether the institution has an appropriate framework for identifying, understanding, measuring, monitoring and reporting credit risk, in line with the institution's size and complexity, and that this framework is compliant with the requirements of the relevant EU and national implementing legislation.

206. In this regard, competent authorities should consider whether the data, information systems and analytical techniques are appropriate to enable the institution to fulfil supervisory

reporting requirements, and to detect, measure and regularly monitor the credit risk inherent in all on- and off-balance-sheet activities (where relevant at group level), in particular with regard to:

- a. the borrower/counterparty/transaction's credit risk and eligibility;
- b. credit exposures (irrespective of their nature) of borrowers and, where relevant, of groups of connected borrowers;
- c. collateral coverage (including netting agreements) and eligibility of this coverage;
- d. ongoing compliance with the contractual terms and agreements (covenants);
- e. unauthorised overdrafts and conditions for reclassification of credit exposures; and
- f. relevant sources of credit concentration risk.

207. Competent authorities should assess whether the institution has a clear understanding of the credit risk related to the different types of borrowers, transactions and credit granted.

208. They should also assess whether the institution has appropriate skills, systems and methodologies to measure this risk at borrower/transaction and portfolio level, in accordance with the size, nature, composition and complexity of the institution's activities involving credit risk. In particular, competent authorities should ensure that such systems and methodologies:

- a. enable the institution to differentiate between different levels of borrower and transaction risk;
- b. provide a sound and prudent estimation of the level of credit risk and of collateral value;
- c. identify and measure credit concentration risks (single-name, sectoral, geographical, etc.);
- d. enable the institution to project credit risk estimates for planning purposes and for stress testing;
- e. enable the institution to determine the level of provision and credit valuation adjustments required to cover expected and incurred losses; and
- f. where material, aim to capture those risk elements not covered or not fully covered by the requirements of Regulation (EU) No 575/2013.

209. For the purposes of Article 101 of Directive 2013/36/EU, when the institution is authorised to use internal approaches to determine minimum own funds requirements for credit risk, competent authorities should verify that the institution continues to fulfil the minimum

requirements specified in the relevant EU and national implementing legislation and that such internal approaches do not involve any material risk underestimation.

210. Competent authorities should assess whether the institution's management body and senior management understand the assumptions underlying the credit measurement system and whether they are aware of the degree of relevant model risk.
211. Competent authorities should assess whether the institution has undertaken stress testing to understand the impact of adverse events on its credit risk exposures and on the adequacy of its credit risk provisioning. They should take into account:
- a. stress test frequency;
 - b. relevant risk factors identified;
 - c. assumptions underlying the stress scenario; and
 - d. the internal use of stress testing outcomes for capital planning and credit risk strategies.
212. Competent authorities should assess whether the institution has defined and implemented continuous and effective monitoring of credit risk exposures (including credit concentration) throughout the institution, amongst others, by means of specific indicators and relevant triggers to provide effective early warning alerts.
213. Competent authorities should assess whether the institution has implemented regular reporting of credit risk exposures, including the outcome of stress testing, to the management body, senior management and the relevant credit risk managers.

Internal control framework

214. Competent authorities should assess whether the institution has a strong and comprehensive control framework and sound safeguards to mitigate its credit risk in line with its credit risk strategy and appetite. For this purpose, competent authorities should pay particular attention to whether:
- a. the scope covered by the institution's control functions includes all consolidated entities, all geographical locations and all credit activities;
 - b. there are internal controls, operating limits and other practices aimed at keeping credit risk exposures within levels acceptable to the institution, in accordance with the parameters set by the management body and senior management and the institution's risk appetite; and

- c. the institution has appropriate internal controls and practices to ensure that breaches of and exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action.

215. Competent authorities should assess the limit system, including whether:

- a. the limit system is adequate for the complexity of the institution's organisation and credit activities, as well as its capability for measuring and managing credit risk;
- b. the limits established are absolute or whether breaches of limits are possible. In the latter case, the institution's policies should clearly describe the period of time during which and the specific circumstances under which such breaches of limits are possible;
- c. the institution has procedures to keep credit managers up to date with regard to their limits; and
- d. the institution has adequate procedures to update its limits regularly (e.g. for consistency with changes in strategies).

216. Competent authorities should also assess the functionality of the internal audit function. To this end, they should assess whether:

- a. the institution conducts internal audits of the credit risk management framework on a periodic basis;
- b. the internal audit covers the main elements of credit risk management, measurement and controls across the institution; and
- c. the internal audit function is effective in determining adherence to internal policies and relevant external regulations and addressing any deviations from either.

217. For institutions adopting an internal approach to determining minimum own funds requirements for credit risk, competent authorities should also assess whether the internal validation process is sound and effective in challenging model assumptions and identifying any potential shortcomings with respect to credit risk modelling, credit risk quantification and the credit risk management system and to other relevant minimum requirements as specified in the relevant EU and national implementing legislation.

6.2.4 Summary of findings and scoring

218. Following the above assessment, competent authorities should form a view on the institution's credit and counterparty risk. This view should be reflected in a summary of findings, accompanied by a risk score based on the considerations specified in Table 4. If, based on the materiality of certain risk sub-categories, the competent authority decides to assess and score

them individually, the guidance provided in this table should be applied, as far as possible, by analogy.

Table 4. Supervisory considerations for assigning a credit and counterparty risk score

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
1	There is a low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The nature and composition of credit risk exposure implies non-material risk/very low risk. • Exposure to complex products and transactions is not material/very low. • The level of credit concentration risk is not material/very low. • The level of forborne and non-performing exposures is not material/very low. • The credit risk posed by performing exposures is not material/very low. • The level of coverage of provisions and of credit valuation adjustments is very high. • The level of coverage and quality of guarantees and collateral are very high. 	<ul style="list-style-type: none"> • There is consistency between the institution's credit-risk policy and strategy and its overall strategy and risk appetite. • The organisational framework for credit risk is robust with clear responsibilities and a clear separation of tasks between risk takers and management and control functions.
2	There is a medium-low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The nature and composition of credit risk exposure implies low to medium risk. • Exposure to complex products and transactions is low to medium. • The level of credit concentration risk is low to medium. • The level of forborne and non-performing exposures is low to medium. • The credit risk posed by performing exposures is low to medium. • The level of coverage of provisions and of credit valuation adjustments is high. • The level of coverage and quality of guarantees and collateral are high. 	<ul style="list-style-type: none"> • Credit-risk measurement, monitoring and reporting systems are appropriate. • Internal limits and the control framework for credit risk are sound. • Limits allowing the credit risk to be mitigated or limited are in line with the institution's credit risk management strategy and risk appetite.

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
3	<p>There is a medium-high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.</p>	<ul style="list-style-type: none"> • The nature and composition of credit risk exposure implies medium to high risk. • Exposure to complex products and transactions is medium to high. • The level of credit concentration risk is medium to high. • The level of forborne and non-performing exposures is medium to high. • The credit risk posed by performing exposures is medium to high and subject to further deterioration under stressed conditions. • The level of coverage of provisions and of credit valuation adjustments is medium. • The level of coverage and quality of guarantees and collateral are medium. 	
4	<p>There is a high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.</p>	<ul style="list-style-type: none"> • The nature and composition of credit risk exposure implies high risk. • Exposure to complex products and transactions is high. • The level of credit concentration risk is high. • The level of forborne and non-performing exposures is high. • The credit risk posed by performing exposures is high. • The level of coverage of provisions and of credit valuation adjustments is low. • The level of coverage and quality of guarantees and collateral are low. 	

6.3 Assessment of market risk

6.3.1 General considerations

219. The assessment of market risk concerns those on- and off-balance-sheet positions subject to losses arising from movements in market prices. Competent authorities should consider the following sub-categories as a minimum when assessing market risk:

- a. position risk, further distinguished as general and specific risk;
- b. foreign-exchange risk;
- c. commodities risk; and
- d. CVA risk.

220. As a minimum, the assessment should cover risks arising from interest rate related instruments and equity and equity-related instruments in the regulatory trading book, as well as foreign exchange positions and commodities risk positions assigned to both in the trading and banking book.

221. In addition, the assessment should consider the following sub-categories of market risk in relation to the banking book:

- a. credit spread risk arising from positions measured at fair value; and
- b. risk arising from equity exposures.

222. IRRBB is excluded from the scope of the market-risk assessment as it is covered in Section 6.5.

6.3.2 Assessment of inherent market risk

223. Through the assessment of inherent market risk, competent authorities should determine the main drivers of the institution's market risk exposure and evaluate the risk of significant prudential impact on the institution. The assessment of inherent market risk should be structured around the following main steps:

- a. preliminary assessment;
- b. assessment of the nature and composition of the institution's positions subject to market risk;
- c. assessment of profitability;
- d. assessment of market concentration risk; and
- e. outcome of stress testing.

Preliminary assessment

224. To determine the scope of the assessment of market risk, competent authorities should first identify the sources of market risk to which the institution is or may be exposed. To do so, competent authorities should leverage the knowledge gained from the assessment of other SREP elements, from the comparison of the institution's position to peers and from any other supervisory activities.

225. As a minimum, competent authorities should consider:

- a. the institution's market activities, business lines and products;
- b. the main strategy of the market risk portfolio and the risk appetite in market activities;
- c. the relative weight of market risk positions in terms of total assets, changes over time and the institution's strategy for these positions, if available;
- d. the relative weight of net gains on market positions in total operating income; and
- e. the own funds requirement for market risk compared to the total own funds requirement, and – where relevant – the internal capital allocated for market risk compared to the total internal capital, including the historical change in this figure and forecasts, if available.

226. In their initial assessments, competent authorities should also consider significant changes in the institution's market activities with the focus on potential changes in the total exposure to market risk. As a minimum, they should assess:

- a. significant changes in market risk strategy, policies and sizes of limits;
- b. the potential impact on the institution's risk profile of those changes; and
- c. major trends in the financial markets.

Nature and composition of the institution's market risk activities

227. Competent authorities should analyse the nature of the institution's market risk exposures (trading and banking book) to identify particular risk exposures and related market risk factors/drivers (e.g. exchange rates, interest rates or credit spreads) for further in-depth assessment.

228. Competent authorities should analyse market risk exposures by relevant asset classes and/or financial instruments according to their size, complexity and level of risk. For the most relevant exposures, supervisors should assess their related risk factors and drivers.

229. While analysing market risk activities, competent authorities should also consider the complexity of the relevant financial products (e.g. over-the-counter (OTC) products or products valued using mark-to-model techniques) and of specific market operations (e.g. high-frequency trading). The following points should be considered:
- a. if the institution holds derivatives positions, competent authorities should assess both the market value and the notional amount; and
 - b. when the institution is engaged in OTC derivatives, competent authorities should evaluate the weight of these transactions in the total derivatives portfolio and the breakdown of the OTC portfolio by type of contract (swap, forward, etc.), underlying financial instruments, etc. (the counterparty credit risk associated with these products is covered under the credit risk methodology).
230. When appropriate, competent authorities should assess distressed and/or illiquid positions (e.g. 'legacy portfolios', i.e. portfolios of illiquid assets related to the discontinued banking practices/activities that are managed on a run-off model) and evaluate their impact on the institution's profitability.
231. For those institutions using internal approaches to calculate their regulatory own funds requirements, competent authorities should also consider the following indicators to identify particular risk areas and related risk drivers:
- a. the split of market risk own funds requirements between the value at risk (VaR), stressed VaR (SVaR), incremental risk charge (IRC) and charge for correlation trading portfolio;
 - b. the VaR broken down by risk factors;
 - c. the change in the VaR and SVaR (possible indicators could be the day-to-day/week-to-week change, the quarterly average and back-testing results); and
 - d. the multiplication factors applied to VaR and SVaR.
232. When appropriate, competent authorities should also consider the internal risk measures of institutions. These could include the internal VaR not used in the calculations of own funds requirements or sensitivities of the market risk to different risk factors and potential losses.
233. When analysing inherent market risk, competent authorities should consider 'point-in-time' figures and trends, both on an aggregate basis and by portfolio. Where possible, this analysis should be completed with a comparison of the institution's figures to peers and to relevant macro-economic indicators.

Profitability analysis

234. Competent authorities should analyse the historic profitability, including volatility of profits, of market activities to gain a better understanding of the institution's market risk profile. This analysis could be performed at portfolio level as well as being broken down by business line or asset class (potentially as part of the wider assessment carried out as part of the BMA).
235. While assessing profitability, competent authorities should pay specific attention to the main risk areas identified during the examination of market risk activities. Competent authorities should distinguish between trading revenues and non-trading revenues (such as commissions, clients' fees, etc.) on one hand and realised and unrealised profits/losses on the other hand.
236. For those asset classes and/or exposures generating abnormal profits or losses, competent authorities should assess profitability in comparison to the level of risk assumed by the institution (e.g. VaR/net gains on financial assets and liabilities held for trading) to identify and analyse possible inconsistencies. Where possible, competent authorities should compare the institution's figures to its historical performance and its peers.

Market concentration risk

237. Competent authorities should form a view on the degree of market concentration risk to which the institution is exposed, either from exposures to a single risk factor or from exposures to multiple risk factors that are correlated.
238. When evaluating possible concentrations, competent authorities should pay special attention to concentrations in complex products (e.g. structured products), illiquid products (e.g. collateralised debt obligations (CDOs)) or products valued using mark-to-model techniques.

Stress testing

239. When evaluating the inherent market risk of an institution, competent authorities should take into account the results of stress tests performed by the institution to identify any previously unidentified sources of market risk. This is especially important for tail-risk events, which may be underrepresented or entirely absent from historical data because of their low frequency of occurrence. Another source of potential hidden vulnerabilities that competent authorities should consider is the potential for jumps in pricing parameters, such as a sudden change in certain prices or price bubbles in commodities.

6.3.3 Assessment of market risk management and controls

240. To achieve a comprehensive understanding of the institution's market risk profile, competent authorities should review the governance and risk management framework underlying its market activities. To this end, competent authorities should assess the following elements:
- a. market risk strategy and risk appetite;

- b. organisational framework;
- c. policies and procedures;
- d. risk identification, measurement, monitoring and reporting; and
- e. internal control framework.

Market risk strategy and appetite

241. Competent authorities should assess whether institutions have a sound, clearly formulated and documented market risk strategy, approved by their management body. For this assessment, competent authorities should, in particular, take into account whether:

- a. the management body clearly expresses the market risk strategy and appetite and the process for their review (e.g. in the event of an overall risk strategy review, or profitability and/or capital adequacy concerns);
- b. senior management properly implements the market risk strategy approved by the management body, ensuring that the institution's activities are consistent with the established strategy, written procedures are drawn up and implemented, and responsibilities are clearly and properly assigned;
- c. the institution's market risk strategy properly reflects the institution's appetite for market risk and is consistent with the overall risk appetite;
- d. the institution's market risk strategy and appetite are appropriate for the institution, given its:
 - business model;
 - overall risk strategy and appetite;
 - market environment and role in the financial system; and
 - financial condition, funding capacity and capital adequacy;
- e. the institution's market risk strategy establishes guidance for the management of the different instruments and/or portfolios that are subject to market risk, and supports risk-based decision-making;
- f. the institution's market risk strategy broadly covers all the activities of the institution where market risk is significant;
- g. the institution's market risk strategy takes into account the cyclical aspects of the economy and the resulting shifts in the composition of the positions subject to market risk; and

- h. the institution has an appropriate framework in place to ensure that market risk strategy is effectively communicated to all relevant staff.

Organisational framework

242. Competent authorities should assess whether the institution has an appropriate organisational framework for market risk management, measurement, monitoring and control functions, with sufficient (both qualitative and quantitative) human and technical resources. They should take into account whether:

- a. there are clear lines of responsibility for taking, monitoring, controlling and reporting market risk;
- b. there is a clear separation, in the business area, between the front office (position takers) and the back office (responsible for allocating, recording and settling transactions);
- c. the market risk control and monitoring system is clearly identified in the organisation, and functionally and hierarchically independent of the business area, and whether it is subject to independent review;
- d. the risk management, measurement, monitoring and control functions cover market risk in the entire institution (including subsidiaries and branches), and in particular all areas where market risk can be taken, mitigated or monitored; and
- e. the staff involved in market activities (both in business areas and in management and control areas) have appropriate skills and experience.

Policies and procedures

243. Competent authorities should assess whether the institution has clearly defined policies and procedures for the identification, management, measurement and control of market risk. They should take into account:

- a. whether the management body approves the policies for managing, measuring and controlling market risk and discusses and reviews them regularly, in line with risk strategies;
- b. whether senior management is responsible for developing them, ensuring adequate implementation of the management body's decisions;
- c. whether market policies are compliant with relevant regulations and adequate for the nature and complexity of the institution's activities, enabling a clear understanding of the market risk inherent to the different products and activities under the scope of the institution, and whether such policies are clearly formalised, communicated and applied consistently across the institution; and

- d. for groups, whether these policies are applied consistently across the group and allow proper management of the risk.

244. Competent authorities should assess whether the institution's market policies and procedures are sound and consistent with the market risk strategy and cover all the main businesses and processes relevant for managing, measuring and controlling market risk. In particular, the assessment should cover:

- a. the nature of operations, financial instruments and markets in which the institution can operate;
- b. the positions to include in, and to exclude from, the trading book for regulatory purposes;
- c. policies regarding internal hedges;
- d. the definition, structure and responsibilities of the institution's trading desks, where appropriate;
- e. requirements relating to trading and settlement processes;
- f. procedures for limiting and controlling market risk;
- g. the framework for ensuring that all positions measured at fair value are subject to prudent valuation adjustments in accordance with the relevant legislation, in particular Commission Delegated Regulation (EU) No 526/2014 with regard to regulatory technical standards for determining proxy spread and limited smaller portfolios for credit valuation adjustment risk¹⁷. This framework should include requirements for complex positions, illiquid products and products valued using models;
- h. the criteria applied by the institution to avoid association with individuals/groups involved in fraudulent activities and other crimes; and
- i. procedures for new market activities and/or products; major hedging or risk management initiatives should be approved by the management body or its appropriate delegated committee; competent authorities should ensure that:
 - new market activities and/or products are subject to adequate procedures and controls before being introduced or undertaken;
 - the institution has undertaken an analysis of their possible impact on its overall risk profile.

¹⁷Commission Delegated Regulation (EU) No 526/2014 of 12 March 2014, OJ L 148, 20.5.2014, p. 17.

Risk identification, measurement, monitoring and reporting

245. Competent authorities should assess whether the institution has an appropriate framework for identifying, understanding and measuring market risk, in line with the institution's size and complexity, and that this framework is compliant with relevant minimum requirements in accordance with the relevant EU and national implementing legislation. They should consider whether:

- a. the data, information systems and measurement techniques enable management to measure the market risk inherent in all material on- and off-balance sheet activities (where relevant at group level), including both trading and banking portfolios, as well as complying with supervisory reporting requirements;
- b. institutions have adequate staff and methodologies to measure the market risk in their trading and banking portfolios, taking into account the institution's size and complexity and the risk profile of its activities;
- c. the institution's risk measurement system takes into account all material risk factors related to its market risk exposures (including basis risk, credit spreads in corporate bonds or credit derivatives, and vega and gamma risks in options). Where some instruments and/or factors are excluded from the risk measurement systems, competent authorities should assess the materiality of the exclusions and determine whether such exclusions are justified;
- d. the institution's risk measurement systems are able to identify possible market risk concentrations arising either from exposures to a single risk factor or from exposures to multiple risk factors that are correlated;
- e. risk managers and the institution's senior management understand the assumptions underlying the measurement systems, in particular for more sophisticated risk management techniques; and
- f. risk managers and the institution's senior management are aware of the degree of model risk that prevails in the institution's pricing models and risk measurement techniques and whether they periodically check the validity and quality of the different models used in market risk activities.

246. Competent authorities should assess whether an institution has implemented adequate stress tests that complement its risk measurement system. For this purposes, they should take into account the following elements:

- a. stress test frequency;
- b. whether relevant risk drivers are identified (e.g. illiquidity/gapping of prices, concentrated positions, one-way markets, etc.);

- c. assumptions underlying the stress scenario; and
- d. internal use of stress-testing outcomes for capital planning and market risk strategies.

247. For the purposes of Article 101 of Directive 2013/36/EU, if the institution is authorised to use internal models to determine minimum own funds requirements for market risk, competent authorities should verify that the institution continues to fulfil the minimum requirements specified in the relevant EU and national implementing legislation and that such internal models do not involve any underestimation of material risk.

248. Competent authorities should assess whether institutions have in place an adequate monitoring and reporting framework for market risk that ensures there will be prompt action at the appropriate level of the institution's senior management or management body where necessary. The monitoring system should include specific indicators and relevant triggers to provide effective early warning alerts. Competent authorities should take into account whether:

- a. the institution has effective information systems for accurate and timely identification, aggregation, monitoring and reporting of market risk activities; and
- b. the management and control area reports regularly to the management body and senior management with, as a minimum, information on current market exposures, P&L results and risk measures (e.g. VaR) compared to policy limits.

Internal control framework

249. Competent authorities should assess whether the institution has a strong and comprehensive control framework and sound safeguards to mitigate its market risk in line with its market risk management strategy and risk appetite. They should take into account whether:

- a. the scope covered by the institution's control function includes all consolidated entities, all geographical locations and all financial activities;
- b. there are internal controls, operating limits and other practices aimed at ensuring market risk exposures do not exceed levels acceptable to the institution, in accordance with the parameters set by the management body and senior management and the institution's risk appetite; and
- c. the institution has appropriate internal controls and practices to ensure that breaches of and exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action. They should take into account whether the institution's internal controls and practices:
 - are able to identify breaches of individual limits set at desk or business-unit level, as well as breaches of the overall limit for the market activities; and

- allow daily identification and monitoring of breaches of limits and/or exceptions.

250. Competent authorities should assess the limit system, including whether:

- a. the limits established are absolute or whether breaches of limits are possible. In the latter case, the institution's policies should clearly describe the period of time during which and the specific circumstances under which such breaches of limits are possible;
- b. the limit system sets an overall limit for market activities and specific limits for the main risk sub-categories; where appropriate, it should allow allocation of limits by portfolio, desk, business unit or type of instrument; the level of detail should reflect the characteristics of the institution's market activities;
- c. the set of limits (limits based on risk metric, notional limits, loss control limits, etc.) established by the institution suits the size and complexity of its market activities;
- d. the institution has procedures to keep traders up to date about their limits; and
- e. the institution has adequate procedures to update its limits regularly.

251. Competent authorities should assess the functionality of the internal audit function. They should assess whether:

- a. the institution conducts internal audits of the market risk management framework on a regular basis;
- b. the internal audit function covers the main elements of market risk management, measurement and control across the institution; and
- c. the internal audit function is effective in determining adherence to internal policies and any relevant external regulations, and addressing any deviations from either.

252. For institutions using internal models to determine own funds requirements for market risk, competent authorities should assess whether the internal validation process is sound and effective in challenging model assumptions and identifying any potential shortcomings with respect to market risk modelling, market risk quantification, the market risk management system and other relevant minimum requirements as specified in the relevant EU and national implementing legislation.

6.3.4 Summary of findings and scoring

253. Following the above assessment, competent authorities should form a view on the institution's market risk. This view should be reflected in a summary of findings, accompanied by a risk score based on the considerations specified in Table 5. If, based on the materiality of certain

risk sub-categories, the competent authority decides to assess and score them individually, the guidance provided in this table should be applied, as far as possible, by analogy.

254. Since factors such as complexity, level of concentration and the volatility of market exposures' returns may not be perfect indicators of the market risk level, in assessing and scoring inherent market risk, competent authorities should consider all these factors in parallel and not in isolation and understand the drivers behind volatility trends.

Table 5. Supervisory considerations for assigning a market risk score

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
1	There is a low level of risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> The nature and composition of market risk exposures imply not material/very low risk. The institution's exposures to market risk are non-complex. The level of market risk concentration is not material/very low. The institution's market risk exposures generate non-volatile returns. 	<ul style="list-style-type: none"> There is consistency between the institution's market risk policy and strategy and its overall strategy and risk appetite. The organisational framework for market risk is robust, with clear responsibilities and a clear separation of tasks between risk takers and management and control functions. Market risk measurement, monitoring and reporting systems are appropriate. Internal limits and the control framework for market risk are sound and in line with the institution's risk management strategy and risk appetite.
2	There is a medium-low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> The nature and composition of market risk exposures imply low to medium risk. The complexity of the institution's market risk exposures is low to medium. The level of market risk concentration is low to medium. <ul style="list-style-type: none"> The institution's market risk exposures generate returns that have a low to medium degree of volatility. 	<ul style="list-style-type: none"> Market risk measurement, monitoring and reporting systems are appropriate. Internal limits and the control framework for market risk are sound and in line with the institution's risk management strategy and risk appetite.
3	There is a medium-high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> The nature and composition of market risk exposures imply medium to high risk. The complexity of the institution's market risk exposures is medium to high. The level of market risk concentration is medium to high. The institution's exposures to market risk generate returns that have a medium to high degree of volatility. 	<ul style="list-style-type: none"> Internal limits and the control framework for market risk are sound and in line with the institution's risk management strategy and risk appetite.

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
4	There is a high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The nature and composition of market risk exposures imply high risk. • The complexity of the institution's market risk exposures is high. • The level of market risk concentration is high. • The institution's exposures to market risk generate returns that have a high degree of volatility. 	

6.4 Assessment of operational risk

6.4.1 General considerations

255. Competent authorities should assess operational risk throughout all the business lines and operations of the institution, taking into account findings from the assessment of internal governance arrangements and institution-wide controls as specified in Title 5. In conducting this assessment, they should determine how operational risk may materialise (economic loss, near miss, loss of future earnings, gain) and should also consider potential impacts in terms of other related risks (e.g. credit-operational risk, market-operational risk 'boundary cases').

256. Competent authorities should assess the materiality of operational risk arising from outsourced services and activities, and whether these could affect the institution's ability to process transactions and/or provide services, or cause legal liabilities for damage to third parties (e.g. customers and other stakeholders).

257. When assessing operational risk, competent authorities should also consider:

- a. Reputational risk: reputational risk is included under operational risk because of the strong links between the two (e.g. most operational risk events have a strong impact in terms of reputation). However, the outcome of reputational risk assessment should not be reflected in the scoring of operational risk but, where relevant, should be considered as part of the BMA and/or the liquidity risk assessment, since the main effects it can have are reductions in earnings and loss of confidence in or disaffection with the institution by investors, depositors or interbank-market participants.
- b. Model risk: model risk comprises two distinct forms of risk:

- i. risk relating to the underestimation of own funds requirements by regulatory approved models (e.g. internal ratings-based (IRB) models for credit risk); and
- ii. risk of losses relating to the development, implementation or improper use of any other models by the institution for decision-making (e.g. product pricing, evaluation of financial instruments, monitoring of risk limits, etc.).

For (i), competent authorities should consider the model risk as part of the assessment of specific risks to capital (e.g. IRB model deficiency is considered as part of the credit risk assessment) and for the capital adequacy assessment. For (ii), competent authorities should consider the risk as part of the assessment of operational risk.

258. In assessing operational risk, competent authorities may use event-type classification for the advanced measurement approaches provided in Article 324 of Regulation (EU) No 575/2013 and specified in the Commission Delegated Regulation issued in accordance with Article 312(4) of Regulation (EU) No 575/2013 to gain a clearer view of the spectrum of operational risks and to achieve a level of consistency in analysing these risks across institutions, irrespective of the approach adopted to determine own fund requirements for operational risk.

6.4.2 Assessment of inherent operational risk

259. Competent authorities should conduct an assessment of the nature and the extent of the operational risk to which the institution is or might be exposed. To this end, competent authorities should develop a thorough understanding of the institution's business model, its operations, its risk culture and the environment in which it operates, since all these factors determine the institution's operational risk exposure.

260. The assessment of inherent operational risk comprises two steps, which are described in more detail in this section:

- a. preliminary assessment; and
- b. assessment of the nature and significance of the operational risk exposures facing the institution.

Preliminary assessment

261. To determine the scope of the assessment of operational risk, competent authorities should first identify the sources of operational risk to which the institution is exposed. To do so, competent authorities should also leverage the knowledge gained from the assessment of other SREP elements, from the comparison of the institution's position to peers (including relevant external data, where available) and from any other supervisory activities.

262. As a minimum, competent authorities should consider:

- a. the main strategy for operational risk and operational risk tolerance;
- b. the business and external environments (including geographical location) in which the institution operates;
- c. the own funds requirement for operational risk (distinguished by the basic indicator approach (BIA), the standardised approach (TSA) and the advanced measurement approaches (AMA)) compared to the total own funds requirement, and – where relevant – the internal capital for operational risk compared to the total internal capital, including the historical trends and forecasts, if available;
- d. the level of and change in gross income, assets and operational risk losses over the past few years;
- e. recent significant corporate events (such as mergers, acquisitions, disposals and restructuring), which might determine a change in the institution's operational risk profile in the short or medium to long term (e.g. because systems, processes and procedures would not be fully aligned with the risk management policies of the parent undertaking in the short term);
- f. changes to significant elements of the IT systems and/or of processes that might determine a change in the operational risk profile (e.g. because a new or changed IT system has not been properly tested, or because insufficient training on the new systems/processes and procedures might lead to errors);
- g. failures to comply with applicable legislation or with internal regulations as reported by external auditors and the internal audit function or brought to light by public information (bearing in mind both the current situation and changes in regulatory compliance behaviour over time);
- h. the ambitiousness of business plans and aggressive incentives and compensation schemes (e.g. in terms of sales targets, headcount reduction, etc.), which might increase the risk of non-compliance, human error and employee malpractice;
- i. the complexity of processes and procedures, products (sold to customers or dealt in) and IT systems (including the use of new technologies), to the extent that they might lead to errors, delays, misspecification, security breaches, etc.; and
- j. the institution's practices for monitoring the quality of outsourced services and its level of awareness of operational risk related to outsourced activities and of service providers' overall risk exposure pursuant to the requirements of the CEBS *Guidelines on outsourcing*.

263. Where relevant, the competent authority should analyse the aspects above by business line/legal entity and geography as well as by event type category, provided that data are available, and compare the institution's position to its peers.

Nature of operational risk exposures

264. Competent authorities should determine the nature of operational risk exposures and distinguish those that are more likely to lead to 'high-frequency/low-impact' events from those causing 'low-frequency/high-severity' losses (which are more dangerous from a prudential point of view).

265. For this purpose, competent authorities should analyse exposures to the main drivers of operational risk to form a forward-looking view on potential risk and losses. Such an analysis may require consideration of business lines, products, processes and geographies relevant to the institution, as well as an assessment of operational risk exposures to primary risk drivers (e.g. processes, people, systems and external factors), with use of the institution's self-risk assessment and peer analysis.

266. In performing this analysis, competent authorities should consider the interactions of such risk drivers in determining the institution's operational risk exposures (e.g. exposure to more risk drivers might increase the likelihood of an operational event and consequent loss).

Significance of operational risk exposure

267. Once the major sources and drivers of operational risk have been identified, the competent authority should focus on those that might have the most material impact on the institution. The competent authority should assess the institution's 'potential exposure' to the operational risk drivers by using both expert judgment and quantitative indicators relating to either the institution or its peers.

268. In assessing the significance of operational risk exposures, competent authorities should consider both the frequency and the severity of the events to which the institution is exposed.

269. A primary source of information competent authorities should consider is the institution's operational losses and event database, which, where available and reliable (i.e. accurate and complete), provides the historical operational risk profile of the institution.

270. For institutions adopting the Advanced Measurement Approach (AMA) for the calculation of minimum own funds requirements, the competent authority should also consider the output of the internal approach, provided that this approach is capable of measuring the operational risk exposure in the desired level of detail (e.g. product, process, etc.) and assuming that the model is sufficiently forward-looking.

271. In addition, competent authorities should perform a more qualitative analysis and leverage the institution's risk assessment, peer analysis data and public and/or consortium databases,

if available and relevant. Competent authorities may also consider other factors, specific to the relevant business units, etc. affected by the potential deficiencies, which can provide a measure of the risk exposure.

272. In performing the assessment of an institution's risk exposure, competent authorities should employ a forward-looking approach, leveraging scenario analyses performed by the institution, where available, and taking into consideration any corrective measures and mitigation actions already implemented and effective.

Assessment of operational risk sub-categories

273. Competent authorities should assess operational risk across operational risk sub-categories (defined by event types and further breakdowns of these event types) and the risk drivers associated with each.

274. In conducting the assessment, competent authorities should pay particular attention to some sub-categories of operational risk because of their pervasive nature and their relevance to the majority of institutions, and also because of their potential prudential impact. Such sub-categories include:

- a. conduct risk;
- b. systems – ICT risk; and
- c. model risk.

Conduct risk

275. Competent authorities should assess the relevance and significance of the institution's exposures to conduct risk as part of the legal risk under the scope of operational risk, and in particular to:

- a. mis-selling of products, in both retail and wholesale markets;
- b. pushed cross-selling of products to retail customers, such as packaged bank accounts or add-on products customers do not need;
- c. conflicts of interest in conducting business;
- d. manipulation of benchmark interest rates, foreign exchange rates or any other financial instruments or indices to enhance the institution's profits;
- e. barriers to switching financial products during their lifetime and/or to switching financial service providers;
- f. poorly designed distribution channels that may enable conflicts of interest with false incentives;

- g. automatic renewals of products or exit penalties; and/or
- h. unfair processing of customer complaints.

276. Since conduct risk covers a wide range of issues and may arise from many business processes and products, competent authorities should leverage the outcome of the BMA and scrutinise incentive policies to gain a high-level insight into sources of conduct risk.

277. Where relevant, the competent authority should consider the level of competition in the markets in which the institution operates and determine whether any dominant position, either alone or within a small group, presents a material risk of misconduct (e.g. as a result of cartel-like behaviour).

278. Possible indicators to flag the existence of conduct risk are:

- a. sanctions applied by relevant authorities to the institution for misconduct practices;
- b. sanctions applied to peers for misconduct practices; and
- c. complaints against the institution in terms of numbers and amounts at stake.

279. However, the competent authority should apply a forward-looking approach, also considering the possible impact of regulatory developments and the activity of relevant authorities in respect of consumer protection and the supply of financial services in general.

Systems - ICT risk

280. Competent authorities may evaluate operational risk using various methodologies based on well-established industry standards (e.g. ISO 27000, Control Objectives for Information and Related Technology (COBIT), Information Technology Infrastructure Library (ITIL), etc.). Whichever approach is adopted, the competent authority should assess, as a minimum:

- a. the quality and effectiveness of business continuity testing and planning (e.g. ability of the institution's IT system to keep the business fully operational);
- b. the security of internal and external access to systems and data (e.g. whether the IT system provides information and access only to the right people);
- c. the accuracy and integrity of the data used for reporting, risk management, accounting, position keeping, etc. (e.g. whether the IT system ensures that the information and its reporting are accurate, timely and complete); and
- d. the agility of change execution (e.g. whether changes in IT systems are carried out within acceptable budgets and at the required speed of implementation).

281. Competent authorities should also assess the complexity of the IT architecture and whether it might affect the items listed above.

282. In assessing these elements, a competent authority should gather, where available, relevant internal incident reports and internal audit reports, as well as other indicators defined and used by the institution to measure and monitor ICT risk.

283. Competent authorities should then assess the significance of the potential impact of ICT risk in terms of both losses and reputational damage to the institution. In doing so, they should leverage relevant sensitivity and scenario analyses or stress testing results, whenever available.

Model risk

284. Competent authorities should assess the institution's exposure to model risk arising from the use of internal models in the main business areas and operations, following the definition and requirements specified in the Commission Delegated Regulation issued in accordance with Article 312(4) of Regulation (EU) No 575/2013 as far as they are applicable.

285. Competent authorities should consider:

- i. to what extent and for which purposes (e.g. asset evaluation, product pricing, trading strategies, risk management) the institution uses models to make decisions and the business significance of such decisions; and
- ii. the institution's level of awareness of and how it manages model risk.

286. For point (i), competent authorities should determine the business/activity for which the institution makes material use of models. In conducting this assessment, competent authorities may look at the following areas, where institutions commonly make extensive use of models:

- a. trading in financial instruments;
- b. risk measurement and management; and
- c. capital allocation (including lending policies and product pricing).

287. For point (ii), competent authorities should assess whether:

- a. the institution has implemented any control mechanism (e.g. market-parameter calibration, internal validation or back-testing, counter-checking with expert judgment, etc.), and whether this mechanism is sound (i.e. in terms of methods, frequency, follow-up, etc.) and includes a model approval process; and

- b. the institution adopts a prudential use of models (e.g. by increasing or decreasing relevant parameters based on the direction of the positions, etc.) if it is aware of model deficiencies or market and business developments.

288. When conducting the model risk assessment, competent authorities should leverage the outcome of the assessment of other risks to capital and risks to liquidity and funding, in particular with respect to the adequacy of methodologies used for measuring risk, pricing and evaluating assets and/or liabilities.

289. For those business areas that make significant use of models, the competent authority should then assess how significant the impact of model risk might be, amongst others, through sensitivity and scenario analyses or stress testing.

6.4.3 Assessment of reputational risk

290. Competent authorities should conduct an assessment of the reputational risk to which the institution is exposed, leveraging their understanding of the institution's governance, its business model, its products and the environment in which it operates.

291. By nature, reputational risk is more relevant for large institutions, in particular those with listed equities or debts or those that operate in interbank markets. Accordingly, when assessing reputational risk, competent authorities should pay more attention to institutions that present those characteristics.

292. Competent authorities should consider both internal and external factors or events that might give rise to reputational concerns in respect of the institution. Competent authorities should consider the following qualitative indicators in their assessment of the institution's exposure to reputational risk:

- a. the number of sanctions from official bodies during the year (not only those from competent authorities, but also sanctions arising from tax or other settlements);
- b. media campaigns and consumer-association initiatives that contribute to a deterioration in the public perception and reputation of the institution;
- c. the number of and changes in customer complaints;
- d. negative events affecting the institution's peers when they are associated by the public with the whole financial sector or a group of institutions;
- e. dealing with sectors that are not well perceived by the public (e.g. weapons industry, embargoed countries, etc.) or people and countries on sanctions lists (e.g. US Office of Foreign Assets Control (OFAC) lists); and
- f. other 'market' indicators, if available (e.g. rating downgrades or changes in the share price throughout the year).

293. Competent authorities should assess the significance of the institution's reputational risk exposure and how it is connected with the other risks (i.e. credit, market, operational and liquidity risks) by leveraging the other risk assessments to identify any possible secondary effects in either direction (from reputation to other risks and vice versa).

6.4.4 Assessment of operational risk management, measurement and controls

294. Competent authorities should assess the framework and arrangements that the institution has specifically to manage and control operational risk as an individual risk category. This assessment should take into account the outcome of the analysis of the overall risk management and internal control framework addressed in Title 5, as this will influence the institution's operational risk exposures.

295. Competent authorities should approach this review having regard to the key operational risk drivers (i.e. people, processes, external factors, systems), which can also act as mitigating factors, and should consider:

- a. the operational risk management strategy and tolerance;
- b. the organisational framework;
- c. policies and procedures;
- d. operational risk identification, measurement, monitoring and reporting;
- e. business resilience and continuity plans; and
- f. the internal control framework as it applies to the management of operational risk.

Operational risk management strategy and tolerance

296. Competent authorities should assess whether the institution has defined and formalised a sound operational risk management strategy and tolerance level, approved by the management body. For this assessment, competent authorities should take into account whether:

- a. the management body clearly expresses the operational risk management strategy and tolerance level, as well as the process for the review thereof (e.g. in the event of an overall risk strategy review, a loss trend and/or capital adequacy concerns, etc.);
- b. senior management properly implements and monitors the operational risk management strategy approved by the management body, ensuring that the institution's operational risk mitigation measures are consistent with the strategy established;

- c. these strategies are appropriate and efficient with respect to the nature and materiality of the operational risk profile and whether the institution monitors their effectiveness over time and their consistency with the operational risk tolerance level;
- d. the institution's operational risk management strategy covers all the activities, processes and systems of the institution – including on a forward looking basis through the strategic plan – where operational risk is or may be significant; and
- e. the institution has an appropriate framework in place to ensure that the operational risk management strategy is effectively communicated to relevant staff.

297. To assess the credibility of such strategies, competent authorities should also assess whether the institution has allocated sufficient resources to their implementation, and whether relevant decisions taken are irrespective of minimum own funds requirements benefits that might accrue (in particular for institutions adopting the BIA or TSA approaches to determine minimum own funds requirements).

Organisational framework for management and oversight of operational risk

298. Competent authorities should assess the soundness and effectiveness of the organisational framework with respect to the management of operational risk. In this regard, the competent authority should determine whether:

- a. there are clear lines of responsibility for the identification, analysis, assessment, mitigation, monitoring and reporting of operational risk;
- b. the operational risk control and monitoring systems are subject to independent review and there is a clear separation between risk takers and risk managers, between these and the risk control and oversight risk functions;
- c. the risk management, measurement, and control functions cover operational risk across the entire institution (including branches) in an integrated manner, irrespective of the measurement approach adopted to determine minimum own funds, and also cover outsourced business functions and other activities; and
- d. the operational risk management framework is structured with sufficient and qualitatively appropriate human and technical resources.

Policies and procedures

299. Competent authorities should assess whether the institution has appropriate policies and procedures for the management of operational risk, including residual risk after mitigation techniques have been applied. For this assessment, competent authorities should take into account whether:

- a. the management body approves the policies for managing operational risk and reviews them regularly, in line with the operational risk management strategies;
- b. senior management is responsible for developing and implementing the policies and procedures for managing operational risk;
- c. operational risk management policies and procedures are clearly formalised and communicated throughout the institution and cover the whole organisation or at least those processes and businesses most exposed to operational risk;
- d. such policies and procedures cover all the elements of operational risk management, measurement and control including, where relevant, loss data collection, quantification methodologies, mitigation techniques (e.g. insurance policies), causal analysis techniques in respect of operational risk events, limits and tolerances and the handling of exceptions to those limits and tolerances;
- e. the institution has implemented a new approval process for products, processes and systems that requires assessment and mitigation of potential operational risks;
- f. such policies are adequate for the nature and complexity of the institution's activities, and enable a clear understanding of the operational risk inherent to the different products and activities under the scope of the institution;
- g. such policies are clearly formalised, communicated and applied consistently across the institution, and for banking groups, whether these policies are applied consistently across the group and allow proper management of the risk; and
- h. the institution promotes an operational risk management culture throughout the organisation, by means of training and by setting targets for operational loss reduction.

Risk identification, measurement, monitoring and reporting

300. Competent authorities should assess whether the institution has an appropriate framework for identifying, assessing, measuring and monitoring operational risk, in line with the institution's size and complexity, and whether the framework is compliant, as a minimum, with the relevant requirements for determining minimum own funds requirements under the relevant EU and national implementing legislation. Competent authorities should take into account whether:

- a. the institution has implemented effective processes and procedures for comprehensive identification and assessment of operational risk exposure (e.g. Risk and Control Self-Assessments (RCSA)) and for the detection and accurate categorisation of relevant events (i.e. loss data collection), including boundary cases with other risks (e.g. credit loss caused or augmented by an operational risk

event); in this regard, competent authorities should also determine the ability of the institution to identify the key drivers of relevant operational losses and use this information for operational risk management purposes;

- b. for the purposes of Article 101 of Directive 2013/36/EU, if the institution is authorised to use an internal model to determine minimum own funds requirements for operational risk, the institution continues to fulfil the minimum requirements specified in the relevant EU and national implementing legislation and whether such internal model involves any material risk underestimation;
- c. the institution has appropriate information systems and methodologies to quantify or assess the operational risk, which comply, as a minimum, with requirements for determining relevant minimum own funds as specified in the relevant EU and national implementing legislation (e.g. for TSA, mapping of relevant profit and loss items to the eight regulatory business lines; for the AMA, the length of time series, treatment of insurance, correlation, etc.);
- d. the institution has implemented adequate stress testing and scenario analysis, as appropriate, to understand the impact of adverse operational events on its profitability and own funds, also taking into due consideration the potential failure of internal controls and mitigation techniques; where relevant, competent authorities should consider the consistency of these analyses with the RCSA and with the outcome of peer analysis;
- e. the institution's management body and senior management understand the assumptions underlying the measurement system and whether they are aware of the degree of relevant model risk;
- f. the institution has defined and implemented continuous and effective monitoring of operational risk exposures throughout the institution, including outsourced activities and new products and systems, amongst others, by means of specific indicators (key risk indicators and key control indicators) and relevant triggers to provide effective early warning alerts; and
- g. the institution has implemented regular reporting on operational risk exposure, including stress-testing outcomes, to the management body, senior management and the managers of relevant businesses and processes as appropriate.

Business resilience and continuity plans

301. Competent authorities should assess whether the institution has comprehensive and tested business resilience and continuity plans in place to ensure that it is able to operate on an ongoing basis and limit losses in the event of severe business disruption.

302. Competent authorities should determine whether the institution has established business continuity plans commensurate with the nature, size and complexity of its operations. Such plans should take into account different types of likely or plausible scenarios to which the institution may be vulnerable.
303. Competent authorities should assess the quality and effectiveness of the institution's continuity management planning process. In doing so, competent authorities should evaluate the quality of the institution's adherence to recognised Business Continuity Management (BCM) processes. Accordingly, competent authorities should determine whether the institution's continuity management planning process includes:
- a. a Business Impact Analysis;
 - b. appropriate recovery strategies incorporating internal and external dependencies and clearly defined recovery priorities;
 - c. the drafting of comprehensive and flexible plans to deal with plausible scenarios;
 - d. effective testing of the plans;
 - e. BCM awareness and training programmes; and
 - f. communications and crisis-management documentation and training.

Internal control framework

304. Competent authorities should assess whether the institution has a strong control framework and sound safeguards to mitigate its operational risk, in line with its operational risk management tolerance and strategy. Competent authorities should take into account whether:
- a. the scope covered by the institution's control functions includes all consolidated entities and geographical locations;
 - b. there are internal controls and other practices (e.g. conduct policies, etc.) aimed at mitigating operational risk exposures and keeping them within levels acceptable to the institution, in accordance with the parameters set by the management body and senior management and the institution's risk tolerance level; and
 - c. the institution has appropriate internal controls and practices to ensure that breaches of and exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action, and to competent authorities as required.
305. Competent authorities should also assess the functionality of the internal audit function. To this end, they should determine whether:

- a. the institution conducts internal audits of the operational risk management framework on a regular basis;
- b. the internal audit covers the main elements of operational risk management measurement and control across the institution; and
- c. such audits are effective in determining adherence to internal policies and any relevant external regulations and addressing any deviations from them.

306. For institutions using the AMA to determine minimum own funds requirements for operational risk, competent authorities should also assess whether the internal approach-validation process is sound and effective in challenging model assumptions and identifying any potential shortcomings with respect to operational risk modelling, quantification and systems and other relevant minimum requirements specified in the relevant EU and national implementing legislation.

307. Irrespective of the approach adopted by the institution to determine regulatory minimum own funds, when models are used for decision-making (e.g. credit lending, pricing, trading financial instruments, etc.), competent authorities should assess whether there is a sound internal validation process and/or model-review process to identify and mitigate model risk.

Management of reputational risk

308. Competent authorities should assess whether the institution has implemented adequate arrangements, strategies, processes and mechanisms to manage reputational risk. In particular, competent authorities should take into account whether:

- a. the institution has formalised policies and processes in place for the identification, management and monitoring of this risk, and whether these policies and processes are proportionate to its size and its relevance in the system;
- b. the institution addresses this risk in a precautionary manner, for example by setting limits or requiring approval for allocating capital to specific countries, sectors or persons and/or whether its contingency plans address the need to deal proactively with reputational issues in the event of a crisis;
- c. the institution conducts stress testing or scenario analysis to assess any secondary effects of reputational risk (e.g. liquidity, funding costs, etc.);
- d. the institution acts to protect its brand through prompt communication campaigns where specific events occur that might endanger its reputation; and
- e. the institution considers the potential impact of its strategy and business plans, and more generally of its behaviour, on its reputation.

6.4.5 Summary of findings and scoring

309. Following the above assessment, competent authorities should form a view on the institution's operational risk. This view should be reflected in a summary of findings, accompanied by a risk score based on the considerations specified in Table 6. If, based on the materiality of certain risk sub-categories, the competent authority decides to assess and score them individually, the guidance provided in this table should be applied, as far as possible, by analogy.

Table 6. Supervisory considerations for assigning an operational risk score

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
1	There is a low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> The institution's operational risk exposures are limited to a few high-frequency/low-severity impact categories. The significance of the institution's exposure to operational risk is not material/very low, as shown by scenario analysis and compared with the losses of peers. The level of losses experienced by the institution in recent years has been not material/very low, or has decreased from a higher level. 	<ul style="list-style-type: none"> There is consistency between the institution's operational risk policy and strategy and its overall strategy and risk appetite. The organisational framework for operational risk is robust with clear responsibilities and a clear separation of tasks between risk takers and management and control functions. Operational risk measurement, monitoring and reporting systems are appropriate. The control framework for operational risk is sound.
2	There is a medium-low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> The institution's operational risk exposures are mainly in high-frequency/low-severity impact categories. The significance of the institution's exposure to operational risk is low to medium, as shown by scenario analysis and compared with the losses of peers. The level of losses experienced by the institution in recent years has been low to medium, or is expected to increase from a lower historic level or decrease from a higher historic level. 	<ul style="list-style-type: none"> Operational risk measurement, monitoring and reporting systems are appropriate. The control framework for operational risk is sound.
3	There is a medium-high risk of significant prudential impact on the institution considering the level of inherent risk and	<ul style="list-style-type: none"> The institution's operational risk exposures extend to some low-frequency/high-severity impact categories. The significance of the institution's exposure to operational risk is medium to 	

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
	the management and controls.	<p>high, as shown by scenario analysis and compared with the losses of peers.</p> <ul style="list-style-type: none"> The level of losses experienced by the institution in recent years has been medium to high, or is expected to increase from a lower historic level or decrease from a higher historic level. 	
4	There is a high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> The institution's operational risk exposures extend to all main categories. The significance of the institution's exposure to operational risk is high and increasing, as shown by scenario analysis and compared with the losses of peers. The level of losses experienced by the institution over the last few years has been high, or risk has significantly increased. 	

6.5 Assessment of interest rate risk arising from non-trading book activities

6.5.1 General considerations

310. Competent authorities should assess interest rate risk arising from interest-rate-sensitive positions from non-trading on and off-balance sheet activities (commonly referred to as interest rate risk in the non-trading book, or IRRBB), including hedges for these positions, irrespective of their recognition and measurement, and irrespective of the recognition and measurement of losses and gains, for accounting purposes (note that credit spread risk arising from some non-trading book positions is covered in the section on market risk).

311. Competent authorities should consider the following sub-categories when assessing IRRBB:

- a. Gap risk – risk resulting from the term structure of interest rate sensitive instruments that arises from differences in the timing of their rate changes, covering changes to the term structure of interest rates occurring consistently across the yield curve (parallel risk) or differentially by period (non-parallel risk).

- b. Basis risk – risk arising from the impact of relative changes in interest rates on interest rate sensitive instruments that have similar tenors but are priced using different interest rate indices. It arises from the imperfect correlation in the adjustment of the rates earned and paid on different interest rate sensitive instruments with otherwise similar rate change characteristics.
- c. Option risk – risk arising from options (embedded and explicit), whereby the institution or its customer can alter the level and timing of their cash flows, namely the risk arising from interest rate sensitive instruments where the holder will almost certainly exercise the option if it is in their financial interest to do so (embedded or explicit automatic options) and the risk arising from flexibility embedded implicitly or within the terms of interest rate sensitive instruments, such that changes in interest rates may affect a change in the behaviour of the client (embedded behavioural option risk).

312. Competent authorities should take into account whether the guidance established in the EBA Guidelines on the management of interest rate risk arising from non-trading book activities (EBA Guidelines on IRRBB)¹⁸ issued in accordance with Article 98(5) of Directive 2013/36/EU are implemented prudently by the institution. This applies particularly to the calculation of the supervisory outlier test specified in Article 98(5) of this Directive and any other supervisory outlier test, as well as to the institution's internal interest rate risk identification, measurement, monitoring and control procedures.

6.5.2 Assessment of inherent IRRBB

313. Through the assessment of the inherent level of IRRBB, competent authorities should determine the main drivers of the institution's IRRBB exposure and evaluate the potential prudential impact of this risk on the institution. The assessment of inherent IRRBB should be structured around the following main steps:

- a. preliminary assessment;
- b. assessment of the nature and composition of the institution's interest rate risk profile; and
- c. assessment of the outcome of the supervisory outlier tests and supervisory stress tests, as well as the institution's interest rate shock scenarios and interest rate stress scenarios.

¹⁸ EBA-GL-2018-02. Guidelines are available online: <http://www.eba.europa.eu/regulation-and-policy/supervisory-review/guidelines-on-technical-aspects-of-the-management-of-interest-rate-risk-arising-from-non-trading-activities-under-the-supervisory-review-process>

Preliminary assessment

314. To determine the scope of the IRRBB assessment, competent authorities should first identify the sources of IRRBB to which the institution is or might be exposed. To do so, competent authorities should leverage the knowledge gained from ICAAP and ILAAP information collected for SREP purposes, from reporting established on IRRBB, from the assessment of other SREP elements, from the comparison of the institution's position with those of its peers and from any other supervisory activities.

315. As a minimum, competent authorities should consider:

- a. the institution's governance of interest rate risk, including its main IRRBB strategy and its risk appetite in relation to IRRBB;
- b. the impact of the supervisory outlier test as specified in Article 98(5) of Directive 2013/36/EU, and any other supervisory outlier test, taking into account the EBA guidelines issued in accordance with that Article, on the institution's economic value as a proportion of its regulatory own funds, or Tier 1 (T1) funds;
- c. the impact on earnings and economic value from a change in interest rates according to the methodology used by the institution; and
- d. the internal capital – where relevant – allocated to IRRBB, both in total and as a proportion of the institution's total internal capital according to its ICAAP, including the historical trend and forecasts, if available.

316. In their preliminary assessment, competent authorities should also consider significant changes in the institution's exposures to IRRBB. As a minimum, they should assess the following aspects:

- a. significant changes in the institution's overall IRRBB strategy, risk appetite, policy or limit sizes;
- b. the potential impact on the institution's risk profile of those changes;
- c. major changes in the institution's modelling, customer behaviour or use of interest rate derivatives and
- d. major market trends.

Nature and composition of the institution's interest rate risk profile

317. Competent authorities should form a clear view on how changes in interest rates can have an adverse impact on an institution's earnings and economic value (the present value of expected cash flows) to gain both a short-term and a longer-term view on the possible threat to capital adequacy.

318. For this purpose, competent authorities should analyse and form a clear view on the structure of the institution's assets, liabilities and off-balance-sheet exposures. In particular:

- a. the different positions in the non-trading book, their maturities or repricing dates, and behavioural assumptions (e.g. assumptions regarding products with uncertain maturity) in relation to these positions;
- b. the institution's interest cash flows, if available;
- c. the proportion of products with uncertain maturity, and products with explicit and/or embedded options, paying particular attention to products with embedded customer optionality; and
- d. the hedging strategy of the institution and the amount and use of derivatives (hedging versus speculation).

319. To better determine the complexity and the interest rate risk profile of the institution, competent authorities should also understand the main features of the institution's assets, liabilities and off-balance-sheet exposures, in particular:

- a. loan portfolio (e.g. volume of loans with no maturity, volume of loans with pre-payment options, volume of floating-rate loans with caps and floors, share of floating rate loan contracts that prevent repricing at negative rates, etc.);
- b. bond portfolio (e.g. volume of investments with options, possible concentrations);
- c. non-performing exposures;
- d. deposit accounts (e.g. sensitivity of the institution's deposit base to changes in interest rates including core deposits, possible concentrations);
- e. derivatives (e.g. complexity of the derivatives used either for hedging or for speculative purposes, considerations relating to sold or bought interest rate options, impact of derivatives on the duration of non-trading book positions); and
- f. nature of IRRBB embedded in fair value instruments, including less liquid instruments such as Level 3 assets and liabilities.

320. When analysing the impact on the institution's earnings, competent authorities should consider the institution's different sources of income and expenses and their relative weights to total revenues. They should be aware of how much the institution's returns depend on interest-rate-sensitive positions, and they should determine how different changes in interest rates would affect the institution's net interest income, as well as determining the effects of changes in the market value of instruments – depending on accounting treatment – either shown in the profit and loss (P&L) account or directly in equity (e.g. via other comprehensive income).

321. When analysing the impact on the institution's economic value and earnings, competent authorities should first consider the results of the supervisory outlier test, as specified in Article 98(5) of Directive 2013/36/EU, and any other supervisory outlier test, to get an initial benchmark against which to compare how interest rate changes would affect the institution. To ensure compliance, competent authorities should take into account the EBA guidelines issued in accordance with that Article. When performing this assessment, competent authorities should pay particular attention to the sensitivity of cash flows to repricing, in terms of both their timing and amount, to changes in the underlying key assumptions (particularly for customer accounts without specific repricing dates, customer accounts with embedded customer optionality and/or equity capital).
322. Competent authorities should seek to understand the impact of those assumptions and then isolate the economic value and earnings risks arising from the institution's behavioural adjustments.
323. Competent authorities should pay attention to the sensitivity of cash flows to changes in the valuation of fair value instruments including interest rate derivatives in connection to interest rate changes (e.g. impact of mark-to-market changes in fair value instruments on P&L, hedge account effectiveness).
324. In addition to using the supervisory outlier test specified in Article 98(5) of Directive 2013/36/EU, and any other supervisory outlier test, competent authorities should consider using their own designated shock scenarios (e.g. larger or smaller, for all or some currencies, allowing for non-parallel shifts in rates, considering basis risk, etc.). When deciding the level at which to set these additional shock scenarios, competent authorities should take into account factors such as the general level of interest rates, the shape of the yield curve and any relevant national characteristics of their financial systems. The institution's internal systems should therefore be flexible enough to compute its sensitivity to any shock that is prescribed by the competent authority.
325. In their quantitative assessment, competent authorities should also consider the results of the institution's internal methodologies for measuring IRRBB, where appropriate. Through the analysis of these methodologies, competent authorities should gain a deeper understanding of the main risk factors underlying the institution's IRRBB profile.
326. Competent authorities should assess whether those institutions operating in different currencies perform an analysis of the interest rate risk in each currency in which they have a significant position. Competent authorities should also assess the approaches that these institutions use for the purpose of aggregating the results of economic value and earnings measures in individual currencies.
327. When analysing the results of both the impact of the supervisory outlier tests and the institution's internal methodologies, competent authorities should consider 'point in time'

figures as well as historical trends. These rates should be compared to peers and considered in the context of the global market situation.

Shock scenarios and stress testing

328. Competent authorities should assess and take into account the results of the interest rate shock scenarios and stress tests (in addition to those of the supervisory outlier tests) performed by the institution as part of its ongoing internal management process. In this context, competent authorities should be aware of the main sources of the institution's IRRBB.

329. If, when the outcome of the institution's shock scenarios and stress tests is reviewed, particular accumulations of repricing/maturity at different points on the curve are revealed or suspected, competent authorities may need to carry out additional analyses.

6.5.3 Assessment of IRRBB management and controls (both risk management and compliance, and internal audit control functions)

330. To achieve a comprehensive understanding of the institution's interest rate risk profile in the non-trading book, competent authorities should review the governance and framework underlying its interest rate exposures.

331. Competent authorities should assess the following elements:

- a. IRRBB strategy and appetite (as distinct elements or as part of the broader market risk strategy and appetite);
- b. organisational framework and responsibilities;
- c. policies and procedures;
- d. risk identification, measurement including internal models, monitoring and reporting; and
- e. internal control framework.

IRRBB strategy and appetite

332. Competent authorities should assess whether the institution has a sound, clearly formulated and documented IRRBB strategy, approved by the management body. For this assessment, competent authorities should take into account:

- a. whether the management body clearly expresses the IRRBB strategy and appetite and the process for the review thereof (e.g. in the event of an overall review of risk strategy, or concerns about profitability or capital adequacy), and whether senior management properly implements the IRRBB strategy approved by the management body, ensuring that the institution's activities are consistent with the

established strategy, written procedures are drawn up and implemented, and responsibilities are clearly and properly assigned;

- b. whether the institution's IRRBB strategy properly reflects the institution's appetite for IRRBB and whether it is consistent with the overall risk appetite;
- c. whether the institution's IRRBB strategy and appetite are appropriate for the institution considering:
 - its business model;
 - its overall risk strategy and appetite;
 - its market environment and role in the financial system; and
 - its capital adequacy;
- d. whether the institution's IRRBB strategy broadly covers all the activities of the institution where IRRBB is significant;
- e. whether the institution's IRRBB strategy takes into account the cyclical aspects of the economy and the resulting shifts in the composition of IRRBB activities; and
- f. whether the institution has an appropriate framework in place to ensure that the IRRBB strategy is effectively communicated to relevant staff.

Organisational framework and responsibilities

333. Competent authorities should assess whether the institution has an appropriate organisational framework and clearly assigned responsibilities for IRRBB management, measurement, monitoring and control functions with adequate human and technical resources. They should take into account whether:

- a. there are clear lines of responsibility for the overall management of IRRBB, and for taking, monitoring, controlling and reporting IRRBB;
- b. the IRRBB management and control area is subject to independent review and is clearly identified in the organisation and functionally and hierarchically independent of the business area; and
- c. the staff dealing with interest rate risk (both in the business area and in the management and control areas) have appropriate skills and experience.

Policies and procedures

334. Competent authorities should assess whether the institution has clearly defined policies and procedures for the management of IRRBB that are consistent with its IRRBB strategy and appetite. They should take into account whether:

- a. the management body approves the policies for managing, measuring and controlling IRRBB and discusses and reviews them regularly in line with risk strategies;
- b. senior management is responsible for developing policies and procedures and ensuring adequate implementation of the management body's decisions;
- c. IRRBB policies are compliant with relevant regulations and adequate for the nature and complexity of the institution's activities, enabling a clear understanding of the inherent IRRBB;
- d. such policies are clearly formalised and communicated and applied consistently across the institution;
- e. these policies are applied consistently across banking groups and allow proper management of IRRBB;
- f. IRRBB policies define the procedures for new product development, major hedging or risk management initiatives and such policies have been approved by the management body or its appropriate delegated committee. In particular, competent authorities should ensure that:
 - new products and new major hedging and risk management initiatives are subject to adequate procedures and controls before being introduced or undertaken; and
 - the institution has undertaken an analysis of their possible impact in its overall risk profile.

Risk identification, measurement including internal models, monitoring and reporting

335. Competent authorities should assess whether the institution has an appropriate framework for identifying, understanding, measuring and monitoring IRRBB, in line with the level, complexity and riskiness of non-trading book positions and the institution's size and complexity. The assessment should encompass internal models, such as those related to customer behaviour (e.g. models of deposit stability and loan early repayment). They should consider the following.

- a. Whether the information systems and measurement techniques enable management to measure the inherent IRRBB in all its material on- and off-balance-

sheet exposures (where relevant at group level), including internal hedges, in the non-trading book portfolio.

- b. Whether the institution has adequate staff and methodologies to measure IRRBB (in accordance with the requirements of the EBA *Guidelines on the management of interest rate risk arising from non-trading activities (EBA Guidelines on IRRBB)*), taking into account the size, form and complexity of their interest rate risk exposure.
- c. Whether the assumptions underlying internal models and methodologies take into account the guidance established by the EBA Guidelines on IRRBB. In particular, competent authorities should assess whether the institution's assumptions regarding positions with no contractual maturity and embedded customer options are prudent. Competent authorities should also assess whether institutions include equity in the calculation of economic value and, if they do, analyse the impact of removing equity from that calculation.
- d. Whether the institution's risk measurement systems take into account all material forms of interest rate risk to which the institution is exposed (e.g. gap risk, basis risk and option risk). If some instruments and/or factors are excluded from the risk measurement systems, institutions should be able to explain why to supervisors and to quantify the materiality of the exclusions.
- e. Whether institution's internal models used for the measurement of IRRBB have been properly developed, independently validated (including whether any expert opinions and judgment employed in the internal models have been thoroughly assessed), and reviewed regularly.
- f. The quality, detail and timeliness of the information provided by the information systems and whether the systems are able to aggregate the risk figures for all the portfolios, activities and entities included in the consolidation perimeter. Information systems should comply with the guidance established by the EBA Guidelines on IRRBB.
- g. The integrity and timeliness of the data that feed the risk measurement process, which should also comply with the guidance established by the EBA Guidelines on IRRBB.
- h. Whether the institution's risk measurement systems are able to identify possible IRRBB concentrations (e.g. in certain time buckets).
- i. Whether risk managers and the institution's senior management understand the assumptions underlying the measurement systems, especially with regard to positions with uncertain contractual maturity and those with implicit or explicit options, as well as the institution's assumptions for equity capital.

- j. Whether risk managers and the institution's senior management are aware of the degree of model risk that prevails in the institution's risk measurement techniques.
- k. Whether the use of interest rate derivatives is compliant with the IRRBB risk strategy and whether those activities are performed within the risk appetite framework and with adequate internal governance arrangements in place.

336. Competent authorities should assess whether the institution has implemented adequate stress test scenarios that complement its risk measurement system. In their assessment, they should evaluate compliance with the relevant guidance established in the EBA guidelines issued in accordance with Article 98(5) of Directive 2013/36/EU.

337. Competent authorities should assess whether the institution has an appropriate monitoring and internal reporting framework for IRRBB that ensures there is prompt action at the appropriate level of the institution's senior management or management body, where necessary. The monitoring system should include specific indicators and relevant triggers to provide effective early warning alerts. Competent authorities should take into account whether the management and control area reports regularly (the frequency will depend on the scale, complexity and level of IRRBB exposures) to the management body and senior management the following information, as a minimum:

- a. an overview of the current IRRBB exposures, P&L results and risk calculation, and the drivers of level and direction of IRRBB;
- b. significant breaches of IRRBB limits;
- c. changes in the major assumptions or parameters on which the procedures for assessing IRRBB are based; and
- d. changes in the interest rate derivatives position and whether these are related to changes in the underlying hedging strategy.

Internal control framework

338. Competent authorities should assess whether the institution has a strong and comprehensive control framework and sound safeguards to mitigate its exposures to IRRBB in line with its risk management strategy and risk appetite. They should take into account:

- a. whether the scope of the institution's control function includes all consolidated entities, all geographical locations and all financial activities;
- b. whether there are internal controls, operating limits and other practices aimed at keeping IRRBB exposures at or below levels acceptable to the institution, in accordance with the parameters set by the management body and senior management and the institution's risk appetite; and

- c. whether the institution has appropriate internal controls and practices to ensure that breaches of and exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action.

339. Competent authorities should assess the limit system, including whether:

- a. it is consistent with the risk management strategy and risk appetite of the institution;
- b. it is adequate for the complexity of the institution's organisation and IRRBB exposures, and for its ability to measure and manage this risk;
- c. it addresses the potential impact of changes in interest rates on earnings and the institution's economic value (from an earnings perspective, limits should specify acceptable levels of volatility for earnings under specified interest rate scenarios; the form of limits for addressing the effect of rates on an institution's economic value should be appropriate for the size and complexity of the institution's activities and underlying positions);
- d. the limits established are absolute or whether breaches of limits are possible (in the latter case, the institution's policies should clearly set out the period of time during which and the specific circumstances under which such breaches of limits are possible; competent authorities should request information about measures that ensure limits are adhered to); and
- e. the institution has adequate procedures for reviewing its limits regularly.

340. Competent authorities should assess the functionality of the internal audit function. To this end, they should assess whether:

- a. the institution conducts internal audits of the IRRBB management framework on a regular basis;
- b. the internal audit covers the main elements of IRRBB management, measurement and control across the institution; and
- c. the internal audit function is effective in determining adherence to internal policies and the relevant external regulations and addressing any deviations.

6.5.4 Summary of findings and scoring

341. Following the above assessments, competent authorities should form a view on the institution's IRRBB. This view should be reflected in a summary of findings, accompanied by a score based on the considerations specified in Table 7. If, based on the materiality of certain risk sub-categories, the competent authority decides to assess and score them individually, the guidance provided in this table should be applied, as far as possible, by analogy.

Table 7. Supervisory considerations for assigning a score to IRRBB

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
1	There is a low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The sensitivity of the economic value to changes in interest rates is not material/very low. • The sensitivity of earnings to changes in interest rates is not material/very low. • The sensitivity of the economic value and earnings to changes in the underlying assumptions (e.g. in the case of products with embedded customer optionality) is not material/very low. 	<ul style="list-style-type: none"> • There is consistency between the institution's interest rate risk policy and strategy and its overall strategy and risk appetite. • The organisational framework for interest rate risk is robust with clear responsibilities and a clear separation of tasks between risk takers and management and control functions. • Interest rate risk measurement, monitoring and reporting systems are appropriate. • Internal limits and the control framework for interest rate risk are sound and are in line with the institution's risk strategy and risk appetite.
2	There is a medium-low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The sensitivity of the economic value to changes in interest rates is low to medium. • The sensitivity of earnings to changes in interest rates is low to medium. • The sensitivity of the economic value and earnings to changes in the underlying assumptions (e.g. in the case of products with embedded customer optionality) is low to medium. 	
3	There is a medium-high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The sensitivity of the economic value to changes in interest rates is medium to high. • The sensitivity of earnings to changes in interest rates is medium to high. • The sensitivity of the economic value and earnings to changes in the underlying assumptions (e.g. in the case of products with embedded customer optionality) is medium to high. 	
4	There is a high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The sensitivity of the economic value to changes in interest rates is high. • The sensitivity of earnings to changes in interest rates is high. • The sensitivity of the economic value and earnings to changes in the underlying assumptions (e.g. in the case of products with 	

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
		embedded customer optionality) is high.	

Title 7. SREP capital assessment

7.1 General considerations

342. Competent authorities should determine through the SREP capital assessment whether the own funds held by the institution provide sound coverage of risks to capital to which the institution is or might be exposed, if such risks are assessed as material to the institution.
343. Competent authorities should do this by determining and setting the quantity (amount) and composition (quality) of additional own funds the institution is required to hold to cover elements of risks and risks not covered by Article 1 of Regulation (EU) 575/2013 ('additional own funds requirements'), including, where necessary, own funds requirements to cover the risk posed by model, control, governance or other deficiencies.
344. To address potential capital inadequacies in stressed conditions, competent authorities should take appropriate supervisory measures, including, where relevant, establishing and communicating P2G which is the quantity (amount) and quality (composition) of own funds that the institution is expected to hold over and above its OCR.
345. Competent authorities should assess the adequacy of the institution's own funds, and the impact of economic stress thereon, as a key determinant of the institution's viability. These assessments should also consider the risks posed by excessive leverage.
346. This determination should be summarised and reflected in a score based on the criteria specified at the end of this title.

The SREP capital assessment process

347. After considering the outcomes of the assessment of risks to capital as specified in Title 6, competent authorities should undertake the following steps as part of the SREP capital assessment process:
- a. determination of the additional own funds requirements;
 - b. reconciliation of P2R and P2G with any macroprudential requirements;
 - c. determination and articulation of TSCR and OCR;
 - d. assessment of the risk of excessive leverage;
 - e. assessment of whether OCR and TSCR can be met in stressed conditions;
 - f. determination of P2G; and

- g. determination of the capital score.

7.2 Determining additional own funds requirements

348. Competent authorities should determine additional own funds requirements, covering:

- a. the risk of unexpected losses, and of expected losses insufficiently covered by provisions, over a 12-month period (except where otherwise specified in Regulation (EU) 575/2013) ('unexpected losses');
- b. the risk of underestimation of risk due to model deficiencies as assessed in the context of Article 101 of Directive 2013/36/EU; and
- c. the risk arising from deficiencies in internal governance, including internal control, arrangements and other deficiencies.

7.2.1 Determining additional own funds to cover unexpected losses

349. Competent authorities should set additional own funds requirements to cover the risk of unexpected losses, and these should be met by the institution at all times. Competent authorities should determine additional own funds requirements on a risk-by-risk basis, using supervisory judgment supported by the following sources of information:

- a. the ICAAP calculations;
- b. the outcome of supervisory benchmark calculations; and
- c. other relevant inputs, including those arising from interaction and dialogue with the institution.

350. The ICAAP calculations – where deemed reliable or partially reliable – should be the starting point for the determination, supplemented by the outcome of supervisory benchmarks and other relevant inputs as appropriate. Where an ICAAP calculation is not deemed reliable, the outcome of the supervisory benchmarks should be the starting point for the determination, supplemented by other relevant inputs as appropriate.

351. Competent authorities should not allow own funds held pursuant to Article 92 of Regulation (EU) 575/2013 to be used to meet or offset additional own funds requirements both on aggregate and on a risk-by-risk basis.

352. For the purposes of Article 98(1)(f) of Directive 2013/36/EU and the determination of additional own funds requirements, competent authorities should assess and consider diversification effects arising from geographical, sectoral or any other relevant drivers within each material risk category (intra-risk diversification). For each of the risks to capital covered by Regulation (EU) 575/2013, such diversification effects should not reduce the minimum own funds requirements calculated in accordance with Article 92 of Regulation (EU) No 575/2013.

353. However, diversification between risks in different categories, including those covered by Regulation (EU) 575/2013 (inter-risk diversification) should not be considered as part of the determination of additional own funds requirements.

354. Competent authorities should ensure that the additional own funds requirements set for each risk ensure sound coverage of the risk. To this end, competent authorities should:

- a. clearly justify any additional own funds requirements that differ significantly from the outcomes of reliable ICAAP calculations or the benchmark calculations; and
- b. apply additional own funds requirements in a consistent manner – where they are not based on institution-specific considerations – to ensure broad consistency of prudential outcomes across institutions.

355. In determining additional own funds, competent authorities should consider the outcomes of dialogue and interaction with the institution.

ICAAP calculation

356. Competent authorities should assess the reliability of the ICAAP calculations by assessing whether they are:

- a. granular: The calculations/methodologies should allow the calculations to be broken down by risk type, rather than presenting a single (economic capital) calculation covering all risks. This breakdown should be enabled by the ICAAP methodology itself. Where deemed appropriate by the competent authority, estimates may be provided, through marginal contribution calculations, for example, for risks that cannot be measured on a standalone basis (e.g. credit concentration risk);
- b. credible: The calculations/methodologies used should demonstrably cover the risk they are looking to address (e.g. the credit concentration risk calculation should use appropriate sector breakdowns that reflect actual correlations and portfolio compositions) and should be based on recognised or appropriate models and prudent assumptions;
- c. understandable: The underlying drivers of the calculations/methodologies should be clearly specified. A 'black box' calculation should not be acceptable. Competent authorities should ensure that the institution provides an explanation of the most fallible areas of the models used, and how these are accounted for and corrected in the final ICAAP calculation; and
- d. comparable: Competent authorities should consider the holding period/risk horizon and confidence levels (or equivalent measurement) of the ICAAP

calculations, adjusting, or requiring the institution to adjust, these variables to facilitate comparability with peers and supervisory benchmark estimations.

357. Competent authorities should further assess the reliability of the ICAAP calculations by comparing them against the outcome of the supervisory benchmarks for the same risks, and other relevant inputs.
358. An ICAAP calculation should be considered partially reliable where, despite not meeting all the above criteria, the calculation still seems highly credible, though this should be on an exceptional basis and accompanied by steps to improve deficiencies identified in the ICAAP calculation.

Supervisory benchmarks

359. Competent authorities should develop and apply risk-specific supervisory benchmarks as a means to challenge ICAAP calculations for those material risks, or elements of such risks, that are not covered by Regulation (EU) 575/2013, or to further support the determination of risk-by-risk additional own funds requirement where ICAAP calculations for those material risks, or elements of such risks, are deemed unreliable or are unavailable.
360. The supervisory benchmarks should be developed to provide a prudent, consistent (calibrated to equivalent holding periods/risk horizons and confidence levels as required by Regulation (EU) 575/2013), transparent and comparable measure with which to calculate and compare the potential own funds requirements of institutions by risk type (excluding risks covered by Regulation (EU) 575/2013).
361. Given the variety of different business models operated by institutions, the outcome of the supervisory benchmarks may not be appropriate in every instance for every institution. Competent authorities should address this by using the most appropriate benchmark where alternatives are available, and by applying judgment to the outcome of the benchmark to account for business-model-specific considerations.
362. When competent authorities take supervisory benchmarks into consideration for the determination of additional own funds requirements, as part of the dialogue, they should explain to the institution the rationale and general underlying principles behind the benchmarks.

Other relevant inputs

363. Competent authorities should use other relevant inputs to support the determination of risk-by-risk additional own funds requirements. Other relevant inputs may include the outcomes of risk assessments (following the criteria specified in Title 6), peer-group comparisons, including report(s) issued by the EBA pursuant to the requirements of Article 78 of Directive 2013/36/EU, benchmarks issued by the EBA pursuant to Article 101 of

Directive 2013/36/EU, risk-specific stress testing, inputs from macro-prudential (designated) authorities, etc.

364. Other relevant inputs should prompt the competent authority to reassess the appropriateness/reliability of an ICAAP/benchmark calculation for a specific risk, and/or make adjustments to the outcome, where they prompt doubts about its accuracy (e.g. where the risk score implies a significantly different level of risk relative to the calculation, or where peer reviews reveal that the institution differs significantly from peers in terms of the own funds requirement to cover a comparable risk exposure).
365. To ensure consistency in determining additional risk-by-risk own funds requirements, competent authorities should use the same peer groups established to analyse risks to capital as specified in Title 6.
366. When competent authorities take other relevant inputs into consideration for the determination of additional own funds requirements, as part of the dialogue, they should explain to the institution the rationale and general underlying principles behind the inputs used.

7.2.2 Determining own funds or other measures to cover model deficiencies

367. If, during the ongoing review of internal approaches pursuant to the requirements of Article 101 of Directive 2013/36/EU, or through the peer analysis conducted pursuant to Article 78 of Directive 2013/36/EU, competent authorities identify model deficiencies that could lead to underestimation of the minimum own funds requirements set by Regulation (EU) 575/2013, they should set additional own funds requirements to cover the risk posed by model deficiencies that could lead to underestimation of risk where this is determined to be more appropriate than other supervisory measures. Competent authorities should only set additional own funds requirements to cover this risk as an interim measure while the deficiencies are addressed.

7.2.3 Determining own funds or other measures to cover other deficiencies

368. Competent authorities should set additional own funds to cover the risks posed by control, governance or other deficiencies – identified following the risk assessment outlined in Titles 4 to 6 – where this is considered more appropriate than other supervisory measures. Competent authorities should only set additional own funds requirements to cover these risks as an interim measure while the deficiencies are addressed.

7.2.4 Determining own funds or other measures to cover funding risk

369. Competent authorities should set additional own funds requirements to cover funding risk – identified following the risk assessment outlined in Title 8 – where this is determined to be more appropriate than other supervisory measures.

7.3 Reconciliation with macroprudential requirements

370. In determining additional own funds requirements (or other capital measures), competent authorities should reconcile the additional own funds requirements with any existing capital buffer requirements and/or macroprudential requirements addressing the same risks or elements of those risks. Competent authorities should not set additional own funds requirements or other capital measures (including P2G) where the same risk is already covered by specific capital buffer requirements and/or additional macroprudential requirements.

7.4 Determining the TSCR

371. Competent authorities should determine the TSCR as the sum of:

- a. the own funds requirement pursuant to Article 92 of Regulation (EU) 575/2013; and
- b. the sum of the additional own funds requirements (determined in accordance with the criteria specified above) and any additional own funds determined to be necessary to cover material inter-risk concentrations.

372. Competent authorities should set a composition requirement for the additional own funds requirements to cover the following risk types of at least 56% Common Equity Tier 1 (CET1) and at least 75% Tier 1 (T1):

- a. elements of credit, market and operational risk (not covered by Regulation (EU) 575/2013);
- b. credit concentration risk and IRRBB;
- c. the risk from model deficiencies that are likely to lead to underestimation of the appropriate level of own funds, where additional own funds requirements are used to cover this risk.

373. Competent authorities should determine the composition of additional own funds to cover other risk types at their discretion but should aim to ensure sound coverage of the risk posed.

374. Competent authorities should not consider items and instruments other than those eligible for the determination of own funds (as defined in Part Two of Regulation (EU) 575/2013) in the assessment/calculation of the TSCR.

7.5 Articulation of own funds requirements

375. Competent authorities should ensure there is consistency in setting additional own funds requirements and communicating them to the institution and/or, where relevant, other competent authorities. As a minimum, this should involve communication of the institution's

TSCR as a proportion (ratio) of the TREA, broken down in terms of the composition of the requirement.

376. To communicate the TSCR as a ratio, competent authorities should express it using the following formula (i.e. as a multiple of the 8% TREA requirement specified in Regulation (EU) No 575/2013):

$$TSCR \text{ ratio} = 8\% \times \frac{TSCR \times 12.5}{TREA}$$

377. Competent authorities should, where appropriate, make the necessary adjustments to the above to incorporate additional own funds requirements set to cover risk exposures not linked to the total balance sheet, and/or to ensure that the additional own funds requirements do not fall below a nominal floor (e.g. as a result of deleveraging), which may be expressed separately.

378. Competent authorities may further express the TSCR by breaking down the additional own funds requirements on a risk-by-risk basis, in addition to the overall requirement.

379. To achieve further consistency, competent authorities may additionally communicate to institutions and/or, where relevant, other competent authorities the OCR and its component parts – the TSCR, the CRD buffer requirements and additional own funds requirements to cover macro-prudential risks – as a proportion (ratio) of the TREA, broken down in terms of the composition of the requirement. Also see the example provided in Section 7.9.

7.6 Assessing the risk of excessive leverage

380. Competent authorities should assess the risk posed by excessive leverage to the institution's own funds.

381. In making the assessment, competent authorities should consider the following aspects:

- a. the current level of the leverage ratio compared to peers and, if applicable, the distance of the ratio from the regulatory minimum limit;
- b. the change in the institution's leverage ratio, including the foreseeable impact of current and future expected losses on the leverage ratio. Competent authorities should also consider the potential impact on the leverage ratio of current and foreseeable growth of exposures considered in the ratio;
- c. the extent to which there is a risk of excessive leverage arising from different stress events (also covered in Section 7.7); and
- d. whether there could be a risk of excessive leverage for specific institutions that are not adequately considered in the leverage ratio.

7.7 Meeting requirements in stressed conditions

382. Competent authorities should determine by means of stress testing the adequacy of the institution's own funds (quantity and composition) in stressed conditions and whether supervisory measures, including P2G, capital planning and other measures as set out in Title 10, are necessary to address potential inadequacies.

383. To assess capital adequacy in stressed conditions, competent authorities should consider:

- a. the use of the qualitative outcomes (e.g. deficiencies identified in risk management and control) of institutions' stress tests and supervisory stress testing; and
- b. the use of the quantitative outcomes of ICAAP stress tests, if the ICAAP is deemed reliable in accordance with paragraph 356, and of supervisory stress tests (i.e. outcomes in terms of changes in own funds ratios), pursuant to Article 100 of Directive 2013/36/EU as specified in Title 12 of these guidelines, and including, for example:
 - i. prescribing specific 'anchor' scenarios/assumptions to be implemented by institutions; and
 - ii. conducting system-wide stress tests using consistent methodologies and scenarios run either by institutions or by supervisors.

384. Competent authorities should assess as appropriate the quantitative outcomes of stress tests with regard to the adequacy and quality of the institution's own funds and determine whether the quantity and quality of own funds are sufficient to cover applicable capital requirements, and in particular:

- a. OCR including its combined buffer requirements under the baseline scenario over a forward looking time horizon of at least two years;
- b. TSCR under the adverse scenarios over a forward looking time horizon of at least two years; or
- c. where relevant, predefined target ratios (fixed threshold) set in the context of a system wide stress test, for the applicable stress test scenarios.

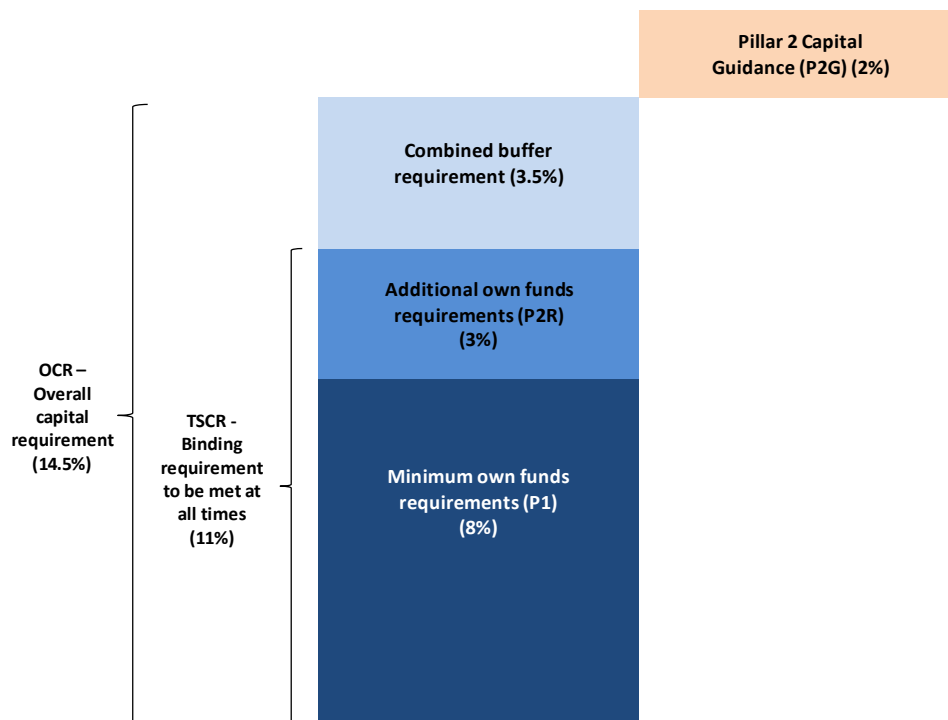
7.7.1 Using P2G to address the quantitative outcomes of stress testing

Determining and setting P2G

385. Competent authorities should determine P2G as specified in this section, and, where the determination leads to a positive value, they should set P2G to address supervisory concerns about the sensitivity of the institution to the adverse scenarios used in the supervisory stress tests.

386. Where the quantitative outcomes of the supervisory stress tests suggest that the institution is not expected to breach its TSCR under the adverse stress test scenario, competent authorities may decide not to set P2G.
387. Competent authorities should determine and set P2G based on the outcomes of the adverse scenario of the relevant supervisory stress tests, including the EU-wide stress tests performed by the EBA or any other relevant supervisory stress tests performed on a system-wide basis using a multi-factor scenario analysis over a forward-looking horizon of at least two years (either top-down or bottom-up).
388. On the basis of establishing a proportionate approach for non-Category 1 institutions and subsidiaries of cross-border groups, for setting and updating P2G competent authorities may consider the outcomes of simplified forms of supervisory stress tests (e.g. through the use of supervisory prescribed 'anchor' scenarios, sensitivity analysis, top-down stress tests conducted by designated authorities, portfolio level impacts from consolidated level stress tests) or past supervisory stress tests.
389. Competent authorities should determine and set P2G in accordance with the minimum engagement model specified in Section 2.2.4. In particular, the frequency with which P2G is determined and set should follow the frequency of the capital adequacy assessment under the SREP minimum engagement model.
390. Notwithstanding the previous paragraph, competent authorities should assess whether the existing P2G level is still appropriate whenever the results of new supervisory stress tests are available, and revise the level of P2G if necessary.
391. For institutions, for which capital adequacy, according to the SREP minimum engagement model, should be assessed annually (e.g. SREP Category 1 institutions), P2G may be determined and set only every second year instead of annually. In the other year, competent authorities should assess on the basis of all relevant information, including outcomes of past supervisory stress tests together with additional sensitivity analysis (i.e. simplified forms of supervisory stress testing), whether P2G is still relevant or needs to be updated
392. Competent authorities should generally not use P2G to cover elements of risks that should be covered by the additional own funds requirements in accordance with Section 7.2 of these guidelines.

Figure 6. Stacking order of own funds requirements and P2G (please refer to the example presented in Section 7.9)



393. When determining the size of P2G, competent authorities should ensure that it is set at a level appropriate to cover at least the anticipated maximum stress impact, which should be calculated based on the changes in the common equity tier 1 (CET1) ratio (i.e. considering both movements in CET1 capital and total risk exposure amount (TREA)) in the worst year of stress and taking into account the level of applicable capital requirements and the considerations set out in paragraphs 384 and 394 to 396.

394. When determining the size of P2G, competent authorities should also consider, where relevant, the following factors:

- a. the year when the maximum stress impact occurs in relation to the starting point and time horizon of the scenarios used in the stress tests;
- b. the outcome of a reliable ICAAP stress test, taking into account the specific scenario definitions and assumptions, in particular where they are deemed more relevant for the business model and risk profile of the institution or where the internal scenarios are more severe than the supervisory scenarios;
- c. relevant management mitigating actions of the institution that are deemed credible following their supervisory assessment;

- d. information about and supervisory views on the relevance of supervisory stress testing to the institution's strategy, financial plans and business model;
- e. the quality (composition) of the institution's available own funds, including at the worst year of stress; and
- f. whether or not the bank is under restructuring or resolution.

395. For the purpose of paragraph 394(b), competent authorities should also consider the extent to which stress scenarios cover all the material risks contributing to the additional own funds requirements in TSCR. Competent authorities should in particular have regard to the fact that macroeconomic downturn scenarios may not entirely capture some risks, for example conduct risk, pension risk or some elements of credit concentration risk (e.g. single name concentration), that may amplify potential losses under the tested adverse scenarios.

396. In addition, competent authorities should consider the extent to which the existing combined buffer requirements and other applicable macroprudential measures already cover risks revealed by stress testing. Competent authorities should offset P2G against the capital conservation buffer (CCB), as P2G and the CCB overlap in nature. Furthermore, while no overlap is in principle expected between P2G and the countercyclical capital buffer (CCyB), competent authorities should, in exceptional cases, offset P2G on a case-by-case basis against the CCyB based on the consideration of underlying risks covered by the buffer and factored into the design of the scenarios used for the stress tests, after liaising with the macroprudential authority. Competent authorities should not offset P2G against the systemic risk buffers (G-SII/O-SII buffers and the systemic risk buffer), as those are intended to cover the risks an institution poses to the financial system.

Communication and composition of P2G

397. Where P2G is set or updated, competent authorities should communicate to the institution the level of P2G and the relevant time limits for its establishment in accordance with paragraph 401. Competent authorities should also explain the potential supervisory reaction to situations where P2G is not met.

398. Competent authorities should communicate to institutions that P2G is expected to be met with CET1 eligible own funds and incorporated into their capital planning and risk management frameworks, including the risk appetite framework and recovery planning.

399. Competent authorities should also communicate to institutions that own funds held for the purposes of P2G cannot be used to meet any other regulatory requirements (Pillar 1, P2R or the combined buffer requirements), and therefore cannot be used twice. That means that own funds required to meet Pillar 1 (8% of TREA), P2R or the combined buffer requirements cannot be used to cover P2G.

400. Competent authorities should additionally communicate to institutions and where relevant, other competent authorities all applicable own funds ratios affected by P2G (CET1, T1 and total own funds).
401. When setting and communicating to the institutions time limits to establish P2G competent authorities should consider at least the following:
- a. whether or not an institution is under the restructuring or resolution; and
 - b. the potential implications that CET1 denominated P2G may have for other parts of the capital requirements and the ability of institutions to issue additional tier 1 (AT1) or Tier 2 (T2) instruments.

7.7.2 Capital planning and other supervisory measures to address capital adequacy in stressed conditions

Capital planning

402. When the quantitative outcomes of the stress tests referred to in Section 7.7.1 indicate that, under the given stress scenarios, an institution will not be able to meet the applicable capital requirements, competent authorities should require the institution to submit a credible capital plan that addresses the risk of not meeting its applicable capital requirements.
403. To determine the credibility of the capital plan, the competent authority should consider, as appropriate:
- a. whether the capital plan covers the entire assumed stress testing time horizon;
 - b. whether the capital plan puts forward a set of credible mitigating and management actions, restricting dividend payments, etc.;
 - c. whether the institution is willing and able to take such actions in order to address the breaches of the applicable capital requirements in the system-wide stress tests;
 - d. whether those mitigating and management actions are subject to any legal or reputational constraints, for instance due to contrary or conflicting former public announcements (e.g. on dividend policies, business plans and risk appetite);
 - e. the probability that mitigating and management action would enable the institution to fully meet its applicable capital requirements within an appropriate timeframe; and
 - f. whether the proposed actions are broadly in line with macroeconomic considerations and with known future regulatory changes affecting an institution within the scope and timeline of the assumed adverse scenarios;

- g. the range of recovery options and their analysis as set out in the institution's recovery plan.

404. When assessing capital plans, the competent authority should, where appropriate, following an effective dialogue with the institution, require the institution to make changes to those plans as appropriate, including to the proposed management actions, or require institutions to take additional mitigating actions that would become relevant given the scenarios and current macroeconomic conditions.

405. Competent authorities should expect institutions to implement the revised capital plan, including further changes made based on the results of the supervisory assessment of and dialogue with the institution.

Additional supervisory measures

406. Competent authorities should, where relevant, consider the application of the additional supervisory measures specified in Title 10, to ensure that the institution is adequately capitalised in stressed conditions.

407. In particular, where the quantitative outcomes of the stress tests indicate that the institution is likely to breach its applicable capital requirements under the adverse scenario within the following 12 months, the competent authorities should, where appropriate, treat such information as one of the possible circumstances within the meaning of Article 102(1)(b) of Directive 2013/36/EU. In such cases, the competent authorities should apply appropriate measures in accordance with Article 104(1) of Directive 2013/36/EU aimed at ensuring sufficient levels of own funds. In particular, when such measures relate to capital, competent authorities should in particular consider one or both of the following, as defined in Article 104(1)(a) and (f):

- a. requiring institutions to hold an appropriate amount of additional own funds in the form of a nominal amount, considering the outcome of the SREP assessment;
- b. requiring a reduction in the inherent risk of an institution's activities, products and systems.

7.8 Summary of findings and scoring

408. Following the above assessment, competent authorities should form a view on whether existing own funds resources provide sound coverage of the risks to which the institution is or might be exposed. This view should be reflected in a summary of findings, accompanied by a viability score based on the considerations specified in Table 8.

Table 8 - Supervisory considerations for assigning a score to capital adequacy

Score	Supervisory view	Considerations
1	The quantity and composition of own funds held pose a low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution is able to comfortably meet its P2G. • The institution holds a level of own funds comfortably above its OCR and is expected to do so in the future. • Stress testing does not reveal any discernible risk regarding the impact of a severe but plausible economic downturn on own funds. • The free flow of capital between entities in the group, where relevant, is not impeded, or all entities are well capitalised above supervisory requirements. • The institution has a plausible and credible capital plan that has the potential to be effective if required. • The institution's leverage ratio is comfortably above any regulatory minimum and there is no material/a very low risk of excessive leverage.
2	The quantity and composition of own funds held pose a medium-low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution has difficulty meeting its P2G. Management mitigating actions to address this are assessed as credible. • The institution is near to breaching some of its capital buffers but is still clearly above its TSCR. • Stress testing reveals a low level of risk regarding the impact of a severe but plausible economic downturn on own funds, but management actions to address this seem credible. • The free flow of capital between entities in the group, where relevant, is or could be marginally impeded.

Score	Supervisory view	Considerations
		<ul style="list-style-type: none"> • The institution has a plausible and credible capital plan that, although not without risk, has the potential to be effective if required. • The institution's leverage ratio is above any regulatory minimum. There is a low level of risk of excessive leverage.
3	The quantity and composition of own funds held pose a medium-high level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution does not meet its P2G. There are concerns about the credibility of management mitigating actions to address this. • The institution is using some of its capital buffers. There is potential for the institution to breach its TSCR if the situation deteriorates. • Stress testing reveals a medium level of risk regarding the impact of a severe but plausible economic downturn on own funds. Management actions may not credibly address this. • The free flow of capital between entities in the group, where relevant, is impeded. • The institution has a capital plan that is unlikely to be effective. • The institution's leverage ratio is above any regulatory minimum, but stress testing reveals concerns about the impact of a severe but plausible economic downturn on the ratio. There is a medium level of risk of excessive leverage.
4	The quantity and composition of own funds held pose a high level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution does not meet its P2G (or deliberately has not established P2G) and will not be able to do so in the foreseeable future. Management

Score	Supervisory view	Considerations
		<p>mitigating actions to address this are assessed as not credible.</p> <ul style="list-style-type: none"> • The institution is near to breaching its TSCR. • Stress testing reveals that TSCR would be breached near the beginning of a severe but plausible economic downturn. Management actions will not credibly address this. • The free flow of capital between entities in the group, where relevant, is impeded. • The institution has no capital plan, or one that is manifestly inadequate. • The institution's leverage ratio is near to breaching any regulatory minimum. There is a high level of risk of excessive leverage.

7.9 Communication of prudential requirements

Example of communicating prudential requirements (see also Figure 6):

As of DATE and until otherwise communicated, INSTITUTION is expected to hold capital to meet a total SREP capital requirement (TSCR) of [11%] of TREA, to be met at all times.

Of this [11%]:

- 8% (comprising at least 56% CET1 and 75% T1) represents own funds requirements specified in Article 92 of Regulation (EU) No 575/2013;

- [3%] represents additional own funds in excess of the requirements specified in Article 92 of Regulation (EU) No 575/2013, of which [2%] (comprising at least XX% CET1 and YY% T1) is to cover unexpected losses identified through SREP and [1%] (comprising at least XX% CET1 and YY% T1) is to cover OTHER [e.g. governance concerns] identified through SREP.

INSTITUTION is hereby reminded that it is also subject to the overall capital requirement (OCR), as defined in Section 1.2 of Guidelines EBA/GL/2014/13, which includes, in addition to the TSCR, the combined buffer requirement as defined in point (6) of Article 128 of Directive 2013/36/EU, to the extent that it is legally applicable.

As of the date of the joint decision, INSTITUTION is subject to the following combined buffer requirements to be fully met in CET1:

- a [2.5%] capital conservation buffer requirement;
- a [1%] countercyclical capital buffer (CCyB)* requirement.

(For the above communication, it should be kept in mind that buffer rates may change prior to the next SREP decision (implying potentially a different OCR in the meantime.)

INSTITUTION is also subject to [2%] Pillar 2 Guidance (P2G), which is a non-legally binding expectation on top of OCR identified in an idiosyncratic and risk-sensitive way, to address INSTITUTION's ability to maintain applicable own funds requirements (and effectively systemic risk buffers) in stressed conditions as revealed by the quantitative results of the supervisory stress tests performed in accordance with Article 100 of Directive 2013/36/EU.

For the above example, the capital requirements can be summarised as follows:

Total SREP capital requirement (TSCR), overall capital requirement (OCR) and Pillar 2 guidance (P2G)		
Prudential requirements	Amount	Background calculations
TSCR ratio	11.0%	
of which: CET1 capital ratio	6.2%	<i>Pillar 1 CET1 ratio (4.5%) plus P2R CET1 ratio (56% of 3%)</i>
of which: T1 ratio	8.3%	<i>Pillar 1 T1 ratio (6%) plus P2R T1 ratio (75% of 3%)</i>
OCR ratio	14.5%	
of which: CET1 capital ratio	9.7%	<i>TSCR CET1 ratio (6.2%) plus the combined buffer (3.5%)</i>
of which: T1 ratio	11.8%	<i>TSCR T1 ratio (8.3%) plus the combined buffer (3.5%)</i>
OCR and P2G	16.5%	
of which: CET1 capital ratio	11.7%	<i>OCR CET1 ratio (9.7%) plus P2G (2%)</i>
of which: T1 ratio	13.8%	<i>OCR T1 ratio (11.8%) plus P2G (2%)</i>

* This is the CCyB that is calculated by the institution and applicable as of the date of the Joint Decision, using the known CCyB buffer rates and exposures of the institutions in accordance with Article 140 of Directive 2013/36/EU.

Title 8. Assessing risks to liquidity and funding

8.1 General considerations

409. Competent authorities should assess the risks to liquidity and funding that have been identified as material for the institution. The purpose of this title is to provide common methodologies to be considered when assessing individual risks and risk management and controls. It is not intended to be exhaustive and gives leeway to competent authorities to take into account other additional criteria that may be deemed relevant based on their experience and the specific features of the institution.

410. This title provides competent authorities with a set of common elements for the assessment of risks to liquidity and funding.

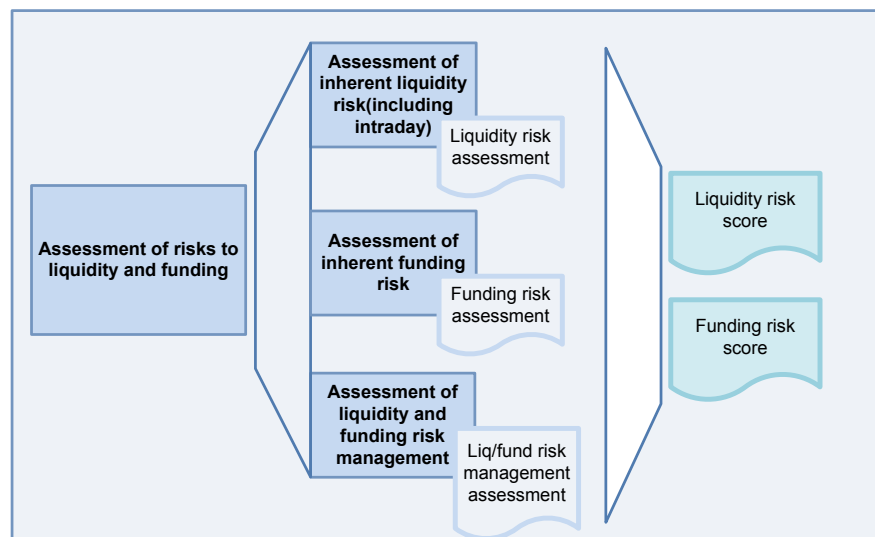
411. The methodology comprises three main components:

- a. assessment of inherent liquidity risk;
- b. assessment of inherent funding risk; and
- c. assessment of liquidity and funding risk management.

412. In the assessment of risks to liquidity and funding, competent authorities should verify the institution's compliance with minimum requirements provided by the relevant EU and national implementing legislation. However, these guidelines extend the scope of the assessment beyond those minimum requirements, aiming to allow competent authorities to form a comprehensive view of the risks.

413. This assessment flow is represented graphically in Figure 6.

Figure 7. Elements of the assessment of risks to liquidity and funding



414. Following the criteria specified in this title, competent authorities should assess all three components to form a view on the level of inherent liquidity and funding risk faced by the institution, and on the quality of the institution's liquidity and funding risk management and controls. Given that liquidity risk and funding risk and their management are interconnected and interdependent, the section for the assessment of liquidity and funding risk management and controls is the same for both risks.

415. In conducting the assessment of risks to liquidity and funding as part of the SREP, competent authorities may use a combination of information sources, including:

- a. outcomes from the analysis of the institution's business model, particularly those that may help with understanding the key sources of risks to liquidity and funding;
- b. information from the monitoring of key indicators;
- c. supervisory reporting, and particularly the information provided by the institution in its liquidity risk reporting pursuant to Article 415 of Regulation (EU) 575/2013;
- d. outcomes of the various supervisory activities;
- e. information provided by the institution, including information from the ILAAP;
- f. findings and observations from internal or external audit reports;
- g. recommendations and guidelines issued by the EBA, as well as warnings and recommendations issued by macro-prudential authorities or the ESRB; and
- h. risks identified in other institutions operating a similar business model (the peer group).

416. In their implementation of the methodologies and common elements specified in this title, competent authorities should identify relevant quantitative indicators and other metrics, which could be also used to monitor of key indicators as specified in Title 3.

417. The outcome of the assessment of each individual risk should be reflected in a summary of findings that provides an explanation of the main risk drivers and a score, as explained in the following sections.

8.2 Assessing liquidity risk

418. Competent authorities should assess the institution's short- and medium-term liquidity risk over an appropriate set of time horizons, including intraday periods, to ensure that the institution maintains adequate levels of liquidity buffers, under both normal and stressed conditions. This assessment includes the following elements:

- a. evaluation of liquidity needs in the short and medium term;
- b. evaluation of intraday liquidity risk;
- c. evaluation of liquidity buffer and counterbalancing capacity; and
- d. supervisory liquidity stress testing.

419. For the assessment of liquidity needs, buffers and counterbalancing capacity under normal conditions, competent authorities should support the analysis with evidence from the reporting templates for additional monitoring metrics as specified in the Commission Delegated Regulation issued pursuant to Article 415(3)(b) of Regulation (EU) No 575/2013.

Evaluation of liquidity needs in the short and medium term

420. Competent authorities should assess the institution's liquidity needs in the short and medium term under both normal and stressed conditions (shocks). They should take into account:

- a. the institution's stressed liquidity needs at different times, in particular before 30 days, between 30 days and 3 months, and after 3 to 12 months, and specifically the effect on the institution's liquidity needs (net cash outflows) of severe but plausible stresses, to cover idiosyncratic, market-wide and combined shocks; and
- b. the size, location and currency of the liquidity needs and, where an institution operates in different material currencies, the separate impacts of shocks in the different currencies, to reflect currency convertibility risk.

421. Competent authorities should support the assessment of short-term liquidity risk by analysing, as a minimum, the LCR as specified in the Commission Delegated Regulation issued pursuant to Article 460 of Regulation (EU) 575/2013, and in particular:

- a. whether the institution is correctly reporting its LCR position; and
- b. whether the LCR adequately identifies the institution's liquidity needs.

422. In evaluating the impact of shocks on the institution's liquidity needs, competent authorities should take into account all material sources of liquidity risk for the institution. In particular, they should take into account:

- a. the possibility that any applicable requirements stemming from the relevant EU and national implementing legislation would not adequately identify the institution's liquidity needs in the event of the type of stress scenario used for the requirement, including where maturities are shorter than 30 days. During the phase-in of the LCR, competent authorities may pay particular attention to the possibility of institutions increasing their LCR by engaging in very short-term borrowing and lending, an activity that, as long as the requirement is less than 100%, may increase the LCR without reducing the liquidity risk;
- b. risks arising in respect of wholesale counterparties regarding on-balance-sheet items and funding concentrations, and taking into account actions the institution may take to preserve its reputation/franchise;
- c. risks arising in respect of contingent cash flows/off-balance-sheet items (for example, credit lines, margin calls) and activities (for example, liquidity support for unconsolidated special-purpose vehicles beyond contractual obligations), taking into account actions the institution may take to preserve its reputation/franchise;
- d. inflows and outflows on a gross basis as well as a net basis: where there are very high inflows and outflows, competent authorities should pay specific attention to the risk to the institution when inflows are not received when expected, even when the net outflow risk is limited;
- e. risks arising in respect of retail counterparties, taking into account actions the institution may take to preserve its reputation/franchise. For this purpose, competent authorities should make use of the methodology on the classification of retail deposits into different risk buckets, pursuant to Article 421(3) of Regulation 575/2013, for liquidity reporting; and
- f. the risk that excessive risks in the medium- to long-term funding profile will adversely affect the behaviour of counterparties relevant to the short-term liquidity position.

Evaluation of intraday liquidity risk

423. Competent authorities should assess the institution's exposure to intraday liquidity risk for a selected time horizon, including the intraday availability of liquid assets given the

unpredictable nature of unexpected intraday outflows or lack of inflows. This assessment should include, as a minimum, an evaluation of intraday liquidity available or accessible under normal conditions as well as under financial or operational stress (e.g. IT failures, legal constraints on the transfer of funds).

424. For those jurisdictions where reporting on intraday risk is not yet available, competent authorities should rely on the institution's own analysis of intraday liquidity risk.

Evaluation of liquidity buffer and counterbalancing capacity

425. Competent authorities should assess the adequacy of the institution's liquidity buffer and counterbalancing capacity to meet its liquidity needs within a month as well as over different time horizons, potentially up to 1 year, including overnight. This assessment should take into account:

- a. the directly available liquidity buffers or the institution's survival periods under different stress scenarios;
- b. the overall counterbalancing capacity available to the institution over the full period of the relevant stress scenario;
- c. the characteristics, such as severity and duration, of different stress scenarios and periods considered in the evaluation of the institution's liquidity needs;
- d. the amount of assets that would need to be liquidated over the relevant time horizons;
- e. whether the actual liquidity buffer and counterbalancing capacity, including the quality of liquid assets, are in line with the institution's liquidity risk tolerance; and
- f. the classification and quality of liquid assets as specified in the LCR as a reference point, as specified in the Commission Delegated Regulation issued pursuant to Article 460 of Regulation (EU) 575/2013.

426. Competent authorities should assess the institution's ability to monetise its liquid assets in a timely fashion to meet its liquidity needs during a stress period. They should take into account:

- a. whether the institution tests its market access by selling or repo-ing on a periodic basis;
- b. whether there are high concentrations that may represent a risk of overestimation of the liquidity buffer and counterbalancing capacity;
- c. whether the assets in the buffer are unencumbered (as defined in the EBA Guidelines on disclosure of encumbered and unencumbered assets¹⁹), under the

¹⁹ EBA Guidelines on disclosure of encumbered and unencumbered assets ([EBA/GL/2014/03](#))

- control of the relevant staff and readily available to a liquidity management function;
- d. whether the denomination of the liquid assets is consistent with the distribution of liquidity needs by currency;
 - e. where the institution has borrowed liquid assets, whether it has to return them during a short-term liquidity stress period, which would mean that the institution would no longer have them available to meet its stressed outflows considering the net effect of the transaction; and
 - f. the likely value of committed liquidity facilities, where competent authorities determine that such facilities can to some extent be included in the counterbalancing capacity.

Supervisory liquidity stress testing

427. Competent authorities should use liquidity stress tests, defined and run by the competent authorities, as an independent tool to assess short- and medium-term liquidity risks, to:

- a. identify liquidity risks over different time horizons and in various stress scenarios. Stress scenarios should be anchored to the 30-day LCR stress assumptions, but competent authorities may extend the scope of their assessment by exploring risks within 30 days as well as beyond 30 days, and altering the LCR assumptions to reflect risks not adequately covered in the LCR;
- b. inform their own view of liquidity risks in addition to the information from the institution's internal stress tests;
- c. identify and quantify specific areas of liquidity risk; and
- d. inform their view on the overall liquidity risk to which the institution is exposed, which will enable them to compare the relative risk of institutions. As a minimum, this should include a supervisory stress test combining institution-specific and market-wide stress.

428. Competent authorities may assess the possible change in and sensitivity of the liquidity coverage requirement following the application of Articles 412(3) and 414 of Regulation (EU) No 575/2013 during mild stress scenarios, by means of supervisory or institution liquidity-specific stress testing. The scenarios applied for this assessment should typically be less severe (e.g. only market-wide stress) than the scenarios used to test the survivability of the institution (market-wide and systemic stress) and consequently reflect situations in which institutions would not be expected to use their minimum liquidity buffer.

8.3 Assessing inherent funding risk

429. Competent authorities should assess the institution's funding risk and whether the medium- and long-term obligations are adequately met with a range of stable funding instruments under both normal and stressed conditions. This assessment includes the following elements:

- a. evaluation of the institution's funding profile;
- b. evaluation of risks to the stability of the funding profile;
- c. evaluation of actual market access; and
- d. evaluation of expected change in funding risks based on the institution's funding plan.

Evaluation of the institution's funding profile

430. Competent authorities should assess the appropriateness of the institution's funding profile, including both medium- and long-term contractual and behavioural mismatches, in relation to its business model, strategy and risk tolerance. More specifically, they should take into account:

- a. whether the institution's medium- and long-term obligations are adequately met with a range of stable funding instruments, pursuant to Article 413 of Regulation (EU) No 575/2013, and whether its actual mismatches over the relevant time horizons are within acceptable boundaries in relation to the specific business model of the institution;
- b. whether – in light of the competent authority's view on the institution's desired funding profile – the institution's actual funding profile falls short of its desired profile;
- c. (local) regulatory and contractual factors affecting the behavioural characteristics of funding providers (e.g. regulations regarding clearing, bail-in, deposit guarantee schemes, etc., as they may influence the behaviour of funding providers), particularly when there are material changes or differences between jurisdictions in which the institution operates; and
- d. that maturity transformation will lead to a certain level of mismatches but that these must remain within manageable and controllable boundaries to prevent collapse of the business model during stress periods or changes in market circumstances.

431. Competent authorities should assess whether potential shortcomings arising from the institution's funding profile, such as maturity mismatches breaching acceptable boundaries, excessive concentrations of funding sources, excessive levels of asset encumbrance or

inappropriate or unstable funding of long-term assets, could lead to an unacceptable increase in the cost of funding for the institution. They should take into account:

- a. the risk of funding being rolled over at higher interest rates where there is an excessive dependence on specific sources of funding, the funding needs of the institution soar or the sources of funding perceive the institution as having a riskier profile, especially when it is not likely that those higher costs will be transferred automatically to clients; and
- b. whether an increasing level of asset encumbrance above acceptable limits reduces access to and increases the price of unsecured funding.

Evaluation of risks to the stability of the funding profile

432. Competent authorities should consider factors that may reduce the stability of the funding profile in relation to the type and characteristics of both assets and liabilities. They should take into account:

- a. the fact that some specific asset classes will be more significant than others to the institution and/or the system;
- b. the structural maturity mismatch between assets and liabilities in different significant currencies, where applicable, as well as in aggregate, and how currency mismatches overlaying structural maturity mismatches affects the overall risk to the stability of the funding profile; and
- c. appropriate structural funding metrics (appropriate to the institution's business model). Examples of structural funding metrics may include loan/deposit ratio, customer funding gap and behaviourally adjusted maturity ladder (of which the net stable funding ratio metric is a particular example).

433. Competent authorities should assess risks to the sustainability of the funding profile arising from concentrations in funding sources. They should take the following factors into account:

- a. concentrations in different respects, notably and where applicable: the type of funding instruments used, specific funding markets, single or connected counterparties and other concentration risks that may affect access to funding in the future (focusing on the markets and instruments relevant to the long-term funding profile and noting that their view on concentration risk in the short-term liquidity profile may be relevant); and
- b. the risk that asset encumbrance may have an adverse effect on the market's appetite for the unsecured debt of the institution (in the context of the specific characteristics of the market(s) in which the institution operates and the institution's business model). Factors for this assessment may include:

- the total amount of encumbered and/or borrowed assets compared with the balance sheet;
- the availability of free assets (assets that are unencumbered but that may be encumbered), especially when considered in relation to total unsecured wholesale funding;
- the level of overcollateralisation relative to the capital base; overcollateralisation refers to the extent to which the value of the assets used to obtain secured funding exceeds the notional amount of funding obtained (e.g. if EUR 120 of assets are used for EUR 100 of secured funding, the overcollateralisation is 20); and
- the implications of the level of overcollateralisation for the deposit insurance scheme if the institution fails.

Evaluation of actual market access

434. Competent authorities should be aware of the institution's actual market access and current and future threats to this market access. Several factors need to be taken into account:

- a. any information of which they are aware, including information from the institution itself, indicating that the institution makes high demands on particular markets or counterparties (including central banks) that are important to it, relative to those markets'/counterparties' capacity;
- b. any significant or unexpected changes in the issuance of debt of which competent authorities become aware in each significant market (including in significant currencies); note that competent authorities would expect institutions to alert them to any such changes. They should also assess whether any such changes are due to the strategic choices of the institution or whether they are signs of reduced market access;
- c. the risk that news about the institution may negatively influence the market (perception/confidence) and therefore market access. Such news may or may not yet be known to the market; and
- d. signs that short-term liquidity risks (e.g. when short-term liquidity risk is assessed as high) may reduce the access the institution has to its major funding markets.

Evaluation of expected change in funding risks based on the institution's funding plan

435. Competent authorities should assess the expected change in funding risks based on the institution's funding plan. This assessment should take into account the following aspects:

- a. the way the institution's funding plan, when executed in full, will affect the institution's funding risks, bearing in mind that the execution of the funding plan may increase or decrease the risks in the funding profile; and
- b. the supervisory view of the feasibility of the plan.

8.4 Assessing liquidity and funding risk management

436. To achieve a comprehensive understanding of the institution's liquidity and funding risk profile, competent authorities should also review the governance and risk management framework underlying its liquidity and funding risk. To this end, competent authorities should assess:

- a. the liquidity risk strategy and liquidity risk tolerance;
- b. the organisational framework, policies and procedures;
- c. risk identification, measurement, management, monitoring and reporting;
- d. the institution's liquidity-specific stress testing;
- e. the internal control framework for liquidity risk management;
- f. the institution's liquidity contingency plans; and
- g. the institution's funding plans.

Liquidity risk strategy and liquidity risk tolerance

437. Competent authorities should assess whether the institution appropriately defines and communicates its liquidity risk strategy and liquidity risk tolerance. They should take into account:

- a. whether the liquidity risk strategy and liquidity risk tolerance are established, approved and updated by the management body;
- b. whether the institution has an appropriate framework in place to ensure that the liquidity risk strategy is effectively communicated to relevant staff;
- c. whether the liquidity risk strategy and tolerance are clearly defined, properly documented, effectively implemented and communicated to all relevant staff;
- d. whether the liquidity risk tolerance is appropriate for the institution considering its business model, overall risk tolerance, role in the financial system, financial condition and funding capacity; and

- e. whether the institution's liquidity risk strategy and tolerance framework is properly integrated within its overall risk appetite framework.

Organisational framework, policies and procedures

438. Competent authorities should assess whether the institution has appropriate arrangements for the governance and management of liquidity and funding risk. For this assessment, competent authorities should take into account:

- a. whether the management body approves the governance and policies for managing liquidity and funding risk and discusses and reviews them regularly;
- b. whether senior management is responsible for developing and implementing the policies and procedures for managing liquidity and funding risk;
- c. whether senior management ensures that the decisions of the management body are monitored;
- d. whether the liquidity and funding risk management framework is internally coherent and ensures ILAAP is comprehensive, and is well integrated into the institution's wider risk management process;
- e. whether the policies and procedures are appropriate for the institution, taking into account its liquidity risk tolerance; and
- f. whether the policies and procedures are properly defined, formalised and effectively communicated throughout the institution.

439. Competent authorities should assess whether the institution has an appropriate organisational framework for liquidity and funding risk management, measurement and control functions, with sufficient human and technical resources to develop and implement these functions and to carry out the required monitoring tasks. They should take into account:

- a. whether the liquidity risk control and monitoring systems and processes are controlled by independent control functions;
- b. whether the risk management, measurement and control functions cover liquidity risk in the entire institution (including branches), and in particular all areas where liquidity risk can be taken, mitigated or monitored;
- c. whether the institution has a set of liquidity and funding policy documents that seem adequate for promoting prudent behaviour by the institution's staff and allowing for efficient operation of the control functions; and

- d. whether the institution has appropriate internal written policies and procedures for the management of liquidity and funding risk, as well as the adequacy of the institution's liquidity and funding risk management framework.

440. Competent authorities should assess the adequacy of the institution's approach to maintaining market access in its significant funding markets. They should take into account:

- a. the institution's approach to maintaining an ongoing presence in the markets (testing market access); for specific small institutions or specialised business models, testing of access to markets may not be relevant;
- b. the institution's approach to developing strong relationships with funding providers to lower the risk of its access being reduced; and
- c. any evidence that the institution would continue to have ongoing market access in times of stress (even though it may be more expensive for the institution to do so at such times).

Risk identification, measurement, management, monitoring and reporting

441. Competent authorities should assess whether the institution has an appropriate framework and IT systems for identifying and measuring liquidity and funding risk, in line with the institution's size, complexity, risk tolerance and risk-taking capacity. They should take the following factors into account:

- a. whether the institution has implemented appropriate methods for projecting its cash flows over an appropriate set of time horizons, assuming business-as-usual and stress situations, and comprehensively across material risk drivers;
- b. whether the institution uses appropriate key assumptions and methodologies, which are regularly reviewed, recognising interaction between different risks (credit, market, etc.) arising from both on- and off-balance sheet items;
- c. when relevant, whether all material legal entities, branches and subsidiaries in the jurisdiction in which the institution is active are included; and
- d. whether the institution understands its ability to access financial instruments wherever they are held, having regard to any legal, regulatory and operating restrictions on their use, including, for example, the inaccessibility of assets due to encumbrance during different time horizons.

442. Competent authorities should assess whether institutions have an appropriate reporting framework for liquidity and funding risk. They should take into account:

- a. whether there is a set of reporting criteria agreed by senior management, specifying the scope, manner and frequency of liquidity and funding risk reporting and who is responsible for preparing the reports;
- b. the quality and appropriateness of information systems, management information and internal information flows supporting liquidity and funding risk management and whether the data and information used by the institution are understandable for the target audience, accurate and usable (e.g. timely, not overly complex, within the correct scope, etc.); and
- c. whether specific reports and documentation containing comprehensive and easily accessible information on liquidity risk are submitted regularly to the appropriate recipients (such as the management body, senior management or an asset-liability committee).

443. Competent authorities should assess the adequacy of the process of measuring intraday liquidity risk, especially for those institutions that participate in payment, settlement and clearing systems. They should take into account:

- a. whether the institution adequately monitors and controls cash flows and liquid resources available to meet intraday requirements and forecasts when cash flows will occur during the day; and
- b. whether the institution carries out adequate specific stress testing for intraday operations (where the institution should consider similar scenarios to those specified above).

444. Competent authorities should assess whether the institution has an adequate set of indicators regarding the liquidity and funding position that are appropriate to the business model and the nature, scale and complexity of the institution. They should take into account:

- a. whether the indicators adequately cover the institution's key structural funding vulnerabilities, covering the following aspects, where appropriate:
 - the degree of dependence on a single market or an excessively small number of markets/counterparties;
 - the 'stickiness' of funding sources and factors driving behaviour;
 - the concentration of particular instruments;
 - the concentration of activities in different currencies;
 - major concentrations of maturities and maturity gaps over the longer term; and

- b. whether the indicators are adequately documented, periodically revised, used as inputs to define the risk tolerance of the institution, part of management reporting and used for setting operating limits.

Institution's liquidity-specific stress testing

445. Competent authorities should assess whether an institution has implemented adequate liquidity-specific stress testing as part of its overall stress testing programme, in accordance with the *EBA Guidelines on institutions' stress testing*, to understand the impact of adverse events on its risk exposure and on the quantitative and qualitative adequacy of its liquid assets, and to determine whether the institution's liquidity holdings are sufficient to cover risks that may crystallise during different types of stress scenarios and/or to address risks posed by control, governance or other deficiencies. For this purpose, competent authorities should take into account whether the institution's stress-testing framework is appropriate for:

- a. determining the institution's survival horizon given its existing liquidity buffer and stable sources of funding, and taking into account the institution's risk tolerance, during a severe but plausible liquidity stress period;
- b. analysing the impact of stress scenarios on its consolidated group-wide liquidity position and on the liquidity position of individual entities and business lines; and
- c. understanding where risks could arise, regardless of its organisational structure and the degree of centralised liquidity risk management.

446. Competent authorities should also assess whether additional tests are needed for individual entities and/or liquidity sub-groups that are exposed to significant liquidity risks. These tests should take into account the consequences of the scenarios over different time horizons, including on an intraday basis.

447. Competent authorities should ensure that the institution provides the modelled impact of different types of stress scenarios, as well as a number of sensitivity tests (on the basis of proportionality). Careful consideration should be given to the assessment of the design of stress scenarios and the variety of shocks simulated in them, taking into account whether, in this design, the institution not only considers the past, but also makes use of hypotheses based on expert judgment. Competent authorities should analyse whether the following scenarios are considered as a minimum:

- a. short-term and prolonged;
- b. institution-specific and market-wide (occurring simultaneously in a variety of markets); and
- c. a combination of (i) and (ii).

448. An important aspect that competent authorities should consider when assessing the institution's stress testing framework is the modelling of the impact of the hypothetical stress scenario(s) on the institution's cash flows and on its counterbalancing capacity and survival horizon, and whether the modelling reflects the different impacts that economic stress may have on both an institution's assets and its in- and outflows.

449. Competent authorities should also assess whether the institution takes a conservative approach to setting stress testing assumptions. Depending on the type and severity of the scenario, competent authorities should consider the appropriateness of a number of assumptions, in particular:

- a. the run-off of retail funding;
- b. the reduction of secured and unsecured wholesale funding;
- c. the correlation between funding markets and diversification across different markets;
- d. additional contingent off-balance sheet exposures;
- e. funding tenors (e.g. where the funding provider has call options);
- f. the impact of any deterioration of the institution's credit rating;
- g. FX convertibility and access to foreign exchange markets;
- h. the ability to transfer liquidity across entities, sectors and countries;
- i. estimates of future balance-sheet growth; and
- j. due to reputational risks, an implicit requirement for the institution to roll over assets and to extend or maintain other forms of liquidity support.

450. Competent authorities should assess whether the management framework of the institution's liquidity-specific stress testing is appropriate and whether it is properly integrated into the overall risk management strategy. They should take into account:

- a. whether the extent and frequency of stress tests are appropriate to the nature and complexity of the institution, its liquidity risk exposures and its relative importance in the financial system;
- b. whether the outcomes of stress testing are integrated into the institution's strategic planning process for liquidity and funding and used to increase the effectiveness of liquidity management in the event of a crisis, including in the institution's liquidity recovery plan;

- c. whether the institution has an adequate process for identifying suitable risk factors for conducting stress tests, having regard to all material vulnerabilities that can undermine the liquidity position of the particular institution;
- d. whether assumptions and scenarios are reviewed and updated sufficiently frequently; and
- e. where the liquidity management of a group is being assessed, whether the institution pays adequate attention to any potential obstacles to the transfer of liquidity within the group.

Liquidity risk internal control framework

451. Competent authorities should assess whether the institution has a strong and comprehensive internal limit and control framework and sound safeguards to mitigate or limit its liquidity risk in line with its risk tolerance. They should take into account whether:

- a. the limit and control framework is adequate for the institution's complexity, size and business model and reflects the different material drivers of liquidity risk, such as maturity mismatches, currency mismatches, derivatives transactions, off-balance-sheet items and intraday liquidity risk;
- b. the institution has implemented adequate limits and monitoring systems that are consistent with its liquidity risk tolerance and that make use of the outcomes of liquidity stress tests;
- c. the risk limits are regularly reviewed by the competent bodies of the institution and clearly communicated to all relevant business lines;
- d. there are clear and transparent procedures regarding how individual liquidity risk limits are approved and reviewed;
- e. there are clear and transparent procedures regarding how compliance with individual liquidity risk limits is monitored and how limit breaches are handled (including clear escalation and reporting procedures); and
- f. the limit and control framework helps the institution to ensure the availability of a diversified funding structure and sufficient and accessible liquid assets.

452. Competent authorities should assess whether the institution has implemented an adequate transfer pricing system as part of the liquidity risk control framework. They should take into account:

- a. whether the institution's transfer pricing system covers all material business activities;

- b. whether the institution's funds transfer pricing system incorporates all relevant liquidity costs, benefits and risks;
- c. whether the resulting mechanism allows management to give appropriate incentives for managing liquidity risk;
- d. whether the transfer pricing methodology and its calibration are reviewed and updated appropriately given the size and complexity of the institution;
- e. whether the transfer pricing system and its methodology are communicated to the relevant staff; and
- f. as an additional factor, whether the institution's policy on incorporating the funds transfer pricing (FTP) methodology into the internal pricing framework is used for assessing and deciding on transactions with customers (this includes both sides of the balance sheet, e.g. granting loans and taking deposits).

453. Competent authorities should assess whether the institution has adequate controls regarding the liquid-assets buffer. They should take into account whether:

- a. the control framework covers the timely monitoring of the liquid-assets buffer, including the quality of the assets, their concentration, immediate availability to the group entity using the assets to cover liquidity risks and any impediments to their timely conversion into cash; and
- b. the institution has an appropriate policy on monitoring market conditions that can affect its ability to sell or repo assets quickly in the market.

Liquidity contingency plans

454. Competent authorities should assess whether the institution's liquidity contingency plan (LCP) adequately specifies the policies, procedures and action plans for responding to severe potential disruptions to the institution's ability to fund itself. They should take into account the content and scope of contingency funding measures included in the LCP, and in particular factors such as:

- a. whether the LCP adequately explains governance arrangements for its activation and maintenance;
- b. whether the LCP appropriately reflects the institution's liquidity-specific and wider risk profile;
- c. whether the institution has a framework of liquidity early warning indicators that are likely to be effective in enabling the institution to identify deteriorating market circumstances in a timely manner and to determine quickly what actions need to be taken;

- d. whether the LCP clearly articulates all material (potential) funding sources, including the estimated amounts available for the different sources of liquidity and the estimated time needed to obtain funds from them;
- e. whether the measures are in line with the institution's overall risk strategy and liquidity risk tolerance; and
- f. the appropriateness of the assumptions regarding the role of central bank funding in the institution's LCP. Examples of factors competent authorities may consider could include the institution's views on:
 - the current and future availability of potential alternative funding sources connected to central bank lending programmes;
 - the types of lending facilities, the acceptable collateral and the operational procedures for accessing central bank funds; and
 - the circumstances under which central bank funding would be needed, the amount required and the period for which such use of central bank funding would probably be required.

455. Competent authorities should assess whether the actions described in the LCP are feasible in relation to the stress scenarios in which they are meant to be taken. They should take into account factors such as:

- a. the level of consistency and interaction between the institution's liquidity-related stress tests, its LCP and its liquidity early warning indicators;
- b. whether the actions defined in the LCP appear likely to enable the institution to react adequately to a range of possible scenarios of severe liquidity stress, including institution-specific and market-wide stress, as well as the potential interaction between them; and
- c. whether the actions defined in the LCP are prudently quantified in terms of liquidity-generating capacity under stressed conditions and the time required to execute them, taking into account operational requirements such as pledging collateral at a central bank.

456. Competent authorities should assess the appropriateness of the institution's governance framework with respect to its LCP. They should take into account factors such as:

- a. the appropriateness of escalation and prioritisation procedures detailing when and how each of the actions can and should be activated;
- b. whether the institution has adequate policies and procedures with respect to communication within the institution and with external parties; and

- c. the degree of consistency between the LCP and the institution's business continuity plans.

Funding plans

457. Competent authorities should assess whether the funding plan is feasible and appropriate in relation to the nature, scale and complexity of the institution, its current and projected activities and its liquidity and funding profile. They should take into account factors such as:

- a. whether the funding plan is robust in terms of its ability to support the projected business activities under adverse scenarios;
- b. the expected change in the institution's funding profile arising from the execution of the funding plan and whether this is suitable given the institution's activities and business model;
- c. whether the funding plan supports any required or desired improvements in the institution's funding profile;
- d. their own view on the (changes in) market activity planned by institutions in their jurisdiction on an aggregated level, and what that means for the feasibility of individual funding plans;
- e. whether the funding plan is:
 - integrated with the overall strategic plan of the institution;
 - consistent with its business model; and
 - consistent with its liquidity risk tolerance;

458. In addition, competent authorities may consider:

- a. whether the institution adequately analyses and is aware of the appropriateness and adequacy of the funding plan given the institution's current liquidity and funding positions and their projected development. As part of this, competent authorities may consider whether the institution's senior management can explain why the funding plan is feasible and where its weaknesses lie;
- b. the institution's policy for determining what funding dimensions and what markets are significant to the institution (and whether it is adequate);
- c. the time horizon envisaged by the institution for migration to a different funding profile, if required or desired, bearing in mind that there may be risks involved if migration towards the end state is either too fast or too slow; and

- d. whether the funding plan contains different strategies and clear management procedures for timely implementation of strategy changes.

459. Competent authorities should assess whether the institution's funding plan is appropriately implemented. As a minimum, they should take into account:

- a. whether the funding plan is properly documented and communicated to all the relevant staff;
- b. whether the funding plan is embedded in the day-to-day operations of the institution, especially in the funding decision-making process; and

460. In addition, competent authorities may take into account whether the institution is able to reconcile the funding plan with the data provided to competent authorities in the funding plan template.

461. Competent authorities should consider the quality of the institution's processes for monitoring the execution of the funding plan and its ability to react to deviations in a timely manner. For this assessment, competent authorities should take into account factors such as:

- a. the quality of the updates to (senior) management regarding the current status of the execution of the funding plan;
- b. whether the funding plan envisages alternative fall-back measures to be implemented if there are changes in the market conditions; and
- c. the policy and practice of the institution regarding the regular review and updating of the funding plan when the actual funding raised significantly differs from the funding plan.

8.5 Summary of findings and scoring

462. Following the above assessment, competent authorities should form a view on the institution's funding and liquidity risks. This view should be reflected in a summary of findings, accompanied by a risk score based on the considerations specified in Tables 9 and 10.

Table 9. Supervisory considerations for assigning a score to liquidity risk

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
1	There is a low risk of significant prudential impact on the institution considering the level	<ul style="list-style-type: none"> There is non-material/very low risk arising from mismatches (e.g. between maturities, currencies, etc.). 	<ul style="list-style-type: none"> There is consistency between the institution's liquidity risk policy and

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
	of inherent risk and the management and controls.	<ul style="list-style-type: none"> The size and composition of the liquidity buffer is adequate and appropriate. The level of other drivers of liquidity risk (e.g. reputational risk, inability to transfer intra-group liquidity, etc.) is not material/very low. 	<p>strategy and its overall strategy and risk appetite.</p> <ul style="list-style-type: none"> The organisational framework for liquidity risk is robust with clear responsibilities and a clear separation of tasks between risk takers and management and control functions.
2	There is a medium-low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> Mismatches (e.g. between maturities, currencies, etc.) entail low to medium risk. The risk posed by the size and composition of the liquidity buffer is low to medium. The level of other drivers of liquidity risk (e.g. reputational risk, inability to transfer intra-group liquidity, etc.) is low to medium. 	<ul style="list-style-type: none"> Liquidity risk measurement, monitoring and reporting systems are appropriate. Internal limits and the control framework for liquidity risk are sound and are in line with the institution's risk management strategy and risk appetite/tolerance.
3	There is a medium-high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> Mismatches (e.g. between maturities, currencies, etc.) entail medium to high risk. The risk posed by the size and composition of the liquidity buffer is medium to high. The level of other drivers of liquidity risk (e.g. reputational risk, inability to transfer intra-group liquidity, etc.) is medium to high. 	
4	There is a high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> Mismatches (e.g. between maturities, currencies, etc.) entail high risk. The risk posed by the size and composition of the liquidity buffer is high. The level of other drivers of liquidity risk (e.g. reputational risk, inability to transfer intra-group liquidity, etc.) is high. 	

Table 10. Supervisory considerations for assigning a score to funding risk

Risk score	Supervisory view	Considerations in relation to inherent risk	Considerations in relation to adequate management and controls
1	There is a low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • There is non-material/very low risk from the institution's funding profile or its sustainability. • The risk posed by the stability of funding is not material. • Other drivers of funding risk (e.g. reputational risk, access to funding markets, etc.) are not material/very low. 	<ul style="list-style-type: none"> • There is consistency between the institution's funding risk policy and strategy and its overall strategy and risk appetite. • The organisational framework for funding risk is robust with clear responsibilities and a clear separation of tasks between risk takers and management and control functions. • Funding risk measurement, monitoring and reporting systems are appropriate. • Internal limits and the control framework for funding risk are sound and are in line with the institution's risk management strategy and risk appetite/tolerance.
2	There is a medium-low risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The risk posed by the institution's funding profile and its sustainability is low to medium. • The risk posed by the stability of funding is low to medium. • Other drivers of funding risk (e.g. reputational risk, access to funding markets, etc.) are low to medium. 	
3	There is a medium-high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The risk posed by the institution's funding profile and its sustainability is medium to high. • The risk posed by the stability of funding is medium to high. • Other drivers of funding risk (e.g. reputational risk, access to funding markets, etc.) are medium to high. 	
4	There is a high risk of significant prudential impact on the institution considering the level of inherent risk and the management and controls.	<ul style="list-style-type: none"> • The risk posed by the institution's funding profile and its sustainability is high. • The risk posed by the stability of funding is high. • Other drivers of funding risk (e.g. reputational risk, access to funding markets, etc.) are high. 	

Title 9. SREP liquidity assessment

9.1 General considerations

463. Competent authorities should determine through the SREP liquidity assessment whether the liquidity held by the institution provides appropriate coverage of the risks to liquidity and funding assessed in accordance with Title 8. Competent authorities should also determine through the SREP liquidity assessment whether it is necessary to set specific liquidity requirements to cover risks to liquidity and funding to which an institution is or might be exposed.
464. Competent authorities should consider the institution's liquidity buffers, counterbalancing capacity and funding profile, as well as its ILAAP and arrangements, policies, processes and mechanisms for measuring and managing liquidity and funding risk, as a key determinant of the institution's viability. This determination should be summarised and reflected in a score based on the criteria specified at the end of this title.
465. The outcomes of the ILAAP, where applicable and relevant, should inform the competent authority's conclusion on liquidity adequacy.
466. Competent authorities should conduct the SREP liquidity assessment process using the following steps:
- a. overall assessment of liquidity;
 - b. determination of the need for specific liquidity measures;
 - c. quantification of potential specific liquidity requirements – benchmark calculations;
 - d. articulation of specific liquidity requirements; and
 - e. determination of the liquidity score.

9.2 Overall assessment of liquidity

467. To assess whether the liquidity held by an institution provides appropriate coverage of risks to liquidity and funding, competent authorities should use the following sources of information:
- a. the institution's ILAAP;
 - b. the outcomes of the assessment of liquidity risk;
 - c. the outcomes of the assessment of funding risk;

- d. the outcome of the supervisory benchmark calculation; and
- e. other relevant inputs (from on-site inspections, peer group analysis, stress testing, etc.).

468. Competent authorities should consider the reliability of the institution's ILAAP, including metrics for liquidity and funding risk used by the institution.

469. When assessing the institution's ILAAP framework – including, where relevant, internal methodologies for the calculation of internal liquidity requirements – competent authorities should assess whether ILAAP calculations are:

- a. credible: whether the calculations/methodologies used properly cover the risks they are looking to address; and
- b. understandable: whether there is a clear breakdown and summary of the underlying components of the ILAAP calculations.

470. For the assessment of the institution's liquidity adequacy, competent authorities should also combine their assessments of liquidity risk and funding risk. In particular, they should take into account findings regarding:

- a. risks not covered by liquidity requirements specified in Regulation (EU) 575/2013, including intraday liquidity risk and liquidity risk beyond the 30-day time period;
- b. other risks not adequately covered and measured by the institution, as a result of underestimation of outflows, overestimation of inflows, overestimation of the liquidity value of buffer assets or counterbalancing capacity, or unavailability from an operational point of view of liquid assets (assets not available for sale, assets that are encumbered, etc.);
- c. specific concentrations of counterbalancing capacity and/or funding by counterparty and/or product/type;
- d. funding gaps in specific maturity buckets in the short, medium and long term;
- e. appropriate coverage of funding gaps in different currencies;
- f. cliff effects; and
- g. other relevant outcomes of the supervisory liquidity stress tests.

471. Competent authorities should translate this overall assessment into a liquidity score, which should reflect the view of competent authorities on the threats to the institution's viability that may arise from risks to liquidity and funding.

9.3 Determining the need for specific liquidity requirements

472. Competent authorities should decide on the necessity of specific supervisory liquidity requirements for the institution based on their supervisory judgment and following dialogue with the institution, taking into account the following:

- a. the institution's business model and strategy and the supervisory assessment of them;
- b. information from the institution's ILAAP;
- c. the supervisory assessment of risks to liquidity and funding, including the assessment of inherent liquidity risk, inherent funding risk and liquidity and funding risk management and controls, taking into account the possibility that risks and vulnerabilities identified may exacerbate each other; and
- d. potential systemic liquidity risk.

473. When competent authorities conclude that specific liquidity requirements are needed to address liquidity and funding concerns, they should decide on the application of quantitative requirements, as covered in this title, and/or on the application of qualitative requirements, as covered in Title 10.

474. When setting structural, long-term supervisory requirements, competent authorities should consider the need for additional short/medium-term requirements as an interim solution to mitigate the risks that persist while the structural requirements produce the desired effects.

475. Where competent authorities conclude that there is a high risk that the institution's cost of funding will increase unacceptably, they should consider measures, including setting additional own funds requirements (as covered in Title 7) to compensate for the increased P&L impact if the institution cannot pass the increased costs of funding to its customers, or requesting changes to the funding structure, to mitigate the funding-cost risk.

9.4 Determination of specific quantitative liquidity requirements

476. Competent authorities should develop and apply supervisory liquidity benchmarks as quantitative tools to support their assessment of whether the liquidity held by the institution provides sound coverage of risks to liquidity and funding. They should be used to provide a prudent, consistent, transparent and comparable benchmark with which to calculate and compare specific quantitative liquidity requirements for institutions.

477. When developing supervisory liquidity benchmarks, competent authorities should take into account the following criteria:

- a. benchmarks should be prudent, consistent and transparent;

- b. benchmarks should be developed using the supervisory assessment of risks to liquidity and funding and the supervisory liquidity stress tests; supervisory liquidity stress testing should be a core part of the benchmark;
 - c. benchmarks should provide comparable outcomes and calculations so that quantifications of liquidity requirements for institutions with similar business models and risk profiles can be compared; and
 - d. benchmarks should help supervisors to specify the appropriate level of liquidity for an institution.
478. Given the variety of different business models operated by institutions, the outcome of the supervisory benchmarks may not be appropriate in every instance for every institution. Competent authorities should address this by using the most appropriate benchmark where alternatives are available, and/or by applying judgment to the outcome of the benchmark to account for business-model-specific considerations.
479. Competent authorities should assess the suitability of any benchmarks applied to institutions and continually review and update them in light of the experience of using them.
480. When competent authorities take supervisory benchmarks into consideration for the determination of specific liquidity requirements, as part of the dialogue, they should explain to the institution the rationale and general underlying principles behind the benchmarks.
481. The NSFR, pending its implementation, may be used as an anchor point for setting specific quantitative liquidity requirements on stable funding if needed.
482. Where competent authorities have not developed their own benchmark for the quantification of specific quantitative liquidity requirements, they can apply a benchmark using the following steps:
- a. comparative analysis, under stressed conditions, of net cash outflows and eligible liquid assets over a set of time horizons: up to 1 month (including overnight), from 1 month to 3 months and from 3 months to 1 year; for this purpose, competent authorities should project net outflows (gross outflows and inflows) and counterbalancing capacity throughout different maturity buckets, considering stressed conditions (for example, prudent valuation under stress assumptions for liquid assets versus current valuation under normal conditions and after a haircut), building a stressed maturity ladder for the year ahead;
 - b. based on the assessment of the stressed maturity ladder, estimation of the survival period of the institution;

- c. determination of the desired/supervisory minimum survival period, taking into account the institution's risk profile and market and macro-economic conditions; and
- d. if the desired/supervisory minimum survival period is longer than the institution's current survival period, competent authorities may estimate additional amounts of liquid assets (additional liquidity buffers) to be held by the institution to extend its survival period to the minimum required.

483. A key input to the competent authority's benchmarks for the quantification of specific quantitative liquidity requirements will be the data collected through the supervisory reporting under Article 415 of Regulation (EU) No 575/2013 on liquidity and on stable funding on an individual and consolidated basis and on additional liquidity monitoring metrics. The design of benchmarks will be influenced by the content of this reporting and the implementation of benchmarks will depend on when the reports are available.

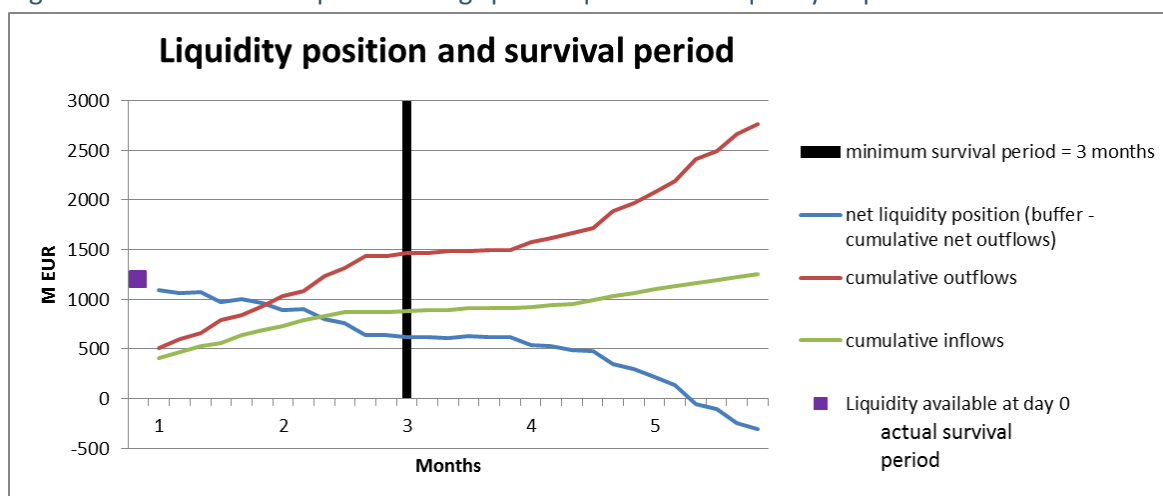
484. Below are some examples of the possible approaches:

- a. Example 1: institution with an initial liquidity buffer of EUR 1 200 mln Cumulative inflows and cumulative outflows estimated under stressed conditions are projected through a time horizon of 5 months. During this time horizon, the institution makes use of the liquidity buffer each time inflows fall below outflows. The result is that, under the stressed conditions defined, the institution would be able to survive 4.5 months, which is longer than the minimum survival period set by supervisors (in this example, 3 months):

Table 11. Illustrative example of benchmark for liquidity quantification

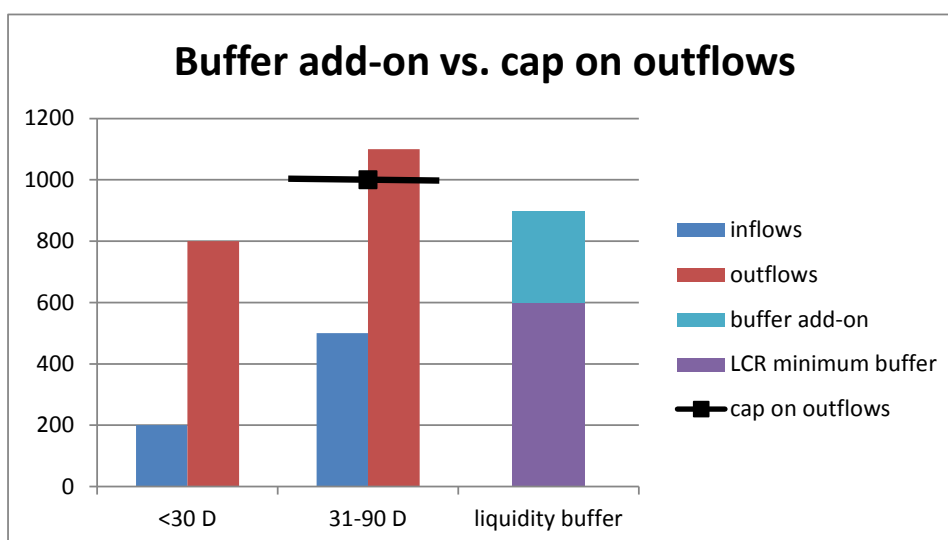
Time horizon in months	cumulative outflows	cumulative inflows	cumulative net outflows	net liquidity position (buffer - cumulative net outflows)	Liquidity available at day 0
					1,200
1	511	405	106	1,094	
	598	465	133	1,067	
	659	531	128	1,072	
	787	563	224	976	
	841	642	199	1,001	
	933	693	240	960	
2	1,037	731	306	894	
	1,084	788	295	905	
	1,230	833	397	803	
	1,311	875	435	765	
	1,433	875	558	642	
	1,440	876	564	636	
3	1,465	882	583	617	
	1,471	889	582	618	
	1,485	891	594	606	
	1,485	911	574	626	
	1,492	916	576	624	
	1,493	916	577	623	
4	1,581	918	663	537	
	1,618	945	673	527	
	1,666	956	710	490	
	1,719	993	726	474	
	1,885	1,030	856	344	
	1,965	1,065	900	300	
5	2,078	1,099	980	220	
	2,192	1,131	1,061	139	Survival period
	2,415	1,163	1,252	-52	
	2,496	1,194	1,302	-102	
	2,669	1,224	1,445	-245	
	2,764	1,253	1,511	-311	

Figure 8. Illustrative example of setting specific quantitative liquidity requirement



- b. Example 2: the supervisory minimum survival period is set at 3 months. An alternative measure to setting a minimum survival period, which can also address the supervisory concern that the gap between inflows and outflows is unacceptably high, is to set a cap on outflows. In the figure below, the mechanism for setting a cap on outflows is shown by the black horizontal bar. An institution is required to reduce its outflows to a level below the cap. The cap can be set for one or more time buckets and for net outflows (following correction for inflows) or gross outflows. The alternative of adding a buffer requirement instead is shown in the third column:

Figure 9. Illustrative example of setting specific quantitative liquidity requirements



9.5 Articulation of specific quantitative liquidity requirements

485. To articulate the specific quantitative liquidity requirements appropriately, competent authorities should use one of the following approaches:

1. Approach 1 – require an LCR higher than the regulatory minimum (when such a ratio is introduced by national or EU regulations), of such a size that shortcomings identified are sufficiently mitigated;
2. Approach 2 – require a minimum survival period of such a length that identified shortcomings are sufficiently mitigated; the survival period can be set either directly, as a requirement, or indirectly, by setting a cap on the amount of outflows over the relevant time buckets considered; competent authorities may require different types of liquid assets (e.g. assets eligible for central banks), to cover risks not (adequately) covered by the LCR;

3. Approach 3 – require a minimum total amount of liquid assets or counterbalancing capacity, either as a minimum total amount or as a minimum amount in excess of the applicable regulatory minimum, of such a size that identified shortcomings are sufficiently mitigated; competent authorities may set requirements for the composition of liquid assets, including operational requirements (e.g. direct convertibility to cash, or deposit of the liquid assets at the central bank).
486. Competent authorities may structure specific quantitative requirements for stable funding by requiring a minimum level of stable funding in terms of the NSFR.
487. To ensure there is consistency, competent authorities should structure specific quantitative liquidity requirements in such a manner as to deliver broadly consistent prudential outcomes across institutions, bearing in mind that the types of requirements specified may differ between institutions because of their individual circumstances. In addition to the quantity, the structure should specify the expected composition and nature of the requirement. In all cases, it should specify the supervisory requirement and any applicable Directive 2013/36/EU requirements. Liquidity buffers and counterbalancing capacity held by the institution to meet supervisory requirements should be available for use by the institution during times of stress.
488. When setting the specific quantitative liquidity requirements and communicating them to the institution, competent authorities should ensure that they are immediately notified by the institution if it does not meet the requirements, or does not expect to meet the requirements in the short term. Competent authorities should ensure that this notification is submitted without undue delay by the institution, accompanied by a plan drawn up by the institution for the timely restoration of compliance with the requirements. Competent authorities should assess the feasibility of the institution’s restoration plan and take appropriate supervisory measures if the plan is not considered feasible. Where the plan is considered feasible, competent authorities should: determine any necessary interim supervisory measures based on the circumstances of the institution; monitor the implementation of the restoration plan; and closely monitor the institution’s liquidity position, asking the institution to increase its reporting frequency if necessary.
489. Notwithstanding the above, competent authorities may also set qualitative requirements in the form of restrictions/caps/limits on mismatches, concentrations, risk appetite, quantitative restrictions on the issuance of secured loans, etc., in accordance with the criteria specified in Title 10 of the guidelines.
490. Below are some examples of the different approaches for the structure of specific quantitative liquidity requirements:

Example of specific requirements articulation

As of 1 January 2015 and until otherwise directed, Bank X is required to:

- a. **Approach 1** – ensure that its counterbalancing capacity is at all times equal to or higher than e.g. 125% of its liquidity net outflows as measured in the LCR.
- b. **Approach 2** – ensure that its counterbalancing capacity results at all times in a survival period that is greater than or equal to 3 months, measured by the internal liquidity stress test/the maturity ladder/specific metrics developed by the supervisor.
- c. **Approach 3:**
- ensure that its counterbalancing capacity is at all times equal to or higher than EUR X billion; or
 - ensure that its counterbalancing capacity is at all times equal to or higher than EUR X billion in excess of the minimum requirement under the LCR.
- d. **Approach 4** – ensure that its stable funding is at all times equal to or higher than EUR X billion in excess of the minimum requirement under the NSFR.

9.6 Summary of findings and scoring

491. Following the above assessment, competent authorities should form a view on whether existing liquidity resources provide sound coverage of the risks to which the institution is or might be exposed. This view should be reflected in a summary of findings, accompanied by a viability score based on the considerations specified in Table 12.

492. For the joint decision (where relevant), competent authorities should use the liquidity assessment and score to determine whether the liquidity resources are adequate.

Table 12. Supervisory considerations for assigning a score to liquidity adequacy

Score	Supervisory view	Considerations
1	The institution's liquidity position and funding profile pose a low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution's counterbalancing capacity and liquidity buffers are comfortably above specific supervisory quantitative requirements and are expected to remain so in the future. • The composition and stability of longer-term funding (>1 year) pose non-material/very low risk in relation to the activities and business model of the institution. • The free flow of liquidity between entities in the group, where relevant, is

Score	Supervisory view	Considerations
		<p>not impeded, or all entities have a counterbalancing capacity and liquidity buffers above supervisory requirements.</p> <ul style="list-style-type: none"> The institution has a plausible and credible liquidity contingency plan that has the potential to be effective if required.
2	<p>The institution's liquidity position and/or funding profile pose a medium-low level of risk to the viability of the institution.</p>	<ul style="list-style-type: none"> The institution's counterbalancing capacity and liquidity buffers are above the specific supervisory quantitative requirements, but there is a risk that they will not remain so. The composition and stability of longer-term funding (>1 year) pose a low level of risk in relation to the activities and business model of the institution. The free flow of liquidity between entities in the group, where relevant, is or could be marginally impeded. The institution has a plausible and credible liquidity contingency plan that, although not without risk, has the potential to be effective if required.
3	<p>The institution's liquidity position and/or funding profile pose a medium-high level of risk to the viability of the institution.</p>	<ul style="list-style-type: none"> The institution's counterbalancing capacity and liquidity buffers are deteriorating and/or are below specific supervisory quantitative requirements, and there are concerns about the institution's ability to restore compliance with these requirements in a timely manner. The composition and stability of longer-term funding (>1 year) pose a medium level of risk in relation to the activities and business model of the institution.

Score	Supervisory view	Considerations
		<ul style="list-style-type: none"> • The free flow of liquidity between entities in the group, where relevant, is impeded. • The institution has a liquidity contingency plan that is unlikely to be effective.
4	The institution's liquidity position and/or funding profile pose a high level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution's counterbalancing capacity and liquidity buffers are rapidly deteriorating and/or are below the specific supervisory quantitative requirements, and there are serious concerns about the institution's ability to restore compliance with these requirements in a timely manner. • The composition and stability of longer-term funding (>1 year) pose a high level of risk in relation to the activities and business model of the institution. • The free flow of liquidity between entities in the group, where relevant, is severely impeded. • The institution has no liquidity contingency plan, or one that is manifestly inadequate.

Title 10. Overall SREP assessment and application of supervisory measures

10.1 General considerations

493. This title covers the combination of the findings of the assessments of the SREP elements into the overall SREP assessment. It also addresses the application by competent authorities of supervisory measures to address deficiencies identified through the assessment of the SREP elements. Competent authorities may apply supervisory measures as specified in Directive 2013/36/EU (Articles 104 and 105) and national law, and, when applicable, early intervention measures as specified in Article 27 of Directive 2014/59/EU, or any combination of the above.

494. Competent authorities should exercise their supervisory powers on the basis of deficiencies identified during the assessments of the individual SREP elements and taking into account the overall SREP assessment, including the score, considering the following:

- a. the materiality of the deficiencies/vulnerabilities and the potential prudential impact of not addressing the issue (i.e. whether it is necessary to address the issue with a specific measure);
- b. whether the measures are consistent with/proportionate to their overall assessment of a particular SREP element (and the overall SREP assessment);
- c. whether the deficiencies/vulnerabilities have already been addressed/covered by other measures;
- d. whether other measures would achieve the same objective with less of an administrative and financial impact on the institution;
- e. the optimal level and duration of application of the measure to achieve the supervisory objective; and
- f. the possibility that risks and vulnerabilities identified may be correlated and/or self-reinforcing, meriting an increase in the rigorousness of supervisory measures.

495. When applying supervisory measures to address specific deficiencies identified in the assessment of SREP elements, competent authorities should take into account overall quantitative own funds and liquidity requirements to be applied based on the criteria specified in Titles 7 and 9.

496. Competent authorities may take supervisory measures directly linked to the outcomes of any supervisory activities (e.g. on-site examinations, assessments of the suitability of members of the management body and key functions, etc.) where the outcomes of such activities necessitate immediate application of supervisory measures to address material deficiencies.

10.2 Overall SREP assessment

497. In determining the overall SREP assessment, competent authorities should consider the findings of the assessments of the SREP elements, specifically:

- a. the risks to which the institution is or may be exposed;
- b. the likelihood that the institution's governance, control deficiencies and/or business model or strategy are likely to exacerbate or mitigate these risks, or expose the institution to new sources of risk;
- c. whether the institution's own funds and liquidity resources provide sound coverage of these risks; and
- d. the potential for positive and negative interaction between the elements (e.g. competent authorities may consider a strong capital position as a potential mitigating factor for certain concerns identified in the area of liquidity and funding, or by contrast, that a weak capital position may exacerbate concerns in that area).

498. On the basis of these considerations, competent authorities should determine the institution's viability, defined as its proximity to a point of non-viability on the basis of the adequacy of its own funds and liquidity resources, governance, controls and/or business model or strategy to cover the risks to which it is or may be exposed.

499. On the basis of this determination, competent authorities should:

- a. take any supervisory measures necessary to address concerns (in addition to specific measures taken to address specific findings of the SREP assessments);
- b. determine future supervisory resourcing and planning for the institution, including whether the institution should be placed in the Supervisory Examination Programme;
- c. determine the need for early intervention measures as specified in Article 27 of Directive 2014/59/EU; and
- d. determine whether the institution can be considered to be 'failing or likely to fail' within the meaning of Article 32 of Directive 2014/59/EU.

500. The overall SREP assessment should be reflected in a viability score based on the considerations specified in Table 13 and clearly documented in an annual summary of the

overall SREP assessment. This annual summary should also include the overall SREP score and scores for elements of the SREP, and any supervisory findings made over the course of the previous 12 months.

Table 13. Supervisory considerations for assigning the overall SREP score

Score	Supervisory view	Considerations
1	The risks identified pose a low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • The institution's business model and strategy do not raise concerns. • The internal governance and institution-wide control arrangements do not raise concerns. • The institution's risks to capital and liquidity pose a non-material/a very low risk of a significant prudential impact. • The composition and quantity of own funds held do not raise concerns. • The institution's liquidity position and funding profile do not raise concerns. • The institution's overall recovery capacity does not raise concerns.
2	The risks identified pose a medium-low level of risk to the viability of the institution.	<ul style="list-style-type: none"> • There is a low to medium level of concern about the institution's business model and strategy. • There is a low to medium level of concern about the institution's governance or institution-wide control arrangements. • There is a low to medium level of risk of a significant prudential impact caused by risks to capital and liquidity. • There is a low to medium level of concern about the composition and quantity of own funds held. • There is a low to medium level of concern about the institution's liquidity position and/or funding profile. • There is a low to medium level of concern about the institution's overall recovery capacity.
3	The risks identified pose a medium-high level of risk to the viability of the institution.	<ul style="list-style-type: none"> • There is a medium to high level of concern about the institution's business model and strategy. • There is a medium to high level of concern about the institution's governance or institution-wide control arrangements.

Score	Supervisory view	Considerations
		<ul style="list-style-type: none"> • There is a medium to high level of risk of a significant prudential impact caused by risks to capital and liquidity. • There is a medium to high level of concern about the composition and quantity of own funds held by the institution. • There is a medium to high level of concern about the institution's liquidity position and/or funding profile. • There is a medium to high level of concern about the institution's overall recovery capacity.
4	The risks identified pose a high level of risk to the viability of the institution.	<ul style="list-style-type: none"> • There is a high level of concern about the institution's business model and strategy. • There is a high level of concern about the institution's governance or institution-wide control arrangements. • There is a high level of risk of a significant prudential impact caused by risks to capital and liquidity. • There is a high level of concern about the composition and quantity of own funds held by the institution. • There is a high level of concern about the institution's liquidity position and/or funding profile. • There is a high level of concern about the institution's overall recovery capacity.
F	The institution is considered to be 'failing or likely to fail'.	<ul style="list-style-type: none"> • There is an immediate risk to the viability of the institution. • The institution meets the conditions for failing or likely to fail, as specified in Article 32(4) of Directive 2014/59/EU²⁰.

²⁰ In particular, the competent authority is of the view that (1) the institution infringes, or there are objective elements to support a determination that the institution will, in the near future, infringe, the requirements for continuing authorisation in a way that would justify the withdrawal of the authorisation by the competent authority, for reasons including but not limited to the fact that the institution has incurred or is likely to incur losses that will deplete all or a significant amount of its own funds; (2) the institution's assets are, or there are objective elements to support a determination that the institution's assets will, in the near future, be, less than its liabilities; or (3) the institution is, or there are objective elements to support a determination that the institution will, in the near future, be, unable to pay its debts or other liabilities as they fall due.

Article 32(4)(d) of Directive [2014/59/EU](#) also identifies extraordinary public support criteria for the determination of whether an institution is failing or likely to fail, but these criteria are not considered for the purpose of SREP and the determination made by the competent authorities.

501. When determining that an institution is 'failing or likely to fail', as reflected by an overall SREP score of 'F', competent authorities should engage with the resolution authorities to consult on findings following the procedure specified in Article 32 of Directive 2014/59/EU.

10.3 Application of capital measures

502. Competent authorities should impose additional own funds requirements and establish own funds expectations by setting TSCR and determining P2G where relevant in accordance with the process and criteria specified in Title 7.

503. Notwithstanding the requirements referred to in the previous paragraph, competent authorities may, on the basis of the vulnerabilities and deficiencies identified in the assessment of SREP elements, impose additional capital measures including:

- a. requiring the institution to use net profits to strengthen own funds in accordance with Article 104(1)(h) of Directive 2013/36/EU;
- b. restricting or prohibiting distributions or interest payments by the institution to shareholders, members or holders of Additional Tier 1 instruments where such prohibition does not constitute an event of default of the institution in accordance with Article 104(1)(i) of Directive 2013/36/EU; and/or
- c. requiring the institution to apply a specific treatment of assets in terms of own funds requirements in accordance with Article 104(1)(d) of Directive 2013/36/EU.

10.4 Application of liquidity measures

504. Competent authorities should impose specific liquidity requirements in accordance with the process and criteria specified in Title 9.

505. Notwithstanding the specific quantitative requirements referred to in the previous paragraph, competent authorities may, on the basis of the vulnerabilities and deficiencies identified in the assessment of risks to liquidity and funding, impose additional liquidity measures including:

- a. imposing specific liquidity requirements, including restrictions on maturity mismatches between assets and liabilities in accordance with Article 104(1)(k) of Directive 2013/36/EU; and/or,
- b. imposing other administrative measures, including prudential charges, in accordance with Article 105 of Directive 2013/36/EU.

10.5 Application of other supervisory measures

506. To address specific deficiencies identified in the assessment of SREP elements, competent authorities may consider applying measures that are not directly linked to quantitative capital

or liquidity requirements. This section provides a non-exhaustive list of possible supervisory measures that can be applied based on Articles 104 and 105 of Directive 2013/36/EU.

Business model analysis

507. Supervisory measures to address deficiencies identified in the BMA are likely to involve requiring the institution to adjust governance and control arrangements to help with the implementation of the business model and strategy, or limiting certain business activities.

508. In accordance with Article 104(1)(b) of Directive 2013/36/EU, competent authorities may require the institution to make adjustments to risk management and control arrangements, or to governance arrangements, to match the desired business model or strategy, by means including:

- a. adjusting the financial plan assumed in the strategy, if it is not supported by internal capital planning or credible assumptions;
- b. requiring changes to organisational structures, reinforcement of risk management and control functions and arrangements to support the implementation of the business model or strategy; and/or
- c. requiring changes to and reinforcement of IT systems to support the implementation of the business model or strategy.

509. In accordance with Article 104(1)(e) of Directive 2013/36/EU, competent authorities may require the institution to make changes to the business model or strategy where:

- a. they are not supported by appropriate organisational, governance or risk control and management arrangements;
- b. they are not supported by capital and operational plans, including allocation of appropriate financial, human and technological (IT) resources; and/or
- c. the strategy leads to an increase in systemic risk, or poses a threat to financial stability.

510. In accordance with Article 104(1)(f) of Directive 2013/36/EU, competent authorities may:

- a. require institutions to reduce the risk inherent in the products they originate/distribute, by means including:
 - requiring changes to the risks inherent in certain product offerings; and/or
 - requiring improvements to the governance and control arrangements for product development and maintenance;

- b. require the institution to reduce the risk inherent in its systems, for example by:
 - requiring improvements to the systems, or increasing the level of investment or speeding-up the implementation of new systems; and/or
 - requiring improvements to the governance and control arrangements for system development and maintenance.

Internal governance and institution-wide controls

511. Supervisory measures to address deficiencies identified in the assessment of internal governance and institution-wide controls may focus on requiring the institution to strengthen governance and control arrangements, or reducing the risk inherent in its products, systems and operations.

512. In accordance with Article 104(1)(b) of Directive 2013/36/EU, competent authorities may:

- a. require the institution to make changes to its overall governance arrangements and organisation, by means including requiring:
 - changes to the organisational or functional structure, including reporting lines;
 - amendments to risk policies or how they are developed and implemented across the organisation; and/or
 - an increase in the transparency of governance arrangements;
- b. require the institution to make changes to the organisation, composition or working arrangements of the management body;
- c. require the institution to strengthen its overall risk management arrangements, by means including requiring:
 - changes to (a reduction in) risk appetite, or the governance arrangements for setting risk appetite, and the development of the overall risk strategy;
 - improvements to ICAAP or ILAAP procedures and models, where they are not deemed fit for purpose;
 - enhancement of stress-testing capacities and the overall stress-testing programme; and/or
 - enhancements to contingency planning;
- d. require the institution to strengthen internal control arrangements and functions, by means including requiring:

- the independence and adequate staffing of the internal audit function; and/or
- improvements to the internal reporting process to ensure that reporting to the management body is appropriate;
- e. require the institution to enhance information systems or business continuity arrangements, for example by requiring:
 - improvements in the reliability of systems; and/or
 - development and testing of business continuity plans.

513. In accordance with Article 104(1)(g) of Directive 2013/36/EU, competent authorities may require the institution to:

- a. make changes to remuneration policies; and/or
- b. limit variable remuneration as a percentage of net revenues.

Supervisory measures based on the outcome of the qualitative review of stress testing

514. Based on the outcomes of the qualitative review of stress testing programmes and if deficiencies are identified, competent authorities should require the institution:

- a. to develop a plan of remedial action aimed at improving stress testing programmes and practices. Where material shortcomings are identified in how an institution addresses the outputs of stress tests, or if management actions are not deemed credible, competent authorities should require the institution to take further remedial actions, including requirements to make changes to the institution's capital plan;
- b. where appropriate, to run specific prescribed scenarios (or elements of those) or using specific assumptions.

515. Furthermore, competent authorities may apply other supervisory measures as set out in Articles 104 and 105 of Directive 2013/36/EU if these are more appropriate to address the identified deficiencies as described in this section.

516. It is noted that supervisory assessment of the outcomes of reverse stress tests should assist with the assessment of business model viability and sustainability, and the assessment of scenarios used for ICAAP and ILAAP purposes, as well as in recovery planning.

517. Competent authorities should also use the outcomes of reverse stress tests performed by institutions to take into account possible systemic implications. Where several institutions identify similar reverse stress test scenarios that would expose these institutions to severe vulnerabilities such scenarios should be analysed as an alert about possible systemic

implications. Competent authorities should in such cases inform the relevant designated authorities about the nature of the stress scenarios identified.

Credit and counterparty risk

518. Supervisory measures to address deficiencies identified in the assessment of the credit and counterparty risk and the associated management and control arrangements are likely to focus on requiring the institution to reduce the level of inherent risk or strengthening management and control arrangements.

519. In accordance with Article 104(1)(b) of Directive 2013/36/EU, competent authorities may require the institution to:

- a. involve the management body or its committees more actively in relevant credit decisions;
- b. improve credit risk measurement systems;
- c. improve controls on credit processes; and/or
- d. enhance collateral management, evaluation and monitoring.

520. In accordance with Article 104(1)(d) of Directive 2013/36/EU, competent authorities may require the institution to:

- a. apply a specific provisioning policy, and – where permitted by accounting rules and regulations – require it to increase provisions;
- b. apply floors (or caps) to internal risk parameters and/or risk weights used to calculate risk exposure amounts for specific products, sectors or types of obligors;
- c. apply higher haircuts to the value of collateral; and/or
- d. hold additional own funds to compensate for the difference between the accounting value of provisions and a prudent valuation of assets (outcome of the asset quality review) indicating expected losses not covered by the accounting provisions.

521. In accordance with Article 104(1)(e) and (f) of Directive 2013/36/EU, competent authorities may require the institution to:

- a. reduce large exposures or other sources of credit concentration risk;
- b. tighten credit-granting criteria for all or some product or obligor categories; and/or

- c. reduce its exposure to, or acquire protection for, specific facilities (e.g. mortgages, export finance, commercial real estate, securitisations, etc.), obligor categories, sectors, countries, etc.

522. In accordance with Article 104(1)(j) of Directive 2013/36/EU, competent authorities may require the institution to enhance the quality and frequency of reporting on credit risk to the management body and senior management.

Market risk

523. Supervisory measures to address deficiencies identified in the assessment of market risk and the associated management and control arrangements are likely to focus on requiring the institution to reduce the level of inherent risk or to strengthen management and control arrangements.

524. In accordance with Article 104(1)(b) of Directive 2013/36/EU, competent authorities may require the institution to address deficiencies identified with regard to the institution's ability to identify, measure, monitor and control market risk, by means including:

- a. enhancing the performance of the institution's internal approaches, or of its backtesting or stress-testing capacity;
- b. enhancing the quality and frequency of the market risk reporting to the institution's senior management; and/or
- c. requiring more frequent and in-depth internal audits of market activity.

525. In accordance with Article 104(1)(e) of Directive 2013/36/EU, competent authorities may:

- a. restrict investment in certain products when the institution's policies and procedures do not ensure that the risk from those products will be adequately covered and controlled;
- b. require the institution to present a plan to reduce its exposures to distressed assets and/or illiquid positions gradually; and/or
- c. require the divestment of financial products when the valuation processes of the institution do not produce conservative valuations that comply with the standards of Regulation (EU) No 575/2013.

526. In accordance with Article 104(1)(f) of Directive 2013/36/EU, competent authorities may:

- a. require the institution to reduce the level of inherent market risk (through hedging or sale of assets) when significant shortcomings have been found in the institution's measurement systems; and/or

- b. require the institution to increase the amount of derivatives settled through central counterparties (CCPs).

Operational risk

527. Supervisory measures to address deficiencies identified in the assessment of operational risk and the associated management and control arrangements are likely to focus on requiring the institution to reduce the level of inherent risk or strengthening management and control arrangements.

528. In accordance with Article 104(1)(b) of Directive 2013/36/EU, competent authorities may:

- a. require the institution to involve the management body or its committees more actively in operational risk management decisions;
- b. require the institution to consider inherent operational risk when approving new products and systems; and/or
- c. require the institution to improve operational risk identification and measurement systems.

529. In accordance with Article 104(1)(e) and (f) of Directive 2013/36/EU, competent authorities may:

- a. require the institution to reduce the extent of outsourcing; and/or
- b. require the institution to mitigate operational risk exposures (e.g. with insurance, introduction of more control points, etc.).

Interest rate risk from non-trading activities

530. Irrespective of the requirement to hold additional own funds pursuant to Article 104(1)(a), competent authorities should consider the application of supervisory measures in the following cases:

- a. if interest rate risk from non-trading activities is present and material (see Title 8);
- b. when the outcomes of the SREP reveal any deficiency in the institution's assessment of the inherent level of IRRBB and the associated management and control arrangements; or
- c. if the institution is reporting that its economic value may decline by more than 20% of own funds ('standard shock') as a result of a sudden and unexpected change in interest rates in accordance with Article 98(5) of Directive 2013/36/EU.

531. In accordance with Article 104(1)(b) of Directive 2013/36/EU, competent authorities may require the institution to take action to address deficiencies identified in its ability to identify, measure, monitor and control interest-rate risk from non-trading activities, for example to:

- a. enhance its stress testing capacity; and/or
- b. enhance reporting of liquidity management information to the institution's management body.

532. In accordance with Article 104(1)(f) of Directive 2013/36/EU, competent authorities may require the institution to apply variations to internal limits to reduce the risk inherent in activities, products and systems.

533. In accordance with Article 104(1)(j) of Directive 2013/36/EU, competent authorities may require additional or more frequent reporting of the institution's IRRBB positions.

534. The measure(s) used in response to the application of the standard shock should depend on the complexity of the calculation method used and the appropriateness of the standard shock and the level of the economic value. If the reduction in economic value is determined by a relatively straightforward or standard method of calculation, competent authorities may initially request additional, possibly internal, information. If, however, the reduction is based on the outcome of a more complex model about which the competent authorities have more information, they may reach an assessment of the appropriate measure(s) more quickly. In the latter case, the choice of measure should take into account the results of the IRRBB assessment performed in accordance with Title 6 of these guidelines.

Liquidity risk

535. In accordance with Article 104(1)(k) of Directive 2013/36/EU, competent authorities may:

- a. impose requirements on the concentration of the liquid assets held, including:
 - requirements for the composition of the institution's liquid-assets profile in respect of counterparties, currency, etc.; and/or
 - caps, limits or restrictions on funding concentrations;
- b. impose restrictions on short-term contractual or behavioural maturity mismatches between assets and liabilities, including:
 - limits on maturity mismatches (in specific time buckets) between assets and liabilities;
 - limits on minimum survival periods; and/orlimits on dependency on certain short-term funding sources, such as money market funding.

536. In accordance with Article 104(1)(j) of Directive 2013/36/EU, competent authorities may impose a requirement for the institution to provide more frequent reporting on liquidity positions, including:

- a. the frequency of liquidity coverage and/or net stable funding reporting; and/or
- b. the frequency and granularity of other liquidity reports, such as ‘additional monitoring metrics’.

537. In accordance with Article 104(1)(b) of Directive 2013/36/EU, competent authorities may require action to be taken to address deficiencies identified with regard to the institution’s ability to identify, measure, monitor and control liquidity risk, by means including:

- a. enhancing its stress-testing capacity to improve its ability to identify and quantify material sources of liquidity risk to the institution;
- b. enhancing its ability to monetise its liquid assets;
- c. enhancing its liquidity contingency plan and liquidity early warning indicators framework; and/or
- d. enhancing reporting of liquidity management information to the institution’s management body.

Funding risk

538. In accordance with Article 104(1)(k) of Directive 2013/36/EU, competent authorities may require action to be taken to amend the institution’s funding profile, including:

- a. reducing its dependency on certain (potentially volatile) funding markets, such as wholesale funding;
- b. reducing the concentration of its funding profile with respect to counterparties, peaks in the long-term maturity profile, (mismatches in) currencies, etc.; and/or
- c. reducing the amount of its encumbered assets, potentially differentiating between total encumbrance and overcollateralisation (e.g. for covered bonds, margin calls, etc.).

539. In accordance with Article 104(1)(j) of Directive 2013/36/EU, competent authorities may require additional or more frequent reporting on the institution’s funding positions, including:

- a. increased frequency of regulatory reporting relevant to the monitoring of the funding profile (such as the NSFR report and ‘additional monitoring metrics’); and/or
- b. increased frequency of reporting on the institution’s funding plan to the supervisor.

540. In accordance with Article 104(1)(b) of Directive 2013/36/EU, competent authorities may:

- a. require actions to be taken to address deficiencies identified with regard to the institution's control of funding risk, including:
 - enhancing reporting to the institution's governing body of management information regarding funding risk;
 - restating or enhancing the funding plan; and/or
 - placing limits on its risk appetite/tolerance;
- b. enhance the institution's stress testing capabilities by means including requiring the institution to cover a longer stress period.

10.6 Supervisory reaction to a situation where TSCR is not met

541. TSCR is a legally binding requirement that institutions have to meet at all times, including in stressed conditions. If TSCR set in accordance with these guidelines is no longer met, the competent authorities should consider additional intervention powers in accordance with Directives 2013/36/EU and 2014/59/EU, including withdrawal of authorisation in accordance with Article 18(d) of Directive 2013/36/EU, application of early intervention measures in accordance with Article 27 of Directive 2014/59/EU and resolution actions in accordance with that Directive. When exercising those powers competent authorities should consider whether measures are proportionate to the circumstances and their judgement on how the situation is likely to develop.

542. A breach of TSCR should also be considered in determining if an institution is failing or likely to fail in accordance with Article 32(4)(a) of Directive 2014/59/EU and the *EBA Guidelines on the interpretation of the different circumstances when an institution shall be considered as failing or likely to fail*, as it is one of the conditions under which the competent authorities may withdraw authorisation in accordance with Article 18(d) of Directive 2013/36/EU.

10.7 Supervisory reaction to a situation where P2G is not met

543. Competent authorities should monitor whether the amount of own funds expected according to P2G is established and maintained by the institution over time.

544. When the institution's own funds drop, or are likely to drop, below the level determined by P2G, the competent authority should expect the institution to notify it and prepare a revised capital plan. In its notification, the institution should explain what adverse consequences are likely to force it to do so and what actions are envisaged for the eventual restoration of compliance with P2G as part of an enhanced supervisory dialogue.

545. There are generally three situations to be considered by a competent authority in which an institution could fail to meet its P2G.

- a. Where the level of own funds falls below the level of P2G (while remaining above OCR) in institution-specific or external circumstances in which risks that P2G was aimed at covering have materialised, the institution may temporarily operate below the level of P2G provided that the competent authority considers its revised capital plan credible in accordance with the criteria set out in Section 7.7.3. The competent authority may also consider adjusting the level of P2G where appropriate.
- b. Where the level of own funds falls below the level of P2G (while remaining above the OCR) in institution-specific or external circumstances as a result of the materialisation of risks that P2G was not aimed at covering, competent authorities should expect the institution to increase the level of own funds to the level of P2G within an appropriate timeline.
- c. Where the institution disregards P2G, does not incorporate it into its risk management framework or does not establish own funds to meet P2G within the time limits set in accordance with paragraph 397, this may lead to competent authorities applying additional supervisory measures as set out in Sections 10.3 and 10.5. Where appropriate, the competent authority may decide to review the level of the additional own funds requirements, in accordance with Title 7.

546. Notwithstanding particular supervisory responses in accordance with the previous paragraph, competent authorities may also consider the application of the capital and additional supervisory measures set out in Sections 10.3 and 10.5, where these are deemed more appropriate to address the reasons for the own funds falling below the level determined by P2G.

10.8 Interaction between supervisory and early intervention measures

547. In addition to the supervisory measures referred to in this title, competent authorities may apply early intervention measures as specified in Article 27 of Directive 2014/59/EU, which are intended to supplement the set of supervisory measures specified in Articles 104 and 105 of Directive 2013/36/EU.

548. Competent authorities should apply early intervention measures without prejudice to any other supervisory measures, and when applying early intervention measures, should choose the most appropriate measure(s) to ensure a response that is proportionate to the particular circumstances.

10.9 Interaction between supervisory and macro-prudential measures

549. Where an institution is subject to macro-prudential measures, competent authorities should assess:

- a. whether, by virtue of the institution using supervisory approved models for the calculation of own funds requirements, the specific vulnerability/deficiency targeted by the macro-prudential measure is omitted from the effects of the measure because of its design features (e.g. if the macro-prudential measure increases risk weights to certain exposure classes, meaning the measure would only cover institutions applying the standardised approach to the calculation of minimum own funds requirements for credit risk, and therefore institutions applying IRB approaches would not be directly affected); and
- b. whether the macro-prudential measure adequately addresses the underlying risks/vulnerabilities/deficiencies of a particular institution, where relevant.

550. Where the macroprudential measure, because of its design specificities, does not cover a particular institution (as discussed above), competent authorities may consider after having consulted the relevant designated authority, extending the effects of the measure directly to that institution (e.g. by applying the equivalent risk weights for certain classes of exposures targeted by the macro-prudential measure).

551. Where the SREP assessment determines that the macroprudential measure does not adequately address the underlying level of risk or deficiencies present in the institution (i.e. the institution is exposed to or poses a higher level of risk than the level targeted by the macroprudential measure, or the deficiencies identified are more material than those targeted by the measure), competent authorities should consider supplementing the macro-prudential measure with additional institution-specific measures.

Title 11. Application of the SREP to cross-border groups

552. This title addresses the application of the common SREP procedures and methodology as specified in these guidelines in relation to cross-border groups and their entities. It also provides links with the joint assessment and decision process to be carried out pursuant to Article 113 of Directive 2013/36/EU and Commission Implementing Regulation (EU) No 710/2014 with regard to conditions for the application of the joint decision process for institution-specific prudential requirements²¹.

11.1 Application of the SREP to cross-border groups

553. When applying the SREP and these guidelines to cross-border groups, competent authorities should assess the viability of the group as a whole, as well as its individual entities. This can be done by dividing the process into two stages: (1) competent authorities make an initial assessment of entities under their direct supervision, and (2) competent authorities jointly discuss and finalise the assessment within the framework of colleges of supervisors pursuant to the requirements of Articles 113 and 116 of Directive 2013/36/EU.

554. In accordance with the scope of application of the guidelines as discussed in Title 1:

- a. consolidating supervisors should perform the initial assessment of the parent undertaking and the group of institutions on a consolidated level; and
- b. competent authorities should perform the initial assessment on the entities under their supervision (individual, or sub-consolidated, where relevant).

555. Where these guidelines are applied to the subsidiaries of a cross-border group as specified in the paragraph above, competent authorities for subsidiaries should, when performing their initial assessment, primarily consider institutions on an individual basis, i.e. assess the business model, strategy, internal governance and institution-wide controls, risks to capital and liquidity, and capital and liquidity adequacy of an entity as they would a standalone institution. The findings from such initial assessments, where relevant, should also include identification of key vulnerabilities in the cross-border or group context, which may be related to the reliance of an institution on its parent/group for funding, capital, technological support, etc. In their initial assessments made on an individual basis, competent authorities should also reflect strengths and mitigating factors related to the entity being part of the group, which may be related to group technological support, financial support arrangements, etc.

²¹Commission Implementing Regulation (EU) No 710/2014 of 23 June 2014, OJ L 188, 27.6.2014, p. 19.

556. The results of any such initial assessment of SREP elements, including, if identified, views on key dependencies on the parent/group, should serve as an input into the joint assessment and decision process pursuant to the requirements of Article 113 of Directive 2013/36/EU, and should therefore be discussed by the competent authorities within the framework of the colleges of supervisors established pursuant to Article 116 of Directive 2013/36/EU.
557. Following the discussions within the framework of colleges of supervisors and outcomes of the joint assessment process, competent authorities should finalise their respective SREP assessments, making the necessary adjustments based on the outcomes of the college discussions.
558. Where a competent authority's initial assessment has revealed specific deficiencies related to intra-group positions (e.g. high concentration of exposures to the parent undertaking, reliance on intra-group funding, concerns about the sustainability of an entity's strategy, etc.) negatively affecting the overall viability of the entity on an individual basis, competent authorities should, within the framework of the colleges of supervisors, discuss whether the final assessment of an entity should be changed considering the overall group dimension, including the consolidated group business model, strategy and existence and specific features of intra-group financial support arrangements.
559. Competent authorities should discuss and coordinate the following within the framework of colleges of supervisors:
- a. planning, including frequency, and timelines for performing the assessment of various SREP elements for the consolidated group and its entities to facilitate preparation of the group risk and liquidity risk reports required for the joint decisions as specified in Article 113 of Directive 2013/36/EU;
 - b. details of the application of benchmarks used for the assessment of SREP elements;
 - c. approach to assessing and scoring sub-categories of risks individually, where such sub-categories have been identified as material;
 - d. inputs required from the institution at consolidated and entity level for conducting the assessment of SREP elements, including those from the ICAAP and ILAAP;
 - e. outcomes of the assessment, including SREP scores assigned to various elements, and the overall SREP assessment and overall SREP score at consolidated and entity level. When discussing the assessment of individual risks to capital and liquidity, competent authorities should focus on the risks that are identified as material for the respective entities; and
 - f. planned supervisory and early intervention measures, if relevant.

560. When preparing the summary of the overall SREP assessment for the cross-border group and its entities, competent authorities should structure it in a way that will facilitate filling in the templates for the SREP report, group risk report, liquidity risk assessment and group liquidity risk assessment report templates required for the joint decision under Article 113 of Directive 2013/36/EU as specified in the Commission Implementing Regulation (EU) No 710/2014 with regard to conditions for the application of the joint decision process for institution-specific prudential requirements.

11.2 SREP capital assessment and institution-specific prudential requirements

561. The determination of capital adequacy and requirements in accordance with the process described in Title 7 for cross-border groups is part of the competent authorities' joint decision process pursuant to Article 113 of Directive 2013/36/EU.

562. The exercise of supervisory powers and the taking of supervisory measures, including with regard to imposing additional own funds pursuant to Article 104(1)(a) at consolidated or individual entity level as specified in Title 7 should be subject to the joint decision of the competent authorities pursuant to Article 113 of Directive 2013/36/EU.

563. For parent or subsidiary institutions of a cross-border group, the application of additional own funds requirements pursuant to Article 104(1)(a) of Directive 2013/36/EU within the context of Article 103 of that Directive should be carried out in accordance with the joint decision process provided for in Article 113 of that Directive.

564. In the context of discussions on the adequacy of the level of own funds and determining additional own funds requirements, competent authorities should consider:

- a. the assessment of the materiality of risks and deficiencies identified at both consolidated and individual entity level (i.e. which risks are material to the group as a whole and which are material to just one entity) and the level of own funds required to cover such risks;
- b. where deficiencies identified are common across all entities (e.g. same governance deficiencies present in all entities, or deficiencies in the models used across several entities), coordinating the assessment and supervisory response, and in particular, deciding whether measures should be imposed at a consolidated level or proportionally at entity level for the entities where common deficiencies are present;
- c. outcomes of ICAAP assessments and views on the reliability of ICAAP calculations and their use as an input in determining additional own funds requirements;

- d. outcomes of the supervisory benchmark calculations used to determine additional own funds requirements for all entities within the group and at a consolidated level; and
- e. additional own funds requirements to be imposed on entities and at a consolidated level to ensure there is consistency of final own funds requirements and whether there is a need for transferring own funds from consolidated to entity level.

565. To determine the TSCR as specified in Title 7, competent authorities should consider the same level of application as the joint decision requirements under Article 113 of Directive 2013/36/EU. In particular, the TSCR and other capital measures, if applicable, should be set at consolidated and solo levels for entities operating in other Member States. For the sub-consolidated level, the TSCR and other capital measures should cover only the parent undertaking of the sub-consolidated group to avoid double counting of additional own funds requirements considered by competent authorities for subsidiaries in other Member States.

566. All relevant information regarding the determination of P2G (including its size, the composition of own funds to cover it, and supervisory reaction) for parent or subsidiary institutions of a cross-border group should be shared among competent authorities as part of the joint decision process pursuant to Article 113 of Directive 2013/36/EU. In particular, competent authorities should discuss the approach to establishing P2G at solo level where no data from the supervisory stress tests is available at solo level, or, where relevant, agree on the application of P2G at consolidated level only.

567. Where P2G is set, relevant information should be duly reflected in the joint decision document prepared in accordance with Article 113 of Directive 2013/36/EU and Commission Implementing Regulation (EU) No 710/2014, and included as an “information item”, as in the application of other supervisory measures formally outside the scope of the joint decision.

11.3 SREP liquidity assessment and institution-specific prudential requirements

568. For Article 113(1)(b) of Directive 2013/36/EU, competent authorities should consider ‘matters’ to be significant and/or ‘findings’ to be material at least where:

- a. specific quantitative liquidity requirements are proposed by competent authorities; and/or
- b. measures other than specific quantitative liquidity requirements are proposed by competent authorities and the score assigned to liquidity risk and/or funding risk is ‘3’ or ‘4’.

11.4 Application of other supervisory measures

569. Competent authorities responsible for the supervision of cross-border groups and their entities should discuss and coordinate, where possible, application of all supervisory and early intervention measures to the group and/or its material entities to ensure that the most appropriate measures are consistently applied to the identified vulnerabilities, taking into account the group dimension, including inter-dependencies and intra-group arrangements as discussed above.

Title 12. Supervisory stress testing

12.1 Use of supervisory stress testing by competent authorities

570. Competent authorities should, also on the basis of Article 100 of Directive 2013/36/EU, use supervisory stress testing to facilitate SREP and, in particular, supervisory assessment of its key elements, as described in Title 4 to Title 9. In particular, supervisory stress testing should help competent authorities, where appropriate, with the following:

- a. The assessment of institutions' individual risks to capital as referred to in Title 6, or risks to liquidity and funding as referred to in Title 8.
- b. The assessment of the reliability of institutions' stress testing programmes, as well as the relevance, severity and plausibility of scenarios for institutions' own stress tests used for ICAAP and ILAAP purposes. This may include challenging institutions' main assumptions and risk drivers.
- c. The assessment of institutions' ability to meet TSCR and OCR in the context of the assessment of capital adequacy, as specified in Section 7.7. Depending on the coverage and type of the supervisory stress test, this assessment may be limited only to some elements of TSCR covered by the design features of the supervisory stress testing (e.g. additional own funds requirements for individual risk categories, if the stress test covers only such risk categories).
- d. The determination of P2G for institutions.
- e. The identification of possible vulnerabilities or weaknesses in institutions' risk management and controls on individual risk areas.
- f. The identification of possible deficiencies in overall governance arrangements or institution-wide controls: supervisory stress testing should be considered by competent authorities as an additional source of information for the purposes of the SREP assessment of internal governance and institution-wide controls referred to in Title 5. In particular, if a competent authority identifies by means of supervisory stress testing, deficiencies in the institution's own stress testing programmes or supporting risk data infrastructure, these should be taken into account in the assessment of the overall governance and risk management framework of that institution.
- g. The determination of specific quantitative liquidity requirements in the context of the assessment of liquidity adequacy, especially where a competent authority has not developed specific supervisory benchmarks for liquidity requirements. Certain elements of the liquidity supervisory stress tests should, where appropriate, be

used as inputs when setting specific liquidity requirements for institutions (e.g. a comparative analysis, under adverse scenarios, of net cash outflows and eligible liquid assets over a set of time horizons, assessment of stressed maturity ladder), as specified in Section 9.4.

571. Furthermore, supervisory stress testing should help competent authorities to assess supervisory organisational procedures and to plan supervisory resources, considering also other relevant information, in particular for the more frequent and in-depth assessment of certain SREP elements in the case of non-Category 1 institutions, and for the purposes of determining the scope of the supervisory examination programme required by Article 99 of Directive 2013/36/EU.
572. Competent authorities should also, where appropriate, use the scenarios and outcomes of supervisory stress tests as additional sources of information in the assessment of institutions' recovery plans, in particular when assessing the choice and severity of scenarios and assumptions used by the institution. In this assessment, the supervisory stress tests scenarios should, where appropriate, in particular where they satisfy the conditions set out in the EBA Guidelines on the range of scenarios to be used in recovery plans²², be used as a reference point for the assessment of the institution's own scenarios and assumptions.
573. Competent authorities should also, where appropriate, use supervisory stress testing outcomes to support the analysis needed for the purposes of granting various permissions and authorisations required by Regulation (EU) No 575/2013 or Directive 2013/36/EU, for example in relation to qualifying holdings, mergers and acquisitions, and shares buy-backs.
574. Competent authorities should also use the outcomes of supervisory stress testing, where appropriate, to support a thematic analysis of the potential vulnerabilities of a group of institutions with similar risk profiles.
575. Competent authorities should also, where appropriate, use supervisory stress testing as a way to motivate institutions to enhance their internal stress testing and risk management capabilities: in particular, a supervisory stress test with a bottom-up component could motivate institutions to further develop and improve their data aggregation, risk modelling and IT tools for stress testing and risk management purposes.

12.2 Key elements of supervisory stress testing

576. When deciding on the key elements of supervisory stress testing, competent authorities should consider, inter alia, the following:
- a. *Coverage*, in terms of covering certain risk factors or multiple risk factors, certain individual portfolios or activities or sectors/geographies, all or several portfolios.

²² EBA Guidelines on the range of scenarios to be used in recovery plans (EBA/GL/2014/06)

- b. *Design*, in terms of the following: (1) sensitivity analysis (single-factor or simple multi-factor), (2) scenario analysis or (3) reverse stress testing. Competent authorities should choose the design that is most appropriate for the objective pursued by the stress test: sensitivity analysis to a single risk factor or multiple risk factors should normally be favoured when assessing individual risk to capital or risks to liquidity or funding; the scenario analysis approach should normally be favoured when an assessment of overall capital adequacy is sought; while reverse stress testing may, inter alia, be deemed appropriate for assessing the severity of the scenarios used by the institution.
- c. *Scope*, in terms of covering the perimeter of cross-border groups: for the purposes of the assessment of the overall capital adequacy of the group, competent authorities should ensure that all relevant group entities are taken into account stress tests.
- d. *Sample* of institutions covered by the stress tests: when planning supervisory stress testing for more than one institution, competent authorities should consider the appropriate sample for the purposes of the exercise, in particular when using supervisory stress testing for thematic assessments of certain business lines/models or impact studies/assessments.
- e. *Approach* (top-down stress test, bottom-up stress test, combination of both, prescribing specific anchor scenarios for institutions).

577. When designing and conducting supervisory stress tests for SREP purposes, competent authorities should consider the outcomes of asset quality reviews (AQR), where available, appropriate and not already incorporated into institutions' financial statements. Combining supervisory stress testing with AQRs can be considered useful in ensuring that the balance-sheet positions of the institutions covered by the supervisory stress tests are reported accurately with improved and comparable starting points across participating institutions.

578. Competent authorities may also consider setting predefined target capital ratios, especially in the context of system-wide stress tests (including country-level stress tests), or setting general or idiosyncratic thresholds. In such cases, these must be suitable and by take into account supervisory objectives. Such targets or thresholds should apply consistently to the institutions within the scope of the supervisory stress tests.

12.3 Organisational and governance arrangements within competent authorities

579. Competent authorities should establish an effective programme for supervisory stress testing. This programme should be supported by appropriate organisation, governance and IT arrangements ensuring that supervisory stress tests can be conducted with appropriate frequency. The supervisory stress testing programme should support the effective

implementation of the supervisory examination programme for individual institutions. The programme should also reflect how the competent authority takes decisions regarding the choice of forms of supervisory stress testing in close connection with the objectives of each exercise.

580. The governance, organisation and IT arrangements supporting the supervisory stress testing programme should include at least the following:

- a. Sufficient human and material resources, data and IT infrastructure to design and conduct supervisory stress tests. In particular, the supervisory stress testing programme should be supported by adequate data and an appropriate methodological approach covering all aspects, including scenarios and assumptions (e.g. templates, guidance, documentation), and ensuring both flexibility and appropriate levels of quality and controls.
- b. A quality assurance process covering stress testing design, development and execution, and the comparability of results across institutions.
- c. The integration of supervisory stress testing into other relevant supervisory processes. Hence, when required and subject to any legal constraints, the organisation should support the internal sharing of information and utilisation of all aspects of the stress testing programme (e.g. both quantitative and qualitative results).

581. As part of governance arrangements, competent authorities should ensure that the supervisory stress testing programme is reviewed regularly, both qualitatively and quantitatively, to ensure that it is adequate.

582. Competent authorities should ensure that they have processes and arrangements in place for an effective dialogue with institutions regarding supervisory stress tests and their outcomes. This dialogue should reflect the intended objectives, be established in particular but not exclusively when supervisory stress tests are run for the purposes of the assessment of the overall capital adequacy of institutions and be organised within the more general context of the SREP assessments as set out in these guidelines. For the purposes of such dialogue both at the technical and managerial level, where relevant, the competent authorities should ensure that:

- a. adequate, sufficiently detailed and accurate explanation and guidance is provided to institutions on the application of the methodologies and assumptions used in a bottom-up stress test;
- b. adequate, sufficiently detailed and accurate instructions are given to institutions with regard to the supporting information required by them to be submitted to competent authorities along with the results of the stress tests;

- c. explanation is provided to institutions following discussions, where relevant, of the outcomes of supervisory stress tests that lead to the application of supervisory measures. This should be considered by competent authorities in particular in the context of system-wide stress tests that trigger supervisory measures.

583. When applying supervisory stress testing to cross-border groups and their entities, competent authorities should exchange information and, where practically possible, appropriately discuss the process within the framework of colleges of supervisors. In particular, competent authorities should ensure that relevant details on the methodologies, scenarios and major assumptions as well as the results of supervisory stress tests, especially those aimed at assessing capital or liquidity adequacy, are made available and discussed.

584. Competent authorities should also identify what information regarding supervisory stress tests and their outcomes may be publicly disclosed, taking into account the intended purposes of the supervisory stress tests. When deciding on the public disclosure of the results or methodologies of supervisory stress tests, competent authorities should consider their own role in the exercise and the approach chosen (top-down stress test, bottom-up stress test) and also consider the extent of their own analysis to accompany published results.

12.4 Process and methodological considerations

585. The supervisory stress testing programme set out by the competent authorities should ensure at least the following:

- a. When designing methodologies and assumptions for use in supervisory stress tests, competent authorities should decide on the design and features of the exercise that are most suitable for its intended purpose, i.e. that are linked to the supervisory (or other) objectives set by the competent authority.
- b. When conducting supervisory stress tests on a wider sample of institutions, competent authorities may consider adopting the design of supervisory stress tests for different categories of institutions as set out in Section 2.4, especially if the exercise is top-down.
- c. Competent authorities should consider the appropriate timelines for conducting supervisory stress tests, including the time horizon of the scenarios and the period over which the management actions proposed by institutions in the stress test exercise are analysed. The timelines for the exercise should also factor in the dialogue with the institution, where relevant for the intended purpose of the exercise and the extent to which the data supplied by the participating institution will remain relevant.
- d. Competent authorities should consider, where relevant for the intended purpose of the exercise, all known future regulatory changes affecting institutions within the scope and time horizon of the exercise.

586. In the case of a scenario analysis stress test, competent authorities should decide whether to run a single scenario to be applied to all institutions included in the scope of the exercise, or to develop institution-specific scenarios for individual institutions (the latter should not be seen as relieving institutions from the responsibility of designing own scenarios for the purposes of ICAAP and ILAAP stress testing), or a combination of the two. Competent authorities should consider the transferability of capital and liquidity resources in stressed conditions and any possible impediments, including legal and operational impediments, that may exist.

587. Furthermore, the following aspects should be considered when developing the methodologies for supervisory stress tests:

- a. For the purposes of the assessment of capital adequacy, competent authorities should consider the impact of the stress test on the institution's P&L, balance sheet, risk exposure amount and leverage ratio, and analyse the impact of the stress test on the capital ratios of institutions covered by the exercise.
- b. For the purposes of bottom-up stress tests, competent authorities should consider the extent to which they prescribe the methodologies for modelling institutions' balance sheets and P&L. Indicatively, institutions' balance sheets may be taken as static, allowing competent authorities to assess current risks over time. Alternatively, they may be allowed to be dynamic, permitting, for example, a more forward-looking exploration of how institutions' business plans might evolve under the stress scenario or how credit volumes might evolve over time. For enhanced comparability, competent authorities may consider opting for the static balance sheet approach. Conversely, for enhanced feedback on institutions' intended or planned reactions vis-a-vis stresses and shocks, the dynamic balance sheet approach may be favoured.
- c. Competent authorities should consider how to take account of systemic feedback or second-round effects in the stress tests, where relevant, recognising the limitations of providing ex ante assumptions in the case of bottom-up stress tests.
- d. For the purposes of bottom-up supervisory stress tests, competent authorities should aim to assess the impact of such exercises consistently and fairly across the institutions covered by supervisory stress tests, respecting the level playing field. Competent authorities should also consider the extent to which stress test results reflect differences in modelling choices and judgements among institutions, rather than true differences in the risks to which they are exposed.

588. Competent authorities should aim to assess model risk across stress testing exercises and have access to different types of comparative information. It is recommended to have, where appropriate, several perspectives/benchmarks. It is important to recognise that all models are imperfect and to clearly identify known and potential weaknesses. Understanding these

limitations and weaknesses of individual institutions' stress testing models can inform the supervisory stress testing process and mitigate potential problems arising from model risk.

Title 13. Final provisions and implementation

589. The following guidelines are repealed with effect from 1 January 2016:

- a. CEBS *Guidelines on the Application of the Supervisory Review Process under Pillar 2* (GL03) of 25 January 2006;
- b. 'Guidance for supervisors' section of the CEBS *Guidelines on Technical aspects of the management of interest-rate risk arising from non-trading activities under the supervisory review process* of 3 October 2006;
- c. CEBS *Guidelines on the management of concentration risk under the supervisory review process* (GL31) of 2 September 2010;
- d. CEBS *Guidelines for the joint assessment of the elements covered by the supervisory review and evaluation process and joint decision regarding the capital adequacy of cross-border groups* (GL39) of 7 April 2010; and
- e. EBA *Guidelines on capital measures for FX lending to unhedged borrowers under the supervisory review and evaluation process* (EBA/GL/2013/02) of 20 December 2013.

590. Competent authorities should implement these guidelines by incorporating them into their supervisory processes and procedures by 1 January 2016²³.

591. Specific provisions in these guidelines are subject to the following transitional arrangements, though competent authorities may accelerate this transition at their own discretion:

- a. implementation of the approach for the diversification of risks and the composition of own funds to cover the TSCR as specified in Title 7 is not required until 1 January 2019; and
- b. the structure of quantitative requirements linked to the NSFR as specified in Titles 9 and 10 is not required until the relevant requirements of Regulation (EU) 575/2013 are specified and come into force.

592. When implementing these guidelines, and in particular Titles 7, 10 and 11, competent authorities should ensure that the SREP capital adequacy and overall assessment, the determination of additional own funds requirements and the imposition of other capital

²³ The revised SREP Guidelines will apply from 01 January 2019.

measures are without prejudice to and do not compromise the institution's compliance with the Basel I floor as referred to in Article 500 of Regulation (EU) No 575/2013.

Annexes

Annex 1. Operational risk, examples of the link between losses and risk drivers

To illustrate how operational risk manifests itself, it is necessary to understand the relationship between the drivers of a specific risk event and the impact (i.e. outcome) of the risk event. Some examples are given in the following table²⁴.

	Driver	Risk event	Impact types (outcomes)
People	Arson – a deliberate act committed by a person	Fire – the event	<ul style="list-style-type: none"> • Death/injury • Financial loss/cost • Property damage • Customer disruption
Process	Manual error	Inaccurate accounts	<ul style="list-style-type: none"> • Financial loss • Reworking accounts
Systems	IT software fault	ATMs shut down/unavailable	<ul style="list-style-type: none"> • Customer complaints • Compensation • Reputational damage • Regulatory censure
External	Very severe ice storm	Buildings inaccessible/invoication of contingency arrangements	<ul style="list-style-type: none"> • Customer disruption • Financial loss • Repair costs

²⁴ Root cause gives rise to a risk event resulting in an impact or multiple outcomes, some of which are quantifiable.

Annex 2. Key features and differences between P2R and P2G

	<u>P2R</u>	<u>P2G</u>
Nature	Requirement on top of Pillar 1 and below the combined buffer requirement set in accordance with Article 104 of the CRD	Expectation on top of the combined buffer requirement
Scope	(1) Risk of unexpected losses over 12 months-period not covered by minimum requirements; (2) risk of expected losses over 12 months insufficiently covered by provisions; (3) risk of underestimation of risk due to model deficiencies; (4) risks arising from governance deficiencies ²⁵	Quantitative outcomes of relevant stress tests (other potential areas to be explored further)
Determination	Calculation based on ICAAP as a starting point, where assessed as reliable, supported by, for example, supervisory benchmarks applied in relation to ICAAP calculations, supervisory judgement, etc. ²⁶	Calculation based on the maximum impact of the adverse scenario on the CET1 ratio, adjusted, for example, for credible mitigating actions and other factors, and offset against the own funds held to meet the CCB and in exceptional cases the CCyB if it covers the same risks assumed in the stress test
Quality of capital	Regulatory eligible own funds, at least in the same composition as Pillar 1	CET1 only
Relevance for the restrictions on distributions under Article 141 of Directive 2013/36/EU	Yes	No

²⁵ See paragraph 348

²⁶ See paragraph 349

Communication to institution	Part of the TSCR ratio articulated in relation to all Pillar 1 ratios (total own funds, T1, CET1)	As a separate ratio, not part of TSCR or OCR, explaining how it affects all capital ratios (T1 and total own funds)
Compliance	Requirements to be met at all times, including in stressed conditions	Institutions are expected to incorporate P2G into their capital planning, risk management and recovery planning, and operate above P2G
Supervisory response to breaches	All supervisory measures can be applied; a breach is a potential condition for the withdrawal of authorisation; an institution in breach is considered failing or likely to fail for resolution purposes	No automatic link between the level of own funds falling below P2G and specific supervisory measures, but would trigger enhanced supervisory dialogue and engagement with an institution, as there is a need to provide a credible capital plan

Annex 3. Overview of 2017 updates to the SREP Guidelines

2017 updates/changes to the SREP Guidelines	Title/section affected in the SREP
Pillar 2 capital guidance	Title 1.2 'Definitions' Title 7.1 'General considerations' Title 7.7.1 'Using P2G to address address quantitative outcomes of supervisory stress testing' Title 7.8 'Summary of findings and scoring' (including Table 8) Title 7.9 'Communication of prudential requirements' Title 10.3 'Application of capital measures' Title 10.7 'Supervisory reaction to a situation where P2G is not met' Title 11.2 'SREP capital assessment and institution-specific prudential requirements' Annex 2 'Key features and differences between P2R and P2G'
Supervisory stress testing	Title 1.1 'Subject Matter' Title 1.2 'Definitions' Title 12 'Supervisory stress testing' Title 13 'Final provisions and implementation'
Supervisory assessment of institutions' stress testing	Title 5.6.3 'Assessment of institutions' stress testing' Title 10.5 'Application of supervisory measures'
Alignment of supervisory assessment of IRRBB with the revision of the EBA Guidelines on IRRBB	Title 6.5 'Assessment of interest rate risk arising from non-trading book activities'
Scoring framework	Title 1.2 'Definitions' Title 2.2 'Scoring in the SREP' Title 4.1, Title 5.1.1, Title 6.2.4, Title 6.3.4, Title 6.4.5, Title 6.5.4, Title 7.8, Title 8.5, Title 9.6 – 'Summary of findings and scoring' Title 6.1, Title 8.1 – 'General considerations' Title 10.2 'Overall SREP assessment' (including Table 13)
Articulation of TSCR and OCR and communication of supervisory capital expectations to the institutions	Title 7.5 'Articulation of own funds requirements' Title 7.9 'Communication of prudential requirements'
Other	General clarifications added to the 'Background and rationale' section Title 10.6 'Supervisory reaction to a situation where TSCR is not met' (<i>new section</i>)

** Note that the numbering of some sections has changed in the updated version. Titles provided in this table refer to the new numbering in the updated version of the guidelines. Some sections have been newly created.*