

Consultation Paper on Further Work on Solvency of IORPs

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1. Responding to this paper

EIOPA welcomes comments on the Consultation Paper on Further Work on Solvency of IORPs.

Comments are most helpful if they:

- respond to the question stated, where applicable;
- contain a clear rationale; and
- describe any alternatives EIOPA should consider.

Please send your comments to EIOPA in the provided Template for Comments, by email CP-14-040@eiopa.europa.eu by 13 January 2015.

Contributions not provided in the provided template for comments, or sent to a different email address, or after the deadline will not be processed.

Publication of responses

Contributions received will be published on EIOPA's public website unless you request otherwise in the respective field in the template for comments. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure.

Please note that EIOPA is subject to Regulation (EC) No 1049/2001 regarding public access to documents and EIOPA's rules on public access to documents¹.

Contributions will be made available at the end of the public consultation period.

Data protection

Please note that personal contact details (such as name of individuals, email addresses and phone numbers) will not be published. They will only be used to request clarifications if necessary on the information supplied.

EIOPA, as a European Authority, will process any personal data in line with Regulation (EC) No 45/2001 on the protection of the individuals with regards to the processing of personal data by the Community institutions and bodies and on the free movement of such data. More information on data protection can be found at www.eiopa.europa.eu under the heading 'Legal notice'.

¹ [https://eiopa.europa.eu/fileadmin/tx_dam/files/aboutceiops/Public-Access-\(EIOPA-MB-11-051\).pdf](https://eiopa.europa.eu/fileadmin/tx_dam/files/aboutceiops/Public-Access-(EIOPA-MB-11-051).pdf)

2. Consultation Paper Overview & Next Steps

This Consultation Paper constitutes the first step of the further work on solvency of IORPs that EIOPA is undertaking on its own initiative. The next steps are to produce technical specifications in view of an EIOPA quantitative impact assessment and, subsequently, technical advice to the European Commission on EU solvency rules for IORPs.

The work follows the QIS on IORPs, which EIOPA conducted at the request of the European Commission. The QIS raised a number of issues regarding definitions and methodologies for establishing the holistic balance sheet. Moreover, the QIS did not specify the supervisory framework underlying the holistic balance sheet. EIOPA committed in the QIS final report to resolve these matters. Section 3 provides a more elaborate description of the background and scope of this consultation paper.

The remainder of this consultation paper consists of two sections:

Section 4 on valuation proposes improved definitions and methodologies to value the holistic balance sheet in the following four areas:

- Contract boundaries;
- Discretionary decision-making processes;
- Benefit reduction mechanisms;
- Sponsor support.

Section 5 on supervisory responses discusses on EIOPA's own initiative the possible uses of the holistic balance sheet and options for the various components of the underlying supervisory framework. Particularly, if the holistic balance sheet is used as a tool to establish capital/funding requirements, as opposed to a risk-management/transparency tool, the supervisory frameworks will differ depending on the proposed options for including various security and benefit adjustment mechanisms, the minimum level of technical provisions to be covered with (financial) assets and recovery periods. The section concludes by discussing and analysing some examples of supervisory frameworks, which have been selected as representing a sensible range of possibilities.

Next steps

EIOPA will consider the feedback received and expects to publish draft technical specifications by early 2015 for a quantitative impact assessment. Following the quantitative impact assessment, EIOPA will develop on its own initiative technical advice to the European Commission on EU solvency rules for IORPs.

3. Introduction

3.1. Background

- 3.1 In July 2013, EIOPA published the results of the quantitative impact study (QIS) on Institutions for Occupational Retirement Provision (IORPs), conducted by EIOPA at the request of the European Commission.²
- 3.2 The QIS outcomes showed the need for further work towards a European prudential regime that is market-consistent and risk-based, providing an objective and transparent view of the financial situation of IORPs and promoting proper risk management, including sound asset and liability management techniques. The results also made clear that a methodology like the holistic balance sheet is needed that allows for the specificities of occupational pension provision.
- 3.3 EIOPA also concluded in its final report that it is not yet in a position to fully assess the practicality of the holistic balance sheet. The QIS introduced and tested a number of new concepts and approaches and, as expected, considerable practical difficulties were encountered. In many cases it was not possible to satisfactorily resolve issues that were identified before and during the QIS exercise. Moreover, a full assessment of a comprehensive supervisory framework would have required the definition of supervisory responses.
- 3.4 The Commission noted that further technical information is needed before taking a decision on any European initiative on solvency of pension funds.³ EIOPA, on its own initiative, committed to undertake further work to resolve these matters. This work is not related to the Commission's proposal for a revision of the IORP Directive, adopted on 27 March 2014.
- 3.5 This consultation paper sets out the initial results of this further work, which should be considered work in progress. EIOPA recognises that revised methodologies and possible supervisory frameworks – taking into account stakeholder comments – need to be explored and tested through a quantitative impact assessment. As a next step, EIOPA intends to produce draft technical specifications for such an assessment by early 2015. Following the quantitative impact assessment, EIOPA will develop on its own initiative technical advice to the European Commission on EU solvency rules for IORPs.

3.2. Extent of the work

- 3.6 EIOPA identified a number of areas where further work would be necessary, in order to better specify or bring more clarity on some

² EIOPA, Report on QIS on IORPs, EIOPA-BoS-13/124, 4 July 2013.

³ European Commission, Occupational Pension Funds (IORP): Next Steps, Memo/13/454, 23 May 2013.

elements of the holistic balance sheet, and on the use that could be made of the holistic balance sheet.

3.7 The five areas identified by EIOPA for initial attention and examined in the work presented in this document are:

- Valuation of sponsor support;
- Valuation and recognition of benefit reduction mechanisms;
- Valuation of discretionary decision-making processes;
- Definition of contract boundaries;
- Specification of supervisory responses.

3.8 These areas were chosen for this work because of concerns expressed by stakeholders, and because of their impact on the holistic balance sheet and due to the effect they might have on the technical specifications in other areas.

3.3. Discussion paper on sponsor support

3.9 The further work on the valuation of sponsor support builds on the discussion paper that EIOPA published together with the QIS final report.⁴ Overall forty-six responses were received, of which three confidential responses. The non-confidential responses were published on EIOPA's website.⁵ The sections on the valuation of sponsor support in this consultation paper summarise and reflect on the stakeholder responses to the various issues.

3.10 On 23 October 2013 EIOPA organised a stakeholder event to discuss the proposals contained in the discussion paper.⁶

3.11 EIOPA would like to thank the respondents to the discussion paper as well as the participants and speakers at the stakeholder event for their valuable contributions.

3.4. Scope of the work

3.12 EIOPA has undertaken this work on its own initiative, in its capacity as technical advisory body to the European Parliament, the Council and the European Commission.

3.13 The scope is broader than previous work done by EIOPA in this area, of which some elements were conditional on the Commission's objective to achieve a level of harmonisation where EU legislation does not need

⁴ EIOPA, Discussion Paper on Sponsor Support Technical Specifications, EIOPA-13/322, 4 July 2013.

⁵ <https://eiopa.europa.eu/consultations/consultation-papers/2013-closed-consultations/july-2013/discussion-paper-on-sponsor-support-technical-specifications/index.html>

⁶ The programme and presentations can be found here: <https://eiopa.europa.eu/consultations/consultation-papers/2013-closed-consultations/july-2013/discussion-paper-on-sponsor-support-technical-specifications/index.html>

additional requirements at the national level. Most notably, the paper considers the holistic balance sheet being used to:

- set solvency capital requirements at the EU level, as part of pillar 1 requirements; but also to
- establish minimum funding requirements at the level of technical provisions, also as part of pillar 1; and to
- assess the sustainability of IORPs, as part of pillar 2 requirements.

3.14 The further work addresses possible improvements of the technical specifications for valuing the holistic balance sheet and considers the various elements for specifying the underlying supervisory framework. A number of examples of supervisory frameworks are discussed, which have been selected as representing a broad range of possibilities.

3.15 This consultation paper does not and is not intended to pre-empt any decisions on the possible uses of the holistic balance sheet, but provides a preliminary analysis of the effects it would have on:

- protection of members and beneficiaries;
- functioning of the internal market, i.e. cross-border activity and consistency with insurance framework;
- economy, i.e. sponsors and long-term investments;
- national IORP systems.

3.16 EIOPA's work is limited to exploring an enhancement of EU prudential regulation for IORPs. However, depending on the EU prudential regime and member state under consideration, the application of common solvency rules may impact on national IORP sectors, by:

- Leading to different results than envisaged by pension schemes/contracts and/or national social and labour law;
- Trigger discussions about existing pension schemes/contract and/or national social and labour law.

The consultation paper puts forward the possibility of appropriate transitional measures to facilitate adjustments of national IORP sectors.

3.17 The work does not consider the legal aspects of fostering enhanced solvency requirements for IORPs at the EU level.

3.18 Finally, this consultation paper constitutes the first stage of EIOPA developing on its own initiative technical advice to the Commission on EU solvency rules for IORPs. In the end, it is the prerogative of the Commission to decide whether or not to take the advice into account and whether or not to take any legislative initiatives in this area, including the

establishment of a legal basis, which would have to be agreed by the European Parliament and the Council.

3.5. Content of the document

- 3.19 The remainder of this document consists of two main sections:
- 3.20 Section 4 deals with valuation issues for technical provisions (specification of contract boundaries), elements containing discretionary decision-making processes, benefit reduction mechanisms, legally enforceable sponsor support and pension protection schemes. Where relevant, different valuation options are identified and analysed.
- 3.21 Section 5 deals with the issue of supervisory responses. The first part of the section discusses the possible uses of the holistic balance sheet and the components of the underlying supervisory framework, defining the trigger points and associated supervisory responses. The second part, analyses a broad range of examples of supervisory frameworks with respect to their effect on protection of members and beneficiaries, functioning of the internal market, the economy and national IORP systems.

4. Valuation of the holistic balance sheet

4.1. Introduction

4.1.1. General approach to valuation

4.1 In EIOPA's view, the holistic balance sheet should be based on market-consistent valuation^{7,8}. This section discusses firstly the contract boundaries, as these identify the cash-flows that should be used when calculating market-consistent values of technical provisions. The section then discusses the valuation of (groups of) elements, which includes proposals for calculating the market-consistent value of sponsor support.

4.1.2. Balancing item approach

4.2 EIOPA recognises that the holistic balance sheet may, dependent on the characteristics of a pension scheme and the set-up of the holistic balance sheet, include an element that will always ensure that the IORP will meet its capital requirements, i.e. will always 'balance the holistic balance sheet'. This could be the case because this element can in all cases provide additional assets to cover technical provisions and the capital requirements, or because this element can in all cases decrease the technical provisions to such a level that the available assets can cover the (amended) technical provisions and capital requirements. In these cases, EIOPA considers that applying a balancing item approach would be appropriate.

4.3 Under the balancing item approach, the value of the element at hand would simply be the required value in order to equal the assets to technical provisions on the holistic balance sheet and the required value to accomplish full loss-absorbency in the SCR calculation. Considering that this method can only be used for elements that can always 'balance the holistic balance sheet', the value thus calculated is equal to the best estimate that would be the result of a full valuation of the element. The balancing item approach would therefore render the market-consistent value of the element.

4.4 There are several elements that could, under specific circumstances, serve as a balancing item:

- Unlimited, legally enforceable sponsor support provided by a strong sponsor;
- Unlimited, legally enforceable sponsor support provided by a sponsor

⁷ This general approach applies only to elements that are included on the holistic balance sheet. Whether or not individual elements should be included on the holistic balance sheet is discussed in section 5.

⁸ Market-consistency is used here in the meaning of making use of and being consistent with information provided by financial markets.

that is supported by a pension protection scheme that covers 100% of benefits (or where there is a pension protection scheme that covers <100% but the reduction in benefits is accounted for in the valuation of the holistic balance sheet), if the pension protection scheme is included on the holistic balance sheet by means of impacting the default rate of the sponsor;

- A pension protection scheme that covers 100% of benefits (or a pension protection scheme that covers <100% but the reduction in benefits is accounted for in the valuation of the holistic balance sheet) and is valued separately (from sponsor support) on the holistic balance sheet;
- Unlimited benefit reductions. This could be ex ante benefit reductions, ex post benefit reductions, or benefit reductions in case of sponsor default.

4.5 The holistic balance sheet can be balanced only “once”, and in case there are different mechanisms available which may in principle act as a balancing item, only the ultimate balancing item can be valued using the balancing item approach. All other elements⁹ would then have to be valued in accordance with regular valuation methods.

4.6 Whether or not an element can in a specific case be valued using the balancing item approach depends on the characteristics of the element and on the design of the holistic balance sheet. Obviously, an element can only serve as a balancing item if it is included on the holistic balance sheet. Furthermore, EIOPA considers in the sections below that certain requirements must be met before an element could serve as a balancing item.

4.2. Contract boundaries

4.2.1. General remarks

4.7 This section first describes some key issues with regard to contract boundaries for IORPs. Based on an analysis of those issues, a possible definition of contract boundaries for IORPs is then proposed. Since the QIS for IORPs dealt only with schemes/IORPs which are not pure DC¹⁰, the proposed definition should be understood to be applicable mainly to those schemes. The issue of contract boundaries for pure DC schemes will have to be dealt with at a later stage.

⁹ An example of this could be if there is a combination of unlimited, legally enforceable sponsor support and a pension protection scheme that covers 100% of benefits. In case sponsor support and the pension protection scheme are separately recognised on the holistic balance sheet, both elements could in theory be eligible for applying the balancing item approach. However, as the PPS would be the last mechanism to be used, in this case sponsor support should be valued in accordance with other valuation methods.

¹⁰ The term ‘pure DC’ means that all risks relating to the pension scheme are borne by the scheme member. In these schemes, no guarantees (not even partial ones) are provided by the IORP or the plan sponsor.

- 4.8 The key question to be answered here is “Which cash-flows shall be recognised in technical provisions within a possible future prudential framework for IORPs?” In Solvency II for insurance, this is termed “contract boundaries” and this expression is used at present in this section. However, it is recognised that it may not be suitable for all IORPs in all member states. This aspect of terminology is dealt with in section 4.2.3.
- 4.9 The technical specifications of the QIS on IORPs prescribed that IORPs did not have to take into account future accrual and contributions when the IORP has the possibility to terminate the scheme, thus avoiding new accrual. QIS participants were required to include the unconditional, pure conditional and – depending on the scenario – mixed and pure discretionary benefits relating to these accrued benefits. A footnote specified that national supervisory authorities would clarify whether this was also allowed when the sponsor or social partners are able to end the pension scheme instead of the IORP. IORPs were required to include future accruals and contributions in technical provisions if it was not possible to end the scheme. Some IORPs, that were able to terminate the scheme, indicated that they would have preferred to include future accruals/contributions.
- 4.10 The aim of this work on contract boundaries for IORPs is to explore the possibility of achieving a European definition of contract boundaries, i.e. one which does not require a decision by national supervisory authorities.
- 4.11 Possible decisions whether, and if so, how, to include or not (certain types of) non-unconditional benefits and/or future members and beneficiaries in a possible future prudential framework for IORPs may impact on the cash-flows which should be recognized in technical provisions of IORPs for prudential purposes, and therefore on contract boundaries. Therefore, the issue of contract boundaries may have to be revisited following such decisions.
- 4.12 The holistic balance sheet approach, as applied in the QIS on IORPs, is based on the principles for valuation and recognition of cash-flows in technical provisions as applied in Solvency II. Therefore, the following text starts with an analysis of contract boundaries in Solvency II and then analyses what a definition of contract boundaries for IORPs could look like.

4.2.2. Analysis of the definition of contract boundaries used in Solvency II

- 4.13 For insurance undertakings, the question of which cash-flows shall be recognised in the best estimate of technical provisions for prudential purposes is answered in Solvency II using the concept of “contract boundaries”.

4.14 The (for now) essential parts of the definition of contract boundaries in Solvency II¹¹ are the following:

TP.2.12 The calculation of the best estimate should only include future cash-flows associated with obligations within the boundary of the contract.

...

TP.2.16 For the purpose of determining which insurance or reinsurance obligations arise in relation to an insurance or reinsurance contract, the boundaries of the contract shall be defined in the following manner:

(a) Where the insurance or reinsurance undertaking has at a future date

(i) a unilateral right to terminate the contract,

(ii) a unilateral right to reject premiums payable under the contract, or

(iii) a unilateral right to amend the premiums or the benefits payable under the contract in such a way that the premiums fully reflect the risk,

any obligations which relate to insurance or reinsurance cover which might be provided by the undertaking after that date do not belong to the contract, unless the undertaking can compel the policy holder to pay the premiums for those obligations;

...

(e) all other obligations relating to the contract, including obligations relating to unilateral rights of the insurance or reinsurance undertaking to renew or extend the scope of the contract and obligations that relate to paid premiums, belong to the contract.

4.15 This definition means to implement the general idea that premium cash-flows (and the corresponding benefit cash-flows) should be recognized in technical provisions of insurance undertakings if they lead to risks building up for the undertaking.

4.16 The definition is based in particular on the following underlying assumptions:

- An obligation of the undertaking only occurs if a premium is paid.
- There is a close relation between certain obligations/provision of cover on the one hand and paid premiums on the other hand.

¹¹ See page 53 f. of EIOPA, Technical Specification on the Long-Term Guarantee Assessment (Part I), EIOPA-DOC-13/061, 28 January 2013.

- The undertaking takes over the complete risk related to the cover provided, in the sense that there is no “third party” (like a sponsor) involved in the insurance contract (in addition to the insurance undertaking and the policyholder) which takes over risk.
- 4.17 The following aspects of this definition are of particular relevance:
- The general rule is that “all obligations relating to the contract” shall belong to the contract. In addition to this general rule, some exceptions are defined.
 - The definition assumes that it is sufficient to stipulate a point in time after which (if certain conditions are fulfilled) premiums do not belong to the contract. Because of the assumption of a close relation between premiums and obligations, this implicitly excludes the benefits/obligations related to the premiums (possibly) paid after the respective point in time.
 - The points in time referred to are those where an undertaking can exercise certain unilateral rights.
 - The definition refers to a “contract”, which means the insurance contract between an insurance undertaking and a policy holder.
- 4.18 How does this relate to the general idea of/reference to risks building up? An underlying assumption of the definition is that an incoming cash-flow (premium) leads to risks building up in the undertaking, because it causes an obligation of the undertaking to provide cover, which can lead to outgoing cash-flows (payment of benefits). So, the general rule to include all obligations (cash-flows) related to the contract is in line with the general idea.
- 4.19 The second part of the definition is to exclude some obligations (cash-flows) from technical provisions. This is based on the idea that if the undertaking can avoid certain incoming cash-flows (by terminating the contract or by rejecting further premiums), it will also avoid the corresponding outgoing cash-flows and the risks related to them. Another way to avoid risk is to amend the premiums or benefits in a way which fully reflects the risk (even though it may not be completely clear what this means in practice).
- 4.20 It is important to be aware that only possibilities to avoid risks which can unilaterally be decided by the undertaking are taken into account in the definition in Solvency II, because if another party (which would most likely be the policyholder) could prevent the use of certain rights, then these rights could probably not be exercised in the very situations when making use of them would avoid risks for the undertaking (and leave the risk with the policyholder).

4.21 The following parts of this section examine in particular if and how the specific aspects of the definition of contract boundaries are applicable to IORPs.

4.2.3. Expression “contract boundary”

4.22 It is often mentioned that the expression “contract boundary” is in many cases not suitable for IORPs. One reason is that the word “contract” is not considered an adequate description of the characteristics of the set of rules and arrangements governing the provision of benefits to members and beneficiaries by an IORP. But also the word “boundary” may be unsuitable, because in the concept of contract boundaries in Solvency II it refers to a point in time, while this does not have to be the case according to the definition of contract boundaries for IORPs proposed below.

Questions to stakeholders:

Q1: Do stakeholders think that the word “contract” is an adequate description of the characteristics of the set of rules and arrangements governing the provision of benefits to members and beneficiaries by an IORP?

Q2: Do stakeholders think that the word “boundary” is suitable here?

Q3: If not, please provide an expression more suitable for IORPs which could replace the expression “contract boundaries”.

4.2.4. Requirement of “unilateral” right/Meaning of “risks building up”

4.23 The definition of contract boundaries used in Solvency II refers to certain unilateral rights of an insurance undertaking. For IORPs such unilateral rights do not exist in most member states, neither for the IORP nor for other parties¹².

4.24 This is not a general problem for the applicability of the definition of contract boundaries from Solvency II to IORPs, because the absence of such unilateral rights would just mean that all future cash-flows (in and out) related to obligations of the IORP to members and beneficiaries would have to be recognised in technical provisions.

4.25 The decision to promise benefits to members and beneficiaries is not taken by an IORP, but by other parties (sponsor/employer, social partners, ...), who use an IORP to provide the promised benefits.

4.26 It is therefore a reasonable starting point to assume that a promise should be reflected by technical provisions of an IORP to the extent that the IORP is (primarily) used by some party (the sponsor/employer, social partners,

¹² See section 5 of EIOPA, Mapping Exercise for Further Work on Solvency of IORPs, EIOPA-14/514, 13 October 2014.

...) promising benefits to provide the promised benefits. This means that the part “risks building up in the IORP” of the basic idea of determining contract boundaries (cash-flows should be recognized in technical provisions if they lead to risks building up in the IORP) should be understood here as “risks building up for a promise to provide benefits of occupational retirement provision (primarily) via an IORP”.

- 4.27 The risks arising from the promise to provide benefits could eventually be borne by the sponsor (via sponsor support) or be absorbed by a benefit adjustment mechanism. But this is an issue of valuation of the cash-flows recognised in technical provisions and possibly of supervisory responses. It does not have to be relevant for the question of recognition of cash-flows. If cash-flows should be paid by the IORP as part of the promise made to members and beneficiaries they should be recognised in technical provisions of the IORP, because only so can they be taken into account and thus protected by a supervisory regime. The valuation of those cash-flows is a separate issue (see section 4.2.6).
- 4.28 If an IORP has the unilateral right (or obligation) to “stop” the promise to provide benefits of occupational retirement provision via itself (by terminating the contract/agreement/promise or rejecting additional contributions) or to modify it in a way that contributions fully reflect the risk, then it would still make sense to include this unilateral right in the definition of contract boundaries for IORPs. There may also be cases in which it may be as appropriate to include such unilateral rights of the sponsor in the definition of contract boundaries for IORPs.

Questions to stakeholders:

Q4: Do stakeholders have any general comments on the above section?

Q5: Do stakeholders think that unilateral rights (or obligations) of an IORP to terminate the contract/agreement/promise or reject additional contributions to the contract/agreement/promise or modify the promise in a way that contributions fully reflect the risk should be the basis for a definition of contract boundaries for IORPs? Are there cases where such rights (or obligations) should be the basis for a definition of contract boundaries for IORPs even though they are not unilateral rights (or obligations) of the IORP, but can be exercised unilaterally or jointly by other parties (possibly together with the IORP)?

4.2.5. Relation of contributions/benefits

- 4.29 The definition of contract boundaries in Solvency II is based on the assumption (among others) that there is only an obligation of the insurance undertaking if there is a premium paid as a basis for this obligation.

- 4.30 Within the context of occupational pensions, there are two ways in which liabilities of an IORP can arise:
- i. Contributions are paid into the IORP, resulting in liabilities building up:
A contribution is paid to an IORP that leads to a liability of the IORP. This is also the way obligations usually arise in life-insurance contracts;
 - ii. Liabilities build up due to continued service of the member, resulting in a need for the plan sponsor to pay contributions:
As a result of continued participation in the pension scheme, new benefits are accrued by the (active) member in the scheme, usually in salary- and service-related schemes. The new accrual is reflected in additional liabilities on the IORP's balance sheet. The contribution that the employer will pay is based on the amount necessary to finance the accrual of members. Legally, the payment of contributions is not a prerequisite to benefits being accrued, as the benefit accrual is only related to continuing service. This means that liabilities of the IORP build up independently from contributions being received by the IORP.
- 4.31 In addition, in many cases contributions to IORPs are not (or not only) determined based on the amounts necessary to finance the (accrual of) benefits of individual members (which would usually be the case in case of a life-insurance contract), but are determined based on the amounts necessary to finance the (accrual of) groups of members or to finance a certain level of funding of the IORP, or a combination of all those possibilities.
- 4.32 This means that it may not be appropriate in the case of IORPs to assume that there is always a clear and simple relationship between certain incoming and certain outgoing cash-flows.
- 4.33 To resolve this, a definition of contract boundaries for IORPs could stipulate that benefits should be recognised in technical provisions, if the IORP cannot unilaterally avoid paying those benefits (and cannot unilaterally modify the promise to pay those benefits so that contributions fully reflect the risk related to those benefits). This would mean that the promise to pay benefits to members and beneficiaries would be recognised "on a going-concern basis"¹³. Rights of the sponsor or social partners to adjust benefits would not impact on the recognition of cash-flows in technical provisions, but may of course impact on the valuation of those cash-flows (see section 4.2.6).

¹³ Here, "on a going-concern basis" means that recognition (not valuation) of cash-flows should happen under the assumption that the promise to pay benefits continues to exist as at the valuation date.

- 4.34 Incoming cash-flows (contributions) should be recognised in technical provisions if they are meant to finance the (accrual of) benefits. Incoming cash-flows whose amount is determined based on the funding position of the IORP and/or are not meant to directly finance the (accrual of) benefits should qualify as sponsor support and should not be recognised in technical provisions, but separately (for instance as an asset on the holistic balance sheet).
- 4.35 This would mean that an IORP without sponsor support would recognise the same cash-flows in technical provisions as an IORP with sponsor support, provided both IORPs have the same level of benefits and contributions directly related to the financing of those benefits. The level of technical provisions could of course differ, because the probability and the expected levels of cash-flows could differ. The IORP with sponsor support would recognise sponsor support separately (for instance as an asset on the holistic balance sheet).

Questions to stakeholders:

Q6: Do stakeholders agree with the analysis above of the different ways of liabilities of IORPs arising?

Q7: Do stakeholders think that there should be a distinction between incoming cash-flows which are considered as "regular contributions" to finance (the accrual of) benefits on the one hand and sponsor support on the other hand? What is the view of stakeholders regarding the practicality of such a distinction?

Q8: Do stakeholders agree, that, if there was a distinction as described in question Q7, "regular contributions" should be recognised in technical provisions while sponsor support should be treated separately?

Q9: Do stakeholders agree that payments by the IORP to the sponsor related to a surplus of the IORP (in case such payments are allowed for in the scheme) should not be recognised in technical provisions of the IORP? If not, how/where should they be recognized/presented in the holistic balance sheet?

Q10: Are stakeholders aware of cases in which there would be an obligation of the IORP to pay out benefits without having received any contributions/payments to finance those benefits (e.g. because the obligation is constituted by social and labour law)? If yes, please describe.

Q11: Do stakeholders believe that the contract boundaries could be defined based on future benefit payments rather than contribution or premiums?

4.2.6. Recognition of cash-flows vs. valuation of cash-flows

- 4.36 The issue of recognition of cash-flows in technical provisions has to be distinguished from the issue of valuation of those cash-flows. To make this distinction clearer, it should be avoided to say that “expected” cash-flows should be recognised in technical provisions.
- 4.37 An expectation already includes the concept of probability. For the issue of contract boundaries, probabilities are not really relevant. A cash-flow does not have to be certain in its timing or amount to belong to the contract. Determining the timing, amount, and probability of occurrence of a cash-flow is relevant for valuation purposes, but not for the determination of contract boundaries.
- 4.38 This is not necessarily an issue of unconditional vs. non-unconditional benefits. Also for the valuation of unconditional benefits probabilities are required. For example, an IORP may have to make (unconditional) payments from an annuity. There may be no unilateral right of adjustment of benefits or contributions by the IORP, contributions may not be able to be rejected, the contract may not be able to be terminated by the IORP.
- 4.39 In this case the payments from the annuity have to be recognised in technical provisions of the IORP. The current value of those payments can differ depending on many factors: mortality rates used for valuation; options of the member/beneficiary to determine the starting age of the annuity (e.g. depending on the retirement age in 1st pillar), which may mean that probabilities have to be determined, at what age the payments of the annuity will start, and also which level the payments may have depending on the starting age;....
- 4.40 In case a certain obligation of an IORP to provide benefits would only occur if the IORP received a certain contribution, but the IORP had the unilateral right to reject this contribution, then the contribution and the related benefits would not have to be recognised in technical provisions. This means that it would not be necessary for the purpose of determining technical provisions to determine the probability of occurrence of those cash-flows (contributions and related benefits).
- 4.41 As regards benefit adjustment mechanisms: Also benefits subject to (ex ante or ex post) benefit adjustment mechanisms are recognised in technical provisions according to the same rules and principles. The benefit adjustment mechanism then impacts on the valuation of those benefits.

Questions to stakeholders:

Q12: Do stakeholders have any general comments on the above section?

4.2.7. Non-unconditional benefits and contract boundaries

- 4.42 The issue of non-unconditional benefits is not unique for IORPs, but is also relevant in Solvency II for insurers, since the Solvency II framework refers to “future discretionary benefits”. Even though the definition differs from the one used in the EIOPA advice/the QIS on IORPs for “(pure) discretionary benefits”, it is still clear that future discretionary benefits in Solvency II are non-unconditional and can be at full or partial discretion of the insurance undertaking. Since “future discretionary benefits” in the meaning of Solvency II can be granted both in the absence and presence of an explicit or implicit policy, it is not completely clear whether they can in all cases be considered mixed or pure discretionary benefits, respectively, in the meaning of the EIOPA advice/the QIS, or whether they would have to be considered mixed or pure discretionary benefits depending on the specific conditions regarding those “future discretionary benefits”.
- 4.43 Article 78 par. 3 of the Solvency II Directive stipulates that when calculating technical provisions insurance undertakings shall take account of all payments to policyholders and beneficiaries, including future discretionary bonuses, which insurance undertakings expect to make, whether or not those payments are contractually guaranteed.
- 4.44 Nevertheless, as for any other type of benefits, it is still necessary to determine which concrete cash-flows from future discretionary benefits/bonuses should be recognised in technical provisions.
- 4.45 Therefore the “general rules” for contract boundaries apply, based on the assumption that there is a close link between certain unconditional and non-unconditional benefits (and therefore between contributions paid to finance unconditional benefits and certain non-unconditional benefits, see section 4.2.5). For example, in the case of contracts with surplus participation by policyholders, the benefits resulting from surplus participation are considered to be future discretionary benefits in Solvency II. Surpluses may exist in this case, because the premiums paid in the past are not completely needed to pay for covering risks or providing financial guarantees. Therefore the possibility to pay benefits from surplus participation (often used to increase unconditional benefits) is based on premiums paid before those benefits are granted and is contingent on the economic effects of the payment of those premiums.

Questions to stakeholders:

Q13: Do stakeholders have any general comments on the above section?

4.2.8. Possible adaption of the definition of contract boundaries in Solvency II to an IORP environment

4.46 Building on the issues discussed above, the definition of contract boundaries used in Solvency II could be adapted to an IORP environment as in the following proposal:

- a) For IORPs/schemes where obligations of the IORP to pay benefits are only established following payments of contributions to the IORP/scheme, contract boundaries shall be defined as follows:
 1. All cash-flows relating to obligations of the IORP relating to current members and beneficiaries shall be recognised in the calculation of technical provisions, unless otherwise stated below. Apart from the cases described below, obligations shall include those obligations relating to current members and beneficiaries which result from contributions received by the IORP after the valuation date.
 2. Any cash-flows relating to obligations of the IORP relating to contributions received by the IORP after any of the following dates shall not be recognised in technical provisions:
 - a. The future date where the IORP has a unilateral right or obligation to terminate the agreement with the plan sponsor and/or the plan members to provide the pension benefits as agreed between plan sponsor and plan members;
 - b. The future date where the IORP has a unilateral right or obligation to reject additional contributions; or
 - c. The future date where the IORP has a unilateral right or obligation to amend the contributions payable after this date or the benefits related to those contributions in such a way that the contributions fully reflect the risks related to them and the related benefits.
- b) For IORPs/schemes where obligations of the IORP to pay benefits are established independently from payments of contributions to the IORP, contract boundaries shall be defined as follows:
 1. All cash-flows relating to obligations of the IORP relating to current members and beneficiaries shall be recognised in the calculation of technical provisions unless otherwise stated below. Apart from the cases described below, obligations shall include those obligations relating to current members and beneficiaries which are established after the valuation date. Any contributions which are directly linked to the financing of certain obligations established after the valuation date shall also be recognised in technical provisions, unless otherwise stated below.

2. Any cash-flows relating to obligations established after any of the following dates shall not be recognised in technical provisions:
 - a. The future date where the IORP has a unilateral right or obligation to terminate the agreement with the plan sponsor and/or the plan members to provide the pension benefits as agreed between plan sponsor and plan members;
 - b. The future date where the IORP has a unilateral right or obligation to reject the establishment of additional obligations; or
 - c. In cases where contributions are directly linked to the financing of certain obligations established after the valuation date, the future date where the IORP has a unilateral right or obligation to amend those contributions or those obligations to fully reflect the risk.

Unilateral rights of the sponsor

- 4.47 The definition proposed above refers only to unilateral rights of the IORP. There may be cases in which it may be equally appropriate to refer in the definition to unilateral rights of the sponsor. This situation is not currently covered by the definition, because this issue needs to be further explored, but the following approach could be taken.

There may be cases where the sponsor is ultimately responsible for the funding of the IORP and the payment of benefits to members and beneficiaries, and the IORP does not have the unilateral right to reject contributions, terminate the agreement or amend the contributions, since it is purely the vehicle in which the promise is funded.

If the sponsor has no unilateral right to stop the payment of contributions and/or benefit accrual, e.g. by contract with the member, then these would need to be recognised in the technical provisions of the IORP (unless the IORP has the right to reject such payments, etc., according to the above definition).

However, if the sponsor has the unilateral right to cease all payments of further contributions to the IORP and/or the further accrual of benefits for members, then these contributions and (possibly corresponding) accrual would not need to be recognized in the technical provisions of the IORP.

- 4.48 Further work is required to determine whether these conditions for unilateral rights of the sponsor are sufficient to make them part of the definition of contract boundaries, or whether further conditions are necessary, and, if so, how to merge these rights and conditions into the proposed definition of contract boundaries.

Questions to stakeholders:

Q14: Do stakeholders think that the above definition of contract boundaries for IORPs is in line with the general idea that cash-flows should be recognised if and only if they lead to risks building up in the IORP as described in section 4.2.4 (all those cash-flows should be in technical provisions; no cash-flows where all risks could be avoided should be in technical provisions)?

Q15: In case more/higher cash-flows than appropriate (compared with the general idea) are included in technical provisions according to this definition, how should the definition be amended to exclude them?

Q16: In case not all cash-flows which lead to risk building up in the IORP, as explained in section 4.2.4, are included, with which wording could they be included?

Q17: Is the wording of the definition appropriate for IORPs?

Q18: Is it necessary to have both 2. a. and b. in the above definition, or could a. be restricted to cases where a termination of the agreement leads to a stop of additional contributions and/or the repayment of contributions received/payment of a surrender value (and then maybe a. and b. could be combined)?

Q19: Are there additional rights of the IORP or another party (unilateral or not) which should be considered in the definition (see section 4.2.4)?

Q20: Is it clear from the proposed wording of the definition that in principle not only benefits (out-going cash-flows), but also contributions (incoming cash-flows) have to be recognized in technical provisions?

Q21: Are the cases described in parts a) and b) of the definition clearly distinguishable in practice?

Q22: Are the conditions mentioned above for making unilateral rights of the sponsor part of the definition of contract boundaries sufficient, or should further conditions be included? How could those rights and conditions be merged into the proposed definition of contract boundaries?

4.2.9. Examples

4.49 In this section some examples of possible pension promises of IORPs are presented, together with cash-flows that would have to be recognised in technical provisions according to the above definition. With the exception of example 8, it is assumed that the pension promises described in the examples are in the scope of part a) of the proposed definition.

Example 1

4.50 Description of the pension promise:

Promise (“unconditional”) of an IORP to provide a fixed pension (e.g. 100 euro/month) to a member/beneficiary for a fixed contribution (e.g. 50 euro/month). There is no unilateral right or obligation of the IORP to terminate the contract or reject/adjust contributions. In case the party paying the contributions (sponsor, ...) stops paying contributions the IORP will not have to pay the fixed pension of 100 euro, but only a lower amount, calculated based on the contributions received/the current wealth/the current technical provisions related to the promise.

Cash-flows to be recognised in technical provisions:

All future benefits and contributions have to be recognised in technical provisions. The “full” benefits of 100 euro/month are only paid with a certain probability (e.g. depending on the member surviving until retirement age). There is also a certain probability that certain future contributions will not be paid, with a correspondingly lower pension. Those probabilities and levels of pension will have to be taken into account when establishing cash-flows to value technical provisions.

Example 2

4.51 Description of the pension promise:

Promise (“unconditional”) of an IORP to provide a pension according to the following formula: $\text{pension} = 2 \times \text{contributions}$ (which means that if 1 euro of contributions is paid, the pension will be 2 euro a month). There is a unilateral right of the IORP to adjust contributions to fully reflect the risk. The right can be exercised by the IORP once, 5 years after the valuation date.

Cash-flows to be recognised in technical provisions:

Contributions paid after the point in time when the unilateral right of the IORP to adjust benefits can be exercised shall not be recognised in technical provisions. Correspondingly, no increase in pensions due to payments of contributions after this point shall be recognised. Contributions paid before this point in time and corresponding benefits (including those benefits accrued by payments of contributions up to the valuation date) shall be recognised in technical provisions. Again the probabilities and corresponding levels of pensions as described in example 1 will have to be taken into account, but it is not necessary to think about probabilities of payments of contributions more than 5 years into the future, because those payments will not be recognised in technical provisions.

Example 3

4.52 Description of the pension promise:

Promise (“unconditional”) of an IORP to provide a pension of 30% of the final wage of the member before reaching retirement age, for a contribution of 10% of wages during the career of the member. There is no unilateral right or obligation of the IORP to terminate the contract or reject/adjust contributions. In case the party paying the contributions (sponsor, ...) stops paying contributions the IORP will not have to pay the pension of 30% of the final wage, but only a lower amount, calculated based on the contributions received/the current wealth/the current technical provisions related to the promise.

Cash-flows to be recognised in technical provisions:

All future benefits and contributions have to be recognised in technical provisions (same in principle as in example 2). The “full” benefits of 30% of the final wage are only paid with a certain probability (e.g. depending on the member surviving until retirement age). There is also a certain probability that certain future contributions will not be paid, with a correspondingly lower pension. It is also necessary to make assumptions about the expected level of wages during and at the end of the career. All those probabilities and levels of pension will have to be taken into account when valuing cash-flows to determine technical provisions.

Example 4

4.53 Description of the pension promise:

As in example 3, but with the additional obligation of the IORP to adjust benefits according to inflation during retirement, without the possibility of the IORP to require or receive additional contributions.

Cash-flows to be recognised in technical provisions:

As in example 3, but with additional assumptions required about level of inflation during retirement.

Example 5

4.54 Description of the pensions promise:

As in example 3, but with the additional obligation of the IORP to adjust benefits according to inflation during retirement, with a unilateral right of the IORP to adjust contributions to fully reflect the risk.

Cash-flows to be recognised in technical provisions:

Future contributions do not have to be recognised in technical provisions, because of the unilateral right of the IORP to adjust contributions to fully reflect the risk. As only past accrual is recognised, the level of the pension recognised in technical provisions will be lower than 30% of the final wage. Additional assumptions are required about the level of inflation during retirement.

Example 6

4.55 Description of the pension promise:

As in example 1, but in addition there is an ex-ante benefit reduction mechanism in place (conditional benefits).

Cash-flows to be recognised in technical provisions:

The proposed definition of contract boundaries could for this case be interpreted in the following way: According to 1. of the proposed definition, all cash-flows relating to obligations of the IORP relating to current members and beneficiaries shall be recognised in technical provisions, unless one of the cases described in 2. of the proposed definition is applicable. This is not the case:

- a. An ex-ante benefit adjustment mechanism does not mean that the IORP has the unilateral right or obligation to terminate the contract.
- b. It does not mean the IORP has the unilateral right or obligation to reject contributions.
- c. It does also not mean that the IORP can or has to unilaterally adjust contributions payable after a certain date to fully reflect the risks related to them and the related benefits¹⁴.

Following this interpretation of the proposed definition, in this case all future contributions and benefits would have to be recognised in technical provisions of the IORP. In addition to the probabilities and assumptions already mentioned in example 1, it would be necessary to make assumptions about the expected value of benefits adjustments.

Example 7

4.56 Description of the pension promise:

Promise of the IORP to pay a lifetime pension of 100 euro/month, starting at retirement, for a single contribution of (e.g.) 20.000 euro, without the possibility of the IORP to require or receive additional contributions. There is no unilateral right or obligation of the IORP to terminate the contract.

Cash-flows to be recognised in technical provisions:

¹⁴ This last point c) may be of particular interest. An ex-ante benefit adjustment mechanism is a mechanism based on a contract concluded beforehand and which describes precisely under which conditions and to which extent adjustments will take place. Such a mechanism may eventually absorb all risks, but it is not necessarily the case that an individual adjustment of benefits under an ex-ante benefit adjustment mechanism means that future contributions (and the corresponding benefits) do fully reflect the risks related to them. One may also argue that, since the ex-ante benefit adjustment mechanism describes precisely to which extent adjustments will take place, it is in this case not a unilateral decision of the IORP to which extent contributions and/or benefits are adjusted. Furthermore, an ex-ante benefits adjustment mechanism may base the adjustment on the financial situation of the IORP as a whole, not on the relation of contributions and benefits related to certain members.

In this case, again, the IORP does not have the unilateral right or obligation to terminate the agreement or reject contributions. It also does not have the unilateral right or obligation to amend contributions (or benefits) payable after a certain date to fully reflect the risk. This means that, according to the proposed definition, in this case all benefits would have to be recognised in technical provisions.

Example 8

4.57 Description of the pension promise:

Promise (“unconditional”) that the IORP will provide a retirement pension of 1.5% of the average salary in the final year of service before retirement for each year the member is an active member of the IORP and accruing “service”. There is a unilateral right of the IORP to terminate the contract at any time.

Cash-flows to be recognised in technical provisions:

Pension rights based on service in employment after the valuation date shall not be recognised in technical provisions. Benefits accrued by service in employment up to the valuation date shall be recognised in technical provisions. Again the probabilities and corresponding levels of pensions will have to be taken into account.

Questions to stakeholders:

Q23: Do stakeholders agree that the proposed adapted definition of contract boundaries for IORPs (above) leads to the results described in this section? If not, please explain.

4.3. Discretionary decision-making processes

4.3.1. Introduction

4.58 Discretionary decision-making processes exist where a party to a pension arrangement has the power to make a subjective decision regarding one of the elements of the holistic balance sheet. The party involved could be the IORP, the employer, the participant itself, the supervisory authority or a pension protection scheme.

4.59 In the QIS on IORPs¹⁵, three situations were identified that include discretionary powers:

- there is a specified policy, based on objective conditions (an ‘explicit

¹⁵ The QIS technical specifications also contained guidance for taking into account discretionary decision-making processes. See European Commission, Quantitative Impact Study (QIS) on Institutions for Occupational Retirement Provision (IORPs) – Technical Specifications, Ares(2012)1182662, 8 October 2012.

policy'), but a discretionary power is available to deviate from that policy;

- there is no specified policy, but there is, under the existing discretionary power, a history of using the discretionary power that could be interpreted as some kind of pattern (an 'implicit policy'); or
- there is only a discretionary power, without any explicit or implicit policy.

4.60 EIOPA concluded in the final QIS report that further work would need to explore more detailed guidance for valuing discretionary decision-making processes. A survey was conducted to gather information about actual practices on (potential) elements of the holistic balance sheet that include discretionary decision-making processes. The results of this survey show¹⁶ that previous definitions still led to ambiguity about the 'categorisation' of such elements in member states, thus highlighting the importance of unambiguous definitions.

4.61 For the purposes of this consultation paper, the following typical characteristics are used to distinguish between the various elements:

- The distinction between pure discretionary benefits and mixed benefits on the one hand, and pure conditional benefits on the other hand is determined by the existence of a discretionary decision-making process. Where pure conditional benefits are granted solely on the basis of an objective measure (for example an ex-ante benefit adjustment mechanism¹⁷), the existence of a discretionary power to grant certain benefits or to deviate from an existing policy to grant benefits qualifies these benefits as either pure discretionary or mixed benefits (dependent on the next characteristic);
- The distinction between pure discretionary benefits and mixed benefits is determined by whether or not an objective measure (explicit policy), or a series of historical decisions and/or communications from which a pattern can be derived (implicit policy), is available to assist in the discretionary decision-making process. In pure discretionary benefits there is no such explicit or implicit policy to assist the decision-maker and the benefit is granted by means of a one-off decision. In mixed benefits, the decision-maker can use an explicit or implicit policy in the (discretionary) decision-making process, as an indication of the amount of benefits that could be granted based on the actual funding position, and can use the discretionary power to deviate from that policy;

¹⁶ See section 3.2 of EIOPA, Mapping Exercise for Further Work on Solvency of IORPs, EIOPA-14/514, 13 October 2014.

¹⁷ See e.g. page 113 of EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC.

- Similar to pure conditional benefits, pure discretionary benefits, mixed benefits and surplus funds are or can be related to surplus-sharing¹⁸. This may be a reason why there is sometimes no clear understanding of the differences between those three items. The differences can be clarified as follows:
 - o surplus funds are specific reserves which are formed of non-distributed surpluses which are (more or less softly) ear-marked to be used to enhance the benefits of members and beneficiaries (by paying e.g. mixed or discretionary benefits), but could also be used for other purposes, e.g. to absorb losses;
 - o mixed benefits are not a type of reserves, but a type of benefits which are granted as a result of an explicit or implicit surplus-sharing policy. Mixed benefits could be financed from any source, including investment returns. A dedicated reserve, exclusively earmarked for surplus-sharing to members and beneficiaries, that may not be used for any other purpose¹⁹, could also be formed to fund future mixed benefits;
 - o pure discretionary benefits are also a type of benefits, not a type of reserves, which are granted as a result of a pure discretionary decision-making process, without any explicit or implicit surplus-sharing policy, but possibly as a type of surplus-sharing. As for mixed benefits, pure discretionary benefits may or may not be financed through a dedicated reserve.

Questions to stakeholders:

Q24: Do stakeholders consider the above definitions workable? If not, please explain why not and how you would suggest to improve the definition(s).

4.3.2. General ideas on the influence of discretionary decision-making processes on valuation

4.62 The responses to the survey as referred to in paragraph 4.60 clearly show that the actual funding position of the IORP is an important determinant in the use of discretionary powers and therefore should be an important

¹⁸ The term 'surplus-sharing' is used here to reflect that these benefits can be provided if an IORP generates income above the amount of money needed for the increase of technical liabilities over time. This income could be a result of investment returns, actuarial gains and losses, et cetera. For some IORPs, these income streams would be considered as 'profits', but for other, non-profit, IORPs this would rather be considered as 'excess income'.

¹⁹ Note that such a specific, single-purpose reserve is not 'freely available' to the IORP and can therefore not be taken into account when calculating the funding position of the IORP.

determinant in the valuation of elements that include such discretionary powers:

- In case of favourable funding positions, the discretionary powers are used to 'spend money', for instance by granting pure discretionary benefits or by voluntarily repaying subordinated loans;
- In case of unfavourable funding positions, the discretionary powers are used to 'save money', for instance by restricting the granting of mixed benefits to below the (explicit or implicit) policy or by calling up ancillary own funds.

4.63 This pattern needs to be reflected in the valuation of the balance sheet items (including off-balance sheet items that can be used to cover the capital requirements) that contain discretionary decision-making processes. Further work is needed to identify whether the relation between elements and the funding position of the IORP (the pattern) can be properly quantified in order to take it into account in the valuation process for these elements.

4.64 Further work will also be needed to identify if this pattern is also valid for the use and valuation of ex post benefit reductions and benefit reductions in case of sponsor default.

Questions to stakeholders:

Q25: Do stakeholders have any general comments on the above section?

Q26: Would it be possible, in the views of stakeholders, to properly quantify the relation between the funding position of the IORP and elements of discretionary decision-making (the pattern) in order to take the pattern into account in the valuation process? If so, how?

4.3.3. Valuation of potential elements of the holistic balance sheet that include discretionary decision-making processes

4.65 The following section considers the valuation of the various elements containing discretionary decision-making processes. Where options are presented, they are 'stand-alone options', specifically for an individual element, without taking into account options that are developed for other elements.

Pure discretionary benefits and mixed benefits

4.66 The value of mixed benefits and pure discretionary benefits depends on a wide range of factors, which includes future IORP management actions and sponsor behaviour. It is difficult to identify a means of valuing these benefits that does not incorporate some degree of estimation, even when

(as may be the case for mixed benefits) the benefits are not only subject to a discretionary decision-making process, but also to a conditionality which would in itself be capable of being objectively modelled. The obstacles to obtaining a best estimate value include a level of complexity in the necessary modelling that may not be practical for most IORPs. Furthermore, it may be difficult to model how the discretionary powers of the IORP management / sponsor will be exercised under different future scenarios. For example, past experience may not be a reliable guide for future behaviour.

Pure discretionary benefits

- 4.67 Pure discretionary benefits are not subject to any conditionality and valuation therefore fully depends on the estimation of the future use of the discretionary decision-making process. Given the pattern that is visible in the use of discretionary decision-making processes, IORPs may find a correlation between their funding position and the granting of pure discretionary benefits. However, responses to the survey as referred to in paragraph 4.60 also show that pure discretionary benefits have rarely ever been granted between 2003 and 2008, when funding positions were much better than between 2008 and 2013.²⁰
- 4.68 In paragraph 5.56, EIOPA concludes that pure discretionary benefits should not be included on a pillar 1 balance sheet, for the purpose of setting capital requirements, considering that such benefits are not part of the pension promise and therefore do not need to be protected. In addition, EIOPA identified in paragraph 5.37 that pure discretionary benefits should be included in a pillar 2 / 3 balance sheet, for the purpose of risk management and transparency. As a result, valuation of pure discretionary benefits is only relevant in case of a pillar 2 / 3 balance sheet.
- 4.69 In EIOPA's view, pure discretionary benefits would have to be modelled if these were to be included on the holistic balance sheet. The benefit to be valued in the technical reserves will be a best estimate²¹ of the expected future payments (under different scenarios). This assumes that a more or less objective value for pure discretionary benefits can be calculated.

Questions to stakeholders:

Q27: Do stakeholders agree that IORPs need to produce a best estimate of

²⁰ See paragraph 3.14 of EIOPA, Mapping Exercise for Further Work on Solvency of IORPs, EIOPA-14/514, 13 October 2014.

²¹ The best estimate should be consistent with the underlying market consistent assumptions. The estimate will be made by the IORP itself, and should take account of any past policies and/or communications to members that would influence or determine the benefit. These estimates may be the subject of discussions between the IORP and the supervisor.

expected future payments (under different scenarios), if pure discretionary benefits were to be recognised in a holistic balance sheet? If not, what alternative would you suggest?

Mixed benefits

- 4.70 Mixed benefits are subject to a conditionality which, depending on the characteristics of the conditionality, may in itself be capable of being objectively modelled, and to a discretionary decision-making process. It may therefore be complex to find a best estimate value for mixed benefits, as this requires an assessment of future IORP management actions. Given the pattern that is visible in the use of discretionary decision-making processes, IORPs may find a correlation between their funding position and the use of discretionary powers when deciding on the granting of mixed benefits.
- 4.71 On the other hand, the responses to the survey as referred to in paragraph 4.60 also indicate that sometimes mixed benefits are very similar to pure discretionary benefits and sometimes they are very close to pure conditional benefits. A number of countries indicate that the discretionary power to deviate from the normal policy is used very regularly in mixed benefits, while other countries report that the discretion only applies to the timing and the beneficiaries of the mixed benefits. This may imply that the valuation of mixed benefits could be aligned with the valuation of pure discretionary benefits or pure conditional benefits²², dependent on the characteristics.
- 4.72 In EIOPA's view, mixed benefits would have to be modelled if these were to be included on a holistic balance sheet. The benefit to be valued in the technical reserves will be a best estimate²³ of the expected future payments (under different scenarios). This assumes that a more or less objective value for mixed benefits can be calculated. The valuation should take into account the future management actions of the IORP, given the discretionary decision-making process that is included in mixed benefits. Within this process, the potential correlation between the funding position of the IORP and the use of discretionary powers should be assessed.

Questions to stakeholders:

Q28: Do stakeholders agree that IORPs need to produce a best estimate of expected future payments (under different scenarios), if mixed benefits were to

²² Pure conditional benefits are not discussed in this section, as pure conditional benefits are not subject to discretionary decision-making processes.

²³ The best estimate should be consistent with the underlying market consistent assumptions. The estimate will be made by the IORP itself, and should take account of any past policies and/or communications to members that would influence or determine the benefit. These estimates may be the subject of discussions between the IORP and the supervisor.

be recognised in a holistic balance sheet? If not, what alternative would you suggest?

Non-legally enforceable sponsor support

- 4.73 The valuation of non-legally enforceable sponsor support²⁴ is probably dependent on the financial situation of the IORP (as well as on the financial situation of the sponsor). The responses to the survey as referred to in paragraph 4.60 seem to provide evidence for the intuition that non-legally enforceable sponsor support will be granted more often when the funding position of the IORP is lower (as compared to national prudential regulation). Even though this kind of sponsor support is provided on a voluntary basis, it still indicates that plan sponsors are relatively likely to provide additional funding if the IORP is in an unfavourable situation. This means that the value of non-legally enforceable sponsor support is very dependent on projections of future funding positions and a (proper) actual value can only be achieved by using adequate and realistic (as far as possible) future projections.
- 4.74 The fact that plan sponsors, even without a legal or contractual obligation, are relatively likely to provide additional funding in unfavourable situations is similar to legally enforceable sponsor support. In that sense, it must be noted that voluntarily provided support from a sponsor becomes legally enforceable once it has been agreed between IORP and sponsor, for instance in the context of a recovery plan.
- 4.75 A further resemblance²⁵ exists with off-balance capital instruments in that both instruments appear to be only used in practice in cases of funding deficits (note that the trigger point for a 'deficit' might be different between the two instruments).
- 4.76 In paragraph 5.45, EIOPA puts forward the option not to include non-legally enforceable sponsor support on the holistic balance sheet for the purpose of setting capital requirements. The rationale behind this option is that there is no legal or contractual obligation on the sponsor to provide support, even though sponsors may be relatively likely to provide additional funding in problematic situations. The discretionary power to provide sponsor support or not is completely outside of the IORP's influence. It is only the plan sponsor that decides.

²⁴ Sponsor support is not legally enforceable if there is no legal or contractual obligation on the plan sponsor to provide additional funding to cover a funding deficit.

²⁵ Note that there is an even stronger resemblance between legally enforceable sponsor support and off-balance sheet capital instruments, in that for both elements the counterparty of the IORP does not have a choice whether or not to comply with an IORP's request for additional funding.

4.77 In EIOPA's view, non-legally enforceable sponsor support would have to be modelled if it was to be included on a holistic balance sheet. The asset to be included on the balance sheet will be a best estimate²⁶ value of non-legally enforceable sponsor support. When calculating this value, the likelihood²⁷ of the sponsor providing additional resources in future scenarios must be taken into account. The challenge with modelling this is that the likelihood of any sponsor to provide the necessary additional funding is case-specific. Under this option, the IORP should be able to demonstrate the appropriateness of its modelling assumptions, subject to the approval from the supervisor. Elements that could play a role are the current financial strength of the plan sponsor, the level of cyclicity with economic scenarios of the plan sponsor's activities and the accounting consequences for the plan sponsor in case he would provide additional funding.

Questions to stakeholders:

Q29: Do stakeholders agree that IORPs need to produce a best estimate of expected future sponsor payments (under different scenarios), if non-legally enforceable sponsor support was to be included on the holistic balance sheet? If not, what alternative would you suggest?

Off-balance capital instruments

4.78 Off-balance capital instruments (e.g. ancillary own funds) are, as their name suggests, not placed on the balance sheet. EIOPA has identified two options for the valuation of off-balance capital instruments:

Option 1: The value of off-balance capital instruments is equal to the amount that the IORP could call up at the valuation date.

4.79 This option starts from the recognition that under current practices there does not seem to be a limitation as to the calling up of off-balance capital instruments. In theory, this means that all available off-balance capital instruments could be called up anytime. Note that this option may need adjustment in order to take into account the probability of default of the party providing the off-balance capital instrument.

²⁶ The best estimate should be consistent with the underlying market consistent assumptions. The estimate will be made by the IORP itself, and should take account of any past policies and/or communications to members that would influence or determine the benefit. These estimates may be the subject of discussions between the IORP and the supervisor.

²⁷ The likelihood should include both the willingness and the ability of the sponsor to provide support.

Option 2: The value of off-balance capital instruments is equal to the current value of the amount that would be called up from these instruments in underfunding scenarios.

4.80 This options starts from the recognition that the practical use of off-balance capital instruments is restricted to situations in which losses need to be absorbed. Under this option, a 'cash-flow' needs to be calculated for underfunding situations in future scenarios for which off-balance capital instruments would likely be called up. Each of these cash-flows should be checked against the availability of such instruments at that point in time. The probability-weighted current value of all these cash-flows represents the 'value' that can be used to cover the SCR.

Questions to stakeholders:

Q30: Do stakeholders agree that these are the two options for valuing off-balance capital instruments? If not, what alternative options would you suggest?

Q31: Which option do you support? Please explain why you support this option.

Surplus funds

4.81 Specifically for surplus funds, valuation seems to be unproblematic. Surplus funds are part of the own funds of an IORP and could be valued by their nominal value. As they can be called up (and with 'used' probably describing the situation better) anytime, surplus funds will always have their full value and can always be used to cover capital requirements. The fact that supervisory approval may be necessary in some jurisdictions does not influence this treatment.

Questions to stakeholders:

Q32: Do stakeholders agree that surplus funds should be valued for their nominal value? If not, how would you suggest to value surplus funds?

Subordinated loans

4.82 The responses to the survey as referred to in paragraph 4.60 suggest that there is a direct connection between the funding position of the IORP and the potential for repaying a perpetual subordinated loan or for repaying a subordinated loan with an agreed repayment date at a date other than the agreed repayment date. Subordinated loans are typically only repaid earlier than contractually agreed if they are not needed anymore to cover the liabilities and the capital requirements. Besides, it may also be possible to extend an agreed repayment date if the funding position is such that the IORP still needs the (money from the) loan.

4.83 This raises the question if and how the possibility to repay subordinated loans earlier than contractually agreed should have an effect on the valuation of the subordinated loan itself. Under market-consistent valuation, the value of the subordinated loan is directly dependent on the repayment date, as that date identifies the return cash flow of the loan and thus its maturity. It would therefore seem logical to take into account a realistic expectation of a repayment date of the loan amount being changed or introduced. However, as deviating from a contractually agreed repayment date is a voluntary action of the IORP / pension fund management company, it is uncertain whether or not it is possible in practice to identify such a realistic expectation.

4.84 EIOPA has identified three options for the valuation of subordinated loans:

Option 1: Value the repayment obligation of a subordinated loan as if there was no possibility for the IORP to repay a perpetual subordinated loan or to repay a subordinated loan with an agreed repayment date at a date other than the agreed repayment date.

4.85 This option leads to the value of perpetual subordinated loans being limited²⁸ to the current value of the interest payments, if any, that the IORP has to pay to the issuer of the loan. For subordinated loans with an agreed repayment date, future cash-flows are taken into account as agreed under the loan contract, including both interest payments and the nominal loan amount.

Option 2: Full stochastic calculation of all potential payments under a subordinated loan contract.

4.86 This option assumes that it is possible to calculate a real(istic) value for all the payments connected to a subordinated loan, which includes the repayment of the nominal loan amount and the interest payments to the issuer. The real value would have to be determined on the basis of probability-weighted values of the future cash-flows, similar to the calculation of technical provisions.

Option 3: Identify a realistic repayment date for a subordinated loan, subject to the approval from the supervisor.

4.87 This option recognises that subordinated loans are typically repaid if they are not needed anymore to cover the liabilities and the capital requirements. The IORP should (deterministically) identify the moment in time at which it currently expects to be able to repay the subordinated

²⁸ As there is no agreed repayment date for perpetual subordinated loans, the loan repayment in itself does not constitute a value for them. Hence the limitation to the current value of the interest payments. Note that in some countries, perpetual subordinated loans are commonly non-interest bearing. In such cases, Option 1 leads to a value of the entire perpetual subordinated loan of 0.

loan. This expected moment could be before, equal to or after a contractually agreed repayment date, dependent on the funding position of the IORP at the valuation date. The value of the subordinated loan is then equal to the sum of the current value of the repayment of the loan amount at the expected moment and the current value of the interest payments, if any, that the IORP would have to pay to the issuer of the loan until the expected moment of repayment. The supervisor should agree that the IORP's expectations are not unreasonable.

Questions to stakeholders:

Q33: Do stakeholders agree that these are the three options for valuing subordinated loans? If not, what alternative options would you suggest?

Q34: Which option do you support? Please explain why you support this option.

4.4. Benefit reduction mechanisms

4.88 For the purposes of this consultation paper, benefit reduction mechanisms have been classified into three types, which have been adapted from EIOPA's Advice to the European Commission on the review of the IORP Directive, and are defined as follows:

- An **ex-ante benefit reduction mechanism** is a mechanism based on a contract/bylaws, concluded beforehand and which describes precisely under which conditions and to which extent reductions will take place;^{29,30}
- An **ex-post benefit reduction** is a measure of last resort (i.e. to be used when no other means are available), which may be allowed by national law and regulation;³¹
- A **benefit reduction in the event of sponsor default**/sponsor insolvency allows for the possibility to reduce pension benefits in the event of a default of the sponsor, in particular in cases when it provides unlimited support and/or when there are not enough assets to cover liabilities. The benefit reduction could occur as part of a transfer to a pension protection scheme or another institution, or as part of a recovery plan of the IORP, if the IORP continues to exist after the default of the sponsor.

²⁹ HBS 4.27 of European Commission, Quantitative Impact Study (QIS) on Institutions for Occupational Retirement Provision (IORPs) – Technical Specifications, Ares(2012)1182662, 8 October 2012.

³⁰ Section 10.6 (page 282) of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February.

³¹ HBS 4.51 of European Commission, Quantitative Impact Study (QIS) on Institutions for Occupational Retirement Provision (IORPs) – Technical Specifications, Ares(2012)1182662, 8 October 2012.

4.89 Two approaches are envisaged here for the valuation of benefit reduction mechanisms: a 'balancing' approach, which could be justified under certain circumstances, and a direct approach, based on a modelling of future cash-flows.

4.4.1. Balancing item approach

4.90 As mentioned in section 4.1.2, benefit reduction mechanisms may be valued using the balancing item approach if the holistic balance sheet includes an allowance for those mechanisms. However, this approach can only be used in case there are no limits to the amount of the reductions under a certain mechanism, as any limitation would mean that there could be instances in which the element would not be able to 'balance the holistic balance sheet'.

4.91 By their nature, benefit reduction mechanisms will be the last mechanisms taken into account. Only where all mechanisms meant to strengthen the promise are fully taken into account will benefit reductions be considered. Furthermore, an IORP will only recognise one type of benefit reductions. Therefore, if an unlimited benefit reduction mechanism is recognised on the holistic balance sheet, it can be valued using the balancing item approach, while other elements of the holistic balance sheet will have to be valued using other valuation methods.

4.4.2. Direct approach

4.92 The direct approach to the calculation of the amount of benefit reduction mechanisms, where they are to be included, is as follows:

- The general valuation objective is that the adjustment to technical provisions made in respect of benefit reductions be consistent with the overall valuation methodology of the holistic balance sheet, involving the valuation of expected future cash-flows on a market consistent basis.
- Where the occurrence and amount of benefit reductions are reasonably predictable, it would be possible to assign probabilities to different amounts of reductions and thereby to put a total value on the effect of the adjustments.
- However, the information collected by EIOPA³² shows that in practice, benefit reductions are relatively uncommon, even for ex-ante benefit reduction mechanisms, and it is therefore likely that in many cases, a simplified approach will be necessary as there will not be sufficient data on which to base a more exact modelling.
- The objective of a simplification is that the benefit reduction to be

³² See section 4 of EIOPA, Mapping Exercise for Further Work on Solvency of IORPs, EIOPA-14/514, 13 October 2014.

valued in the technical provisions will be a best estimate of the average future annual reduction, consistent with the underlying market consistent assumptions. This estimate should take account of any past policies and/or communications to members that would influence or determine the benefit.

- Depending on the use that is made of the holistic balance sheet, the benefit reductions would be allowed for on the holistic balance sheet by means of a separately identifiable deduction from the amount of technical provisions.
- The SCR calculation will be based on the amount of the technical provisions reduced by the allowance for benefit reductions.

Questions to stakeholders:

Q35: Do stakeholders agree with these two approaches to valuing benefit reduction mechanisms? If not, what alternatives or amendments would you suggest?

4.5. Legally enforceable sponsor support

4.5.1. Introduction

4.93 As set out in EIOPA's advice on the review of the IORP Directive, four forms of sponsor support can be distinguished:

- A – Increases in contributions
- B – Subsidiary liability of the sponsor
- C – Contingent assets of the sponsor
- D – Claims on the sponsor

For reasons of simplicity the wording in the text below often takes into account form A only, but is meant to capture forms B, C and D as well.

4.94 Sponsor support is legally enforceable if the sponsor is legally obliged to provide additional funding to the IORP and/or the members and beneficiaries and the IORP and/or members and beneficiaries can 'force' the sponsor to fulfil its obligations in that respect. This obligation could be laid down in national social and labour law or in a contractual agreement between IORP and plan sponsor or between plan sponsor and members and beneficiaries.

4.95 If there is no legal obligation to provide sponsor support, the support is non-legally enforceable. This chapter deals with legally enforceable sponsor support only, as non-legally enforceable sponsor support is dealt with in section 4.3 on discretionary decision-making processes. Therefore,

where this section refers to 'sponsor support', this should be read as referring only to legally enforceable sponsor support.

Background

- 4.96 One of the most significant aspects of the QIS results for some member states is the value placed on sponsor support.
- 4.97 As noted by stakeholders and IORPs in both the public consultation on the QIS technical specifications and during the QIS itself, valuing sponsor support is subject to considerable practical difficulties and issues were raised with several aspects of the methodology and simplifications used for the QIS. This included the concept of placing a single market consistent value on sponsor support as many stakeholders felt that there are too many complexities in understanding sponsor support to do this in a formulaic way.
- 4.98 Also, it was argued that calculating the maximum amount of sponsor support was difficult to implement for some IORPs. Although the formulae and assumptions to be used were set out in the QIS, some IORPs were unable to obtain the data on the sponsors needed for the calculation.
- 4.99 In addition, issues were raised with some of the assumptions used with stakeholders feeling that some of them were arbitrary or the same as those used for insurance in Solvency II, which were argued to be not relevant in the context of an IORP. In particular, issues were raised regarding the assumption relating to the credit risk for unrated sponsors.
- 4.100 There was particular concern over how sponsor support was to be estimated in more complex IORP and sponsor structures, such as multi-employer IORPs or where a single sponsor had several IORPs.
- 4.101 As the sponsor support values are highly sensitive to these and other inputs, EIOPA committed to undertake further work on the technical specifications which "will include revised proposals for, and public consultation on, an improved methodology for the calculation of sponsor support, [..]."³³ Alongside the QIS final report, EIOPA published a discussion paper in July 2013 on how the general valuation principles for sponsor support in the QIS technical specifications might be improved and to consider an alternative, simplified approach for calculating sponsor support in a proportionate manner for small and medium sized IORPs.
- 4.102 EIOPA received 46 responses to the discussion paper from across Europe. These responses provided further useful comments and views from stakeholders.

³³ See paragraph I.5.25 of EIOPA, Draft Technical Specifications – QIS of EIOPA's Advice on the Review of the IORP Directive, EIOPA-BOS-12/085.

4.103 In the discussion paper, EIOPA committed to carrying out further qualitative and quantitative analysis on the proposed simplification and the other methods previously used to assess the possible impacts on QIS results, to consider the advantages and disadvantages of the various approaches, and to gain knowledge about the conditions of applicability and reliability of each approach. This section also sets out the results of this further work.

Recap of sponsor support

4.104 Some IORPs in some of those member states, which rely on sponsor support as a security mechanism, are underfunded on existing funding measures. This has resulted in sponsors having to pay or promising to pay additional contributions to the IORP as a recovery plan (or part of such a plan) to bring assets up to a level required under the current national standard. In most countries, recovery plan contributions are calculated using deterministic models so that the present value of the contributions equals the level of underfunding. However, there are variations in practice between methodologies used within member states (note that the variations presented here may occur simultaneously):

- some allow, or require, deficit contributions to be calculated using stochastic models especially where there is an option to reduce benefits or the current funding target is determined using stochastic models;
- some allow benefits to be reduced if the level of contributions calculated using deterministic models is unaffordable or the sponsor is unwilling to increase contributions to the required level without a reduction in the benefits; and
- some allow future expected investment returns in excess of the discount rate used to calculate technical provisions to be taken into account when determining the recovery plan.

4.105 Recovery plan lengths are sometimes fixed under national legislation, or agreed on a case by case basis by individual IORPs or national supervisory authorities. In some cases national supervisory authorities allow for overall sponsor strength (i.e. the extent to which recovery plan contributions are affordable by the sponsor in the short term) and availability of contingent assets (e.g. charges over assets, parent company guarantees, escrow accounts) to be taken into account in the calculation of required deficit contributions, whereby these contributions may be reduced and increased reliance placed on investment performance or longer recovery periods if additional security is being provided.

4.106 The QIS technical specifications state that for the purposes of the holistic balance sheet, sponsor support (in addition to the planned regular and recovery plan contributions) should be valued on a market-consistent basis:

“The value of sponsor support should be calculated as the probability weighted average of the discounted value of future cash-flows, that would be required to be paid by the sponsor to the IORP in excess of its regular contributions, in order to ensure assets in the IORP meet a required level.”³⁴

- 4.107 With this market consistent approach for assessing the value of sponsor support, the expected values of cash flows from the sponsor need to take account of the ability of the sponsor to make the payments, as well as the level of contributions and the period over which they are paid.
- 4.108 In other words, sponsor support for the QIS would be the present value of future contributions needed to bring assets up to the required level, allowing for the affordability position of the sponsor, with a credit risk adjustment to allow for the possibility that they will not be paid if the sponsor defaults. For some IORPs, an important difference in the QIS approach from existing methods is the explicit allowance for sponsor support and including default risk within that assessment, in such a formulaic way.
- 4.109 This chapter contains the results of EIOPA’s further qualitative and quantitative analysis on the approaches and different options to valuing sponsor support. Consideration has been given to the advantages and disadvantages of these approaches, taking into account the feedback given by stakeholders.

Overview of principal approach to valuing sponsor support

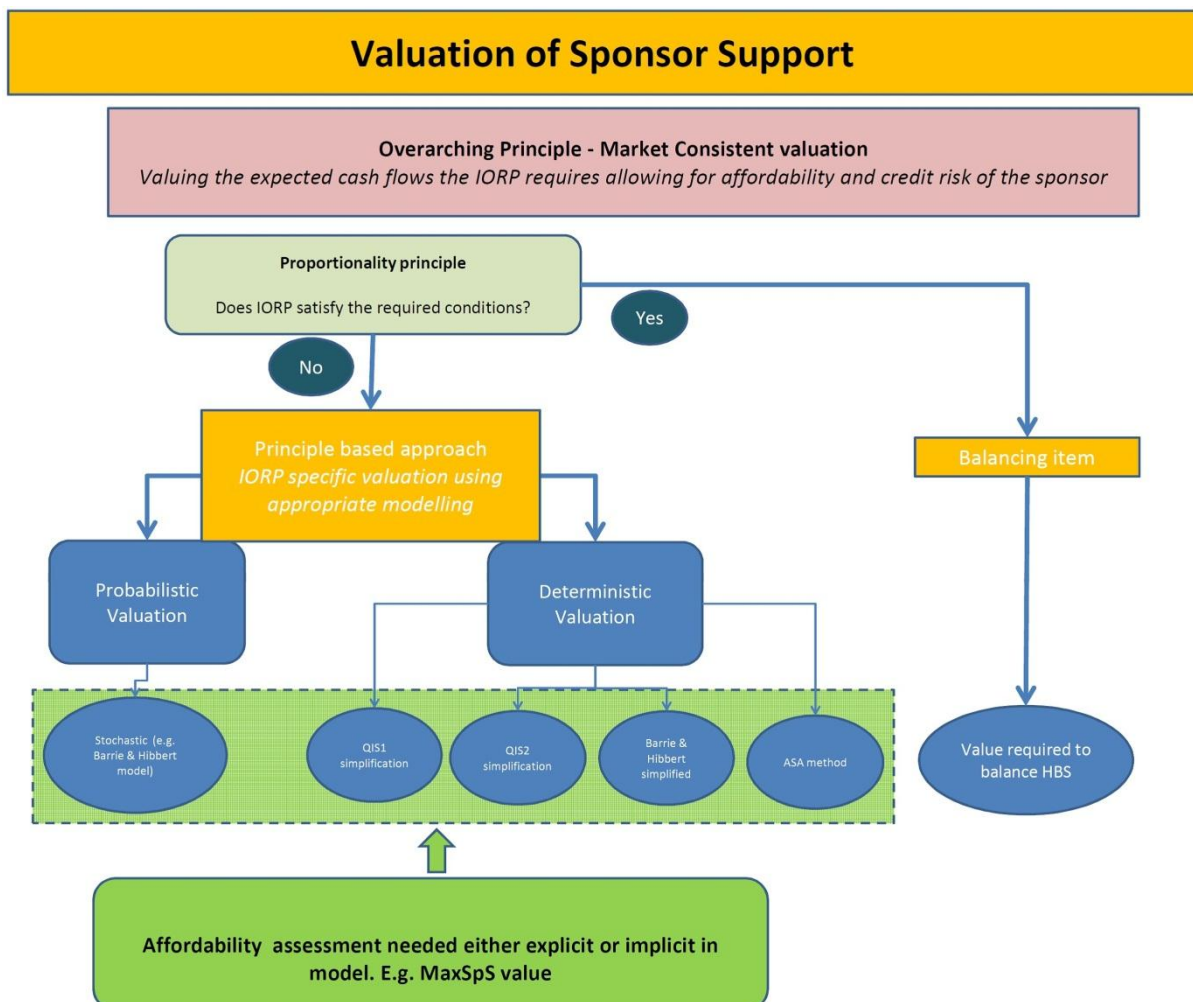
- 4.110 In light of the comments provided by stakeholders during the consultation on the sponsor support discussion paper, EIOPA recognises that it may not be possible to devise a one-size-fits-all methodology to the valuation of sponsor support. The position of sponsors can vary significantly and the appropriate approach for one type of sponsor may not be appropriate for another. For example, understanding the affordability position of a commercial sponsor will require very different analysis to that of a sponsor in the not-for-profit sector. Additionally, where sponsor support may be used in tandem with other security mechanisms, this may add significant complexity to the calculation of the expected cash flows in future scenarios.
- 4.111 EIOPA therefore supports an EU wide principle based approach to the valuation of sponsor support. The overarching principle being put forward is that contained in EIOPA’s advice that the valuation of sponsor support should be market consistent. The specifics of the calculation should then

³⁴ See HBS.6.10 of European Commission, Quantitative Impact Study (QIS) on Institutions for Occupational Retirement Provision (IORPs) – Technical Specifications, Ares(2012)1182662, 8 October 2012.

be left to member states/national supervisory authorities and/or IORPs to implement as appropriate specific to their own circumstances.

4.112 EIOPA is also recommending that there be a 'proportionality principle' whereby IORPs with certain characteristics are not required to perform detailed calculations in order to see whether the holistic balance sheet balances. In these cases, sponsor support is then classed as the 'balancing item' for the holistic balance sheet. Where an IORP does not satisfy the criteria for this proportionality principle, it would need to carry out a 'market consistent calculation of sponsor support'. This would be done by following a 'Modelling Approach' that best suits their circumstances in order to calculate the value of sponsor support.

4.113 The diagram below aims to illustrate this broad approach. The individual items are discussed in more detail later in this section.



Questions to stakeholders:

Q36: Do stakeholders agree that at the EU level, there should only be a principle based approach to valuing sponsor support with the specifics being left to member states/supervisors and/or IORPs?

Q37: Do stakeholders agree with the overarching principle that the valuation of sponsor support should be market consistent? If not, what principle(s) would you suggest?

Q38: Do stakeholders agree that in order to achieve this market-consistent valuation, the expected cash flows required by the IORP should be valued allowing for affordability and credit risk of the sponsor? If not, what approach(es) would you suggest?

4.5.2. Conditions of applicability for use of the balancing item approach – Principle of proportionality

4.114 In some circumstances the strength of the sponsor may be sufficient so that a detailed approach to valuing that unlimited sponsor support may be disproportionate. In addition, the set up and legal structure of IORPs may mean that the valuation is unnecessary and does not provide useful information to the IORP and/or supervisor. In these circumstances, IORPs could follow the balancing item approach such that the value of sponsor support is simply the required amount to balance the holistic balance sheet. EIOPA suggests some principles of proportionality here that could be the necessary conditions for IORPs to satisfy before taking this approach.

- Sponsor support as the balancing item depending on the default rate of the sponsor;
- Sponsor support as the balancing item depending on the strength of the sponsor;
- Sponsor support as the balancing item where a pension protection scheme exists and the pension protection scheme is modelled to impact on the default risk of the sponsor.

Principle 1 - Sponsor support as a balancing item depending on the default rate of the sponsor

4.115 All sponsors are subject to some degree of default risk. This means that in theory there will always be a gap between the sum of financial assets and the value of sponsor support on the one hand and liabilities on the other hand, if the value of sponsor support is, in effect, the deemed level of underfunding relative to other assets with a haircut for the credit risk. This outcome depends on the method used to value sponsor support. Some simplifications merely apply a haircut to the deficit and so by default the

holistic balance sheet cannot balance. Others, using stochastic methods tend to balance for strong sponsors.

4.116 Moreover, the IORP would also have to comply with an SCR, since the sponsoring undertaking cannot provide loss-absorbency for its own default. Even IORPs with the highest rated sponsor, with a default risk of say, 0.002%, would be subject to an SCR of 1.3% (before diversification) of the loss given default (see Table 4.1 below).

Table 4.1: SCR for counterparty default risk in case of single sponsor ^a		
	Probability of default	SCR in % of LGD ^b
AAA	0.002%	1.3%
AA	0.01%	3.0%
A	0.05%	6.7%
BBB	0.24%	14.7%
BB	1.20%	54.4%
B	4.175%	100%
CCC or lower	4.175%	100%
^a European Commission, QIS on IORPs – Technical Specifications, 8 October 2012		
^b Loss-given-default is assumed to equal 95% of value sponsor support		

4.117 It is therefore unclear how such a holistic balance sheet which never balances would be used in practice by IORPs and supervisors and whether applying a haircut in this manner is an appropriate and useful approach.

4.118 Depending on the strength of the sponsor, it may have enough assets to safeguard pension obligations with a given level of confidence over a one-year horizon. For example, there is a 99.998% probability that an AAA-rated sponsoring undertaking still exists after one year to provide unlimited support, much higher than the one-year 99.5% confidence level that is used in Solvency II.

4.119 In the context of the Call for Advice, it was suggested that unlimited sponsor support be treated in a manner similar to re-insurance contracts under Solvency II. However, there is an important difference between re-insurance contracts of insurance undertakings and unlimited sponsor support provided to IORPs. The value of unlimited sponsor support – if symmetric – is dependent on the level of funding of the IORP. The sponsor has recourse to any funds held by the IORP and, hence, the higher the level of funding of the IORP, the lower the value of sponsor support (all other things being equal). This implies that the IORP can never hold sufficient own funds to cover for the default risk of the sponsor unless the SCR is fully covered with financial assets.

4.120 In the (special) case that the sponsor has to pay for any shortfalls, but is not entitled to possible surpluses, the IORP will be able to meet the SCR without fully covering it with financial assets. Of course, the same is true if sponsor support is covered by a pension protection scheme that

guarantees the necessary level of benefits promised (and which has an (assumed) long-term default probability of zero).

4.121 The value of unlimited sponsor support will be treated as a balancing item on the holistic balance sheet with full loss-absorbency in the SCR calculation, if the one-year survival rate of the sponsor (or the equivalent in the case of multi-employer IORPs) exceeds the confidence level of the supervisory framework. For example, if the sponsor:

- is rated (or, based on a methodology set out by EIOPA, is deemed rated) equal or above investment grade (>BBB) (default rate 0.24%) under a confidence level of 99.5%;
- is rated (or, based on a methodology set out by EIOPA, is deemed rated) equal or above BB (default rate 1.2%) under a confidence level of 97.5%;
- has any credit rating under a confidence level of 95% (default rate 4.175%).

4.122 In addition, the IORP should be able to demonstrate that the sponsor has sufficient financial strength to cover the resulting value of sponsor support on the holistic balance sheet and the stressed balance sheet for the SCR calculation.

4.123 A disadvantage of this methodology is that it introduces potential cliff effects in the supervisory framework. At one moment in time, the IORP may meet the sponsor default rate threshold and cover the SCR with sponsor support. However, at some stage the sponsor's default rate may deteriorate below the threshold. This means that the IORP would all of a sudden have to cover the technical provisions and SCR with financial assets, as sponsor support will not be able to fill the gap. The impact of such an event may be significantly correlated with financial market developments, which means that the value of investments may deteriorate simultaneously.

4.124 To reduce the incidence of such cliff effects, IORPs could, in addition to the requirements set out, also be required to show that the default rate of the sponsor is likely to be stable over time. This may, for example, be the case if the IORP is covered by multiple employers that cover a significant part of a strong national economy or the sponsor may be operating in an industry that is not very susceptible to cyclical movements.

Advantages:

- Ensures the same level of protection, irrespective of whether liabilities are covered by financial assets or sponsor support;
- Relative simplicity of the method;
- Also covers calculation of SCR;

- In cases where the assessed value of the sponsor is sufficient, the cost and complexity related to producing a value of sponsor support for the holistic balance sheet would be quite low;
- In other cases, there would be a standard holistic balance sheet approach to the assessment of the value of sponsor support.

Disadvantages:

- Introduces potential cliff effects, depending on implementation;
- Default rate of the sponsor required;
- The value of sponsor support would not in all cases be determined in the standard holistic balance sheet way;
- The valuation would not take account of the possibility that the financial situation of the sponsor could deteriorate over the lifetime of the pension obligations;
- Does not in general lead to a market-consistent valuation of sponsor support.

Principle 2 - Sponsor support as a balancing item depending on the strength of the sponsor

4.125 The strength of the sponsor could be considered with an approach similar to that provided by PwC research³⁵.

4.126 As a first step it could be assessed whether the value of the sponsor (or the equivalent in the case of multi-employer IORPs) is larger than a certain multiple (M) of the value (of sponsor support) required to balance the holistic balance sheet. For this purpose, the “value required to balance the holistic balance sheet” should be taken equal to liabilities + SCR’ – financial assets, where SCR’ is calculated gross of the loss-absorbing capacity of sponsor support.

4.127 The “value of the sponsor” could, for this purpose be determined by using the method set out for maximum sponsor support (see paragraphs 4.191 – 4.203), i.e. discounted value of the sponsor’s future cash flows, or more simply it could be set as equal to shareholder funds or to market capitalization or some variation of that based on financial metrics suitable for the sponsor and IORP. In other cases (where no income/wealth information is available, which may be the case for example in multi-employer IORPs), total wages may be used as a potential measure of the sponsor’s capacity to provide support, although more work is necessary to determine what a suitable metric would be for that purpose. The value of

³⁵ PwC research, in Institute and Faculty of Actuaries, Options for assessing employer covenant and the holistic balance sheet, Research Report, January 2013, Edinburgh/London.

the sponsor would be determined here in a market-consistent way, or at least using market data.

- 4.128 A combination of the above methods, by using an average or a minimal value, would also be possible if it was considered that a single method was unreliable.
- 4.129 The value of the sponsor would have to be reassessed periodically, as would be the case for the holistic balance sheet as a whole.
- 4.130 The multiple M to be used would be included in the rules underlying the supervisory framework. Its value could be determined based on an analysis of the volatility of the "value of the sponsor", determined according to the above methods. In PwC's paper, a value of M was suggested as being x2. In order to ensure that the valuation under this method is also suitable for SCR scenarios, an assessment of the value of sponsor support on the stressed holistic balance sheet would be required.
- 4.131 If the value of the sponsor is larger than M times the value required to balance the holistic balance sheet, no further steps would be necessary and sponsor support could be included in the holistic balance sheet as a balancing item.
- 4.132 IORPs could also be required to show that the 'value of the sponsor' is likely to be stable over time. This may, for example, be the case if the IORP is covered by multiple employers that cover a significant part of the national economy.
- 4.133 As a second step, if the value of the sponsor is not larger than M times the value of sponsor support included in the holistic balance sheet, the IORP would have to complete the holistic balance sheet by calculating the value of sponsor support using the standard methods, which would include calculating the impact on the SCR.

Advantages:

- In cases where the assessed value of the sponsor is larger than M times the value of sponsor support included in the holistic balance sheet, including taking the SCR into account, the cost and complexity related to producing a value of sponsor support for the holistic balance sheet would be quite low;
- In other cases, there would be a standard holistic balance sheet approach to the assessment of the value of sponsor support.

Disadvantages:

- The value of sponsor support would not in all cases be determined in the standard holistic balance sheet way;
- The valuation would not take account of the possibility that the financial situation of the sponsor could deteriorate over the lifetime of the

pension obligations;

- Does not in general lead to a market-consistent valuation of sponsor support.

Questions to stakeholders:

Q39: What is the general view of stakeholders with regard to sponsor support as a balancing item?

Q40: Which conditions should apply for sponsor support to be treated as a balancing item?

Q41: Are there other cases beyond the cases mentioned above in which sponsor support could be treated as a balancing item?

Q42: Do stakeholders have a view as to what value of M would be appropriate?

Principle 3- Sponsor support as a balancing item in case of the existence of a pension protection scheme

4.134 The final QIS report stated “that the security provided by a pension protection scheme gives a good reason for the assumption that pension protection schemes can balance the holistic balance sheet and have a corresponding loss absorbing capacity in the calculation of the SCR”.

4.135 If a pension protection scheme guarantees 100% of benefits (or where the pension protection scheme guarantees <100% but the reduction in benefits is accounted for on the holistic balance sheet) and has negligible default risk, the benefits promised to members and beneficiaries will always be paid with a sufficient level of security.

4.136 Therefore, in such cases sponsor support could be seen to act as the balancing item for the holistic balance sheet and no further assessment of the strength of individual sponsors would be necessary for the purpose of balancing the holistic balance sheet.

4.137 All this would be without prejudice to the possibility of including pension protection schemes as a separate asset on the holistic balance sheet as discussed in section 4.6.

4.138 The QIS report mentioned that the assumption that the pension protection scheme has a zero default risk “should be carefully monitored, and could eventually be amended depending on the outcome of a more thorough quantitative assessment of the financial strength of pension protection schemes, or if the rules governing a pension protection scheme or other circumstances changed, impacting the creditworthiness of the pension protection scheme.”

4.139 Some criteria with regard to judging the security of the pension protection scheme arrangement could include the certainty and permanence of the

legal arrangement and the financial strength of the pension protection scheme.

- Certainty and permanence of the legal arrangement of the pension protection scheme: The legal arrangement could be considered certain, if it is based on national law and if the protection provided by the pension protection scheme is legally enforceable. The payment of contributions/levies to the pension protection scheme should be legally enforceable by the pension protection scheme, with no possibility of those required to pay those contributions/levies to “opt out” of the protection provided by the pension protection scheme and the obligation to pay contributions/levies. If the legal arrangement is based on national law then it should also be considered sufficiently permanent, because national law cannot be changed by the parties involved in the arrangement, but only by the appropriate national body (usually parliament), which will consider possible effects on members and beneficiaries, IORPs, and sponsors;
- Financial strength of the pension protection scheme: A pension protection scheme should be considered financially strong, if the pension protection scheme can enforce the payment of levies/contributions and if the financial strength of the sponsors obliged to pay those levies/contributions is considered high (e.g. because those sponsors represent a large part of a national economy, which is considered itself as strong). In practice, a supervisor would be better able to judge this than individual IORPs.

4.140 If those criteria are fulfilled, pension protection schemes could be considered sufficiently strong to allow sponsor support to be the balancing item on the holistic balance sheet.

Advantages:

- Avoids unnecessary demands on IORPs where the members’ benefits can reasonably be assumed to be fully protected;
- The test of the appropriateness of the value of sponsor support would be even further simplified. This is in particular the case for multi-employer or industry-wide IORPs, where not having to assess large numbers of sponsors is a particularly strong reduction of cost and complexity.

Disadvantages:

- Implies a full reliance on the strength of the pension protection scheme. Minimum funding requirements would still be necessary to avoid IORPs relying fully on the pension protection scheme.

Questions to stakeholders:

Q43: Do stakeholders think a pension protection scheme could in principle be considered as impacting on sponsor support to allow it to be a balancing item if it is considered financially strong and based on a sufficiently permanent and certain legal arrangement?

Q44: Should considering a pension protection scheme as a balancing item be restricted to cases where a pension protection scheme protects 100% of benefits or is it appropriate to allow for the reduction in benefits in case of sponsor default where there is a pension protection scheme in place?

Q45: Do stakeholders believe that it is appropriate that where a pension protection scheme is used as the balancing item, a separate minimum level of funding with financial assets and/or sponsor support should be required?

4.5.3. Principle based approach (IORP specific valuation)

- 4.141 This approach involves the valuation of sponsor support subject to general principles set at the EU level tailored to the specific sponsor and IORP and relevant to the individual member state circumstances.
- 4.142 This approach may use elements of various modelling techniques relevant to the IORP's specific circumstances and overlaid with expert judgment relating to the specific circumstance of the sponsor, to allow IORPs and supervisors to value sponsor support for inclusion in the holistic balance sheet or to come to a view on the ability of the sponsor to provide for the assessed requirements of the IORP.
- 4.143 Under this approach, IORPs would be provided with general principles, and possibly guidance from national supervisory authorities, to conduct the calculation of sponsor support, such as the calibration of the asset-price model to generate future economic scenarios, sponsor payments to be included in cash-flows, assumptions for sponsor default risk and sponsor affordability, assumptions on sponsor behaviour and the use of expert judgment. This approach could be accompanied by national supervisory authorities having the mandate to require measures from the IORP, if the modelling assumptions would not be considered appropriate. The test could consider various circumstances and data, and the required measures could depend on those.
- 4.144 EIOPA has highlighted two broad modelling approaches to valuing sponsor support under this principle based approach: probabilistic and deterministic. The QIS exercise asked IORPs to use stochastic modelling, but also allowed for simplified methods (often including deterministic modelling) where these methods were suitable for the IORP's circumstances.

- 4.145 EIOPA is aware of the fact that it may be difficult to compare two different IORPs which have applied two different modelling methods and it would be important to ensure the methods were calibrated to produce comparable outcomes, in line with comments received by some of the IORPs that used stochastic valuation methods in the QIS. When developing simplified methods or methods using deterministic approaches, EIOPA will consider carefully how to ensure that these methods and stochastic models produce comparable outcomes.
- 4.146 Probabilistic approach - The most complex probabilistic approach is stochastic modelling, which uses inputs that are market consistent and have the capacity to capture complex variables such as the flexibility to reduce benefits alongside allowing for other security mechanisms. A probabilistic approach may be particularly suitable for larger IORPs, for those who already use stochastic-based asset liability modelling and for those who have the resources and size to make such an approach cost effective.
- 4.147 EIOPA recognises that the probabilistic approach is complex and requires data inputs that may not always be available to IORPs. This may limit its suitability and reliability, especially for smaller and medium-sized IORPs who may prefer to use a deterministic/simplified approach. Because of the complexity of the model, use of a stochastic model may also require more use of judgement to ensure the modelling parameters are appropriate, the output is sensible (e.g. resulting contributions are affordable) and that the results are understandable and useful.
- 4.148 Deterministic approach - This approach uses deterministic models to generate sponsor support values. Such models can make use of credit analysis, based on income and balance sheet related credit ratios or other financial (or other) factors, to derive credit risk grades or internal ratings³⁶. These internal ratings can then be linked to a probability of default and time period over which the deficit can be reasonably repaired as well as the level of recovery plan contributions needed to meet any deficits, leading to an estimate of the sponsor support which allows for the credit risk.
- 4.149 This particular approach uses publicly available accounting information which is generally easy to access, which may make it more suitable for smaller and medium-sized IORPs. This approach is used already by some IORPs (in countries where sponsor support is an important consideration) to assess the risk of the sponsor not being able to provide support to the IORP, particularly where the sponsor is weak and/or the deficit is large.

³⁶ The probabilities of default derived from such credit analysis can be also be used in the context of stochastic approaches.

4.150 While the output from such models can often be easier to understand, EIOPA recognises that a deterministic approach may not capture complex variables and interactions and may therefore not be suitable for all IORPs.

4.151 EIOPA recognises that any approach will need to be implemented in a proportionate manner for IORPs of different characteristics.

Determining sponsor affordability - maximum sponsor support

4.152 In order to ensure that modelled contributions from sponsors are affordable in practice, the concept of maximum sponsor support was developed by EIOPA to allow for consideration of the ability, and the possible inability or limitation, of the sponsor to be able to meet any required deficit financing of the IORP which is the basis for the valuation of sponsor support. This is an important element in the valuation of sponsor support, necessary to ensure that any modelled contributions or support required from the sponsor may be realistically possible and to adjust the value of sponsor support if not the case.

4.153 This issue is likely to be very sponsor specific since the nature of the sponsor will vary from IORP to IORP. Some stakeholders felt that it would be useful for EIOPA to undertake further research in this area and this issue is discussed in more detail later in this chapter.

4.5.4. Valuation methods for determining sponsor support

4.154 As described above, EIOPA envisages a system for the valuation of sponsor support that consists of two general approaches (see diagram in section 4.5.1 below paragraph 4.113):

- 1) IORPs that meet the conditions of applicability for the proportionality principle, as described in section 4.5.2, may treat it as a balancing item on the holistic balance sheet.
- 2) IORPs that do not meet these conditions will have to apply a principle based approach to calculating the value of sponsor support:
 - Through an IORP specific valuation consistent with the general valuation principles provided by EIOPA; or
 - By use of a simplification if it is appropriate to the specific circumstances.

4.155 In the July 2013 discussion paper on sponsor support, EIOPA recognised the need to apply the QIS technical specifications in a proportionate manner in order to allow small and medium-sized IORPs to carry out the necessary calculations for the holistic balance sheet approach. The QIS technical specifications included two possible simplifications and provided calculation spreadsheets in which participants could input data relevant to their IORPs for each simplification.

4.156 IORPs participating in the QIS reported that the QIS sponsor support calculations were often very complex and costly to perform, especially for smaller IORPs. For this reason, EIOPA undertook to develop further simplifications to enhance the participation of smaller IORPs in any future QIS. The July 2013 paper suggested another, simpler approach, the 'alternative simplified approach'. In this paper, EIOPA is also setting out a principle based approach designed to respond to the criticism that the modelling approaches were too formulaic and avoid a one-size-fits-all approach.

4.157 EIOPA has therefore analysed the methodologies listed below, including the simplifications provided in the QIS.

4.158 EIOPA recognises that there are a number of different approaches, valuation methodologies and simplifications. This section aims to set these out in a simple way and give guidance on the circumstances in which it may be appropriate for differing IORPs to select the different options presented.

I. Principle based approach

- a. Stochastic modelling approach
- b. Deterministic modelling approach
 - i. QIS Simplification 1
 - ii. QIS Simplification 2
 - iii. Simplified stochastic model, developed by Barrie & Hibbert
 - iv. Alternative Simplified Approach (ASA)

II. Balancing item approach

- i. Balancing item valuation

Approach I – Principle based approach

Ia – Stochastic modelling approach

4.159 This approach to calculating the market value of sponsor support is by means of a stochastic valuation³⁷. This is a form of probabilistic model, which establishes the value of sponsor support as the probability weighted average of the discounted value of future cash flows in respect of the amounts which the sponsors pay into the IORP, according to the rules governing the requirements for such payments.

4.160 The technical specifications for the QIS recommended this approach in principle. The use of the principles-based approach allows for an IORP-specific valuation relevant to the specific member state. It has the ability

³⁷ Stochastic valuation here refers to a valuation obtained by way of stochastic simulation (use of Monte-Carlo simulation for instance).

to capture complex interactions between security and benefit adjustment mechanisms and/or sponsor support arrangements containing embedded options. This methodology allows flexibility in the sense that the full stochastic method, if appropriate, may be simplified to yield more straightforward probabilistic or deterministic models.

- 4.161 The technical specifications for the QIS contained an elaborate set of principles to perform a stochastic valuation of the best estimate of technical provisions. However, these principles did not apply to the valuation of sponsor support. Still, a number of participants in the QIS performed a stochastic valuation of sponsor support, especially IORPs covered by non-legally enforceable and/or limited sponsor support.
- 4.162 Such IORPs carrying out the QIS indicated that the security mechanisms section provided little guidance for performing stochastic valuations. As a consequence, many of those IORPs who used the stochastic approach were compelled to make their own assumptions in doing these stochastic valuations, resulting in a wide variation in outcomes between IORPs.

Stakeholder feedback

- 4.163 Most respondents to the 2013 discussion paper had no major concerns with the stochastic model proposed in the QIS but this is largely due to the fact that in the QIS most IORPs did not adopt or attempt to adopt the full stochastic method.
- 4.164 The stochastic valuation methods in the QIS were used in member states with large IORPS which typically already used complex modelling methods. Comments raised by these IORPs regarding the stochastic valuation included the following main points:
- EIOPA needs to consider carefully the implications of providing various methods of calculating sponsor support (e.g. stochastic and deterministic). It may be difficult to compare two different IORPs using two different methods and it would be important to ensure the methods were calibrated to produce comparable outcomes.
 - The stochastic method is complex, difficult to understand and could incur high operational costs as external advisors would likely be needed. It might be unrealistic to expect all but the largest IORPs to carry out this method and guidance would be needed to improve understanding if the aim were to encourage more IORPs to use it.
 - More guidance would be needed on the choice of parameters and explanation of how they are derived. The model is very sensitive to the inputs adopted and so results are highly dependent on the structure of the model and the inputs chosen.
- 4.165 Most stakeholders felt that it is not necessary to provide further guidance on stochastic valuations and that EIOPA should instead propose a more

principles-based approach. However, some of those respondents who used this approach to valuation felt that further guidance would be useful, which corresponds with their experience in conducting the QIS.

4.166 EIOPA could only set out the principles to be used in carrying out a stochastic approach to valuing sponsor support. This would leave it to IORPs to decide on the appropriate approach that best suit their scheme and employer

EIOPA proposal

4.167 In EIOPA's view the technical specifications for the valuation of sponsor support should allow for a principles-based, IORP-specific valuation of sponsor support. The standard methods developed by EIOPA are unlikely to be suitable for all types of sponsor support arrangements, particularly those with complex interactions between security and benefit adjustment mechanisms or embedded options.

4.168 The general principles developed for a stochastic valuation of the best estimate technical provisions could also be made applicable for sponsor support, i.e. time horizon of the valuations, calibration of the asset price model for generating economic scenarios, assumptions regarding sponsor behaviour and IORP management actions and the use of expert judgement. Moreover, the technical specifications should contain principles on sponsor payments to be included in cash-flows and the incorporation of sponsor default risk and sponsor affordability. The technical specifications should allow for simplifications to a full stochastic approach, if appropriate to the particular circumstance of the IORP. This would leave it to IORPs to decide on the appropriate approach that best suit their scheme and employer.

4.169 IORPs would need to be able to demonstrate the appropriateness of their modelling assumptions to the supervisor. This could be accompanied by supervisory authorities having the mandate to require measures from the IORP, if the modelling assumptions would not be considered appropriate. The test could consider various circumstances and data, and the required measures could depend on those.

Advantages:

- Allows IORPs to develop the approach that best suits their specific circumstances;
- Avoids a one-size-fits-all approach that may not suit the wide variety of sponsor circumstances;
- Avoids the need to set parameters that may be seen as arbitrary;
- May help produce a more realistic picture of sponsor support.

Disadvantages:

- May lead to inconsistent approaches being taken by IORPs reducing the comparability of results;
- If used for any QIS purposes, may limit the usefulness in the data in representing the impact of different options for the holistic balance sheet;
- Only provides broad principles, but not detailed guidance;
- Does not help progress a standard formula for calculating sponsor support for the holistic balance sheet.

Question to stakeholders:

Q46: Do stakeholders agree that technical specifications should allow for a principles-based, IORP specific valuation of sponsor support? Please explain.

Q47: In what areas of valuation of sponsor support would it be most useful for EIOPA to specify guidance? Please explain and describe the possible contents of such guidance.

Q48: Are there any other issues in relation to stochastic models, which you believe should be covered?

Approach I.b - Deterministic modelling approach³⁸

I.b.i. QIS Simplification 1 ("QIS1")

4.170 This method provides an estimate using a simplified approach to allowing for the uncertainty in the valuation of the assets and liabilities derived from deterministic methods. It estimates the probability distribution of the aggregate need for sponsor support in a run-off situation. The probability distribution used is supposed to be Gaussian, with a mean value which is equal to the current estimated underfunding based on "technical provisions minus invested assets". It assumes a standard deviation derived from the standard deviation of assets, the standard deviation of liabilities, and the linear correlation between assets and liabilities.

4.171 This simplification includes allowance for the volatility of assets and liabilities, the correlation between assets and liabilities and the default risk of the sponsor. A spreadsheet was available that generated the outcomes of this simplification based on input data provided by IORPs. However, few IORPs used this simplification for the QIS. It is possible that stakeholders

³⁸ Although this section will only present simplification methods, it should be noted that in simple situations, it is possible in theory to obtain a market-consistent value of sponsor support with a deterministic approach (by using a "closed formula") without making any simplification.

did not understand the rationale or the model and felt nervous about using this method.

4.172 For IORPs to use QIS simplification 1 to calculate the value of sponsor support, they must use the current level of funding. Financial assets and the appropriate level of liabilities are then considered as random variables and the timing of future contributions are set by the user, but the level is considered constant over the determined period. Once the results are derived, two haircuts are applied. The first is applied to take into account the possibility that the funds needed by the IORP in the future might exceed the maximum value the sponsor is able to provide (this maximum was approximated by using the calculation of 'maximum sponsor support'). The second is applied to take into account the probability of default and the recovery rate in respect of the sponsor, which is assumed to be constant over time.

4.173 Data needed for the calculation are:

- The value of Level A technical provisions;
- The market value of investment assets;
- Assumptions for the standard deviation in assets and liabilities;
- The relative standard deviation of technical provisions;
- The relative standard deviation of support needed (defined as the difference between the assumed target level and the level of assets);
- The expected correlation between assets and liabilities;
- The maximum value of sponsor support, calculated without default risk;
- The annual probability of default of the sponsor.

Stakeholder feedback

4.174 In their responses to the July 2013 discussion paper, most stakeholders expressed support for the concept of simplifications and felt that the two existing simplifications presented in the QIS technical specifications should be retained. However, stakeholders also felt that it was not necessary for EIOPA to undertake any further work on QIS simplification 1 and 2. This was for a variety of reasons:

- The lack of availability of inputs needed to complete the simplifications was more problematic than the simplifications themselves. Stakeholders mentioned specifically the difficulties in deriving figures for probabilities of default and maximum sponsor support required by these simplifications;
- It is difficult to know what improvements could be made in the absence of information on how the holistic balance sheet could be used;

- In light of these difficulties, most stakeholders felt it was more important for EIOPA to develop more principles-based approaches rather than conduct further work on simplifications.

Advantages:

- Captures in a simple way the uncertainty about the current valuation of financial assets and technical provisions;
- Allows for an explicit quantitative comparison between the needs of the IORP and the wealth of the sponsor, with the possibility of sensitivity analysis;
- Possibility of taking into account cases where “negative contributions” (i.e. restitutions from the IORP to the sponsor and/or contribution holidays) are possible.

Disadvantages:

- The concept of maximum sponsor support has been criticised for its arbitrariness, and lack of applicability in some cases;
- The probability of default of the sponsor is assumed to be constant over time;
- When “negative contributions” are possible, this method operates as a compensation for the difference between negative and positive contributions before applying the haircut for default risk. This feature leads to a systematic overestimation of sponsor support in such cases.

Questions to stakeholders:

Q49: Do stakeholders believe that this approach is a suitable simplified method for determining sponsor support? In what circumstances is it appropriate? In what circumstances might it not be appropriate?

Q50: As EIOPA has provided a model for IORPs to derive a value using this specification as long as they provide the above input data, what more should EIOPA do to encourage use of this approach where appropriate?

I.b.ii. QIS Simplification 2 (“QIS2”)

4.175 This simplification is designed to provide a methodology for valuing sponsor support by taking the probability weighted average of future cash flows, where the only source of uncertainty is the default risk of the sponsor. This generates a probability tree in which each year the sponsor may default or not default. If the calculated value of unlimited sponsor support exceeds the maximum value of sponsor support then the market value should be set equal to the maximum value.

4.176 Like the first simplification, the second QIS simplification also started from the position of the current funding level of the IORP. However, simplification 2 calculated the probability weighted average of assumed future cash flows needed to meet the Level A technical provisions, where the only source of uncertainty is the default risk of the sponsor. Returns on assets, and so the discount rate, were assumed to be equal to the appropriate risk-free interest rate. The cash flows were assumed to be paid for a period equal to the duration of the expected outgoing benefit payments from the IORP. Sponsor contributions and receipts are assumed to be symmetric. The timing of future contributions is freely set by the user, but contributions are then set as constant over this time span.

4.177 Most IORPs used this simplification and needed the following inputs:

- The value of technical provisions;
- The market value of investment assets;
- The expected duration of settlement of sponsor support;
- The interest rate, which should reflect the appropriate risk-free rate for the duration (or can be based on the risk-free interest rate curve);
- The annual probability of default;
- The expected recovery rate of sponsor support by the IORP upon default, which should not exceed 50%;
- The maximum value of sponsor support, calculated without credit risk.

Stakeholder feedback

4.178 Most respondents to the 2013 discussion paper felt that simplification 2 is more useful than simplification 1, but this might reflect the fact that most IORPs participating in the QIS used this simplification as opposed to simplification 1. It was noted, though, that availability of data might still be a problem for more complex IORP structures.

Advantages:

- Relative conceptual simplicity;
- Allows for an explicit quantitative comparison between the needs of the IORP and the wealth and credit assessment of the sponsor, with the possibility of sensitivity analysis.

Disadvantages:

- Yields negative value for sponsor support when the initial funding level is above 100%, as sponsor support is assumed to be symmetric;
- Any uncertainty around the current asset and liability estimates is not captured;

- The probability of default of the sponsor is taken as constant over time;
- The maximum sponsor support concept has been criticised as a way of assessing 'affordability' (cf. QS1);
- No account taken of size effect³⁹ (partly because the method is deterministic).

Questions to stakeholders:

Q51: Do stakeholders believe that this approach is a suitable simplified method for determining sponsor support? In what circumstances is it appropriate? In what circumstances might it not be appropriate?

Q52: As EIOPA has provided a model for IORPs to derive a value using this specification as long as they provide the above input data, what more should EIOPA do to encourage use of this approach, where appropriate?

I.b.iii. Stochastic models (full and simplified), developed by Barrie & Hibbert

4.179 In addition to the full stochastic model presented in their paper to the Institute and Faculty of Actuaries in 2013, Barrie & Hibbert also proposed a simplified method which builds upon the principles of stochastic modelling but replaces stochastic simulations with a deterministic approach.⁴⁰ There are two main differences between the standard Barrie & Hibbert method and the simplified method:

- Future interest rates are given by a single scenario using the present forward yield curve; and
- An average default rate of the sponsor is applied (as opposed to allowing for the transition of sponsor's credit status from year to year).

4.180 As with some of the other simplifications, the simplified Barrie & Hibbert approach may not capture non-linear effects arising from the uncertainty regarding the value of assets and liabilities, for example, because of the existence of a cap or floor or where there are multiple possible states, for

³⁹ The "size effect" is the influence that the relative size of the IORP compared to its sponsor should have on the valuation of sponsor support. For instance if a BBB-rated sponsor with a shareholder value of 100 is sponsoring an IORP with 150 assets and 160 liabilities, a decrease of 10% in the value of the IORP's assets will typically have an impact of 15% on the shareholder value of the sponsor (through the provision of full sponsor support). Such a cost may be bearable for the sponsor, and therefore the value of sponsor support should be 'close' to the amount of initial underfunding (10). If the same sponsor is sponsoring an IORP with the same initial underfunding, but 1.500 assets and 1.510 liabilities, the same relative decrease in the value of the IORP's assets would result in a cost of 150 for the sponsor, greater than its shareholder value. Therefore, it is likely that under adverse market scenarios the sponsor would not be able to provide full support; this should result in a market consistent value of sponsor support lower than in the first case. Not all methods presented here are able to capture this effect.

⁴⁰ See Barrie & Hibbert Research in The Actuarial Profession, Options for assessing employer covenant and the holistic balance sheet, Research Report, January 2013.

example, recovery plan payments alongside possible benefit adjustments. However, because it is deterministic rather than stochastic, it would be much easier for IORPs to implement.

Advantages:

- Explicitly achieves a risk neutral projection of future cash flows;
- Market consistent probabilities of default for the sponsor, not necessarily constant over time;
- Allows for contribution patterns other than purely linear;
- The simplified stochastic model developed by Barrie & Hibbert uses a probabilistic approach to derive factors to enable a simpler use in individual cases, still using some market-consistent inputs.

Disadvantages:

- The B&H methods do not include an affordability check. Therefore, they would need to be used in conjunction with other methods which look at affordability;
- The full stochastic model is complex to understand and implement. This could result in high costs, particularly for smaller IORPs;
- No modelling of cash-flows from the IORP to the sponsor (either by way of restitutions or contribution holiday), leading to a systematic overestimation of sponsor support in cases where restitutions / contribution holiday are possible.

Questions to stakeholders:

Q53: Do stakeholders believe that this approach is a suitable simplified method for determining sponsor support? In what circumstances is it appropriate? In what circumstances might it not be appropriate?

Q54: Should EIOPA produce spreadsheets to enable IORPs to use this simplification?

I.b.iv. Alternative Simplified Approach ("ASA")

4.181 EIOPA proposed the Alternative Simplified Approach (ASA) in its July 2013 discussion paper. It proposed that IORPs could carry out their own assessment of the sponsor's financial strength using two credit ratios: income cover and asset cover⁴¹. Using these ratios to derive a credit

⁴¹ It should be noted that, although this credit strength assessment has been initially presented in the context of the ASA method, it should not be seen as exclusive to the ASA, as its outcomes are directly usable as inputs for other methods as well.

assessment, IORPs could then calculate the value of sponsor support using a series of standardised tables provided by EIOPA.

4.182 As with the QIS simplifications, the ASA method starts with the current level of funding of the IORP. But unlike the QIS simplifications, the sponsor's financial strength is measured as above and then the timing of recovery is linked to financial strength. The overall factor for default risk to be applied to the relevant deficit is then based on these assessments of financial strength and the timing of required future recovery plan contributions.

Stakeholder feedback

4.183 Stakeholders gave positive feedback on the ASA method in response to the July 2013 discussion paper. It was acknowledged that the method is more suitable for small and medium sized IORPs and provides a way to work with non-rated sponsors.

4.184 Many respondents thought that it could be useful for the standard case with a medium sized sponsor with one IORP, but is not suitable for more complex sponsor arrangements or IORPS that are currently fully funded.

4.185 A number of detailed criticisms or observations were made on the ASA, in particular on the cliff edges between different levels of assessed financial strength and the possibility of using further or different metrics, where credit risk assessments are assured. In particular, it would also be straightforward to include other ideas in any development of the simplification. The work described in paragraphs 4.208-4.212 carried out by the UK PPF on assessing sponsor strength uses many more metrics, and different ones for different types of sponsors, but in principle similar to the ASA credit assessment.

4.186 The ASA method, as described, includes a financial strength assessment. The result of this assessment can be used to implement other methods and allows for comparisons.

Advantages:

- Simple to implement;
- Uses concepts IORPs / sponsors are familiar with;
- Only method that builds in an assessment of sponsor strength which can be used to produce a credit assessment and insolvency probability where none otherwise exists;
- The parameters can easily be adjusted to deal with country or sector specific concerns (so do not change the principles, but refine the parameters).

Disadvantages:

- Cliff effects (possibly severe) due to a discrete financial strength matrix,

- although can be mitigated by extending the granularity of the approach;
- Does not work properly in case of current full funding;
 - Does not take into account any expected future shortfall;
 - Does not take into account the correlation with other security and benefit adjustment mechanisms (e.g. conditional, discretionary, mixed benefits and reduction of benefits);
 - Does not always give sensible results when income cover is high and asset cover is low (affordability issue);
 - Arbitrary mapping between coverage ratios / ratings / probabilities of default;
 - Same credibility given to income cover as to asset cover, in spite of the lower predictability of future income, compared to present wealth (the ratios use the most recent income not the future income; parameters can be refined for extreme scenarios);
 - Probability of default of the sponsor is taken as constant over time;
 - No account of size effect (because deterministic).

Questions to stakeholders:

Q55: Do stakeholders believe that this approach is a suitable method for determining sponsor support? In what circumstances is it appropriate? In what circumstances is it not appropriate?

Q56: Do the proposed adaptations to this option overcome the criticisms? Should EIOPA produce spreadsheets to enable IORPs to use this simplification?

Approach II – Balancing item

II.i. Balancing item

- 4.187 This approach is to include unlimited sponsor support as a balancing item on the holistic balance sheet, so that the level of reliance on the sponsor as the mechanism to balance the holistic balance sheet would be transparent.
- 4.188 Unlimited sponsor support would, in this case, balance technical provisions and reduce the SCR to zero. Its valuation is therefore simply the required value in order for the (stressed) holistic balance sheet to be balanced.
- 4.189 Since this approach does not lead to an independently derived value of sponsor support, it would have to be accompanied by additional prudential requirements, where applicable, to ensure that the conditions under which the IORP may take this approach are met. The principles of proportionality

that could be necessary conditions for IORPs to satisfy are discussed in section 4.5.2.

4.5.5. Specific issues in relation to the valuation approaches

4.190 In EIOPA's 2013 sponsor support discussion paper, a number of improvements to specific issues in relation to the valuations approaches set out in the QIS were put forward for consideration. This section describes some of the key areas suggested for further work:

- Maximum sponsor support;
- Alternatives to deriving default probabilities based on credit ratings;
- The timing of sponsor support;
- More complex IORP structures:
 - o Sponsors with multiple IORPs;
 - o IORPs with multiple sponsors;
 - o IORPs with sponsors with parent guarantees;
 - o Not-for-profit sponsors.

Maximum sponsor support

4.191 In cases where the method adopted by the IORP for calculating sponsor support does not take account of affordability, maximum sponsor support is a value used to assess whether the expected value of sponsor support to the IORP exceeds the sponsor's financial capabilities (and also to provide for the SCR). It is used directly in some of the modelling approaches discussed in this paper.

4.192 One of the criticisms of the QIS technical specifications was that the instructions for calculating maximum sponsor support were not suitable for some types of organisations, including not-for-profit organisations, subsidiaries and multi-employer schemes.

4.193 It also did not deal with complex situations, for example where a single sponsor has several IORPs. The variables and parameters in the calculation of maximum sponsor support were considered arbitrary, since they are not explained and are not based on analysis. In addition, some input variables, e.g. "cash flows" were not clearly defined.

4.194 The biggest challenge was to translate the company's value into the maximum support the sponsor is capable of affording. The QIS used, as a simplification, 50% of the sponsor's worth and 33% of expected future cash flows. This was criticised as being an arbitrarily selected proportion with the outcome being very sensitive to these parameters.

4.195 In the 2013 discussion paper, EIOPA considered whether the maximum amount of sponsor support should be 50% of the sponsor's worth, or some other figure, and how any particular level can be justified.

4.196 Also, with regards to future cash-flows, it considered what increase in the contribution level from the sponsor is feasible relative to the "free cash" or some other measure.

4.197 EIOPA acknowledged that the answers to these questions will depend on the specific situation of the IORPs and sponsors. This makes it very difficult to prescribe a standard method that is appropriate for all IORPs as equivalent criticisms of arbitrariness of the choice of parameters might apply, whichever parameters and, indeed, methodology is used.

Stakeholder feedback

4.198 Stakeholders responding to the consultation largely agreed that the lack of clarity around the concept of maximum sponsor support and the different financial structures of sponsors make it difficult to set a standard method and assumptions for valuing it. On the one hand, some stakeholders felt that the complexity of the calculations, particularly for multi-employer IORPs, far outweigh any discernible benefits. This is especially the case where benefits are insured through a pension protection scheme but also where the sponsor is considered extremely strong relative to the funding risks of the IORP.

EIOPA proposal - Principle based approach

4.199 Sponsor affordability should be taken into account in the valuation of sponsor support (and the calculation for the loss-absorbing capacity of sponsor support in the SCR) by using a principles-based approach that builds on the assessment made for Principle 2) for the use of the balancing item approach (see paragraphs 4.125-4.133). Namely, whether the value of the sponsor is larger than a certain multiple (M) of the value of sponsor support included in the holistic balance sheet, i.e. the value required to balance the holistic balance sheet.

4.200 If the value of the sponsor is not larger than M times the value of sponsor support included in the holistic balance sheet, the IORP would have to calculate a value for sponsor support and so make a quantitative assessment of the maximum amount of support the sponsor is capable of affording. This should be based on a more detailed assessment of the variables that are mentioned under step 1, i.e.:

- Market capitalisation of the sponsor;
- Shareholder funds;
- (Discounted value of future) cash-flows of the sponsor;
- Wages paid of the sponsor, where the above information is not

available.

4.201 The assessment should include an analysis of the extent to which the value of the sponsor or the cash-flow of the sponsor is available to cover the (annuity) value of sponsor support recognised on the (stressed) holistic balance sheet.⁴²

4.202 If the estimated maximum amount of sponsor support is lower than the value of sponsor support recognised on the (stressed) balance sheet, the IORP will have to adjust the calculated value of sponsor support.

4.203 The IORP should be able to demonstrate to the supervisor the validity of the assumptions and analysis used in the assessment. The supervisory authority should be empowered to require the IORP to amend its assessment, if the assumptions and/or analysis were considered to be inappropriate.

Advantages:

- Takes into account sponsor affordability in the valuation of sponsor support;
- Allows for a proportionate application by using a two-step approach;
- Principles-based approach allows for tailor-made application and prevents arbitrary thresholds.

Disadvantages:

- The absence of a standard approach means that more effort from IORPs is necessary to conduct the assessment;
- The absence of a standard approach requires more resources from supervisory authorities to review the assessments.

Question to stakeholders:

Q57: Do stakeholders agree that a simplified one-size-fits-all approach for the calculation of maximum sponsor support is not possible and so the best approach is the proposed principles-based approach for including sponsor affordability? If not, please explain.

Q58: In respect of a further quantitative impact assessment, would stakeholders like EIOPA to define the parameters to use for maximum sponsor support? If yes, how could EIOPA improve the approach set out in the previous QIS?

Q59: Do stakeholders think that other options should be considered to determine a value to be used to assess overall sponsor affordability?

⁴² If wages are used, the assessment should include an analysis of the extent to which an increase in the contribution level as a percentage of wages is feasible.

Probability of default

- 4.204 The determination of sponsor default probabilities is highly sensitive to the credit rating (or credit assessments of whatever description) of the sponsor. However, as most sponsors do not have a credit rating, respondents to the QIS had to generate their own estimate of credit quality to generate probabilities of default or use a prescribed assumption (which was set at 4.175% for the QIS). Many QIS respondents felt that this key input was too arbitrary and therefore undermined the results as it was felt it was too high a figure for all sponsors without a credit rating. In addition, it is particularly difficult to generate credit ratings or even credit assessments for various kinds of employers (charities, universities, et cetera).
- 4.205 Many IORPs stressed that the use of credit rating in the QIS was in conflict with EU policy to reduce mechanical reliance on credit ratings.
- 4.206 As part of the alternative simplified approach presented by EIOPA in the July 2013 discussion paper, a probability of default was derived from information contained in the sponsor's accounts. This was an attempt to reduce reliance on external credit ratings and also to derive a probability of default where no credit rating exists. Stakeholders were asked whether they had other suggestions that could reduce the reliance on credit ratings.

Stakeholder feedback

- 4.207 Stakeholders provided a number of specific suggestions including:
- Industry-wide IORPs could benchmark the total wage sum of the industry with that of the country;
 - The use of statistics, clustering, sector-specific data or any other standardised default data should be used instead of individual default probabilities;
 - If sector specific data is easily available, an industry-wide scheme should be able to use it;
 - It is possible that there can be a difference between default probabilities for companies with similar accounting-based performances in different countries, and over different periods. For this reason, it may be better for this to be the responsibility of the supervisor in each member state;
 - Market prices could give additional information to be included (e.g. credit default swaps for corporate debt);
 - One suggestion would be for the creation of industry-wide credit scores and for EIOPA to identify ways in which they can be mapped to the risk of default as well as to the sponsor's appetite for investment risk and ability to support reasonable calls from the pension scheme.

UK Pension Protection Fund consultation

- 4.208 An important recent development has been the UK Pension Protection Fund (PPF) consultation on their proposals for a new way of assessing sponsor insolvency probabilities. These can be regarded as a more sophisticated version of the credit assessment part of the ASA approach.
- 4.209 Previously, the PPF used probabilities and credit assessments of each sponsor provided by Dun & Bradstreet, and as such were not transparent. Their new proposals are based on analysis of the PPF experience of insolvencies over the period since they commenced in 2005. As a result, the universe of some 6000 IORPs is segmented in 19 different groups because of the fundamentally different characteristics of the sponsors. Analysis of the financial metrics which optimised the predictability of the assessment led to different metrics from a long list of possible metrics being used for each segment of IORPs. The analysis also produced the formulaic approach to combining the metrics in each case, so that a single “one-year insolvency probability” is derived.
- 4.210 The results of the consultation are currently being considered by the PPF. This seems in principle to be a very useful way to estimate the insolvency probabilities in the UK. Moreover, there is no burden on IORPs as they will be provided with the result, so there is no need for them to understand the complex processes.
- 4.211 EIOPA will monitor further developments regarding these PPF proposals, which could be the basis of a general approach in other member states. However, application of this approach would be heavily dependent on the sufficient availability of insolvency data in member states.
- 4.212 The PSVaG in Germany and the PRI in Sweden were also contacted to obtain information on any work they have done on this issue. Because of their different nature, they have not produced analysis similar to the PPF.

EIOPA proposal

- 4.213 EIOPA has identified three approaches for deriving sponsor default probabilities which should not be considered to be mutually exclusive:

Approach 1 – Base default probabilities on credit ratings and market data (e.g. credit default swaps)

- 4.214 Under this approach, IORPs could use default probabilities as implied by securities traded on financial markets, such as credit default swaps and corporate bonds. EIOPA could develop a standardised table linking credit ratings to market-implied default probabilities, as opposed to historical default probabilities. The latter would accommodate IORPs with sponsors that do not use bond markets to finance debt, but do have a credit rating.

Approach 2 – Derive default probabilities by reference to suitable financial reporting data (e.g. by using the scoring methodology in the ASA method)

4.215 Under this approach, IORPs would have to assess the credit strength of the sponsor using suitable financial reporting data, for example, by using the scoring methodology in the ASA method. The outcomes of these assessments could be linked to market-implied default probabilities or historical default probabilities using a standardised table.

Approach 3 – Derive default probabilities using data contained in sponsor accounts, using formulae developed by EIOPA, following an approach similar to the PPF proposals

4.216 Under this approach, IORPs could derive default probabilities following an approach similar to the PPF proposal, using formulae developed by EIOPA. IORPs would not have to make their own calculations if the outcomes of the formulae are already provided by the national pension protection scheme.

Questions to stakeholders:

Q60: Do stakeholders believe that the approaches presented cover the full range of possibilities to estimate sponsor default probabilities? If not, what specific alternative approaches would stakeholders suggest?

Timing of Sponsor Support

4.217 In the QIS technical specifications, IORPs were expected to take into account the timing of sponsor support when making projections about future cash flows. The number of years for which sponsor support recovery plan contributions (or other forms of sponsor support) are deemed to be payable, was set equal to the duration of liabilities. An alternative approach provided in the QIS allowed IORPs to assess the period over which assets will reach the required level depending on the strength of the sponsor reflected in the affordability of making additional contributions. The specifications went on to say that the distribution of sponsor support over time may depend on the pension contract and/or social and labour law.

Stakeholder feedback

4.218 The discussion paper published by EIOPA in July 2013 asked stakeholders whether it would be an improvement to the general principles for the valuation of sponsor support if the timing of sponsor support were to reflect the affordability of making additional payments.

4.219 Respondents said that:

- It was either impractical to link these factors or it was better to look at affordability separately;
- This was just one of many factors that need to be considered;

- It is, in principle, appropriate to use the timing component when calculating the value of the sponsor support. However, the model might become more complex;
- Sponsor affordability, growth and investment plans should be a consideration for the nature of recovery plans and periods and supervisory responses. This would recognise that the overall security for the IORP is a balance between the IORPs funding and the continuing strength and ability of the sponsor to support the IORP. Allowing the sponsor to invest in its business could improve its financial position and lead to stronger sponsor support over the long term – to the benefit of the IORP. Therefore ensuring that the right balance is struck between the funding needs of the IORP and allowing the sponsor to invest and grow its business is a key consideration;
- It was difficult to say, as more information on the supervisory framework would be needed.

4.220 There are two possible timings that can be envisaged:

- Linking the timing of sponsor support to the length of recovery plan permitted in the supervisory framework. This would mean that the valuation of future sponsor support is directly linked to a possible recovery plan in the case of underfunding;
- Secondly, linking timing options to another measure such as duration of liabilities and/or strength of the sponsor or affordability check.

Questions to stakeholders:

Q61: What in the stakeholders' view is the appropriate time period on which to consider possible payments from sponsors for the calculation of sponsor support? Please explain.

More complex IORP structures

4.221 Feedback from stakeholders on EIOPA's proposal for the ASA, as well as comments made in earlier consultations on the holistic balance sheet and the Call for Advice, highlighted the issue that the methods proposed do not work for IORPs with more complex arrangements with their sponsors. Stakeholders also raised the issue that some of the data necessary for some of the proposed methods was not available, especially in some industry-wide schemes.

4.222 To address these issues, the following outlines methods for dealing with the four main types of complex IORP structures:

- Sponsors with multiple IORPs;

- IORPs with multiple sponsors;
- IORPs with sponsors with parent (or other) guarantees;
- Charities, universities, mutuals and providents.

Sponsor with multiple IORPs

4.223 In this situation, the sponsor has to support multiple IORPs as well as its own financial obligations (e.g. debt and property leases). IORPs should be able to use all of the sponsor support valuation approaches, subject to data availability, by using the same principles but adapted to the multiple IORP situation.

4.224 The ASA approach, for example, uses the combined cost of servicing the company's financial liabilities (e.g. interest on its debt and annual lease payments) along with the deficit repair payments in the denominator of the interest cover calculation. Similarly, the company debt and combined deficit of all the IORPs can be used in the asset cover calculation. Once these two ratios are calculated on the combined basis, the process could be in principle as for a single IORP, using the look up tables, as before, to generate a credit rating estimate, probability of default, likely period of recovery and values of sponsor support for each IORP.

4.225 An equivalent aggregate approach can be taken by the other valuation methods, which could relate to all of the IORPs sponsored by the employer. However, consideration will need to be given to the allocation of maximum sponsor support across multiple IORPs where this maximum is used as a way of placing an affordability check on the value of sponsor support and ensure that it is not double counted in the holistic balance sheet of the multiple IORPs.

4.226 In order to achieve this, the value of maximum sponsor support would need to be apportioned across the IORPs. This could be done, for example, by:

- The size of the IORPs by assets;
- The size of the IORPs by liabilities;
- Number of members;
- Funding position.

Questions to stakeholders:

Q62: Please provide your views on this suggested approach.

Q63: Are there any other suggestions on how to deal with single sponsors with multiple IORPs?

IORPs with multiple sponsors (e.g. industry-wide schemes)

- 4.227 In cases of multi-employer/industry-wide IORPs, sponsor support is not only provided by one but by several (possibly a very large number of) sponsors. This makes the valuation of sponsor support even more complex and difficult, e.g. with regards to methodologies as well as availability of data to establish the maximum value of sponsor support and sponsor default probabilities.
- 4.228 In cases in which all sponsors collectively finance the IORP, it could be appropriate in principle to use the method as described above for sponsors with multiple IORPs by combining the values relevant to sponsor support from each sponsor. The assessment of a group of sponsors as if they were a single sponsor may be appropriate, so long as this does not misrepresent their ability to pay, and particularly applicable where an IORP has a large number of non-material, homogeneous sponsors from whom it can make a call for supplementary contributions.
- 4.229 Given the problem with availability of data, using total wages instead of income/wealth measures could provide a measure of the financial capacity of some multi-employer plans where financial data on the sponsors' businesses are not available. Although this would not be a reliable measure of the profitability of the sponsors and their ability to divert resources to the IORP, which is the nature of sponsor support, it would be some indication of the relative scale of the IORPs demands and the scale of the employers.
- 4.230 Instead of determining the value of all individual sponsors, it could be sufficient in the first step to determine the value of a sample of sponsors which collectively have a value larger than a multiple of the value of sponsor support included in the holistic balance sheet. One approach would then be to use a sample of for example the 5 largest sponsors which cover a specified percentage of the members of the IORP. But this approach could be modified, for example if there is a problem with availability of data. In this case the sample could be chosen in a different way.
- 4.231 In cases where a second step would be necessary, if the sponsor support is not deemed very strong, the "normal" assessment of the maximum value of sponsor support could also be restricted to a sample of sponsors, which would provide a maximum value of sponsor support which is (collectively) assessed as larger than the value necessary to meet the liabilities and cover the SCR in the holistic balance sheet.
- 4.232 This approach has advantages:
- In cases where the combined value of the sample of sponsors is larger than a specified multiple of the value of sponsor support deemed necessary, the cost and complexity related to producing a maximum

value of sponsor support for the holistic balance sheet would be quite low;

- In other cases, there would be a refined assessment of the maximum value of sponsor support and/or additional measures which would make sure the IORP could be provided with sponsor support if necessary in these situations.

Questions to stakeholders:

Q64: Please provide your views on this suggested approach.

Q65: Are there any other suggestions on how to deal with multiple employer IORPs?

IORPs with sponsors with parent guarantees

4.233 In case there are legally enforceable guarantees protecting the sponsor and/or the support provided by it to an IORP, whether granted by other group- or parent-companies of the sponsor, or by third parties such as credit insurance, bank guarantees or government guarantees, those guarantees should be taken into account when calculating the value of sponsor support.

4.234 Calculations for valuing sponsor support should in this case be done in the same way as for "standard" sponsor support, but taking into account the financial strength and data of the respective guarantor(s). If the guarantee covers the full sponsor support, replacing the sponsor with the guarantor in calculating sponsor support will probably simplify the procedure, as the guarantor is more likely to have a credit rating and more easily available data for assessing credit quality. Any commitment of those guarantors towards other IORPs, as well as other on- or off-balance commitments, should be taken into account, in order to avoid any multiple gearing.

Questions to stakeholders:

Q66: Please provide your views on this suggested approach.

Not-for-profit e.g. charities, universities, mutuals, providents.

4.235 In this situation, the problems are different. The sorts of metrics which can be used to assess the strength of public companies or other for-profit organisations may not be appropriate, or not be possible, for not-for-profit type sponsors.

4.236 It is then necessary to design measures which provide equivalent ways of assessing the ability of the sponsor(s) to provide financial support to the

IORP(s), depending on their cash-flows and any reserves they have, as well as their commitments. In principle, there are no fundamental differences, but the way such "strength" appears in the accounting information may differ greatly within this group of entities, and may differ between member states.

4.237 For example, it may be possible to replace operating "profit" by operating "surplus" and use the same credit ratios. While the income cover ratio may be lower compared to "for profit" sponsors with equivalent revenues, the balance sheet of "not-for-profit" entities may be stronger, as they are generally not so asset intensive (and debt laden).

Questions to stakeholders:

Q67: Please provide your views on this suggested approach.

Q68: Are there any other suggestions on how to deal with not-for-profit entities?

4.5.6. Quantitative comparison of some valuation methodologies

4.238 In addition to the qualitative analysis presented in section 4.5.4, EIOPA also conducted a quantitative comparison, by calculating the value of sponsor support for a sample of stylised IORPs using the following methods:

- a. The QIS simplification 1, with financing periods of 5 and 20 years;
- b. The QIS simplification 2, with financing periods of 5 and 20 years;
- c. The ASA method, with financing periods of 5 and 20 years;
- d. The (full) Barrie & Hibbert method;⁴³
- e. The simplified Barrie & Hibbert method.⁴⁴

4.239 In the analysis, allowance was made for different options for the length of the assumed period of extra contributions from the sponsor needed to meet any deficit. To facilitate comparison of the methods, the probabilities of default in this method are based on the same financial strength assessment as was used for ASA. In addition, the model used does not take account of the ability of the sponsor to afford the required recovery plan contributions underlying the assessment of the value of sponsor support.

4.240 For this purpose, EIOPA designed in a first step a set of stylised "IORPs + sponsors", characterised by the amount of Level A technical provisions of

⁴³ See Barrie & Hibbert Research in The Actuarial Profession, Options for assessing employer covenant and the holistic balance sheet, Research Report, January 2013.

⁴⁴ See Barrie & Hibbert Research in The Actuarial Profession, Options for assessing employer covenant and the holistic balance sheet, Research Report, January 2013.

the IORP, the amount of assets of the IORP, and the value of the “asset cover” and “income cover” ratios of the sponsor, as specified in the discussion paper on sponsor support.⁴⁵ Those key characteristics are sufficient to apply all the methodologies compared here.

4.241 The methods presented above have been tested on 7 different cases:

- an IORP with a very strong sponsor (case 1: asset cover 10, income cover 10);
- two IORPs with a strong sponsor (case 2: asset cover 10, income cover 0.1, case 3: asset cover 0.1, income cover 10);
- two IORPs whose sponsors share close characteristics (case 4: asset cover 3.1, income cover 3.1, case 5: asset cover 2.9, income cover 2.9);
- an IORP with a very weak sponsor (case 6: asset cover 0.1, income cover 0.1);
- a fully funded IORP (case 7).

4.242 For each method and each of the stylised IORP described above, a “value of sponsor support” has been calculated the following way:

- a. a rating of the sponsor, and the corresponding probability of default, has been determined following the specifications of the ASA method. For the fully funded IORP, where the ASA scoring method cannot apply (because asset cover and income cover do not exist), it has been arbitrarily assumed that the sponsor was BBB rated;
- b. for the QIS simplifications 1 and 2, the above mentioned inputs have been fed directly into the respective helper spreadsheets circulated during the 2013 exercise;
- c. for the ASA method, the method has been applied as described in the discussion paper on sponsor support⁴⁶. However, for the sake of comparability with other methods, the financing periods have been “forced” to 5 and 20 years (although the original method proposed a financing period depending on the strength of the sponsor);
- d. for the Barrie & Hibbert methods, both models (the full one, and the simplified one) have been implemented in an excel spreadsheet.⁴⁷

4.243 All methods have been tested on the basis of the classification of financial strength provided by the ASA method (e.g. credit ratios & credit ratings).

⁴⁵ See section 4.2 of EIOPA, Discussion Paper on Sponsor Support Technical Specifications, EIOPA-13/322, 4 July 2013.

⁴⁶ See section 4 of EIOPA, Discussion Paper on Sponsor Support Technical Specifications, EIOPA-13/322, 4 July 2013.

⁴⁷ EIOPA would like to thank Barrie & Hibbert for their assistance in implementing this quantitative analysis.

Therefore, they have implicitly inherited some drawbacks of the ASA classification (in particular with regard to possible cliff effects). It is possible though, to refine the steps, if needed, to remove the cliff edges.

4.244 In order to facilitate the comparison of the results, the values obtained have been put together into the following table:

Table 4.2: Valuation of sponsor support relative to notional deficit of 1,000 units							
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7
IORP assets	9 000	9 000	9 000	9 000	9 000	9 000	10 000
IORP liabilities	10 000	10 000	10 000	10 000	10 000	10 000	10 000
Deficit amount	1 000	1 000	1 000	1 000	1 000	1 000	0
Sponsor Asset cover*	10x	10x	0,1x	3,1x	2,9x	0,1x	na
Sponsor Income cover**	10x	0,1x	10x	3,1x	2,9x	0,1x	na
Sponsor strength / rating	V strong / AAA	Strong / A	Strong / A	Med + / BBB	Weak / B	V weak / CCC	Med + / BBB
QS1 - 5 years	1 842	1 696	807	982	877	31	762
QS1 - 20 years	1 897	1 823	1 627	1 241	991	33	961
QS2 - 5 years	996	985	985	975	917	60	0
QS2 - 20 years	986	948	948	918	765	66	0
ASA - 5 years	994	977	977	962	875	656	0
ASA - 20 years	981	927	927	885	667	331	0
B&H (full)	2 753	2 553	2 553	2 386	1 558	1 215	1 826
B&H (simplified)	1 287	1 223	1 223	1 168	873	737	358
* Sponsor net assets / Level A deficit							
** Sponsor EBITDA / (interest on debt + Level A deficit)							

4.245 The initial findings following this quantitative comparison are the following are:

- The B&H approaches tend to lead to the highest result amongst all methods. This is due to the lack of affordability check, as the sponsor is considered able to contribute to an unlimited extent;
- The simplified B&H model leads to results systematically lower than the full B&H model. This is due to the fact that future shortfalls are not taken into account under the simplified approach;
- Compared to QS1 and QS2, the ASA approach tends to overestimate the value of sponsor support for very weak sponsors, and underestimate it for strong sponsors;
- ASA and B&H do not differentiate between a sponsor strong on assets

and weak on income, and a sponsor strong on income and weak on assets;

- QS1 and B&H full method yield higher amounts of sponsor support than other methods, because sponsor support is assumed to be asymmetric. This means that sponsoring undertakings are required to recover shortfalls, but are not entitled to restitutions, i.e. negative contributions, in case of surpluses. QS1 and B&H full method take into account such asymmetries by allowing for stochastic scenarios with both shortfalls as well as surpluses.⁴⁸

Scheme in surplus

4.246 EIOPA's further analysis demonstrates that some methods only work optimally for underfunding situations. If there is an expectation that there could be future shortfalls (or future surpluses) then some methods are more appropriate than others (e.g. stochastic modelling may be most appropriate here).

Summary of characteristics of the valuation methodologies

4.247 The following table provides a comparison of the valuation methodologies discussed above:

Item taken into account?	QS1	QS2	ASA	fBH	sBH
Current shortfall	√	√	√	√	√
Future shortfall	√	X	X	√	√
Current sponsor strength	√	√	√	√	√
Affordability check	√	√	partially	X	X
Negative contributions	√	√	X	X	X
Size effects	√	X	X	√	X
Flexibility in contribution patterns	poor	poor	poor	partially	partially
Market-consistent probabilities of default over time	X	X	X	√	partially
Ease of use	√	√	√	X	X
Ease of understanding	X	X	√	X	X
Proportionate cost to carry out	√	√	√	X	√

4.6. Pension protection schemes

4.248 There is a close link between sponsor support and pension protection schemes. Pension protection schemes could be seen as a means of the collective pooling of default risk of individual sponsors. Pension protection schemes could be valued as a separate asset on the on the holistic balance

⁴⁸ By construction, the QS1 method would be able to capture negative contributions (i.e. the sponsor is entitled to restitutions). However, when performing simulations, negative contributions have been assumed not to be possible, in order to make consistent numerical comparisons with the other methods, in particular the full B&H method.

sheet or as impacting on the value of sponsor support by reducing the sponsor default risk to zero. In principle, in both cases the general principles for valuation of the holistic balance sheet should apply. If pension protection schemes were valued as impacting on the value of sponsor support, this would mean that whenever the value of sponsor support is determined or considered within a possible framework, the value provided by pension protection schemes would implicitly be taken into account.

4.249 Advantages and disadvantages of a separate valuation (and presentation) of pension protection schemes in the holistic balance sheet:

Advantages:

- A separate valuation (and presentation) of pension protection schemes leads to more transparency compared to a non-separate valuation. In the case of separate valuation and presentation it is clear which part of the available assets/resources of the IORP or its members is provided by a pension protection scheme;
- A separate valuation (and presentation) of pension protection schemes is in line with the general principle that all items on the holistic balance sheet should in principle be valued separately. There is no reason for a deviation from that principle in the case of a pension protection scheme.

Disadvantages:

- It may be difficult to separately “value” the pension protection scheme on the holistic balance sheet;
- It may not be cost effective or worthwhile more generally, for each IORP to have to assess the value of any pension protection scheme.

4.250 Advantages and disadvantages of pension protection schemes valued as impacting on the value of sponsor support by reducing sponsor default probabilities to zero:

Advantages:

- This approach would reflect the close link between sponsor support and pension protection schemes;
- If sponsor support was considered as a balancing item in case of the existence of a strong pension protection scheme, this would make the valuation of sponsor support easier and less burdensome.

Disadvantages:

- This approach would not be transparent. It would not be clear which part of a combined value of sponsor support and a pension protection scheme would result from which of those security mechanisms. This could make it difficult for supervisors to apply supervisory responses, e.g. because there would be no clear view what the sponsor itself,

without the protection provided by the pension protection scheme, could contribute to the protection of members and beneficiaries;

- This approach could lead to a misstatement of the actual strength of sponsor support, but also of pension protection schemes. There could be an overestimation of the value of sponsor support in case of a very strong pension protection scheme and no haircut applied for maximum sponsor support. But there could also be an underestimation of the value of pension protection schemes (even though included in the value of sponsor support in the presentation on the holistic balance sheet), if the pension protection scheme is valued only as impacting on the default risk of the sponsor, but a haircut for maximum sponsor support is applied.

Pension protection schemes as a balancing item on the holistic balance sheet:

- 4.251 One approach to the valuation of pension protection schemes, if valued as a separate asset on the holistic balance sheet, could be to consider it a balancing item on the holistic balance sheet. This approach is interconnected with other issues discussed in this paper, such as treating sponsor support as a balancing item on the holistic balance sheet.
- 4.252 Provided that some criteria with regard to the security of the pension protection scheme arrangement are fulfilled, the pension protection scheme could be considered as being equivalent to financial assets, and therefore could be used to cover liabilities (including technical provisions) as well as solvency capital requirements.
- 4.253 Considering pension protection schemes as a balancing item on the holistic balance sheet would avoid some misstatements which could otherwise happen:
- If pension protection schemes were not included as a balancing item on the holistic balance sheet, the holistic balance sheet might show a gap indicating expected cuts in benefits which, from the point of view of members and beneficiaries, would in reality not exist in cases where the pension protection scheme fully protects benefits, and complies with all the criteria as stated above. Even if benefit adjustment mechanisms existed, which would in principle be expected to close this gap, they could not close the gap in this case, because the expected value of benefit reductions should be determined based on reality, not on an arbitrary decision not to include a security mechanism, like the pension protection scheme, on the holistic balance sheet.
 - If benefit reductions were anyway calculated based on the assumption that there was no pension protection scheme, then this would mean an overestimation of benefit reductions on the holistic balance sheet.

- If benefit adjustments were calculated, even though they would never have to be actually executed because of the protection provided by a pension protection scheme, this would also give wrong impressions as regards other issues. For example, distributing these notional reductions between generations in a balanced way would not be an issue, because all generations would receive benefits, either by the IORP or by the pension protection scheme.
- Furthermore, timing of reductions would not be an issue, because there would be no actual reductions.

4.254 When a pension protection scheme is considered a balancing item on the holistic balance sheet, it would also “balance” the SCR through its loss-absorbing capacity.

Questions to stakeholders:

Q69: Do stakeholders agree with the above comments on the options to value pension protection schemes? If not, please explain.

Q70: Which of the options to value pension protection schemes do stakeholders prefer?

Q71: Do stakeholders think a pension protection scheme could in principle be considered a balancing item on the holistic balance sheet, if considered as a separate asset on the holistic balance sheet?

5. Supervisory responses

5.1. Introduction

5.1.1. Overview

- 5.1 In response to the Commission's Call for Advice (CfA) on the Review of the IORP Directive⁴⁹, EIOPA recommended the holistic balance sheet as the means in principle of including all security and benefit adjustment mechanisms and that valuations should be market-consistent.
- 5.2 EIOPA noted that some elements of its advice were conditional on the following three factors;⁵⁰
- The Commission's objective to achieve a common level of security for retirement benefits, the rejection of which would necessitate a review of some of the advice;
 - The results of a quantitative impact study to provide further information whether a common level of security is feasible in practice and effective in terms of costs and benefits;
 - That the CfA typically asked for advice whether articles of Solvency II should be amended or removed to adequately address the specificities of IORPs and, hence, the advice did not consider whether or not Solvency II is the correct starting point.
- 5.3 EIOPA's advice is consistent with the CfA's objective to increase the level of harmonisation and the holistic balance sheet proposal and the Commission's objective of achieving a common level of security for all IORPs. EIOPA's advice stated that this not necessarily implies that these options are preferred over the other options presented in the explanatory text.⁵¹
- 5.4 IORPs in different member states apply different mechanisms to secure pension commitments (regulatory own funds, sponsor support, pension protection schemes) and dispose of different benefit adjustment mechanisms (conditional (in particular benefits subject to ex ante benefit reduction mechanisms), mixed and discretionary benefits, ex post benefit reductions and reductions in case of sponsor default). The holistic balance sheet aims to take into account these (national) specificities of IORPs by allowing for the possibility of the full range of security and benefit adjustment mechanisms to be recognised.

⁴⁹ See European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

⁵⁰ See page 82-83 of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁵¹ See page 163 and 270 of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

- 5.5 EIOPA also recommended that all assets and liabilities should be valued on a market-consistent basis⁵², i.e. by making use of and being consistent with information provided by financial markets. Where pension obligations cannot be replicated on financial markets, the advice contained the option for including a risk margin in technical provisions based on the cost-of-capital concept.⁵³ Its aim is to establish a market-consistent value of non-hedgeable liabilities by considering the value in the event of a hypothetical transfer of the liabilities to another institution (e.g. an IORP or an insurance undertaking). EIOPA proposed the Level B best estimate of technical provisions based on the expected return on assets as a possible minimum threshold to be covered with (financial) assets.⁵⁴
- 5.6 Finally, EIOPA's advice recommended that the holistic balance sheet approach should include a risk-based solvency capital requirement (SCR) to ensure that IORPs demonstrate sufficient capital to be able to meet technical provision requirements after adverse developments within a year with a degree of certainty consistent with the confidence level underlying the supervisory framework. The SCR measures the required amount of capital to cover for risks the institution is exposed to. Depending on the items recognised on the holistic balance sheet, the SCR calculation may take into account the loss-absorbency of security and benefit adjustment mechanisms.

5.1.2. QIS and supervisory responses

- 5.7 In the QIS on IORPs, participants were asked to value the different items of the holistic balance sheet and calculate the SCR for eighteen scenarios with different assumptions. Many participants commented that it was not clear how the holistic balance sheet was going to be used in practice as the technical specifications did not specify supervisory responses. In the absence of an underlying supervisory framework, IORPs had to make assumptions on the timing of sponsor support and benefit adjustment mechanisms in valuing these items on the holistic balance sheet, usually with reference to national supervisory frameworks. Participants highlighted that any further specification of the supervisory framework may change the values reported in the QIS on IORPs.
- 5.8 EIOPA recognised in its final report that the QIS on IORPs could not be considered an assessment of a comprehensive supervisory framework⁵⁵. The technical specifications for the QIS did not specify:

⁵² See page 82 of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁵³ EIOPA's advice also contained options for including a risk-margin for adverse deviations from assumptions and not including a risk-margin.

⁵⁴ See p. 167 of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁵⁵ See 3.7 on page 18 of EIOPA, Report on QIS on IORPs, EIOPA-BoS-13/124, 4 July 2013.

- The thresholds at which supervisory action should be considered and the accompanying recovery periods and the nature of recovery plans and supervisory responses.
- The tiering of assets, e.g. a possible (minimum) level of liabilities – such as the Level B best estimate of technical provisions – that has to be covered by (financial) assets.
- The tiering of own funds, i.e. whether IORPs can have different qualities of own funds to cover capital requirements, and which limits should be applied to each quality.

5.1.3. Issues identified in QIS

- 5.9 EIOPA also recognised in the final QIS report that important issues would have to be considered regarding the underlying supervisory framework. Due to the manner in which the items are valued, the holistic balance sheet may never balance unless technical provisions are fully covered with financial assets or always balance, raising the issue of how the figures should be interpreted or reworked and what the role of the supervisor should be.⁵⁶ Moreover, it was observed that items on the holistic balance sheet are interdependent, which in some cases gives rise to circularities.
- 5.10 Sponsor support is always subject to some degree of sponsor default risk. Nevertheless, the valuation section proposes that the value of unlimited sponsor support can be established as a balancing item, provided that certain conditions are met. These conditions could relate to the financial capacity of the sponsor to absorb losses, the default probability and, possibly, the expected stability of default rates, or the existence of a pension protection scheme which eliminates the impact of the default risk of the sponsor.
- 5.11 Even for IORPs where the holistic balance sheet, as specified in the QIS technical specifications, always balances, there can still be room for supervisory action. Such IORPs would still need to have sufficient financial assets to cover at least a minimum level of liabilities, as under the current IORP Directive, as discussed in this section. A final observation in the QIS was that the values of assets and liabilities on the holistic balance sheet are not independent in some pension systems. Additional payments made to the IORP may reduce the value of sponsor support or raise the value of liabilities by increasing conditional and mixed benefits or decreasing expected benefit reductions, which means IORPs may be aiming for a moving target.

5.1.4. Trigger points and supervisory actions

- 5.12 The design of the supervisory responses consists of the identification of:

⁵⁶ See paragraph 3.9 on page 18 of EIOPA, Report on QIS on IORPs, EIOPA-BoS-13/124, 4 July 2013.

- trigger points, particularly the capital/funding requirement and the level of technical provision to be covered with financial assets; and
 - associated supervisory actions and recovery periods.
- 5.13 The trigger point will first of all be dependent on how the holistic balance sheet will be used in practice. The holistic balance sheet can be used to:
- set solvency capital requirements at the EU level, as part of pillar 1 requirements;
 - establish minimum funding requirements at the level of technical provisions, also as part of pillar 1;
 - assess the sustainability of IORPs, as part of pillar 2 requirements.
- 5.14 In addition, the trigger points depend on the security and benefit adjustment mechanisms included on the holistic balance sheet and the minimum level of liabilities to be covered with (financial) assets. Section 5.2 discusses the three uses of the holistic balance sheet and the options for various components of the underlying supervisory framework, including recovery periods and supervisory actions.
- 5.15 EIOPA has undertaken a preliminary analysis of several examples around possible supervisory responses. IORPs in different member states will be affected by these examples in different ways, given the different nature of the security and benefit adjustment mechanisms available to IORPs. Section 5.3 provides an overview of the examples as well as a description of the technical analysis and section 5.4 aims at presenting the results for some examples that have been identified as representing a sensible range of possibilities,⁵⁷ in order to highlight their foreseeable advantages and drawbacks and to provide stakeholders with a better knowledge of their implications, in particular for members and employers.
- 5.16 It should be noted that this analysis is related to quantitative aspects only, i.e. the figures presented in the holistic balance sheet, which is only a part of any supervisory framework. Even if some security or benefit adjustment mechanisms were not recognised on the holistic balance sheet, supervision would still have to take them into account. Moreover, the supervisory framework needs to be completed by other qualitative considerations under pillar 2 and pillar 3, such as governance, risk management and transparency.
- 5.17 IORPs may dispose of various policy instruments to restore compliance with the trigger points, such as additional sponsor payments and benefit adjustments, which will also depend on the specificities of the pension scheme/contract and national social and labour law, or a reduction of

⁵⁷ The total number of possibilities is quite high; hence this study focuses on a limited number of them. However, it would in principle be possible to apply the same kind of analysis to any specific possibility not described here.

mismatch risk. Supervisory actions will consist of requiring IORPs to establish a recovery plan to restore compliance with the funding requirements within the specified recovery period. In this respect, it should be noted that some of the options presented already take into account (part of) the available security and benefit adjustment mechanisms that would be used in a recovery plan. This implies that these mechanisms are not available anymore if the IORP does not comply with the trigger points under such options.

5.1.5. Assumptions

- 5.18 As stated in the introduction, the aim of this section is to specify examples of trigger points (and associated supervisory responses) and to explore their possible implications, using the figures provided by the holistic balance sheet, irrespective of the actual values of those figures and of the methodologies and parameters used for deriving them. This does not necessarily mean that trigger points cannot be specified, as such points may be set irrespective of the actual value of certain elements.
- 5.19 This assumption is especially true in respect of the confidence level that underlies the calculation of the SCR. EIOPA's advice stated that "EIOPA believes it should not advice on the specific confidence level since it considers it to be a political issue."⁵⁸
- 5.20 EIOPA's advice put forward two separate policy options for an SCR with a harmonised and non-harmonised confidence level, recognising that only the former is consistent with the objective of the Commission to have a harmonised prudential confidence level.⁵⁹ In line with the QIS on IORPs, the assumption will be adopted in this section that the SCR will be applied using a harmonised confidence level.⁶⁰ However, EIOPA would like to emphasise that further quantitative information will be needed in order to assess whether a common level of security is feasible in practice and effective in terms of costs and benefits.
- 5.21 The analysis of the examples is based on the assumption that the SCR standard formula ensures that an IORP initially complying with the quantitative requirements would be left at a one-year horizon with sufficient assets to cover the technical provisions with a probability corresponding to the underlying confidence level. This may imply reconsideration of the existing design of the SCR standard formula in the technical specifications.

⁵⁸ See page 276 of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁵⁹ See p. 276/277 of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BOS-12/015, 15 February 2012.

⁶⁰ See p. 6 of European Commission, Quantitative Impact Study (QIS) on Institutions for Occupational Retirement Provision (IORPs) – Technical Specifications, 8 October 2012.

- 5.22 It will also be assumed in this section that the Level A value of technical provisions contains a risk margin based on the cost-of-capital approach, although EIOPA's advice also contained options for inclusion of a risk margin for adverse deviation from actuarial assumptions and exclusion of a risk margin.⁶¹
- 5.23 Further elements of the holistic balance sheet for which the value and/or methodologies and parameters are not yet specified include, but are not limited to:
- the mortality tables (or type thereof) used for the calculation of technical provisions;
 - the methodology used for deriving the risk-free rate and the Level B expected return on assets; and
 - the methodology used for valuing sponsor support and pension protection schemes.
- 5.24 Such an approach allows for the presented options to be compatible with any framework as soon as it provides the holistic balance sheet figures, without pre-empting decisions that may be made at a later stage concerning the level of confidence of the SCR and the main parameters affecting the calculation of technical provisions.

5.2. Components of supervisory framework

- 5.25 Supervisory responses depend on the 'overall design' of the supervisory framework. The supervisory framework can take many different forms depending on how the holistic balance sheet is going to be used and what choices are made for the various components. This section will discuss possible options for the following components:
- Use of holistic balance sheet and capital requirements;
 - Security and benefit adjustment mechanisms on the holistic balance sheet;
 - Own fund items;
 - Tiering of assets, i.e. the level of liabilities that serves as a basis for funding/capital requirements;
 - Recovery periods for the minimum funding requirement and for the SCR;
 - Supervisory actions; and
 - Transitional measures.

⁶¹ See page 165 of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

5.2.1. Use of holistic balance sheet and capital requirements

- 5.26 EIOPA recognises that within a pension contract there are four potential risk bearers: (i) the IORP, (ii) the plan sponsor, (iii) a pension protection scheme, and (iv) the members and beneficiaries. Social partners (and the national legal framework) may decide how the risks in a scheme are distributed.
- 5.27 It is not possible to set quantitative requirements on the risks that are borne by members and beneficiaries⁶², apart perhaps from a buffer for operational risk. Therefore, any quantitative (1st pillar) requirements should apply only in respect of the risks that are borne by the IORP and/or the plan sponsor (as well as a pension protection scheme). The full circle of risks should play a role in governance (2nd pillar) and/or transparency (3rd pillar) requirements.

Options for the use of the holistic balance sheet

- 5.28 The capital or funding requirement imposed by the supervisory framework determines the level of assets (financial assets and security mechanisms) the IORP is required to hold. The capital/funding requirement depends on how the holistic balance sheet is going to be used in practice. EIOPA has identified three options for the practical use of the holistic balance sheet.

Option 1: Holistic balance sheet (incl. SCR) as part of pillar 1 requirements

- 5.29 The holistic balance sheet could be part of the pillar 1 requirement where the SCR would be used to set the capital requirement on the EU level.
- 5.30 It is possible to combine this option with option 3 below, which uses the holistic balance sheet as a risk management tool as part of the pillar 2 requirements. For instance, the holistic balance sheet could be used to set short-term capital requirements under pillar 1 and to assess the long-term sustainability of pension schemes/contracts provided by IORPs under pillar 2.

Option 2: Holistic balance sheet (excl. SCR) as part of pillar 1 requirements

- 5.31 The holistic balance sheet could also be used to establish minimum funding requirements on the EU level, i.e. IORPs would be required to have sufficient assets to cover technical provisions. This option would ensure a more harmonised approach to the valuation of assets and technical provisions of IORPs compared to the existing IORP Directive. The SCR would not be part of the pillar 1 requirements. Instead, member states would have the possibility to supplement the minimum funding requirement by imposing additional capital requirements.

⁶² See for instance paragraph 8.3.72 of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

- 5.32 Under this option the assessment of the SCR as well as the holistic balance sheet could become part of the pillar 2 requirements. As such, the SCR calculation would indicate whether IORPs would be able to fulfil pension promises with a degree of certainty in line with the confidence level (see option 3).

Option 3: Holistic balance sheet as part of pillar 2 and pillar 3 requirements

- 5.33 Finally, the holistic balance sheet could be used as a risk management tool as part of the pillar 2 requirements. This option could be implemented by leaving the funding requirements (incl. the regulatory own funds requirement) and the valuation standards for determining them in the existing IORP Directive unchanged or in conjunction with option 1 or 2, where the holistic balance sheet is also used to establish capital or funding requirements.
- 5.34 The holistic balance sheet would provide IORPs and their stakeholders with a transparent view of the extent to which pension obligations can be supported by financial assets, sponsor support and pension protection schemes and the extent to which benefit adjustments may occur in the future. The SCR calculation would show whether IORPs can deliver on guarantees with a high level of certainty. In addition, it would provide insight into the risk exposure of sponsoring undertakings, pension protection schemes and members and beneficiaries to a stressed scenario.
- 5.35 Using the holistic balance sheet as a risk management tool would identify the main risk(s) that an IORP is exposed to and encourage reforms of unsustainable pension schemes/contracts (i.e. those scheme/contracts that cannot provide for the promise to a sufficient degree of probability) by imposing public disclosure of the outcomes as part of pillar 3 requirements. Moreover, the pillar 2 assessment could be used by supervisory authorities to feed into their considerations with regard to supervisory actions (e.g. a reduction of surplus sharing could be required to lower the extent of expected benefit adjustments). Trigger points and/or tiering rules can act as prompts for IORPs and/or supervisors to take action, but the mechanisms that are available to IORPs, the order in which they are used and allowable depth of the instruments can be determined by national supervisors. National competent authorities could also be empowered to take supervisory action to ensure that IORPs provide pension schemes/contracts that are completely specified or sustainable. Supervisory authorities would have to be granted sufficient flexibility in taking supervisory actions. The supervisory actions would depend on the case-by-case outcomes of the pillar 2 assessment, possibly supplemented by applying some specific stress scenarios to the holistic balance sheet.

Questions to stakeholders:

Q72: If it was decided to establish EU capital/funding requirements as part of pillar 1, would there in the stakeholders' view be a role for the holistic balance sheet? Please explain why and, if yes, what that role should be.

Q73: Do stakeholders believe that the holistic balance sheet should be used as a risk management tool as part of pillar 2 requirements? Please explain.

Q74: Do stakeholders agree that the outcomes of a pillar 2 assessment should be publicly disclosed as part of pillar 3 requirements?

Q75: Do stakeholders agree that competent authorities should be empowered to take supervisory action based on the pillar 2 assessment of the holistic balance sheet? Please explain and, if yes, what action?

5.2.2. Security and benefit adjustment mechanisms

5.36 The nature of the supervisory framework will depend on the composition of the prudential balance sheet. The choice as to which security and benefit adjustment mechanisms to include on the balance sheet is in its turn related to the use that is made of the holistic balance sheet.

5.37 In EIOPA's view all security and benefit adjustment mechanisms should be explicitly recognised when the holistic balance sheet is used as a risk management/transparency tool. The options considered in this section for the different security and benefit adjustment mechanisms relate to the holistic balance sheet that is used to establish capital/funding requirements under pillar 1 of the supervisory framework.

Sponsor support

5.38 The Commission explicitly asked in its Call for Advice how sponsor support could be included in any EU-wide framework. EIOPA's advice recommended that all forms of sponsor support should be valued as an asset [...] on the asset-side of the holistic balance sheet of the IORP and can also act as a risk mitigation mechanism reducing capital requirements. In addition, sponsor support should be legally enforceable in order to be included on the holistic balance sheet.⁶³

5.39 A supervisory framework ignoring any legal liability for the provision of sponsor support would neglect an important source of security for a large part of members and beneficiaries of IORPs in Europe. This source of security exists whether it is included in a supervisory framework or not. If a framework were to ignore the existence of sponsor support, then the actual security level for IORPs protected by sponsor support would be higher than for IORPs not protected by sponsor support (given the same

⁶³ See p. 171 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

level of financial assets), even though the framework would require the same level of confidence for both IORPs.

- 5.40 There is a risk of default of the sponsoring undertaking, which will need to be taken into account in the valuation of sponsor support. Sponsor support will only be able to cover the capital requirement in full if it is unlimited in nature and legally enforceable. Moreover, the sponsoring undertaking will need to meet a number of conditions demonstrating its financial strength (see section 4.5 on sponsor valuation). Unlimited sponsor support that does not fulfil these conditions will not be able to meet the capital requirement on its own.
- 5.41 Limited sponsor support and non-legally enforceable sponsor support will – almost per definition - not be able to cover technical provisions or the SCR by itself. The reason is that contingencies can be envisaged where the desired level of sponsor support will exceed the limit set beforehand or the level that the undertaking is willing to pay.
- 5.42 EIOPA has identified two options in respect of the recognition or not on an IORP's balance sheet of non-legally enforceable sponsor support, although the advice on the review of the IORP Directive recommended that sponsor support be legally enforceable to be included on the holistic balance sheet:

Option 1: Include non-legally enforceable sponsor support on the holistic balance sheet

- 5.43 The rationale behind this option is that all sponsor support may have a market-consistent value. Even if sponsor support is not legally enforceable, member states' practice shows⁶⁴ that sponsors tend to be willing to provide additional contributions, especially in case the IORP is underfunded.
- 5.44 This option follows a probability-weighted average approach and assumes that the likelihood of the sponsor voluntarily providing additional support can be identified, in order to reflect the fact that this type of sponsor support is not legally enforceable. Under this option, non-legally enforceable sponsor support should thus be included on an IORP's balance sheet. The question of how likely any sponsor will be willing to provide the necessary additional funding is case specific.

Option 2: Exclude non-legally enforceable sponsor support from the holistic balance sheet

- 5.45 The rationale behind this option is that there is no legal or contractual obligation on the sponsor to provide support, even though sponsors may be relatively likely to provide additional funding in problematic situations. The discretionary power to provide sponsor support or not is completely

⁶⁴ See section 3.5 of EIOPA, Mapping Exercise for Further Work on Solvency of IORPs, EIOPA-14/514, 13 October 2014.

outside of the IORP's influence. It is only the plan sponsor that decides. It must be noted though that even voluntarily provided support from a sponsor may become legally enforceable once it has been agreed between IORP and sponsor, for instance in the context of a recovery plan, in which case the legally enforceable sponsor support would be recognised on the balance sheet. Under these conditions, non-legally enforceable sponsor support must be excluded from the holistic balance sheet.

Questions to stakeholders:

Q76: Which of the two options for recognising non-legally enforceable sponsor support do stakeholders support? Please explain why you support this option.

Pension protection schemes

5.46 EIOPA has identified two options in respect of the recognition or not on an IORP's balance sheet of pension protection schemes:

Option 1: Include pension protection schemes

5.47 The Commission asked in its Call for Advice how to explicitly include pension protection schemes in any EU-wide framework. EIOPA's advice put forward two options for including pension protection schemes on the holistic balance sheet:

- include pension protection schemes in the solvency framework as an asset in the balance sheet and with a loss-absorbing capacity in the calculation of capital requirements; or
- include pension protection schemes in the solvency framework through the credit risk of the sponsor used in the calculation of sponsor support.

The advice stated that it must be ensured that pension protection schemes should only be considered if they contribute to the security of the pension promise in a reliable way and effective way.⁶⁵

5.48 Including pension protection schemes in a solvency framework would recognise that a pension protection scheme can be a normal mechanism which protects members' and beneficiaries' pensions against insolvency of their employers. It is not the aim of a solvency framework to protect those employers from becoming insolvent. An insolvency of an employer, which is not an IORP, is something which happens regularly and some member states have set up pension protection schemes in their social and labour law to minimise negative effects from this on pensions provided by IORPs. The frequency and severity of pension protection schemes being triggered

⁶⁵ See p. 278 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

is accepted under member states' social and labour law. The prudential framework should not aim at reducing this frequency and severity below the level accepted under national social and labour law.

- 5.49 Some pension protection schemes are used (by a transfer of pension liabilities to them) several hundred times a year. This shows that they are able to fulfil their task on a regular and ongoing basis, as allowed for in the respective member states' social and labour law. Such pension protection schemes, unlike Insurance Guarantee Schemes (IGS), cannot be seen as a "last resort" mechanism. A last resort mechanism, like an IGS, should only be triggered in very rare circumstances, when no other means are available. In contrast, this particular type of pension protection scheme is more like an "ordinary" insurance scheme, which protects against a risk which crystallises regularly, with a distribution of the economic consequences over a large number (possibly tens of thousands) of sponsors.
- 5.50 The final QIS report showed that it was acceptable to assume, for the purpose of the QIS, that the default risk of pension protection schemes is zero, and stated that "it might be appropriate also for further QIS work to assume that the level of security provided by a pension protection scheme gives a good reason for the assumption that pension protection schemes can balance the holistic balance sheet and have a corresponding loss absorbing capacity in the calculation of the SCR". The report also mentioned that this assumption "should be carefully monitored, and could eventually be amended depending on the outcome of a more thorough quantitative assessment of the financial strength of pension protection schemes, or if the rules governing a pension protection scheme or other circumstances changed, impacting on the creditworthiness of the pension protection scheme."⁶⁶
- 5.51 A supervisory framework ignoring protection by a pension protection scheme would neglect an important source of security for members and beneficiaries. This source of security exists whether it is included in a supervisory framework or not. If a solvency framework were to ignore the existence of a pension protection scheme, then the actual confidence level for members of IORPs protected by a pension protection scheme would be higher than for IORPs not protected by a pension protection scheme (given the same level of financial assets and/or sponsor support), even though the framework would require the same level of confidence for both IORPs. A uniform level of confidence for all the members of IORPs therefore can only be achieved if any pension protection scheme is included in a framework in a way that acknowledges that pension protection schemes can provide (at least) the same level of security as financial assets. In

⁶⁶ See p. 110 of EIOPA, Report on QIS on IORPs, EIOPA-BoS-13/124, 4 July 2013.

cases where the market consistent value of pension protection schemes is sufficiently high, it could be used to cover liabilities (including technical provisions) as well as solvency capital requirements. To avoid that IORPs protected by a pension protection scheme do not hold any financial assets, a (minimum) level of technical provisions could be specified to be covered with financial assets (see section 5.2.4).

- 5.52 If pension protection schemes were not included as an asset on the holistic balance sheet, the holistic balance sheet might show a (higher) gap indicating that there are not enough assets/resources available to pay the promised benefits, while in reality, due to the existence of a strong pension protection scheme, there would be enough resources available to pay the promised benefits. Even in the case of a weaker pension protection scheme, the holistic balance sheet would show a larger gap/lack of resources than would actually be the case.
- 5.53 Even if benefit adjustment mechanisms also existed that could in principle be expected to close this gap, they could not close the gap in this case, because the expected value of benefit reductions should be determined based on reality, not on an arbitrary decision not to include a security mechanism, like the pension protection scheme, in the holistic balance sheet. If benefit reductions were anyway calculated based on the assumption that there was no pension protection scheme, then this would mean an overestimation of benefit reductions in the holistic balance sheet. If benefit adjustments were calculated, even though they would never have to be actually executed because of the protection provided by a pension protection scheme, this would also give wrong impressions as regards other issues.

Option 2: Exclude pension protection schemes

- 5.54 EIOPA's advice not only included two options for including pension protection schemes in the supervisory framework, but also the option to exclude pension protection schemes from the solvency framework.⁶⁷ Under this option, the objective of the supervisory framework would be that the IORP can deliver the pension promise without relying on a pension protection scheme, even in a case of default of the sponsor. The pension protection scheme would then provide an additional layer of protection, beyond the level of confidence aimed at by the supervisory framework.

Questions to stakeholders:

Q77: Which of the two options for recognising pension protection schemes do stakeholders support? Please explain why you support this option.

⁶⁷ See p. 278 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

Mixed and pure discretionary benefits

5.55 The following sections provide options for the question whether or not the various elements containing discretionary decision-making processes should be recognised on the holistic balance sheet. The options presented are 'stand-alone options', specifically for an individual element, without taking into account options that are developed for other elements or similarities.

Pure discretionary benefits

5.56 EIOPA is of the opinion that pure discretionary benefits should not be included on an IORP's balance sheet that is part of pillar 1 requirements. The rationale behind this opinion is that pure discretionary benefits are not included in the pension promise, which means that there is no benefit that needs to be protected by a prudential framework. There is no contractual obligation to provide pure discretionary benefits, nor is there a pattern from which some kind of implicit obligation could be derived. A liability will then only occur if the IORP decides, in a one-off decision, to grant such a benefit. By granting it, the benefit becomes unconditional and is taken into account in the balance sheet. This option assumes that, considering that there is no contractual obligation nor a clear expectation (by the IORP or the members and beneficiaries) that such benefits will be granted, pure discretionary benefits do not have to be protected and consequently should not be taken into account on an IORP's balance sheet for the purpose of setting capital requirements. EIOPA recognises that this approach differs from the approach taken under Solvency II.

Questions to stakeholders:

Q78: Do stakeholders agree that pure discretionary benefits should not be included on an IORP's pillar 1 balance sheet, as these do not represent a part of the benefit promise that needs to be protected by quantitative requirements? If not, what alternative options would you suggest?

Mixed benefits

5.57 EIOPA has identified three options for the recognition or not on an IORP's balance sheet of mixed benefits:

Option 1: Include mixed benefits on the holistic balance sheet, but allow for full loss-absorbing capacity when calculating the net SCR.

5.58 This option assumes that, even though there is no contractual obligation to provide mixed benefits, mixed benefits should be protected by the supervisory framework. Because these benefits are likely not to be granted in stress situations, the technical provisions for these benefits are in effect

a loss-absorbing mechanism for their full value. This means that part or all of the value of mixed benefits can be deducted from the gross SCR when calculating the net SCR.

Option 2: Exclude mixed benefits from the holistic balance sheet.

5.59 The rationale behind this option is that, like pure discretionary benefits, mixed benefits are not included in the pension promise, which means that there is no benefit that needs to be protected by a prudential framework. There is no contractual obligation to provide mixed benefits. Even though there is an explicit or implicit policy for granting mixed benefits, a liability will only occur if the IORP decides, in a one-off decision, to grant mixed benefits. By granting them, the benefits become unconditional and are taken into account in the balance sheet. This option assumes that, considering that there is no contractual obligation, mixed benefits do not have to be protected and consequently should not be taken into account on an IORP's balance sheet for the purpose of setting capital requirements.

Option 3: Treat mixed benefits as pure discretionary benefits or as pure conditional benefits, in a country-specific decision, dependent on their characteristics

5.60 This option assumes that the use of the discretionary power in mixed benefits is likely to be either high or low. If the discretionary power is used very often, mixed benefits may actually be more or less equal to pure discretionary benefits. If the discretionary power is used only very rarely, mixed benefits may actually be more or less equal to pure conditional benefits. Under this option, the IORP should 'classify' their mixed benefits as either discretionary or conditional benefits, subject to the approval from the national supervisor.

Questions to stakeholders:

Q79: Which of the three options for recognising mixed benefits do stakeholders support? Please explain why you support this option.

Benefit reduction mechanisms

5.61 In a number of member states, there are provisions to reduce IORP member benefits within the rules governing IORPs or in national legislation. As these reductions may have a material effect on the obligations of the IORP, it is necessary to consider how best to reflect them in the holistic balance sheet for the purpose of setting capital requirements, or whether they should be allowed for at all.

5.62 For the purposes of this discussion, benefits reductions have been classified into three types, which have been adapted from EIOPA's Advice to the European Commission on the review of the IORP Directive, and are defined as follows:

- An **ex-ante benefit reduction mechanism** is a mechanism based on a contract/bylaws, concluded beforehand and which describes precisely under which conditions and to which extent adjustments will take place;^{68,69}
- An **ex-post benefit reduction** is a measure of last resort (i.e. to be used when no other means are available), which may be allowed by national law and regulation;⁷⁰
- A **benefit reduction in case of sponsor default**/sponsor insolvency allows for the possibility to reduce pension benefits in the event of a default of the sponsor, in particular in cases when it provides unlimited support and/or when there are not enough assets to cover liabilities. The benefit reduction could occur as part of a transfer to a pension protection scheme, other institution or as part of a recovery plan of the IORP, if the IORP continues to exist after the default of the sponsor.

5.63 EIOPA has undertaken a survey of the existence and operation of such reductions in member states. The results showed that reductions may occur in 15 member states.⁷¹ The survey identified a wide variety in how benefit reduction mechanisms operate, how it is decided and who decides whether benefits will be reduced and how much the reduction should be. In no country are such reductions regular or frequent, but they do occur in some countries from time to time, and therefore it is appropriate to consider whether to take account of them in the holistic balance sheet.

5.64 In deciding how to treat these reductions in the holistic balance sheet, the question is whether the reductions are part of the 'normal' functioning of the IORP or whether they reflect the inability of the IORP to meet its commitments. It is proposed that as a general principle, 'normal' reductions should be taken into account in valuing the benefits for the holistic balance sheet and are a loss-absorbing mechanism. However, even if the above principle is accepted, there is not necessarily a consistent mapping between 'normal' or other reductions with the three types of reduction mechanisms under consideration.

5.65 There should be consistency between the treatment of benefit reductions and pure discretionary, mixed and pure conditional benefits, as the

⁶⁸ HBS 4.27 of European Commission, Quantitative Impact Study (QIS) on Institutions for Occupational Retirement Provision (IORPs) – Technical Specifications, Ares(2012)1182662, 8 October 2012.

⁶⁹ Section 10.6 (page 282) of EIOPA, EIOPA's Advice to the European Commission on the Review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁷⁰ HBS 4.51 of European Commission, Quantitative Impact Study (QIS) on Institutions for Occupational Retirement Provision (IORPs) – Technical Specifications, Ares(2012)1182662, 8 October 2012.

⁷¹ Ex ante benefit reductions occur in 9 member states, ex post benefit reductions in 11 member states and reductions in case of sponsor default in 11 member states. See section 4 of EIOPA, Mapping Exercise for Further Work on Solvency of IORPs, EIOPA-14/514, 13 October 2014.

economic effect of paying non-unconditional benefits only in economically favourable times is the same as making reductions to contractual benefits in economically unfavourable circumstances.

- 5.66 Based on the above considerations, EIOPA has identified the following options for the treatment of benefit reductions on the holistic balance sheet for the purpose of setting capital requirements:

Option 1: Allow for ex-ante benefit reductions in the holistic balance sheet but make no allowance for ex post reductions or reductions in case of sponsor default/insolvency

- 5.67 The rationale for allowing for ex ante-benefit reduction mechanisms is that such mechanisms are concluded beforehand in a contract or a bylaw and therefore can be seen as essential for determining the nature of the promise to provide benefits. Excluding those mechanisms would therefore mean that the supervisory framework would not adequately reflect the nature of the promise. If a framework would not reflect the possibility of the ex-ante reductions, this would falsely treat such promises as a hard guarantee promise.

- 5.68 On the other hand, this option considers ex post benefit reductions to be in effect the inability of the IORP to meet its commitments. Therefore, ex post benefit reductions should not be taken into account, as this would in itself reduce the ability of the IORP to pay those benefits. Similarly, reductions in case of sponsor default/insolvency should not be taken into account as this option considers such reductions not to be part of the normal operation of the IORP.⁷²

Option 2: Allow for ex-ante benefit reductions in the holistic balance sheet, but make allowance for ex post benefit reductions or reductions in case of sponsor default on a country by country basis

- 5.69 The rationale for this approach is that even though the distinction between an ex ante benefit reduction mechanism and other types of benefit reduction mechanisms may be clear from a purely "formal" point of view, this distinction is likely to ignore the intentions and expectations linked to the promise at the time it was given. While, according to the definition, a mechanism is considered an ex ante benefit reduction mechanism only if it is concluded in a contract or in bylaws beforehand, there may also be situations where the relevant parties did not consider it was necessary to include such a provision in a contract or bylaw, because of the existence of such a provision in social and labour law or another field of law.

⁷² This option would be in line with OECD guideline 5.1 on protection of members and beneficiaries stating that regulation "should promote the protection of benefits that an employee accrues by participating in an occupational pension plan, prevent the retroactive reduction of the value of benefits previously accrued in the plan and provide that plan members obtain timely notice regarding any reduction in the rate of future benefits accruals in the pension plan."

Furthermore, one might be of the opinion that a distinction between ex ante and other benefit reduction mechanisms (if any) should not be based on formal criteria, but on the content of the mechanism (“substance over form”), so that, in this view, it should not be relevant whether a mechanism is based on the contract/bylaws or on law, but the distinguishing element should be whether the relevant parties were aware of the possibility to reduce benefits when setting up the scheme/promise (which is always the case if the mechanism is based on contract/bylaws, but may also be the case in other situations).

Option 3: Include all benefit reductions on the holistic balance sheet

5.70 Since it is difficult or even impossible to determine for a specific scheme what the relevant parties were aware of when setting up the scheme/promise, excluding ex post benefit reductions and benefit reductions in case of sponsor default would risk treating pension schemes as hard guarantees which were in fact meant to be different. To avoid this, all types of benefit reduction mechanisms could be included in the framework, which is the case in this option.

Questions to stakeholders:

Q80: Which of the three options for recognising benefit reduction mechanisms do stakeholders support? Please explain why you support this option.

Q81: Are there any additional options that stakeholders believe should be considered?

5.2.3. Own fund items

5.71 This section deals with elements that, if included on the holistic balance sheet, would be considered part of an IORP’s own funds. It explains why EIOPA considers that these items (off-balance capital instruments, surplus funds and subordinated loans) should be taken into account in a prudential framework for the purpose of setting capital requirements. However, it should be noted that their inclusion may be subject to tiering rules⁷³.

Off-balance capital instruments

5.72 Off-balance capital instruments (e.g. ancillary own funds) are, as their name suggests, not placed on the balance sheet. Within Solvency II, the value of these instruments can in part or in full be used to cover the solvency capital requirement.

⁷³ EIOPA’s advice recommended that own fund items should be classified into three tiers and that the eligible amounts of Tier 2 and Tier 3 items to cover the SCR should be subject to quantitative limits. See p. 270-276 of EIOPA, EIOPA’s Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

5.73 For off-balance capital instruments, the question of whether or not they can be used to cover an IORP's SCR seems to be unproblematic. Off-balance capital instruments are part of the own funds of an IORP. As they can be called up (and with 'used' probably describing the situation better) anytime, off-balance capital instruments can always be used to cover capital requirements. The fact that supervisory approval may be necessary in some jurisdictions does not influence this treatment. Note that this may need to be further elaborated if tiering rules for own funds would be introduced (like they are under Solvency II) .

Questions to stakeholders:

Q82: Do stakeholders agree that off-balance capital instruments should always be eligible to cover the SCR? If not, what alternative options would you suggest?

Surplus funds

5.74 For surplus funds, the question of recognition or not on an IORP's balance sheet for the purpose of setting capital requirements seems to be unproblematic. Surplus funds are part of the own funds of an IORP. As they can be called up (and with 'used' probably describing the situation better) anytime, surplus funds can always be used to cover capital requirements. The fact that supervisory approval may be necessary in some jurisdictions does not influence this treatment.

Questions to stakeholders:

Q83: Do stakeholders agree that surplus funds should always be recognised on an IORP's balance sheet and could always be used to cover capital requirements? If not, how would you suggest to treat surplus funds in this respect?

Subordinated loans

5.75 For subordinated loans, the question of recognition or not on an IORP's balance sheet for the purpose of setting capital requirements also seems to be unproblematic. In underfunding situations, repayment of such loans will be subordinate to the IORP's obligations towards members and beneficiaries, and can thus be considered part of the own funds of an IORP. And in favourable funding situations, there is, apart perhaps from a contractually agreed repayment date, full discretion to the IORP as to the repayment of the loan. Therefore, subordinated loans can always be used to cover capital requirements. Note that this option may need to be further elaborated if restrictions on the use of subordinated loans would be introduced (like they are under Solvency II).

Questions to stakeholders:

Q84: Do stakeholders agree that subordinated loans should always be recognised on an IORP's balance sheet and could, bar possible future decisions to introduce restrictions, be used to cover capital requirements? If not, how would you suggest to treat subordinated loans in this respect?

5.2.4. Tiering of assets

- 5.76 EIOPA's advice recommended that all assets and liabilities on the holistic balance sheet should be valued on a market-consistent basis⁷⁴. EIOPA also advised that the risk-free interest rate to calculate the best estimate of technical provisions should take into account the nature of the liabilities of IORPs.⁷⁵ Specifically, it was mentioned that IORPs commonly provide long-term guarantees and that the same adjustments to the risk-free rate as for insurance undertakings should be considered⁷⁶, such as the matching adjustment and the volatility adjustment.
- 5.77 EIOPA's advice recommended an "analysis of the feasibility of introducing tiering requirements (analogous to the approach taken for the classification of own funds into three tiers) ensuring that an appropriate amount of reliance is placed on all the types of assets eligible to cover IORPs' liabilities."⁷⁷ Specifically, the Level B best estimate of technical provisions was proposed, "which is part of Level A and would be calculated on the expected return of assets or on a fixed, but not risk-free, interest rate curve."⁷⁸
- 5.78 EIOPA recognises that further work should be done on how Level B discount rate could be appropriately set, for example by including an element of prudence in the assessment of estimated returns. This has not been investigated as part of the work done for this consultation paper.

Liabilities to be covered with financial assets

- 5.79 Sponsor support and pension protection schemes are, after correcting for default risk of the sponsor and its financial capacity to fulfil the commitment, treated as substitutes for financial assets on the holistic balance sheet. This means that IORPs covered by a very strong sponsor or a pension protection scheme will be able to meet the solvency capital

⁷⁴ See p. 82 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁷⁵ See p. 167 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁷⁶ See p. 109 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁷⁷ See p. 171 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

⁷⁸ See p. 167 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

requirement without having to rely on financial assets, unless a (minimum) level of technical provisions is specified to be covered with financial assets.

5.80 In case the holistic balance sheet is going to be used to establish capital/funding requirements, this section considers two options with regard to the level of technical provisions to be covered with financial assets:

- The Level A market-consistent value of technical provisions (incl. the risk margin), irrespective of the existence of security mechanisms
- A minimum level equal to the Level B best estimate of technical provisions based on the expected return on assets, which member states can supplement either through the national prudential regime or national social and labour law.

5.81 It is important to be aware that the actual requirement of funding with financial assets could be higher than the minimum funding requirement described under these two options. In cases where there are no security or benefit adjustment mechanisms available, or where they are limited or insufficient relative to the financial position of the IORP, all funding requirements (with regard to technical provisions and SCR) can only be met by financial assets. In such cases, it would therefore not be sufficient for an IORP to only hold financial assets up to the level of the minimum requirement, but it would also have to hold financial assets to cover the SCR and technical provisions above the minimum funding requirement.

Option 1: Level A technical provisions as minimum funding requirement for financial assets

5.82 Under the first option, IORPs would have to cover the full level of technical provisions valued on a market-consistent basis (incl. the risk margin) by financial assets, irrespective of the existence of security mechanisms. This tiering rule would imply an increase in the minimum funding rules compared to the existing IORP Directive, which allows valuing technical provisions on the basis of the expected return on assets. This is especially the case for member states which currently base technical provisions on discount rates related to current estimated asset returns.

5.83 The requirement that IORPs should have sufficient assets to cover the market value of technical provisions, allows IORPs to comprehensively hedge mismatch risk between assets and liabilities or, if certain risks cannot be hedged on financial markets, by transferring them to another institution. This will not be possible if available financial assets fall short of the market value of technical provisions, which could be the case when technical provisions are calculated using the expected return on assets. In

addition, the default risk of an individual sponsoring undertaking can often not be hedged on financial markets.

- 5.84 Only IORPs covered by an adequately strong sponsoring undertaking would be able to meet the SCR – or the level of technical provisions if no SCR is imposed on the EU level – without having to resort to financial assets. In practice, this would be the case when the IORP is able to demonstrate that the sponsor is able to provide full loss-absorbency in the calculation of the SCR and at least the one-year survival probability of the sponsor exceeds the confidence level set by the supervisory framework. However, there is the risk that the financial situation of the sponsor deteriorates over time up to a point that the sponsor is no longer capable of fulfilling its commitment towards the IORP or the members and beneficiaries. Such a transition could take place in a sudden way and be significantly correlated with financial market developments. An IORP that has sufficient financial assets to provide for the pension promise will be less sensitive to a deterioration of the sponsor's financial situation.
- 5.85 However, the rationale explained above does not hold true in case of the existence of a pension protection scheme which covers the default risk of the employer. In this case a minimum funding requirement to the amount of level A technical provisions would not be necessary to avoid the negative consequences described above.
- 5.86 Additionally, requiring a high level of funding and contributions from sponsors may weaken them and restrict their ability to invest in the growth of their business thereby weakening the support it can provide the IORP. This may not be an issue for 'new benefits' since the sponsor can tailor its contributions and pension promise to reflect its affordability, but if level A was introduced as a funding requirement for existing pension promises in member states where this was not already a requirement, it may weaken the sponsors and so reduce their ability to provide support to the IORPs.

Option 2: Level B best estimate as minimum funding requirement for financial assets

- 5.87 Under the second option, the supervisory framework would lay down a minimum level of technical provisions to be covered with financial assets similar to the Level B best estimate of technical provisions using the expected return on assets, as proposed in EIOPA's advice. This tiering rule would be consistent with the current IORP Directive which prescribes that the level of technical provisions to be funded with financial assets should at a minimum take into account the yield on assets held by the IORP. This minimum funding requirement could be applied to all IORPs or be restricted to IORPs which dispose of certain security and adjustment mechanisms, be subject to prior approval of the national supervisor or as

a member state option (i.e. it could be left to the discretion of member states to impose a more stringent minimum level of financial assets).

- 5.88 The minimum tiering rule recognises that IORPs that are covered by a strong sponsor and, in some member states, a pension protection scheme do not need to cover the market-consistent value of technical provisions with financial assets in order to meet their pension obligations. In that respect, it should be kept in mind that only IORPs covered by strong sponsors, or a pension protection scheme, will be able to meet the capital requirement without covering the SCR with financial assets. The sponsoring undertaking would need to meet a number of conditions demonstrating its financial strength. As a result, the protection offered by the sponsor or the pension protection scheme would at least be as strong as the confidence level imposed on the IORP.
- 5.89 Allowing IORPs to set their funding requirement for financial assets by taking account of asset returns also encourages investment in long-term assets and allows for a more economically efficient approach to funding of long-term liabilities.

Questions to stakeholders:

Q85: In the stakeholders' view should the minimum requirement for the level of liabilities to be covered with financial assets be based on the Level A technical provisions or the Level B best estimate of technical provisions? Please explain.

Q86: If the Level B best estimate were to be used, in the stakeholders' view should it apply to all IORPs or should its use be restricted to IORPs which dispose of certain security and adjustment mechanisms, be subject to prior approval of the national supervisor or applied as a member state option? Please explain.

Liabilities to be covered with assets (incl. security mechanisms)

- 5.90 The supervisory framework could not only contain a tiering rule for covering liabilities with financial assets, but also a tiering rule for covering liabilities with assets, i.e. including security mechanisms. Two options can be considered for the requirements (liabilities plus SCR) to be covered with assets (incl. security mechanisms): requirements based on Level A technical provisions and requirements based on Level B best estimate of technical provisions.
- 5.91 In case the holistic balance sheet is going to be used to establish capital requirements, in each option the SCR should be calculated consistently with the basis used.

Option 1: Level A based on risk-free interest rate (incl. long-term adjustments)

- 5.92 Under this option IORPs would have to cover the Level A technical provisions with assets, incl. security mechanisms. The Level A corresponds to the market-consistent value of technical provisions recognised on the holistic balance sheet. If the holistic balance sheet is going to be used to set capital requirements on the EU level then the SCR will be based on this Level A technical provisions.
- 5.93 This option would ensure that IORPs would have sufficient assets, incl. security mechanisms, to cover the market-consistent value of pension obligations, incl. benefit adjustment mechanisms. Moreover, the SCR would ensure that IORPs would also have sufficient assets to cover the market value of technical provisions under an adverse scenario.

Option 2: Level B based on expected return on assets

- 5.94 Under this option IORPs would also have to value the holistic balance sheet on a market-consistent basis. However, IORPs would only have to cover the Level B best estimate of technical provisions with assets, incl. security mechanisms. If the holistic balance sheet is going to be used to set capital requirements on the EU level then the SCR would be based on this Level B best estimate of technical provisions.
- 5.95 This option could be subject to prior approval of the national supervisor or applied as a member state option.
- 5.96 The expected return on assets could be the same as the rate used in the calculation of the Level B best estimate that would have to be covered with financial assets, which would ensure consistency between the two tiering concepts.
- 5.97 A drawback of using the Level B best estimate of technical provisions as a basis for establishing supervisory trigger points is that it does not reflect current market prices. This could have adverse consequences for risk management as IORPs would not necessarily have sufficient assets to hedge mismatch risk on financial markets.
- 5.98 In addition, IORPs without sufficiently strong security mechanisms are likely to “benefit” the most from using the Level B best estimate for establishing capital requirements. The reason is that such IORPs will have to cover the full SCR or technical provision with financial assets.
- 5.99 IORPs that are covered by unlimited sponsor support of sufficient strength or a pension protection scheme will be able to meet the SCR or technical provisions regardless of whether this option would be implemented. The value of unlimited sponsor support and/or pension protection schemes is in that case equal to the gap between technical provisions and financial assets.

Questions to stakeholders:

Q87: In the stakeholders' view should the level of technical provisions that needs to be covered with assets (incl. security mechanisms), and that potentially serves as a basis for the SCR, be based on Level A technical provisions or on the Level B best estimate of technical provisions? Please explain.

Q88: If the Level B best estimate were to be used, in the stakeholders' view should its use be restricted to IORPs which dispose of certain security and adjustment mechanisms, be subject to prior approval of the national supervisor or applied as a member state option? Please explain.

Additional requirements through national prudential rules or SLL

- 5.100 The tiering rule based on the Level B best estimate could be considered a minimum requirement. Member states may want to set a higher minimum level of technical provisions to be covered with (financial) assets, for example based on risk-free market rates, when IORPs are not covered by unlimited sponsor support or perhaps even if they are covered by unlimited sponsor support or where the estimate for sponsor support is relatively low.
- 5.101 The possibility to impose additional tiering rules is particularly important under a supervisory framework that allows for last resort benefit reductions to be shown on the holistic balance sheet. Under such a supervisory framework the IORP will (potentially) always comply with the capital requirement as all risks are eventually borne by members and beneficiaries. Therefore, financial assets will constitute the primary policy/supervisory instrument to prevent such last resort benefit reductions from happening. The last resort benefit reductions may be included in a supervisory framework with a harmonised confidence level to reflect that the IORP's pension promise is subject to a lower national security level. This implies that member states may want to specify a target level of financial assets exceeding technical provisions in line with the national security level.
- 5.102 Another member state option could be that the level of technical provisions that (eventually) should be covered with financial assets should correspond to the ambition level of the pension promise, if such an ambition exists. The minimum level of technical provisions could include the target value of pure conditional benefits and mixed benefits. This would avoid that IORPs would be aiming for a moving target to be funded with financial assets, i.e. where additional financial assets would increase the value of conditional/mixed benefits, necessitating additional financial assets, et cetera.

5.103 Because the current IORP Directive is a minimum harmonisation regime, there are significant differences between current national prudential regimes. The additional requirement that cross-border IORPs be fully funded at all times may have contributed to the low level of cross-border activity, as IORPs may be permitted longer recovery periods under their national prudential regime.

5.104 Member states could include additional requirements by means of social and labour law. These requirements would apply only in respect of the members in the host country, irrespective of the IORP's home country. Such requirements might for instance specify how much of the technical reserves should be covered by financial assets.

Questions to stakeholders:

Q89: Do stakeholders believe it would be a sensible approach for member states to specify additional requirements regarding the funding with (financial) assets through national social and labour law, instead of through national prudential regimes? Please explain.

5.2.5. Recovery periods

Recovery period with regard to technical provisions to be covered with financial assets

5.105 The IORP Directive leaves it up to member states to specify the length of recovery periods with regard to technical provisions, although they should extend a 'limited period of time'.

5.106 EIOPA has identified three possible options for the length of recovery plans regarding the technical provisions to be covered with financial assets.

Option 1: Harmonised, short recovery periods

5.107 Under this option IORPs would only be permitted a brief recovery period, say below one year, if financial assets fall below the required level. This implies that recovery periods would be tightened in those member states which currently allow for more extensive periods for IORPs operating on a domestic basis. The brief recovery period is in line with the current requirements for (technical provisions of) IORPs engaged in cross-border operations, which have to be fully funded at all times.

5.108 Replacing the minimum harmonisation approach of the current IORP Directive by a maximum harmonisation approach would remove one of the potential obstacles to cross-border activity of IORPs. IORPs would be subject to the same recovery period, irrespective of their home member state.

- 5.109 Short recovery periods could limit the possibility of IORPs being in an underfunding situation in the event of a sudden deterioration in the financial capacity of the sponsor to support the IORP or pension promise.
- 5.110 Under the option that the Level A technical provisions have to be covered by financial assets, short recovery periods would increase the likelihood that IORPs could be in a position to hedge mismatch risk on financial markets, or if certain risks cannot be hedged on financial markets, by transferring them to another institution.
- 5.111 However, the rationale explained above does not hold true in case of the existence of a pension protection scheme which covers the default risk of the employer. In this case neither a minimum funding requirement to the amount of level A technical provisions nor a short recovery period would be necessary to avoid possible negative consequences.
- 5.112 Additionally, a very short recovery period, in the event the threshold is breached, would imply that potentially large one-time sponsor payments and/or benefit cuts will be needed to raise the amount of assets to the required level.

Option 2: Harmonised, longer recovery period

- 5.113 The supervisory framework could also specify a harmonised, longer recovery period for covering technical provisions with financial assets. The harmonised recovery period could be applied to all IORPs or be restricted to IORPs which dispose of certain security and adjustment mechanisms and/or be subject to prior approval of the national supervisor.
- 5.114 It can be argued from an economic perspective to smooth the necessary adjustments of sponsor payments and/or benefit reductions over a number of years, as this contributes to:
- tax smoothing, as recovery contributions paid by employers and employees are similar to a tax that distorts economic decisions;
 - intergenerational risk sharing, as spreading risks over many generations reduces overall risk for any given single generation;
 - the sponsor's ability to stand by the IORP and economic growth;
 - the sponsor's willingness to take on pension risk for its workers, preventing closure of defined benefit schemes;
 - reducing the pro-cyclical impact of higher sponsor contributions and/or lower retirement benefits on the real economy.
- 5.115 Recovery periods that are not flexible enough to reflect the real risks and the position of the sponsor risk putting the IORP and sponsor under undue strain and may reduce the willingness of the sponsor to provide defined benefit schemes.

Option 3: Recovery period left to the discretion of member states

5.116 The recovery period for covering technical provisions with financial assets could also be left to the discretion of member states. This would be in line with the current IORP Directive, which permits member states to allow IORPs to have insufficient assets for a 'limited period of time'.

5.117 A reason for leaving recovery periods up to member states is that the nature of security and benefit adjustment mechanisms is determined by pension schemes/contracts and/or national social and labour law. The timing of sponsor support and benefit adjustments is to a large extent a matter of income distribution, i.e. the allocation of financial shocks between plan members and generations. This means that possible regulation of the timing of security and benefit adjustment mechanisms is, at least to a large extent, the responsibility of member states. It may be completely the responsibility of member states in case of the timing of payments of a pension protection scheme being stipulated in social and labour law.

5.118 Moreover, this option allows member states to decide whether they want to restrict the IORP's reliance on sponsor support to a short timeframe (as under option 1) or whether they want to permit longer recovery periods to smooth additional sponsor payments and benefit adjustments over time (as under option 2).

5.119 The option could be implemented by allowing member states to specify recovery periods through their national prudential regimes or through national social and labour law.

Questions to stakeholders:

Q90: Do stakeholders believe that there is scope for harmonising the recovery period regarding the level of technical provisions to be covered with financial assets on the EU level? Please explain.

Q91: Do stakeholders think that the recovery period regarding the level of technical provisions to be covered with financial assets should be short or cover an extensive period of time? Please explain.

Q92: In the stakeholders' view how long should the more extensive recovery period be and should it be restricted to IORPs which dispose of certain security and adjustment mechanisms and/or be subject to prior approval of the national supervisor? Please explain.

Recovery period with regard to SCR

5.120 If the holistic balance sheet were to be used to establish capital requirements under pillar 1, the supervisory framework should not only contain a recovery period if the IORP does not comply with the tiering rule

for financial assets, but should also specify a recovery period if the IORP does not comply with the solvency capital requirement. This recovery period specifies how quickly IORPs would have to raise financial assets, reduce benefits or decrease the risk exposure, given the existing security and benefit adjustment mechanisms.

5.121 EIOPA has identified three possible options for the length of recovery plans regarding the SCR.

5.122 The recovery period with regard to the SCR would not be relevant for IORPs that are covered by security and/or benefit adjustment mechanisms that provide full loss-absorbency in the SCR, provided that such mechanisms are recognised on the holistic balance sheet. In such cases, the SCR would reduce to zero and the recovery period would not be applicable.

Option 1: Harmonised, short recovery period

5.123 Solvency II specifies very short recovery periods in the event of a breach of the MCR (3 months) and the SCR (6 months). The reason is that an institution that does not comply with the SCR will no longer be able to support guarantees with the given level of confidence. In such an event the undertaking will have to hedge risk or attract additional capital as soon as possible to prevent a further deterioration of its solvency position. If assets drop below the level of technical provisions (or if basic own funds turn negative) then the undertaking will no longer be able to support guarantees.

5.124 To stimulate sound risk-management practices and to ensure that IORPs can deliver on guarantees, a similar low recovery period, of say below one year, could be adopted. This would be particularly appropriate for IORPs that fully support pension guarantees by means of financial assets.

5.125 Regardless of whether it is recognised on the holistic balance sheet or not, the rationale explained above does not hold true in case of the existence of a pension protection scheme which covers the default risk of the employer. In this case, a short recovery period would not be necessary to ensure that pension promises can be provided with a given level of confidence.

Option 2: Harmonised, longer recovery period

5.126 The supervisory framework could also specify a longer recovery period, harmonised on the EU level, for complying with the SCR. The harmonised recovery period could be applied to all IORPs, be restricted to IORPs which dispose of certain security and adjustment mechanisms and/or be subject to prior approval of the national supervisor.

5.127 The possibility of more extensive recovery periods would effectively transform the SCR into a 'longer-term' capital requirement. IORPs would

not have to provide guarantees with the level of confidence set by the supervisory framework at all times. Instead, the confidence level would gradually increase from a situation where the SCR is not met until the IORP has accumulated sufficient assets to meet the capital requirement. In addition, it would allow IORPs to take into account any expected excess return on assets in restoring the compliance with the capital requirement.

Option 3: Recovery period left to the discretion of member states

5.128 The recovery period for meeting the SCR could also be left to the discretion of member states.

5.129 This would allow member states to decide whether the SCR has to be complied with at all times in order to ensure that IORPs can meet the pension promises with the level of confidence specified by the supervisory framework (as under option 1) or whether the SCR has to be used as a “longer-term” capital requirement (as under option 2).

5.130 The option could be implemented by allowing member states to specify recovery periods through their national prudential regimes or, alternatively, through national social and labour law.

Questions to stakeholders:

Q93: Do stakeholders believe that there is scope for harmonising the recovery period for meeting the SCR on the EU level? Please explain.

Q94: In the view of stakeholders should the recovery period in the event of non-compliance with the SCR be short or cover a more extensive period of time? Please explain.

Q95: In the view of stakeholders how long should the more extensive recovery period be and should it be restricted to IORPs which dispose of certain security and adjustment mechanisms and/or be subject to prior approval of the national supervisor? Please explain.

5.2.6. Supervisory actions

5.131 In case a trigger point is breached, the supervisor should have the power to require the IORP to set up a recovery plan to restore compliance with prudential requirements as is the case under the current IORP Directive.

5.132 The recovery plan could have the following components:

- reduction of mismatch risk by hedging on financial markets or transferring non-hedgeable risks to another institution;
- changes in asset allocation;
- explicit recognition of an expected excess of the return on assets over the discount rate used to value the liabilities;
- additional contributions from the sponsor;

- additional contributions from members;
- reductions of benefits;
- limitations as to the granting of mixed benefits;
- waiving the possibility to grant pure discretionary benefits;
- change of the level of contributions for future accruals;
- change in the relationship between the sponsor and the IORP which increases the value of sponsor support.

5.133 These components can enter (individually or together) under the generic denomination of “recovery plan”.

Questions to stakeholders:

Q96: Do stakeholders agree that IORPs should be required to submit a recovery plan if capital/funding requirements are not met or should more specific supervisory responses be specified on the EU level? Please explain.

5.2.7. Transitional measures

5.134 Current promises to pay benefits, pension contracts and/or pension agreements (in the following jointly referred to as: “contractual agreements”) regularly include a definition of a level of contributions or at least a framework, rules, or laws on how these may be set or revised. This definition may happen in different ways. It could be a fixed contribution in euros, it could be a percentage of the salary, be related to the funding position of the IORP (determined in a certain way, e.g. based on national GAAP), or defined in another way. Current contractual agreements may also include ex-ante benefit reduction mechanisms.

5.135 Contractual agreements on IORP benefits are made in the context (among other things) of the prudential regime in place at the time, which imposes specific funding obligations. The contractual agreements are usually accepted by all relevant parties: the IORP, social partners, employers, employees, government, and tax authorities.

5.136 If a new prudential regime were to change IORPs’ funding obligations, certain parties (sponsors, etc.) may be required to adjust their contributions (or other kinds of payments) to the IORP to a level higher than the contributions originally agreed on, which may change the nature of the pension promise. Also, (ex ante) benefit adjustment mechanisms which are triggered according to the existing contracts may under the new framework not have the same effects on the solvency position of an IORP as originally foreseen, because the level and timing of reductions were determined based on the “old” (national) framework.

- 5.137 As a consequence, IORPs may, depending on the supervisory framework and in respect of their existing obligations, not be able to comply with new prudential requirements nor be able to set up a feasible plan to achieve compliance. Supervisors would have to respond to that inability using the measures provided for this case in the framework (winding up of the IORP, closing the IORP for new members, reducing benefits, ...).
- 5.138 National prudential law and social and labour law will usually be shaped in a way that ensures that a certain level of contributions and benefits is well suitable to the requirements of both areas of law. A possible future European prudential framework might lead to changes in the level of contributions as well as benefits which are currently determined (by social partners) within the context of national law. If EU prudential requirements were amended, member states may need to adjust their social and labour law in order to ensure that their overall framework continues to reflect the previously agreed objectives.
- 5.139 Depending on the choice of a supervisory framework, IORPs that need time to adapt to the new supervisory framework could be accommodated by allowing for appropriate transitional periods, which may have to be very long depending on the supervisory framework. This would also give member states the time to adjust their social and labour law to new circumstances, if intended. It may also be appropriate, depending on the supervisory framework, to consider the possibility of grandfathering, meaning that new prudential requirements would not apply to existing contracts, i.e. benefits that were accrued under the previous framework and/or cases where benefits and contributions are fixed for the whole (future) term of a contract. This would avoid introducing additional costs to existing contracts.

Questions to stakeholders:

Q97: What is the view of stakeholders on the potential impact of a possible future European prudential framework for IORPs on existing contractual agreements and national social and labour law?

Q98: In the stakeholders' view is there scope for transitional measures in order to mitigate the potential impact of a possible EU prudential regime on existing contractual agreements and national social and labour law?

5.3. Overview of examples of supervisory frameworks

5.140 As mentioned in the introduction to this chapter, the design of "supervisory responses" can be envisaged as a set of trigger points and associated supervisory actions, although EIOPA recognises that in practice supervisors will often take other factors into account as well. However, for

the purposes of providing comparative analysis of some examples, EIOPA has considered the following quantitative items on the holistic balance sheet as being used or included within triggers for supervisory actions:

- the level A best estimate for unconditional benefits;
- the level A best estimate for pure conditional, mixed and pure discretionary benefits;
- the level B best estimate for the same categories of benefits as above;
- a risk margin for Level A best estimates;
- a SCR in relation to the Level A and Level B figures;
- the expected "ex-ante" benefit reductions;
- the expected "ex-post" benefit reductions;
- the expected benefit reductions in case of sponsor default;
- the market value of financial assets;
- the market consistent value of sponsor support;
- the market consistent value of pension protection schemes.

5.141 In general, in the context of a quantitative framework, supervisory actions will be triggered when the value of "eligible assets" becomes lower than an amount considered as necessary for the safeguard of the interests of members and beneficiaries. This is a very general principle which relies on the specification of:

- the eligible assets; and
- the amount that the IORP should hold.

5.142 Moreover, some assets may be considered as eligible only to cover a certain type of liabilities (tiering concept). Such partial eligibility should also be clearly specified.

5.143 Considering the list of possible components for both "assets" and "liabilities", the number of possibilities for defining trigger points is quite large. The overview table below provides a wide range of six examples of supervisory frameworks, but many other configurations are possible.⁷⁹

⁷⁹ In the context of this analysis, some elements, such as subordinated loans and other elements, that would usually be considered off-balance sheet, have not been included here.

Table 5.1: Overview of examples of supervisory frameworks

EXAMPLES	1	2	3	4	5	6
HOLISTIC BALANCE SHEET						
Security mechanisms						
- legally enforceable sponsor support	yes	yes	yes	yes	no	
- non-legally enforceable sponsor support	yes	yes	no	yes	no	
- pension protection schemes	no	no	yes	yes	no	
Benefit adjustment mechanisms						
- pure conditional benefits	yes	yes	yes	yes	yes	
- mixed benefits	yes	no	no	no	yes	
- ex ante benefit reductions	yes	yes	yes	yes	yes	
- ex post benefit reductions	no	no	no	yes	no	
- reductions in case of sponsor default	no	no	no	yes	no	
Risk margin cost-of-capital	yes	yes	yes	yes	yes	
SCR AND TIERING OF ASSETS (INCL. SECURITY MECHANISMS)						
Solvency Capital Requirement (SCR)	yes	yes	yes	yes	MS	minimum funding requirements and valuation standards according to current IORP Directive
Discount rate: Level A / Level B	L. A	L. B	L. A	L. A	L. A	
Supervisory action ^a	RP	RP	RP	RP	RP	
Recovery period ^b	< 1 y	MS-PL	MS-PL	MS-SLL	MS-PL	
Additional requirements by MS ^c	n/a	PL	n/a	n/a	n/a	
TIERING OF FINANCIAL ASSETS						
Liabilities to be covered with financial assets						
- pure conditional benefits	yes	yes	yes	yes	yes	
- mixed benefits	yes	no	no	no	yes	
- pure discretionary benefits	no	no	no	no	no	
- ex ante benefit reductions	yes	no	yes	no	yes	
- ex post benefit reductions	no	no	no	no	no	
- reductions in case of sponsor default	no	no	no	no	no	
Risk margin cost-of-capital	yes	no	no	no	yes	
Discount rate: Level A / Level B	L. A	L. B	L. B	L. B	L. A	
Supervisory action ^a	RP	RP	RP	RP	RP	
Recovery period ^b	< 1 y	MS-PL	MS-PL	MS-SLL	MS-PL	
Additional requirements by MS ^c	n/a	PL	PL	SLL	PL	
RISK MANAGEMENT TOOL						
HBS part of pillar 2 requirements	-	-	yes	-	yes	yes
- all security and benefit adjustment mechanisms	-	-	yes	-	yes	yes
- SCR	-	-	no	-	yes	yes
^a In case of non-compliance with the requirements the IORP would have to establish a recovery plan. ^b The recovery period can be smaller than one year or established by member states through national prudential legislation (MS-PL) or national social and labour law (MS-SLL). ^c Additional requirements for liabilities to be covered with (financial) assets can be 'not applicable' (n/a) or be specified by member states through national prudential legislations (PL) or national social and labour law (SLL).						

5.144 The examples of supervisory frameworks differ with regard to the use of the holistic balance sheet:

- The first four examples use the holistic balance sheet to establish risk-based capital requirements under pillar 1, where example 3 also makes use of it as a risk management tool under pillar 2.
- The last two examples predominantly use the holistic balance sheet as a risk management tool under pillar 2, where example 6 also aims to achieve a more harmonised approach to valuing technical provisions.

5.145 The selected examples for supervisory frameworks distinguish two trigger points:

- The solvency or funding requirement;
- The level of technical provisions that has to be covered by financial assets.

IORPs that do not meet these trigger points would have to submit a recovery plan to the supervisory authority, outlining how to restore compliance within the specified recovery period.

5.146 These trigger points differ with respect to the security mechanisms eligible for covering the trigger point and the types of benefits and benefit adjustment mechanisms included in technical provisions.

5.147 The trigger points specified also differ with regard to the discount rate used to provide values for the level of technical provisions that needs to be covered with assets (incl. security mechanisms) and serves as a basis for the SCR as well as the level of technical provisions that needs to be covered with financial assets:

- The level of technical provisions that needs to be covered with assets (incl. security mechanisms) and serves as a basis for the SCR is based on Level A in examples 1, 3, 4, 5 and 6 whereas in example 2 member states may choose to apply the Level B best estimate of technical provisions.
- The level of technical provisions to be covered with financial assets is based on Level A technical provisions in examples 1 and 5, whereas in examples 2, 3 and 4 the Level B best estimate of technical provision based on the expected return on assets may be used. In example 6 the technical provisions to be funded with financial assets are valued using the minimum rules in the current IORP Directive.

Lines of analysis

5.148 The next section will provide a description of the examples of supervisory frameworks underlying the holistic balance sheet. The description will contain a preliminary assessment of the impact of each example on:

- Market-consistent and risk-based supervision;
- National IORP systems;
- Protection of members and beneficiaries;
- Similar level of protection irrespective of security mechanisms;
- Sponsors and pension protection schemes;
- Long-term investments;
- Cross-border activity;
- Consistency with the insurance framework.

EIOPA recognises that this list of criteria is not exhaustive and, for example, ignores the practicality of the framework for IORPs and supervisors and the costs of implementation.

Market-consistent and risk-based supervision

5.149 The introduction of risk-based supervision is one of the main objectives of the Commission for the review of the IORP Directive. "The supervisory system should provide supervisors with the appropriate tools and powers to assess the overall financial position of an IORP based on an economic risk-based approach."⁸⁰ "The valuation of assets, technical provisions and other liabilities should be market-consistent [..]."⁸¹ At the same time, the Commission underlined the need to carefully take into account lessons learnt from the insurance discussions on the discount rate to better reflect long-term guarantees.⁸²

5.150 EIOPA highlighted in its QIS final report to continue working towards a risk-based regulatory framework for IORPs that is based on a market-consistent valuation of balance sheets.⁸³

National IORP systems

5.151 The analysis will assess the extent to which the examples of supervisory frameworks will impact on existing national IORP systems.

5.152 IORPs in different member states make use of different means to secure pension obligations and different mechanisms to adjust pension benefits. The use of these security and benefit adjustment mechanisms depends on pension schemes/contracts agreed by employers or social partners and on

⁸⁰ See page 6 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

⁸¹ See page 7 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

⁸² See page 7 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

⁸³ See page 9 of EIOPA, Report on QIS on IORPs, EIOPA-BoS-13/124, 4 July 2013.

social and labour law. They are governed by rules laid down in national prudential regimes and social and labour law. The differences in organising occupational pension systems mean that pension promises may be subject to different national security levels as well as different benefit types and levels.

5.153 The introduction of a more harmonised EU prudential regime will affect national prudential regulation. This will potentially also trigger discussions in the field of pension schemes/contracts and national social and labour law, since these are in practice strongly intertwined with the prudential regime. It will also likely influence the level and extent of ongoing pension provision where a higher standard for solvency and protection of accrued benefits may be traded off against a lower (or no) provision of ongoing DB benefits.

Protection of members and beneficiaries

5.154 The analysis will assess the extent to which the examples of supervisory frameworks improve protection of members and beneficiaries. Fostering the protection of members and beneficiaries is one of the main objectives and tasks of EIOPA.⁸⁴

5.155 The aim of the supervisory framework is to ensure that IORPs are able to meet pension promises, which is not necessarily the same as guarantees. The promise made to members and beneficiaries can be defined in two different ways:

- The narrow definition of the pension promise only takes into account stipulations in pension schemes/contracts, but not in national social and labour law. This means that ex ante benefit reductions will always be included, but that ex post benefit reductions and benefit reductions in case of sponsor default will only be included in so far as they are part of the pension scheme/contract.
- The broad definition of the pension promise takes into account stipulations in pension schemes/contracts as well as in national social and labour law, including any possible ex post benefit reductions and benefit reductions in case of sponsor default.

5.156 The protection of members and beneficiaries can be assessed from two different angles:

- On the one hand, the targeted long-term protection of members and beneficiaries which corresponds to the level of protection effectively achieved by an IORP which initially complies with capital and funding requirements.

⁸⁴ Article 1.6(f) and Article 8.1(h) of Regulation (EU) No 1094/2010 establishing a European Insurance and Occupational Pensions Authority, 24 November 2010.

- On the other hand, the short-term protection of members and beneficiaries of existing IORPs, which may initially not comply with the new capital and funding requirements.

Similar level of protection irrespective of security mechanisms used and possible misstatement of the level of protection

5.157 The Commission indicated in its Call for Advice from EIOPA that “irrespective of the security mechanisms used, the level of protection of the scheme members and beneficiaries should be similar.”⁸⁵ Therefore the analysis will assess to what extent this objective is achieved for the different examples. In particular, the way security mechanisms (sponsor support and pension protection schemes) are considered in the framework will have an impact on the harmonisation of the level of protection. For instance, if sponsor support were to be completely ignored in the framework, the actual security level for IORPs protected by sponsor support would be higher than for IORPs not protected by sponsor support (given the same level of financial assets). The same reasoning holds for pension protection schemes. That could mean that for IORPs in some countries which dispose of these mechanisms the level of security would be systematically higher than in other countries. A uniform level of security for all the members of IORPs and for all member states could therefore only be achieved if security mechanisms are considered in a framework in a way that acknowledges that sponsor support and pension protection schemes can in some cases provide the same level of security as financial assets.

5.158 Furthermore it will be analysed whether there is a misstatement of the level of protection which may be the consequence of the exclusion of certain security mechanisms in some examples. If security mechanisms were not included, the holistic balance sheet might show a (higher) gap indicating that there are not enough assets/resources available to pay the promised benefits, while in reality, in case of a strong sponsor or a pensions protection scheme, there would be enough resources available to pay the promised benefits because of the protection by the sponsor and/or the pension protection scheme.

Sponsors and pension protection schemes

5.159 Sponsors of IORPs often have a legal obligation to support the pension promise in an unlimited way. Sponsor support may take the form of a subsidiary liability, which means that the employer will pay retirement benefits directly to beneficiaries if the IORP is not able to fulfil the promise. Alternatively, sponsor support may take the form of additional

⁸⁵ See page 6 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

(future) contributions to IORPs in case of underfunding, often as part of a recovery plan. In both cases, sponsors will be able to spread pension costs over time.

5.160 A more harmonised EU framework may affect the timing of sponsor support by increasing funding targets and/or shortening recovery periods. This in turn may have implications for the company's business plans and growth, real operations, employment and the wider economy. A negative impact on sponsors will mean that sponsors are in a weaker position to support the IORP, which in turn has a negative impact on the IORP and member security. The impact on pension protection schemes will be directly related to the financial situation of sponsors, as they provide cover against the default of sponsoring undertakings.

5.161 The impact on sponsors is relevant for the overall EU strategy for smart, sustainable and inclusive growth, which aims to improve the EU's competitiveness while maintaining its social market economy model and improving significantly its resource efficiency.⁸⁶

Long-term investments

5.162 The analysis will assess the extent to which the examples of supervisory frameworks would impact on long-term investments by IORPs.

5.163 IORPs are large institutional investors with over EUR 3,000 billion in assets, including significant allocations to long-term investments, like infrastructure and private equity. As such, IORPs are important suppliers of long-term capital to the European economy. The introduction of a risk-sensitive supervisory framework may influence IORPs' appetite to making allocations to long-term investments. This explains the ongoing work in Solvency II to limit its impacts for such long-term investments made by insurers.

5.164 The Commission aims to mobilise the financial sector (incl. IORPs) to channel funds to long-term investments, like infrastructure and SME financing, to enhance sustainable growth.⁸⁷

Cross-border activity

5.165 The analysis will assess the extent to which the examples of supervisory frameworks would improve the functioning of the internal market and stimulate cross-border pension provision. Enhancing the functioning of the internal market and encouraging IORPs to set up cross-border pension schemes is one of the main reasons of the Commission for the review of

⁸⁶ European Commission, Europe 2020 – A strategy for smart, sustainable and inclusive growth, COM(2010) 2020, 3 March 2010.

⁸⁷ European Commission, Communication from the Commission on Long-Term Financing of the European Economy, COM(2014) 168, 27 March 2014.

the IORP Directive.⁸⁸ This relates to the main objective of the IORP Directive to establish an internal market for occupational retirement provision and to making it possible for institutions to operate across borders. Also one of EIOPA's main objectives is to contribute to improving the functioning of the internal market, including in particular a sound, effective and consistent level of regulation and supervision.⁸⁹

5.166 At the moment there are only 75 IORPs active on a cross-border basis⁹⁰ on a total of 110,000 IORPs. The IORP Directive takes a minimum harmonisation approach to establishing prudential rules on the EU level. National prudential regulations are usually tailored to the specific occupational pension systems in the home member state and often cannot cope with pension arrangements from other EU countries. The wide variety of national prudential frameworks may thus constitute a barrier for establishing pan-European IORPs. Moreover, the IORP Directive contains the requirement that IORPs should be fully funded at all times.

Consistency with insurance framework

5.167 The Commission indicated in its Call for Advice that "EIOPA's advice on the future regulation for IORPs should be provided on the basis of the particular characteristics of occupational pension schemes in the EU. [...] Pension schemes and pension products containing similar risks should be subject to similar regulatory requirements. The new supervisory system for IORPs should be constructed in a way that avoids regulatory arbitrage between and within financial sectors. Accordingly, the general layout of the supervisory system should, to the extent necessary and possible, be compatible with the approach and rules used for the supervision of life assurance undertakings [...]"⁹¹

5.168 EIOPA also noted in its advice to the Commission that it will adopt a consistent approach to both the occupational pensions and the insurance sector. However, it was emphasised that consistent is not the same as identical. There are important differences between IORPs and insurance undertakings that need to be reflected in the legislative framework.⁹²

⁸⁸ See page 3 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

⁸⁹ Article 1.6(a) of Regulation (EU) No 1094/2010 establishing a European Insurance and Occupational Pensions Authority, 24 November 2010.

⁹⁰ EIOPA, 2014 Report on cross-border IORP market developments, 10 July 2014.

⁹¹ See page 6 and 7 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

⁹² See page 10 and 11 of EIOPA, EIOPA's Advice to the European Commission on the review of the IORP Directive 2003/41/EC, EIOPA-BoS-12/015, 15 February 2012.

5.4. Analysis of examples of supervisory frameworks

5.169 This section describes the supervisory frameworks as set out previously, and includes an assessment of six examples. As already mentioned in section 5.1.4, these six examples constitute a subset of the range of possible configurations.

5.4.1. Example 1

General description

5.170 This example intends to ensure that, with a probability corresponding at least to the level of confidence underlying the SCR calculation, the IORP will be left at a 1-year horizon with a level of assets sufficient to hedge mismatch risk between assets and liabilities (including unconditional, pure conditional and mixed benefits) on financial markets or, in case of non-hedgeable liabilities, to transfer risks to another institution (IORP, insurance undertaking, etc.), without any need to require benefit reductions other than those explicitly provided in the pension arrangement (ex-ante benefit reductions).

5.171 The supervisory framework would not take into account the value of pension protection schemes, ex post benefit reductions and benefit reductions in case of sponsor default. The aim of the supervisory framework would be to minimise the use of these security and benefit reduction mechanisms. Hence, there is no reliance on pension protection schemes and a low reliance on sponsor support.

5.172 IORPs will have to hold a minimum level of financial assets to cover the market-consistent value of Level A technical provisions (incl. risk margin, excl. ex ante benefit reductions). IORPs that do not meet this requirement would have to restore compliance within one year.

5.173 The SCR must be covered by financial assets or sponsor support. IORPs that do not meet the SCR are permitted a recovery period of less than a year to increase financial assets and/or to reduce mismatch risk. This ensures that IORPs will be able to provide guarantees with a high level of certainty at all times. If the IORP is unable to put in place an appropriate recovery plan, the Level A technical provisions (incl. risk margin) should be transferred to another undertaking.

5.174 The key characteristics of this option can be summarised in the following table:

Table 5.2: Example 1			
Amount to be covered – trigger point (1)	Reductions of benefits taken into account (2)	Eligible assets (3)	Supervisory response if (1) - (2) > (3)
Level A technical provisions (including risk margin, excluding pure discretionary benefits)	Ex ante benefit reductions	Financial assets	One year for the sponsor to finance the IORP up to the required level; if no success, transfer of the level A + risk margin to another undertaking
SCR plus Level A technical provisions (including risk margin and excluding pure discretionary benefits)		Financial assets and sponsor support	

Market-consistent and risk-based supervision

5.175 IORPs would have to value the holistic balance sheet on a market-consistent basis. IORPs would be subject to a risk-based capital requirement that takes into account the capacity of the sponsoring undertaking and benefit adjustment mechanisms to absorb losses. The requirement to cover the market-consistent value of technical provisions with financial assets at all times would improve the possibility of IORPs to hedge mismatch risk between assets and liabilities.

National IORP systems

5.176 This example of the solvency framework would seriously interfere with existing pension schemes/contracts and national social and labour law in a number of member states, in particular for those with large defined benefit liabilities. The impact would be more or less neutral for national IORP systems that already require that IORPs cover at all times a market-consistent value of technical provisions and risk-based buffer requirements, if the SCR was calibrated to the same confidence as their existing systems. Where this is not the case, the impact could be significant in these member states as well.

5.177 It is likely that this example would discourage sponsors from providing pension promises for future membership in countries where this has a significant impact on their existing system.

5.178 The supervisory framework would raise the funding requirements and/or significantly tighten recovery periods for IORPs that provide sustainable pension promises under existing pension contracts/schemes and national social and labour law.

- First, IORPs would have to fund the Level A value of technical provisions with financial assets subject to a recovery period of less than one year, even when they are covered by unlimited sponsor support that is sufficiently strong or that is backed up by a pension protection scheme. At the moment, such IORPs only have to cover technical provisions that are established based on the expected return on assets. Moreover, sponsoring undertakings are now permitted to smooth recovery plan payments to such IORPs over a considerable period of time. The same is true for possible benefit reductions contained in the pension scheme/contract. In this example, such benefit reductions would have to be realised within one year, since the value of future reductions may not be deducted from the level of technical provisions that has to be covered with financial assets.
- Second, IORPs are not allowed to recognise pension protection schemes, ex post benefit reductions and benefit reductions in case of sponsor default on the holistic balance sheet. IORPs that would otherwise have been solvent by including these security and benefit adjustment mechanisms would now have to cover the SCR with financial assets or reduce benefits within a one-year time period. IORPs in the affected member states usually have to target a lower amount to be covered with financial assets and/or are allowed much more extensive recovery periods.

5.179 In addition, IORPs that have relatively low levels of financial assets combined with weak security and benefit adjustment mechanisms would also be forced to raise funding within a short timeframe, which might necessitate adjustments to national pension arrangements. These IORPs would have to raise financial assets to cover Level A technical provisions and the SCR. This may not be possible as the sponsor will probably not have the financial strength or will not be legally required to make additional payments. As a result, IORPs are likely to close and cease the build-up of future pension rights.

Protection of members and beneficiaries

5.180 The solvency capital requirement ensures that an IORP initially complying with the quantitative requirements under this example will be able to deliver on the pension promise, without proceeding to ex post benefit reductions, with a probability corresponding to the confidence level underlying the SCR calculation. Even in situations of market stress, the IORP will still have sufficient assets to cover the level A technical provisions (incl. risk margin, excl. pure discretionary benefits), which improves the possibility of IORPs to hedge mismatch risk between assets and liabilities.

5.181 Moreover, the short recovery period ensures that an IORP will have at any time sufficient financial assets to hedge mismatch risk between assets and

liabilities corresponding to the unconditional, pure conditional and mixed benefits of the pension arrangement, without any need to require benefit reductions other than those explicitly provided in the pension arrangement (ex ante benefit reductions). The short recovery period (less than one year) aims to ensure that the IORP can withstand further downturns in the event of non-compliance with the SCR.

5.182 This example achieves a level of protection of members and beneficiaries that does not take into account the available sponsor support. Indeed, in the event of a default of the sponsor, an IORP initially complying with the requirements of this example would be sufficiently funded to enable a transfer of liabilities to another institution.

5.183 The impact on the short-term protection of members and beneficiaries of existing IORPs is probably low. If the IORP is covered by a sponsor that provides unlimited support and has the financial capacity to provide the additional funding, then the impact on the short-term protection of members and beneficiaries is low as the sponsor support would already have provided a high level of protection.

5.184 In the absence of strong sponsor support, it may not be feasible for IORPs to cover the market-consistent value of technical provisions with financial assets or to achieve solvency within a one-year timeframe. Consequently, the framework may result in triggering ex post benefit reductions, benefit reductions in case of sponsor default, a downward adjustment of the pension promise or even a wind-up of the IORP.

5.185 It should be kept in mind though that such a situation would not have been sustainable in the long run, as an IORP not complying with the prudential requirements of this example, will not be able to deliver on the pension promise if an adverse scenario occurs. Thus, it may be relevant to trigger the benefit reductions immediately in order to share the losses between cohorts of members.

Similar level of protection irrespective of security mechanisms used and possible misstatement of the level of protection

5.186 This example does not take into account pension protection schemes. This leads to differing levels of security, because if a framework were to ignore the existence of a pension protection scheme, then the actual confidence level for members of IORPs protected by a pension protection scheme would be higher than for IORPs not protected by a pension protection scheme (given the same level of financial assets and/or sponsor support). That would mean that in some countries which dispose of pension protection schemes the level of security would be systematically higher than in other countries. Therefore this example does not achieve the objective of the Commission indicated in its Call for Advice from EIOPA

that “irrespective of the security mechanisms used, the level of protection of the scheme members and beneficiaries should be similar.”⁹³

5.187 Furthermore, due to the exclusion of pension protection schemes there is a misstatement of the level of protection. If pension protection schemes were not included, the holistic balance sheet might show a (higher) gap indicating that there are not enough assets/resources available to pay the promised benefits, while in reality, in case of a pension protection scheme, there would be enough resources available to pay the promised benefits because of the protection by the pension protection scheme.

Sponsors and pension protection schemes

5.188 Sponsors that have a legal obligation to provide unlimited sponsor support would have to make substantial transfers to the IORP within a short period of time for covering the Level A technical provisions and possibly the SCR with financial assets. Some sponsors may not have the financial strength to do so, leading to a possible increase in sponsor insolvency and a negative impact on economic growth more generally.

5.189 An increased call on pension protection schemes in the short and medium-term is also likely. This would in turn result in an increase in the pension protection scheme levies paid by remaining IORPs/sponsors, further enhancing the downturn. In the long-term the dependence on pension protection schemes will decrease as IORPs will have to be fully funded with financial assets at all times. Moreover, it is likely that future accrual of pension benefits would cease, meaning the pension protection scheme’s liability decreases.

5.190 This example would trigger additional short-term calls on the pension protection scheme if and when the funding requirement causes the insolvency of the sponsor. It would be interesting to consider the impact in the long-term, as increasing the funding requirements may lead to an immediate increase of calls on pension protection schemes, but would probably also lead to a decrease in the number and severity of calls once the IORPs have reached this increased level of funding.

Long-term investments

5.191 In member states that already apply risk-based capital requirements, the framework will not impact on long-term investments. Any effects of risk-based capital requirements on the investment behaviour of IORPs will have already taken place when the member state introduced its national risk-based capital requirements.

⁹³ See page 6 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

- 5.192 In member states that do not currently apply risk-based capital requirements, the introduction of the SCR will stimulate IORPs to take a comprehensive view of mismatch risk between assets and liabilities. The SCR calculation will also increase insight into the risk exposure of sponsors and plan members. The outcomes of those calculations may lead IORPs to conclude that mismatch risk between assets and liabilities needs to be reduced, which may have consequences for allocations to certain long-term investments.
- 5.193 Under this example, IORPs would have to be fully funded with financial assets. IORPs that are covered by unlimited sponsor support and/or ex ante benefit reduction mechanisms could be encouraged to de-risk the investment portfolio, which could have consequences for certain types of long-term investments. The reason is that sponsors would have less than one year to make additional payments to the IORP if financial assets fall below the Level A technical provisions. Similarly, IORPs would have to apply – if relevant - ex ante benefit reductions within one year.
- 5.194 IORPs that are covered by non-legally enforceable sponsor support and/or ex post benefit reduction mechanisms would achieve very limited loss-absorbing capacity in the SCR. Such IORPs would also be encouraged to increase allocations to assets that match liabilities. This would reduce the SCR and, hence, decrease the amount of additional financial assets that needs to be raised. However, IORPs would lose the potential returns from investments in long-term growth assets potentially increasing the costs of pension provision.

Cross-border activity

- 5.195 This example provides national competent authorities with an explicit framework to assess a broad range of IORPs with different security and benefit adjustment mechanisms. This will potentially stimulate cross-border activity as current prudential regimes are very much tailored to national IORP systems.
- 5.196 The example would also contribute to removing a potential barrier to cross-border activity of IORPs by achieving a high level of harmonisation between EU member states. This high level of harmonisation would be achieved by requiring that IORPs would need to cover the Level A technical provisions with financial assets at all times. This would make the existing fully funded at all times requirement for IORPs engaging in cross-border operations redundant. As a consequence, cross-border activity would no longer result in an increase of prudential requirements.
- 5.197 The high level of harmonisation achieved under this example would minimise the scope for regulatory arbitrage, i.e. IORPs establishing themselves in member states where prudential rules are most lenient. However, the increased costs in pension provision means that it is likely

there will be no further defined benefit pension provision, potentially ending cross-border defined benefit pensions.

Consistency with insurance framework

5.198 This example would be almost fully consistent with the Solvency II framework for insurers. IORPs that are not covered by sponsor support would need to cover the full SCR with financial assets subject to a recovery period of less than one year.⁹⁴ However, pure discretionary benefits would not have to be included in the amount of technical provisions.

5.199 Two cases can be considered in order to illustrate the consistency assessment: the case of an insurance company (with neither any possibility to reduce benefits, nor any possibility to call for additional contributions) and the case of a mutual undertaking (with a possibility to reduce benefits / call for additional contributions from its members).

5.200 Case 1: insurance company.

- Example 1 would require the company to hold an amount of financial assets equal to Level A for corresponding to unconditional, pure conditional and mixed benefits + risk margin + SCR;
- Solvency II requires the company to hold a level of assets corresponding to a comparable value for all benefits (guaranteed and discretionary benefits⁹⁵) + risk margin + SCR.

5.201 This means that, as far as the required amount of assets is concerned, example 1 would differ from Solvency II only with regard to the treatment of pure discretionary benefits. Otherwise, example 1 would be globally consistent with Solvency II, provided that the confidence level underlying the SCR is equal to Solvency II's confidence level of 99.5%. In addition to the required amount of assets, Solvency II also contains constraints in terms of tiering of own funds and requirements with regard to a MCR. As this report does not deal with these issues, a comparison of them is not possible. The framework for insurance would therefore be slightly stricter, but not significantly different in terms of pure quantitative requirements.

5.202 Case 2: mutual undertaking

- Example 1 would require the undertaking to hold an amount of financial assets of level A (including ex-ante benefit reductions) + risk margin + SCR – additional contributions (if seen as some form of sponsor support), with a minimum of level A + risk margin;

⁹⁴ The recovery period in case of non-compliance with the SCR equals 6 months.

⁹⁵ It should be noted here that "discretionary benefits" in the context of Solvency II has a different meaning than "pure discretionary benefits" in the context of the HBS. However, "unconditional + conditional + mixed + discretionary" in the HBS covers roughly the same benefits as "guaranteed + discretionary" under Solvency II.

- Solvency II will require the mutual undertaking to hold an amount of financial assets of technical provisions (for guaranteed and discretionary benefits) plus SCR.

5.203 Additional contributions would be considered under Solvency II as ancillary own funds, and therefore (at least partially) eligible to cover the SCR. However, such additional contributions would be limited to those foreseen for the next 12 months. Concerning the length of the recovery period, the same considerations hold as for case 1 above. Although the requirements on the mutual undertaking are somewhat stricter than the requirements implied by example 1 on the own fund IORP, both frameworks seem globally comparable and consistent.

Questions to stakeholders:

Q99: Do stakeholders have any general comments on (the description of) example 1?

Q100: Could example 1, in the view of stakeholders, be used for all IORPs in the EU?

5.4.2. Example 2

General description

5.204 Under this example, IORPs will have to hold a minimum level of financial assets to cover the Level B best estimate of technical provisions (excl. ex ante benefit reductions) based on the expected return on assets. IORPs are permitted an extensive though limited time period to recover if financial assets fall below this minimum threshold. Member states may impose additional requirements on recovery periods and the amounts to be covered with financial assets through their national prudential regulation.

5.205 This example would not take into account the value of pension protection schemes, ex post benefit reductions and reductions in case of sponsor default. The aim of the supervisory framework would be to prevent the use of these security and benefit reduction mechanisms.

5.206 The SCR would have to be covered by financial assets or sponsor support. The SCR would be based on the Level B best estimate of technical provisions, but member states may impose additional requirements through their national prudential regime. IORPs that do not meet the SCR are permitted substantial recovery periods of a 'limited period of time' to increase financial assets and/or to reduce mismatch risk. Member states may further specify recovery periods through national prudential regimes.

5.207 In order to promote transparency to supervisors and members, IORPs would also have to value the holistic balance sheet on a market-consistent basis.

5.208 The key characteristics of this option can be summarised in the following table:

Amount to be covered – trigger point (1)	Reductions of benefits taken into account (2)	Eligible assets (3)	Supervisory response if (1) - (2) > (3)
Minimum of Level B best estimate of technical provisions (excluding pure discretionary and mixed benefits)	-	Financial assets	The IORP (where necessary in agreement with the sponsor) to set up a recovery plan to finance the IORP up to the required level;
SCR plus minimum of Level B best estimate of technical provisions (excluding pure discretionary and mixed benefits)	Ex ante benefit reductions	Financial assets and sponsor support	

Market-consistent and risk-based supervision

5.209 The use of Level B as a funding target in this example is not market-consistent. However, IORPs would also be required for transparency purposes to value the holistic balance sheet on a market-consistent basis.

5.210 IORPs would be subject to a risk-based capital requirement that takes into account a comprehensive set of risks as well as the capacity of the sponsor and benefit adjustment mechanisms to absorb losses. The existing regulatory own funds requirement does not consider financial market risk and only applies to IORPs where the institution bears the risk.

National IORP systems

5.211 This example would interfere with national systems by imposing an SCR with a harmonised confidence level, but the impact may be limited in some countries. The framework would still allow member states to establish the value of technical provisions using the expected return on assets. This is not only the case for the tiering of assets, but also for the value of technical provisions that underlies the capital requirement. Moreover, IORPs would not be required to take into account pure discretionary and mixed benefits, in line with the current IORP Directive. Finally, member states have the discretion to allow for considerable recovery periods with regard to the amounts to be covered by financial assets and the SCR.

5.212 IORPs where the sponsoring undertaking bears the risk would become subject to a risk-based capital requirement. However, the capital requirement would take into account the loss-absorbing capacity of the sponsor, potentially reducing the SCR to zero for strong sponsors. IORPs that are covered by non-legally enforceable sponsor support would probably be most affected, because this type of sponsor support has very limited capacity to absorb losses. The impact on other IORPs that are not covered by strong sponsor arrangements may be limited, if the national prudential regime already imposes a similar risk-based buffer requirement. However, the confidence level under the harmonised regime may deviate from the confidence level that is currently used on the national level.

Protection of members and beneficiaries

5.213 The possibility in this example to allow for long recovery periods would mean that it is unlikely that the regime would ensure that the IORP would be able to meet the pension promise with the confidence level underlying the SCR at all times. Moreover, the SCR may be based on the Level B best estimate of technical provisions, which means that IORPs would not be required to have sufficient assets to be able to hedge mismatch risk on financial markets.

5.214 The impact on the short-term protection of members and beneficiaries of existing IORPs is probably low, as the new rules for the tiering of assets do not significantly differ from those currently applicable. However, IORPs would still have to comply with new capital requirements (SCR).

5.215 For IORPs covered by a sponsor that provides unlimited support with the financial capacity to absorb the SCR in stress scenarios, the impact on the protection of members and beneficiaries would be low as the sponsor support will help the IORP comply with the new capital requirements through its loss-absorbing capacity. The protection provided by IORPs with weak or no sponsor support will gradually increase. Such IORPs will experience a higher capital requirement as sponsor support is not able to provide full loss-absorbency in the SCR. However, member states may also allow for substantial recovery periods through national prudential regimes.

5.216 It should be kept in mind though that the absence of a requirement to cover Level A technical provisions may not be sustainable in the long run, as an IORP will not be able to deliver on the pension promise to the required confidence level if an adverse scenario occurs. It may therefore be more relevant to trigger the reductions of benefits immediately in order to share the losses between cohorts of members.

Similar level of protection irrespective of security mechanisms used and possible misstatement of the level of protection

5.217 This example does not take into account pension protection schemes. This leads to differing levels of security, because if a framework were to ignore the existence of a pension protection scheme, then the actual confidence level for members of IORPs protected by a pension protection scheme would be higher than for IORPs not protected by a pension protection scheme (given the same level of financial assets and/or sponsor support). That would mean that in some countries which dispose of pension protection schemes the level of security would be systematically higher than in other countries. Therefore this example does not reach the objective of the Commission indicated in its Call for Advice from EIOPA that “irrespective of the security mechanisms used, the level of protection of the scheme members and beneficiaries should be similar.”⁹⁶

5.218 Furthermore, due to the exclusion of pension protection schemes there is a misstatement of the level of protection. If pension protection schemes were not included, the holistic balance sheet might show a (higher) gap indicating that there are not enough assets/resources available to pay the promised benefits, while in reality, in case of a pension protection scheme, there would be enough resources available to pay the promised benefits because of the protection by the pension protection scheme.

Sponsors and pension protection schemes

5.219 The impact of this example on sponsors would be limited. The most important change compared to the current situation is that IORPs where the sponsoring undertaking bears the risk would become subject to a risk-based SCR. However, the SCR takes into account the loss-absorbing capacity of sponsor support, which may potentially reduce the SCR to zero for very strong sponsors. Weaker sponsors may be required to fund the IORP to a higher level, but member states are allowed to implement considerable recovery periods.

5.220 Since sponsors are not strongly affected, the impact of this example on pension protection schemes will also be limited.

Long-term investments

5.221 In member states that already apply risk-based capital requirements, the framework will not impact on long-term investments. Any effects of risk-based capital requirements on the investment behaviour of IORPs will have already taken place when the member state introduced its national risk-based capital requirements.

⁹⁶ See page 6 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

- 5.222 In member states that do not currently apply risk-based capital requirements, the introduction of the SCR will stimulate IORPs to take a comprehensive view of mismatch risk between assets and liabilities. The SCR calculation will also increase insight into the risk exposure of sponsors and plan members. The outcomes of those calculations may lead IORPs to conclude that mismatch risk between assets and liabilities needs to be reduced, which may have consequences for allocations to certain long-term investments.
- 5.223 Member states will be allowed to specify considerable recovery periods in national prudential regimes in case the SCR is breached. This means that the capital requirement will be used as a long-term target, lowering the potential impact on certain long-term investments. IORPs with non-legally enforceable sponsor support will be most affected by the introduction of the SCR, since this type of sponsor support will have limited loss-absorbing capacity. These IORPs will have the strongest incentive to reduce balance sheet mismatch risk.

Cross-border activity

- 5.224 This example would provide national competent authorities with an explicit framework to assess a broad range of IORPs with different security and benefit adjustment mechanisms. This will potentially stimulate cross-border activity as current prudential regimes are very much tailored to national IORP systems and have difficulty in coping with other types of arrangements.
- 5.225 The example would not in itself make the 'fully funded at all times' requirement redundant. Member states could still specify additional requirements for recovery periods with regard to the level of technical provisions to be covered with financial assets. As a result, this potential barrier to cross-border activity could still be relevant.
- 5.226 There would remain scope for regulatory arbitrage, i.e. IORPs establishing themselves in member states where prudential rules are most lenient, as national prudential regimes may differ with regard the level of technical provisions to be covered with (financial) assets as well as recovery periods.

Consistency with insurance framework

- 5.227 Under this example, there would be three differences compared to the insurance framework. First of all, member states are allowed to specify the length of recovery periods with regard to the SCR in their national prudential regimes. Second, the expected return on assets may be taken into account in establishing the value of technical provisions that needs to be covered with assets, including sponsor support. Third, pure discretionary and mixed benefits would not have to be included on the prudential balance sheet.

Questions to stakeholders:

Q101: Do stakeholders have any general comments on (the description of) example 2?

Q102: Could example 2, in the view of stakeholders, be used for all IORPs in the EU?

5.4.3. Example 3

General description

5.228 In this example, the holistic balance sheet concept is split into two different balance sheets: (i) a balance sheet for pillar 1 requirements and (ii) a balance sheet for pillar 2/3 requirements:

- The pillar 1 balance sheet looks at the certainty with which the current unconditional benefits could be provided and could be used as part of a more harmonised framework to further improve comparisons between countries and between IORPs. This balance sheet would include quantitative prudential requirements.
- The pillar 2/3 balance sheet looks to the future and the IORP's expected responses to yet uncertain situations (scenarios). This balance sheet could be used as a risk management tool for IORPs and supervisors, to check the financial set-up of the IORP and the compliance with national requirements.

5.229 The objective of the pillar 1 balance sheet is to ensure that IORPs can deliver on the pension promise as defined by the pension scheme/contract and national social and labour law. In this balance sheet, IORPs have to comply with an SCR and are permitted appropriate, though limited, recovery periods to increase financial assets and/or to reduce mismatch risk.

5.230 The aim of the pillar 2/3 balance sheet is to assess whether the pension promise, as defined by the pension scheme/contract and national social and labour law, will be sustainable in the future, i.e. whether the security and benefit adjustment mechanisms of the IORP are able to cover the defined future scenarios. This balance sheet could be used as a risk management tool.

Pillar 1 requirements

5.231 The 'pillar 1 balance sheet' would provide a view of the current situation of the IORP, based on the unconditional benefits at the calculation date. This balance sheet would contain (harmonised) trigger points that would identify when supervisory responses or IORP actions are required.

5.232 The balance sheet would consist of the following elements:

- The assets would consist of the financial assets, legally enforceable sponsor support and pension protection schemes;
- The liabilities would consist of the unconditional liabilities;
- The SCR would be calculated over this balance sheet taking also into account the loss-absorbing capacity of the security and benefit adjustment mechanisms, as far as they would become available and enforceable (asset-side) or unconditional (liabilities-side) at the calculation date when the predefined shocks within the capital requirement would occur⁹⁷;

5.233 Directly related to the pillar 1 balance sheet are the supervisory triggers:

- If the SCR cannot be covered by the eligible elements, the IORP is in an underfunding position and a recovery plan must be submitted to the supervisor setting out how the IORP intends to get back to a full funding position;
- If the financial assets are lower than the Level B best estimate of the liabilities, a recovery plan must be submitted to the supervisor explaining how the financial assets will be increased and/or how the benefits will be adjusted so as to fund the Level B best estimate.

Pillar 2 requirements

5.234 The 'pillar 2/3 balance sheet' would provide a forward-looking assessment of what could happen in the future and how the IORP would respond to the various potential scenarios. This balance sheet would start from the pillar 1 balance sheet and explore future incoming and outgoing cash-flows (both in respect of benefits and in respect of contributions). The pillar 2/3 balance sheet would therefore contain all types of benefits and all types of security and benefit adjustment mechanisms.

5.235 As the pillar 2/3 balance sheet would look at future responses from the IORP to potential funding positions, the IORP should model how it would respond to any situation. This implies that recovery plans are already included in the modelling before they are actually needed. It also means that this balance sheet should always balance. If it does not balance, the financial set-up of the IORP is not sustainable, as the IORP is not able to deliver on the pension promise; surely not in the long run. The IORP should then be forced to change the financial set-up or to ask social partners to change the pension contract into a promise that can actually be fulfilled.

5.236 The mechanisms that are available to IORPs, the order in which they are used and the allowable depth of the instruments will be determined (or at

⁹⁷ This means for example that ex ante or ex post benefit reductions can be part of the netting effect to the extent that they would become unconditional if the predefined shocks in the SCR calculations would occur (for instance as a result of an existing recovery plan).

least limited) by national rules. This means that even in case of a 'balanced' pillar 2/3 balance sheet, the national supervisor may identify a breach of (host) national legislation. For instance, the depth of the ex post benefit reductions needed may be such that this mechanism no longer qualifies as a 'last resort mechanism'. Whether or not action is then needed is dependent on national social and labour law.

5.237 This leads to the recognition of two 'trigger points' for the pillar 2/3 balance sheet. The first trigger point is a general, harmonised trigger point, the second is country-specific by nature:

- If the pillar 2/3 balance sheet does not balance, the pension promise cannot be fulfilled with the current financial set-up. The promise and the financial set-up then need to be aligned by changing one of them, or by changing both;
- If mechanisms are used or relied upon to an extent that breaches national regulations, action must be taken as deemed appropriate by national regulation.

5.238 The key characteristics of this option can be summarised in the following table:

Table 5.4: Example 3			
Amount to be covered – trigger point (1)	Reductions of benefits taken into account (2)	Eligible assets (3)	Supervisory response if (1) - (2) > (3)
Level B best estimate of technical provisions (excluding pure discretionary and mixed benefits)	Ex ante benefit reductions	Financial assets	The IORP (where necessary in agreement with the sponsor) to set up a recovery plan to finance the IORP up to the required level
SCR plus Level A technical provisions (including risk margin, excluding pure discretionary and mixed benefits)	Ex ante benefit reductions	Financial assets, legally enforceable sponsor support and PPS	
Pillar 2 risk management tool			
Level A technical provisions (incl. risk margin)	Ex ante benefit reductions Ex post benefit reductions Reductions in case of sponsor default	Financial assets, sponsor support and PPS	The IORP to restore sustainability using a flexible approach

Market-consistent and risk-based supervision

Pillar 1 requirements

5.239 IORPs would have to value the pillar 1 balance sheet on a market-consistent basis. Furthermore, IORPs would be subject to a risk-based capital requirement that takes into account a comprehensive set of risks as well as the capacity of the sponsor and benefit adjustment mechanisms to absorb losses. The existing regulatory own funds requirement does not consider financial market risk and only applies to IORPs where the institution bears the risk.

Pillar 2 requirements

5.240 The pillar 2/3 balance sheet would be valued on a market-consistent basis. Furthermore, this balance sheet projects future risks and the expected responses by the IORP.

National IORP systems

Pillar 1 requirements

5.241 The impact of the pillar 1 balance sheet and its prudential requirements, although imposing an SCR requirement, would likely be limited in most countries. This balance sheet recognises legally enforceable sponsor support as an asset, eligible to cover both the SCR and (part of) the liabilities. Moreover, IORPs would only be required to take into account unconditional pension obligations. Finally, member states have the discretion to allow for considerable recovery periods with regard to the amounts to be covered by financial assets and the SCR.

5.242 IORPs where the sponsoring undertaking bears part of the risks would become subject to a risk-based capital requirement. However, the capital requirement would take into account the loss-absorbing capacity of the sponsor. This has the potential of reducing the SCR to zero for strong sponsors or where the default risk of the sponsor is covered by a pension protection scheme that guarantees the full level of benefits.

Pillar 2 requirements

5.243 The pillar 2/3 balance sheet would have an impact on national IORP systems that allow IORPs to provide unsustainable pension promises. The supervisor could require such IORPs to modify the pension promise or the financial set-up of the pension promise.

Protection of members and beneficiaries

Pillar 1 requirements

5.244 The pillar 1 balance sheet in its strictest form ensures that an IORP initially complying with the quantitative requirements under this example will be able to deliver on the pension promise, without proceeding to ex post benefit reductions or benefit reductions in case of sponsor default, with a

probability corresponding to the confidence level underlying the SCR calculation.

- 5.245 The possibility for member states to allow for long recovery periods would mean that the example would not ensure that the IORP would be able to meet the pension promise with the confidence level underlying the SCR at all times.
- 5.246 The impact on the short-term protection of members and beneficiaries, of existing IORPs, is probably low, as the new rules on tiering of assets do not significantly differ from those currently applicable. However, IORPs will still have to comply with new capital requirements (SCR).
- 5.247 IORPs may be covered by unlimited sponsor support of sufficient financial strength and/or a pension protection scheme, which has the capacity to provide full loss-absorbency in the SCR. In that case the impact on the protection of members and beneficiaries is low as the sponsor support and/or pension protection scheme will help the IORP comply with the new capital requirements through its loss-absorbing capacity.
- 5.248 The protection provided by IORPs with weak or no sponsor support will gradually increase. Such IORPs will experience a higher capital requirement as sponsor support is not able to provide full loss-absorbency in the SCR. However, member states may also allow for substantial recovery periods through national prudential regimes.

Pillar 2 requirements

- 5.249 The pillar 2/3 balance sheet, as a forward-looking risk management tool, is capable of establishing that pension promises are realistic, consistent, sustainable and transparent. As such, this contributes to the protection of members and beneficiaries. The assessment of this balance sheet ensures that IORPs have sufficient financial assets and security and benefit adjustment mechanisms to support the pension promise as defined by the pension scheme/contract and national social and labour law.

Similar level of protection irrespective of security mechanisms used and possible misstatement of the level of protection

- 5.250 This example takes into account all security mechanisms. It will therefore reach the objective of the Commission indicated in its Call for Advice from EIOPA that "irrespective of the security mechanisms used, the level of protection of the scheme members and beneficiaries should be similar."⁹⁸ Furthermore, due to the inclusion of all security mechanisms there is no misstatement of the level of protection.

⁹⁸ See page 6 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

Sponsors and pension protection schemes

Pillar 1 requirements

5.251 The impact of the pillar 1 balance sheet on sponsors would be limited. The most important change compared to the current situation is that IORPs where the sponsoring undertaking bears risks would become subject to a risk-based SCR. However, the SCR takes into account the loss-absorbing capacity of sponsor support, which may potentially reduce the SCR to zero for very strong sponsors and for sponsor that are covered by a pension protection scheme that guarantees the full level of benefits. Weaker sponsors may be required to fund the IORP to a higher level, but member states would be allowed to implement recovery periods of considerable length.

5.252 Since sponsors are not strongly affected, the impact on pension protection schemes will also be limited.

Pillar 2 requirements

5.253 The pillar 2/3 balance sheet will probably have limited impact on sponsors. IORPs providing an incomplete contract can be required to improve the financial set-up of the IORP or the pension promise. However, sponsors providing unlimited support may not be able to provide the necessary additional support. Furthermore, sponsors providing limited or non-legally enforceable cannot be forced to make additional payments.

Long-term investments

Pillar 1 requirements

5.254 In member states that already apply risk-based capital requirements, the pillar 1 balance sheet will not impact on long-term investments. Any effects of risk-based capital requirements on the investment behaviour of IORPs will have already taken place when the member state introduced its national risk-based capital requirements.

5.255 In member states that do not currently apply risk-based capital requirements, the introduction of the SCR in the pillar 1 balance sheet will stimulate IORPs to take a comprehensive view of mismatch risk between assets and liabilities. The SCR calculation will also increase insight into the risk exposure of sponsors and plan members. The outcomes of those calculations may lead IORPs to conclude that mismatch risk between assets and liabilities needs to be reduced, which may have consequences for allocations to certain long-term investments.

5.256 Member states will be in a position to specify recovery periods in national prudential regimes in case the SCR is breached. This means that the capital requirement will be used as a long-term target, lowering the potential impact on certain long-term investments.

Pillar 2 requirements

5.257 The pillar 2/3 balance sheet will have no impact on long-term investments, as it does not include the SCR as a measure of the IORP's risk exposure.

Cross-border activity

5.258 This example would provide national competent authorities with an explicit framework to assess a broad range of IORPs with different security and benefit adjustment mechanisms, both through the pillar 1 balance sheet and through the pillar 2/3 balance sheet. This will potentially stimulate cross-border activity as current prudential regimes are very much tailored to national IORPs systems and have difficulty in coping with other types of arrangements.

5.259 The example would not in itself make the fully funded at all times requirement redundant. Member states could still specify additional requirements for recovery periods with regard to the level of technical provisions to be covered with financial assets. As a result, this potential barrier to cross-border activity could still be relevant.

5.260 There would remain scope for regulatory arbitrage, i.e. IORPs establishing themselves in member states where prudential rules are most lenient, as national prudential regimes may differ with regard to the discount rate for valuing the level of technical provisions to be covered with financial assets as well as recovery periods.

Consistency with insurance framework

5.261 The consistency of this example with the insurance framework is high. An insurance company that would be subject to the requirements under the pillar 1 balance sheet would be treated almost the same as under the Solvency II requirements. The only difference remaining would be that pure discretionary and mixed benefits would not have to be included under this example. Moreover, member states may specify an appropriate length of recovery periods with regard to the SCR in their national prudential regimes.

Questions to stakeholders:

Q103: Do stakeholders have any general comments on (the description of) example 3?

Q104: Could example 3, in the view of stakeholders, be used for all IORPs in the EU, taking into account national specificities?

5.4.4. Example 4

General description

- 5.262 This example intends to ensure that, with a probability corresponding at least to the level of confidence underlying the SCR calculation, the IORP will be left at a 1 year horizon with a level of assets sufficient to hedge mismatch risk between assets and liabilities (excl. pure discretionary and mixed benefits) or, in case of non-hedgeable liabilities, to transfer risks to another institution (IORP, insurance undertaking, etc.), after having, if necessary and possible, applied ex ante and ex post benefit reductions.
- 5.263 IORPs could recognise all security and benefit adjustment mechanisms on the holistic balance sheet, including pension protection schemes, ex post benefit reductions and benefit reductions in case of sponsor default. Assets and liabilities would have to be valued on a market-consistent basis.
- 5.264 IORPs will have to hold a minimum level of financial assets to cover the Level B best estimate of technical provisions (excl. ex ante and ex post benefit reductions as well as benefit reduction in case of sponsor default) based on the expected return on assets. IORPs are permitted an extensive though limited time period to recover if financial assets fall below this minimum threshold. Member states may impose additional requirements on recovery periods and the amounts to be covered with financial assets through their national social and labour law.
- 5.265 The SCR and Level A technical provisions must be covered by financial assets, sponsor support or pension protection scheme. IORPs that do not meet the SCR are permitted a recovery period of less than a year to increase financial assets and/or to reduce mismatch risk, but the recovery period can be extended through national social and labour law.
- 5.266 Hence, in this example, the reliance on the sponsor and/or pension protection schemes may be high in cases of low funding of IORPs with financial assets. However, reliance on the sponsor and/or pension protection schemes is only possible if the market consistent value of these security mechanisms is sufficiently high and certain criteria are met.
- 5.267 The key characteristics of this option can be summarised in the following table:

Table 5.5: Example 4			
Amount to be covered – trigger point (1)	Reductions of benefits taken into account (2)	Eligible assets (3)	Supervisory response if (1)- (2) > (3)
Level B best estimate of technical provisions (excluding pure discretionary and mixed benefits)	-	Financial assets	The IORP (where necessary in agreement with the sponsor) to set up a recovery plan to finance the IORP up to the required level
SCR plus Level A technical provisions (including risk margin and excluding pure discretionary and mixed benefits)	Ex ante reductions of benefits Ex post reductions of benefits Reductions of benefits in case of sponsor default	Financial assets, sponsor support and PPS	

Market-consistent and risk-based supervision

5.268 IORPs would have to value the holistic balance sheet on a market-consistent basis. IORPs would be subject to a risk-based capital requirement that takes into account the capacity of security and benefit adjustment mechanisms to absorb losses.

National IORP systems

5.269 This example would not interfere with pension schemes/contracts and national social and labour law, provided that national pension arrangements are completely specified. This means that the security and benefit adjustment mechanisms of IORPs should be strong enough to absorb all losses in the SCR stress scenarios.

5.270 The example might necessitate adjustments to national pension arrangements if these are not completely specified. Such arrangements are not sustainable in the sense that IORPs will not have enough assets (incl. security mechanisms) to cover the value of pension obligations (incl. benefit adjustment mechanisms) on the holistic balance sheet and/or the stressed balance sheet used in the SCR calculation. The IORP would have to raise financial assets to meet the SCR, but the impact could be mitigated. Member states have the option to permit substantial recovery periods.

5.271 The example would prescribe that at least the Level B best estimate of technical provisions should be covered with financial assets, which is consistent with the current IORP Directive. Member states may specify additional requirements on the amounts to be covered with financial assets and accompanying recovery periods through national social and labour

law. This ensures that security levels will not be lowered compared to the existing situation.

Protection of members and beneficiaries

- 5.272 The example, in its strictest form, ensures that an IORP initially complying with the quantitative requirements under this example will be able to deliver on the pension promise, which may include ex post benefit reductions or benefit reductions in case of sponsor default, with a probability corresponding to the confidence level underlying the SCR calculation. The holistic balance sheet is valued on a market-consistent basis, which increases the possibility of IORPs having sufficient assets to hedge mismatch risk between assets and liabilities.
- 5.273 The possibility for member states to allow for long recovery periods would mean that the regime would not ensure that the IORP would be able to meet the pension promise with the confidence level underlying the SCR at all times.
- 5.274 The impact on the short-term protection of members and beneficiaries of existing IORPs is probably low. IORPs that provide a complete pension promise will balance the holistic balance sheet and comply with the SCR. IORPs may be covered by unlimited sponsor support, possibly supplemented by a pension protection scheme, which has the capacity to provide full loss-absorbency in the SCR. Similarly, the pension promise may allow for ex ante benefit reductions, ex post benefit reductions and benefit reductions in case of sponsor default that can reduce the SCR to zero.
- 5.275 The protection provided by IORPs with weak security and benefit adjustment mechanisms will gradually increase. Such IORPs will experience a higher capital requirement as security and benefit adjustment mechanisms are not able to provide full loss-absorbency in the SCR. However, member states may also allow for substantial recovery periods through national social and labour law.

Similar level of protection irrespective of security mechanisms used and possible misstatement of the level of protection

- 5.276 This example takes into account all security mechanisms. It will therefore achieve the objective of the Commission indicated in its Call for Advice from EIOPA that “irrespective of the security mechanisms used, the level of protection of the scheme members and beneficiaries should be similar.”⁹⁹ Furthermore, due to the inclusion of all security mechanisms there is no misstatement of the level of protection.

⁹⁹ See page 6 of European Commission, Call for Advice from the European Insurance and Occupational Pensions Authority (EIOPA) for the Review of Directive 2003/41/EC (IORP II), 30 March 2011.

Sponsors and pension protection schemes

- 5.277 Sponsors that have sufficient financial strength to provide the IORP with unlimited support or that are covered by a pension protection scheme - possibly in combination with benefit reductions in case of sponsor default - would not be impacted by the this example. Such sponsors could still provide funding to the IORP in a gradual way to cover at least the Level B best estimate of technical provisions with financial assets.
- 5.278 Other sponsors that have a legal obligation to provide unlimited sponsor support would experience a limited impact. These sponsors would not be able to provide full, but still some loss-absorbency in the SCR calculation. Moreover, member states may allow for prolonged recovery periods.
- 5.279 This example is unlikely to trigger any increased calls on a pension protection schemes. Since all characteristics of the contract are taken into account there should be no additional burden on sponsors. This means that their probability of default should not increase, and therefore there would be no increased calls on the pension protection scheme.

Long-term investments

- 5.280 In member states that already apply risk-based capital requirements, the framework will not impact on long-term investments. Any effects of risk-based capital requirements on the investment behaviour of IORPs will have already taken place when the member state introduced its national risk-based capital requirements.
- 5.281 In member states that do not currently apply risk-based capital requirements, the introduction of the SCR will stimulate IORPs to take a comprehensive view of mismatch risk between assets and liabilities. The SCR calculation will also increase insight into the risk exposure of sponsors and plan members. The outcomes of those calculations may lead IORPs to conclude that mismatch risk between assets and liabilities needs to be reduced, which may have consequences for allocations to certain long-term investments.
- 5.282 IORPs that are relying on financial assets and provide guarantees would need to hold own funds to provide cover against mismatch risk between long-term investments and liabilities. Especially, IORPs that currently provide guarantees and that are not covered by sufficiently strong security mechanisms would be encouraged to increase allocations to assets that match liabilities. This would reduce the SCR and, hence, lower the amount of additional financial assets that needs to be raised. However, member states may allow for substantial recovery periods, which would diminish the potential impact on certain long-term investments.
- 5.283 IORPs that are covered by strong security and benefit adjustment mechanisms, which in the end are able to absorb all losses in the SCR stress scenarios, are not bound by the SCR. However, the holistic balance

sheet and the SCR calculation enhance transparency with regard to the risk exposure of sponsors and plan members. The outcomes of those calculations may lead IORPs to conclude that mismatch risk between assets and liabilities needs to be reduced, which may have consequences for allocations to certain long-term investments.

Cross-border activity

5.284 This example would provide national competent authorities with an explicit framework to assess a broad range of IORPs with different security and benefit adjustment mechanisms. This will potentially stimulate cross-border activity as current prudential regimes are very much tailored to national IORPs systems and have difficulty in coping with other types of arrangements.

5.285 The example would facilitate the removal of the 'fully funded at all times' requirement for IORPs engaging in cross-border operations. Member states could specify additional requirements with regard to the amounts to be covered with financial assets and for recovery periods through national social and labour law, as opposed to the current approach where minimum requirements are supplemented through national prudential regimes. As a result, the removal of this potential barrier may provide an additional stimulus to cross-border activity.

5.286 This example would minimise scope for regulatory arbitrage, i.e. IORPs establishing themselves in member states where prudential rules are most lenient, as minimum requirements are supplemented through national social and labour law. As consequence, the quantitative requirements will be the same for pension schemes from a particular member state, irrespective of the home member state of the IORP providing the scheme.

Consistency with insurance framework

5.287 This example would to a large extent be consistent with the Solvency II framework for insurers. IORPs that are not covered by specific security mechanisms and/or benefit adjustment mechanism would need to cover the full SCR with financial assets subject to a recovery period of less than one year, but the recovery period can be extended through national social and labour law. However, discretionary and mixed benefits would not have to be included in the amount of technical provisions.

5.288 In cases where insurance undertakings are allowed to claim additional contributions and/or reduce benefits ex post (which is the case for instance for mutual entities, at least in some jurisdictions), this example would lead to potential inconsistencies with regard to the treatment of sponsor support (mechanisms of a similar type – such as a call for additional contributions a mutual can issue to its members – are not eligible for covering technical provisions under Solvency II) and to the possibility to reduce benefits ex post (not taken into account in the

insurance framework). In cases where sponsor support is limited or insufficient relative to the financial position of the IORP, the funding requirement with regard to technical provisions can only be met by financial assets.

Questions to stakeholders:

Q105: Do stakeholders have any general comments on (the description of) example 4?

Q106: Could example 4, in the view of stakeholders, be used for all IORPs in the EU?

5.4.5. Example 5

General description

5.289 The objective of this example is to ensure that IORPs can deliver on the pension promise as defined by the pension scheme/contract and national social and labour law.

Pillar 1 requirements

5.290 IORPs would in this example be subject to the minimum funding requirements and accompanying recovery periods in the current IORP Directive, which may be supplemented through national prudential legislation. However, the calculation of technical provisions would be more harmonised by valuing them on a market-consistent basis. Besides unconditional benefits, IORPs would have to include a risk-margin as well as pure conditional and mixed benefits.

Pillar 2 requirements

5.291 IORPs would also be required to assess the holistic balance sheet and the SCR as a risk management tool through the pillar 2 requirements. The full holistic balance sheet would be valued on market-consistent basis and include all security and benefit adjustment mechanisms. IORPs may also take into account the loss-absorbing capacity of these security and benefit adjustment mechanisms in the calculation of the SCR.

5.292 The outcomes of the pillar 2 assessment would be subject to public disclosure. National supervisory authorities would be able to require IORPs that have insufficient assets (incl. sponsor support and pension protection schemes) to cover the SCR to put in place a 'recovery plan' in order to ensure that IORPs are able fulfil the pension promise with a degree of certainty in line with the specified confidence level.

5.293 The key characteristics of this example can be summarised in the following table:

Table 5.6: Example 5			
Amount to be covered – trigger points (1)	Reductions of benefits taken into account (2)	Eligible assets (3)	Supervisory response if (1)- (2) > (3)
Minimum Level A technical provisions (including risk margin) + regulatory own funds requirement of current IORP Directive and member state option to impose additional buffer requirement	Ex ante benefit reductions	Financial assets	The IORP (where necessary in agreement with the sponsor) to set up a recovery plan to finance the IORP up to the required level
Pillar 2 risk management tool			
SCR plus Level A technical provisions (incl. risk margin)	Ex ante reductions of benefits Ex post reductions of benefits Reductions in case of sponsor default	Financial assets, sponsor support and PPS	The IORP to restore sustainability using a flexible approach

Market-consistent and risk-based supervision

Pillar 1 requirements

5.294 IORPs would have to value technical provisions on a market-consistent basis.

Pillar 2 requirements

5.295 As part of the pillar 2 requirements, the full holistic balance sheet would be valued on a market-consistent basis. In addition, IORPs would need to calculate a risk-based capital requirement that takes into account a comprehensive set of risks as well as the capacity of the sponsor and benefit adjustment mechanisms to absorb losses.

National IORP systems

Pillar 1 requirements

5.296 This example would interfere with national systems by imposing a more harmonised approach to establishing technical provisions. IORPs would have to fund a higher level of technical provisions if current discount rates exceed the (adjusted) risk free interest rate and/or if pure conditional and mixed benefits are currently not taken into account. Moreover, technical provisions would have to include a risk margin using the cost-of-capital approach.

Pillar 2 requirements

5.297 National pension systems that allow IORPs to provide unsustainable pension promises would be affected through the pillar 2 requirements of this example. Member states where IORPs have weak sponsor support arrangements will be most impacted by the assessment of the full holistic balance sheet and the SCR. This is the case when financial assets do not cover the SCR and when benefit reduction mechanisms do not provide full loss-absorbency in the SCR. Such IORPs would be obliged by the national supervisory authority modify the pension arrangement to ensure that pension promises can be fulfilled.

Protection of members and beneficiaries

5.298 This example would be capable of accomplishing that pension promises are realistic and transparent. IORPs should be able to support any pension promise by having sufficient financial assets and security mechanisms.

5.299 The assessment of the full holistic balance sheet and the SCR ensures that IORPs have enough financial assets and/or sufficiently strong security and/or benefit adjustment mechanisms to absorb unexpected losses. If this is not the case, supervisory authorities would be able to force IORPs to modify the pension arrangement to ensure that the pension promise can be fulfilled.

Sponsors and pension protection schemes

5.300 This example will impact sponsors providing unlimited support to IORPs that experience a rise in technical provisions. The more harmonised approach may increase technical provisions by lowering discount rates and/or by including pure conditional and mixed benefits as well as a risk margin. The impact on sponsor contributions may be smoothed over time as member states would be able to determine recovery periods through national prudential regimes.

5.301 Since an increase in sponsor contributions may be smoothed over time, the short-term impact on pension protection schemes will be limited. In the long term, calls on the pension protection scheme may decrease because IORPs will achieve a higher level of funding with financial assets.

Long-term investments

5.302 In member states that already apply risk-based capital requirements, the framework will not impact on long-term investments. Any effects of risk-based capital requirements on the investment behaviour of IORPs will have already taken place when the member state introduced its national risk-based capital requirements.

5.303 In member states that do not currently apply risk-based capital requirements, the introduction of the SCR as part of pillar 2 will stimulate IORPs to take a comprehensive view of mismatch risk between assets and

liabilities. The SCR calculation will also increase insight into the risk exposure of sponsors and plan members. The outcomes of those calculations may lead IORPs to conclude that mismatch risk between assets and liabilities needs to be reduced, which may have consequences for allocations to certain long-term investments.

5.304 IORPs with no or non-legally enforceable sponsor support are likely to experience the biggest gap between assets and the SCR, since this type of sponsor support will have little loss-absorbing capacity. These IORPs will have the strongest incentive to reduce balance sheet mismatch risk.

Cross-border activity

5.305 This example would provide national competent authorities with an explicit framework to assess a broad range of IORPs with different security and benefit adjustment mechanisms through the use of the holistic balance sheet as a risk management tool under pillar 2. This will potentially stimulate cross-border activity as current prudential regimes are very much tailored to national IORPs systems and have difficulty in coping with other types of arrangements.

5.306 The example would not make the fully funded at all times requirement redundant. Member states could still specify additional requirements for recovery periods. As a result, this potential barrier to cross-border activity could still be relevant.

5.307 Despite the more harmonised approach to valuing technical provisions, there would remain scope for regulatory arbitrage, i.e. IORPs establishing themselves in member states where prudential rules are most lenient, as national prudential regimes may differ with regard to additional capital requirements and recovery periods.

Consistency with insurance framework

5.308 Consistency with the insurance framework would be increased in this example by introducing the requirement to assess the full holistic balance sheet and SCR under pillar 2. However, the outcomes of these calculations will not be used to impose quantitative requirements under pillar 1. The assessment will serve as a test whether IORPs have sufficient assets (incl. security mechanisms) to fulfil pension promises with a high degree of certainty. IORPs failing the test could be required by the supervisory authority to modify the pension arrangement.

Questions to stakeholders:

Q107: Do stakeholders have any general comments on (the description of) example 5?

Q108: Could example 5, in the view of stakeholders, be used for all IORPs in the EU?

5.4.6. Example 6

General description

Pillar 1 requirements

5.309 IORPs would be subject to the valuation standards, minimum funding requirements and accompanying recovery periods in the current IORP Directive, which may be supplemented through national prudential legislation.

Pillar 2 requirements

5.310 IORPs would also be required to assess the holistic balance sheet and the SCR as a risk management tool through the pillar 2 requirements. The full holistic balance sheet would be valued on market-consistent basis and include all security and benefit adjustment mechanisms. IORPs may also take into account the loss-absorbing capacity of these security and benefit adjustment mechanisms in the calculation of the SCR.

5.311 National supervisory authorities would be able to require IORPs that have insufficient assets (incl. sponsor support and pension protection schemes) to cover the SCR to modify the pension arrangement in order to ensure that IORPs are able fulfil the pension promise with a high degree of certainty.

5.312 The key characteristics of this option can be summarised in the following table

Table 5.7: Example 6			
Amount to be covered (1)	Reductions of benefits taken into account (2)	Eligible assets (3)	Supervisory response if (1) - (2) > (3)
Technical provisions, SCR and risk margins would be calculated in accordance with the current IORP Directive and national requirements, and supervisory responses would follow current provisions.			
Pillar 2 risk management tool			
SCR plus Level A technical provisions (incl. risk margin)	Ex ante benefit reductions Ex post reductions of benefits Reductions in case of sponsor default	Financial assets, sponsor support and PPS	The IORP to restore sustainability using a flexible approach

Market-consistent and risk-based supervision

Pillar 1 requirements

5.313 The value of technical provisions would not be market-consistent, as member states could continue to apply discount rates ranging from the yield on government or high-quality bonds to the expected return on assets. Moreover, IORPs where the institutions underwrite risk would still be subject to the regulatory own funds requirement of the IORP Directive, which does not take into account market risks.

Pillar 2 requirements

5.314 As part of the pillar 2 requirements, the full holistic balance sheet would be valued on a market-consistent basis. In addition, IORPs would need to calculate a risk-based capital requirement that takes into account a comprehensive set of risks as well as the capacity of the sponsor and benefit adjustment mechanisms to absorb losses.

National IORP systems

Pillar 2 requirements

5.315 This example would affect national IORP systems that allow IORPs to provide unsustainable pension promises through the pillar 2 requirements. Member states where IORPs have weak sponsor support arrangements will be most impacted by the assessment of the full holistic balance and the SCR. This is the case when financial assets do not cover the SCR and when benefit reduction mechanisms do not provide full loss-absorbency in the SCR. Such IORPs would be obliged by the national supervisory authority to modify the pension arrangement to ensure that pension promises can be fulfilled.

Protection of members and beneficiaries

5.316 This example would be capable of accomplishing that pension promises are realistic and transparent. IORPs should be able to support any pension promise by having sufficient financial assets and security mechanisms.

5.317 The assessment of the full holistic balance sheet and the SCR ensures that IORPs have enough financial assets and/or sufficiently strong security and/or benefit adjustment mechanisms to absorb unexpected losses. If this is not the case, supervisory authorities would be able to direct IORPs to modify the pension arrangement to ensure that the pension promise can be fulfilled.

Sponsors and pension protection schemes

5.318 Sponsors are not likely to be affected since funding requirements and valuation standards will not change. As a consequence, the impact on pension protection schemes will be limited.

Long-term investments

- 5.319 In member states that already apply risk-based capital requirements, the framework will not impact on long-term investments. Any effects of risk-based capital requirements on the investment behaviour of IORPs will have already taken place when the member state introduced its national risk-based capital requirements.
- 5.320 In member states that do not currently apply risk-based capital requirements, the introduction of the SCR as part of pillar 2 will stimulate IORPs to take a comprehensive view of mismatch risk between assets and liabilities. The SCR calculation will also increase insight into the risk exposure of sponsors and plan members. The outcomes of those calculations may lead IORPs to conclude that mismatch risk between assets and liabilities needs to be reduced, which may have consequences for allocations to certain long-term investments.
- 5.321 IORPs with no or non-legally enforceable sponsor support are likely to experience the biggest gap between assets and the SCR, since this type of sponsor support will have little loss-absorbing capacity. These IORPs will have the strongest incentive to reduce balance sheet mismatch risk.

Cross-border activity

- 5.322 This example would provide national competent authorities with an explicit framework to assess a broad range of IORPs with different security and benefit adjustment mechanisms through the use of the holistic balance sheet as a risk management tool under pillar 2. This will potentially stimulate cross-border activity as current prudential regimes are very much tailored to national IORPs systems and have difficulty in coping with other types of arrangements.
- 5.323 The quantitative requirements under pillar 1 will remain the same in this example, which means the 'fully funded at all times' requirement would not be made redundant. Member states could continue to specify additional requirements with regard to the level of technical provisions to be covered with financial assets and for recovery periods. As a result, this potential barrier to cross-border activity would still be relevant.
- 5.324 There would also remain scope for regulatory arbitrage, i.e. IORPs establishing themselves in member states where prudential rules are most lenient, as national prudential regimes will continue to differ with regard to discount rates, additional capital requirements and recovery periods.

Consistency with insurance framework

- 5.325 Consistency with the insurance framework would be increased by introducing the requirement to assess the full holistic balance sheet and SCR under pillar 2. However, the outcomes of these calculations will not be used to impose quantitative requirements under pillar 1. The assessment

will serve as a test whether IORPs have sufficient assets (incl. security mechanisms) to fulfil pension promises with a high degree of certainty. IORPs failing the test could be required by the supervisory authority to modify the pension arrangement.

Questions to stakeholders:

Q109: Do stakeholders have any general comments on (the description of) example 6?

Q110: Could example 6, in the view of stakeholders, be used for all IORPs in the EU?

5.4.7. Summary overview of examples

5.326 The following table summarises the assessment of the examples set out in the previous sections. Of necessity, any summary simplifies the source information and must be understood as an overview of the analysis and not as a substitute. Furthermore, this summary is not intended to identify any preferred example.

5.327 It should be noted that other factors, and in particular national social and labour law, may have an impact on the absolute level of some of the criteria listed here (for instance: protection of members and beneficiaries, costs, exposure to the default of the sponsor).

Table 5.8: Summary overview of examples of supervisory frameworks

Line of analysis	Example 1	Example 2	Example 3	Example 4	Example 5	Example 6
Market-consistent and risk-based	Full	Partial through pillar 3	Full	Full	Full market-consistent, partial risk-based through pillar 2	Partial through pillar 2
National IORP systems	Considerable impact in a number of member states	Impact greatest in states with no enforceable employer covenant and without a current market consistent regime	Impact would be limited in most but not all countries	Greatest impact where there are limited or no security or benefit reduction mechanisms	Obligation for increased harmonisation would have an impact in a number of countries	Very low
Protection of members and beneficiaries	High capital requirement, short recovery periods	Medium capital requirement, longer recovery periods	High capital requirements, longer recovery periods	Medium capital requirements, longer recovery periods	MS specific capital requirements, longer recovery periods	MS specific capital requirements, longer recovery periods
Sponsors and pension protection schemes	Higher capital requirements would significantly increase demands on sponsors in some member states. Consequent impact on PPS	Limited effect	Limited or none	Limited effect	Limited effect	Limited or none
Similar level of protection irrespective of security mechanisms	Partial	Partial	Full	Full	Not relevant	Not relevant
Long-term investment	Increased need for liquidity may discourage long-term investments	Little negative impact where there are long recovery periods or significant security or benefit reduction mechanisms	Little negative impact where there are long recovery periods or significant security or benefit reduction mechanisms	Little negative impact where there are long recovery periods or significant security or benefit reduction mechanisms	Little negative impact where there are long recovery periods or significant security or benefit reduction mechanisms	Little negative impact
Cross-border activity	High harmonisation of prudential regime, fully funded requirement redundant, high comparability	Medium harmonisation of prudential regime, fully funded requirement not redundant, high comparability through pillar 3	Medium harmonisation of prudential regime, fully funded requirement not redundant, high comparability	High harmonisation of prudential regime, fully funded requirement redundant, high comparability	Medium harmonisation of prudential regime, fully funded requirement not redundant, high comparability through pillar 2/3	Low harmonisation of prudential regime, fully funded requirement not redundant, high comparability through pillar 2/3
Consistency with insurance framework	Fully consistent	Some differences, but not necessarily inconsistent	High consistency, except for recovery periods	Largely consistent	Limited consistency	Low

5.5. Possible simplifications

- 5.328 All of the examples for a supervisory framework presented above require IORPs to set up a holistic balance sheet. The holistic balance sheet offers benefits in terms of providing IORPs and their stakeholders with a transparent view of the extent to which pension obligations can be supported by financial assets, sponsor support and pension protection schemes and of the extent to which benefit adjustment mechanisms are expected to be used in the future. However, EIOPA recognises that establishing the holistic balance sheet, and possibly the SCR, is accompanied with costs. Therefore, it would be helpful to identify situations where simplifications are possible and appropriate.
- 5.329 Simplifications could be considered most appropriate in cases where IORPs will (always) have sufficient assets (incl. security mechanisms) to meet the technical provisions (incl. benefit adjustment mechanisms) and/or the SCR. This would in particular be the case when IORPs have in place very strong security mechanisms or unrestricted benefit reduction mechanisms that are able to balance the holistic balance sheet and/or provide full loss-absorbency in the SCR calculation. Examples for this are cases where sponsor support or a pension protection scheme guaranteeing 100% of benefits would be considered a balancing item on the holistic balance sheet.
- 5.330 Simplifications could include a lower frequency of establishing and reporting the holistic balance sheet, unless there is a material change in the IORP's risk profile, simplifications with regard to the necessary calculations for setting up the holistic balance sheet (in particular technical provisions and SCR), and/or less strict risk management procedures.
- 5.331 In case of a strong pension protection scheme guaranteeing 100% of benefits the benefits promised to members and beneficiaries will always be paid. This is a fact, irrespective of whether the pension protection scheme is included in the framework or not. This means that simplifications to the holistic balance sheet based on the existence of a pension protection scheme would also be appropriate, if an existing pension protection scheme was not included in determining quantitative requirements within a prudential framework.

Questions to stakeholders:

Q111: Do stakeholders agree that there is scope for simplifications with regard to drawing up the holistic balance sheet? Which simplifications would you consider most important and in which situations?

Annex: Summary of Questions to Stakeholders

Contract boundaries

Q1: Do stakeholders think that the word "contract" is an adequate description of the characteristics of the set of rules and arrangements governing the provision of benefits to members and beneficiaries by an IORP?

Q2: Do stakeholders think that the word "boundary" is suitable here?

Q3: If not, please provide an expression more suitable for IORPs which could replace the expression "contract boundaries".

Q4: Do stakeholders have any general comments on the above section?

Q5: Do stakeholders think that unilateral rights (or obligations) of an IORP to terminate the contract/agreement/promise or reject additional contributions to the contract/agreement/promise or modify the promise in a way that contributions fully reflect the risk should be the basis for a definition of contract boundaries for IORPs? Are there cases where such rights (or obligations) should be the basis for a definition of contract boundaries for IORPs even though they are not unilateral rights (or obligations) of the IORP, but can be exercised unilaterally or jointly by other parties (possibly together with the IORP)?

Q6: Do stakeholders agree with the analysis above of the different ways of liabilities of IORPs arising?

Q7: Do stakeholders think that there should be a distinction between incoming cash-flows which are considered as "regular contributions" to finance (the accrual of) benefits on the one hand and sponsor support on the other hand? What is the view of stakeholders regarding the practicality of such a distinction?

Q8: Do stakeholders agree, that, if there was a distinction as described in question Q7, "regular contributions" should be recognised in technical provisions while sponsor support should be treated separately?

Q9: Do stakeholders agree that payments by the IORP to the sponsor related to a surplus of the IORP (in case such payments are allowed for in the scheme) should not be recognised in technical provisions of the IORP? If not, how/where should they be recognized/presented in the holistic balance sheet?

Q10: Are stakeholders aware of cases in which there would be an obligation of the IORP to pay out benefits without having received any contributions/payments to finance those benefits (e.g. because the obligation is constituted by social and labour law)? If yes, please describe.

Q11: Do stakeholders believe that the contract boundaries could be defined based on future benefit payments rather than contribution or premiums?

Q12: Do stakeholders have any general comments on the above section?

Q13: Do stakeholders have any general comments on the above section?

Q14: Do stakeholders think that the above definition of contract boundaries for IORPs is in line with the general idea that cash-flows should be recognised if and only if they lead to risks building up in the IORP as described in section 4.2.4 (all those cash-flows should be in technical provisions; no cash-flows where all risks could be avoided should be in technical provisions)?

Q15: In case more/higher cash-flows than appropriate (compared with the general idea) are included in technical provisions according to this definition, how should the definition be amended to exclude them?

Q16: In case not all cash-flows which lead to risk building up in the IORP, as explained in section 4.2.4, are included, with which wording could they be included?

Q17: Is the wording of the definition appropriate for IORPs?

Q18: Is it necessary to have both 2. a. and b. in the above definition, or could a. be restricted to cases where a termination of the agreement leads to a stop of additional contributions and/or the repayment of contributions received/payment of a surrender value (and then maybe a. and b. could be combined)?

Q19: Are there additional rights of the IORP or another party (unilateral or not) which should be considered in the definition (see section 4.2.4)?

Q20: Is it clear from the proposed wording of the definition that in principle not only benefits (out-going cash-flows), but also contributions (incoming cash-flows) have to be recognized in technical provisions?

Q21: Are the cases described in parts a) and b) of the definition clearly distinguishable in practice?

Q22: Are the conditions mentioned above for making unilateral rights of the sponsor part of the definition of contract boundaries sufficient, or should further conditions be included? How could those rights and conditions be merged into the proposed definition of contract boundaries?

Q23: Do stakeholders agree that the proposed adapted definition of contract boundaries for IORPs (above) leads to the results described in this section? If not, please explain.

Discretionary decision-making processes

Q24: Do stakeholders consider the above definitions workable? If not, please explain why not and how you would suggest to improve the definition(s).

Q25: Do stakeholders have any general comments on the above section?

Q26: Would it be possible, in the views of stakeholders, to properly quantify the relation between the funding position of the IORP and elements of discretionary decision-making (the pattern) in order to take the pattern into account in the valuation process? If so, how?

Q27: Do stakeholders agree that IORPs need to produce a best estimate of expected future payments (under different scenarios), if pure discretionary benefits were to be recognised in a holistic balance sheet? If not, what alternative would you suggest?

Q28: Do stakeholders agree that IORPs need to produce a best estimate of expected future payments (under different scenarios), if mixed benefits were to be recognised in a holistic balance sheet? If not, what alternative would you suggest?

Q29: Do stakeholders agree that IORPs need to produce a best estimate of expected future sponsor payments (under different scenarios), if non-legally enforceable sponsor support was to be included on the holistic balance sheet? If not, what alternative would you suggest?

Q30: Do stakeholders agree that these are the two options for valuing off-balance capital instruments? If not, what alternative options would you suggest?

Q31: Which option do you support? Please explain why you support this option.

Q32: Do stakeholders agree that surplus funds should be valued for their nominal value? If not, how would you suggest to value surplus funds?

Q33: Do stakeholders agree that these are the three options for valuing subordinated loans? If not, what alternative options would you suggest?

Q34: Which option do you support? Please explain why you support this option.

Benefit reduction mechanisms

Q35: Do stakeholders agree with these two approaches to valuing benefit reduction mechanisms? If not, what alternatives or amendments would you suggest?

Legally enforceable sponsor support

Q36: Do stakeholders agree that at the EU level, there should only be a principle based approach to valuing sponsor support with the specifics being left to member states/supervisors and/or IORPs?

Q37: Do stakeholders agree with the overarching principle that the valuation of sponsor support should be market consistent? If not, what principle(s) would you suggest?

Q38: Do stakeholders agree that in order to achieve this market consistent valuation, the expected cash flows required by the IORP should be valued allowing for affordability and credit risk of the sponsor? If not, what approach(es) would you suggest?

Q39: What is the general view of stakeholders with regard to sponsor support as a balancing item?

Q40: Which conditions should apply for sponsor support to be treated as a balancing item?

Q41: Are there other cases beyond the cases mentioned above in which sponsor support could be treated as a balancing item?

Q42: Do stakeholders have a view as to what value of M would be appropriate?

Q43: Do stakeholders think a pension protection scheme could in principle be considered as impacting on sponsor support to allow it to be a balancing item if it is considered financially strong and based on a sufficiently permanent and certain legal arrangement?

Q44: Should considering a pension protection scheme as a balancing item be restricted to cases where a pension protection scheme protects 100% of benefits or is it appropriate to allow for the reduction in benefits in case of sponsor default where there is a pension protection scheme in place?

Q45: Do stakeholders believe that it is appropriate that where a pension protection scheme is used as the balancing item, a separate minimum level of funding with financial assets and/or sponsor support should be required?

Q46: Do stakeholders agree that technical specifications should allow for a principles-based, IORP specific valuation of sponsor support? Please explain.

Q47: In what areas of valuation of sponsor support would it be most useful for EIOPA to specify guidance? Please explain and describe the possible contents of such guidance.

Q48: Are there any other issues in relation to stochastic models, which you believe should be covered?

Q49: Do stakeholders believe that this approach is a suitable simplified method for determining sponsor support? In what circumstances is it appropriate? In what circumstances might it not be appropriate?

Q50: As EIOPA has provided a model for IORPs to derive a value using this specification as long as they provide the above input data, what more should EIOPA do to encourage use of this approach where appropriate?

Q51: Do stakeholders believe that this approach is a suitable simplified method for determining sponsor support? In what circumstances is it appropriate? In what circumstances might it not be appropriate?

Q52: As EIOPA has provided a model for IORPs to derive a value using this specification as long as they provide the above input data, what more should EIOPA do to encourage use of this approach, where appropriate?

Q53: Do stakeholders believe that this approach is a suitable simplified method for determining sponsor support? In what circumstances is it appropriate? In what circumstances might it not be appropriate?

Q54: Should EIOPA produce spreadsheets to enable IORPs to use this simplification?

Q55: Do stakeholders believe that this approach is a suitable method for determining sponsor support? In what circumstances is it appropriate? In what circumstances is it not appropriate?

Q56: Do the proposed adaptations to this option overcome the criticisms? Should EIOPA produce spreadsheets to enable IORPs to use this simplification?

Q57: Do stakeholders agree that a simplified one-size-fits-all approach for the calculation of maximum sponsor support is not possible and so the best approach is the proposed principles-based approach for including sponsor affordability? If not, please explain.

Q58: In respect of a further quantitative impact assessment, would stakeholders like EIOPA to define the parameters to use for maximum sponsor support? If yes, how could EIOPA improve the approach set out in the previous QIS?

Q59: Do stakeholders think that other options should be considered to determine a value to be used to assess overall sponsor affordability?

Q60: Do stakeholders believe that the approaches presented cover the full range of possibilities to estimate sponsor default probabilities? If not, what specific alternative approaches would stakeholders suggest?

Q61: What in stakeholders views is the appropriate time period on which to consider possible payments from sponsors for the calculation of sponsor support? Please explain.

Q62: Please provide your views on this suggested approach.

Q63: Are there any other suggestions on how to deal with single sponsors with multiple IORPs?

Q64: Please provide your views on this suggested approach.

Q65: Are there any other suggestions on how to deal with multiple employer IORPs?

Q66: Please provide your views on this suggested approach.

Q67: Please provide your views on this suggested approach.

Q68: Are there any other suggestions on how to deal with not-for-profit entities?

Pension protection schemes

Q69: Do stakeholders agree with the above comments on the options to value pension protection schemes? If not, please explain.

Q70: Which of the options to value pension protection schemes do stakeholders prefer?

Q71: Do stakeholders think a pension protection scheme could in principle be considered a balancing item on the holistic balance sheet, if considered as a separate asset on the holistic balance sheet?

Components of supervisory framework

Q72: If it was decided to establish EU capital/funding requirements as part of pillar 1, would there in the stakeholders' view be a role for the holistic balance sheet? Please explain why and, if yes, what that role should be.

Q73: Do stakeholders believe that the holistic balance sheet should be used as a risk management tool as part of pillar 2 requirements? Please explain.

Q74: Do stakeholders agree that the outcomes of a pillar 2 assessment should be publicly disclosed as part of pillar 3 requirements?

Q75: Do stakeholders agree that competent authorities should be empowered to take supervisory action based on the pillar 2 assessment of the holistic balance sheet? Please explain and, if yes, what action?

Q76: Which of the two options for recognising non-legally enforceable sponsor support do stakeholders support? Please explain why you support this option.

Q77: Which of the two options for recognising pension protection schemes do stakeholders support? Please explain why you support this option.

Q78: Do stakeholders agree that pure discretionary benefits should not be included on an IORP's pillar 1 balance sheet, as these do not represent a part of the benefit promise that needs to be protected by quantitative requirements? If not, what alternative options would you suggest?

Q79: Which of the three options for recognising mixed benefits do stakeholders support? Please explain why you support this option.

Q80: Which of the three options for recognising benefit reduction mechanisms do stakeholders support? Please explain why you support this option.

Q81: Are there any additional options that stakeholders believe should be considered?

Q82: Do stakeholders agree that off-balance capital instruments should always be eligible to cover the SCR? If not, what alternative options would you suggest?

Q83: Do stakeholders agree that surplus funds should always be recognised on an IORP's balance sheet and could always be used to cover capital requirements? If not, how would you suggest to treat surplus funds in this respect?

Q84: Do stakeholders agree that subordinated loans should always be recognised on an IORP's balance sheet and could, bar possible future decisions to introduce restrictions, be used to cover capital requirements? If not, how would you suggest to treat subordinated loans in this respect?

Q85: In the stakeholders' view should the minimum requirement for the level of liabilities to be covered with financial assets be based on the Level A technical provisions or the Level B best estimate of technical provisions? Please explain.

Q86: If the Level B best estimate were to be used, in the stakeholders' view should it apply to all IORPs or should its use be restricted to IORPs which dispose

of certain security and adjustment mechanisms, be subject to prior approval of the national supervisor or applied as a member state option? Please explain.

Q87: In the stakeholders' view should the level of technical provisions that needs to be covered with assets (incl. security mechanisms), and that potentially serves as a basis for the SCR, be based on Level A technical provisions or on the Level B best estimate of technical provisions? Please explain.

Q88: If the Level B best estimate were to be used, in the stakeholders' view should its use be restricted to IORPs which dispose of certain security and adjustment mechanisms, be subject to prior approval of the national supervisor or applied as a member state option? Please explain.

Q89: Do stakeholders believe it would be a sensible approach for member states to specify additional requirements regarding the funding with (financial) assets through national social and labour law, instead of through national prudential regimes? Please explain.

Q90: Do stakeholders believe that there is scope for harmonising the recovery period regarding the level of technical provisions to be covered with financial assets on the EU level? Please explain.

Q91: Do stakeholders think that the recovery period regarding the level of technical provisions to be covered with financial assets should be short or cover an extensive period of time? Please explain.

Q92: In the stakeholders' view how long should the more extensive recovery period be and should it be restricted to IORPs which dispose of certain security and adjustment mechanisms and/or be subject to prior approval of the national supervisor? Please explain.

Q93: Do stakeholders believe that there is scope for harmonising the recovery period for meeting the SCR on the EU level? Please explain.

Q94: In the view of stakeholders should the recovery period in the event of non-compliance with the SCR be short or cover a more extensive period of time? Please explain.

Q95: In the view of stakeholders how long should the more extensive recovery period be and should it be restricted to IORPs which dispose of certain security and adjustment mechanisms and/or be subject to prior approval of the national supervisor? Please explain.

Q96: Do stakeholders agree that IORPs should be required to submit a recovery plan if capital/funding requirements are not met or should more specific supervisory responses be specified on the EU level? Please explain.

Q97: What is the view of stakeholders on the potential impact of a possible future European prudential framework for IORPs on existing contractual agreements and national social and labour law?

Q98: In the stakeholders' view is there scope for transitional measures in order to mitigate the potential impact of a possible EU prudential regime on existing contractual agreements and national social and labour law?

Analysis of examples of supervisory frameworks

Q99: Do stakeholders have any general comments on (the description of) example 1?

Q100: Could example 1, in the view of stakeholders, be used for all IORPs in the EU?

Q101: Do stakeholders have any general comments on (the description of) example 2?

Q102: Could example 2, in the view of stakeholders, be used for all IORPs in the EU?

Q103: Do stakeholders have any general comments on (the description of) example 3?

Q104: Could example 3, in the view of stakeholders, be used for all IORPs in the EU, taking into account national specificities?

Q105: Do stakeholders have any general comments on (the description of) example 4?

Q106: Could example 4, in the view of stakeholders, be used for all IORPs in the EU?

Q107: Do stakeholders have any general comments on (the description of) example 5?

Q108: Could example 5, in the view of stakeholders, be used for all IORPs in the EU?

Q109: Do stakeholders have any general comments on (the description of) example 6?

Q110: Could example 6, in the view of stakeholders, be used for all IORPs in the EU?

Possible simplifications

Q111: Do stakeholders agree that there is scope for simplifications with regard to drawing up the holistic balance sheet? Which simplifications would you consider most important and in which situations?