EIOPA-BoS-16/075
14 April 2016

Annex 3 to Opinion (EIOPA-BoS-16/075): Impact assessment

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1. Procedural issues, consultation of interested parties and use of evidence

1. EIOPA recognises the importance of assessing the costs and benefits of the common framework for risk assessment and transparency put forward in its Opinion to the EU institutions in order to make sure it strengthens the supply of occupational retirement provision in the EU in a cost-efficient manner. The analysis of the costs and benefits is undertaken according to EIOPA's Impact Assessment methodology.

2. The impact assessment has benefitted from the responses of stakeholders to the consultation paper on further work on solvency of IORPs.[1] The aim of the further work contained in the consultation paper was to improve the technical specifications for valuing technical provisions and sponsor support. Moreover, the consultation paper discussed six examples of supervisory frameworks, ranging from regimes to set harmonised capital or funding requirements at the EU level to a common framework for risk assessment and transparency. Annex A includes a summary of stakeholder comments on the six examples of supervisory framework.

3. Between 11 May and 10 August 2015 EIOPA conducted a quantitative assessment (QA) of the further work. In total 101 IORPs participated in the QA from six member states, which cover 95% of the European DB IORP sector. The participating IORPs have EUR 1.25tr of assets under managements, representing a market coverage of 41%. The QA collected quantitative evidence on the six examples of supervisory frameworks, which have fed into this impact assessment. The QA also included qualitative questions asking participating IORPs to provide an assessment of the six supervisory frameworks. Annex B provides an overview of the outcomes of those assessments.

2. Baseline scenario for impact assessment

4. When analysing the impact from proposed policies, the impact assessment methodology is anchored to a baseline scenario as the basis for comparing policy options. This helps to identify the incremental impact of each option that was considered during development of the policies. The aim of the baseline scenario is to explain the current situation without additional regulatory intervention.

2.1. Heterogeneity of national regimes

5. The current IORP Directive lays down minimum rules with regard to the valuation of assets and liabilities and funding requirements. The minimum harmonisation approach enables a wide variety of valuation standards and funding requirements in the different member states.

6. The IORP Directive does not provide standards for the valuation of assets, and IORPs in EU member states may use discount rates for the valuation of technical provisions ranging from risk-free market rates to the expected return on assets. Moreover, the IORP Directive prescribes that technical provisions should be funded with assets. Only IORPs where the institution itself, and not the employer, underwrites risks are subject to a regulatory own funds requirement. This regulatory own funds requirement takes into account biometric risks to some extent, but is insensitive to operational, counterparty and market risks.

[1] EIOPA, Consultation Paper on Further Work on Solvency of IORPs, EIOPA-CP-14/040, 13 October 2014.

Only a minority of member states supplement the regulatory own funds requirement with national risk-based buffer requirements.

7. The QA made clear that IORPs in most member states use a discount rate exceeding current risk-free market interest rates. In addition, the common framework includes all types of benefits which is not the case in all national frameworks (for instance with regard to inflation compensation of pensions). In consequence, aggregate technical provisions (excluding benefit reductions) under a common, market-consistent approach are 27% higher in the QA than under national technical provisions.

2.2. Recognition of security and benefit adjustment mechanisms

8. The results of the QA show that the values of technical provisions, provided according to the standards for valuation and explicit recognition of those elements in the current national regimes, may deviate significantly from the respective comprehensive and market-consistent values provided by the common framework.

9. In all participating member states, the QA shows that the standards for valuation and recognition of items to be included in the national regime do either not explicitly recognise the expected payments from security mechanisms (mainly sponsor support, but also pension protection schemes), or the potential extent of future benefit increases or reductions, or both.

10. The QA results show that, based on the QA technical specifications, in aggregate the future payments by sponsoring undertakings would amount to a market value of EUR 1,037bn, which is equivalent to 24% of technical provisions. The estimated market value of future benefit reductions amount in aggregate to EUR 363bn, which corresponds to 9% of technical provisions.

11. The results of the QA show that information about the potential extent of support from sponsors and pension protection schemes, as well as of potential benefit reductions may currently not be explicitly recognised in national valuation regimes (although they may be implicitly be taken into account in IORPs' existing risk assessment).

2.3. Risk exposure of IORPs

12. The QA results of the standardised risk assessment[2] show that IORPs have substantial exposure to biometric and financial market risk, most notably to interest rate, equity and longevity risk. After allowing for diversification effects the gross risk (based on a probability of occurrence of 0.5%) amounts to 31% of total liabilities.

13. Most IORPs do not bear these risks themselves, but instead the sponsoring undertakings and members and beneficiaries do. The materialisation of the pre-defined stress scenario which is calibrated to a 0.5% probability of occurrence and uses a risk-free rate would roughly double the value of the sponsor support to EUR 1,737bn and the value of benefit reductions to EUR 727bn, while reducing by half the value of conditional/discretionary benefits from EUR 134bn to EUR 69bn. The value of future payments by pension protection schemes would increase from EUR 9bn to EUR 44bn. Often these risks are not or not comprehensively recognised in national regimes.

[2] In the QA this has been presented as the calculation of a "solvency capital requirement", but this term would not be appropriate here, since EIOPA advises to refrain at this point in time from introducing harmonised funding or capital requirements at the EU level.

2.4. Implications for functioning of the internal market and potential regulatory arbitrage

14. The heterogeneity in national funding requirements and valuation standards means that currently the balance sheets and other information provided by IORPs are not comparable between IORPs in different member states. This makes it difficult for employers and other stakeholders, where they are interested in using an IORP in another member state, to compare IORPs.

15. On the other hand, the heterogeneity in national funding requirements and valuation standards raises the possibility of regulatory arbitrage between member states. At the moment, this does not seem to be a major issue as the level of cross-border activity of IORPs is low. The number of active cross-border IORPs currently only amounts to 76, of which 45 provide non-DC schemes.[3]

16. The absence of a market-consistent and risk-sensitive prudential regime for IORPs in most member states may also contribute to cross-sectoral regulatory arbitrage between IORPs and insurance undertakings.

3. Objectives pursued

17. According to Article 1, paragraph 6 of the EIOPA Regulation, the EIOPA objectives are as follows:

    "The objective of the Authority shall be to protect the public interest by contributing to the short, medium and long-term stability and effectiveness of the financial system, for the Union economy, its citizens and businesses. The Authority shall contribute to:

    (a) improving the functioning of the internal market, including in particular a sound, effective and consistent level of regulation and supervision,

    (b) ensuring the integrity, transparency, efficiency and orderly functioning of financial markets,

    (c) strengthening international supervisory coordination,

    (d) preventing regulatory arbitrage and promoting equal conditions of competition,

    (e) ensuring the taking of risks related to insurance, reinsurance and occupational pensions activities is appropriately regulated and supervised, and

    (f) enhancing customer protection."

18. In line with these objectives the impact assessment analyses the benefits of the common framework in terms of 1) market-consistent and risk-based regulation and supervision, 2) the functioning of the internal market and prevention of regulatory arbitrage, and 3) the protection of members and beneficiaries. Moreover, the impact assessment considers the impacts on national IORP sectors in general and employers and the social partners in particular. The direct costs of the proposed framework are related to the resources needed by IORPs to perform the calculations prescribed by the common framework and to communicate the results.

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[3] EIOPA, 2015 Market development report on occupational pensions and cross-border IORPs, EIOPA-BoS-15/144, 9 July 2015.

4. Policy options: examples of supervisory frameworks

19. EIOPA considered the six of examples of supervisory frameworks put forward in the consultation paper in the policy development process.

20. The table below provides an overview of the components to be included in each example, most notably which security and benefit adjustment mechanisms, and the proposed trigger points and supervisory actions. A more complete description of the six supervisory examples can be found on pp. 122-153 of the consultation paper.

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).

21. The six examples of supervisory frameworks represent a broad range of possibilities:

- The first four examples aim at establishing harmonised capital requirements at the EU level, where example 3 also includes a common framework for transparency;

- Example 5 aims to achieve a harmonised approach to valuing technical provisions at the EU level, but does not change the existing minimum capital requirements. This example also includes a common framework for risk assessment and transparency;
- Example 6 puts forward a common framework for risk assessment and transparency, keeping in place the current funding and capital requirements, including the underlying valuation standards.

22. The first five examples distinguish two trigger points a breach of which would require supervisory action:

- The capital requirement constitutes the solvency capital requirement (SCR) in examples 1 to 4 and the (minimum) regulatory own requirement in accordance with Art. 17(1) IORP Directive in example 5. The SCR is based on a market-consistent balance sheet (Level A) in all examples with the exception of example 2, which is valued using the expected return on assets (Level B);
- The funding requirement represents the level of technical provisions to be covered with financial assets. The funding requirement is based on Level A technical provisions in examples 1 and 5 and the Level B best estimate of technical provisions in examples 2, 3 and 4.

5. Overview of impacts for Examples 1-5

23. EIOPA assessed the quantitative effects of the first five examples of supervisory frameworks which aim to harmonise capital requirements and/or funding requirements. Example 6 would introduce a common framework for risk assessment and transparency for IORPs and not change the capital or funding requirements. Annex 2 to the Opinion on the results of the QA provides a more comprehensive description of the quantitative effects.

5.1. Example 1

24. A description of this example can be found in section 6.2.1 of Annex 2 to the Opinion.

Main QA results

25. The QA results show that the introduction of this supervisory framework could result in a funding shortfall of just under EUR 1.2tr, which represents another EUR 870bn over and above the existing aggregate shortfall under the current regime – this would mainly be driven by an increase in shortfall in NL (EUR 139bn) and the UK (EUR 649bn) although all participating countries would see a significant increase in their funding requirement. The reasons for these increases vary by country, including an increase in the level of liabilities under Level A compared to the national funding standard and the need to fund any deficit with financial assets only or through a one-year recovery plan without using any other mechanisms (unlike all other supervisory frameworks where a flexible recovery plan could be allowed).

26. Under this regime there could also be an increase in the aggregate SCR of EUR 41bn, which could be met by financial assets and sponsor support where available. This would be mainly driven by an increase in SCR of EUR 42bn in UK and EUR 22bn in IE whilst in NL, the existing capital requirements of EUR 312bn under the current regime would be reduced by EUR 26bn.

5.2. Example 2

27. A description of this example can be found in section 6.3.1 of Annex 2 to the Opinion.

Main QA results

28. The QA results show that the introduction of this supervisory framework could result into a very small funding surplus of EUR 7bn compared to an aggregate existing shortfall under the current regime of EUR 317bn. However, this average masks significant differences between countries. For example the funding deficit would remain broadly similar in BE, PT and UK because the valuation standard in these countries is close to Level B expected return on assets. IE would see a significant EUR 22bn increase in the funding shortfall compared to the current regime. The key driver of the improvement in the aggregate figure is due to NL whose small shortfall in the current regime would turn into a sizeable surplus of EUR 319bn, which is mainly due to the difference in the discount rate of risk-free market interest rates being used under the national funding standard and Level B under this example. However, it should be noted that the quantitative requirements in example 2 constitute minimum harmonisation rules which could be supplemented through national prudential law.

29. Under this regime there would also be an increase in the SCR, which could be met by financial assets and sponsor support, of EUR 122bn in aggregate (mainly driven by an increase of EUR 70bn in the UK, EUR 27bn in NL and EUR 20bn in IE).

5.3. Example 3

30. A description of this example can be found in section 6.4.1 of Annex 2 to the Opinion.

Main QA results

31. The funding requirement under this supervisory framework would be similar to that under example 2 aside from the fact that ex ante benefit reductions could be taken into account. However, these have in aggregate a negligible effect in the QA results of participating countries and the impact of this supervisory framework on the funding requirement is therefore similar to that described for example 2 above, with a significant improvement in the aggregate funding position compared to the current funding regime, albeit with substantial differences across participating countries.

32. However, the capital requirements under example 3 would be more similar to that under example 1 apart from the fact that mixed benefits would be excluded from the valuation of the technical provisions and pension protection schemes would be included in the assets eligible to cover the liabilities. The change in SCR compared to the current regime would therefore be similar to that seen in example 1 for most participating countries except NL where the SCR would go up by EUR 82bn (because of the exclusion of mixed benefits) and UK where the increase in SCR would be EUR 31bn, compared to EUR 42bn in example 1 (because of the inclusion of pension protection schemes). Overall the SCR would increase by EUR 137bn from EUR 317bn in the current regime. An important difference with example 1 is that recovery periods are established on the national level through national prudential law.

5.4. Example 4

33. A description of this example can be found in section 6.5.1 of Annex 2 to the Opinion.

Main QA results

34. The funding requirement under this example would be similar to that in example 2 and the impacts on the existing funding shortfall described in that example would therefore apply. The funding position under this framework improves significantly in aggregate compared to the current regime, albeit with marked differences between participating countries.

35. Compared to example 3, ex post benefit reductions and reductions of benefits in case of sponsor default would be taken into account in the calculation of the SCR under this supervisory framework. The key difference in the SCR between these two regimes would therefore be for NL which would see on average a much smaller SCR (EUR 60bn) than under example 3 and in the current regime – this would drive a decrease in the aggregate SCR of EUR 212bn compared to the current regime. However, the quantitative requirements constitute minimum rules which could be supplemented through national social and labour law. The UK would see an increase in SCR of EUR 36bn compared to capital requirement of 0 under the current regime, as part of UK IORPs dispose of an excess of assets over liabilities which is able to absorb first losses.

5.5. Example 5

36. A description of this example can be found in section 6.6.1 of Annex 2 to the Opinion.

Main QA results

37. The funding requirement under this regime would be broadly similar to that under example 1 as IORPs would be required to hold sufficient financial assets to cover Level A technical provisions (excluding pure discretionary benefits, ex post benefit reductions and benefit reductions in case of sponsor default). This example of supervisory framework could therefore result in a change in funding requirement of the same order as in example 1, with an estimated increase in the funding shortfall, to be covered by financial assets, from EUR 317bn in the current funding regime to EUR 1.2tr.

38. Under this regime, IORPs would have to comply with existing minimum capital requirements on a market consistent balance sheet – no new requirement would be imposed. Overall the SCR would be EUR 70tr smaller than in the current regime, but this figure does not fully take into account national buffer requirements supplementing the minimum funding and regulatory own funds requirement in the IORP Directive.

5.6. Interim conclusion

39. The quantitative impacts vary substantially between the five examples of supervisory frameworks and between the different member states within the five examples. The surpluses/shortfalls, determined as the minimum relative to the capital requirement or the funding requirement, range from an aggregate shortfall of 68% of liabilities for IE in example 3 to a surplus of 26% of liabilities for NL in example 4 (see figure 5.1). The change in this combined measure of the surplus/shortfall compared to the surplus/shortfall under the national regime, ranges from a deterioration of -127% of current liabilities for IE in example 3 to an improvement of 48% of current liabilities for NL in example 4 (see figure 5.2).

40. The vast range of impacts is the result of differences in national prudential regulation, the availability of security and benefit adjustment mechanisms and the recognition (or not) of those security and benefit adjustment mechanisms in the various examples of supervisory frameworks. In view of the heterogeneity of national IORP sectors, EIOPA considers that a one-size-fits-all solvency regime at the EU level would not be appropriate and ineffective due to the potential significant negative impacts on IORPs, sponsors and members. There may also be a need for extensive transitional periods. Therefore, EIOPA advises in the Opinion to refrain from introducing harmonised funding or capital requirements for IORPs at the EU level at this point in time.

Figure 5.1: Impact of examples of supervisory frameworks, minimum of surplus SCR and funding requirement

% total liabilities under the applicable example

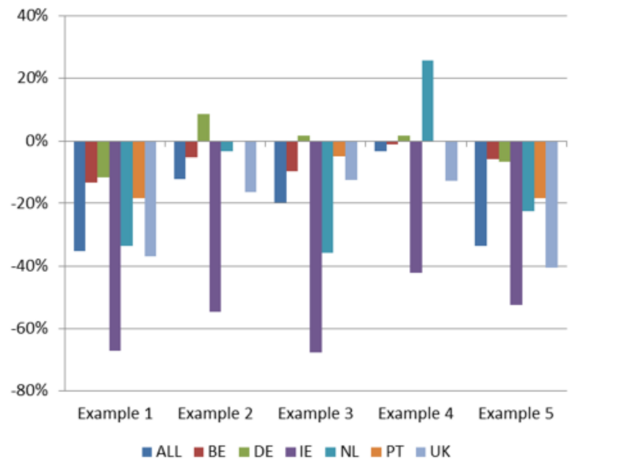
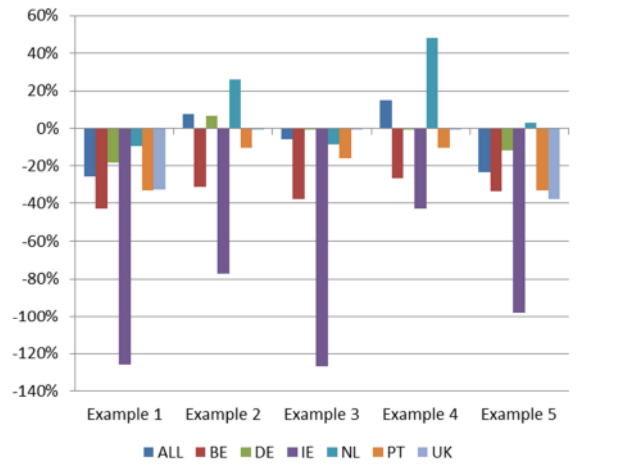


Figure 5.2: Impact of examples of supervisory frameworks, minimum of surplus SCR and funding requirement compared to surplus national regime

% liabilities national regime



Source: EIOPA

6. Example 6 – Common framework for risk assessment and transparency for IORPs

41. EIOPA proceeded with conducting a comprehensive cost-benefits analysis of example 6, to assess the expected impact of the proposal in the Opinion for a common framework for risk assessment and transparency for IORPs.

6.1. Market-consistent and risk-based regulation and supervision

42. The common framework consists of a market-consistent balance sheet including all security and benefit adjustment mechanisms and a standardised risk assessment applying pre-specified shocks calibrated to a 0.5% probability of occurrence within one year.

6.1.1. Transparency

43. The common framework would enhance transparency, because it provides an explicit and objective view of the values of all available resources, such as financial assets, sponsor support and pension protection schemes, which can be

used to support pension obligations. It also includes a useful indication of the expected value of benefit adjustments, either positive of negative, which may occur in the future based on market-consistent valuation.

44. This means that by including all security and benefit adjustment mechanisms, the common framework provides information about the extent to which not only the IORP, but other stakeholders like sponsors and pension protection schemes might be expected to contribute to fulfilling the pension obligation based on market-consistent valuation, and the extent to which members and beneficiaries might expect to receive non-unconditional benefits or face benefit reductions. The common framework also provides insight about the extent to which pension obligation are currently funded by financial assets and to what extent the IORP depends on investment returns on excess of the risk free rate, payments by sponsors or pension protection schemes and/or benefit adjustments in the future. This information is currently often not readily available.

45. The common framework provides objective values for all resources, obligations and the potential extent of benefit adjustments, because it is based on market-consistent valuation. However, a certain element of subjectivity will be unavoidable, e.g. when setting assumptions around future behaviour, in modelling and the valuation of some items of the balance sheet such as sponsor support.

46. The comprehensive information provided by the common framework would also supplement the information already available to stakeholders to help them make informed decisions.

47. The results of the common framework could be used by NSAs to feed into their wider considerations with regard to analysis of the landscape, risk assessment and supervisory actions (e.g. a reduction of surplus sharing could be required to lower the extent of expected benefit reductions).

48. Institutions responsible for setting general conditions for IORP systems, whether in member states or at a European level could use the information provided by the common framework at an aggregate level when considering how IORP systems should be arranged.

49. By providing for public disclosure, the common framework would make this explicit and objective information available not only to the IORP itself, the NSA, etc., but also to the general public, which is another aspect of transparency.

6.1.2. Risk assessment

50. Risk assessment is part of risk management, which can be understood as identifying, measuring, monitoring, managing and reporting risks. IORPs will already have strategies and processes for risk management in place. The management of risk may vary widely between different IORPs, due to differences in the risk profile, available resources, legal requirements, etc. IORPs will usually use a set of different methods and approaches for their risk management, reflecting the different objectives of risk management. The results of all of those methods and approaches is taken into account when taking decisions and managing risks.

51. Appropriate risk management needs to be based on a comprehensive view of all relevant factors, as well as on objective data. Therefore, the common framework could play a part in identifying, measuring, monitoring and reporting risk, as a basis for managing risk.

52. The information provided by the common framework, which includes all available security and benefit adjustment mechanisms, could further strengthen risk assessment and risk management, irrespective of how capital and funding requirements are defined.

53. The common framework would require assigning a market-consistent value to all assets (including security mechanisms) and liabilities (including the effects of benefit adjustment mechanisms) related to the pension promise. This information is currently often not readily available. Having this information would contribute to identifying, measuring, monitoring and reporting all relevant risks (some of which are currently only taken into account implicitly), including whether the pension contract may be subject to an inappropriate level of risk in the long run.

54. IORPs could use the common framework when a new pension scheme or section of a scheme is established, to assess the nature of the risks associated with the contract that social partners intend to bring to the IORP, or the extent to which the likelihood of security mechanisms or benefit adjustment mechanisms (based on market-consistent valuation) having to be used would be unacceptably high. Based on this information, the IORP may reject to operate that specific pension scheme as proposed and/or require social partners to amend the terms before it can accept to operate the scheme.

55. Where the market-consistent value of technical provisions is higher than the value currently included in the IORP’s accounts or used for risk assessment and management (the "gap"), this might be an indication that more resources might be needed for fulfilling the obligations than represented by the technical provisions included in accounts or used for risk assessment and management.

56. This "gap" can in principle be closed by a risk premium to be earned over the risk free rate, or by making use of security and benefit adjustment mechanisms. There should be an assessment whether the required value of risk premium is realistic and/or how much risk would have to be taken to earn it. Values of security and benefit adjustment mechanisms indicate how much sponsors and pension protection schemes might have to contribute to fulfilling the obligation, and to which extent members and beneficiaries might have to expect benefit reductions in terms of the market value of the pension promise.

57. The common framework provides information about the current risk sharing, but does not say anything about whether the current risk sharing is the intended risk sharing. In other words, the value of a specific security or benefit adjustment mechanism in the common framework does not mean that this mechanism would or should have a certain impact on the pension promise, it just says that a certain impact is expected (using market-consistent valuation).

6.2. Sponsors and social partners

58. For sponsors the value of sponsor support shown in the common framework might be useful information to be taken into account in their financial and liquidity planning.

59. Social partners or employers are in general responsible for arranging pension schemes. They could use the common framework, both at the start of the contract and regularly during the contract, to assess the extent to which the use of benefit adjustment mechanisms and the reliance on security mechanisms as expected according to the results of the common framework (based on market-consistent valuation) may be different from what had been expected when setting up the pension scheme or IORP, and whether any differences are

acceptable. If this is not the case, scheme rules, including the financial commitment of the sponsor(s), could be amended.

6.3. National IORP systems

60. National IORPs systems would benefit from increased protection of members and beneficiaries, a better functioning of the EU internal market and reduced scope for regulatory arbitrage (see below) without suffering the potential negative effects of a one-size-fits-all approach. Any decision on supervisory actions based on the results of the common framework or any other relevant information will be taken at the national level, if deemed necessary by the NSA to achieve its supervisory objectives as defined by EU and national law. Moreover, the common framework is not intended to replace other risk management tools or techniques currently used by IORPs, such as ALM studies. NSAs may also require additional calculations from IORPs using national valuation standards and/or confidence levels, supplementing the information provided by the common framework.

61. However, national IORP systems may be negatively affected by administrative costs associated with producing and reporting the common framework (see below) and the risk of misinterpretation associated with public disclosure of the outcomes of the common framework. EIOPA has taken into account these potentially negative effects in formulating its Opinion by including a number of mitigating measures.

62. Public disclosure of comprehensive and objective information on pension obligations and the associated security and benefit adjustment mechanisms could have a disciplinary effect on IORPs and stimulate dialogue between the various stakeholders.

63. However, member states often do not impose market-consistent valuation standards. In consequence, the values on the national balance sheets and the common framework's balance sheet will likely be different. This will also result in different outcomes for frequently used metrics like the excess of investment assets over technical provisions or the funding ratio. Under the common framework IORPs also have to explicitly recognise the value of sponsor support on the asset-side of the balance sheet, where under national frameworks sponsor support is usually only implicitly accounted for. This implies that the common framework may give a more favourable impression of the financial situation of IORPs compared to the national framework. As a last example, IORPs have to report the market value of non-unconditional benefits and benefit reduction mechanisms on the common framework's balance sheet, which is most often not the case under national frameworks. However, a market value of such benefit adjustment mechanisms cannot be translated one-on-one into (an impact on) expected retirement benefits of individual plan members. A (public) misinterpretation of the results of the common framework may have negative implications for national IORP sectors in general and plan members, sponsors and NSAs in particular. Concerns about the publication of data based on confidential or commercially sensitive information (e.g. sponsors' business plans) could also hinder the transparent sharing of information between sponsors and IORPs and undermine the good functioning of existing risk management processes.

64. EIOPA therefore included the advice that public disclosure of the main elements of the common framework's balance sheet and outcomes of the standardised risk assessment should be accompanied by appropriate explanation, in order to minimise the risk of misinterpretations by the general public with regard to the financial position of the IORPs and the value of the security and benefit

adjustment mechanisms. The explanation should include, for example, specific references to potential consequences for members and beneficiaries, and sponsors. Furthermore, the report should include information about the standardised risk assessment performed, the scenarios used and the way such a scenario could affect the financial position of the IORP and consequently the pension rights of members and beneficiaries and/or the sponsor’s commitments.

65. In addition, where full public disclosure would lead to unintended consequences or a breach of confidentiality, the NSA should have the power to allow an IORP on the basis of guidelines to be established at the European level to disclose specific elements of the common framework in a qualitative manner only. These guidelines should also specify the circumstances in which the NSA could make use of that power.

6.4. Administrative costs

66. There would be one-off set up costs and ongoing costs associated with the regular production and disclosure of the common framework's balance sheet and standardised risk assessment for IORPs. These costs would be borne by the IORP, members or the sponsor depending on the circumstances.

67. There would also be set up and ongoing costs to NSAs associated with the collection, processing and assessment of IORPs' submissions and any follow-up activities. These would depend on the extent to which existing operational practices would need to be adapted to facilitate this and on the number of IORPs reporting to the NSA.

68. The costs of complying with the proposed requirements are likely to vary by member state and per individual IORP and are difficult to estimate. The estimates of the costs of completing the quantitative assessment provided by participating IORPs provide a good starting point for estimating the costs of producing the common framework save for the important factors outlined below which could lead to lower or higher costs.

69. The average cost per IORP of completing the QA exercise was estimated at around EUR 33,000 with some variation across countries. Scaling these figures up across all European DB IORPs would suggest an overall annual cost, over and above current valuation costs, of up to EUR 300m to complete the common framework's balance sheet and standardised risk assessment according to the QA technical specifications. UK IORPs could incur the greatest annual estimated costs in aggregate (EUR 210m) due to the number of DB IORPs in this country.

70. However, it is important to note that these estimates are based on the cost of completing the QA exercise and would therefore need to be adjusted to take account of additional factors.

71. Some of these factors could result in lower expected costs:

- The cost estimates reported were based on the full QA specification which required the calculation of two baselines (Level A and Level B) and the calculation of six supervisory examples (although in those instances where separate calculations for each supervisory example is not warranted, the costs may be less). In practice fewer sets of calculations would be required on an ongoing basis.
- Participating IORPs may not be representative of the overall universe, e.g. may tend to be larger than average, thereby overstating the costs for smaller IORPs who may have less complex circumstances and may make greater use of

simplifications. However, as a significant proportion of the costs would be fixed costs, these are likely to be proportionally greater for smaller IORPs.

- Some of the costs, e.g. to assess the requirements and set up or adapt data, analytical and reporting processes, would be one-off costs, assuming that the requirements are not frequently changed.

72. However some of the costs may also be understated for the following reasons:

- The degree of due diligence required to calculate figures that have to be disclosed to supervisors and the public is higher than that required for the QA;
- There will be administrative costs associated with reporting the results to national supervisors and making the results available to the public;
- Some IORPs, especially small- and medium-sized ones, will incur additional advisory costs to help their understanding and interpretation of the common framework's balance sheet and standardised risk assessment;
- NSAs may require additional calculations (e.g. for the distinguishing parts of the IORP[4] or using a different discount rate to the risk free rate[5]);

73. Moreover, the cost estimates only consider the costs for IORPs, but do not take into account the additional costs for NSAs.

74. For countries participating in the QA, the estimated overall annual costs of EUR 300m would represent on average 0.01% of assets under management, with considerable variation by country:

Table 6.1: Estimated annual costs, % of assets under management	
BE	0.030%
DE	0.004%
IE	0.050%
NL	0.002%
PT	0.020%
UK	0.010%

75. The aggregate costs range from a fraction of a basis point in NL to 5 basis points in IE, which is as much as 25 times higher than in NL. Member states with on average smaller-sized IORPs in terms of assets have on average higher costs relative to the size of their IORP sector. If a similar amount of resources is needed to perform the calculations irrespective of the size of the IORP then member states with the highest incidence of small- to medium-sized IORPs will bear the largest burden.

76. Valuing all elements of the common framework and assessing their interconnectedness may be challenging for small to medium-sized IORPs, because of the complexity of the calculations and the level of sophistication needed in combination with a lack of resources. These challenges will be more important if national funding standards and/or risk management practices are not based on a market-consistent valuation or use stress scenarios calibrated at

[4] See section 4.7 ("Level of aggregation of the calculations") of the Opinion.

[5] See section 4.6 ("Relation to currently applied practices") of the Opinion.

a different probability of occurrence compared to the common framework. As a result, the implementation of the common framework may not be effective in terms of costs and benefits without a proportionate application, allowing for simplified methods and approaches.

77. In view of these cost differences between member states, EIOPA considered that especially for small and medium-sized IORPs a proportionate approach is essential to minimise the burden, given that establishing the common framework without simplifications will be associated with material implementation and ongoing costs.

78. First of all, member states should be provided with the option not to apply the common framework to IORPs with less than 100 members, in line with the small schemes exemption of Article 5 of the current IORP Directive.[6] Moreover, EIOPA advises to allow for an additional exemption based on a threshold of EUR 25m in terms of assets.

79. In addition, member states should be allowed to lower the frequency of regular reporting from once every year to once every three years. IORPs would still have to submit an interim report to the NSA, but this would not necessarily involve a full recalculation of all figures.

80. Finally, IORPs should be allowed to use simplified methods if this is proportionate to the nature, scale and complexity of the activities and the underlying risks. IORPs should be able to use their own simplifications or choose from the numerous simplifications already included in the technical specifications for the quantitative assessment or the additional simplifications proposed in the Opinion. One of the most important simplifications is the possibility of using the balancing item approach to the valuation of certain elements on the common framework's balance sheet. The balancing item approach to the valuation of sponsor support can only be used by IORPs with sufficiently strong sponsors.

81. In addition, the assessment of methods and outputs by IORPs participating in the QA (see Section 7 of Annex 2) showed that some IORPs found the technical specifications complex and burdensome, pointing to the need to consider whether further simplifications could be appropriate. In particular, further simplification of the standardised risk assessment should be considered.

6.5. Functioning of internal market and prevention of regulatory arbitrage

82. Since the common framework would be valued based on the same principles of market-consistent valuation in all member states, the data it would provide would be comparable between all IORPs and between all member states. This means that NSAs and other stakeholders could use it to assess and better understand the differences and commonalities between European IORP systems. International supervisory coordination (e.g. when required in the context of cross-border activity) would become easier, because there would be a "common language" for valuing liabilities and measuring risks. This would also help to detect and possibly prevent regulatory arbitrage and promote equal conditions of competition.

83. Even though the values included in the common framework would in principle be comparable between IORPs and between member states, interpretation or explanation of the values would still be necessary to understand differences

[6] It might be worth considering applying the small scheme exemption based on the number of members of distinguishing parts of an IORP, depending on available risk-sharing mechanisms (see section 4.7 of the Opinion).

related to different available security and adjustment mechanisms and the interaction between those.

84. Since the data included in the common framework would be comparable, it would be possible to aggregate results of the common framework at the European level (although care needs to be taken when interpreting aggregated results as there is no cross subsidy between IORPs).

85. The common framework would also facilitate the process of starting cross-border activity by providing stakeholders with a comprehensive tool to assess the financial position and risks of IORPs when providing pension schemes in other host member states. The market values of the different security and benefit adjustment mechanisms used in member states would be made transparent. A pension scheme would be described in the common framework in the same way, irrespective of the home member state of the IORP and of the host member states in which it operates. This would make it easier for employers and other stakeholders to take a well-reasoned decision to use an IORP in another member state for providing occupational pensions, which might lead to increase in cross-border activity.

86. Because of the market-consistent and risk based approach, the common framework would increase consistency with the prudential framework of insurers, reducing the potential for cross-sectoral regulatory arbitrage. IORPs would have to value the common framework's balance sheet on a market-consistent basis, very similar to Solvency II. There are also similarities between the standardised risk assessment and the calculation of the solvency capital requirement in Solvency II, although the standardised risk assessment will not lead to (additional) capital requirements.

6.6. Protection of members and beneficiaries

87. The market-consistent and risk-based approach of the common framework, and the uses made of it by IORPs and stakeholders, would improve risk assessment and contribute to the resilience and viability of IORPs. This would mean that protection of members and beneficiaries would improve.

88. The information provided to members and beneficiaries by the common framework about the potential extent of conditional and discretionary benefits or benefit reductions based on a market-consistent valuation, could complement the information members and beneficiaries already receive to help them plan retirement provided the information is contextualised and the possible implications are explained clearly. The reliance on sponsor support and pension protection schemes might also be relevant for this type of member considerations, although the extent to which this would be useful would depend on the format in which it is presented to members and beneficiaries.[7]

89. The common framework provides a market-consistent and risk-based view of the financial situation of IORPs and the schemes operated by them and of who bears the risks related to a pension scheme or promise. This transparency and the potential for supervisory action by NSAs could encourage reforms of national legislation, IORPs and/or pensions schemes, where this is considered necessary to improve protection of members and beneficiaries.

[7] In this respect it might be worth considering public disclosure on the level of distinguishing parts of an IORP, depending on available risk-sharing mechanisms (see section 4.7 of the Opinion).

7. Conclusions

90. The six examples of supervisory frameworks presented in the EIOPA consultation paper on solvency of IORPs and tested in the QA represented a broad range of possible uses of the holistic balance sheet for Pillar I, II or III. EIOPA took this broad approach to get a comprehensive overview of what an appropriate framework might look like.

91. The results of the quantitative assessment show that each of the examples 1 to 5, which use the holistic balance sheet to determine capital and/or funding requirements, lead to very different results in different member states and could have significant negative impacts on IORPs, sponsors and members. The differing results are mainly a consequence of the different national funding requirements and security and benefit adjustment mechanisms available across member states. EIOPA proposes to refrain at this point in time from introducing harmonised funding or capital requirements for IORPs at the EU level. A one-size-fits-all regime would not be appropriate due to the potential significant negative impacts. Moreover, extensive transitional periods and transitional measures would be required, which could appropriately take into account the differences between member states' IORP systems.

92. EIOPA advises that the common framework be used as a tool for risk assessment and transparency based on the approach included in example 6 of the potential supervisory frameworks that were presented in the EIOPA consultation paper on solvency of IORPs. The assessment of impacts outlines some significant benefits the common framework would bring to the IORP sector in terms of greater transparency with regards to IORP's risk exposure which in turn would provide IORPs with a useful risk assessment tool to complement those they are already using. Improved transparency and risk management would lead to better protection of member benefits, enhance the functioning of the internal market and reduce the scope for regulatory arbitrage. The positive impacts of the common framework would be even more important for IORPs which do not already use effective risk assessment tools.

93. The impact assessment recognises that the set up and ongoing costs associated with complying with the requirements related to the common framework could be particularly important for some IORPs and in some member states. The opinion includes several recommendations to reduce the burden on particularly small- and medium-sized IORPs and further work can be done to develop additional simplifications and European-wide guidance which facilitate the proportionate application of the common framework. The benefit to cost ratio could also be significantly different in countries where there is less consistency between the proposed framework and the national funding standard. In view of this, EIOPA believes that the benefits of the proposed common framework are likely to outweigh the costs. However, EIOPA recognises that benefits are difficult to quantify and that this impact analysis is mainly qualitative in nature.

Annex A: Summary of stakeholder comments on examples of supervisory frameworks in the consultation paper

General

94. Most respondents to the consultation did not support the use of the holistic balance sheet to establish EU capital/funding requirements (Examples 1-5) and favoured the use of the HBS as a risk management and transparency tool (Example 6) if it had to be used at all. The current funding regime under the IORP Directive was deemed to be sufficient. There were also concerns about detrimental impacts on pension provision, member benefits, long-term investments, sponsors and the wider economy. Others were concerned about the practical difficulties and cost effectiveness of using the holistic balance sheet for the purpose of setting solvency or funding requirements (it was perceived as too immature and that there was a need to resolve specification issues first). Some were of the view that a market-consistent approach is inappropriate for the long-term nature of pension liabilities.

Example 1

95. There was general agreement from respondents to the consultation with the impact analysis presented in the consultation paper. Many argued that this option could lead to a significant increase in costs and weaken occupational pension provision (reduced benefits and coverage). In particular it was noted that there could be substantial impacts on sponsors through a rise in required contributions which could lead to sponsor insolvencies or scheme closures, with knock-on effects on member benefits and pension protection schemes. It was felt that the framework would provide a strong incentive for IORPs to invest in low-risk liquid closely matched assets which could discourage long-term investments and promote inappropriate investment behaviours.

96. Some argued that negative impacts could be mitigated by setting capital requirements relative to Level B technical provisions, allowing longer recovery plans (a one-year recovery plan was thought to be incompatible with the long-term nature of pension liabilities), including pension protection schemes in the holistic balance sheet or restricting the new requirements to new accruals.

97. Several commented that the potential benefits for cross-border activities would be most probably offset by the withdrawal of defined benefit provision by employers altogether, thereby serving to reduce cross border activity.

Example 2

98. Responses from stakeholders were mixed, with some being clearly opposed to the proposals and some finding it preferable to and more workable than example 1 but with reservations. Concerns included the negative impact of capital requirements; exclusion of some elements (pension protection schemes, mixed/discretionary elements); and the requirement for Level B to be market-consistent. The flexibility in recovery period was welcome as it was felt to be more in line with IORPs' long-term nature.

99. There was general agreement with the impact analysis although some questioned whether this supervisory framework would stimulate cross-border activity.

Example 3

100. Respondents to the consultation were mostly opposed to this supervisory framework. The two-step approach using the HBS to set capital requirements in pillar 1 and for a forward looking assessment in pillar 2 was felt to be too

complex and burdensome although some thought it was a sensible approach. The forward looking assessment in pillar 2 was considered impractical in view of the many assumptions that needed to be made. There were also concerns about some conditional elements being excluded from the HBS in pillar 1 leading to options being mispriced. From a risk management perspective, it was argued that existing approaches were likely to be more informative and less costly

101. There was disagreement that the impacts on IORPs and sponsors would be limited in view of the SCR requirement and required actions associated with the forward-looking assessment.

Example 4

102. Some stakeholders favoured this example more, arguing that it was based on a more complete balance sheet although it was deemed to be overly complex and costly by some and it was thought that the impacts could still be potentially significant, albeit smaller than example 1. A few stakeholders argued that this supervisory framework was inappropriate in countries where benefit reductions are not applicable. There were also concerns about the default recovery plan of one year.

Example 5

103. A few stakeholders were more comfortable with this supervisory framework although many were opposed to this option in view of the likely significant impacts on sponsors, pension provision and long-term investments arising from a Level A funding requirement. The flexibility in the recovery period was seen as a welcome development compared to example 1. It was argued that long transitional periods would be required.

Example 6

104. Most respondents thought that example 6 was the best option amongst the six suggested supervisory examples although respondents highlighted some issues in relation to this option. Stakeholders were of the view that the HBS could have value as a risk management tool but some thought the associated implementation and ongoing costs were likely to be significant in relation to the benefits it could offer and existing risk management tools were therefore perceived as being more proportionate and cost effective, especially for small and medium-sized IORPs. They argued that simplifications (such as for instance the balancing item approach) and a transition period would be required to lessen the burden. Others expressed concern that the one-size-fits-all nature of the HBS did not sit well with the wide range of IORPs and supervisory practices to be found across Europe. Some considered the proposed valuation of sponsor support to be challenging and that a more qualitative or complete view was needed. Many commented that market-consistent valuations are not necessarily appropriate in the pension context as their volatility and short-term focus was seen to be inconsistent with the long-term nature of pension liabilities – with the ensuing risk that the use of the HBS could encourage inappropriate responses by IORPs.

105. Most respondents were in favour of full disclosure to supervisors should the HBS be used as a risk assessment and transparency tool. Many stakeholders argued that the complexity of the HBS and potentially misleading nature of the results would make full public disclosure undesirable. They expressed strong concerns about the possible detrimental impacts of publishing commercially sensitive information on sponsors and financial markets. Others thought that it was difficult to relate the HBS to members' circumstances and that disclosure to

members could lead to inappropriate actions being taken. Some stakeholders were in favour of public disclosure but in a form that could be understood.

Annex B: Summary of assessments of IORPs participating in the QA

General

106. In their assessment of impacts, the IORPs that participated in the QA ranked example 1 and example 5 supervisory frameworks as having the most significant negative impacts. Overall, examples 2, 3 and 4 were deemed to have slightly less negative impacts. However, there were some marked differences between countries. For instance, participating IORPs from NL assessed the impacts of examples 2-4 to be mostly neutral to slightly negative compared to BE IORPs which assessed these examples as having potentially negative to very negative impacts. The judgements were most favourable on example 6 with participating IORPs expecting, on average, a slightly negative impact.

Example 1

107. IORPs participating in the QA highlighted a range of possible actions in response to the establishment of this supervisory framework. Most likely responses included additional contributions from the sponsor (72%), the need for a recovery plan (64%), changes to contributions for future accruals (41%) and changes to asset allocation (38%). However, there was great variation in responses across countries. For instance NL IORPs were more likely to have benefit reductions while BE IORPs were more likely to change their investment strategy.

108. Participants also reported that in their view example 1 would have, on average, negative to very negative impacts on national IORP systems, sponsors, long-term investments and cross-border activity. They also considered the practicality of the proposed prudential framework to be low to very low.

Example 2

109. IORPs participating in the QA highlighted a range of possible actions in response to the establishment of this supervisory framework. Most likely responses included additional contributions from the sponsor (71%), changes to asset allocation (50%), changes to contributions for future accruals (43%), and reduction of mismatch risk assets/liabilities (36%).

110. Participants also reported that in their view Example 2 would have, on average, a negative impact on national IORP systems, sponsors, member protection and long-term investments. The most significant impact was deemed to be on cross-border activity. They also considered the practicality of the proposed prudential framework to be low.

Example 3

111. IORPs participating in the QA highlighted a greater range of possible actions in response to the establishment of this supervisory framework compared to the first two examples. Most likely responses included additional contributions from the sponsor (72%), changes to asset allocation (50%), changes to contributions for future accruals (44%), the need for a recovery plan (42%); reduction of mismatch risk assets/liabilities (39%) and change in expected return assumptions (39%).

112. Participants also reported that in their view example 3 would have, on average, a negative impact on national IORP systems, sponsors, member protection and long-term investments. The most significant impact was deemed to be on cross-border activity. They also considered the practicality of the proposed prudential framework to be low.

Example 4

113. Most likely responses to this supervisory framework as highlighted by IORPs participating to the QA included additional contributions from the sponsor (81%), changes to asset allocation (56%), changes to contributions for future accruals (50%), reduction of mismatch risk assets/liabilities and change in expected return assumptions (44%), strengthening of the sponsor arrangement (38%) and the need for a recovery plan (36%).

114. Participants also reported that in their view example 4 would have, on average, a negative impact on national IORP systems, sponsors, member protection and long-term investments. The most significant impact was deemed to be on cross-border activity. They also considered the practicality of the proposed prudential framework to be low.

Example 5

115. Most likely responses to this supervisory framework as highlighted by IORPs participating in the QA included the need for a recovery plan (68%), additional contributions from the sponsor (67%), changes to asset allocation (33%) and changes to contributions for future accruals (33%).

116. Participants also reported that in their view example 5 would have, on average, a negative to very negative impact on national IORP systems, sponsors, member protection, long-term investments and cross-border activity. The negative impacts reported were at par or higher than for example 1. They also considered the practicality of the proposed prudential framework to be low to very low.

Example 6

117. Most likely responses to this supervisory framework as highlighted by IORPs participating in the QA included additional contributions from the sponsor (75%), changes to asset allocation (63%), reduction of granting mixed/discretionary benefits (63%), changes to contributions for future accruals (63%), changes in expected return assumptions (50%), additional contributions from members (50%), strengthening of the sponsor arrangement (50%) and a reduction of mismatch risk between assets and liabilities (38%).

118. Participants also reported that in their view example 6 would have, on average, a negative impact on national IORP systems and a negative to very negative impact on cross-border activity. They expected, on average, a slightly positive impact on the protection of members and beneficiaries, long-term investments by IORPs and consistency with the insurance framework. Participating IORPs considered the practicality of the proposed prudential framework to be slightly negative.

Annex C: List of country abbreviations

AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
ES	Spain
FI	Finland
FR	France
GR	Greece
HR	Croatia
HU	Hungary
IE	Ireland
IS	Iceland
IT	Italy
LI	Liechtenstein
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
NO	Norway
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom

Annex D: List of other abbreviations used

ALM	Asset and liability management
bn	Billion (10^9)
DB	Defined benefit
DC	Defined contribution
EIOPA	European Insurance and Occupational Pensions Authority
EU	European Union
EUR	Euro
HBS	Holistic balance sheet
IORP	Institution for Occupational Retirement Provision
m	Million (10^6)
NSA	National supervisory authority
QA	Quantitative assessment
SCR	Solvency capital requirement
tr	Trillion (10^{12})