Comments Template on Consultation Paper on Further Work on Solvency of IORPs		Deadline 13 January 2015 23:59 CET
Name of Company:	Pensioenfederatie Prinses Magrietplantsoen 90 NL- 2595 BR Den Haag	
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Reference	**Comment**	
General Comment	**Preliminary remarks** We welcome the mapping exercise which demonstrates clearly the existing major differences between occupational pension provision in the Member States. These differences, in combination with the subsidiarity principle, are an important reason for our disagreement with the ambition to harmonize prudential rules for occupational pensions in Europe. We have strong concerns about adverse macro-economic effects of capital requirements	

	as a consequence of the proposed Solvency Capital Requirement ("SCR") and the consequential diminishing incentive for employers to offer occupational pensions. We consider the Holistic Balance Sheet ('HBS") implementation to be costly. It will have a negative impact on the benefits for the IORP participants. In addition, we think that the HBS is too complex and costly for especially small and medium sized IORPs. We would like to underline that Pension Security needs to take into account the overall pension system of a country, including the balance between security, sustainability and adequacy. In this respect, we reiterate that pensions fall under the subsidiarity principle. Therefore, we would like to express our doubts as to whether the HBS approach can be consistent with the principles of subsidiarity and whether further harmonization of capital requirements is warranted. As a first step, the fundamental conceptual shortcomings of the HBS should be discussed and addressed. Afterwards, a decision needs to be taken on what purpose the HBS could serve, if any at all. This should be analysed by means of a sufficiently long consultation period and sufficient time for EIOPA to draw conclusions from the responses provided by stakeholders. These conclusions may provide a better and more fruitful and feed into a more focused and informative Quanitative Impact Study (QIS), if deemed appropriate after all. We therefore invite EIOPA to start thinking about alternatives to the HBS, such as ALM studies and continuity analyses. These might serve the same goals as the HBS, with the advantage of lower complexity, lower costs, and less model uncertainty. In this general comment section, we would like to elaborateon a possible use of the HBS in the different parts of the IORP Directive: **1 Use for capital requirements (in pillar 1)** The HBS is conceptually wrong as an instrument for capital requirements. It is undesirable to set up capital requirements for conditional benefits (let alone discretionary benefits), as this would	

make them (almost) unconditional in practice: once the initially calculated capital charge is met by means of a higher funding ratio, the capital charge will have grown as the value of the "conditional" benefit will be higher at a higher funding ratio. This leads to a spiral that will only stop once the maximum of the original conditional benefit will be granted, thus implicitly making it unconditional. Moreover, the capital requirements for conditional benefits would imply a double charge for risk-taking as both the resulting upward potential (higher indexation option value, i.e. an higher market-consistent value) and the downward risk (higher SCR) result in higher capital requirements. This constitutes a clear disincentive to take risks, which is likely to be harmful for participants (lower returns lead to lower pensions and higher contributions) and runs against the objective of the European Commission to stimulate pension funds to finance long-term investments. Finally, as options (like conditional benefits, extra (conditional) sponsor support and benefit cuts) are less sensitive to volatility when they are far out of the money, risk-taking is more attractive for poor pension funds than for rich pension funds.

1.1. HBS inconsistent with use of an SCR

The combination of the HBS and an SCR is conceptually wrong. The HBS shows the current market value of all conditional and unconditional pension promises (assuming there is a complete market, which is not the case), and the backing of these promises by current assets and conditional future payments (or benefit reductions). As capital requirements are neither part of the pension promise nor of the financing of this promise, there is no place for an SCR on the HBS.

This can be illustrated by means of a simple (complete) contract with a finite horizon offering the participants all revenues of the fund when it closes. If the stochastic simulations for the HBS are conducted over the full (finite) lifetime of the pension contract, the HBS will exactly balance. The current value of assets is then exactly balanced by the current value of 'unconditional' liabilities plus the option of profit-sharing (indexation option) minus the option of loss-sharing (benefit reductions). If the simulation horizon ends before the end of the contract, the conditional pension rights beyond the simulation horizon will not be valued, and consequently there will generally be a residue (positive or negative). This residue represents transfers to or from the generations that will still be in the fund beyond the simulation horizon. In the view of EIOPA, the pension fund only disposes of sufficient capital when this residue exceeds the SCR. In practice, this would then mean that, irrespective of the financial starting position of the fund, current members should always have to make transfers to future generations. This cannot be regarded as beneficial for the current participants. In addition the longer the simulation horizon, the smaller the value of the residue will be (as the transfers are discounted), and therefore the less likely it will be that the HBS (including the SCR) will balance.

1.2. HB inconsistent with use of a recovery plan

The HBS concept is inconsistent with a recovery plan. Setting up an HBS including all conditional and mixed benefits and all steering instruments requires the inclusion of all extra possible future funding like extra sponsor support and instruments like benefits cuts. If the HBS then does not balance, a further recovery plan will no be possible, since all steering instruments are already included in the HBS. The only conclusion that can be drawn is that the funding policy is insufficient to pay out the benefits as promised, thus that the pension deal seems to be unsustainable (at current market prices).

1.3. HBS cannot be used for supervisory response

Another problem with the use of the HBS for capital requirements concerns the supervisory response. The HBS can only be calculated assuming a complete contract (including an agreement beforehand on the sharing of surpluses and deficits between the different stakeholders and all recovery mechanisms). This can be demonstrated as follows: Assume an IORP with an insufficient

	"holistic funding ratio" and a deficit of 100 million euros in order to comply with the SCR. In this situation, an additional payment by the sponsor of 100 million euros would be impossible, because this future security mechanism has already been valued in the HBS. Therefore, the outcome of the HBS is a take-it-or-leave-it deal. If the supervisor would not like the outcome, he might only suggest adjustments in the agreement or the recovery mechanisms, but the resulting HBS-outcome will be highly unpredictable as all HBS-items are interrelated. As a consequence, this approach is not suitable for prudential supervision. **1.4. HBS complex and hard to calculate** In addition to these fundamental problems, the HBS also implies severe practical problems. Although the HBS, in theory, provides for an overview of all risks that have an impact on the 'solvency' of an IORP, the QIS1 (2012) has shown that, in practice, IORPs faced great difficulties in providing accurate numbers. We doubt whether these difficulties can be overcome at all. This is due to the unavailability of necessary data such as market prices for long horizons, standard deviations and correlations and missing markets (like the prices for wage inflation), as well as the complexity of the methods to be used (i.e. risk-neutral valuation in the absence of closed form calculation methods). The complexity of the methods to be used, makes the HBS very sensitive, possibly too sensitive, for model and parameter assumptions, which can result in changes in the HBS valuation by tens of percentage points depending on the assumptions used. The simplifications that are being investigated may solve the problem of complexity on the one hand, but will inevitably lead to overall inconsistencies on the other hand: any simplification will inevitably lead to the entire HBS to be no longer market consistent. And if simplification will lead to a different market value of one balance sheet item, this different valuation will also impact the valuation of all the other balance	

	sheet items. **2 Use as an instrument for risk management (in pillar 2)** The HBS might possibly be used as an instrument for risk management to obtain more insight into the relative risks of the balance sheet, but other less costly methods could better achieve this goal. A well-drafted HBS can provide insights in the relative risks for different stakeholders. It is important to note however, that this does not provide insights into the main goals of an IORP, which are for example the capacity to pay the current benefits or the capacity to compensate for inflation. It only gives the current valuation of the future cash flows against market prices (assuming there is a market, which is not the case) of conditional and unconditional pension benefits and the way these promises are financed. It will therefore never be possible to use the HBS as the sole instrument for risk management, and other instruments will always be needed. Other instruments can for example consist of some sort of solvency projection (continuity analysis), ALM calculations and stress tests. If such instruments are available, we think that the use of the HBS will provide little additional added value , especially given the complexity of the information offered by the HBS. **3 Use as a tool for transparency (in pillar 3)** We have always been in favour of providing good and comprehensive information to participants. However, according to us, the HBS cannot be used for transparency purposes. The information provided by the HBS is not the information that participants need or expect. In addition, it is far too complex for members. A participant wants to learn about the underlying risks of his or her pension benefits, for example the probability that benefits will be decreased or not adjusted to inflation, and what the	

	implications of these events could be. The option values that are shown on the HBS do not provide this information, as they are not forward looking, but only provide for a relative ranking of risks. The fact that an indexation option (the market value of condional indexation) currently has a value of for example 5, does not convey any information about the probability that the indexation of pensions will be granted. It only provides for the current market price of the option. As the participant cannot trade this option, the underlying value is hardly informative. Technically, the option values provide information about the value of the optionality in a risk neutral world, but this is not the (real) world in which participants live. Moreover, as market conditions may change quickly, the option value may be very volatile. We therefore conclude that use of the HBS as a tool for transparency in the relationship with participants is neither desirable nor feasible. If specific elements of the HBS will be implemented as balancing items, we want to stress that it is still important to properly convey all relevant information. As an example, if a specific form of sponsor support would be used as a balancing item but the coverage is not 100%, any remaining risk to the participants or the IORP should still be reflected elsewhere on the HBS. Last but not least, we would like to remind that our answers to the technical questions depend on the implementation of a prudential framework that is not clear as of yet.	
Q1	*As argued in the general remarks, the use of the HBS for capital requirements is conceptually wrong for several fundamental reasons. Firstly, requiring capital for conditional benefits will make them unconditional in practice as extra capital increases their value. This is a clear disincentive to take risk or to offer conditional benefits, especially for relatively rich funds. Secondly, an SCR has no place on the HBS as all benefits and financing methods are included in the HBS. Consequently, for a complete contract the HBS automatically balances, and an SCR would always imply a deficit*	

	on the EIOPA Balance Sheet (EBS = HBS+net SCR). Thirdly, as all recovery mechanisms have to be included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no further recovery possible as the recovery plan is already included in the HBS. Apart from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool. *As argued in the general remarks, the HBS might potentially add value as an instrument for risk management, but other and less costly methods (real world as opposed to risk-neutral simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective.* *As argued in the general remarks, the HBS is not suited as an instrument for transparency in the relationship with participants as the current estimated market price of an option is not informative for them. The option cannot be traded, its price is highly volatile, and its value gives no clear information on the likelihood or size of, for instance, indexation, as option values are determined in the risk-neutral world whereas participants are only interested in the real world as they live in this world.* No, "contract" is not an adequate description. In the Netherlands there is a collective agreement between social partners for many IORPs on contributions and future accrual. Once the contributions and benefits are placed in the IORP, the IORP can terminate the agreement or amend the benefits according to its own rules.	
Q2	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes in the relationship with participants. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.*	

	We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA. Yes, the word “boundary” could be suitable. However we would prefer to use the word “scope”.	
Q3	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We would propose “scope of the agreement” instead of contract boundaries.	
Q4	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes.. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The term “contract boundaries” and the definition are not adequate for IORPs. The scope of the agreement should be different depending on whether the purpose of the HBS exercise is its application to capital requirements or as a risk management tool. For its application to capital requirements, the scope should be limited to unconditional elements of the agreement, for an	

	application as risk management tool, a wider scope could be considered.	
Q5	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* In the Netherlands IORPs do have the unilateral right to terminate the contract. We suggest that the "scope of agreement" should only take into account benefits accrued to date for capital requirements. Future in- and outgoing cash flows can be taken into account in a risk management tool of a "holistic framework".	
Q6	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Not entirely. In the Netherlands, the accrual of benefits is not conditional on the paid premiums . It is the other way around: benefits are accrued and should subsequently be serviced by premium payments. Thus, new pension entitlements are recognised in the technical provisions and not contribution payments. . The corresponding contribution cashflows are added to the unconditional financial assets of the IORP.	

	In addition, not all benefits built up due to the continued service of the participants. For example, liabilities can arise from the single event of a person becoming a member of an IORP (e.g. if, immediately when joining, a participant is entitled to a lump sum or to a dependant's pension in case they die while being a participant and the formula determining this lump sum or pension is independent of the member's length of membership).	
Q7	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes.. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes. As for capital requirements, we suggest that the "scope of agreement" should only take into account benefits accrued to date. Future in- and outgoing cash flows can be considered in a risk management tool within the "holistic framework". This concept could include all steering- and adjustment mechanisms of a pension fund, but not necessarily in the form of a (holistic) balance sheet. Contributions that fully reflect new risks could be excluded from the "scope of agreement" of the "holistic framework". If contributions are not sufficient or too high to cover newly accrued benefits, this could be labelled as 'sponsor support' (negative or positive) and could be placed separately in the "holistic framework". Regarding the practicality of such a distinction, we have several questions: The definition of 'fully reflect new risks' still needs to be clarified. In the "holistic framework", the horizon should not be infinite for practical reasons, and increase uncertainty when longer horizons are used. In addition, the distinction between "regular contributions" and "sponsor support" can be complex and may not be material: for example, the contributions are fixed for a few years, based	

	on the estimation that they will fully reflect the risks, but in time the estimate and realization start to differ slightly. The question is, whether the probability will be taken into account that no contributions are paid by the sponsor. Furthermore, how to estimate these probabilities needs to be clarified. One could also think about the case that if the sponsor is not able to pay the contributions anymore, the business will close and therefore there will be no new benefits.	
Q8	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes.. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts in order to provide our constructive input to the works of EIOPA.* For capital requirements, we suggest that the "scope of agreement" should only take into account benefits accrued to date. Future in- and outgoing cash flows can be considered in a risk management tool of a "holistic framework". For the Dutch case, the accrued benefits should be recognised in the technical provisions. The part of contributions that covers these benefits should be recognised as financial assets, and the surplus/shortfall in contribution payments should be recognized in the sponsor support.	
Q9	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes.. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.*	

	We agree that payments by the IORP to the sponsor related to a surplus of the IORP can never result in a decrease of the technical provisions. Only in the event of very high funding levels of the IORP the payment to the sponsor is possible in the Dutch case . It could result in a negative asset value in a “holistic framework”. In addition, we would like to note that if payments from the IORP to the sponsor are possible during overfunding of the IORP, it is usually possible for the sponsor to make additional payments to the IORP in case of underfunding. This should also be taken into account and will result in a positive asset value.	
Q10	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes, this is possible. For example, in industry-wide pension schemes, it may be that a new company entering the scheme is not immediately included (because both the IORP and the company are not immediately aware of each other), in which case no contributions are paid. Employees of the new company do build up entitlements in the meantime. Also note that benefits and contributions are not the same in the Netherlands. New entitlements are recognized in the technical provisions, not contribution payments. In this respect we further refer to our answer to Q6.	
Q11	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value*	

	as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes, in the Dutch case, future benefit payments are the relevant element for the scope of the agreement. New entitlements are recognized in the technical provision, not contribution payments . In this respect we further refer to our answer on Q6.	
Q12	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes.. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* For the purposes of valuating the cashflows by using risk-neutral valuation, 'probabilities' as we typically think of them, are not relevant. In a risk-neutral scenario set, the scenarios are not calibrated to real-world probabilities. Therefore, the resulting option values cannot be interpreted as the 'expected amount of sponsor support' or 'the expected amount of conditional indexation'.	
Q13	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.*	

	We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA. For capital requirement purposes, the scope of the agreement should be limited to unconditional benefits accrued to date. In the Netherlands these benefits are usually nominal benefits without indexation. For risk management purposes, non-unconditional benefits can be included. Note that for example indexation can be conditional, even if contributions are made to finance indexation. If the purpose is to apply the HBS as a risk management tool, the conditional indexation should not be part of the technical provisions but the contribution for this indexation should be separately identified on the HBS.	
Q14	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes, the cashflows should only be recognised if they lead to an unalterable risk.	
Q15	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.*	

	This depends on whether the scope of the agreement is defined for a capital requirement or for an application as risk management tool.	
Q16	No answer.	
Q17	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* For capital requirement purposes, the scope of the agreement should be limited to unconditional benefits accrued to date. For risk management purposes, other cashflows can be included in the definition of the scope of the agreement.	
Q18	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Both a and b should be included, as situations could arise where the agreement is not terminated, but no additional new benefits are accrued.	

Q19	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* In the Netherlands IORPs do have the unilateral right to terminate the contract. This situation is covered by a definition in the Dutch Pension Act.	
Q20	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* In definition b, this is not obvious and neither should this be the case. Technical provisions should only be based on benefit obligations in case these are established independently from the contributions paid.	
Q21	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.*	

	We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA. Yes, it is possible (and it happens regularly) that the agreement is not terminated, but no additional new benefits are accrued.	
Q22	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes.. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We repeat that for capital requirement purposes, the scope of the agreement should be limited to unconditional benefits accrued to date only. For risk management purposes, other cash flows can be included.	
Q23	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes. Example 7 shows daily practice in the Netherlands: only accrued nominal benefits for which the IORP receives a single contribution have to be recognized in the technical provisions. Also	

	example 8 reflects this daily practice.	
Q24	*As argued in the general remarks, the use of the HBS for capital requirements is conceptually wrong for several fundamental reasons. Firstly, requiring capital for conditional benefits will make them unconditional in practice as extra capital increases their value. This is a clear disincentive to take risk or to offer conditional benefits, especially for relatively rich funds. Secondly, an SCR has no place on the HBS as all benefits and financing methods are included in the HBS. Consequently, for a complete contract the HBS automatically balances, and a SCR would always imply a deficit on the EIOPA Balance Sheet (EBS = HBS+net SCR). Thirdly, as all recovery mechanisms have to be included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no further recovery possible as the recovery plan is already included in the HBS. Apart from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool.* *As argued in the general remarks, the HBS might potentially add value as an instrument for risk management, but other and less costly methods (real world as opposed to risk-neutral simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective.* *As argued in the general remarks, the HBS is not suited as an instrument for transparency in the relationship with participants as the current estimated market price of an option is not informative for them. The option cannot be traded, its price is highly volatile, and its value gives no clear information on the likelihood or size of, for instance, indexation, as option values are determined in the risk-neutral world whereas participants are only interested in the real world as they live in this world.* Yes. Although clear definitions are somewhat difficult to recognize, we do think that the concepts	

	contained in the introduction are workable. However, in practice, it may still be difficult to categorize existing practices, as they may contain elements of more than one class of the identified decision-making mechanisms.	
Q25	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No, we agree with the general ideas put forward in this section.	
Q26	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* In the Netherlands, we try to make pension contracts as complete as possible. Contracts should therefore provide for patterns of decision-making in view of the changing funding position, however with a well-argued derogation through discretionary decision-making at all times.	
Q27	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value*	

	as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that IORPs need to produce a best estimate of expected future payments, if pure discretionary benefits were to be recognised in a holistic balance sheet. But from a principal point of view we are of the opinion that pure discretionary benefits should not be recognised in the holistic balance sheet. In this respect, we furthermore refer to the opinion as expressed by EIOPA in paragraph 5.56 of this consultation document concerning such benefits and to our answer on Question 78.	
Q28	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes.. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that, if mixed benefits were to be recognised in a holistic balance sheet, IORPs need to produce a best estimate of expected future payments. We foresee that this will be very difficult or even impossible for small and medium sized IORPs. In this respect we also refer to our answer on Question 79 of this consultation document.	
Q29	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly*	

	and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that IORPs need to produce a best estimate of expected future sponsor payments, if non-legally enforceable sponsor support was to be included in the holistic balance sheet. At the same time we think that this will be very difficult or even impossible for small and medium sized IORPs.	
Q30	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that Options 1 and 2 are the two options for valuing off-balance capital instruments.	
Q31	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We support Option 2, because this option has as (in our view correct) starting point that off-	

	balance sheet instruments are in practice primarily used in situations, where IORPs are underfunded. For these situations the cashflows related to such instruments should be checked against their availability at that point in time.	
Q32	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that surplus funds should be valued at their nominal value.	
Q33	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that the Options 1, 2 and 3 are the options for valuing subordinated loans.	
Q34	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.*	

	We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA. We support Option 3. This option has as (in our view correct) starting point that subordinated loans are in practice typically repaid, if they are (due to the funding position of the IORP) not needed anymore to cover liabilites and capital requirements of the IORP.	
Q35	*As argued in the general remarks, the use of the HBS for capital requirements is conceptually wrong for several fundamental reasons. Firstly, requiring capital for conditional benefits will make them unconditional in practice as extra capital increases their value. This is a clear disincentive to take risk or to offer conditional benefits, especially for relatively rich funds. Secondly, an SCR has no place on the HBS as all benefits and financing methods are included in the HBS. Consequently, for a complete contract the HBS automatically balances, and a SCR would always imply a deficit on the EIOPA Balance Sheet (EBS = HBS+net SCR). Thirdly, as all recovery mechanisms have to be included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no further recovery possible as the recovery plan is already included in the HBS. Apart from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool.* *As argued in the general remarks, the HBS might potentially add value as an instrument for risk management, but other and less costly methods (real world as opposed to risk-neutral simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective.* *As argued in the general remarks, the HBS is not suited as an instrument for transparency in the relationship with participants as the current estimated market price of an option is not informative*	

	for them. The option cannot be traded, its price is highly volatile, and its value gives no clear information on the likelihood or size of, for instance, indexation, as option values are determined in the risk-neutral world whereas participants are only interested in the real world as they live in this world. In an HBS that includes other options, we prefer the direct approach. Using the balancing item approach in a HBS including other conditionalities will result in mispricing of these other options. As a consequence, the underlying projections will not be correct as benefit reductions for inclusion in the underlying cash flows. If using a simplified method such as the balancing item approach, one should also use a simplified method for valuing all the other options in order to prevent mispricing. See also our answer to Q.72 for further thoughts on the HBS in general and the inclusion of the SCR specifically.	
Q36	*As argued in the general remarks, the use of the HBS for capital requirements is conceptually wrong for several fundamental reasons. Firstly, requiring capital for conditional benefits will make them unconditional in practice as extra capital increases their value. This is a clear disincentive to take risk or to offer conditional benefits, especially for relatively rich funds. Secondly, an SCR has no place on the HBS as all benefits and financing methods are included in the HBS. Consequently, for a complete contract the HBS automatically balances, and a SCR would always imply a deficit on the EIOPA Balance Sheet (EBS = HBS+net SCR). Thirdly, as all recovery mechanisms have to be included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no further recovery possible as the recovery plan is already included in the HBS. Apart from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool.* *As argued in the general remarks, the HBS might potentially add value as an instrument for risk management, but other and less costly methods (real world as opposed to risk-neutral*	

	simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective. *As argued in the general remarks, the HBS is not suited as an instrument for transparency in the relationship with participants as the current estimated market price of an option is not informative for them. The option cannot be traded, its price is highly volatile, and its value gives no clear information on the likelihood or size of, for instance, indexation, as option values are determined in the risk-neutral world whereas participants are only interested in the real world as they live in this world.* We agree that the specifics of the market consistent calculation of sponsor support should be left to the discretion of Member States and IORPs. This would allow Member States to implement these as appropriate and as specifically as possible with regard to their own circumstances.	
Q37	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that the overarching principle of the sponsor support valuation should be market consistent. This is true especially in cases where sponsor support may be used in tandem with other security mechanisms, such as benefit reductions.	
Q38	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital*	

	requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that some allowance should be made for affordability and credit risk. However, we emphasize that it is difficult to get a good view on the sponsor's credit risk in case the sponsor is not rated. Apart from that, the enforcement of the sponsor commitment may also depend on his reported strength. Likewise it is not clear, what principles should be used for credit risk allowance and affordability in case of multi employer- and - sponsor IORPs.	
Q39	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We support the balancing item approach under the conditions decribed in Q40, namely that the balancing item approach only works for IORPs that have unlimited sponsor support and do not use sponsor support in tandem with other security mechanisms.	
Q40	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly*	

	and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The balancing item approach only works for IORPs that have unlimited sponsor support and do not use sponsor support in tandem with other security mechanisms.	
Q41	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes. In case of a pension protection scheme.	
Q42	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No. Any value for M generally applied for all IORPs using the balancing item approach is arbitrary. A sponsor with a large value is not necessarily able to actually pay up the value of the deficit. It is difficult to get a good view on the creditworthiness of a sponsor that is not rated. For this case we	

	support the idea to use total wages as a proxy for the affordabilty assessment.	
Q43	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes	
Q44	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* A PPS is not applicable for the Dutch situation. We believe that the details of the calculation of the PPS should be left to the discretion of the Member States and IORPs. This allows them to implement these as appropriate and as specific as possible with regard to their own circumstances. The use of a balancing item approach in case of a PPS should be justified properly and in a transparent manner	
Q45	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value*	

	as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The use of a balancing item approach in case of a PPS should be justified properly and in a transparent manner. This would imply that no extra requirements are needed for IORPs that are applying the balancing item approach. If the PPS does not guarantee full benefits, the combination of the PPS and the necessary benefit reductions is the balancing item.	
Q46	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We support the principle based IORP-specific valuation of the sponsor support. The specificities of calculating the sponsor support should be left to the discretion of the Member States and of IORPs. This would provide them with the possibility to implement it appropriately and according to their own circumstances. A rules-based valuation would be too complex for incorporating all specificities of all IORPs in the EU. In addition, the competent authority or EIOPA would have to prescribe a risk-neutral valuation set including assumptions for the modelling of options (like the one or two parameter Hull-White model), parameters and information on incomplete markets (like market prices for long horizons, standard deviations and correlations and missing markets (e.g. the prices for wage inflation)).	
Q47	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool*	

	for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We would welcome more guidance on the allowance for credit risk concerning the calculation of sponsor support under the stochastic modelling approach. In addition, in case of multi employer- and sponsor IORPs it is not clear what principle should be used for the allowance of credit risk and affordability.	
Q48	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes. We would welcome more guidance on the calculation of the maximum sponsor support under the stochastic modelling approach. The major issues with regard to this approach are: 1. The projection horizon 2. The application of a UFR 3. Unobservable parameters (like (wage) inflation, volatilities and correlations) 4. Model/parameter sensitivity	

	The value of the steering mechanisms depends substantially on the evaluation horizon chosen in the valuation. Some Dutch IORPs participating in the IORP QIS 1 that used a risk neutral valuation employed a projection horizon of 100 years, whereas others employed a horizon equal to the duration of the liabilities. This results in HBSs for the different IORPs not being comparable, as they automatically raise the shock absorption in the HBS by increasing the projection horizon. In general, we agree with the use of the UFR approach, while noting that its application conflicts with the principles of pure market consistent valuation. As the value of the embedded options in a pension contract cannot be derived from market prices, risk neutral scenarios need to be determined based on a risk free nominal interest rate curve. This curve can be observed in financial markets, but does not include any UFR. One changes for instance the value of nominal liabilities by overwriting market prices when applying an UFR approach. Another issue with the UFR is that it is impossible to calculate the impact of interest rate shocks properly. For some economic variables used in the valuation of the HBS no market information is available or the financial markets are not liquid enough to provide reliable prices. For these variables, such as (wage) inflation, volatilities and correlations, IORPs need to make an assumption leading to possible differences in the valuation of the HBS between IORPs. Even if all market information is available, IORPs can select from a wide range of risk neutral valuation models. Some financial institutions define tailored models to price a very specific derivative. This can be illustrated by the fact that models used by banks for pricing interest rate caps differ from the models for pricing swaptions, whereas both derivatives are subject to the same interest rate risk. Tailored models make calibration easier and therefore are supposed to make pricing more accurate. When the payoffs of a claim depend on several economic variables such as interest rates, inflation and equity returns, these variables need to be incorporated. This leads to more broadly defined models. In this case more model risk is present, if valuation is done for products that are dissimilar to the ones that have been used for calibration.	

	Apart from these issues, the use of the stochastic modelling approach should be encouraged because of the implication that capital requirements are lower in comparison to using simplified methods. This may however not always be the case.	
Q49	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* This method is based on the assumption that the distributions of assets and liabilities are symmetrically spread , while in practise they are not. This is especially the case for IORPs using benefit reductions as a steering mechanism.	
Q50	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The QIS simplification 1 can be used by IORPs that do not use other steering mechanisms than additional sponsor support in case of underfunding. EIOPA can encourage this method by providing more guidance on how to derive the probability of default and maximum sponsor support. Particularly as some shareholders provided EIOPA with the feedback that they were not able to derive the assumptions that constitute input for this simplification.	

Q51	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The QIS simplification 2 is not in line with the overarching principle that market consistent valuation methods should be used. As only the current underfunding situation is considered in the valuation, possible future underfunding situations are not taken into account.	
Q52	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purpose. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* This method is not appropriate, as it is not in line with the overarching principle of market consistent valuation.	
Q53	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.*	

	We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA. From the consultation paper we understand that the simplified B&H model does not take future shortfalls into account (see 4.245). This model is not in line with the overarching principle that market consistent valuation methods should be used. Therefore it is not appropriate.	
Q54	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No	
Q55	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purpose. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The ASA model does not take future shortfalls into account. This model is not in line with the overarching principle that market consistent valuation methods should be used. Therefore it is not appropriate. However, we support the simplification in this method with regard to the derival	

	of the credit risk of the sponsor.	
Q56	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No.	
Q57	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes.	
Q58	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our*	

	constructive input to the works of EIOPA. No, we believe that the specifics of the maixmum sponsor support calculation should be left to the discretion of the Member States and to IORPs in order to implement it as appropriately and as specifically as possible according to their own circumstances.	
Q59	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes, especially in case of multi employer- and -sponsor IORPs. We would welcome more principle based guidance for these cases. For multi employer IORPs with a large number of employers historic default rates can be used.	
Q60	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We support a pragmatic approach that can be used by all IORPs. Therefore we favour the approach in which the sponsor credit risk can be based on historical data of different types of sponsors such as the PPF assessment. The enforcement of the sponsor commitment may also	

	depend on the reported sponsor strength . If historic data of the peers of this sponsor are used, the enforcement of the commitment would be easier.	
Q61	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We do not agree with this approach, as this paragraph only considers the current situation of underfunding as a basis for the sponsor support valuation . To be in line with the overarching principle of market consistent valuation, also possible future underfunding should be considered. In our opinion the timing of the sponsor support cash flow is covered by the principle of market consistent valuation.	
Q62	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Assuming that the investment behaviour of the IORPs within the multi sponsor IORP is almost the same, the situation of underfunding for these IORPs is highly correlated. Therefore apportioning of the maximum sponsor support seems to be appropriate. This paragraph only addresses the implications of the multi sponsor IORP in case of the application of simplified methods. We would	

	welcome more principle based guidance for the stochastic modelling approach.	
Q63	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Maybe the QIS 1 simplification can be extended in such a way as to take the correlation of underfunding of various IORPs into account. We stress however that this method can only be used by IORPs that, in case of underfunding, use no other steering mechanisms than additional sponsor support.	
Q64	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The sponsors' credit of the multi sponsor IORP cannot be assessed by averaging the individual sponsor's credit risk. We would suggest to take the correlation between the defaults of the sponsors into account. Apart from that, in our opinion the default rate could be based on past defaults of the sponsors , if the total number of sponsors is large enough.	
Q65	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool*	

	for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The sponsors' credit of multi sponsor IORP cannot be assessed by averaging the the individual sponsor credit risk. We would suggest to take the correlation between the defaults of the sponsors into account. Apart from that, in our opinion the default rate could be based on past defaults of the sponsors , if the total number of sponsors is large enough. See also Q64.	
Q66	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree to take all guarantees into account when valuing the sponsor support.	
Q67	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.*	

	We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA. We stress that for not-for-profit organisations it is even more complicated to assess the financial strength. We would therefore welcome more guidance. A method such as the PPF assessment may be of use of these IORPs. In our opnion it is better to base the default rate on historic data.	
Q68	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We stress that for not-for-profit organisations it is even more complicated to assess the financial strength. We would therefore welcome more guidance. A method such as the PPF assessment may be of use of these IORPs. In our opnion it is better to base the default rate on historic data. See Q67.	
Q69	*As argued in the general remarks, the use of the HBS for capital requirements is conceptually wrong for several fundamental reasons. Firstly, requiring capital for conditional benefits will make them unconditional in practice as extra capital increases their value. This is a clear disincentive to take risk or to offer conditional benefits, especially for relatively rich funds. Secondly, an SCR has no place on the HBS as all benefits and financing methods are included in the HBS. Consequently, for a complete contract the HBS automatically balances, and a SCR would always imply a deficit on the EIOPA Balance Sheet (EBS = HBS+net SCR). Thirdly, as all recovery mechanisms have to be included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no further recovery possible as the recovery plan is already included in the HBS. Apart*	

	from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool. *As argued in the general remarks, the HBS might potentially add value as an instrument for risk management, but other and less costly methods (real world as opposed to risk-neutral simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective.* *As argued in the general remarks, the HBS is not suited as an instrument for transparency in the relationship with participants as the current estimated market price of an option is not informative for them. The option cannot be traded, its price is highly volatile, and its value gives no clear information on the likelihood or size of, for instance, indexation, as option values are determined in the risk-neutral world whereas participants are only interested in the real world as they live in this world.* We agree with the advantages and disavantages of the two options as described in paragraph 4.6.	
Q70	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Methodologically, it is best to value a PPS seperately by using a full valuation, such as the full Barrie & Hibbert method. However, in the light of simplicity and feasibility, allowing the existence	

	of a PPS to reduce the sponsor default rates to 0% seems a practical solution. It is important, however, that in this case, the PPS guarantees all liabilities of an IORP. In case less than 100% of the liabilities are guaranteed by the PPS, a combination of the PPS and benefit reductions is the balancing item. If this route were to be chosen, we would invite EIOPA to further suggest how to allow for a combination of the PPS and benefit reduction as a balancing item. The use of a balancing item approach in case of a PPS should be justified properly and in a transparent manner.	
Q71	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree with the approach to consider the PPS as a balancing item in the HBS, under the condition that the PPS is strong enough to guarantee 100% of the benefits. If the PPS does not guarantee full benefits, the combination of the PPS and necessary benefit reductions is the balancing item. The use of a balancing item approach in case of a PPS should be justified properly and in a transparent manner.	
Q72	*As argued in the general remarks, the use of the HBS for capital requirements is conceptually wrong for several fundamental reasons. Firstly, requiring capital for conditional benefits will make them unconditional in practice as extra capital increases their value. This is a clear disincentive to take risk or to offer conditional benefits, especially for relatively rich funds. Secondly, an SCR has no place on the HBS as all benefits and financing methods are included in the HBS. Consequently, for a complete contract the HBS automatically balances, and a SCR would always imply a deficit on the EIOPA Balance Sheet (EBS = HBS+net SCR). Thirdly, as all recovery mechanisms have to be*	

	included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no further recovery possible as the recovery plan is already included in the HBS. Apart from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool. *As argued in the general remarks, the HBS might potentially add value as an instrument for risk management, but other and less costly methods (real world as opposed to risk-neutral simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective.* *As argued in the general remarks, the HBS is not suited as an instrument for transparency in the relationship with participants as the current estimated market price of an option is not informative for them. The option cannot be traded, its price is highly volatile, and its value gives no clear information on the likelihood or size of, for instance, indexation, as option values are determined in the risk-neutral world whereas participants are only interested in the real world as they live in this world.* No, the HBS should show the current market value (assuming there is a complete market, which is not the case) of all conditional and unconditional pension promises and the way these promises are backed by current assets and conditional future payments (or benefit reductions). As capital requirements are neither part of the pension promise nor of the financing of this promise, there is no place for capital charges on the HBS. This can easily be explained by means of a simple contract with a finite horizon offering the participants all revenues of the fund, if it is closed. If stochastic simulations for the HBS are conducted over the full lifetime of the contract, the HBS exactly balances. The current value of assets is exactly balanced by the current value of 'unconditional' liabilities plus the profit sharing option minus the loss sharing option (benefit	

reductions). If the simulation horizon ends before the end of the contract there generally is a residue. This residue represents transfers to or from the generations that are still in the fund after the simulation horizon. The EIOPA Balance Sheet (EBS = HBS+net SCR) can only be positive if the net SCR is smaller than the residue. This means that irrespective of the financial starting position, current participants should always make a transfer to future generations. This cannot be regarded as beneficial for the participants. The longer the simulation horizon, the smaller the value of the residue(as the transfers are discounted), and therefore the less likely it will be that the EBS will balance.

Prudential supervision should focus on unconditional promises. In Solvency II, the mistake was to also require capital for conditional promises, even if these promises are conditional on the future financial health of the insurance company (profit sharing). Consequently, there is a double charge for risk taking under Solvency II. First, more risk increases downside risk and therefore a higher SCR is required. Second, more risk also increases upward potential and thereby the option of profit sharing. Where the first requirement makes perfect sense, the second does not. Either a company is making profit and hence will have the money to share a part of it, or there is no profit and in that case also no promise to pay anything. For insurance companies this mistake might be circumvented by formulating contracts in such a way that this may be discarded (contract boundaries), or by simply not promising profit sharing any more. For pension funds (at least in the Netherlands) the mistake is more binding as conditional indexation is an important aspect of the pension agreement. Even if a pension fund has a strong sponsor who is willing to finance a deficit due to the value of the option to grant indexation , the Solvency II balance sheet will not work, since it is dynamically inconsistent, because extra contributions of the sponsor will increase the option to grant indexation. This process can continue until indexation is almost fully guaranteed, but this is clearly at odds with the agreed conditionality of the indexation. In the EBS, one tries to correct this conceptual mistake by adding compensating options available to pension funds to finance future deficits such as benefit reductions and sponsor support. In general, it is rarely a good idea to compensate mistakes by compensating mistakes. This is not different in this case.

With respect to benefit reductions, it is doubtful whether a supervisor (who should monitor the

	protection of current and future participants' pensions) should disregard pension promises simply because these promises are no longer likely to be met. Moreover, as options are less sensitive to volatility changes if they are far out of the money, from a supervisory point of view the relative attractiveness of risk taking as a function of the financial health of the fund is contrary to the desired situation. If the fund is highly underfunded, the option to grant indexation is far out of the money and extra risk taking will hardly affect this value. The option of benefit reduction on the other hand will increase with risk taking as this option is more in the money. For a fund with a large surplus, it works the other way around. Consequently, risk taking is less attractive for a rich fund than for a poor one. Again, this seems contrary to a good policy from the point of view of protecting current and future participants. To conclude, the best solution to circumvent the mistake of Solvency II is not to enlarge the balance sheet, but to limit it to just unconditional promises.	
Q73	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The HBS could possibly be used as an instrument for risk management in order to obtain more insights in relative balance sheet risks , but other and less costly methods such as ALM, continuity analyses and stress tests would better achieve this goal. In theory, the HBS could shed some light on the relative importance of the pension funds' different recovery mechanisms . One of the preconditions for this theory is however that the market is complete, which is clearly not (and never will be) the case. Moreover, the calculation of these options is far from trivial, and therefore costly.	

	This consultation document offers numerous simplifications to calculate a HBS. The result of these calculations is just a balance sheet without any logical economic interpretation. The interaction between balance sheet items is lost, because the assumed option prices disregard the price of risk (the expected payout on an insurance policy is not equal to the premium). Furthermore, simplifications of one balance sheet item will also impact the valuation of other balance sheet items. Another issue is that the HBS will only give the current valuation but no projections.	
Q74	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No. Even apart from the incompleteness of the market, the HBS is way too complex to communicate. A participant would like to know to what extent her/his pension is likely to keep up with inflation. Even an expert will have no idea how to interpret an option to grant indexation of say 25% of unconditional liabilities. Equally uninformative is the information that the option to cut benefits is worth 5% of labilities. As options are priced in a risk-neutral world (in which we do not live) such a number is hardly indicative of the probability or size of future benefit cuts. For a participant, in order to get an idea of the perspective and risks of his/her future pension, one should simulate with real world scenarios. The HBS does not do that. It only tells us how much we should be able to get for our pension agreement on the market or how much we should pay to get rid of a pension promise if there was a market (which is not the case). These number will moreover depend highly on the specific day the balance sheet is calculated as all prices are calibrated according to the market prices on a particular date.	
Q75	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool*	

	for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No. Using the concept of the HBS for risk management requires the inclusion of all steering and adjustment instruments. In case the HBS funding ratio would be too low, there are no further instruments available for recovery. In this case the recovery plan cannot be set up; it is already included in the HBS through steering and adjustment instruments available to the IORP. The only signal the HBS can give is that the pension agreement is possibly not sustainable (given current market prices). Apart from that, there also are practical problems with the HBS. As all recovery mechanisms have to be included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no further recovery possible as the recovery plan is already included in the HBS. Apart from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool. To conclude, the HBS might potentially add value as an instrument for risk management, but less complex methods (real world as opposed to risk-neutral simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective.	
Q76	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more*	

	informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The existence of some form of non-legally enforceable sponsor support will contribute to the safety of the pension promise. Therefore one could be in favour of the option to include the non-legally enforceable sponsor support in the HBS. However, individual IORPs are best suited to decide if and how to include this. As there is a link to IFRS in the sense that there is a need for a realistic picture of the sponsor's liabilities, the IORP should be able to address this issue with its sponsor(s). The local supervisor should then assess the used method and the viability of the assumptions and resulting outcome.	
Q77	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The existence of a pension protection scheme (PPS) will also contribute to the safety of the pension promise. Therefore one could be in favour to include the value of the PPS on the HBS. However, in the case of the inclusion of the PPS, EIOPA has to monitor the financial strength of these PPSs. This has to be done on a macro scale, otherwise the systemic risk of such schemes is not taken into account in the value.	
Q78	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value*	

	as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* As mentioned above, we see no role for the HBS for capital requirements. If it were to be used , we agree that pure discretionary benefits should not be included on an IORP's capital requirement balance sheet (but as mentioned above, we see no role for the HBS for setting capital requirements).	
Q79	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We support Option 2, because in the case of mixed benefits there is, no contractual obligation to provide these benefits, similar to the case of pure discretionary benefits.	
Q80	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our*	

	constructive input to the works of EIOPA. Option 3 seems most sensible. The HBS is consistent only if all options are included on the balance sheet, which means that all types of benefit reductions should be included. Additionally,in practice there is no rationale for making a distinction between ex ante and ex post reductions. In relation to paragraph 5.65 we would like to comment that, although EIOPA's view may be economically valid, the legal perspective is different, i.e. granting discretionary benefits in addition to hard benefits is legally different from cutting benefits, thus resulting in benefit payments below the original hard benefits.	
Q81	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* In our view there are no other options to be considered.	
Q82	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.*	

	We agree that off-balance sheet capital instruments should be eligible to cover the SCR.	
Q83	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that surplus funds should be recognised on an IORP's balance sheet and could be used to cover capital requirements.	
Q84	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We agree that subordinated loans should be recognised on an IORPs balance sheet and could, bar possible future decisions, be used to cover capital requirements.	
Q85	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly*	

	and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We would be in favour of level B.This would be consistent with the current approach in the IORP-Directive and in line with the practice in many Member States. In the Netherlands, it is allowed to base additional capital requirements on top of the minimum funding rate, on prudently established expected returns on assets.	
Q86	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We would think that this should apply to all IORP's in combination with the conditions as quoted by EIOPA.	
Q87	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.*	

	We are in favour of level B. Consistent with the current approach in the IORP Directive and in line with the practice in many Member States. In the Netherlands, it is allowed to base additional capital requirements on top of the minimum funding rate, on prudently established expected returns on assets.	
Q88	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We would think that this should apply to all IORPs in combination with the conditions as quoted by EIOPA. See answer on Q 86.	
Q89	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Yes. This is currently established practice in the Netherlands and hence would tally in nicely with the present arrangements, without jeopardizing the national equilibrium in pension legislation, and thus avoiding violation of the subsidiarity principle.	
Q90	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool*	

	for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Recovery periods are integral parts of national pension systems. Since pension systems are very different across Member States, harmonizing recovery periods would disrupt one or more of these systems. As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q91	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* This is entirely dependent on the set-up of the pension system. It does not only depend on the nature of the pension entitlements (are these guarantee-like, ambitions, or not defined at all?) , but also on for example the governance structure, the participants included and other sources of pension provision, such as state or private pensions. As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q92	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital*	

	requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative. *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* Again, this is entirely dependent on the specific national set-up, see the answer to Q.91. As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q93	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We would like to note that we think that the SCR is not compatible with the HBS. As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q94	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.*	

	We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA. We would like to note that we think that the SCR is not compatible with the HBS. As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q95	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* We would like to note that we think that the SCR is not compatible with the HBS . As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q96	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No. We would like to note that we think that the SCR is not compatible with the HBS . As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further	

	recovery plan can be developed.	
Q97	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The size of the impact crucially depends on the scope of the future supervisory framework. Existing contractual agreements concerning future contributions and benefits may need to change. Also national social and labour law may need to be adjusted. With regard to existing pension benefits, the impact will depend on whether these benefits could be interpreted as acquired property rights. Those rights should remain unadjusted. Moreover, in the Netherlands, it is explicitly confirmed that a change in prudential regulation as such does not give a reason to change existing contracts with the supervisor, such as for instance in the case of recovery plans approved by the supervisor. As long as IORPs fulfill their obligation according to these contracts, there is no reason to change it. If existing contractual agreements need to be revised in a future European framework, this should explicitly be stipulated by law.	
Q98	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.*	

	We are against EIOPA interfering with national social and labour law.	
Q99	*As argued in the general remarks, the use of the HBS for capital requirements is conceptually wrong for several fundamental reasons. Firstly, requiring capital for conditional benefits will make them unconditional in practice as extra capital increases their value. This is a clear disincentive to take risk or to offer conditional benefits, especially for relatively rich funds. Secondly, an SCR has no place on the HBS as all benefits and financing methods are included in the HBS. Consequently, for a complete contract the HBS automatically balances, and a SCR would always imply a deficit on the EIOPA Balance Sheet (EBS = HBS+net SCR). Thirdly, as all recovery mechanisms have to be included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no further recovery possible as the recovery plan is already included in the HBS. Apart from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool.* *As argued in the general remarks, the HBS might potentially add value as an instrument for risk management, but other and less costly methods (real world as opposed to risk-neutral simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective.* *As argued in the general remarks, the HBS is not suited as an instrument for transparency in the relationship with participants as the current estimated market price of an option is not informative for them. The option cannot be traded, its price is highly volatile, and its value gives no clear information on the likelihood or size of, for instance, indexation, as option values are determined in the risk-neutral world whereas participants are only interested in the real world as they live in this world.* This framework is not usable, since it contains some inconsistent elements . It includes an SCR and	

	some options are left out of the balance sheet. This causes inconsistencies in the valuation of the options on the HBS including inappropriate uniform recovery periods. In addition, this recovery period is very short, which does not do justice to the long-term nature of IORPs. We would like to note that we think that the SCR is not compatible with the HBS . As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q100	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No. This framework is not usable, since it contains some inconsistent elements . It includes an SCR and some options are left out of the balance sheet. This causes inconsistencies in the valuation of the options on the HBS including inappropriate uniform recovery periods. In addition, this recovery period is very short, which does not do justice to the long-term nature of IORPs. We would like to note that we think that the SCR is not compatible with the HBS. As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q101	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our*	

	constructive input to the works of EIOPA. Firstly, it is not clear to us how level B technical provision could be combined with market-consistent valuation of the different options in the pension contract. Secondly, some options are excluded from the framework and thuscause mispricing in the included options. Thirdly, including an SCR on a balance sheet that contains conditional items is not appropriate. Fourthly, recovery plan requirements should be set at the Member State level. As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q102	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* This is not possible. It is not clear to us how the level B technical provision could be combined with market-consistent valuation of the different options in the pension contract. Some options are missing. Including an SCR is not appropriate. Recovery plan requirements should be set at the Member State level. As all recovery mechanisms have to be included in order to be able to calculate the HBS, no further recovery plan can be developed.	
Q103	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.*	

	We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA. In example 3, in the text it is stated that the balance sheet intended for capital requirements (the pillar 1 balance sheet) should only cover unconditional elements. However, in the description in table 5.4, three conditional elements are included: ex ante benefit reductions, legally enforceable sponsor support and the PPS. Since some conditional elements are left out of the balance sheet, ex ante benefit reductions, sponsor support and the PPS will be mispriced. Therefore, the 'pillar 1' framework as presented is not usable in its current form. The HBS as a risk management tool includes future accrual of benefits and accompanying future contributions. Since it is not clear how these will develop, in addition they will require IORPs to make a lot of additional assumptions about future development of these variables.	
Q104	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No, example 3 cannot be used for all IORPs in the EU. In example 3, it is stated in the text that the balance sheet intended for capital requirements (the pillar 1 balance sheet) should only cover unconditional elements. However, in the description in table 5.4, three conditional elements are included: ex ante benefit reductions, legally enforceable sponsor support and the PPS. Since some conditional elements are left out of the balance sheet, ex ante benefit reductions, sponsor support and the PPS will be mispriced. Therefore, the 'pillar 1' framework as presented is not usable in its current form.	

	In principle, the HBS could possibly be used as a risk management tool, but needs more thought and developing before it can be implemented. One issue is the necessary assumptions (see answer to Q. 103). Another thing to keep in mind is that the market value of an option on the HBS is not one-on-one linked to the probability of the option being executed times the size of the event, but also depends on pricing characteristics such as volatility of the financial instruments the scenario set is calibrated on.	
Q105	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The framework in example 4 is not usable, since it contains some inconsistent elements . It includes an SCR, some options are left out of the balance sheet (mixed benefits and pure discretionary benefits) and thus causes inconsistencies in the valuation of the options on the HBS. We would like to note that we think that the SCR is not compatible with the HBS.	
Q106	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes towards participants. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* No. This framework is not usable, since it contains some inconsistent elements . It includes an	

	SCR, some options are left out of the balance sheet (mixed benefits and pure discretionary benefits) and thus causes inconsistencies in the valuation of the options on the HBS.	
Q107	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The pillar 1 framework presented in example 5 is not suitable for capital requirements, since it contains some inconsistent elements . Some options are left out of the balance sheet (sponsor support, mixed benefits, ex post benefit reductions), thus causing inconsistencies in valuation of the options that are on the HBS. If the proposed pillar 2 framework would include an SCR, this is not consistent with the methodology and it is illogical to put an SCR in pillar 2. The positive side of using the HBS as a risk management tool is that it would include all options (like conditional and mixed benefits, sponsor support and benefit cuts) in the HBS.	
Q108	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.*	

	The pillar 1 framework presented in example 5 is not usable for capital requirements because it excludes some, but not all options from the balance sheet and thus causes mispricing in the remaining option, such as ex ante benefit reductions.The HBS is not usable as a risk management tool as laid down in example 5, as it includes an SCR. We would like to reiterate that we think that the SCR is not compatible with the HBS.	
Q109	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* The HBS could possibly be used as an instrument for risk management to obtain more insights in relative risks of the balance sheet, but other and less costly methods such as ALM, continuity analyses and stress tests would better achieve this goal. However, we consider including an SCR in the specifications to be inconsistent and not useful within the HBS methodology.	
Q110	*We seriously doubt whether it will be possible to develop the HBS into an adequate tool for prudential supervision. It should be, according to us, neither be applied for capital requirements nor for transparency purposes. The HBS could possibly have a limited value as a risk management tool. However there are less complex methods that are less costly and more informative.* *We answer this question despite of the above mentioned doubts, in order to provide our constructive input to the works of EIOPA.* If the SCR component were to be left out, there is potential to use the example as a risk management tool at a EU-wide level.	

Q111	*As argued in the general remarks, the use of the HBS for capital requirements is conceptually wrong for several fundamental reasons. Firstly, requiring capital for conditional benefits will make them unconditional in practice as extra capital increases their value. This is a clear disincentive to take risk or to offer conditional benefits, especially for relatively rich funds. Secondly, an SCR has no place on the HBS as all benefits and financing methods are included in the HBS. Consequently, for a complete contract the HBS automatically balances, and a SCR would always imply a deficit on the EIOPA Balance Sheet (EBS = HBS+net SCR). Thirdly, as all recovery mechanisms have to be included in order to be able to calculate the HBS, any supervisory response cannot improve the HBS; there is no futher recovery possible as the recovery plan is already included in the HBS. Apart from these fundamental problems the HBS is far too complex and subjective to be able to develop into a cost efficient and informative supervisory tool.* *As argued in the general remarks, the HBS might potentially add value as an instrument for risk management, but other and less costly methods (real world as opposed to risk-neutral simulations) would better achieve this goal. Simplifying methods to calculate the HBS or omitting certain elements on the HBS result in combinations of market-consistent and simplified prices. This however prevents achieving the HBS's objective.* *As argued in the general remarks, the HBS is not suited as an instrument for transparency in the relationship with participants as the current estimated market price of an option is not informative for them. The option cannot be traded, its price is highly volatile, and its value gives no clear information on the likelihood or size of, for instance, indexation, as option values are determined in the risk-neutral world whereas participants are only interested in the real world as they live in this world.* For the use of simplifications in the QIS, they should be in line with the overarching principle of using market consistent valuation methods.	

	Using this overarching principle, we see three possible approaches for using the HBS in a risk management environment: - Option 1: Delete all options, and just consider assets and unconditional liabilities. - Option 2: Do a full analysis without any simplifications thus including all options in the HBS and achieving consistency. - Option 3: Value all included options using a simplified approach that satisfies the overarching principle. In this case, we recommend not to use risk-neutral pricing to value some options and a simplified approach to value others, as this will result in mispriced options from the risk-neutral analysis.	