

EIOPA Consultation Response Template

Consultation paper on the proposal for Implementing Technical Standards specifying the methodology to determine the set of scenarios to be used for the prudent deterministic valuation of the best estimate for life obligations with options and guarantees.

General

Q1. Do you have general comments on the consultation paper? (Yes / No)

Comments:

The Actuarial Association of Europe (AAE) appreciates the effort undertaken by EIOPA to develop a prudent deterministic valuation methodology. This approach, aimed at providing small and non-complex undertakings with a pragmatic means to reflect the time value of options and guarantees (TVOG) in their technical provisions, is a step towards proportionality without the resource intensity of full stochastic valuation. However, we have several observations and concerns regarding the proposed framework, as noted below.

Firstly, while proxies to capture sufficient variability and TVOG offer a potentially simpler approach, they often come with inherent complexities that diminish their reliability and interpretability. As noted in Recital 9, the inevitable trade-off in using a smaller set of scenarios compared to full stochastic valuation leads to a higher degree of inaccuracy in measuring TVOG. This inherent limitation needs careful consideration to ensure the methodology maintains its intended purpose without compromising robustness.

The proposed methodology's reliance on a maximum of ten scenarios, combining real-world and risk-neutral approaches with simplistic assumptions (e.g., no dependency structures but compensated by conservative volatilities), has limitations. While simplicity can enhance accessibility, it may not absolve undertakings from conducting further in-depth analyses. The lack of a well-defined concept of "prudence" in the context of the Best Estimate and the Loss Absorbing Capacity of Technical Provisions (LAC TP) raises concerns about the methodology's capacity to consistently achieve its prudence objectives.

Moreover, the robustness of the methodology at this stage appears insufficient. Undertakings bear the ultimate responsibility for their calculations and must have confidence in the scenarios generated. This includes ensuring that the scenarios adequately reflect the specificities of their business and risks.

The professional judgement of actuaries can play an important vital role in assessing the appropriate approach taking into account the undertaking's context, and rigorously evaluating options and guarantees. On this topic, we would like to refer to the AAE's Educational Note on Professional Judgement, which provides useful insights into how

actuaries can navigate these challenges responsibly: https://actuary.eu/wp-content/uploads/2022/10/2022.10.07_AAE-EAN-PJ-FINAL.pdf

1. Background and Rationale

Q2. Do you have comments on the following sections in section 1 with background and rationale?

- Amendments to the Solvency II Directive
- Mandate for draft Implementing Technical Standards
- Information requests conducted by EIOPA
- Approach to the draft ITS

Other comments:

We note a potential ambiguity regarding the flexibility of the base methodology as outlined in Section 1. Specifically, it is unclear whether the base methodology itself may be subject to periodic adjustments or whether it is intended to remain fixed, with only the resulting set of scenarios for each relevant currency being updated on a quarterly basis.

This distinction is significant, as allowing changes to the base methodology over time could introduce uncertainty and variability in its application. A fixed base methodology provides greater consistency and predictability for undertakings, ensuring they can rely on a stable framework to guide their calculations. On the other hand, the ability to adapt the base methodology might enable improvements in response to evolving market conditions or insights gained from practical implementation.

We suggest that EIOPA could clarify this matter. If adjustments to the base methodology are envisaged, it would be helpful to outline the circumstances under which such changes might occur and to ensure adequate notice periods.

Q3. Do you have any other comments on the background and rationale section? (Yes / No)
Comments:

The stated aim of the prudent deterministic valuation is to provide small and non-complex undertakings with an approach to reflect a prudent level of the time value of options and guarantees (TVOG) in their calculation of technical provisions, without requiring a full stochastic valuation. However, the consultation on the implementation of the new proportionality framework under Solvency II notes that undertakings cannot apply this proportionality approach if they are already using a stochastic valuation approach.

It is unclear as to why any prior use of a stochastic approach, should limit the option to use proportionality - especially if the local FSA has historically forced the application of full stochastic valuation upon the undertaking. Furthermore, it should be clarified that the use

of the prudent deterministic is not mandatory. The use of this proportionality measure must remain at the discretion of the undertaking.

2. Draft Technical Standards

Q4. Do you have comments on the following recitals in section 2?

- Recital 1

It is important to note that the respect of these conditions may evolve over time due to internal factors, such as changes in the undertaking's risk profile or business model, or external factors, such as shifts in the regulatory or economic environment. Given this potential for change, we would recommend regular monitoring and follow-up to ensure that undertakings continue to meet the necessary conditions for using the prudent deterministic valuation approach.

- Recital 2

- Recital 3

Offering a method that is operationally compatible with an iterative calculation by a non-stochastic model can enable undertakings with a deterministic model to calculate an improved value of financial options and guarantees.

We would, however, like to emphasise the importance of considering the broader implications of such an approach. Specifically, the application of the methodology must ensure alignment with the respective scenario management rules and the assumptions concerning policyholder protection. These aspects are integral to the calculation of the best estimate and may require adaptation to reflect the specificities of the methodology and its application to different types of obligations.

- Recital 4

The recital states: "The matching adjustment and the volatility adjustment are undertaking-specific adjustments to the risk-free interest rate term structure." We suggest this wording be amended, as the volatility adjustment (VA) is currency-specific rather than undertaking-specific. While the application of the VA is indeed at the discretion of the undertaking, subject to supervisory approval, its calibration is determined at the currency level.

Additionally, we acknowledge the intent of Recital 4 to simplify and standardise the methodology for deriving scenarios used in the prudent deterministic valuation. However, the approach to derive the scenarios using the basic RFR without considering the VA may have an impact on TVOG for some undertakings. We would like to highlight the following considerations:

- The exclusion of MA and VA from the scenario derivation methodology might compromise the accuracy of the calculated Time Value of Options and Guarantees (TVOG). This is particularly pertinent for undertakings with significant reliance on these adjustments, as their absence could lead to material deviations in the valuation results.
- As noted in Recital 9, the adoption of a limited set of scenarios inherently introduces a level of sampling error, affecting TVOG accuracy. While we understand that expanding the set of scenarios to include MA and VA would increase operational complexity, it may also enhance valuation precision. This trade-off warrants further consideration to ensure the methodology balances feasibility with an acceptable level of prudence in valuation outcomes. It might be helpful to assess the implications of including MA and VA in a subset of scenarios and compare these results to those derived using the current approach. This analysis could provide insights into the trade-offs between complexity and accuracy.
- The limited set of scenarios may not fully capture the range of risk factors influencing TVOG, especially under stressed conditions. Including scenarios that reflect the MA and VA could better represent the economic reality of certain portfolios.
- Additionally, regarding the Volatility Adjustment (VA), we would like to emphasise its significance for EU insurers heavily exposed to fixed-income assets. The VA, or equivalently the "spread corrected for default," represents a critical component of the financial results and significantly influences the calculation of TVOG. Excluding stochasticity in the VA could fail to capture the variability of credit risk premiums, which are essential for accurately reflecting the economic reality and sensitivity of certain insurers' P&L results.

- Recital 5
- Recital 6
- Recital 7
- Recital 8
- Recital 9

We wonder whether there is solid evidence to support the claim that a sufficiently prudent level of volatility can effectively compensate for the independence assumption across financial market parameters. This assumption may overlook potential interactions between parameters that could materially impact results.

Furthermore, combining risk-neutral and real-world approaches, such as inferring volatilities from the SCR shocks, could present challenges. This hybrid approach may

introduce inconsistencies in the calibration of scenarios and affect the reliability of the resulting valuations. We suggest EIOPA consider these issues and provide further justification or refinement of the proposed methodology to ensure robustness.

- Recital 10

- Recital 11

Q5. Do you have comments on the following articles in section 2?

- Article 1 - Financial market parameters

The scenarios aim to cover the most material financial market parameters affecting the valuation of the best estimate liabilities (BEL). However, there is no clear guidance on how bonds, particularly corporate bonds, should be valued. We note that the Technical Specifications for the First Information Request concerning the Prudent Harmonised Reduced Set of Scenarios (PHRSS) framework in 2023 outlined two methodologies for using risk-free rates to determine bond prices. To ensure consistency across undertakings, the methodology for bond valuation should be formalised within this article or through additional EIOPA Guidelines.

Paragraph 2 lists financial market parameters that must be considered material. We suggest introducing greater flexibility in the generation of relevant scenarios, particularly to reflect the context of small and non-complex undertakings across Europe. For instance, such undertakings are less likely to engage in significant real estate investments or may primarily invest in real estate linked to contracts where the investment risk is borne by policyholders, rendering TVOG inapplicable. Flexibility in this regard would enhance the proportionality and applicability of the framework.

- Article 2 - Criteria for the set of scenarios

We acknowledge that restricting the number of scenarios to 10 aims to provide a simple methodology with a limited operational burden. While this restriction naturally impacts the achievable accuracy of the calculated TVOG, we understand it reflects a trade-off made during the discussions on the Prudent Harmonised Reduced Set of Scenarios (PHRSS).

Paragraph 2 requires that "For any given combination of reference date, basic risk-free interest rate term structure, and relevant currency, only one set of scenarios shall be determined." This constraint may be overly rigid, given the diversity of investment portfolios across undertakings. For example, some undertakings primarily invest in government bonds, while others may hold a balance of government and corporate bonds or a mix of government bonds and equities. Allowing some flexibility to tailor scenarios to distinct asset mixes could enhance the applicability and relevance of the methodology without compromising its simplicity. Such flexibility could be achieved by applying the same core methodology to different portfolio types as determined by EIOPA.

- Article 3 - Base methodology

We suggest a process to be established to allow for deviations in the base methodology when required by significant changes or disruptions in financial markets. This would ensure that the methodology remains robust and relevant under varying market conditions.

Additionally, we note that smaller undertakings typically perform a full recalculation of their options and guarantees only for year-end closing rather than for infra-annual purposes. Acknowledging this practice could help align the framework with the operational realities of these undertakings, ensuring proportionality in its application.

Furthermore, we suggest undertakings to be required to analyse any material basis risk between their actual asset exposures and the simulated financial parameters. This would enhance the reliability of the TVOG assessment and ensure that the scenarios used align closely with the undertaking's specific risk profile.

- Article 4 - Adjustments to the set of scenarios

- Article 5 - Selection of volatilities

The SCR shocks used to determine volatilities are based on empirical data calibrated to a 1-in-200 risk measure over a one-year horizon. While this approach is suitable for Solvency Capital Requirement purposes, it may not fully align with the needs of the proposed methodology. Specifically, the 1-in-200 risk measure might not be appropriate for inferring volatilities that underpin scenarios dependent on different time horizons or interdependencies between financial parameters over time.

- Article 6 - Currencies

- Article 7 - Entry into force

Q6. Do you have any other comments on the draft technical standards in section 2? (Yes / **No**)

Comments:

Annex I: Impact Assessment

Q7. Do you have comments on the analysis of policy issue A? (Yes / **No**)

Comments:

Q8. Do you have any other comments on the impact assessment in Annex I? (Yes / **No**)

Comments:

Annex II: Potential Mathematical Implementation of the Methodology

Q9. Do you have comments on the potential mathematical implementation of the methodology? (Yes / No)

Comments:

In Annex II, Section 3.a., the optimisation algorithm is outlined, including definitions for the formulae provided. However, the coefficient w_6 , which governs the penalty term ensuring that scenario weights are not too low, is not explicitly defined in the paper. This omission may create ambiguity, as the choice of w_6 likely relies on expert judgement to generate a coherent output.

We would suggest that EIOPA provides further clarification or guidance on how w_6 should be selected. This could include indicative ranges or criteria for its determination to ensure consistency across implementations and to reduce subjectivity in the optimisation process.

Q10. Question 1: Do you agree with the proposed interest rate model's approach? If not, what would be the advantages of an additional drift term?

Comments:

Q11. Question 2: Do you agree with the simplification of the interest rate volatility targeting?

Comments:

We have reservations about the simplification of interest rate volatility targeting. Volatility calibration based on swaption prices is the standard market practice. The proposed methodology diverges from this approach, creating a discrepancy between the impact assessment and the methodology under consideration, which hinders drawing proper conclusions. At a minimum, we would recommend a comparison of approaches under various financial conditions, along with evidence that the average value is market consistent.

Additionally, the methodology assumes that interest rate volatility is constant and based on the 10-year shock of the standard formula, which implicitly assumes an average 10-year duration across all undertakings. This strong assumption should be validated as part of a broader global basis risk analysis to ensure its applicability across diverse undertakings and scenarios.

Q12. Question 3: Do you agree with the penalty term design for weights in the optimisation? If not, what alternative would you propose?

Comments:

Q13. Question 4: Do you agree with the approach for deriving volatility parameters in the simulation step?

Comments:

We partially agree with the proposed approach for deriving volatility parameters in the simulation step but believe it could be further refined. Specifically, in line with the SCR interpretation of the standard formula, we would expect different volatilities to be applied for upwards and downwards scenarios. This differentiation would better capture the asymmetry often observed in financial market dynamics and improve the realism of the generated scenarios.

Q14. Do you have any other comments on the potential mathematical implementation of the methodology in Annex II? (~~Yes~~ / **No**)

Comments:

Any Other Comments

Q15. Do you have any other comments on the consultation paper? (**Yes** / ~~No~~)

Comments:

Under the first Information Request concerning the Prudent Harmonised Reduced Set of Scenarios (PHRSS) in 2023, undertakings were required to add a stochastic supplement equal to 5% of the SCR to their Best Estimate unless they could accurately calibrate an ad-hoc supplement reflecting their risk profile. Further detail on how this supplement level was determined would enhance understanding of the framework. It is worth noting that the PHRSS already applies a prudent valuation approach to guarantees, and the addition of another layer of prudence may increase technical provision requirements, potentially impacting proportionality.

While the simplified method offered by the prudent deterministic calculation supports proportionality, it still demands a thorough assessment of the undertaking's business model and portfolio. The Actuarial Function (AF) will play a critical role in this process, ensuring the appropriateness of methodologies, models, and assumptions used in calculating technical provisions.

The EIOPA Guidelines on the valuation of technical provisions (EIOPA-BoS-14/166 EN) contain several relevant provisions, including tasks for the AF in relation to the valuation of financial options and guarantees and the use of economic scenario generators (ESGs). However, it is unclear how these requirements align with Recital 3, which limits the set of scenarios to ensure compatibility with non-stochastic models. Guidance on the integration of ESG requirements, particularly for outsourced ESGs (as covered in Guidelines 56 and 57), would be valuable.

Considering these aspects, we suggest complementing the regulation on prudent deterministic valuation with explicit guidance regarding the tasks of the AF, particularly in validating the methodology, understanding the ESG models and calibration processes, and

ensuring alignment with the prudence objectives of the Solvency II Directive. This would ensure a consistent and robust application of the framework across undertakings.

We emphasise the importance of ensuring a level-playing field by applying the methodology consistently and proportionately across all undertakings. Additionally, enhancing the role of the Actuarial Function in validating assumptions, methodologies, and scenarios will strengthen the robustness and credibility of valuations.