

FINAL REPORT

FINAL REPORT

on revised Guidelines on valuation of technical provisions

EIOPA-BoS-26/285
15 July 2026



eiopa

European Insurance and
Occupational Pensions Authority

TABLE OF CONTENTS

1. Executive summary	3
2. Background	4
3. Amended guidelines of the Guidelines on valuation of technical provisions	5
4. Explanatory text	11
Annex: Feedback statement	25

1. EXECUTIVE SUMMARY

INTRODUCTION

On 9 October 2025, EIOPA launched a public consultation on revised Guidelines on valuation of technical provisions. This final report sets out the final text of the revised Guidelines including a feedback statement on the public consultation.

CONTENT

These Guidelines are revised in the context of the review of Directive 2009/138/EC (Solvency II Directive)¹. This revision focuses on the guidelines related to the calculation of the risk margin of technical provisions, namely Guidelines 50, 61, 62 and 63. The Guidelines are amended to reflect changes to the legal framework. Another objective of the revision is to simplify and shorten the guidelines, in particular where the guidelines are relevant for insurance and reinsurance undertakings. The revised Guidelines will contribute to a sound and consistent application of the legal requirements on the risk margin.

PUBLIC CONSULTATION

EIOPA conducted a public consultation on the revised Guidelines between 9 October 2025 and 5 January 2026. A stakeholder event was held on 10 December 2025 to discuss the consultation paper. Six stakeholders provided feedback on the consultation paper. Based on the stakeholder feedback, in particular the recognition of the lambda factor, which accounts for the time dependency of risks and reduces the amount of the risk margin in particular for long-term liabilities, was improved for simplified calculation methods.

NEXT STEPS

The revised Guidelines will be applicable from 30 January 2027.

¹ Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II), (OJ L 335, 17.12.2009, p. 1).

2. BACKGROUND

In the context of the review of Directive 2009/138/EC (Solvency II Directive), EIOPA will review all existing guidelines on that Directive. In view of the large number of these guidelines, the review will be sequential. The main objective of the review is to ensure that the guidelines are up to date and in line with the legal framework as amended by the Solvency II review. Another objective of the review is to simplify and shorten the guidelines, in particular where the guidelines are relevant for insurance and reinsurance undertakings. The corpus of guidelines on Solvency II has grown over the years and the Solvency II review mandates EIOPA to issue additional guidelines. EIOPA believes that the corpus of guidelines should be limited to what is strictly necessary to ensure a sound and consistent application of Solvency II.

This final report presents the draft revised Guidelines, explanatory text and a feedback statement on the public consultation.

The current Guidelines on the valuation of technical provisions were issued in 2015. Based on the practical application of the Guidelines, several improvements have been identified. The Guidelines which relate to best estimates valuation were revised in 2022 and have been applied from 2023. This revision thus focuses on the guidelines related to the calculation of the risk margin of technical provisions, namely Guidelines 50, 61, 62 and 63 as well as Technical Annexes IV and VI.

The need to revise those guidelines stems from the Solvency II review. Specifically, the Solvency II review introduces in the calculation of the risk margin an exponential and time-dependent element (so called “lambda factor”) in order to account for the time dependency of risks and reduce the amount of the risk margin in particular for long-term liabilities, thereby also reducing the sensitivity of the risk margin to interest rate changes. Guideline 62 and Technical Annex IV have been amended to account for the introduction of such a factor.

In order to streamline the Guidelines, Guideline 61 and Technical Annex VI are deleted. The rationale for the deletions is that the guidance that the deleted Guideline provides is sufficiently clear from the legal provisions of Solvency II and/or encompassed by other Guidelines. Further drafting amendments are introduced to Guidelines 50 and 62 to improve the clarity of the text.

The amendments to the Guidelines are solely for clarification and streamlining purposes with no intention to reduce supervisory expectations. They do not provide new interpretations or applications of the legal framework. Therefore, the revisions are not expected to have a material impact on policyholders, the insurance industry or supervisory authorities. Consequently, this consultation paper does not include an impact assessment of the proposed changes.

3. AMENDED GUIDELINES OF THE GUIDELINES ON VALUATION OF TECHNICAL PROVISIONS

Guideline 50 – Simplified calculation of technical provisions during the year

1. Insurance and reinsurance undertakings may use simplifications, subject to proportionality assessment, in the quarterly calculations of technical provisions. For example, it can be appropriate to base the simplified calculation of the risk margin during the year on the risk margin calculated at the beginning of the year *inter alia* by using the ratio of the best estimate at the valuation date to the best estimate at the beginning of the year.

Guideline 62 – Hierarchy of methods for the calculation of the risk margin

2. When deciding whether a full projection of all future Solvency Capital Requirements is performed or another method is used, insurance and reinsurance undertakings should use as a basis for their decision the hierarchy set out below. Insurance and reinsurance undertakings should ensure that the method chosen is adequate to reflect the nature, scale and complexity of the risks underlying the reference undertaking's insurance and reinsurance obligations in a proportionate manner.
3. Whether a full projection of all future Solvency Capital Requirements is performed or another method is used, insurance and reinsurance undertakings should calculate the future Solvency Capital Requirements in such a manner that double counting the effects concerning the time dependency of risks, which are captured in the exponential and time-dependent element referred to in Article 77(5) of Solvency II (lambda factor), is avoided.

Method 1

4. To approximate the individual risks or sub-risks within some or all modules, sub-modules and other components to be used for the calculation of future Solvency Capital Requirements as referred to in Article 58(a) of Commission Delegated Regulation 2015/35.

Method 2

5. To approximate the whole Solvency Capital Requirement for each future year as referred in Article 58 (a) of Commission Delegated Regulation 2015/35, *inter alia* by using the ratio of the best estimate at that future year to the best estimate at the valuation date.
6. This method is not appropriate when negative best estimate values exist at valuation date or subsequent dates.
7. This method takes into account the maturity and the run-off pattern of the obligations net of reinsurance. Consequently, some considerations should be given regarding the manner in which the best estimate of technical provisions net of reinsurance has been calculated. Further consideration should be given as to whether the risk profile of the undertaking (and hence also the risk profile of the reference undertaking) can be assumed to be unchanged over time. In particular, the undertaking should consider whether it can be assumed that the composition and the proportions of the risks, sub-risks and other components of the Solvency Capital

Requirement do not change, and that the main risk drivers remain the same over the years as well as in relation to the net best estimates.

8. An undertaking that intends to use this method should consider to what extent these assumptions are fulfilled. If some or all of these assumptions are not fulfilled, the undertaking should carry out at least a qualitative assessment of how material the deviation is, in particular looking at the main risk drivers, the composition and the proportion of the risks, sub-risks and other components of the Solvency Capital Requirement and their relation to the net best estimates. If the impact of the deviation is not material compared to the risk margin as a whole, then this method can be used. Otherwise the undertaking should either adjust the formula appropriately or use a more sophisticated method.

Method 3

9. To approximate the sum included in the formula set out in Article 37(1) of Commission Delegated Regulation 2015/35 in a single step, without calculating separately each of the summands of that sum, as referred to in Article 58 (b) of Commission Delegated Regulation 2015/35, *inter alia* by using the modified duration of the insurance liabilities as a proportionality factor.
10. This method is not appropriate when negative best estimate values exist at valuation date or subsequent dates.
11. This method is also not appropriate when the value of options and guarantees imbedded in the insurance contracts are material, especially when a stochastic valuation is used.
12. This method takes into account the maturity and the run-off pattern of the obligations net of reinsurance. Consequently, some considerations should be given regarding the manner in which the best estimate of technical provisions net of reinsurance has been calculated. Further consideration should be given as to whether the risk profile of the undertaking (and hence also the risk profile of the reference undertaking) can be assumed to be unchanged over time. In particular, the undertaking should consider whether it can be assumed that the composition and the proportions of the risks, sub-risks and other components of the Solvency Capital Requirement do not change and that the main risk drivers remain the same over the years as well as in relation to the net best estimates.
13. An undertaking that intends to use this method should consider to what extent these assumptions are fulfilled. If some or all of these assumptions are not fulfilled, the undertaking should carry out at least a qualitative assessment of how material the deviation from the assumptions is, in particular looking at the main risk drivers, the composition and the proportions of the risks, sub-risks and other components of the Solvency Capital Requirement. If the impact of the deviation is not material compared to the risk margin as a whole, then the simplification can be used. Otherwise, the undertaking should either adjust the formula appropriately or use a more sophisticated method.
14. When deciding on the application of a method based on the modified duration of the insurance liabilities, attention should be paid to the value of the modified duration to avoid meaningless results for the risk margin and whether it can be assumed that it adequately reflects the cash flow pattern of the obligations net of reinsurance.

15. The lambda factor can be accounted for in this method only by adjusting appropriately the formula of the modified duration.

Method 4

16. To approximate the risk margin by calculating it as a fixed percentage of the best estimate technical provisions net of reinsurance at valuation date. When deciding on the percentage to be used for a given line of business, the undertaking should take into account that this percentage is likely to increase if the modified duration of the insurance liabilities – or some other measure of the run-off pattern of these liabilities – increases.
17. Undertakings should give due consideration to the very simplistic nature of this method; it should only be used where it has been demonstrated that none of the more sophisticated risk margin methods in the above hierarchy can be applied.
18. When undertakings use this method for the calculation of the risk margin, they should describe the rationale for choosing the percentages used by line of business, and should justify the choice of those percentages taking into account any specific characteristics of the portfolios being assessed. The percentages and the justifications should be documented and periodically reviewed.
19. As part of that justification, insurance and reinsurance undertakings should be able to demonstrate that the percentage taken of the best estimate technical provisions is unlikely to result in an underestimation of the amount of the risk margin.
20. This method is not appropriate when negative best estimate values exist at valuation date or subsequent dates.
21. This method is also not appropriate when the value of options and guarantees imbedded in the insurance contracts are material, especially when a stochastic valuation is used.
22. Without prejudice to the proportionality assessment and the provisions in Article 58 of Commission Delegated Regulation 2015/35, insurance and reinsurance undertakings may use the simplifications defined in Technical Annex IV when applying the hierarchy of methods.

Technical Annex IV - Hierarchy of simplifications for the risk margin

23. With respect to level (1) of the hierarchy:
Life Underwriting Risk
24. The simplifications allowed for the SCR calculations in respect of mortality, longevity, disability risk, expense risk, revision risk and catastrophe risk carry over to the risk margin calculations.
Health Underwriting Risk
25. The simplifications allowed for the SCR calculations in respect of health mortality, health longevity, medical expense disability-morbidity, income protection disability morbidity, health expense and SLT health lapse risks carry over to the risk margin calculations.
Non-life Underwriting Risk
26. The calculation of the future SCRs related to premium and reserve risk could be somewhat simplified if renewals and future business are not taken into account:

- If the premium volume in year t is small compared to the reserve volume, then the premium volume for the year t can be set to 0. An example may be business comprising no multiple-year contracts, where the premium volume can be set to 0 for all future years t where $t \geq 1$.
- If the premium volume is zero, then the capital charge for non-life underwriting can be approximated by the formula:

$$3 \cdot \sigma_{(res,mod)} \cdot PCO_{Net}(t)$$

where

$\sigma_{(res,mod)}$ represents the aggregated standard deviation for reserve risk and $PCO_{Net}(t)$ the best estimate provision for claims outstanding net of reinsurance in year t .

27. The aggregated standard deviation for reserve risk $\sigma_{(res,mod)}$ could be calculated using the aggregation steps as described in Articles 117 of Commission Delegated Regulation 2015/35, assuming all the amounts relating to premium risk are equal to zero.
28. As a further simplification it can be assumed that the undertaking-specific estimate of the standard deviation for premium risk and reserve risk remains unchanged throughout the years.
29. Also the underwriting risk charges for catastrophe risk and non-life lapse risk are taken into account only with respect to the insurance contracts that exist at $t = 0$.

Counterparty Default Risk

30. The counterparty default risk charge with respect to reinsurance ceded can be calculated directly from the definition for each segment and each year. If the exposure to the default of the reinsurers does not vary considerably throughout the development years, the risk charge can be approximated by applying reinsurers' share of best estimates to the level of risk charge that is observed in year 0.
31. According to the standard formula counterparty default risk for reinsurance ceded is assessed for the whole portfolio instead of separate segments. If the risk of default in a segment is deemed to be similar to the total default risk or if the default risk in a segment is of negligible importance, then the risk charge can be arrived at by applying reinsurers' share of best estimates to the level of the total capital charge for reinsurers' default risk in year 0.
32. With respect to level (2) of the hierarchy:
33. By using a representative example of a proportional method the reference undertaking's SCR for the year t could be fixed in the following manner:

$$SCR_{RU}(t) = SCR_{RU}(0) \cdot \frac{BE_{Net}(t)}{BE_{Net}(0)} \quad t = 1, 2, 3, \dots$$

where

$SCR_{RU}(t)$ = SCR as calculated at time $t \geq 0$ for the reference undertaking's portfolio of (re)insurance obligations;

$BE_{Net}(t)$ = best estimate technical provisions net of reinsurance as assessed at time $t \geq 0$ for the undertaking's portfolio of (re)insurance obligations.

34. The simplification described above can be applied also at a more granular level, i.e. for individual modules and/or submodules. However, it is noted that the number of calculations

to be carried out will in general be proportional with the number of modules and/or submodules for which this simplification is applied. Moreover, it needs to be considered whether a more granular calculation as indicated above will lead to a more accurate estimate of the future SCR_{RU} to be used in the calculation of the risk margin.

35. With respect to level (3) of the hierarchy:
36. With respect to life insurance the duration approach implies that the risk margin *CoCM* could be calculated according to the following formula:

$$CoCM = CoC \cdot SCR_{RU}(0) \cdot AdjDur_{mod}(0)$$

where:

CoC = the Cost-of-Capital rate;

$SCR_{RU}(0)$ = the SCR as calculated at time $t=0$ for the reference undertaking's portfolio of (re)insurance obligations; and

$AdjDur_{mod}(0)$ = the modified duration of reference undertaking's (re)insurance obligations net of reinsurance at $t=0$ adjusted to take into account the inclusion of the lambda factor.

$AdjDur_{mod}(0)$ is calculated according to the following formula:

$$AdjDur_{mod}(0) = \frac{\sum_{k \geq 1} \alpha_k \cdot PV(CF_k, r)}{BE(0, r) \cdot (1 + r)}$$

where:

$$\alpha_k = \sum_{t=0}^{k-1} \max(0.96^t, 0.5);$$

CF_k = cash flows at time k for the obligation, assumed to be deterministic, i.e. no financial options and guarantees and no dependency on the interest rate level;

$PV(CF_k, r)$ = the present value of deterministic cash flow CF_k under rate r , i.e. $CF_k \cdot (1 + r)^{-k}$;

r = the internal rate of return of the cash flows CF_k under the risk-free rate term structure at the valuation date;

$BE(0, r)$ = the best estimate technical provisions net of reinsurance as assessed at time $t=0$ assuming deterministic cash flows CF_k , i.e. $\sum_{k \geq 1} PV(CF_k, r)$.

.

37. Where $SCR_{RU}(0)$ includes material sub-risks that will not exist over the whole lifetime of the portfolio (for example non-life premium risk for unexpired contracts or material market risk), the calculation can often be improved by
 - excluding these subrisks from $SCR_{RU}(0)$ for the above calculation;
 - calculating the contribution of these subrisks to the risk margin separately;
 - aggregating the results (where practicable allowing for diversification).
38. With respect to level (4) of the hierarchy:

39. According to this simplification the risk margin $CoCM$ is calculated as a percentage of the best estimate technical provisions net of reinsurance at $t = 0$, that is

$$CoCM = \alpha_{lob} \cdot BE_{Net}(0)$$

where

$BE_{Net}(0)$ = the best estimate technical provisions net of reinsurance as assessed at time $t=0$ for the undertaking's portfolio of (re)insurance obligations within the given line of business;

α_{lob} = a fixed percentage for the given line of business.

4. EXPLANATORY TEXT

AMENDED: Guideline 50 – Simplified calculation of technical provisions during the year

Insurance and reinsurance undertakings may use simplifications, ~~for example the simplification outlined in Technical Annex VI,~~ subject to the proportionality assessment, in the quarterly calculations of technical provisions. **For example, it can be appropriate to base the simplified calculation of the risk margin during the year on the risk margin calculated at the beginning of the year *inter alia* by using the ratio of the best estimate at the valuation date to the best estimate at the beginning of the year.**

Explanatory text:

Guideline 50 is amended to take into account the deletion of Technical Annex VI.

According to Article 129(4) of Solvency II, the MCR needs to be calculated quarterly. This necessitates a quarterly calculation of technical provisions to derive the input values for the calculation of the MCR and to derive the own funds.

The calculation of technical provisions between the annual reporting dates may give rise to additional practicability issues. For example, the data basis of the undertaking may not be adequate for this task. In non-life insurance, undertakings often collect data on an annual basis, i.e. ordered per accident year, underwriting year, run-off year etc.

Another example are calculations which are so resource intensive that – compared to a partial recalculation – their full repetition during the year may not be in proportion with the additional information the calculation provides. In these cases, it may be appropriate to update the key variables of the calculations (like interest rates) while other variables with little influence on the results may be approximated.

It can be appropriate to base the simplified calculations of the risk margin to be carried out during the year on the risk margin calculated at the beginning of the year. Since no full calculations of the SCR are carried out during the year, a possible simplification may be to fix the risk margin at a given point in time (t) during the forthcoming year (i.e. $CoCM_{lob}(t)$) basing on the assumption that the ratio of the risk margin to the best estimate technical provisions (net of reinsurance) will stay constant during the year, according to the following formula:

$$CoCM(t) = CoCM(0) \cdot \frac{BE_{Net}(t)}{BE_{Net}(0)}, \quad 0 < t < 1$$

where:

$CoCM(0)$ = risk margin as calculated at time $t = 0$ for the reference undertaking's portfolio of (re)insurance obligations,

$BE_{Net}(t)$ = best estimate technical provisions net of reinsurance as assessed at time $t \geq 0$ for the reference undertaking's portfolio of (re)insurance obligations.

It may be inappropriate to apply this formula in the following cases:

- ▶ When the best estimates are expected to decrease, in relative terms to the business, e.g. in cases of negative best estimates or best estimates close to zero. Furthermore, there may be situations, such as run-off undertakings and portfolios or undertakings that are particularly sensitive to external factors, that may deserve specific analysis, for example when material movements in the interest rate term structures occur.
- ▶ Another situation where this approach may not be appropriate is when cash flow patterns are not well reflected by changes of the best estimates. For example when an undertaking's business is expected to strongly increase in the short term, leading to both a lower best estimate (due to allowance for profit at inception) and a higher duration of the obligations: in this case, in fact, this simplification leads to a lower risk margin, while an increased risk margin would be expected due to the increased duration of the liabilities.
- ▶ Moreover, the assumption of stability of the SCR to the best estimate over time could not be met if the undertaking has commuted a reinsurance treaty or when a purchase of a book of business causes a change in the proportional split.

Accordingly, in cases where the above simplification is not appropriate, it may be a better approximation to let the risk margin stay unchanged during the year (i.e. $CoCM(t) = CoCM(0)$).

A combination of the two approaches described above is also possible, e.g. by fixing the risk margin at the beginning of the year as a floor for the risk margin to be used during the year, that is:

$$CoCM(t) = CoCM(0) \cdot \max \left\{ \frac{BE_{Net}(t)}{BE_{Net}(0)}; 1 \right\}$$

In cases where the change in the risk profile of the undertaking leads to an expected increase of the risk margin, the above simplification is not appropriate. In such cases, a revaluation of the risk margin may be more appropriate.

In some circumstances, it may be unavoidable for the undertaking to apply a valuation method which leads to an increased level of estimation uncertainty in the valuation. This could e.g. be the case where there is only insufficient pertinent past experience data available to derive or validate assumptions or in case of portfolios with high-severity-low- frequency claims.

DELETED: Guideline 61 – Methods to calculate the risk margin

~~Insurance and reinsurance undertakings should assess whether a full projection of all future Solvency Capital Requirements is necessary in order to reflect the nature, scale and complexity of the risks underlying the reference undertaking's insurance and reinsurance obligations in a proportionate manner. In such case, undertakings should carry out these calculations. Otherwise, alternative methods may be used to calculate the risk margin, ensuring that the method chosen is adequate to capture the risk profile of the undertaking.~~

~~Where simplified methodologies are used to calculate the best estimate, the undertakings should assess the consequent impact that the use of such methodologies may have on the methods available to calculate the risk margin, including the use of any simplified methods for projecting the future SCRs.~~

Explanatory text:

Guideline 61 is deleted. The revised Guideline 62 is deemed to encompass the content of the Guideline.

AMENDED: Guideline 62 – Hierarchy of methods for the calculation of the risk margin

~~When deciding which level of~~ **whether a full projection of all future Solvency Capital Requirements is performed or another method is used, insurance and reinsurance undertakings should use as a decision basis for their decision** the hierarchy set out below. ~~is most appropriate, insurance and reinsurance undertakings should ensure that the complexity of the calculations does not go beyond what is necessary in order to~~ **the method chosen is adequate** to reflect the nature, scale and complexity of the risks underlying the reference undertaking's insurance and reinsurance obligations in a proportionate manner.

3. Whether a full projection of all future Solvency Capital Requirements is performed, or another method is used, insurance and reinsurance undertakings should calculate the future Solvency Capital Requirements in such a manner that double counting the effects concerning the time dependency of risks, which are captured in the exponential and time-dependent element referred to in Article 77(5) of Solvency II (lambda factor), is avoided.

~~Undertakings should apply the hierarchy of methods consistently with the framework set out when defining the proportionality principle and the necessity of assessing risks properly.~~

~~Insurance and reinsurance undertakings should use the following hierarchy as a decision making basis regarding the methods to be used for projecting future Solvency Capital Requirements:~~

Method 1

To approximate the individual risks or sub-risks within some or all modules, ~~and sub-modules~~ **and other components** to be used for the calculation of future Solvency Capital Requirements as referred to in Article 58(a) of Commission Delegated Regulation 2015/35.

Method 2

To approximate the whole Solvency Capital Requirement for each future year as referred in Article 58 (a) of Commission Delegated Regulation 2015/35, *inter alia* by using the ratio of the best estimate at that future year to the best estimate at the valuation date.

This method is not appropriate when negative best estimate values exist at valuation date or subsequent dates.

This method takes into account the maturity and the run-off pattern of the obligations net of reinsurance. Consequently, some considerations should be given regarding the manner in which

the best estimate of technical provisions net of reinsurance has been calculated. Further consideration should be given as well as to whether the assumptions regarding the risk profile of the undertaking **(and hence also the risk profile of the reference undertaking)** can be considered **assumed to be unchanged over time. In particular, the undertaking should consider whether it can be assumed that the composition and the proportions of the risks, sub-risks and other components of the Solvency Capital Requirement do not change, and that the main risk drivers remain the same over the years as well as in relation to the net best estimates.** This includes:

- a) ~~For all underwriting risks, to consider if the composition of the subrisks in underwriting risk is the same;~~
- b) ~~For counterparty default risk, to consider if the average credit standing of reinsurers and special purpose vehicles is the same;~~
- c) ~~For market risk, to consider if the material market risk in relation to the net best estimate is the same;~~
- d) ~~For operational risk, to consider if the proportion of reinsurers' and special purpose vehicles share of the obligations is the same;~~
- e) ~~For adjustment, to consider if the loss absorbing capacity of the technical provisions in relation to the net best estimate is the same.~~

An undertaking that intends to use this method should consider to what extent these assumptions are fulfilled. If some or all of these assumptions ~~do not hold~~ **are not fulfilled**, the undertaking should carry out at least a qualitative assessment of how material the deviation ~~from the assumptions is~~, **in particular looking at the main risk drivers, the composition and the proportion of the risks, sub-risks and other components of the Solvency Capital Requirement and their relation to the net best estimates.** If the impact of the deviation is not material compared to the risk margin as a whole, then this method can be used. Otherwise the undertaking should either adjust the formula appropriately or ~~be encouraged to~~ use a more sophisticated method.

Method 3

To approximate the ~~discounted sum of all future Solvency Capital Requirements~~ **included in the formula set out in Article 37(1) of Commission Delegated Regulation 2015/35** in a single step, without approximating the Solvency Capital Requirements for each future year separately, **calculating separately each of the summands of that sum**, as referred to in Article 58 (b) of Commission Delegated Regulation 2015/35, *inter alia* by using the modified duration of the insurance liabilities as a proportionality factor.

This method is not appropriate when negative best estimate values exist at valuation date or subsequent dates.

This method is also not appropriate when the value of options and guarantees imbedded in the insurance contracts are material, especially when a stochastic valuation is used. ~~When deciding on the application of a method based on the modified duration of the insurance liabilities, attention should be paid to the value of modified duration to avoid meaningless results for the Risk Margin.~~ This method takes into account the maturity and the run-off pattern of the obligations net of reinsurance. Consequently, some considerations should be given regarding the

manner in which the best estimate of technical provisions net of reinsurance has been calculated. Further consideration should be given as to whether the assumptions regarding the risk profile of the undertaking **(and hence the risk profile of the reference undertaking)** can be considered **assumed to be unchanged over time. In particular, the undertaking should consider whether it can be assumed that the composition and the proportions of the risks, sub-risks and other components of the Solvency Capital Requirement do not change and that the main risk drivers remain the same over the years as well as in relation to the net best estimates.** This includes:

- a) ~~For basic SCR, to consider if the composition and the proportions of the risks and sub-risks do not change over the years;~~
- b) ~~For counterparty default risk, to consider if the average credit standing of reinsurers and SPVs remains the same over the years;~~
- c) ~~For operational risk and counterparty default risk, to consider if the modified duration is the same for obligations net and gross of reinsurance;~~
- d) ~~To consider if the material market risk in relation to the net best estimate remains the same over the years;~~
- e) ~~For adjustment, to consider if the loss absorbing capacity of the technical provisions in relation to the net best estimate remains the same over the years.~~

An undertaking that intends to use this method should consider to what extent ~~these assumptions are fulfilled. If some or all of these assumptions do not hold~~ **are not fulfilled**, the undertaking should carry out at least a qualitative assessment of how material the deviation from the assumptions is, **in particular looking at the main risk drivers, the composition and the proportions of the risks, sub-risks and other components of the Solvency Capital Requirement.** If the impact of the deviation is not material compared to the risk margin as a whole, then the simplification can be used. Otherwise the undertaking should either adjust the formula appropriately or ~~be encouraged to use a more sophisticated method.~~

When deciding on the application of a method based on the modified duration of the insurance liabilities, attention should be paid to the value of the modified duration to avoid meaningless results for the risk margin and whether it can be assumed that it adequately reflects the cash flow pattern of the obligations net of reinsurance.

The lambda factor can be accounted for in this method only by adjusting appropriately the formula of the modified duration.

Method 4

To approximate the risk margin by calculating it as a **fixed** percentage of the best estimate ~~According to this method, the risk margin should be calculated as a percentage of the best estimate~~ technical provisions net of reinsurance at valuation date. When deciding on the percentage to be used for a given line of business, the undertaking should take into account that this percentage is likely to increase if the modified duration of the insurance liabilities – or some other measure of the run-off pattern of these liabilities - increases.

Undertakings should give due consideration to the very simplistic nature of this ~~method~~^{approach}; it should only be used where it has been demonstrated that none of the more sophisticated risk margin ~~methods~~^{approaches} in the above hierarchy can be applied.

When undertakings ~~rely on~~^{use} this method for the calculation of the risk margin, they **should describe** ~~will need to justify and document~~ the rationale for **choosing** the percentages used by line of business **and should justify the choice of those percentages taking into account**. ~~This justification and rationale should consider~~ any specific characteristics of the portfolios being assessed. **The percentages and the justifications should be documented and periodically reviewed.**

As part of that justification, insurance and reinsurance undertakings should be able to demonstrate that the percentage taken of the best estimate technical provisions is unlikely to result in an underestimation of the amount of the risk margin.

This method is not appropriate when negative best estimate values exist at valuation date or subsequent dates.

This method is also not appropriate when the value of options and guarantees imbedded in the insurance contracts are material, especially when a stochastic valuation is used. Without prejudice to the proportionality assessment and the provisions in Article 58 of Commission Delegated Regulation 2015/35, insurance and reinsurance undertakings may use the simplifications defined in Technical Annex IV when applying the hierarchy of methods.

Explanatory text:

Guideline 62 is amended to reflect the introduction of the lambda factor in the calculation of the risk margin in Article 77(5) of the Solvency II Directive.

It is noted that the distinction between the levels in the hierarchy sketched in the respective Guideline is not always clear-cut. This is e.g. the case for the distinction between the simplifications on level (2) and level (3). An example may be a proportional method (based on the development of the best estimate technical provisions) applied for an individual module or sub-module relevant for the calculation of future SCRs for the reference undertaking. Such simplifications can be seen as belonging to either level (2) or level (3).

All material market risk other than interest rate risk should be considered also when using a simplification; such non-hedgeable risk should be quantified in the calculation of the risk margin. In circumstances where undertakings hedge their financial guarantees, material market risk will often pertain. This could, for example, include tracking error or timing error. Also, if a hedging program has been devised based on assumed future policyholder behaviour, then changes from this expected future policyholder behaviour can be identified as an example of material market risk.

Premiums are a crucial component in the assessment of the operational risk and the premium risk of the transferred portfolio. Also when using a simplification, the premium volume for the calculation of operational risk should be quantified and past premiums should be included for the quantification of

premium and reserve risk, even if premiums are not formally transferred to the reference undertaking according to Article 38 (1)(d) of the Delegated Regulation 2015/35.

With respect to **Method 1**): This approach would require focusing on the individual modules or sub-modules in order to approximate the individual risks and/or sub-risks being relevant for the following modules:

- a) underwriting risk (life, health and non-life, respectively);
- b) counterparty default risk with respect to ceded reinsurance and special purpose vehicles (SPVs);
- c) material market risk,

in order to investigate to what extent the calculations could be simplified or approximated. In doing so, also any other relevant components of the SCR need to be taken into account.

With respect to **Method 2**): Simplifications classified as belonging to this level of the hierarchy are in general based on an assumption that the future SCRs for a given line of business are proportional to the best estimate technical provisions for this line of business and the relevant year – the proportionality factor being the ratio of the present SCR to the present best estimate technical provisions for the same line of business (as calculated by the reference undertaking).

When using this method, considerations should be given as to whether the assumptions regarding the risk profile of the undertaking can be considered unchanged over time. In particular, it should be considered if the main risk drivers and the composition of the subrisks within the risk modules of the Solvency Capital Requirement remain the same over the years, as well as in relation to the net best estimates. Such assumptions include:

- a) For all underwriting risks, to consider if the composition of the subrisks in underwriting risk is the same;
- b) For counterparty default risk, to consider if the average credit standing of reinsurers and special purpose vehicles is the same;
- c) For market risk, to consider if the material market risk in relation to the net best estimate is the same;
- d) For operational risk, to consider if the proportion of reinsurers' and special purpose vehicles' share of the obligations is the same;
- e) For adjustment, to consider if the loss absorbing capacity of the technical provisions in relation to the net best estimate is the same.

This simplification is not considered proportionate for negative best estimate values at valuation date or at following dates, as it would lead to meaningless results for the Risk Margin (i.e. negative Risk Margin).

With respect to **Method 3**): A representative example of a simplification belonging to this level of the hierarchical structure is using information regarding the modified duration of the liabilities in order to calculate the present and all future SCRs in one single step.

This approach applies also to SLT and some non-life obligations (e.g. non-life annuities).

The simple example below has been put forward to show that even in case of reasonable in- and outgoing cash-flows the calculated value of the duration may be meaningless.

Year	Premiums	Claims	Cash flows	Time * cash flows	BE beginning of year	Discount rate	3%
1	20	0	-20	-20	19,09		
2	20	0	-20	-40	39,63		
3	20	0	-20	-60	60,82	BE	19,06
4	20	0	-20	-80	82,65	Duration	301,42
5	20	0	-20	-100	105,13		
6	20	0	-20	-120	128,28		
7	20	0	-20	-140	152,13		
8	20	0	-20	-160	176,69		
9	20	0	-20	-180	201,99		
10	20	0	-20	-200	228,05		
11	20	0	-20	-220	254,89		
12	20	0	-20	-240	282,54		
13	20	0	-20	-260	311,02		
14	20	0	-20	-280	340,35		
15	20	0	-20	-300	370,56		
16	20	0	-20	-320	401,67		
17	20	30	10	170	433,72		
18	20	30	10	180	436,74		
19	20	30	10	190	439,84		
20	20	30	10	200	443,03		
21	0	30	30	630	446,32		
22	0	30	30	660	429,71		
23	0	30	30	690	412,61		
24	0	30	30	720	394,98		
25	0	30	30	750	376,83		
26	0	30	30	780	358,14		
27	0	30	30	810	338,88		
28	0	30	30	840	319,05		
29	0	30	30	870	298,62		
30	0	30	30	900	277,58		
31	0	30	30	930	255,91		
32	0	30	30	960	233,58		
33	0	30	30	990	210,59		
34	0	30	30	1020	186,91		
35	0	30	30	1050	162,52		

36	0	30	30	1080	137,39		
37	0	30	30	1110	111,51		
38	0	30	30	1140	84,86		
39	0	30	30	1170	57,40		
40	0	30	30	1200	29,13		

When using this method, considerations should be given as to whether the assumptions regarding the risk profile of the undertaking can be considered unchanged over time. In particular, it should be considered if the composition and the proportions of the risks and sub-risks of the Basic Solvency Capital Requirement do not change and if the main risk drivers remain the same over the years as well as in relation to the net best estimates. Such assumptions include:

- For basic SCR, to consider if the composition and the proportions of the risks and sub-risks do not change over the years;
- For counterparty default risk, to consider if the average credit standing of reinsurers and SPVs remains the same over the years;
- For operational risk and counterparty default risk, to consider if the modified duration is the same for obligations net and gross of reinsurance;
- To consider if the material market risk in relation to the net best estimate remains the same over the years;
- For adjustment, to consider if the loss absorbing capacity of the technical provisions in relation to the net best estimate remains the same over the years.

The formula for this level of the hierarchy incorporating the lambda factor is described in Technical Annex IV. This formula is derived from Method 2 under the assumptions of a flat discounting curve and of deterministic cash flows. Therefore, this approach is not applicable when options and guarantees of life obligations are material and a stochastic valuation is used.

The proof of the formula reported in Technical Annex IV is described in the following.

The general formula for the risk margin calculation is given by

$$(1) \quad RM = CoC \cdot \sum_{t \geq 0} \max(\lambda^t, floor) \cdot SCR(t) \cdot (1 + r_{t+1})^{-t-1}$$

where $SCR(t)$ are the estimated future capital requirements and $(r_k)_k$ is the relevant risk-free rate term structure.

Under Method 2, it is assumed that

$$(A 1) \quad SCR(t)/SCR(0) = BE(t)/BE(0)$$

for any time step $t \geq 0$. Combining equation (1) and assumption (A 1), it can be seen that under this method the risk margin can be calculated as

$$(2) \quad RM = CoC \cdot SCR(0) \cdot \sum_{t \geq 0} \max(\lambda^t, floor) \cdot BE(t)/BE(0) \cdot (1 + r_{t+1})^{-t-1}$$

Under Method 3, in addition to assumption (A 1), the following two assumptions are made:

(A 2) there is a single rate r such that $r = r_k$ for all $k \geq 1$ (i.e. the risk-free curve is “flat”);

(A 3) the best estimate $BE(0)$ can be calculated on basis of deterministic cash flows CF_k .

To ease the notation, let $\lambda_t = \max(\lambda^t, floor)$ denote the applicable λ -factor at time $t \geq 0$.

From the assumptions and equation (2), it can be seen that

$$(3) \quad RM = CoC \cdot SCR(0) \cdot \sum_{t \geq 0} \lambda_t \cdot BE(t, r) / BE(0, r) \cdot (1 + r)^{-t-1}$$

Further, the best estimate at time t is given by

$$BE(t, r) = \sum_{k \geq 1} CF_{t+k} \cdot (1 + r)^{-k} = (1 + r)^t \cdot \sum_{k \geq 1} PV(CF_{t+k}, r)$$

This implies that

$$\sum_{t \geq 0} \lambda_t \cdot BE(t, r) \cdot (1 + r)^{-t} = \sum_{t \geq 0} \sum_{k \geq 1} \lambda_t \cdot PV(CF_{t+k}, r) = \sum_{m \geq 1} \sum_{t=0}^{m-1} \lambda_t \cdot PV(CF_m, r)$$

Combining this with equation (3) and noting that $\alpha_m = \sum_{t=0}^{m-1} \lambda_t$, it can be seen that

$$RM = CoC \cdot SCR(0) \cdot \frac{\sum_{m \geq 1} \alpha_m \cdot PV(CF_m, r)}{BE(0, r) \cdot (1 + r)},$$

which is the formula reported in Technical Annex IV.

With respect to **Method 4**): As the fixed percentage α_{lob} depends on the line of business, the method can only be applied if the undertaking's business is restricted to one line of business or if the business outside of one line of business is not material.

Furthermore, this method assumes that the risk profile of the undertaking is relatively simple and stable over time and, therefore, should not be used when options and guarantees of life liabilities are material and a stochastic valuation is used.

It is possible to implicitly take into account the effect of the lambda factor on the risk margin under method 4. This can be achieved by deriving the percentage of method 4 on basis of an application of a more sophisticated method from the hierarchy of methods set out in Guideline 62.

AMENDED: Technical Annex IV - Hierarchy of simplifications for the risk margin

With respect to level (1) of the hierarchy:

Life Underwriting Risk

The simplifications allowed for the SCR- calculations in respect of mortality, longevity, disability risk, expense risk, revision risk and catastrophe risk carry over to the risk margin calculations.

Health Underwriting Risk

The simplifications allowed for the SCR calculations in respect of health mortality, health longevity, medical expense disability-morbidity, income protection disability morbidity, health expense and SLT health lapse risks carry over to the risk margin calculations.

Non-life Underwriting Risk

The calculation of the future SCRs related to premium and reserve risk could be somewhat simplified if renewals and future business are not taken into account:

- If the premium volume in year t is small compared to the reserve volume, then the premium volume for the year t can be set to 0. An example may be business comprising no multiple-year contracts, where the premium volume can be set to 0 for all future years t where $t \geq 1$.
- If the premium volume is zero, then the capital charge for non-life underwriting can be approximated by the formula:

$$3 \cdot \sigma_{(res,mod)} \cdot PCO_{Net}(t)$$

where

$\sigma_{(res,mod)}$ represents the aggregated standard deviation for reserve risk and $PCO_{Net}(t)$ the best estimate provision for claims outstanding net of reinsurance in year t .

The aggregated standard deviation for reserve risk $\sigma_{(res,mod)}$ could be calculated using the aggregation steps as described in Articles 117 of Commission Delegated Regulation 2015/35, assuming all the amounts relating to premium risk are equal to zero.

As a further simplification it can be assumed that the undertaking-specific estimate of the standard deviation for premium risk and reserve risk remains unchanged throughout the years.

Also the underwriting risk charges for catastrophe risk **and non-life lapse risk are** ~~is~~ taken into account only with respect to the insurance contracts that exist at $t = 0$.

Counterparty Default Risk

The counterparty default risk charge with respect to reinsurance ceded can be calculated directly from the definition for each segment and each year. If the exposure to the default of the reinsurers does not vary considerably throughout the development years, the risk charge can be approximated by applying reinsurers' share of best estimates to the level of risk charge that is observed in year 0.

According to the standard formula counterparty default risk for reinsurance ceded is assessed for the whole portfolio instead of separate segments. If the risk of default in a segment is deemed to be similar to the total default risk or if the default risk in a segment is of negligible importance, then the risk charge can be arrived at by applying reinsurers' share of best estimates to the level of the total capital charge for reinsurers' default risk in year 0.

With respect to level (2) of the hierarchy:

By using a representative example of a proportional method the reference undertaking's SCR for the year t could be fixed in the following manner:

$$SCR_{RU}(t) = SCR_{RU}(0) \cdot \frac{BE_{Net}(t)}{BE_{Net}(0)} \quad t = 1, 2, 3, \dots$$

where

$SCR_{RU}(t)$ = SCR as calculated at time $t \geq 0$ for the reference undertaking's portfolio of (re)insurance obligations;

$BE_{Net}(t)$ = best estimate technical provisions net of reinsurance as assessed at time $t \geq 0$ for the undertaking's portfolio of (re)insurance obligations.

The simplification described above can be applied also at a more granular level, i.e. for individual modules and/or submodules. However, it is noted that the number of calculations to be carried out will in general be proportional with the number of modules and/or submodules for which this simplification is applied. Moreover, it needs to be considered whether a more granular calculation as indicated above will lead to a more accurate estimate of the future SCRs to be used in the calculation of the risk margin.

With respect to level (3) of the hierarchy:

With respect to life insurance the duration approach implies that the risk margin $CoCM$ could be calculated according to the following formula:

$$CoCM = CoC \cdot SCR_{RU}(0) \cdot AdjDur_{mod}(0) \cdot SCR_{RU}(0) / (1+r)$$

where:

CoC = the Cost-of-Capital rate;

$SCR_{RU}(0)$ = the SCR as calculated at time $t=0$ for the reference undertaking's portfolio of (re)insurance obligations; **and**

$AdjDur_{mod}(0)$ = the modified duration of reference undertaking's (re)insurance obligations net of reinsurance at $t=0$ adjusted to take into account the inclusion of the lambda factor; ~~and~~

~~CoC = the Cost-of-Capital rate.~~

$AdjDur_{mod}(0)$ is calculated according to the following formula:

$$AdjDur_{mod}(0) = \frac{\sum_{k \geq 1} \alpha_k \cdot PV(CF_k, r)}{BE(0, r) \cdot (1+r)}$$

where:

$$\alpha_k = \sum_{t=0}^{k-1} \max(0.96^t, 0.5);$$

CF_k = cash flows at time k for the obligation, assumed to be deterministic, i.e. no financial options and guarantees and no dependency on the interest rate level;

$PV(CF_k, r)$ = the present value of deterministic cash flow CF_k under rate r , i.e. $CF_k \cdot (1+r)^{-k}$;

r = the internal rate of return of the cash flows CF_k under the risk-free rate term structure at the valuation date;

$BE(0, r)$ = the best estimate technical provisions net of reinsurance as assessed at time $t=0$ assuming deterministic cash flows CF_k , i.e. $\sum_{k \geq 1} PV(CF_k, r)$.

Where $SCR_{RU}(0)$ includes material sub-risks that will not exist over the whole lifetime of the portfolio (for example non-life premium risk for unexpired contracts or material market risk), the calculation can often be improved by:

- excluding these subrisks from $SCR_{RU}(0)$ for the above calculation;
- calculating the contribution of these subrisks to the risk margin separately;
- aggregating the results (where practicable allowing for diversification).

With respect to level (4) of the hierarchy:

According to this simplification the risk margin $CoCM$ is calculated as a percentage of the best estimate technical provisions net of reinsurance at $t = 0$, that is

$$CoCM = \alpha_{lob} \cdot BE_{Net}(0)$$

where

$BE_{Net}(0)$ = the best estimate technical provisions net of reinsurance as assessed at time $t=0$ for the undertaking's portfolio of (re)insurance obligations within the given line of business;

α_{lob} = a fixed percentage for the given line of business.

Explanatory text:

Technical Annex IV (as well as Guideline 62) is amended to reflect the introduction of the lambda factor in the calculation of the risk margin in Article 77(5) of the Solvency II Directive. Other changes are related to editorial revisions and to the need to clarify some aspects of the Annex.

DELETED: Technical Annex VI - Simplified calculation during the year for the risk margin

~~The Risk Margin at a given point in time during the forthcoming year (i.e. $CoCM_{lob}(t)$) could be calculated as follows:~~

~~$$CoCM(t) = CoCM(0) \cdot \frac{BE_{Net}(t)}{BE_{Net}(0)}, 0 < t < 1$$~~

~~where:~~

~~$CoCM(0)$ = risk margin as calculated at time $t = 0$ for the reference undertaking's portfolio of (re)insurance obligations,~~

~~$BE_{Net}(t)$ = best estimate technical provisions net of reinsurance as assessed at time $t \geq 0$ for the reference undertaking's portfolio of (re)insurance obligations.~~

Explanatory text:

Technical Annex VI is deleted. The concept behind the formula outlined in it has been integrated into Guideline 50.

ANNEX: FEEDBACK STATEMENT

This feedback statement sets out a high-level summary of the consultation comments received and EIOPA's assessment of them. The full list of all the non-confidential comments provided can be found on EIOPA's website.

EIOPA received comments from 6 stakeholders, mainly insurance industry and associations.

As part of the consultation EIOPA held a workshop with stakeholders to discuss the Guidelines on 10 December 2025.

EIOPA would like to express its appreciation for the feedback of the stakeholders during the preparation of the Guidelines.

RECOGNITION OF LAMBDA FACTOR IN SIMPLIFIED CALCULATION OF RM (GL 62 AND TECHNICAL ANNEX IV, METHODS 3 AND 4)

Stakeholder comments

Stakeholders comment that the lambda factor should be recognized in all simplified methods for calculating the risk margin as listed in Guideline 62, i.e. that it should not be excluded from method 3 and 4. With respect to method 3, stakeholders comment that EIOPA should build on the formula contained in the technical specifications of the information request on the 2020 review of Solvency II. With respect to method 4, although recognising that this simplification does not allow for a straightforward calibration of the lambda factor, as there is no explicit formula, stakeholders argue that if the calibration of the percentage α explicitly reflects the temporal structure of their liabilities, the lambda factor could be included in a consistent and meaningful way.

Assessment

The simplified calculation under method 3 was modified to explicitly recognise the lambda factor. The criteria for the application of method were amended accordingly. The modified calculation under method 3 is not more burdensome than according to the current specification of method 3.

With respect to method 4, it was clarified in the explanatory text that the lambda factor can be implicitly taken into account in method. The criteria for the application of method were amended accordingly.

SIMPLIFIED CALCULATION OF TECHNICAL PROVISIONS DURING THE YEAR (GL 50)

Stakeholder comments

Stakeholders comment that the deletion of Technical Annex VI would lead to a reduction in the information contained in the Guidelines. It is argued that the formula included in that Annex and moved to the explanatory text, would disappear once the consolidated version of the guidelines is finalised. This could create an inconsistency between supervisors' expectations, that would continue to refer to

the formula in the explanatory text, and undertakings that may adopt different approaches for the quarterly calculation of the risk margin.

Assessment

In response to these comments, Guideline 50 was amended to include more details on quarterly calculation of the risk margin. Other editorial changes were made to the explanatory text in response to stakeholders' suggestions.

REQUEST FOR REVISION OF OTHER GUIDELINES

Stakeholder comments

Stakeholders have pointed out other guidelines that could be considered for a review.

Assessment

This review of the Guidelines on valuation of technical provisions is limited to the risk margin guidelines because those related to best estimates valuation were only recently revised in 2022 and applied from 2023. The observations made will be considered in a future review.