



EIOPA-BoS-20/422
1 July 2020

Technical specification of the complementary information request on the 2020 review of Solvency II

1. Introduction

1. The European Commission issued in February 2019 a request to EIOPA for technical advice on the review of Solvency II.¹ EIOPA will provide this advice in December 2020. The advice will be accompanied by an impact assessment quantifying in particular the impact of proposed changes on the solvency position of insurance and reinsurance undertakings. In order to collect data for the impact assessment EIOPA carries out information requests to the insurance industry.
2. EIOPA published on 15 October 2019 a consultation paper on the Opinion that will set out its advice on the review of Solvency II (in the following just called "consultation paper"). Stakeholders provided comments on the consultation paper by 15 January 2020.
3. From March to May 2020 EIOPA carried out an information request to the insurance industry in order to collect data on the combined impact of proposals with a material impact on the solvency position of insurance and reinsurance undertakings. Such a holistic impact assessment is explicitly requested in the call for advice of the European Commission.
4. In view of the Covid-19 pandemic and its impact on financial markets and the insurance business that information request will be complemented with another request. The objective of the complementary request is to collect:
 - updated data on the combined impact of proposals, similar to the information request for the holistic impact assessment, but with a reference date of end-June 2020
 - specific data on the impact of the Covid-19 pandemic on the insurance business, for example the impact on lapse rates or medical expense claims.
5. With regard to the combined impact of proposals the request is focused on the most material changes in order to limit the burden of the request. That compared to the last information request a lot of proposals are not included in this request does not imply that EIOPA has changed its position on those proposals. Also, the alternative calculations on the own funds buffer for compressed spreads, on the dynamic volatility adjustment for the standard formula and on interest rate risk are not requested again to minimise the burden and without implying a policy position on these elements.
6. In general, **EIOPA's position as reflected in this information request is not final**. The information collected through the information request will inform EIOPA's final decision on the advice on the review of Solvency II in December 2020.
7. This information request is addressed to a sample of insurance and reinsurance undertakings.

2. Timing

8. Insurance and reinsurance undertakings participating in the information request should submit results to their national supervisory authorities. After validating the submissions, national supervisory authorities will report this information to EIOPA.
9. EIOPA plans to disclose results from the information request as part of its Opinion on the 2020 review of Solvency II in December 2020. Results will only be disclosed

¹ https://ec.europa.eu/info/files/190211-request-eiopa-technical-advice-review-solvency-2_en

in anonymised or aggregated way in order to ensure the confidentiality of company data.

10. The timeline for these steps is as follows:

1 July 2020	Launch of the information request
14 September 2020	Deadline for participants to submit results to their national supervisory authorities
15 to 24 September 2020	Validation of results by national supervisory authorities
24 September 2020	Deadline for reporting of information from national supervisory authorities to EIOPA

Participants should stand ready to reply to possible requests of their national supervisory authorities for clarifications or resubmissions after the submission until October 2020.

3. Specification of the sample

11. The information request is addressed to a representative sample of insurance and reinsurance undertakings subject to Solvency II. The sample should be representative of:

- the different types of undertakings (life, non-life, composite insurance undertakings and reinsurance undertakings),
- the use of the standard formula and/or internal models to calculate the SCR,
- the use of matching adjustment and the volatility adjustment,
- risk profile and risk management of undertakings in particular the extent of asset liability matching and use of interest rate risk derivatives.

Where possible, the sample should be representative with regard to the different sizes of undertakings (small, medium, large). But in view of the burden in particular for smaller undertakings this is not required for this information request.

12. For each EEA country the undertakings belonging to the sample will be selected by the national supervisory authorities and should cover at least 25% of the business of undertakings in the local market subject to Solvency II (measured in technical provisions for life insurance obligations and measured in premiums for non-life insurance obligations), but at least 3 undertakings.
13. The sample chosen for the CIR by the national supervisory authorities is expected to be a sub-sample of the sample chosen for the information request for the holistic impact assessment.
14. Exceptions to this rule may be necessary in view of the data request on health insurance pandemic risk. For national markets where a material share of pandemic risks is covered by insurance undertakings (including at least DE, FR and NL to the extent data are available), the sample should also include at least 25% of the insurance undertakings that cover pandemic risk and apply the SCR standard formula to calculate the pandemic risk sub-module. For that purpose, market share should be measured in premiums for medical expense and income protection insurance. In order to comply with this condition the sample may need to include undertakings that did not participate in the information request for the holistic

impact assessment. Those undertakings only need to provide the data on pandemic risk as specified in section 7.5.

4. General approach of the information request

15. Participants are requested to provide information on their solvency position in accordance with three scenarios:
 - Baseline scenario: the current legal framework for Solvency II
 - Scenario 1: changes to the baseline in accordance with EIOPA's tentative advice
 - Scenario 2: the same as scenario 1, but without a change to the interest rate risk calibration of the SCR standard formula
16. For each scenario the following type of information needs to be provided:
 - in case the VA is used the undertaking-specific VA per currency
 - technical provisions (best estimate, risk margin, technical provisions calculated as a whole)
 - available own funds and eligible own funds to cover SCR and MCR
 - the SCR and, to the extent it is calculated with the standard formula, information on modules, sub-modules, adjustments for loss-absorbing capacity of deferred taxes and technical provisions and the capital requirement for operational risk
17. In addition, participants should provide specific information on the impact of the Covid-19 pandemic on their insurance business.
18. These technical specifications are based on the specifications for the holistic impact assessment. The main changes are as follows:
 - Many of the changes of scenario 1 have been deleted in order to focus the request on the most material changes.
 - The additional calculations on the dynamic volatility adjustment in the standard formula, the own funds buffer for compressed spreads and on alternative interest rate risk calibrations have been deleted.
 - Specifications for the macroeconomic volatility adjustment have been included in section 5.1.2.
 - Some of the Q&As provided during the information request for the holistic impact assessment are reflected in the specifications.

A version of sections 5 and 6 tracking the changes is provided separately.

19. The reference date for the calculation of the scenarios is **30 June 2020**.
20. Participants should submit their results to national supervisory authorities in the provided Excel reporting template.
21. The reporting template is based on the template from for the holistic impact assessment. Changes are outlined in the tab "List of Changes".
22. These technical specifications are supplemented by an Excel file Technical Information that sets out the following information for scenarios 1 and 2:
 - Basic risk free interest rate term structures

- Risk-free interest rate term structures including a VA
- Risk-corrected spreads and scaling factors for the calculation of volatility adjustments
- Where applicable, the value of the macroeconomic VA
- SCR standard formula shocks for the interest rate risk sub-module

Furthermore, this Excel file on hidden tabs includes detailed information on the calibration parameters of the new method proposed for the basic risk free interest rate term structures as described in section 5.1.1.

23. The Technical information file will be provided about one week after the launch of the information request. The reason for the delay is that the Technical information is based on the risk-free interest rates for 30 June 2020 that EIOPA will only publish on 3 July 2020.

5. Technical specification of scenario 1

5.1. Risk-free interest rate term structures

5.1.1. Basic risk-free interest rates

24. For the valuation of insurance and reinsurance obligations the risk-free interest rate term structures set out in the file Technical Information should be used. These term structures were derived with the alternative extrapolation method specified in annex 2.6 of the consultation paper and take into account the implications from the DLT assessment set out in section 2.2.4.4.5 of that paper.²
25. For currencies where the Technical Information file does not provide term structures no change compared to the base case should be assumed.

5.1.2. Volatility adjustment

26. Participants which apply the VA should recalculate the VA applicable to their undertaking and use them to determine their solvency position. They should report about the VA calculation in the tab "Volatility adjustment".
27. Note that as part of EIOPA's tentative proposal for the design of the VA, the VA will consist of a permanent VA that can be increased by a macroeconomic VA. The macroeconomic VA is calculated as a country specific increase, which is triggered whenever the country risk corrected spread (measured on the basis of the national representative portfolio) is higher than both an absolute and a relative threshold. For further background please see option 7 in the consultation paper, paragraph 2.478 ff.
28. As at year-end 2019, the macroeconomic VA would not have been triggered for any country. Whether a macroeconomic VA would apply as at 30 June 2020 will only be determined in the first week after the launch of this information request. The technical specifications therefore set out the complete VA calculation, including the macroeconomic VA. Whether the macroeconomic VA should be calculated will be set out in the Technical Information file. Also note that the macroeconomic VA

² For the Swedish krona a different mean reversion parameter of 40% was used to derive the term structures. This reflects the higher speed of convergence used to derive the currently applicable risk-free interest rate term structures for that currency.

cannot be used in the dynamic VA (DVA) in internal models (see section 5.4.2.1 for details).

29. As the first step of the VA calculation, participants need to determine the relevant currencies of their liabilities. Information reported by currency shall cover the five most material currencies of the business³. These currencies should be selected in row 10. Row 12 reflects the value of the gross best estimate in the respective currency, but should be given in the reporting currency. For this purpose, the values of the best estimate liabilities should be based on the term structures with the alternative extrapolation method without VA and without transitional measures.
30. Row 11 reflects the value of the fixed income investments in the respective currency, but should be given in the reporting currency.
31. To determine the VA, the following input information is needed:
- The risk-corrected spread of the representative portfolio of the relevant currency;
 - The scaling-factor for the relevant currency.

Note that, within the calculation of the VA, the scaling-factor leads to an increase of the value of the VA. For details see paragraph 63.

32. The input data referred to in paragraph 31 are included in the Technical Information file provided by EIOPA for the complementary information request.
33. To determine the permanent VA by currency, the undertaking has to calculate the following two factors:
- application ratio 4 (AR₄)
 - application ratio 5 (AR₅).

The names of these application ratios are chosen in line with the options on the VA set out in the consultation paper.

Calculation of application ratio 4

34. The application ratio 4 aims to correct for mismatches in the fixed income assets and insurance liabilities in respect of duration and volume. For further background on this ratio, please cf. the consultation paper, paragraph 2.361 ff. The application ratio 4 is calculated as

$$AR_4 = \min \left\{ \frac{PVBP(MV_{i,c}^{FI})}{PVBP(BEL_{i,c})}; 1 \right\}$$

where

- $MV_{i,c}^{FI}$ denotes the market value of undertaking's i investment in fixed income investments in currency c^A ; the fixed income investments should be identified on the basis of their CIC, according to the following table:

³ Where undertakings have only liabilities in one currency or business in a particular currency already makes up more than 90% of the business, it is sufficient to fill in column C, the others can be left blank. Where undertakings have liabilities in more than one currency, a reporting by currency is requested (where currencies are added in descending order of materiality) up and until the business reported exceeds the threshold of 90% or the maximum of five currencies is reached.

⁴ Note that undertakings do not have to assign investments to either backing or not backing the liabilities when determining $MV_{i,c}^{FI}$, but only consider the investments in the currency of the liabilities.

CIC third position	Asset class	Fixed income Assets
1	Government bonds	Yes
2	Corporate bonds	Yes
3	Equity	No
4	Collective Investment Undertakings	For investment funds look through should be performed and fixed income assets within should be identified. If no look through is possible, only debt funds (CIC 42) are eligible
5	Structured notes	Only CIC 52 (structured notes mainly exposed to interest rate risk) and 54 (structured notes mainly exposed to credit risk)
6	Collateralised securities	Only CIC 62 (collateralised securities mainly exposed to interest rate risk) and 64 (collateralised securities mainly exposed to credit risk)
7	Cash and deposits	No
8	Mortgages and loans	Yes
9	Property	No

- $PVBP(BEL_{i,c})$ equals the price value of a basis point of the best estimate of the liabilities of undertaking i in currency c ;
- $PVBP(MV_{i,c}^{FI})$ equals the price value of a basis point of the fixed income investments of undertaking i in currency c .

Note that the fixed income investments of the unit- and index-linked should be included in the calculation of the application ratio 4. This also holds for supranational bonds. But business valued as a whole is excluded, from the calculation.

35. For the purpose of the data collection, where undertakings have already participated in the information request of EIOPA in autumn 2019 or in the information request for the holistic impact assessment and have already calculated the application ratio 4 as at year-end 2018 or 2019, they can use that application ratio also for this complementary information request provided that according to their assessment the application ratio 4 would not materially change for the reference date 30 June 2020. In this case, the undertaking should provide an explanation in its response.
36. Similarly, for the purpose of the data collection, where according to the undertaking's assessment the spread duration of the assets exceeds the duration of the liabilities and the volume of fixed income compares to the volume of the best estimate, the application ratio 4 can be set to 1. In this case, the undertaking should provide an explanation in its response.

Calculation of $PVBP(BEL_{i,c})$

37. The price value of a basis point of the best estimate of the liabilities should be calculated as a sensitivity with regard to the value of the VA. This means that

$PVBP(BEL_{i,c})$ is calculated as the difference in the value of the best estimate⁵ with and without applying the part of the VA that does not depend on the undertaking specific application ratios, including the macroeconomic component:

$$PVBP(BEL_{i,c}) = \frac{BEL_{i,c}(RFR_c) - BEL_{i,c}(RFR_c + GAR \cdot RC_{S_c_scaled})}{GAR \cdot RC_{S_c_scaled}}$$

where

- RFR_c denotes the basic risk-free interest rate term structure for currency c
- $RFR + GAR \cdot RC_{S_c_scaled}$ denotes the basic risk-free interest rate term structure, to which a volatility adjustment of size $GAR \cdot RC_{S_c_scaled}$ is applied⁶
- $GAR \cdot RC_{S_c_scaled}$ denotes the volatility adjustment before the application of undertaking specific ARs. It includes also the macroeconomic component (see paragraph 62 for further details). The term $RC_{S_c_scaled}$ is equal to:

$$Scale_c \cdot RC_{S_c} + \omega_j \cdot \max(RC_{S_{c,j}} \cdot Scale_{c,j} - 1.3 \cdot RC_{S_c} \cdot Scale_c; 0)$$

- RC_{S_c} denotes the risk corrected spread of the reference portfolio in currency c and $RC_{S_{c,j}}$ the risk-corrected spread of the reference portfolio for country j using currency c , where j is the country in which the participant is located.⁷
- GAR denotes the general application ratio. It is set to 85%.
- $Scale_c$ and $Scale_{c,j}$ are scaling factors for, respectively, the relevant currency and country reference portfolio bringing the weight of fixed income instruments to 1. For details see paragraphs 64 and 65
- ω_j is a component designed to ensure a gradual and smooth activation of the country component and mitigating the cliff effect. For details see paragraph 61.

38. To determine $PVBP(BEL_{i,c})$, a revaluation of the best estimate needs to be performed taking into account the effect of future discretionary benefits (i.e. including the loss-absorbing capacity of technical provisions). For the purpose of that calculation, asset values stay unchanged - no impact of a change in credit spreads on undertakings assets should be taken into account. Where an undertaking has liabilities denoted in several currencies, $PVBP(BEL_{i,c})$ should be determined separately for each currency. Please note that it is expected that all figures are entered in your reporting currency to the Excel template.

Calculation of $PVBP(MV_{i,c}^{FI})$

39. The price value of a basis point of the fixed income investments of the undertaking should be calculated based on the difference in their market value against current spreads and when spreads would have increased by the part of the VA that does not depend on the undertaking specific application ratio, i.e. $GAR \cdot Scale_c \cdot RC_{S_c}$:

$$PVBP(MV_{i,c}^{FI}) = \frac{MV_{i,c}^{FI}(CS) - MV_{i,c}^{FI}(CS + GAR \cdot RC_{S_c_scaled})}{GAR \cdot RC_{S_c_scaled}}$$

⁵ not including TP as a whole and net of reinsurance recoverables.

⁶ i.e. $GAR \cdot RC_{S_c_scaled}$ is applied as the current VA up to the last liquid point (LLP) and then extrapolated to the UFR.

⁷ In order to simplify the application of the macroeconomic VA for this information request, no distinction between business written in county j and written outside of country j needs to be made.

where CS denotes the current level of spreads. Note that all fixed income investments including government bonds need to be shocked.

40. The application ratio 4 is on this basis derived as a result.

Calculation of application ratio 5

41. The application ratio 5 intends to account for the illiquidity characteristics of liabilities in the valuation of technical provisions. For further background on this application ratio, please cf. the consultation paper, paragraph 2.396 ff. For the purpose of this information request, the application ratio 5 is calculated following a "bucketing approach" as described below.
42. Participants should determine application ratio 5 for each relevant currency, taking into account the characteristics of the undertaking's individual insurance obligations in that currency.
43. As the determination of illiquidity intends to assess the stability of insurance liabilities and is not expected to change materially over time, the calculation of AR_5 can be based on the information as at the previous year end. However, where the illiquidity of liabilities is expected to have changed materially since then, the determination of AR_5 should have regard to the information as at the reference date.
44. To determine AR_5 for life obligations, the following four steps have to be performed. For non-life obligations only the steps 3 and 4 are relevant.
45. Note that the liabilities of unit- and index-linked insurance should be included in the calculation of the application ratio 5. But business valued as a whole is excluded from the calculation.

Step 1: Only life obligations - Assessment of surrender/cancellation options

46. Under this step, obligations contained in a homogeneous risk group (HRG) have to be classified according to their surrender/cancellation options.
- Group 1:
 - HRGs where no obligations contain surrender or cancellation options
 - HRGs where no obligations include surrender or cancellation options where the take up of the surrender option or the cancellation of the contract can ever lead to a loss in own funds of the insurance or reinsurance undertaking
 - Group 2: All other HRGs
47. As a result of step 1, each HRG should be allocated to one of the two groups described above.
48. For the purposes of paragraph 46, all options should be considered for which an increase or a decrease in the option exercise rate results in payments arising earlier than expected. This should at least include all legal or contractual policyholder rights:
- to fully or partly terminate or surrender the insurance cover⁸;

⁸ For annuity obligations, this includes lump-sum options

- to permit the insurance policy to lapse; and
- to restrict or extend the length of the insurance cover.

Step 2: Only life obligations - Assessment of underwriting risks

49. Under this step, the relevance/materiality of specific underwriting risks is assessed. For this purpose, the change of the best estimate for each homogeneous risk group (HRG) within the undertaking is assessed with respect to the following standard formula risk sub-modules⁹:
- Mortality risk sub-module according to Art. 137 Delegated Regulation
 - Risk of a permanent increase in lapse rates in the lapse risk sub-module according to Art. 142 Delegated Regulation
 - Health mortality risk sub-module according to Art. 152 Delegated Regulation
 - Risk of a permanent increase in SLT health lapse rates of the SLT health lapse risk sub-module according to Art. 159 Delegated Regulation
50. Where each of these risks has an impact of less than 5% on the best estimate, the liabilities in the homogeneous risk group are considered to have “low best estimate impact of underwriting risk” for the purpose of determining the illiquidity of liabilities.
51. The next steps have to be performed for all obligations including non-life obligations.

Step 3: All obligations - Bucketing of obligations

52. The following applies to each homogeneous risk group (HRG).
53. The insurance and reinsurance obligations belonging to a HRG of life obligations are classified as “category I” liabilities where:
- the obligations of the HRG belong to group 1 (according to step 1) **and**
 - the obligations of the HRG are considered to have “low best estimate impact of underwriting risk” according to step 2
54. Where for a HRG of life obligations the insurance and reinsurance liabilities comply with condition ii but not condition i set out above, the liabilities in the HRG are classified as “category II” liabilities.
55. All other life obligations as well as all non-life insurance obligations are classified as “category III” liabilities.
56. This can be summarized as follows:

Illiquidity category	Criteria	Application factor
Category I – High illiquidity	<ul style="list-style-type: none"> • No surrender/cancellation options or where the take up of the surrender option or the cancellation of the contract can never lead to a loss in own funds for the insurer • Low best estimate impact mortality risk 	100% ($AR_{5,I}$)

⁹ These standard formula shocks are also applied by internal model users.

Category II – Medium illiquidity	<ul style="list-style-type: none"> • Low best estimate impact of permanent increase in lapse rates • Low best estimate impact of mortality risk 	75% (AR _{5,II})
Category III – Low illiquidity	Contracts that do not fall into category I or II	60% (AR _{5,III})

Step 4: All obligations - Determination of AR5

The final application ratio 5 (AR₅) is then determined by aggregating the application factors AR_{5,I}, AR_{5,II} and AR_{5,III}.

AR₅ is a weighted average of the application factors that are allocated to the different illiquidity categories:

$$AR_5 = \max\left(\min\left(\frac{BE_I \cdot AR_{5,I} + BE_{II} \cdot AR_{5,II} + BE_{III} \cdot AR_{5,III}}{BE_I + BE_{II} + BE_{III}}; 100\%\right); 60\%\right)$$

where

- BE_I is the best estimate of the category I liabilities;
- BE_{II} is the best estimate of the category II liabilities and
- BE_{III} is the best estimate of the category III liabilities.

57. These best estimates are determined using the basic risk-free rates without the volatility adjustment and without transitionals, where the basic risk-free rate is the term structure based on the alternative extrapolation method.
58. Note that this formula also applies in case the best estimate for a category is negative. In this case the overall application ratio would be reduced and a smaller VA would finally apply.
59. The final application ratio 5 should be provided in row 30.

Calculation of the permanent VA

60. The permanent VA is finally determined on that basis and given in row 32. It is calculated as

$$VA_{perm} = GAR \cdot AR_4 \cdot AR_5 \cdot Scale_c \cdot RC_{S_c}$$

where

- GAR is the general application ratio
- AR_4 denotes the application ratio 4
- AR_5 denotes the application ratio 5
- $Scale_c$ denotes the scaling-factor for currency c
- RC_{S_c} denotes the risk-corrected spread of the representative portfolio for currency c

Calculation of the macroeconomic VA

61. The macro-economic VA is an additive component to the permanent VA, which depends on the level of the risk corrected (RC) spread in each country j , relatively to the currency RC spread. Its formula is the following:

$$VA_{macro,j} = GAR * AR_4 * AR_5 * \omega_j * \max(RC_{S_{c,j}} * Scale_{c,j} - 1.3 * RC_{S_c} * Scale_c; 0)$$

where

- $Scale_{c,j}$ denotes the scaling-factor for country j using currency c ;
- $RC_{S_{c,j}}$ denotes the risk-corrected spread of the reference portfolio for country j using currency c ;
- ω_j is a component designed to ensure a gradual and smooth activation of the country component and mitigating the cliff effect. It is equal to 0 when $RC_{S_{c,j}}$ is below 60 bps and then increases linearly up to the point in which $RC_{S_{c,j}}$ is equal or greater than 90 bps, where it assumes a value equal to 1. In formula:

$$\omega_j = \begin{cases} 0 & \text{if } RC_{S_{c,j}} \leq 60 \text{ bps} \\ \frac{RC_{S_{c,j}} - 60}{30} & \text{if } 60 \text{ bps} < RC_{S_{c,j}} \leq 90 \text{ bps} \\ 1 & \text{if } RC_{S_{c,j}} > 90 \text{ bps} \end{cases}$$

Calculation of the total VA

62. The total VA applicable for an undertaking i located in country j is:

$$VA_{perm}^i + VA_{macro,j}^i$$

Background on the derivation of risk-corrected spreads and scaling factors

63. The scaling-factor $Scale_c$ is determined as:

$$Scale_c = \frac{1}{w_{gov,c} + w_{corp,c}}$$

where

- $w_{gov,c}$ denotes the weight of the government bond portfolio in the representative portfolio for currency c ; and
- $w_{corp,c}$ denotes the weight of the corporate bond portfolio in the representative portfolio for currency c

64. The country scaling-factor $Scale_{c,j}$ is determined as:

$$Scale_{c,j} = \frac{1}{w_{gov,j} + w_{corp,j}}$$

where

- $w_{gov,j}$ denotes the weight of the government bond portfolio in the national representative portfolio for country j ; and
- $w_{corp,j}$ denotes the weight of the corporate bond portfolio in the national representative portfolio for country j

65. For the determination of the risk-corrected spreads RC_{S_c} and $RC_{S_{c,j}}$ EIOPA computed the risk correction RC of a spread S as follows:

66. For government bonds issued by EEA countries, the risk correction is determined as

$$RC = 30\% \cdot \min(S^+, LTAS^+) + 20\% \cdot \max(S^+ - LTAS^+, 0)$$

where

- S denotes the average spread of government bonds in the respective sub-class¹⁰ of government bonds in the representative portfolio for currency c ;
- $S^+ = \max(S, 0)$ is the maximum of S and zero;
- $LTAS$ denotes the long-term average spread of government bonds in the respective sub-class of government bonds in the representative portfolio for currency c ;
- $LTAS^+ = \max(LTAS, 0)$ is the maximum of the long-term average spread and zero.

67. For other fixed income investments in the representative portfolio, the risk correction is determined as

$$RC = 50\% \cdot \min(S^+, LTAS^+) + 40\% \cdot \max(S^+ - LTAS^+, 0)$$

where

¹⁰ Cf. section 8 in the technical documentation of the methodology to derive EIOPA's risk-free interest rate term structures

- S denotes the average spread of fixed income investments in the respective sub-class¹¹ within the representative portfolio for currency c ;
- $S^+ = \max(S, 0)$ is the maximum of S and zero;
- $LTAS$ denotes the long-term average spread of fixed-income investments in the respective sub-class within the representative portfolio for currency c ;
- $LTAS^+ = \max(LTAS, 0)$ is the maximum of the long-term average spread and zero.

5.2. Technical provisions

68. Undertakings should report on the values of their technical provisions in the tab "Technical provisions". This tab foresees a split into the various subcomponents of the technical provisions. Undertakings are also requested to report on the values of technical provisions without transitionals on technical provisions and interest rate and without volatility adjustment and without transitional measures, respectively (see columns F and G for the base case and columns J and K for scenario 1).

5.2.1. Risk margin

69. Risk margins should be calculated in accordance with the following modified calculation (compare Article 37 Delegated Regulation):

$$RM_{scenario} = CoC \cdot \sum_{t \geq 0} \frac{SCR(t) \times \max(\lambda^t, 0.5)}{(1+r(t+1))^{t+1}}, \text{ where } \lambda = 0.975$$

70. Where undertakings apply one of the simplifications for the calculation of the risk margin, which are detailed in the Technical Annex IV of the EIOPA Guidelines on the Valuation of Technical Provisions (EIOPA-BoS-14/166), the following adaptations should be made:

- Level (1) of the hierarchy of simplifications: approximate the individual risks or sub-risks within some or all modules and sub-modules to be used for the calculation of future SCRs

Application of the λ^t parameter for each future SCR, as defined for the full calculation.

- Level (2) of the hierarchy of simplifications: approximate the whole SCR for each future year, e.g. by using a proportional approach

Application of the λ^t parameter for each future SCR, as defined for the full calculation.

- Level (3) of the hierarchy of simplifications: estimate all future SCRs "at once", e.g. by using an approximation based on the duration approach

Multiply the amount obtained with the simplification by a parameter $\lambda^{\frac{Duration}{2}}$.

- Level (4) of the hierarchy of simplifications: approximate the risk margin by calculating it as a percentage of the best estimate

Multiply the amount obtained with the simplification by a parameter λ^1 .

¹¹ Cf. section 8 in the technical documentation of the methodology to derive EIOPA's risk-free interest rate term structures

71. These simplifications above should only be used if they are currently used by the undertaking and considered as appropriate simplifications.

5.3. Own funds

72. This section is only relevant for undertakings that use the matching adjustment.
73. The own funds of the whole undertaking will be calculated ignoring the adjustment prescribed in Art. 81 Delegated Regulation with regard to matching adjustment portfolios. That means the excess of assets over liabilities, obtained by comparing the restricted own-fund items within the matching adjustment portfolio and the notional Solvency Capital Requirement for the matching adjustment portfolio, should not be reduced.

5.4. Solvency Capital Requirement

5.4.1. Standard formula

5.4.1.1. Interest rate risk calibration

74. The interest rate risk sub-module should be calculated based on the interest rate shocks for scenario 1 set out in the file Technical Information. The shocks are derived in accordance with paragraphs 5.27 to 5.35 of the consultation paper.
75. For currencies where the Technical Information file does not provide interest rate shocks no change compared to the base case should be assumed.

5.4.1.2. Correlation between spread and interest rate risk

76. The SCR standard formula correlation parameter for interest rate risk (downward shock) and spread risk should be set to 0.25 instead of 0.5. The parameter for interest rate risk (upward shock) and spread risk should stay at 0. All other correlation parameters remain unchanged. In particular, the two-sided correlation in the market risk module according to Art. 164 Delegated Regulation remain unchanged.

5.4.1.3. Long-term equity investments

77. The calculation of the equity risk sub-module should take into account the Long Term Equity (LTE) provisions according to Article 171a of the Delegated Regulation. However, the criteria set out in the provisions are amended. Participants should assess the applicability of the amended criteria for the application of the LTE provisions and identify those equity that can be classified as LTE.
78. The calculation of the equity risk sub-module includes the Long Term Equity (LTE) provisions according to Article 171a of the Delegated Regulation.
79. In the tab "SF only - Equity risk" information is requested on the composition of the equity risk sub module. Information has to be reported in the base case (based on the existing requirements on equity risk and LTE) as well as under scenario 1 (with alternative requirements on the application of LTE as outlined below).

Information on the base case is collected in cells D13 to F33 and in cells D36 to F39, information on the equity risk under scenario 1 is collected in cells H13 to J33 and in cells H36 to J39.

80. For the purpose of applying LTE under scenario 1, participants should assess the applicability of the amended criteria for the application of the LTE provisions and identify those equity that can be classified as LTE.
81. The following table provides an overview of the current requirements compared to the amendments for the purpose of scenario 1:

Existing requirements (base case scenario)	Change in requirements that form the basis for scenario 1
1. For the purpose of this Regulation, a sub-set of equity investments may be treated as long-term equity investments if the insurance or reinsurance undertaking demonstrates, to the satisfaction of the supervisory authority, that all of the following conditions are met:	
a) the sub-set of equity investments as well as the holding period of each equity investment within the sub-set are clearly identified;	The requirement is changed as follows: the sub-set of equity investments is clearly identified;
b) the sub-set of equity investment is included within a portfolio of assets which is assigned to cover the best estimate of a portfolio of insurance or reinsurance obligations corresponding to one or several clearly identified businesses, and the undertaking maintains that assignment over the lifetime of the obligations;	No change
c) the portfolio of insurance or reinsurance obligations, and the assigned portfolio of assets referred to in point (b) are identified, managed and organised separately from the other activities of the undertaking, and the assigned portfolio of assets cannot be used to cover losses arising from other activities of the undertaking;	No change
d) the technical provisions within the portfolio of insurance or reinsurance obligations referred to in point (b) only represent a	Deletion of the requirement.

part of the total technical provisions of the insurance or reinsurance undertaking;	
e) the average holding period of equity investments in the sub-set exceeds 5 years, or where the average holding period of the sub-set is lower than 5 years, the insurance or reinsurance undertaking does not sell any equity investments within the sub-set until the average holding period exceeds 5 years;	<p>The requirement is changed as follows:</p> <p>A policy for long term investment is set up for each long-term equity portfolio and reflects undertaking's commitment to hold the global exposure to equity in the sub-set of equity investment for a period that exceeds 5 years in average. Undertakings shall not use high frequency algorithmic trading techniques¹².</p> <p>For the purpose of the information request, undertakings should consider if this policy is intended to be put in place.</p>
f) the sub-set of equity investments consists only of equities that are listed in the EEA or of unlisted equities of companies that have their head offices in countries that are members of the EEA;	No change
g) the solvency and liquidity position of the insurance or reinsurance undertaking, as well as its strategies, processes and reporting procedures with respect to asset-liability management, are such as to ensure, on an ongoing basis and under stressed conditions, that it is able to avoid forced sales of each equity investments within the sub-set for at least 10 years;	<p>The requirement is changed as follows:</p> <p>Where undertakings can demonstrate that either</p> <ul style="list-style-type: none"> i. particular homogeneous risk groups (HRGs) of the life insurance and reinsurance liabilities belongs to category I as defined for the purpose of the calculation of the VA (see paragraph 53) and the Macaulay duration of the liabilities in this HRG exceeds 12 years or ii. a sufficient liquidity buffer is in place for the portfolio of non-life insurance and reinsurance liabilities and the assigned portfolio of assets; <p>The sub-set of equity investments backing the liabilities identified in i. or ii. can be applied a risk charge of 22% provided the other conditions of this Article are met.</p> <p>The calculation of the liquidity buffer is outlined in paragraphs 82 to 85.</p>
h) the risk management, asset-liability management and investment policies of the insurance or reinsurance undertaking reflects the	<p>An addition is made to the requirement:</p> <p>Those elements are reported in the ORSA of the undertakings.</p> <p>For the purpose of the data collection, no such report is requested.</p>

¹² High frequency algorithmic trading techniques in accordance with Article 4(1)(40) of the Directive 2014/65/EU.

<p>undertaking's intention to hold the sub-set of equity investments for a period that is compatible with the requirement of point (e) and its ability to meet the requirement of point (g).</p>	
	<p>i) the sub-set of equity investments shall be properly diversified in such a way as to avoid excessive reliance on any particular issuer or group of undertakings and excessive accumulation of risk in the portfolio as a whole.</p>
<p>2. Where equities are held within collective investment undertakings or within alternative investment funds referred to in points (a) to (d) of Article 168(6), the conditions set out in paragraph 1 of this Article may be assessed at the level of the funds and not of the underlying assets held within those funds.</p>	<p>No change</p>
<p>3. Insurance or reinsurance undertakings that treat a sub-set of equity investments as long-term equity investments in accordance with paragraph 1 shall not revert back to an approach that does not include long-term equity investments. Where an insurance or reinsurance undertaking that treats a sub-set of equity investments as long-term equity investments is no longer able to comply with the conditions set out in paragraph 1, it shall immediately inform the supervisory authority and shall cease to apply Article 169(1)(b), (2)(b), (3)(b) and (4)(b) to any of its equity investments for a period of 36 months.;</p>	<p>No change</p>
	<p>4. Controlled intra-group equity investments shall be excluded from the sub-set of equity investments.</p>

82. The liquidity buffer used for the purpose of criteria g) ii should be tested on the level of the whole non-life insurance and reinsurance liabilities. The liquidity buffer should be calculated on the basis of the assets backing the undertaking's non-life insurance and reinsurance obligations. Where the liquidity buffer as outlined in the following paragraph is bigger or equal than 1, all equity backing the non-life insurance and reinsurance obligations fall under the scope of the provisions of

Article 171a can apply a risk charge of 22% (provided that the other criteria set out above are met). Where the liquidity buffer is smaller than 1, no equity falls under the scope of Article 171a.

83. Undertakings should provide more information on the calculation of the liquidity buffer identified for the purpose of criteria g) ii, irrespectively of whether they finally apply the provision to equity backing non-life obligations or not. The liquidity buffer for the purpose of criteria g) is to be calculated as follows:

$$\frac{HQLA}{BE_portfolio}$$

- where the numerator are high-quality liquid assets (HQLA) backing the non-life liabilities, applying a liquidity haircut as defined below;
 - the denominator is the non-life best estimate liabilities net of reinsurance.
84. HQLA is comprised of two categories of assets: "Level 1" and "Level 2" assets. Level 1 assets can be included without limit, while a haircut is applied to Level 2 assets which can comprise up to 40% of the stock of HQLA. Level 2 assets are further split into Level 2A and Level 2B. Level 2B assets cannot represent more than 15% of the stock of HQLA. The determination of the HQLA follows a two-step process: First, the haircut outlined in the following paragraph is applied. Secondly, the before mentioned limitations apply.
85. The list of HQLA for the purpose of the data collection is as follows.

Item		Haircut
Level 1 assets	Cash and cash equivalent	0%
	Bonds and loans from: <ul style="list-style-type: none"> • The European Central Bank • EU Member States' central government and central banks denominated and funded in the domestic currency of that central government and the central bank • Multilateral development banks referred to in paragraph 2 of Article 117 of Regulation (EU) No 275/2013 • International organisations referred to in Article 118 of Regulation (EU) No 275/2013 	0%
Level 2A assets	Bonds and loans rated CQS 0 or 1, excluding those from financial institutions	15%

Level 2B assets	Covered bonds rated CQS 0 or 1, excluding those emitted by a bank which is part of the same group	25%
	Qualifying RMBS	50%
	Bonds and loans rated CQS 2 or 3, excluding those from financial institutions	50%

5.4.1.3.1. Sensitivity analyses on the LTE specification

86. To assess the sensitivity of the revised LTE provisions to changes in the requirements defined for Scenario 1, the following results should be reported in addition to the central specification defined in the previous paragraphs:

- Sensitivity A: Undertakings should assess the relevance of LTE provisions modifying criterion 1. g) i as follows:
 - i. particular homogeneous risk groups (HRGs) of the life insurance and reinsurance liabilities belongs to categories I or II as defined for the purpose of the calculation of the VA (see paragraph 53 and 54) and the Macaulay duration of the liabilities in this HRG exceeds 12 years.
- Sensitivity B: Undertakings should assess the relevance of LTE provisions disregarding the limits set on paragraph 84.
- Sensitivity C: Undertakings should assess the relevance of LTE provisions modifying paragraph 82 as follows:

The liquidity buffer used for the purpose of criteria 1. g) ii should be tested on the level of the whole non-life insurance and reinsurance liabilities. The liquidity buffer should be calculated on the basis of the assets backing the undertaking's non-life insurance and reinsurance obligations.

- Where the liquidity buffer as outlined in the following paragraph is bigger or equal than 1, all equity backing the non-life insurance and reinsurance obligations fall under the scope of the provisions of Article 171a and can apply a risk charge of 22% (provided that the other criteria set out above are met).
- Where the liquidity buffer as outlined in the following paragraph is bigger or equal than 0.75 but lower than 1, half of all equity backing non-life insurance and reinsurance obligations fall under the scope of the provisions of Article 171a and can apply a risk charge of 22% (provided that the other criteria set out above are met).
- Where the liquidity buffer is smaller than 0.75, no equity falls under the scope of Article 171a.

87. Data on these sensitivities is collected in cells D67 to G81 of the "SF only - Equity risk" tab.

5.4.1.4. Diversification effects regarding matching adjustment portfolios

88. This section is only relevant for undertakings that use the matching adjustment.

89. The SCR of the whole company should be calculated considering 100% diversification benefits in matching adjustment portfolios, that is, SCR calculated applying full diversification benefits regarding the matching adjustment portfolios and the rest of portfolios.

5.4.2. Internal models

90. Please note the tabs "IM only – SCR details" and "IM only – VA details" need only to be completed by DVA users.

5.4.2.1. Volatility adjustment in internal models

91. This section is only relevant for internal models covering market and credit risk and including a "constant VA" (CVA) or "dynamic VA" (DVA).

CVA – canonical translation of new VA concept

92. Regarding CVA, changes to the VA translate in a canonical manner and beyond the data request as described above and relevant for all undertakings applying the VA, only additional information on market & credit risk is required as described in the paragraphs in the instruction relevant to DVA users.

DVA – background and motivation

93. With reference to EIOPA's 'Opinion on the supervisory assessment of internal models including a dynamic volatility adjustment' ('DVA'), EIOPA-BoS-17/366, 'DVA opinion' in the following, approaches to the DVA are classified as 'direct approaches', if designed with the ambition to closely replicate the EIOPA VA methodology. Approaches are classified as 'holistic', if deviating from closely modelling the EIOPA VA methodology with the aim to solve undesirable risk management incentives.

94. Furthermore, the DVA opinion introduces the so called "prudency principle". This principle requires, that any deviations from the VA methodology as described in the Solvency II Directive, the Delegated Regulation and EIOPA VA Methodology should be addressed in a way that the internal model produces an SCR guaranteeing a level of policyholder protection that is at least as high as if replicating the EIOPA VA Methodology. Concretely, this means that the undertaking shall demonstrate that its SCR is at least as high as if replicating the EIOPA VA Methodology.

95. In the call for advice the European Commission requested EIOPA to advise on whether or not to maintain the DVA in internal models and, in case of maintaining, to advise on criteria to improve harmonisation of the modelling. With respect to this request, EIOPA suggested the following principles in the consultation paper:

- No disincentives for risk and investment management, especially no 'overshooting' (or 'undershooting');
- DVA benefit should be risk sensitive, reflecting the risks present in assets and liabilities covered. In particular, there should be no full elimination of credit spread SCR, and the DVA benefit should reflect expected losses, unexpected credit risk (esp. migration & default) and other risk of the assets.

DVA – Enhancement of the prudency principle

96. The data collected with the information request supporting the public consultation on EIOPA's tentative advice, provided evidence that for some undertakings and

currencies the risk corrected spread as calculated on their own asset portfolio is materially lower than the risk corrected spread calculated on the reference portfolio relevant for this currency. The most likely reason identified are structural differences in the undertakings' own portfolios compared to the reference portfolios.

97. In certain cases the VA resulting from the reference portfolio was higher than the risk corrected spread of own assets. To counteract potential overshooting caused by such structural difference ('quality overshooting'), EIOPA considers to advice to enhance the 'prudency principle' as follows:

For any DVA approach undertakings should demonstrate that the SCR is at least as high as if

1. Replicating the EIOPA VA methodology
2. Replicating the EIOPA VA methodology but calculating the risk corrected spread on basis of the undertaking's own asset portfolio.

This principle should apply to any holistic DVA approach but also to any direct DVA approach.

DVA – Description of the data request

98. Changes to the baseline in accordance with EIOPA's tentative advice
- Under scenario 1 the DVA should be calculated as a 'direct DVA' under the VA regime of scenario 1 ('direct DVA(RefPF)' in the following). The corresponding SCR hat to be reported on the tab "Solvency Position" and on the tab "IM only – SCR details".
 - Additionally the DVA should be calculated as a 'direct DVA' under the VA regime of scenario 1, but using the undertaking's own portfolio (instead of the relevant VA currency reference portfolio) to calculate the risk corrected spread, which is used as input for the VA under scenario 1 ('direct DVA(own PF)' in the following).

Please note:

- (1) Own funds have to be determined by applying the VA regime under scenario 1 to your technical provisions.
- (2) In the 'direct DVA(own PF)' calculation the switch to your own portfolio only concerns the SCR. But, in your simulations generating the distribution in your model, "t=0" has to be calculated also on your own asset portfolio to have a distribution consistent in all data points regarding the choice of the portfolio to determine the risk corrected spread.
- (3) In case you are using a holistic DVA approach it is not expected that your approach would be redesigned anticipating the VA regime under scenario 1. The holistic impact assessment does only attempt to estimate the lower bound of the SCR under the enhanced prudency principle. Thus you are requested to calculate 'direct DVA(RefPF)' and 'direct DVA(own PF)' irrespective of your current DVA approach. However, the template offers cells for an optional submission of values according to an adjusted holistic DVA model.

Application ratios 4 and 5 should be treated as follows:

- Application ratio 4: Please determine a prudent estimate of application ratio 4 under your simulations and use this value as 'constant' parameter in your simulations. If considered necessary please differentiate between 'direct DVA(RefPF)' and 'direct DVA(own PF)'.
- Application ratio 5: Please use the value of application ratio 5 as determined for the calculation of technical provisions as constant parameter in your simulations. You need not to differentiate between 'direct DVA(RefPF)' and 'direct DVA(own PF)'.

Portfolio weights and scaling factor:

Scenario 1 includes the change of 'market value freeze' to 'cashflow freeze' for the VA methodology (see 2.4.4.3.1 of the consultation paper).

This implies a variation of weights of the portfolios under simulations.

Consequently you are requested to recalculate the weights and the scaling factor (see paragraph 63) within the portfolios used under 'direct DVA(RefPF)' and 'direct DVA(own PF)'.

If this cannot be implemented with reasonable effort for the purpose of this holistic impact assessment, please contact your national supervisory authority

Spread data to calculate the risk corrected spread:

It is expected that you use the spread data as included in your internal model.

This includes the LTAS used in the calculation of the risk corrected as described in paragraphs 64 to 67. As a reference of LTAS values please consider the file "EIOPA_RFR_20191231_PD_Cod.xlsx" as published with the EIOPA monthly RFR information for key date 30.06.2020.

Different from the algorithm used in the reference portfolio, also for EEA government bonds you are expected differentiate spread data by issuer as implemented in your internal model.

The method proposed by EIOPA does only include a flooring of the risk correction at zero, i.e. no increase of spreads due the risk correction. However, for the purpose of determining the VA in the HIA specification for valuation, standard formula and constant VA approaches in internal models also a flooring of the spreads was applied. In the dynamic VA in internal models, no flooring of negative spreads should be applied. The inconsistency to the VA used for valuation is accepted for the purpose of the HIA.

Supranational bonds should be allocated to the corporate portfolio, in the relevant CQS bucket, consistently with EIOPA's "Technical documentation of the methodology to derive EIOPA's risk-free interest rate term structures", paragraph 383.

99. Additionally to the total SCR figures requested on the tab "Solvency position" the following should be provided on market and credit risk:

- Market & credit risk SCR [stand-alone]: 'Marginal risk' for financial instruments including credit migration and credit default risk; if this combined risk SCR cannot be provided with reasonable effort, please contact your national supervisory; in such cases an alternative might be to only provide the market and the credit spread risk as described below.

- Market risk SCR [stand-alone]: 'Marginal risk' for financial instruments except credit migration and credit default risk; if the latter components cannot be excluded with reasonable effort, please contact your national supervisory authority; in such cases an alternative might be to only provide the combined market and credit risk.
- Credit spread risk SCR (or proxy) [stand-alone]: 'Marginal risk' for financial instruments, i.e. credit risk without migration and default.

100. Furthermore, please also provide the risk corrected spread as determined on your own asset portfolio in "t=0", i.e. as if using your own asset portfolio to determine the VA for technical provisions.

101. EIOPA is aware that DVA models in some case include margins like for example an application ratio lower than 65% to cater for model uncertainty. Although it is expected that such margins will also be needed in the future, for the purpose of this impact assessment, in the 'direct DVA(RefPF)' and 'direct DVA(own PF)' you are expected to not apply any margins of that kind, which are related to your current DVA approach.

102. Please note that the macroeconomic VA is not allowed to be applied in the DVA framework.

DVA – Implementation of the data request in the reporting template

103. The tab "IM only - SCR details" is linked to paragraphs 98 and 99. In more detail:

- Block "Base case - information based on QRT S.22.01.": Covers the figures in the official YE 2019 reporting. The figures here are expected to match with the figures in the block with the same title on the tab "Solvency position".
- Block "Scenario 1 - SCR with direct DVA on VA currency reference portfolios": Covers figures under the 'direct DVA(RefPF)' as described in the first bullet point of paragraph 98. The figures here are expected to match to the figures in block "Scenario 1" on the tab "Solvency position".
- Block "Scenario 1 - SCR with direct DVA on own asset portfolio": Covers figures under the 'direct DVA(own PF)' as described in the second bullet point of paragraph 98. This block takes up the second SCR calculation as required under the enhanced prudency principle described in paragraph 97. The SCR under the enhanced prudency principle would be the maximum of the SCRs under block 2 and block 3.
- Block "Optional: Scenario 1 - SCR with holistic approach amended to scenario 1": Entries here are optional and this block could be used if an undertaking would like to present a revised holistic approach, that would anticipate a changed 'volatility adjustment' regime, while the blocks 2 and 3 are both based on a direct DVA approach.
- Paragraph 99 describes the meaning of lines 15 - 17 in the above four blocks.

104. The tab "IM only - VA details" requests data as sketched in paragraph 100. This is for analysis purposes only and should show the VA as it would result, if the VA for the Solvency II balance sheet under scenario 1 would not be determined based on the currency reference portfolios but based on the undertaking's own portfolio. The tab thus is a mirror image of the tab "Volatility adjustment". "IM only - VA details" has to be filled additionally to the tab "Volatility adjustment" and serves the purpose to get an indication of the spread position of the undertaking's own portfolio

compared to the currency reference portfolios and support the analysis of the SCR and considerations on the enhanced prudency principle.

6. Technical specification of scenario 2

105. The calculations under scenario 2 should be carried out in accordance with the specifications of scenario 1 set out in section 5, but without the recalibration of the interest rate risk sub-module of the SCR standard formula. Note that the adapted correlation should be taken into account in this scenario.
106. In scenario 2, the alternative RFR extrapolation curve similar to scenario 1 should be used.
107. Interest rate shocks in accordance with the current calibration of the interest rate risk sub-module are set out in the file Technical Information.

7. Additional specifications

108. The following data should be provided separately from the calculations for scenario 1 and 2.

7.1. Impact of the VA at the end of Q1 2020 under the current VA regime

Tab "Q1 2020 solvency position"

109. To assess the effectiveness of the current VA under crisis conditions participants are requested to provide data per end of Q1 2020 also without long-term guarantee measures (LTGM) as required in the quantitative reporting template S.22. This supplements the regular reporting per end of Q1 2020, which only includes values with LTGM. The granularity is slightly reduced compared to S.22 and only covers values "with LTGM", "without transitionals on technical provisions and interest rate" and "Without volatility adjustment and without transitional measures".
110. Important to note: These calculations are based on the official regular reporting and the current VA regime, i.e. "base case" per 31.03.2020. The figures with LTGM should match your official reporting. They should include the impact of dynamic VA where that approach is applied in internal models.

7.2. Qualitative questions on the dynamic volatility adjustment

Tab "IM only - Qualitative Questions"

111. These questions are only relevant for undertakings applying the dynamic VA in an internal model.
112. To assess the relevance of the crisis for EIOPA's answer to the call for advice of the European commission with respect to the dynamic VA in internal models, participants in qualitative questions are requested to share experience under the COVID-19 crisis with respect to the following perspectives
 - Disincentives for investment and risk management strategies,

- Challenge of the level playing field by existence of diverging practices
- Appropriateness of the dynamic VA in light of the VA underlying assumptions

113. Participants are kindly asked to consider in their answers also their replies to the qualitative questionnaire on the dynamic VA issued in March 2019.

114. The questions are:

Under the perspective of your experiences under the COVID-19 crisis until 30.06.2020, please answer the following questions with respect to impacts from your approach to the dynamic VA on risk and investment management:

- 'Risk management' (cf. Article 44 of the Solvency II Directive) and 'investment management': Did the crisis impact your risk appetite to credit spread risk, especially with respect to disincentives? This especially relates to investment in riskier assets for the sole purpose of lowering the SCR.
- 'Forced sale of assets' (cf. Article 44(2a)(c)(i) of the Solvency II Directive): Did you experience any forced sale of your assets during the crisis? Did you need to change your risk management provisions with respect to forced sale of assets due to experiences from the crisis?
- 'Overshooting' and 'undershooting': Did you observe any 'overshooting' or 'undershooting' of the volatility adjustment (VA)? If yes, would you see the reason in a structural mismatch of your asset portfolio to the VA reference portfolio? In your answer please consider inter alia the following: Did your own funds position improve compared to year-end 2019 when using the VA but declined due to losses from increasing spreads without using the VA? Or conversely: Did you experience a pronounced loss but only very limited compensation by the VA?
- Supplementary calculations and considerations: In view of experienced or potential overshooting or undershooting: Did you perform supplementary calculations for example using a dynamic VA model that is different from the one used for regular reporting (e.g. based on your own asset portfolio)? If yes, please share insights from such calculations. Furthermore, do you think that your answers to the questions in the bullet points above would be different if you were using a different VA model, based on your own portfolio as VA option 1 described in the 2019 consultation paper? Similarly, would the proposed application ratios or the new risk correction have influenced your answer?

7.3. Extrapolation with euro LLP of 30 years

Tab "Technical provisions LLP 30"

115. Participants should calculate their technical provisions in the same way as in the baseline scenario, but applying for liabilities denominated in euro a risk-free interest rate term structure with a last liquid point of 30 years. The term structure is provided in the Technical Information file. No determination of own funds and no calculation of the SCR (other than to derive the risk margin) is necessary.
116. This calculation is only relevant for undertakings located in the euro area.
117. Please note that the values provided include the application of the other LTG measures (e.g. VA or transitionals). With respect to the VA, the current design of the VA applies, similar to the baseline.

7.4. Lapse risk information

Tab "Lapse risk information"

118. Participants should provide data on observed lapses regarding life insurance obligations, differentiating by lines of business and by the existence and type of disincentive to lapse (tax, surrender penalties, other). In case of liabilities subject to different types of disincentive, participants should report under the type which is the most relevant.
119. For obligations where surrender penalties apply, participants are requested to also report the average impact of the penalty on the surrender values.
120. Undertakings where life insurance obligations represent an immaterial share of total (re)insurance obligations are not requested to provide the information on lapse rates.

7.5. Health insurance pandemic risk

Tab "SF only – Pandemic risk"

121. On a best effort basis, participants that meet the following three criteria should provide data on the health insurance claims caused by the Covid-19 pandemic from 1 January to 30 June 2020:
 - They have health insurance and reinsurance obligations other than workers' compensation insurance and reinsurance obligations.
 - In their main national market a material share of the pandemic risks is covered by insurance undertakings; that includes at least DE, FR and NL, for other national markets to be decided by the national supervisor.
 - They apply the standard formula to calculate the pandemic risk sub-modules.
122. The data are specified as follows:
 - Income protection insurance:
 - Number of insured for which claims caused by the Covid-19 pandemic were incurred
 - Claims paid and claims reserve for claims caused by the Covid-19 pandemic
 - Medical expense insurance:
 - Number of insured for which claims caused by the Covid-19 pandemic were incurred
 - Claims paid and claims reserve caused by the Covid-19 pandemic separately for:
 - hospitalisation
 - consultation with a medical practitioner (including tests on Corona virus infections of ambulant patients)
 - other expenses
123. Claims should include reported claims and, to the extent estimates are available, incurred but not reported claims. Claims should be gross of reinsurance.
124. Participants should also report their SCR for pandemic risk and its components for income protection insurance and medical expense insurance. The SCR should

relate to the end of 2019, be gross of reinsurance and gross of the loss-absorbing capacity of future discretionary benefits and deferred taxes.

125. Participants may limit the data to the main national market in which they cover pandemic risk, provided they do it consistently for all data on pandemic risk.