Guidelines for Valuation of Assets using Mark-to-Model Approach

Supplementary Document to RBC Framework

Date: 2025-11-09

Preamble: Whereas the Authority (NIA) has carried out several actions to implement a risk-based capital framework for the assessment of the solvency position of insurers and reinsurers licensed in Nepal, following the international supervisory standards, in particular the insurance core principles and standards of the International Association of Insurance Supervisors (IAIS),

Whereas IAIS has adopted a risk-based framework based on, among other elements, the total balance sheet approach to ensure that the determination of Available Capital Resources and the Solvency Capital Requirement is based on consistent assumptions for the recognition and valuation of assets and liabilities for solvency purposes (IAIS ICP 14 and ICP 17),

Whereas under the total balance sheet approach assets and liabilities should be valued consistently using economic criteria appropriate for the recognition of risks,

Whereas the economic valuation of an asset may be directly observable if the asset is traded in deep, liquid and transparent markets, but otherwise such valuation requires the application of generally accepted financial methodologies underpinning the pricing of financial markets (Mark-to-Model Valuation),

Whereas most of the assets of the Nepali insurance sector are sensitive to interest rate risks and are not traded in deep, liquid and transparent markets, and hence the economic valuation of those assets should be based on a Mark-to-Model Valuation,

Whereas while giving freedom to market participants to select the Mark-to Model Valuation that is most appropriate for the recognition of the risks of the insurer's assets, the Authority also intends to monitor that there is no arbitrage in such selection that may jeopardize either the sound determination of the Available Capital Resources and the Solvency Capital Requirement or the level playing field,

In exercise of the powers conferred by Section 166 of the Insurance Act, 2022(2079), Nepal Insurance Authority has issued the following supplementary document to ensure effective implementation of the risk-based capital and solvency framework.

1. **Scope**: This Guideline shall apply to life insurers, non-life insurers, reinsurers and micro-insurers licensed by Nepal Insurance Authority when carrying out the valuation of assets for risk-based capital and solvency framework. This Guideline shall apply proportionally to the complexity of the models applied and the risks concerned.

2. **Definitions** – In this guideline, unless the context otherwise requires –

(a) "Act" means the Insurance Act, 2022 (2079).

(b) "Appointed Actuary" means a person who is appointed or retained in accordance with the Guideline related to Actuary Appointment for Insurers, 2024.

(c) "Auditor" means auditor who has obtained a license to audit pursuant to prevailing law.

(d) "Authority" means Nepal Insurance Authority registered pursuant to Section 3 of the Act.

(e) "Control" referred to a "Mark-to-Model" means all the processes relevant to ascertain the reliability in an ongoing basis of the outcomes of the model for an appropriate assessment of Available Capital Resources and the Solvency Capital Requirement, and for a sound risk management.

(f) "Credit spread" means the difference in the yields of a benchmark risk-free rate and a risky asset with similar features, other than the credit quality.

(g) "Insurer" means a corporate body registered pursuant to Section 10 of the Act and the word includes reinsurer and micro insurer unless otherwise explicitly stated.

(h) "Mark-to-Model" means the approach of asset valuation that applies financial formulae and inputs which deliver a valuation sufficiently reliable and near to what would be the market value.

(i) "Risk-free Rate" means the rate of return on a risk-free asset.

3. **Market Valuation of Assets**- (1) As per Chapter (4) of the Risk Based Capital and Solvency Directive 2025(2082), assets of insurers shall be valued at market value for solvency purposes.

(2) Unless otherwise stated, where the assets are valued in financial statements based on Nepal Financial Reporting Standards (NFRS) at fair value, that fair value shall be used for solvency purposes. In no case the 'amortized cost' may be used for solvency purposes.

(3) For an asset that is traded in a deep, liquid and transparent market, the insurers shall use the observable market value for solvency purposes.

(4) If the market value of an asset as per sub-section (3) is not available, then the insurers may derive the value of that asset, by-

(a) either referring to the market value of other sufficiently similar assets or liabilities traded in deep, liquid and transparent markets with appropriate adjustments, or

(b) applying a Mark-to-Model Valuation.

(5) Unless otherwise stated, provisions of subsections (1) to (4) apply to all assets, including assets that only provide predefined fixed cash flows, such as bonds and deposits, and loans

and mortgages, including loans on policies. In the case of loans on policies Annexure IV shall also apply.

(6) Notwithstanding investment in subsidiaries and associates, items of immaterial amount whose market value is not reliably derivable and have no material impact on the solvency position and items that should be valued at nil for solvency purposes shall not be valued using the mark-to-model approach.

4. **Mark-to-Model Valuation** – (1) Where according to Section (3) the insurer needs to apply a Mark-to Model Valuation, the insurer shall ensure that the selection, application, monitoring, reporting, record and control of the Mark-to-Model Valuation is carried out according to the following governance requirements:

(a) Any model used for valuation, the documentation of the model, and any subsequent changes to the model used for Mark-to-Model Valuation shall be certified by the Chief Financial Officer (CFO) and countersigned by the Chief Executive Officer (CEO).

(b) Any Mark-to-Model Valuation used for asset valuation shall be documented in a sufficiently detailed and sufficiently complete manner such that -

(i) an independent knowledgeable third party can understand the model framework, the methodology, the underlying assumptions, and the limits of applicability of the model and in principle reproduce the model outputs if all the parameters and data were available, and

(ii) an independent knowledgeable third party can form a sound judgement on the reliability of the model.

(c) The documentation shall include at least the following content with a level of detail appropriate to the complexity of the model –

(i) Purpose and Scope of assets to which the Mark-to-Model Valuation is used, and the timing of application of the model,

(ii) Theoretical foundation underlying the model, and the evidence of its general acceptance in financial praxis,

(iii) Description of model inputs, and sources of inputs, which should be consistent with available market information,

(iv) Assumptions underlying the model, which should reflect market assumptions,

(v) Algorithms related to mathematical methods, including the rationale for selecting the methods, in particular the capacity of the model to capture the risks to which the assets are exposed,

(vi) Description of interim outputs as well as results,

(vii) Description of technology and software tools used to implement the model,

(viii) Any limitations of the different components of the model, including limitations of the inputs, of the assumptions, methodologies, software and outcomes,

(ix) Processes to apply for the application, monitoring, reporting, record and control of the Mark-to-Model Valuation, and

(x) List of changes to the model with justifications, and analysis of impact of the change in the model in the results.

(d) The insurer shall provide the reconciliation of the current year results to past year results for each type of asset having Mark-to-Model Valuation.

(e) The insurer shall track and record all the information and software necessary to replicate each application, monitoring and control of the Mark-to-Model Valuation.

5. **Supervisory review** – (1) The documents as per Section 4 sub-section (b) shall be made available to the Authority upon request.

(2) The details of the investment shall be submitted to the Authority as per the templates provided in Annexure III of this document. Insurers shall ensure that the information submitted is accurate and complete.

6. **Interest Rate risk**– (1) Solvency capital requirement for Interest rate risk involves the assessment of impact of changing interest rates on the solvency valuation of assets and liabilities.

(2) The impact of changes in the interest rate shall be assessed under stressed scenarios for all interest rate-sensitive assets (and liabilities). As a rule, assets with fixed cash flows will be sensitive to changes in interest rates, including assets combining fixed cash flows and variable cash flows. This includes medium and long-term fixed income assets, such as fixed deposits with banks.

(3) For assets not sensitive to changes in the interest rates (both on an ongoing basis of the insurer and in case of a transfer of the assets) their valuation in the stressed upwards and downwards scenario shall not change compared to their valuation in the non-stressed solvency balance sheet.

7. **Right to Amend** – This guideline can be amended by the Board of Authority while the annexures can be amended by the Chairman of Authority.

Annexure I

Discounted Cash Flow Method

(1) Mark-to-Model valuation of assets using the Discounted Cash Flow (DCF) Method is commonly applied to assets with-

a. Predefined cash flows expressed in Nepali rupees, such as -
   i. Instruments like bonds, deposits, and other fixed-income assets,
   ii. Loans and mortgages, and

b. No reliable market prices observed in a deep, liquid and transparent financial markets, or there are no other similar assets whose price can be used as reference.

Here, the term 'predefined' means that there is no option embedded in the asset, and the amount and timing of the cash flow does not depend on any feature, other than the capacity of the counterpart to meet its commitments.

(2) According to the Discounted Cash Flow method, the value of an asset at the valuation date is the present value of all anticipated future cash flows generated by that asset. Mathematically, the present value (PV) of an asset is given by –

$$PV = \sum_{t} \frac{CF_t}{(1 + r_t)^t}$$

Where,

- CF_t represents the cash flow at time t
- r_t represents the discount rate for cash flow at time t

(3) DCF modelling of asset involves the following key components –

a. **Anticipated Cash Flows and Timing of Cash Flows**

The Discounted Cash Flow model relies on projected cash flows. The cash flows anticipated to be generated by the investment being valued shall be projected accurately in terms of both the magnitude and timing of cash flows. All cashflows expected from the asset shall be incorporated into the model used for valuation, such as Interest receivables from the term deposits.

b. Appropriate Discount rate

Discount Rate is one of the sensitive variables in the DCF model. Insurers may use the risk-free rate (RFR), increased with adequate credit spread according to the credit quality of the assets, as the discount rate.

(4) **Risk-free rate (RFR)** –

a. Due to the lack of developed secondary market and lack of available market information in the Nepalese financial sector, the risk-free rate to be used for the valuation of technical provisions of the Nepalese insurance sector has been derived using the methodology approved by NIA.

b. Insurers may value the assets under DCF method by discounting the cash flows using these rates, increased with an adequate spread according to the asset class.

c. The assumption of uniform distribution of cash flows during each future year, is not relevant for the valuation of investments. Therefore, the actual value of cash flows with different time horizons shall be calculated with their respective discount factors.

d. Insurers shall transform the interest rates that NIA publishes into discount rates considering the term of each cash flow of the investment.

e. Insurers have the freedom to select the intra-annual interpolation method among those available in financial markets praxis, provided that the interpolated intra-annual interest rates are financially consistent with the risk-free interest rate plus relevant credit spreads, and it is verified that the interpolation methodology does not jeopardize a reliable solvency value of the assets. Additional details about the interpolation methodologies have been provided in Annexure II.

(5) **Credit spread** –

a. The credit spread is allowance for the credit risk of an asset, and accounts for the expected defaults as well as the expected cost of downgrade.

b. Under the DCF method, the spreads derived according to the methodology approved by NIA are admissible to carry out a Mark-to-Model Valuation of that asset.

However, insurers having fully implemented Own Risk Solvency Assessment (ORSA) may determine the relevant spreads provided that –

i. the calculation is based on internationally accepted criteria and is documented and approved by the Board of the insurers,

ii. there shall be an annual review by an independent person of the appropriateness of the methodology and its outcomes when applied to the assets of the insurer, and

iii. internal audit verifies that the outcomes are monitored, controlled and reported according to ORSA policy and any other internal rule of functioning of the entity.

c. The spreads are calculated separately for financial counterparties and for non-financial counterparties, and within each of them for different credit quality classes.

Financial counterparty and non-financial counterparty

d. Financial counterparty refers to any counterparty that is primarily involved in financial activities and providing financial services such as lending, investing or managing funds. Examples include Banks, Insurance companies, Investment firms, etc.

e. Non-financial counterparty refers to any counterparty that is not primarily engaged in financial activities and providing financial services, such as natural person like employee, agent, policyholder, etc.

Stressed spreads that NIA publishes shall apply to the valuation of assets in the scenarios considered for the calculation of the interest rates risk charge. The stressed spreads in the tables have been calculated by increasing/decreasing the non-stressed spreads by 30 percent. For simplicity and given that the spreads are calculated as a multiple of the simple average of Chinese fundamental spreads of 1 to 10 years terms, a uniform 30 per cent spread stress is applied to all maturities and spreads, considering that 30% is the stress set out for central tranche of maturities (5 to 7 years).

(6) Insurers shall disclose the details of Mark-to-Model Valuation using the discounted cash flow (DCF) approach for each type of asset in the model documentation as per guideline (4) above, including the description of the cash flow structure, and any simplifying assumptions used.

(7) **Duration of the asset -**

Financial duration of the asset may be calculated under the discounted cash flow approach as follows:

$$Duration = \frac{\sum_t (PV_t) * t}{PV},$$

Where,

$PV = \sum_t PV_t$

and $PV_t = \sum_t \frac{CF_t}{(1+r_t)^t}$

The duration as defined above is the Macaulay Duration which refers to the weighted average of the time to future cash flows generated by an asset. Macaulay Duration is always less than or equal to the asset's maturity.

There are other approaches to measure the duration according to the features of the asset, such as the option adjusted duration, which is a more appropriate approach for assets with certain embedded options.

Annexure II

Interpolation of zero-coupon spot rates

(8) A continuous yield curve allows for the computation of discount factors for any future date. Insurers may choose among different interpolation methods based on objective and rational criteria. Some commonly used interpolation methods are described below. However, insurers are free to use any other interpolation method prevalent in financial market practice, provided that the chosen method ensures financial consistency of the intra-annual interpolated rate with the annual rates that NIA publishes.

The selection of the interpolation method shall consider the level of complexity of the assets to value, providing a sensible trade off among accuracy and burden of calculation and application of the intra-annual interpolated interest rates.

A. **Linear Interpolation**

Linear interpolation assumes a linear relationship between the unknown rate and the known rates.

- **Linear on the spot rate method**

  Linear on the spot rate method is the simplest method of interpolation. It simply connects two known zero-coupon spot rates with a straight line. However, this approach results in a non-smooth curve and discontinuous forward rates, which may limit its accuracy. A known drawback is that forward rates exhibit jumps at the interpolation points.

  Using this interpolation method, the interpolated monthly zero-coupon spot rate, for nth month in year t is given by –

$$r_{t-1+\frac{n}{12}} = r_{t-1} + \frac{r_t - r_{t-1}}{t-(t-1)} * \frac{n}{12}$$

  Where,

  r_{t-1} is the annual zero-coupon spot rate for term $(t-1)$ year

  r_t is the annual zero-coupon spot rate for term (t) year

- **Piece-wise Constant Forward rate Interpolation**

  Piecewise constant forward rate interpolation, also referred to as forward interpolation, involves linear interpolation on the logarithm of discount factors. This method assumes that forward rates remain constant between two observed maturities.

  It avoids forward rate jumps at coupon dates, making it suitable for cash flow valuation, especially for floating-rate instruments.

Using this interpolation method, the interpolated monthly zero-coupon spot rate, for nth month in year t is given by –

$$r_{t-1+\frac{n}{12}} = \left[(1 + r_{t-1})^{t-1} * exp\left(f_{t-1,1} * \frac{n}{12}\right)\right]^{\frac{1}{t-1+\frac{n}{12}}} - 1$$

Where,

r_{t-1} is the annual zero-coupon spot rate for term $(t-1)$ year

$f_{t-1,1}$ is the continuous one-year forward rate for term $(t-1)$ to (t) year, which may be calculated as-

$$f_{t-1,1} = \ln\left(1 + \left(\frac{(1+r_t)^t}{(1+r_{t-1})^{t-1}} - 1\right)\right)$$

Other linear interpolation methods include linear on discount factors, linear on logarithm of discount rates, linear on the forward rate, etc.

B. <u>Non-Linear Interpolation</u>

There are several non-linear interpolation methods, which provide smoother and more realistic yield curves. These include Cubic Spline Interpolation, Quartic Splines Interpolation, Monotone or Hermite Cubic Spline Interpolation, and Nelson-Siegel Method. These approaches are typically used when a smooth forward rate curve is desired or when modeling more complex term structures.

Annexure III

Template of Investment Details

A. Template for details of investment in Time deposits and Bonds

ST03.02A - Details of Assets valued using Mark-to-Model approach- Time Deposits and Bonds	
Name of the insurer/ reinsurer	
Valuation Date	
Type of asset	Time deposits and Bonds

Column Number	Column Heading
C0001	Unique ID
C0002	Type of Asset
C0003	Sub-type of asset
C0004	ID of Asset
C0005	Name of the exposure
C0006	Amount of investment (Face Value)
C0007	Date of Investment
C0008	Date of Maturity
C0009	Term of Investment
C0010	Interest Rate
C0011	Interest Payment Frequency
C0012	Credit Quality
C0013	Asset Class
C0014	Financial / Non-financial entity
C0015	Time of Cash flow
C0016	Description
C0017	Valuation - Baseline
C0018	Valuation - Stress Up scenario
C0019	Valuation - Stress Down scenario
C0020	Duration

B. Template for details of investment in Loans

ST03.02B - Details of Assets valued using Mark-to-Model approach- Loans	
Name of the insurer/ reinsurer	
Valuation Date	
Type of asset	Loans

Column Number	Column Heading
C0001	UniqueID
C0002	Sub-type of asset
C0003	ID of Asset
C0004	Name of the exposure
C0005	Original Loan Amount
C0006	Outstanding Loan Amount
C0007	Loan date
C0008	Date of Maturity
C0009	Term of Loan
C0010	Interest Rate
C0011	Payment Frequency
C0012	Credit Quality
C0013	Asset Class
C0014	Financial / Non-financial entity
C0015	Time of Cash flow
C0016	Description
C0017	Valuation - Baseline
C0018	Valuation - Stress Up scenario
C0019	Valuation - Stress Down scenario
C0020	Duration

Annexure IV

Loans on Policies

(9) Assets shall be valued at market value in the solvency balance sheet. Where the loans on policies are valued in financial statements based on Nepal Financial Reporting Standards (NFRS) at fair value, that fair value may be used for solvency purposes.

(10) The outstanding loan amount is not an acceptable valuation for solvency purposes, except for loans with a maturity of less than one year.

(11) In the absence of a directly observable market value and where no similar asset with a directly observable market value exists for reference, loans on policies may be valued using the Mark-to-Model Valuation approach. For policy loans, this typically involves:

a. Projecting the future cash flows (repayment of loan principal and interest) from the loan, and

b. Discounting those cash flows using credit risk-adjusted discount rate (risk-free rate + adequate credit spread) to determine the present value. To achieve an economic valuation, the credit risk adjustment of a loan on policies needs to consider the technical provisions that may be applied without any restriction to recover the outstanding amount of the loan on policies.

(12) **Assumptions and Methods-**

a. The assumptions and methods used for the valuation of loans on policies shall be certified by the Appointed Actuary of the insurer.

b. Policyholder behavior shall be given due consideration when determining the value of loans on policies. For simple portfolios with predictable policyholder behavior, deterministic valuation methods may be used. For complex portfolios involving higher uncertainty about the policyholder behavior, stochastic modelling approaches should be considered where appropriate. Assumptions regarding mortality rates, lapse/surrender rates, loan prepayment rates, etc. shall also be incorporated into the valuation model, applying the proportionality principle.

c. The values of parameters related to assumptions of policyholder behavior shall be based on the insurer's experience study, where available. If a reliable experience study is not available, the values may be based on the industry study, if available and appropriate. If neither is available, the values may be derived from published rates, appropriately modified for Nepalese lives, or on the bases used for pricing the product.

d. Key assumptions and methods used for the valuation of loans on policies shall be consistent with those used for the valuation of technical provisions for the underlying policies against

which the loan has been issued. Any inconsistency shall be clearly explained in the Valuation Note by the Appointed Actuary.

(13) **Duration of loans on policies**

a. Where the entity has enough experience on anticipated termination of policyholder loans, the duration shall be assessed considering the lifetime of the policyholder loan established in the loan contract and the cash flows agreed for the reimbursement of the loan, reduced with a reliable estimate of the anticipated termination.

b. Where the entity has not reliable experience on anticipated termination of the policyholder loans, the duration shall be assessed considering the lifetime of the policyholder loan established in the **loan contract** and the cash flows agreed for the reimbursement of the loan, without any adjustment.

c. Where the loan contract does not specify an end date, the duration of the loan shall be assessed according to the experience of the entity about the redemption of the policyholder loans.

(14) **Credit Quality and Reporting of loans on policies in the template 03.02**

a. The loans on policies shall be valued by considering the sum of risk-free rate and the credit spread applicable to "AAA" rated instruments as the discount rate. This is a pragmatic approach and aims to avoid the circularity in valuation of policy loans.

b. Loans on policies shall be reported in the template 03.02 as following –

   i. Loans on policies **not exceeding** the corresponding technical provision for each loan and loans on policies **exceeding** the corresponding technical provision for each loan shall be **reported separately**.

   ii. Policy loans not exceeding technical provisions (i.e. having valuation lower than or equal to the technical provisions) with the same duration rounded in years shall be reported in a single row, and as "AAA" rated.

   iii. For policy loans exceeding technical provisions (i.e. having valuation higher than the technical provisions),

      1. the amount of solvency value of the loan lower than or equal to the technical provisions shall be reported in separate rows (grouped by duration rounded in years), and as "AAA" rated.

2. the amount of solvency value of the loan in excess of technical provisions shall be reported in separate rows (grouped by duration rounded in years), and as belonging to credit quality step 5,

iv. To appropriately capture the interest rates risk that the entity is exposed to, it is necessary to recalculate the value of the policyholder loans both in the upwards and in the downwards scenario, and separately to recalculate the solvency valuation of the technical provisions. The change of value of policyholder loans may not offset the changes in the valuation of technical provisions, because of their different duration, furthermore than the case where the amount of the loan is different from the valuation of the technical provision that collateralizes such loan.

v. The valuation of loans on policies in stressed scenarios may be reported in sheet 03.02 in separate rows on a pro-rata basis, ensuring that overall impact of the change in interest rate under each of the scenarios is not understated.

(15) **Risk Mitigating Instrument**

The technical provisions that may be offset against the loans without any restriction shall be reported as a risk mitigating instrument with AAA rating. The part of technical provisions considered as a mitigating instrument shall not exceed the solvency valuation of the loan.

No capital charge is applied net of risk mitigation for the part of loan that is covered by the technical provisions.

(16) **Sample of Reporting Loans on Policies in 03.02**

Consider that the insurer has issued the following four policy loans. The amounts determined as per the mark-to-model valuation have been shown below –

(Amounts just for illustrative purposes)

Policy	Solvency Valuation	Stressed up valuation	Stressed down valuation	Duration	Technical Provision	Solvency Valuation exceeding technical provisions ?	Amount in excess of technical Provision	Amount not exceeding technical Provisions
A	115,000	104,551	123,500	5	101,525	Yes	13,475	101,525
B	229,890	212,574	249,182	4	198,750	Yes	31,140	198,750
C	517,255	478,292	560,659	4	611,005	No	-	517,255
D	287,365	265,717	311,477	4	297,850	No	-	287,365

These may be reported in sheet 03.02 as follows in accordance with the provisions set out in para (14) above –

i. **Loans on policies not exceeding the corresponding technical provision** for each loan are reported in separate rows grouped as per the rounded duration and as "AAA" rated. Therefore, policy C and D are grouped and reported in a separate row as "AAA" rated.

ii. The amount of solvency valuation **not exceeding technical provisions**, for **loans on policies exceeding the corresponding technical provision**, are reported in a separate row grouped as per the rounded duration. So,

   a) the amounts not exceeding technical provisions for loan A are reported in a separate row as "AAA" rated, and

   b) the amounts not exceeding technical provisions for loan B are reported in a separate row as "AAA" rated.

iii. The amount of solvency valuation **in excess of technical provisions**, for **loans on policies exceeding the corresponding technical provision**, is reported in a separate row grouped as per the rounded duration. So,

   a) the amounts exceeding technical provisions for loan A are reported in a separate row as belonging to credit quality step 5, and

   b) the amounts exceeding technical provisions for loan A are reported in a separate row as belonging to credit quality step 5.

iv. The technical provisions that may be offset against the loans are reported as a risk mitigating instrument with AAA rating.

Example of reporting is shown in the following table.

Columns omitted in the example should be filled in according to the features of each reporting entity.

SN	1	2	3	4	5
Name of the exposure	Loans on Policies – Solvency Valuation not exceeding Technical provisions [Duration 4]	Loans on Policies - Solvency Valuation exceeding Technical provisions [Duration 4]	Loans on Policies - Solvency Valuation exceeding Technical provisions [Duration 4]	Loans on Policies - Solvency Valuation exceeding Technical provisions [Duration 5]	Loans on Policies - Solvency Valuation exceeding Technical provisions [Duration 5]
Total valuation for solvency purposes	804,620.00	198,750.00	31,140.00	101,525.00	13,475.00
Valuation stress interest rates up	744,009.00	183,779.56	28,794.44	92,300.35	12,250.65
Valuation stress interest rates down	872,136.00	215,428.78	33,753.22	109,029.02	14,470.98
Duration	4	4	4	5	5
Credit quality	AAA or equivalent	AAA or equivalent	BB or equivalent	AAA or equivalent	BB or equivalent
Asset class / subclass para (39)	1	1	5	1	5
Provider of the credit quality of the asset owned by the reporting entity	Unrated	Unrated	Unrated	Unrated	Unrated
Capital requirement total solvency value	17,702.00	4,373.00	3,130.00	2,741.00	1,550.00

Risk mitigating	Technical provisions loans on policies	Technical provisions loans on policies	None	Technical provisions loans on policies	None
Type of collateral / guarantor	Technical provisions loans on policies	Technical provisions loans on policies		Technical provisions loans on policies	
Average credit quality Collateral or Guarantor	AAA or equivalent	AAA or equivalent		AAA or equivalent	
Credit quality collateral or guarantor	1	1		1	
Provider of the credit quality of the collateral or guarantor	Unrated	Unrated		Unrated	
Market value collaterals (considering credit risk adjustment)	804,620.00	198,750.00		101,525.00	
Percentage collaterals/guarantees with asset class worse than 4					
Exposure covered with admissible collaterals / guarantor (credit risk adjusted)	804,620.00	198,750.00		101,525.00	
Capital requirement original exposure reduced with admissible mitigation	(17,702.00)	(4,373.00)		(2,741.00)	
Capital requirement corresponding to the mitigating instruments (only if admissible)					
Capital charge net mitigation (adding the requirement related to mitigating instruments)			**3,130.00**		**1,550.00**