



BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Risk-Based Capital Framework for Takaful Operators

Applicable to:

1. Licensed takaful operator
2. Professional retakaful operator

Issued on: 31 May 2017

BNM/RH/PD 033-4

Table of Contents

PART A	OVERVIEW.....	1
1.	Introduction	1
2.	Principles	3
3.	Legal Provision	3
4.	Applicability	3
5.	[Deleted]	4
6.	Effective Date.....	4
PART B	CAPITAL ADEQUACY	5
7.	Capital Adequacy Ratios (CAR).....	5
8.	Total Capital Required (TCR).....	6
9.	Total Capital Available (TCA).....	7
10.	Valuation of Assets and Liabilities.....	10
PART C	COMPONENTS OF CAPITAL REQUIRED TO MITIGATE MAJOR RISKS.....	11
11.	Capital Charges for Credit Risk (CRCC).....	11
12.	Capital Charges for Market Risk (MRCC)	11
13.	Capital Charges for General Takaful Liabilities (GCC).....	12
14.	Capital Charges for Family Takaful Liabilities (FCC)	13
15.	Capital Charges for Shareholders' Fund Expense Liabilities (ECC).....	14
16.	Capital Charges for Operational Risk (ORCC).....	16
17.	Surrender Value Capital Charges (SVCC).....	16
PART D	CAPITAL ADEQUACY POSITION REPORTING.....	18
18.	Supervisory Target Capital Level (STCL)	18
19.	Individual Target Capital Level (ITCL).....	18
20.	Restrictions on payment of Dividends.....	21
PART E	CAPITAL ADEQUACY POSITION REPORTING SUBMISSION ...	22
	APPENDICES.....	23
APPENDIX I	Credit Risk Capital Charges	23
APPENDIX II	Market Risk Capital Charges.....	37

APPENDIX II (a)	Illustration on Capital Computation for a licensed takaful operator with Derivatives Position	54
APPENDIX III	Investment and Individual Counterparty Limits	56
APPENDIX IV	Risk Charges for Liabilities of General Takaful Business	60
APPENDIX V	Stress Factors for Liabilities of Family Takaful Business	61
APPENDIX VI	Risk Charges and Rating Categories	62
APPENDIX VII	Guidance Notes on Completion of Reporting Forms for the Framework	63

PART A OVERVIEW

1. Introduction

- 1.1 The Risk-Based Capital Framework for Takaful Operators (Framework) sets Bank Negara Malaysia (the Bank)'s expectation for licensed takaful operator's maintenance of capital adequacy level to commensurate with the risk profile of the takaful operations and act as financial buffer for the takaful exposure. This Framework aims to achieve the following objectives:
- (a) enable all obligations under a takaful contract to be met;
 - (b) provide flexibility for a licensed takaful operator to operate at different risk levels in line with its business strategies, so long as it holds appropriate level of capital and observes prudential safeguards; and
 - (c) ensure the development of strong takaful industry that promotes public confidence and contributes to the overall financial system stability.
- 1.2 This Framework has been developed based on a standardised approach to be applied by all licensed takaful operators. A primary consideration in this Framework's development is the fiduciary duties of the licensed takaful operator towards the participants to ensure appropriate management of the takaful funds and the overall takaful business operations, in line with the objective of Shariah. In particular, this Framework is designed to ensure that a licensed takaful operator has an appropriate amount of capital to meet the responsibility to provide for the costs of running the takaful operations as well as the potential interest-free loan (qard) in the unlikely event of deficit in the takaful funds.
- 1.3 This Framework also recognises the ownership and obligations of the various funds in the takaful operations, as well as the extent to which the funds are impacted by the different risks involved in the takaful operations. This Framework is designed with the following considerations in determining the capital adequacy position for a licensed takaful operator:
- (a) the capital required for shareholders' fund is reflective of the risks directly borne by the licensed takaful operator, whilst the capital required for

individual takaful fund is reflective of the risks borne by those takaful funds. For a takaful fund, where the capital required is not adequately covered by capital available within that takaful fund, the excess capital required is a proxy for the potential qard that may need to be extended by the licensed takaful operator in the future; and

- (b) the capital available in the shareholders' fund is fully available to support risks borne by the licensed takaful operator as well as the potential qard to the takaful funds as proxy by the excess capital required for the takaful funds. The capital available in a takaful fund is available only to meet the risks of the takaful fund itself and acts to reduce the potential qard that may need to be extended by the licensed takaful operator in the future.

To this effect, this Framework recognises that a lower amount of capital available needs to be held by shareholders to support potential qard obligations where takaful funds are stronger and have its own resources.

1.4 This Framework sets out the:

- (a) manner to compute capital adequacy position of the licensed takaful operator, including the components of capital eligible for recognition in the computation as well as the applicable risk charges for each risk exposure;
- (b) expectation for a licensed takaful operator to meet Supervisory Target Capital Level;
- (c) expectation for a licensed takaful operator to set and measure Individual Target Capital Level that reflects the risk profile and risk management practices of a licensed takaful operator;
- (d) possible actions that can be taken by the Bank in cases of breach of the Supervisory Target Capital Level and Individual Target Capital Level; and
- (e) prudential limits for investment and individual counterparty limits.

1.5 The adoption and effective implementation of sound risk management practices and market conduct governance within a licensed takaful operator by the board of directors and senior management of a licensed takaful operator is key in supporting the implementation of this Framework.

2. Principles

- 2.1 This Framework has been developed based on the following principles:
- (a) ensure compliance with Shariah;
 - (b) provide better alignment of risk and reward objectives of a licensed takaful operator consistent with its fiduciary duty to manage the takaful business in a sound manner;
 - (c) provide incentive for a licensed takaful operator to manage business in a risk-focused manner and adopt prudent practices;
 - (d) provide an early warning signal on the deterioration in capital adequacy level, hence allowing prompt and pre-emptive actions to be taken by a licensed takaful operator and supervisor;
 - (e) promote transparency as a means to protect the interests of participants; and
 - (f) reduce opportunities for regulatory arbitrage within the financial sector.

3. Legal Provision

- 3.1 This Framework is issued pursuant to sections 57 and 155 of the Islamic Financial Services Act 2013 (IFSA).

4. Applicability

- 4.1 This Framework is applicable to all licensed takaful operators, including professional retakaful operators, for business generated from within and outside Malaysia. Unless otherwise stated, the term 'licensed takaful operator' in this Framework includes a professional retakaful operator.
- 4.2 This Framework is applied to takaful business generated outside Malaysia to mitigate the risks of losses that may arise from the foreign business that would adversely affect the capital adequacy position of the licensed takaful operator and compromise the licensed takaful operator's ability to meet its obligations to participants and beneficiaries in Malaysia.

- 4.3 Business outside Malaysia generated by a branch of a foreign (re)takaful operator/(re)insurer operating in Malaysia may be exempted from this Framework, subject to the Bank's prior approval if:
- (a) there is an explicit undertaking from the branch's head office to satisfy the liabilities arising from businesses outside Malaysia in the event that the branch is unable to fulfil its obligations;
 - (b) strong financial position of the foreign branch's group;
 - (c) the branch is subjected to consolidated supervision by a recognised and competent home supervisory authority; and
 - (d) the foreign retakaful operator/reinsurer's home supervisory authority is willing to cooperate with the Bank in the supervision of the retakaful operator/reinsurer.

5. [Deleted]

6. Effective Date

- 6.1 This Framework which was first issued on 30 October 2012, continues to be applicable to licensed takaful operators. Issuance of this Framework under sections 57 and 155 of the IFSA takes effect from 1 June 2017. Licensed takaful operators are required to continue complying with this Framework.

PART B CAPITAL ADEQUACY

7. Capital Adequacy Ratios (CAR)

7.1 A licensed takaful operator shall compute the CAR as follows:

$$CAR = \frac{\text{Total Capital Available}}{\text{Total Capital Required}} \times 100\%$$

7.2 The CAR serves as key indicator of a licensed takaful operator's financial resilience and its ability to support the takaful business. It will be used as an input to determine the appropriate level of supervisory intervention by the Bank.

7.3 A licensed takaful operator shall compute the Total Capital Available and Total Capital Required in accordance with the requirements stipulated in paragraphs 8 to 10.

7.4 A licensed takaful operator shall compute and report their CAR at a more granular level where it is required by the Bank.

8. Total Capital Required (TCR)

8.1 The TCR shall be determined as follows:

$$TCR = \sum_{all\ i} \left[\text{Max} [\text{Surrender value capital charges}_{Takaful\ Fund\ i}, \text{Capital Required}_{Takaful\ Fund\ i}] + \text{Max} [\text{Surrender value capital charges}_{Shareholders'\ Fund}, \text{Capital Required}_{Shareholders'\ Fund}] \right]$$

where:

- 'i' refers to each takaful fund established by a licensed takaful operator, as per the fund segregation requirements stipulated in *Guidelines on Takaful Operational Framework*, unless specified otherwise by the Bank as part of supervisory assessment;
- 'Capital Required_{Takaful Fund i}' refers to Σ (credit risk capital charges + market risk capital charges + takaful liabilities risk capital charges) for takaful fund i; and
- 'Capital Required_{Shareholders' Fund}' refers to Σ (credit risk capital charges + market risk capital charges + expense liabilities risk capital charges + operational risk capital charges) for shareholders' fund.

8.2 A licensed takaful operator shall compute the TCR for each takaful fund and the shareholders' fund.

8.3 For takaful funds, the credit, market and takaful liabilities risk charges are applicable to the Participants' Risk Fund (PRF) only.

8.4 For the computation of operational risk capital charges, a licensed takaful operator shall take into account all the assets of the takaful funds including assets of the Participants' Investment Fund and assets of the shareholders' fund.

8.5 A licensed takaful operator shall apply the individual capital charges as per Part C of this Framework.

9. Total Capital Available (TCA)

9.1 A licensed takaful operator shall determine the TCA as follows:

$$TCA = \text{Capital Available}_{\text{Shareholders' Fund}} + \sum_{\text{all } i} \text{Min} [\text{Capital Available}_{\text{Takaful Fund } i}, 130\% \text{ of Max} (\text{Surrender value capital charges}_{\text{Takaful Fund } i}, \text{Capital Required}_{\text{Takaful Fund } i})]$$

where 'i' refers to each takaful fund established by a licensed takaful operator, as per the fund segregation requirements stipulated in *Guidelines on Takaful Operational Framework*, unless specified otherwise by the Bank as part of supervisory assessment.

9.2 The TCA considers in totality the capital available in the shareholders' fund as they are fully available to support the risks of the business or to give a qard to the PRFs when needed. Where takaful funds have their own capital, the support needed from the shareholders' fund or the potential for the shareholders' fund to give a qard is reduced. As such, the TCA allows the capital available in the takaful funds to also be recognised to reflect the reduced burden on the shareholders' fund. However, the recognition is limited to meeting the individual takaful fund's own capital required or surrender value capital charges (whichever is higher) with an additional 30% buffer to meet the Supervisory Target Capital Level requirement (see paragraph 18 on Supervisory Target Capital Level). The limitation in the recognition is set to reflect the inability for a licensed takaful operator to use the capital available of the takaful fund to meet the risks of other than that of the takaful fund itself.

9.3 The capital available of a licensed takaful operator shall be the aggregate of Tier 1 and Tier 2 capital of the licensed takaful operator less the deductions in paragraph 9.9. The total amount of Tier 2 capital of a licensed takaful operator shall not exceed the amount of Tier 1 capital.

- 9.4 Tier 1 capital of a licensed takaful operator shall include the aggregate of any of the following:
- (a) issued and fully paid-up ordinary shares;
 - (b) share premiums;
 - (c) paid-up non-cumulative irredeemable preference shares;
 - (d) capital reserves;
 - (e) retained profits¹; and
 - (f) the valuation surplus² maintained in the takaful funds.
- 9.5 Capital instruments which qualify as Tier 2 capital shall include any of the following:
- (a) cumulative irredeemable preference shares;
 - (b) mandatory³ capital loan stocks and other similar capital instruments;
 - (c) irredeemable subordinated debts;
 - (d) available-for-sale reserves⁴;
 - (e) revaluation reserves for self-occupied properties and other assets;
 - (f) general reserves;
 - (g) subordinated term debts; and
 - (h) qard from shareholders' fund⁵.
- 9.6 Subordinated term debts shall be subject to the prior approval of the Bank on a case-to-case basis, may include term debt and limited life redeemable preference shares which satisfy the following conditions:
- (a) unsecured, subordinated and fully paid-up;
 - (b) a minimum original fixed term to maturity of five years;
 - (c) early repayment or redemption shall not be made without prior consent of the Bank;

¹ In the event that a licensed takaful operator has accumulated losses, the losses shall be deducted from the capital.

² Gross of deferred tax, if any.

³ Refers to irredeemable loans stocks or capital instruments which are mandatorily convertible to equity.

⁴ In the event that a licensed takaful operator has fair value losses for available-for-sale instruments, the losses shall be deducted from the capital.

⁵ To be considered as capital of the relevant takaful fund that received the qard.

- (d) the instruments shall be subjected to straight line amortisation over the last five years of their life⁶;
 - (e) there shall be no restrictive covenants; and
 - (f) the amount eligible for inclusion shall not exceed 50% of Tier 1 capital. In exceptional cases, this limit may be exceeded with the prior written consent of the Bank.
- 9.7 The main criteria used in the classification of a capital element into either Tier 1 or Tier 2 shall be the degree of its permanence and whether it is free and clear of any encumbrances.
- 9.8 A licensed takaful operator that plans to issue any new capital instruments is required to seek the Bank's prior written approval on the classification of the instruments under this Framework.
- 9.9 For the purpose of calculating CAR, the following deductions shall be made by a licensed takaful operator from the aggregate of Tier 1 and Tier 2 capital to arrive at the TCA:
- (a) goodwill and other intangible assets (e.g. capitalised expenditure) of the licensed takaful operator;
 - (b) deferred tax income or deferred tax expenses and deferred tax assets of the licensed takaful operator;
 - (c) assets pledged to support credit facilities obtained by the licensed takaful operator or other specific purposes;
 - (d) investment in the licensed takaful operator's subsidiaries;
 - (e) qard to takaful fund (in respect of shareholders' fund); and
 - (f) all credit facilities granted by the licensed takaful operator which are secured by its own shares.

⁶ E.g. a subordinated term debt with original term to maturity of 7 years and remaining term of 2 years, will be recognised as Tier 2 capital only up to 40% (since only 2 out of 5 years are remaining) of the issued amount.

10. Valuation of Assets and Liabilities

- 10.1 For the purpose of this Framework, a licensed takaful operator shall value its assets and financial liabilities in accordance with the requirements of the *policy document on Financial Reporting for Takaful Operators*.
- 10.2 A licensed takaful operator carrying on general takaful business shall value its contribution liabilities, claims liabilities and expense liabilities in accordance with the *Guidelines on Valuation Basis for Liabilities of General Takaful Business*.
- 10.3 A licensed takaful operator carrying on family takaful business shall value its family takaful fund liabilities and expense liabilities in accordance with the *Guidelines on Valuation Basis for Liabilities of Family Takaful Business*.

PART C COMPONENTS OF CAPITAL REQUIRED TO MITIGATE MAJOR RISKS

11. Capital Charges for Credit Risk (CRCC)

11.1 A licensed takaful operator shall compute CRCC as follows:

$$CRCC = \sum_{all\ i} [exposure\ to\ counterparty\ i \times credit\ risk\ charge\ i]$$

where 'i' refers to the different exposures to counterparties in the respective takaful funds and shareholders' fund.

11.2 The CRCC aim to mitigate a licensed takaful operator's risks of losses resulting from asset defaults, related losses of income and the inability or unwillingness of a counterparty to fully meet its contractual financial obligations.

11.3 A licensed takaful operator shall apply the CRCC as set out in Appendix I.

12. Capital Charges for Market Risk (MRCC)

12.1 A licensed takaful operator shall compute MRCC as follows:

$$MRCC = \sum_{all\ i} [market\ exposure\ i \times market\ risk\ charge\ i]$$

where 'i' refers to the different asset classes in the respective takaful funds and shareholders' fund.

12.2 The MRCC aim to mitigate risks of financial losses arising from:

- (a) the reduction in the market value of assets due to exposures to equity, profit rate, property and currency risks;
- (b) non-parallel movements between the value of liabilities and the value of assets backing the liabilities due to profit rate movements (i.e. the profit rate mismatch risk); and

(c) its concentration of exposures to particular counterparties or asset classes as described in paragraph 9 of Appendix II.

12.3 The MRCC for profit rate mismatch risk shall be applicable only for family takaful funds, general takaful funds where the takaful liabilities are discounted and shareholders' fund of a licensed takaful operators conducting:

- (a) composite business;
- (b) family takaful business only; or
- (c) general takaful business only, where the liabilities are discounted.

12.4 A licensed takaful operator shall apply the MRCC as set out in Appendix II.

13. Capital Charges for General Takaful Liabilities (GCC)

13.1 A licensed takaful operator shall compute GCC as follows:

$$\begin{aligned}
 \text{GCC} &= \sum_{\text{all } i} [\text{Capital charge for claims liabilities } i] + \\
 &\quad [\text{Capital charge for contribution liabilities } i] \\
 &= \sum_{\text{all } i} [\text{Value of claims liabilities } i \times \text{risk charge } i] + \\
 &\quad [\text{Value of provision for unexpired risk } i \times \text{risk charge } i]
 \end{aligned}$$

where

- 'i' refers to the different classes of general takaful business; and
- 'Claims liabilities' and 'Provision for unexpired risk (URR)' refers to the value determined in accordance to paragraph 10.2 at 75% confidence level.

13.2 Where a licensed takaful operator holds the provision for unearned contribution (UCR) as the value of its contribution liabilities, a licensed takaful operator may use the following formula to recognise a lower capital charge for contribution liabilities:

Capital charge for contribution liabilities i

$$= \text{Max} [0 , (\text{Value of URR } i \times \text{risk charge } i) - (\text{Value of Contribution liabilities } i - \text{Value of URR } i)]$$

where

- 'i' refers to the different classes of general takaful business; and
- 'Contribution liabilities' refers to the value determined in accordance to paragraph 10.2.

13.3 For a licensed takaful operator carrying on general takaful business, the GCC aim to address its risks of under-estimation of the general takaful liabilities and adverse claims experience, over and above the amount of provision already provided for at the 75% confidence level.

13.4 A licensed takaful operator shall apply the GCC as set out in Appendix IV.

14. Capital Charges for Family Takaful Liabilities (FCC)

14.1 A licensed takaful operator shall compute FCC other than for family takaful certificates which are covered under paragraph 14.5 below, as follows:

$$FCC = (V^* - \text{Value of family takaful liabilities})$$

where

- 'V*' is the adjusted best estimate value of family takaful liabilities computed using the stress factors stipulated in Appendix V; and
- 'Value of family takaful liabilities' as determined in accordance to paragraph 10.3 at 75% confidence level.

14.2 For a licensed takaful operator carrying on family takaful business, the FCC aim to address the risk of under-estimation of the family takaful liabilities and adverse claims experience, over and above the amount of provision already provided for at the 75% confidence level.

- 14.3 A licensed takaful operator shall apply the stress factors for major risks inherent in family takaful liabilities as stipulated in Appendix V. Where the valuation assumptions are not separated according to the categories as stipulated in Appendix V, the stress factors for a licensed takaful operator to derive V^* in respect of the combined risk rates shall be the highest stress factors of the constituent risks as stipulated in the same appendix.
- 14.4 For products⁷ which have liabilities affected by risks other than those listed in Appendix V, the additional risks above the 75% confidence level shall be quantified and included by a licensed takaful operator in the determination of its Individual Target Capital Level as per Part D of this Framework.
- 14.5 For a short-term medical and health takaful standalone certificate or rider, as well as short-term personal accident plan for which contributions and claims liabilities have been provided for, the applicable risk charges shall correspond to that as stipulated for general takaful business in Appendix IV.

15. Capital Charges for Shareholders' Fund Expense Liabilities (ECC)

- 15.1 A licensed takaful operator shall compute ECC for general takaful business as follows:

$$ECC = \sum_{all\ i} Max [0 , (Ve^*_i - Value\ of\ provision\ for\ unexpired\ expense\ risk\ i)]$$

where

- 'i' refers to the different classes of general takaful business;
- 'Ve*' refers to the adjusted best estimate value of provision for unexpired expense risk (UER) computed using stress factor specified in paragraph 2 of Appendix IV; and
- 'UER' refers to the value determined in accordance to paragraph 10.2 at 75% confidence level

⁷ E.g. Products with investment guarantees that would have impact on the liabilities of a licensed takaful operator in adverse market or credit risk events.

15.2 Where a licensed takaful operator holds the provision for unearned wakalah fee (UWF) as its provision for expense liabilities for its general takaful business, the licensed takaful operator may use the following formula to recognise a lower ECC:

$$ECC = \sum_{all\ i} Max [0 , (Ve^*_{i} - Value\ of\ expense\ liabilities_{i})]$$

where

- 'i' refers to the different classes of general takaful business;
- 'Ve*' refers to the adjusted best estimate value of UER computed using stress factor specified in paragraph 2 of Appendix IV; and
- 'Value of expense liabilities' as determined in accordance to paragraph 10.2.

15.3 A licensed takaful operator shall compute ECC for family takaful business as follows:

$$ECC = \sum_{all\ i} (Ve^*_{i} - Value\ of\ expense\ liabilities_{i})$$

where

- 'i' refers to each family takaful certificate;
- 'Ve*' refers to the adjusted best estimate value of expense liabilities computed using parameters specified in Appendix V; and
- 'Value of expense liabilities' as determined in accordance to paragraph 10.3 at 75% confidence level.

15.4 The ECC aim to address the risk of under-estimation of expense liabilities and adverse experience of the expenses of the shareholders' fund, over and above the amount of provisions already provided for at the 75% level of confidence.

16. Capital Charges for Operational Risk (ORCC)

16.1 A licensed takaful operator shall compute ORCC as follows:

$$ORCC = 1\% \text{ of total assets of takaful business}$$

where 'total assets' refers to the assets of the takaful funds including assets of the Participants' Investment Fund, and assets of the shareholders' fund.

16.2 The ORCC aim to mitigate a licensed takaful operator's risk of losses arising from inadequate or failed internal processes, people and systems, in managing the takaful operations. The ORCC also include the risk of losses arising from non-compliance to Shariah and failure by a licensed takaful operator in executing its fiduciary duties.

17. Surrender Value Capital Charges (SVCC)

17.1 A licensed takaful operator shall compute SVCC as follows:

$$SVCC_i = \text{Max} [0, (\text{Aggregate surrender value of the business in force } i - \text{Provision for liabilities } i)]$$

where

- 'i' refers to shareholders fund and each family takaful fund established by a licensed takaful operator as per the fund segregation requirements stipulated in *Guidelines on Takaful Operational Framework*, unless specified otherwise by the Bank as part of supervisory assessment; and
- 'Provision for liabilities' refers to the value of family takaful fund liabilities and the value of expense liabilities as determined in accordance to paragraph 10.3.

17.2 For a licensed takaful operator carrying on family takaful business, the SVCC aim to address lapse risk in excess of the levels assumed in the calculation of provisions and risk margins, for family takaful funds and shareholders fund only.

- 17.3 A licensed takaful operator shall apply SVCC to products whose surrender values are contractually defined and/or created by reasonable expectation. The SVCC shall be calculated separately for each family takaful fund and shareholders' fund, where applicable.

PART D CAPITAL ADEQUACY POSITION REPORTING

18. Supervisory Target Capital Level (STCL)

- 18.1 A licensed takaful operator shall maintain their CAR above the STCL of 130%.
- 18.2 A licensed takaful operator operating below the STCL will attract stricter supervisory actions of increasing intensity. This may include business restrictions and/or restructuring measures, and potentially actions to resolve the financial position of a licensed takaful operator.
- 18.3 The STCL must be viewed as a benchmark against which a licensed takaful operator shall establish its own higher Individual Target Capital Level.

19. Individual Target Capital Level (ITCL)

- 19.1 A licensed takaful operator shall set an ITCL above the STCL that better reflects its overall risk tolerance and appetite set by the board of directors, its own risk profile and the quality of its risk management practices. The ITCL shall include additional capacity to absorb unexpected losses beyond those that are covered by this Framework where the risks are not included or are not adequately provided for (having regard to the quality of risk management of the licensed takaful operator) in the regulatory capital maintained under this Framework.
- 19.2 Additional risks that may be considered by a licensed takaful operator include liquidity risk, group risk, catastrophe (including environment) risk as well as the risk of the underestimation of liabilities that may result from guarantees provided by shareholders whether implicitly or explicitly, over and above the amount of provision already provided for at the 75% level of confidence.
- 19.3 The ITCL shall be derived through an iterative process of stress and scenario tests performed on a range of financial positions and corresponding capital

adequacy ratios, until a suitable target level is determined. The target level, i.e. the ITCL, shall be determined at the minimum, such that:

- (a) it takes into account plausible adverse scenarios that may arise over a one year time horizon;
- (b) if a licensed takaful operator has a CAR at the ITCL before the occurrence of selected plausible adverse scenarios, the licensed takaful operator is able to maintain a CAR above the STCL of 130% after the occurrence of those scenarios; and
- (c) it takes into account all changes in risk profile arising from the planned business and operational activities over the period of projection.

19.4 In setting the ITCL, the impact of the stress tests on the takaful fund and how this affects the financial position of a licensed takaful operator in relation to its ability to provide qard in the future shall be determined. Where a takaful fund has its own resources to meet the takaful fund's own obligations under the stressed scenario, there should not be additional capital required to be held by the shareholders' fund in relation to that takaful fund.

19.5 The ITCL is expected to be higher for a licensed takaful operator with higher risk profiles and/or weaker risk management practices, and where takaful funds have higher risk profiles and/or weaker financial strength. It is expected that for two licensed takaful operators of similar risk profiles and similar risk management practices, the ITCL will be lower for the licensed takaful operator whose takaful funds have higher amount of surplus in relation to the takaful fund's own risks.

19.6 The stress and scenario tests conducted to determine the ITCL shall meet the requirements of the *policy document on Stress Testing*. Where appropriate, the work done to fulfil the requirements of the *policy document on Stress Testing* can be modified to derive the ITCL.

- 19.7 A key area of the work done to fulfil the requirements of the *policy document on Stress Testing* which may require modification is that when using stress and scenario test to determine the ITCL, the impact of plausible adverse scenarios are tested on the ITCL instead of the actual capital level.
- 19.8 The approach for determining ITCL does not equate to an internal models framework. In an internal models framework, the capital requirement may be substituted with outputs of an approved internal model. The ITCL on the other hand, is set by considering how the capital requirements, as computed in accordance with this Framework, vary under plausible adverse scenarios. A licensed takaful operator may utilize appropriate models that have been developed internally for this purpose, where the output is expressed as plausible adverse scenarios for stress testing to determine the ITCL.
- 19.9 The board of directors shall be primarily responsible for setting the ITCL, and ensuring that a licensed takaful operator has in place a capital management framework that takes into account its strategic business direction and the changing business environment. The capital management framework shall at a minimum contain thresholds that will act as triggers for corrective actions to ensure maintenance of appropriate capital levels that are commensurate with the licensed takaful operator's risk profile at all times as well as detailing what those corrective actions are.
- 19.10 The ITCL shall provide a robust threshold in the management of a licensed takaful operator's capital adequacy, where a breach of this level shall trigger timely responses by management to restore capital to the ITCL (including restrictions on payment of dividends) and heightened board scrutiny. Any breach or potential breach of ITCL shall be reported to the Bank immediately.

19.11 The Bank will assess⁸ whether the ITCL is appropriate for a licensed takaful operator's risk profile, and on a case-by-case basis, may require an adjustment to the licensed takaful operator's ITCL and/or require the licensed takaful operator to compute and report their ITCL at a more granular level.

19.12 When a licensed takaful operator's CAR breaches its own ITCL but remains above the supervisory target, the licensed takaful operator will be subjected to the Bank's assessment on the circumstances of the breach and the licensed takaful operator's remedial plans to restore CAR above its ITCL, before deciding on the level of supervisory intervention required. Continued deterioration of a licensed takaful operator's CAR below its ITCL will attract increasing levels of supervisory attention.

20. Restrictions on payment of Dividends

20.1 All declarations and payments of any dividends are subject to the prior written approval of the Bank.

20.2 Before submitting an application for declarations and payments of any dividends, a licensed takaful operator must have assessed that its CAR:

- (a) is not below its Individual Target Capital Level; or
- (b) will not fall below its Individual Target Capital Level as a result of the payment of dividends.

⁸ Under the Risk-Based Supervisory Framework, the Bank will evaluate the inherent risks associated with a licensed takaful operator's significant activities, and the quality of risk management applied to mitigate those risks. This enables the Bank to assess the licensed takaful operator's overall net risk with respect to its current level of capital and earnings.

PART E CAPITAL ADEQUACY POSITION REPORTING SUBMISSION

- 21.1 A licensed takaful operator shall submit to the Bank their CAR computations based on the financial year end positions, within 90 days after the end of each financial year using the reporting forms specified by the Bank. The financial year end CAR positions shall be certified by a licensed takaful operator's external auditor, the chief executive officer (CEO) and a non-executive director.
- 21.2 In addition, a licensed takaful operator shall submit the quarterly CAR computations to the Bank within 21 days after the end of each quarter. The CEO of a licensed takaful operator shall certify that the reported figures represent the actual capital adequacy position of a licensed takaful operator.
- 21.3 The quarterly CAR need not be certified by a licensed takaful operator's external auditor.
- 21.4 A licensed takaful operator with weak capital adequacy positions shall compute and report their CAR to the Bank on a more frequent basis as may be required by the Bank.
- 21.5 A licensed takaful operator shall comply with submission requirements on capital adequacy position as specified in Appendix VII.

APPENDICES

APPENDIX I Credit Risk Capital Charges

1. Debt Obligations

1.1 For the purpose of applying credit risk charges, exposures to debt obligations shall include positions in debt securities, debentures, commercial papers, short term notes, asset-backed securities and financings⁹. Convertible securities, i.e. debt issues or preference shares that can be converted into ordinary shares of the issuer, will be classified under this category if the instruments trade and behave like debt securities. Table 1 provides the applicable credit risk charges for counterparties and debt obligations.

Table 1: Risk charges for counterparties and debt obligations

Counterparty or debt obligations		Risk charge
(a)	The Federal Government of Malaysia, Bank Negara Malaysia ¹⁰ , the federal government or the central bank of a G10 country ¹¹ and recognised multilateral development banks (MDBs) ¹²	0%
(b)	Cagamas in respect of its obligations or that issued by its subsidiaries prior to 4 September 2004 and Cagamas Covered Sukuk Wakalah	0.8%
(c)	State government of Malaysia and the federal government or the central bank of non-G10 countries	1.6%

⁹ Including staff loans

¹⁰ Including special purpose vehicle established by Bank Negara Malaysia to facilitate the issuance of securities (such as Bank Negara Malaysia Sukuk Ijarah and BNMi-Murabahah issued through BNM Sukuk Berhad).

¹¹ G10 countries are Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States of America.

¹² Recognised MDBs are those which are in the World Bank Group which comprises the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC), the Asian Development Bank (ADB), the African Development Bank (AfDB), the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IADB), The European Investment Bank (EIB), the European Investment Fund (EIF), the Nordic Investment Bank (NIB), the Caribbean Development Bank (CDB), the Islamic Development Bank (IDB) and the Council of Europe Development Bank (CEDB). Exposures to other MDBs are treated based on the corporation's rating outlined in this table. ¹³ Ratings are facility-specific and can only be used to determine the capital charge for exposure to the specific facility.

(d)	Corporations and other organisations with the following rating categories (further details in Appendix VI):	
(i)	One	1.6%
(ii)	Two	2.8%
(iii)	Three	4%
(iv)	Four	6%
(v)	Five	12%
(e)	Debt facilities ¹³ with original maturity of 1 year or less and with the following rating categories (further details in Appendix VI):	
(i)	One	1.6%
(ii)	Two	4%
(iii)	Three	8%
(iv)	Four	12%
(f)	Individual person :	
(i)	staff of a licensed takaful operator ¹⁴	4%
(ii)	other individuals	12%

1.2 A licensed takaful operator shall use the latest rating accorded by either a recognised rating agency established in Malaysia or by an internationally recognised rating agency. The following rating principles shall apply:

(a) A licensed takaful operator shall use the issue-specific rating where available. Where a licensed takaful operator invests in a debt obligation which does not have an issue-specific rating, the following principles shall apply:

(i) In the event where a licensed takaful operator's exposure is to a counterparty which does not have its own issuer rating, but has a rating on other obligations such as a debt security to which a licensed takaful operator is not exposed, a licensed takaful operator can use

¹³ Ratings are facility-specific and can only be used to determine the capital charge for exposure to the specific facility.

¹⁴ Financing given to staff under the employment service contracts.¹⁵ This refers to instruments which do not fulfill the characteristics of equity but qualify as tier 1 capital instruments under the capital adequacy framework for banking institutions.

that debt security rating in determining the appropriate risk charge for its exposure to the counterparty. However, this is subject to the condition that a licensed takaful operator's unrated exposure ranks pari passu or senior in all respects to the debt security which has a rating and the debt security rating has not taken into account any effects of collateral/guarantee arrangements. Otherwise, the risk charge for unrated obligations shall apply to the unrated exposure; and

- (ii) Where a counterparty has its own issuer rating, this assessment typically applies to senior unsecured exposures to that counterparty. Thus, only senior exposures to that counterparty will be able to utilise this rating. Other exposures will be treated as unrated.
- (b) If a debt obligation is rated by more than one rating agency, the risk charge shall be based on the following principles:
- (i) Where two ratings are available, the lower rating shall be applied; or
 - (ii) Where three or more ratings are available, the lower of the two highest ratings shall be used.

1.3 Investments in innovative tier 1 capital instrument¹⁵ issued by licensed Islamic banks under the IFSA, licensed banks and licensed investment banks under the Financial Services Act 2013 (FSA) are subjected to the same credit risk charge¹⁶ that is applicable to an exposure to similarly rated corporate debt obligations.

1.4 For debt obligation that are denominated in foreign currency or issued outside Malaysia, a licensed takaful operator shall consider the appropriateness of the rating in reflecting transferability and convertibility risks. Where such risks are not adequately reflected in the rating, a licensed takaful operator shall provide for this in the ITCLs set.

¹⁵ This refers to instruments which do not fulfill the characteristics of equity but qualify as tier 1 capital instruments under the capital adequacy framework for banking institutions.

¹⁶ In addition, investments in such instruments are also subject to the market risk charge treatment, described in Appendix II.

2. Credit Risk Mitigation Using Collateral and Guarantees

- 2.1 A licensed takaful operator may recognise a lower credit risk capital charge for debt obligations if a licensed takaful operator holds certain types of credit risk mitigants (CRM), namely, eligible collateral against the debt obligations, or if the obligations are guaranteed by recognised guarantors.
- 2.2 No CRM can be recognised to reduce the credit risk capital charge if the rating assigned to the debt obligation to which the risk charge corresponds has already reflected the CRM.
- 2.3 In order to achieve capital relief for the use of CRM, the following minimum conditions shall be fulfilled:
- (a) a collateral used under the CRM techniques must comply with Shariah requirements;
 - (b) all documentation used in the transactions must be binding on all parties and legally enforceable in all relevant jurisdictions;
 - (c) sufficient assurance from legal counsel has been obtained with respect to the legal enforceability of the documentation; and
 - (d) periodic reviews are undertaken to confirm the ongoing enforceability of the documentation.
- Only collateral and/or guarantees that are actually employed and/or provided under a legally enforceable agreement are eligible as CRM. A commitment to provide collateral/guarantee is not recognised as a CRM until the commitment to do so is actually fulfilled.
- 2.4 While the use of a CRM reduces or transfers credit risk, it may add to residual risks in the form of legal, operational and/or liquidity risk. Therefore, it is imperative that a licensed takaful operator employs robust procedures and processes to control these risks. A licensed takaful operator shall be prepared and able to demonstrate to the Bank that adequate risk management policies and procedures are in place to control these risks arising from the use of CRMs.

(I) Collateral

- 2.5 In addition to the minimum requirements specified in paragraph 2.3 of this appendix, the legal mechanism by which a collateral is pledged or transferred shall adequately provide for the right of a licensed takaful operator to liquidate or take legal possession of the collateral in a timely manner in the event of default, insolvency or bankruptcy of the counterparty. Furthermore, a licensed takaful operator shall take all steps necessary to fulfil those requirements under the law applicable to a licensed takaful operator's interest in the collateral for obtaining and maintaining an enforceable security interest.
- 2.6 For a collateral to be eligible, it shall be regularly marked-to-market and shall be pledged for the life of the debt obligation exposure. In order for the collateral to provide effective cover, the credit quality of the counterparty and the value of the collateral shall not have a material positive correlation. Collateral issued by the borrower or a party related to the borrower shall not be classified as eligible collateral as both would generally exhibit a material positive correlation.
- 2.7 A licensed takaful operator shall have in place clear and robust procedures for the timely liquidation of collateral. This includes procedures to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are duly observed.
- 2.8 Where collateral is held by a custodian, a licensed takaful operator shall take reasonable steps to ensure good custody of that collateral and take reasonable steps to ensure that the custodian segregates the collateral from its own assets.
- 2.9 The value of the collateral backing the debt obligations shall be determined:
- (a) at its market value; or
 - (b) where for any reason it is not possible to determine its market value, the value approved by the Bank on an application by a licensed takaful operator, which shall set out the value arrived at by a licensed takaful operator and the basis for it.

2.10 The amount of debt obligation exposure to which the credit risk charge is applied may be adjusted to reflect the “eligible collateral” backing the exposure, determined as follows:

(a) the ‘adjusted debt outstanding’ shall be:

$$E^* = E - [C \times (1 - H_c - H_{fx})]$$

where,

- (i) E^* is the adjusted debt outstanding
 - (ii) E is the value of the debt outstanding before adjustment
 - (iii) C is the market value of the collateral
 - (iv) H_c and H_{fx} are multiple adjustments for the collateral, expressed as a ratio of market value of the collateral
 - (v) E^* is subject to a minimum of 15% of E ;
- (b) the multiple adjustment (‘ H_c ’) broadly reflects the riskiness of the collateral received; and
- (c) ‘ H_{fx} ’ applies if the collateral is denominated in a currency that is different from that of the debt. The currency mismatch charge is 8%.

2.11 The values of the multiple adjustment ('HC') are given below.

Table 2: Multiple adjustments for eligible collateral

Eligible Collateral	Residual term to maturity (X)	H _c
(a) Cash (including certificate of deposits or comparable instruments) and bank deposits ¹⁷ with any licensed bank, licensed investment bank, licensed Islamic bank and prescribed development financial institution		0%
(b) Securities issued or fully guaranteed by the Federal Government of Malaysia, Bank Negara Malaysia ¹⁰ , or the federal government or the central bank of a G10 country	$X \leq 1$ year	0.5%
	$1 < X \leq 5$ years	2%
	$X > 5$ years	4%
(c) Securities issued or guaranteed by recognised MDBs	$X \leq 1$ year	1.5%
	$1 < X \leq 5$ years	3.0%
	$X > 5$ years	5.0%
(d) Securities with ratings of category two ¹⁸ or better issued by a corporation	$X \leq 1$ year	3.5%
	$1 < X \leq 5$ years	5.0%
	$X > 5$ years	7.0%
(e) Shares listed on the Main Market of Bursa Malaysia or other main index of exchanges in a G10 country		20%
(f) Shares listed on other local exchanges		30%

2.12 Where the collateral is a basket of assets, the multiple adjustments to be applied to such baskets shall be the highest multiple adjustment that would be applicable to any of the collaterals in the basket.

¹⁷ Structured deposits and Restricted Investment Account (RA) would not qualify as eligible collateral.

¹⁸ Under paragraph 1 of Appendix VI.

(II) Guarantees

2.13 The capital risk charges applicable to debt obligations may be reduced to reflect a guarantee backing the debt obligation that is provided by a recognised guarantor if:

- (a) the guarantee represents a direct claim on the guarantor and is explicitly referenced to a specific debt exposure or pool of exposures, so that the extent of the cover is clearly defined and cannot be disputed;
- (b) the guarantee is irrevocable except where the guaranteed party has not made the payment due to the guarantor. The guarantor must also not have the right to unilaterally cancel the protection cover or increase the effective cost of the cover as a result of the deteriorating credit quality in the guaranteed exposure;
- (c) the guarantee is unconditional such that there is no clause in the guarantee contract that could prevent the guarantor from being obliged to pay out in a timely manner, in the event that the original counterparty fails to make the payment(s) due;
- (d) the guarantee covers all types of payments the underlying debt obligor is expected to make under the documentation governing the transaction, such as notional amount, margin payment etc.;
- (e) the guarantee period covers the full term of the debt obligations; and
- (f) upon the default/non-payment of the counterparty, a licensed takaful operator may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The guarantor may make one lump sum payment of all monies under such documentation to a licensed takaful operator or, the guarantor may assume the future payment obligations of the counterparty covered by the guarantee.

2.14 In calculating the capital charges, the portion of a debt obligation which is guaranteed would be subjected to the risk charge of the guarantor¹⁹, while the uncovered portion is subjected to the risk charge of the counterparty to the debt obligation.

2.15 The recognised guarantors are:

- (a) the Federal Government of Malaysia, Bank Negara Malaysia¹⁰, the federal government or the central bank of a G10 country or recognised MDBs;
- (b) other rated entities (including financial guarantee insurer) which is rated at least under category two¹⁸; and
- (c) licensed Islamic banks, licensed banks, licensed investment banks and prescribed development financial institutions.

In all circumstances, the guarantors shall have a counterparty rating which is at least higher than that of the debt obligation or the obligor.

3. Financing Secured By Immovable Properties

3.1 A licensed takaful operator shall not accept immovable property as a security for financing facility unless it is a freehold property or leasehold property with at least 21 years of unexpired period of lease.

3.2 A licensed takaful operator shall not grant a financing facility for the purchase of immovable property for residential purpose, in excess of 90%, or for any other purpose, in excess of 70%, of the market value of the immovable property on the date of granting of the financing facility.

¹⁹ E.g. a debt security which is fully guaranteed for its entire term by the Federal Government of Malaysia shall carry a credit counterparty risk charge of 0%.

- 3.3 A licensed takaful operator granting a financing facility which is secured by rights and interests in an immovable property, where applicable:
- (a) shall enter into an agreement in writing for the financing facility with the borrower;
 - (b) shall require the borrower to execute a deed of assignment assigning all his rights and interests in the immovable property to itself and to register the deed of assignment under the National Land Code, Land Ordinance of Sabah or Land Code of Sarawak;
 - (c) shall require the borrower to execute a power of attorney in its favour, authorising it to execute a charge in its favour on the immovable property which is the subject of the sale and purchase agreement with the borrower;
 - (d) shall ensure that the sale and purchase agreement does not prohibit the lodgement of a private caveat by a licensed takaful operator or, prohibit it from being the financier for the purchase of the immovable property;
 - (e) shall obtain a confirmation from the developer or registered proprietor of the immovable property that there is no prior subsisting assignment of the rights and interests in the immovable property which would vitiate the deed of assignment; and
 - (f) where the immovable property is subject to a restriction in interest that it cannot be transferred, assigned, charged, or otherwise dealt with, without the consent of the State Authority, shall ensure that the consent of the State Authority has been obtained for the sale or assignment to the person in whose name the immovable property is to be registered, and for the licensed takaful operator to acquire the immovable property in the event of any default in the repayment of the financing facility.
- 3.4 A licensed takaful operator shall only accept immovable property situated in Malaysia as security for a financing facility granted in Malaysia.

- 3.5 Financing secured by immovable properties in the manner specified in this paragraph shall be subjected to the following risk charges:

Table 3: Risk charges for financing secured by properties

Types of properties	Risk charges
(a) residential properties	
- FTV < 80%	2.8%
- 80% ≤ FTV ≤ 90%	4%
(b) other types of properties	
- FTV < 70%	5.6%
(c) abandoned properties	12%

Note: FTV= Financing-to-Value ratio

- 3.6 A financing that does not meet the requirements under this part shall be subject to the counterparty risk charges in Table 1 of this appendix.

4. Investment in Structured Products

- 4.1 A structured product usually refers to an investment which derives its value by reference to the price or value of an underlying reference²⁰. Such products are exposed to counterparty credit risk charges, where the risk charge is determined based on the credit rating of the product offer. The risk charge shall be applicable to the entire marked-to-market value of the investments.
- 4.2 In addition, separate market risk charges shall be applicable to the marked-to-market value of the structured investments, depending on whether the product is capital guaranteed or otherwise. Please refer to paragraphs 8.1 to 8.7 of Appendix II for the determination of the market risk capital charge.

²⁰ "Underlying reference" means any security, index, currency, commodity or other assets or reference, or combination of such assets or reference.

5. Other Assets

5.1 The credit risk charges for other assets not specified above are set out in Table 4.

Table 4: Risk charges for other assets

Types of exposure	Risk charges
(a) Cash in hand and bank deposits ¹⁷ with licensed banks, licensed investment banks, licensed Islamic banks and prescribed development financial institutions	0%
(b) Deposits with other banking institutions with the following ratings categories ²¹ (further details in Appendix VI):	
(i) One	1.6%
(ii) Two	2.8%
(iii) Three	4%
(iv) Four	6%
(v) Five	12%
(c) Credit exposures to licensed (re)takaful operators ²² and qualifying (re)takaful operators ²³	1.6%

²¹ In the absence of issue-specific ratings, the issuer local rating may be used in determining the credit risk charge.

²² Credit exposures to licensed (re)takaful operator refers to:
 (a) Amount due from licensed (re)takaful operator (including amount due in respect of contributions outstanding, claims recoverable, commissions);
 (b) Retakaful recoveries in respect of claims incurred; and
 (c) Retakaful deposits in respect of retakaful accepted.

²³ A reference to qualifying (re)takaful operator includes reference to professional reinsurance companies licensed under the FSA and qualifying reinsurance companies licensed under the Labuan Financial Services and Securities Act 2010 which comply with the requirements in paragraph 5.3 of this appendix.

(d)	Credit exposures to (re)takaful operators ²² other than those licensed (re)takaful operators and qualifying (re)takaful operators ²³ , with the following rating categories ²⁴ (further details in Appendix VI):	
(i)	One	1.6%
(ii)	Two	2.8%
(iii)	Three	4%
(iv)	Four	6%
(v)	Five	12%
(e)	Outstanding contributions, agent balances and other receivables due from:	
(i)	other licensees under the IFSA and the FSA or agents	4%
(ii)	others	6%
(f)	Other assets ²⁵	8%

5.2 Credit exposures to (re)takaful operator under items (c), (d) and (e) in Table 4 includes retakaful/reinsurance recoveries in respect of claims incurred (reported under claims liabilities) as well as claims paid (reported under other assets).

5.3 A qualifying (re)takaful operator as mentioned in Table 4 above refers to a (re)takaful operator²⁶ which is licensed under the Labuan Islamic Financial Services and Securities Act 2010²⁷ and satisfies the following requirements:

²⁴ Rating principles in paragraph 1.2 of this appendix shall apply for the purpose of determining the rating of the (re) takaful operator.

²⁵ Including other property, plant and equipment, except for those which are not exposed to counterparty risk (e.g. self-occupied properties).²⁶ Includes a Labuan (re)insurer licensed under the Labuan Financial Services and Securities Act 2010 that is approved to carry out takaful and retakaful services.

²⁶ Includes a Labuan (re)insurer licensed under the Labuan Financial Services and Securities Act 2010 that is approved to carry out takaful and retakaful services.

²⁷ Administered by the Labuan Financial Services Authority.

- (a) The (re)takaful operator carries a financial strength rating of category three²⁸ or better; or
- (b) (i) The (re)takaful operator has obtained an explicit and irrevocable guarantee²⁹ from its parent company (or head office³⁰) to fully support the (re)takaful operator in the event of financial difficulties; and
(ii) Its parent company (or head office) is licensed under the IFSA or carries a financial strength rating of category three²⁸ or better. For the purpose of meeting the rating requirement in the event that the parent company (or head office) does not have its own financial strength rating, the rating of subordinated debt issued by the parent company (or head office) with rating of category three²⁸ or better, may be accepted.

5.4 The ratings of the (re)takaful operator and banking institutions other than those licensed banks, licensed investment banks, licensed Islamic banks and prescribed development financial institutions (other banking institutions) shall be referred to in Appendix VI for the purpose of determining a licensed takaful operator exposure to the (re)takaful operator or other banking institutions and the corresponding credit risk charges. The rating principles in paragraph 1.2 of this appendix shall apply as appropriate.

²⁸ Under paragraph 1 of Appendix VI.

²⁹ The guarantee should at least:

- (a) Cover all retakaful arrangements between the retakaful operator and any Malaysian entities licensed under the IFSA;
- (b) Cover the amount of the retakaful operator's liabilities to Malaysian entities arising from the retakaful arrangements referred to in (a) above in its entirety (including retakaful recoveries or other liabilities as agreed upon in the retakaful transactions);
- (c) Be in place for the entire duration the retakaful operator is exposed to the risk of the arrangements; and
- (d) Be irrevocable, subject to the validity of the retakaful claims, and the retakaful operator shall not unilaterally cancel the guarantee under any circumstances, as long as the arrangement in (a) above still exposes the retakaful operator to the risk of claims.

³⁰ For branches of retakaful operator, the head office shall provide an irrevocable and explicit undertaking to immediately transfer funds in the event (or expected) depletion of the working capital or in the event of a large loss being intimated.

³¹ A licensed takaful operator shall ensure that the derivatives activities undertaken are in compliance with Shariah principles at all times and the derivatives structure shall be based on approved Shariah principles, e.g. 'urbun (deposit), hamish jiddiyah (security deposit) or wa'ad (undertaking), with appropriate adaptations of the principles.

APPENDIX II Market Risk Capital Charges

1. Equity Risks

- 1.1 Equity risks arise from exposures to equity instruments, which include ordinary shares, warrants, depository receipts, transferable subscription rights or similar instruments that exhibit market behaviour similar to equities. Convertible securities, e.g. debt securities or preference shares that can be converted into ordinary shares of the issuer, will be classified as shares if they trade and behave like shares. Equity risks arising from exposures to derivatives³¹ such as futures, swaps and options on individual shares or stock indices are also included. However, an investment in the shares of unlisted single-purpose property holding companies is excluded (see paragraph 2 below).
- 1.2 Exposures to equity instruments exclude investments in innovative Tier 1 capital instruments issued by licensed Islamic banks, licensed bank and licensed investment banks.
- 1.3 The applicable risk charges for equity exposures are as provided in Table 1.

Table 1: Risk charges for equity exposures

Equity Instruments		Risk charges
(a)	listed on the Main Market of Bursa Malaysia, or listed on the primary board of recognised stock exchanges in a G10 country	20%
(b)	listed on recognised stock exchanges other than those mentioned in (a)	30%
(c)	FTSE Bursa Malaysia (FBM) KLCI, FBM Top-100 index of Bursa Malaysia, FBM Hijrah Shariah or the indicative	16%

³¹ A licensed takaful operator shall ensure that the derivatives activities undertaken are in compliance with Shariah principles at all times and the derivatives structure shall be based on approved Shariah principles, e.g. 'urbun (deposit), hamish jiddiyah (security deposit) or wa'ad (undertaking), with appropriate adaptations of the principles.

Equity Instruments	Risk charges
index of the recognised stock exchanges in a G10 country	
(d) FBM Mid-70 or other stock market indices	25%
(e) unlisted or private equity (including venture capital)	35%

- 1.4 For the purpose of Table 1, investment in individual stocks that make up the FBM KLCI for example will attract a 20% risk charge, while investing in basket of stocks that tracks the performance of the FBM KLCI will attract a lower 16% risk charge for the entire basket of stocks.
- 1.5 A direct position in equity which is matched by opposite positions in equity derivatives, may be fully offset and only the absolute net position subject to the equity risk charge. For example, a future in a given equity may be offset against a direct position in the same equity.
- 1.6 Equity derivatives positions that can be applied to reduce a licensed takaful operator's equity risk exposure shall be determined based on the following:
- (a) futures and forward contracts relating to individual equities are reported at current market prices;
 - (b) futures relating to equity indices are reported either as the current index value times the monetary value of one index point set by the futures exchange or market value of the notional underlying equity portfolio;
 - (c) equity and stock index options are treated based on the delta equivalent approach described in paragraphs 5.1 to 5.5 below; and
 - (d) for a short position in equity derivatives, the absolute value of the short position is to be converted into positions in the relevant underlying, to which the equity risk charge will apply.
- 1.7 A simplified illustration on the application of the equity risk capital charge for a licensed takaful operator with derivatives positions is provided in Appendix II(a).

2. Property Risks

- 2.1 Property risks arise from exposures to immovable properties both for investment and self-occupied purposes.
- 2.2 An investment in shares of unlisted single-purpose property holding companies (entity), is deemed as an investment in property and therefore subject to the property risk charge, if the investment meets the following criteria:
- (a) the entity wholly owns the property, including all rights, interests and benefits related to the ownership of the property; and
 - (b) the entity shall not have significant liabilities other than in relation to loan facilities taken for the purchase of property.
- Otherwise, the investment is deemed as an investment in shares.
- 2.3 The applicable risk charges for exposures to immovable properties are provided in Table 2 below:

Table 2: Risk charges for investment in immovable property

Property investments	Risk charges
(a) self-occupied properties	8%
(b) other property and property-related investments	16%

3. Profit Rate Risks

- 3.1 Profit rate risks arise from exposures to assets³² and liabilities whose values are affected by profit rate movement including debt securities, commercial papers, debentures, notes, negotiable instruments of deposits, mortgages, financing³³, profit rate derivatives and other instruments that share similar characteristics such as non-convertible preference shares. Convertibles bonds, i.e. debt issues or preference shares that are convertible into ordinary shares of the issuer, will be treated as debt securities if the instruments trade and behave like debt securities. Profit rate risk charges for family takaful fund, general takaful fund and shareholders' fund shall be computed in accordance with paragraphs 3.4 to 3.17.
- 3.2 Profit rate risk exposures can be reduced by profit rate derivative positions, such as futures, forwards and options. Profit rate derivatives shall be converted into exposures in the relevant underlying assets and subjected to appropriate profit rate risk charge calculations. To determine the capital charge, the amount reported shall be the market value of the principal amount of the underlying or of the notional underlying. In the case of options, the delta-equivalent value of the option positions is used.
- 3.3 This paragraph outlines the treatment of profit rate derivative exposures by product class:
- (a) Futures and Forward contracts, including Forward Rate Agreements (FRAs)
 - (i) these instruments are treated as a combination of a long and short position in a notional zero-coupon government security. The maturity period of futures or FRAs will be the period until delivery or exercise of the contract, plus, where applicable, the life of the underlying instrument. For example, a long position in a June three month profit rate future (taken in April) is to be regarded as a long position in a government security with a maturity of five months

³² Including cash and deposit.

³³ Including staff loans.

and a short position in a government security with a maturity of two months.

- (ii) in the case of a future or forward on a corporate bond or corporate bond index, positions will be included at the market value of the notional underlying/ portfolio of securities.
- (iii) in the case of foreign currency forward contracts with a profit rate element, either a long or short position in the market value of each underlying currency leg would be recorded in the respective 'maturity bucket' capturing the relevant profit rate risk.

(b) Swaps

- (i) swaps will be treated as two underlying positions in zero coupon government securities with relevant maturities. For example, a plain vanilla profit rate swap under which a licensed takaful operator pays floating and receives fixed will be treated as a long position in a fixed rate instrument of maturity equivalent to the residual life of the swap and a short position in a floating-rate instrument of maturity equivalent to the period until the next profit fixing.
- (ii) where one of the swap legs involves payment relating to some other reference price, for example a stock index, the leg shall be slotted into the equity component of market risk charge calculation. Swaps are treated as two notional positions. For example, an equity swap in which the licensed takaful operator receives an amount based on the change in value of one particular equity or stock index and pays a different index will be treated as a long position in the former and a short position in the latter.

(c) Options

- (i) for options, the delta-weighted option position will be slotted into the respective 'maturity band' according to its underlying together with other profit rate related instruments. Paragraphs 5.1 to 5.5 of this appendix further explain the capital treatment of option positions.

I. Computation of profit rate risk charges for:

- **family takaful funds**
- **general takaful funds where the takaful liabilities are discounted**
- **shareholders' fund of a licensed takaful operator conducting family takaful business only, general takaful business only where the liabilities are discounted or composite business**

3.4 The capital charge to address profit rate risks are reduced to the extent that the weighted average duration of the exposures in profit rate related assets match the weighted average duration of the takaful liabilities.

3.5 For each takaful fund, the values of all profit rate related exposures (including profit rate derivatives exposures) and the takaful fund liabilities shall be computed as follows:

- (a) compute the value of the takaful fund liabilities and the market value of profit rate related exposures under the base scenario (referred to as V0 and A0, respectively). V0 is the value of the takaful fund liabilities derived based on the valuation basis as determined in accordance to paragraph 10.2 and 10.3 of Part B;
- (b) re-compute the value of the takaful fund liabilities and the value of profit rate related exposures under the increasing profit rate scenario (referred as to V1 and A1, respectively); and
- (c) re-compute the value of the takaful fund liabilities and the value of profit rate related exposures under the decreasing profit rate scenario (referred as to V2 and A2, respectively).

The method is summarised below:

Scenario	Value of profit rate exposure (1)	Liability value (2)	Surplus (1) - (2)
Base	A0	V0	S0
Increasing profit rate	A1	V1	S1
Decreasing profit rate	A2	V2	S2

- 3.6 The amount of capital charges required is the higher of the reduction in surplus under the increasing and decreasing rate scenario. In the event that the reduction in surplus is higher under the increasing scenario in one fund, but higher under the decreasing scenario in another fund, then the dominant scenario at the company level shall be selected and applied consistently to all funds. Any resulting negative capital charges for each individual fund shall be zeroed.
- 3.7 The yield to value the profit rate related securities under the base scenario shall be the risk-free yield, in the case of government securities (e.g. Government Islamic Instrument (GII)) or the implied market yield for quoted securities or securities with similar characteristics, if unquoted. Alternatively, the base yields may be obtained from a recognised bond pricing agency. In the case of financings (and mortgages), the yield as implied by a debt security with similar tenor as the financing and carries a rating of category three³⁴ or better, shall be used as the base yield.
- 3.8 Where the profit rate related exposures have embedded options, such as call or put provisions in the case of debt securities/financings, or prepayment/refinancing rights which give the borrowers the rights to prepay the amount of debt outstanding, a licensed takaful operator shall take into account the likelihood of these options being exercised, and the effect of the exercise of these rights on the values of such debt securities/financings, under the scenarios of changes in the profit rate level.
- 3.9 As a general guide, the callable date shall be the legal maturity date if there is sufficient evidence to demonstrate that the debt security will be called at the said date. Where there is no legal maturity date, the longest category of residual term to maturity, (X), of more than 20 years shall apply.

³⁴ Under paragraph 1 of Appendix VI.

- 3.10 For the purpose of revaluing profit rate related exposure and takaful fund liabilities in the above scenarios, the base yield curve shall be multiplied by $(1 + \text{stress_up})$, and $(1 - \text{stress_down})$, for the increasing and decreasing scenarios respectively. Values of stress_up and stress_down are based on the level of the prevailing GII spot yields, and are prescribed in Table 3 below.
- 3.11 For profit rate related exposure and takaful fund liabilities denominated in foreign currencies, the base yield shall be based on an appropriate risk-free yield curve, as determined in accordance to paragraph 10.2 and 10.3 of Part B. However, the stress levels of $(1 + \text{stress_up})$ and $(1 - \text{stress_down})$ shall be applied as per Table 3 and where these stress levels may be inadequate for the underlying volatilities of foreign profit rates, the Bank may require an adjustment to the level of a licensed takaful operator's ITCL.
- 3.12 The values of the stress up and stress down shall be further subjected to a maximum of 40%, unless otherwise specified by the Bank.
- 3.13 For shareholders' fund of a licensed takaful operator conducting family takaful business only, general takaful business only where the liabilities are discounted or composite business, the profit rate risk charge shall be computed in accordance to that specified in paragraphs 3.4 to 3.12 of this appendix.

Table 3: Prescribed changes in profit rates³⁵

Residual terms to maturity ³⁶ (X)	stress_up	stress_down
$X \leq 4$ years	$0.15 + \text{Max} [0 ; 0.4(3.75 - \text{GII}_3)]$	$0.15 + \text{Max} [0 ; 0.2(\text{GII}_3 - 3.75)]$
4 years < $X \leq 8$ years	$0.15 + \text{Max} [0 ; 0.4(3.8 - \text{GII}_5)]$	$0.15 + \text{Max} [0 ; 0.2(\text{GII}_5 - 3.8)]$
$X > 8$ years	$0.15 + \text{Max} [0 ; 0.4(4.25 - \text{GII}_{10})]$	$0.15 + \text{Max} [0 ; 0.2(\text{GII}_{10} - 4.25)]$

Note: GII_n denotes the spot yield of the n-year GII at valuation date.

³⁵ The Bank may review the stress up and stress down factors in the future to reflect the movement of GII rates.

³⁶ Term to maturity refers to the period remaining till the maturity of the instruments or in the case of an instrument with a floating rate coupon, the period remaining till the next repricing date of the next coupon.

II. Computation of profit rate risk charges for:

- **general takaful funds where the takaful liabilities are not discounted**
- **shareholders' fund of licensed takaful operator conducting general takaful business only where the liabilities are not discounted**

3.14 A simplified approach is adopted for undiscounted liabilities in the general takaful fund and shareholders' funds of a licensed takaful operator conducting general takaful business only to address profit rate risks in view of the short-term nature of most of the takaful liabilities.

3.15 The net value of all positions in profit rate related exposures is determined for each maturity band (see paragraph 3.9 of this appendix), to which risk charges are then applied. The overall profit rate risk capital charge is the absolute amount of the sum of the individual net capital charge positions. The risk charges vary according to the residual term to maturity of the securities as provided in the table below.

Table 4: Profit rate risk charges related securities for shareholders' funds of licensed takaful operator conducting general takaful business only and general takaful funds, where the liabilities are not discounted

Residual term to maturity (X)	Risk charges (%)
$X \leq 1$ month	0.0
$1 < X \leq 3$ months	0.2
$3 < X \leq 6$ months	0.5
$6 < X \leq 12$ months	0.8
$1 < X \leq 2$ years	1.3
$2 < X \leq 3$ years	1.9
$3 < X \leq 4$ years	2.7
$4 < X \leq 5$ years	3.2
$5 < X \leq 7$ years	4.1
$7 < X \leq 10$ years	4.6
$10 < X \leq 15$ years	6.0
$15 < X \leq 20$ years	7.0
$X > 20$ years	8.0

- 3.16 All profit rate derivative positions are subjected to profit rate risk charges, according to the term to maturity above, in the same manner as cash positions. Offsetting of fully matched long and short positions in the same underlying is allowed.
- 3.17 A simplified illustration on the computation of profit rate risk capital charge for a general takaful with derivatives positions is provided in Appendix II (a).

4. Currency Risks

- 4.1 Takaful business which has exposures in currencies which are different from that of the liabilities will be subjected to a currency risk charge of 8% on the net open position. The capital charge is in addition to the credit and market risk charges described above.
- 4.2 To calculate the capital charge for currency risks, the net balance sheet positions for exposures to each of the different currencies are converted into Ringgit Malaysia at the spot exchange rates. The sum of the net short positions or the sum of the net long positions, whichever is higher, is then multiplied by the 8% risk charge to arrive at the currency capital charge.
- 4.3 A licensed takaful operator's net position in each currency shall be calculated by aggregating the following positions:
- all asset items less liabilities; and
 - the value of all amounts to be received less the value of all amounts to be paid under unsettled spot transactions, forward foreign exchange transactions, including currency futures, the principal on currency swap positions and profit rate transactions such as futures, swaps etc.
- 4.4 An example of the calculation is shown below.

Long/short position	Long currency positions		Short currency positions		
	Japanese yen	Hong Kong dollar	British pound	Singapore dollar	US dollar
RM-equivalent value of net currency positions	+50	+150	-20	-180	-35
Total RM-equivalent value of net currency positions	+200		-235		

Capital charge = $235^{37} \times 8\% = \text{RM}18.8 \text{ mil}$

³⁷ The higher of either net long currency positions or net short currency positions.

5. Treatment of Options

- 5.1 For capital computation purposes, option positions shall be reported as a position equal to the market value of the instrument underlying the option multiplied by the delta³⁸ of the option.
- 5.2 The capital charge for options with equities as the underlying assets are based on the delta-weighted positions which would have incorporated the measure of market risk as described in paragraph 1.3 of this appendix.
- 5.3 Delta weighted positions of profit rate options will be subject to profit rate risk charge calculations as set out in this appendix:
- (a) paragraphs 3.4 to 3.13 for family takaful funds, general takaful funds with discounted liabilities and shareholders' fund of a licensed takaful operator conducting composite business, family takaful business only or general takaful business only with discounted liabilities; and
 - (b) paragraphs 3.14 to 3.17 for general takaful funds with undiscounted liabilities and shareholders' fund of a licensed takaful operator conducting general takaful business only with undiscounted liabilities.
- Similar to other derivative transactions, a two-legged approach is used, which requires one entry at the time the underlying contract takes effect, and a second entry, at the time the derivatives contract matures. For instance, a bought call option on a June 3 month profit rate future will in April be considered, on the basis of its delta-equivalent value, a long position with a maturity of 5 months and a short position with a maturity of two months.
- 5.4 The capital charge for options on foreign currency is based on the delta-weighted position which will incorporate measurement of the exposure for the respective currency position as described in paragraphs 4.1 to 4.4 of this appendix.

³⁸ Defined as the sensitivity of the option price relative to the instruments underlying the option.

- 5.5 As the delta-approach above does not capture all risks associated with option positions, such as basis, gamma and vega risks, licensed takaful operator shall therefore take into consideration these additional risk dimensions when setting their ITCL.

6. Counterparty Credit Risk Charges for Derivatives Positions

- 6.1 Where a licensed takaful operator enters into derivative transactions which are transacted over the counter (OTC), they shall hold additional capital for counterparty credit risk, using the method described below:
- (a) the capital charge for each OTC derivative contract shall be based on its 'asset equivalent value'. The asset equivalent value is the sum of the current marked-to-market exposure of the derivative contracts with positive values and an amount for potential exposure add-on;
 - (b) the potential exposure add-on shall be determined by multiplying the notional principal amount³⁹ of the derivative contract (regardless of whether the contract has a zero, positive or negative marked-to-market value) by the relevant credit conversion factor specified in Table 5 below according to the nature and residual maturity of the contract;

³⁹ Potential exposure add-on should be based on effective rather than stated notional amounts. In the event that the stated notional amount is leveraged or enhanced by the structure of the transaction, a licensed takaful operator must use the actual or effective notional amount when determining potential exposure, e.g. a stated notional amount of RM1 million with payments calculated at two times KLIBOR would have an effective notional amount of RM2 million.

Table 5: Add-on factor

Maturity (x)	Profit rate contracts	Equity contracts	Foreign Currency contracts
$X \leq 1$ year	0.5%	6%	2%
$1 < X \leq 2$ years	1%	8% ⁴⁰	5%
$2 < X \leq 3$ years	2%		7%
Each additional year	1%		1%

- (c) the asset equivalent value of each derivative contract shall then be multiplied by the credit risk charge applicable to the counterparty to the derivative contract to determine the capital charge (based on credit risk charge for various counterparty as presented in Table 1 in Appendix I);
- (d) foreign exchange contracts which have an original maturity of 14 calendar days or less may be excluded from the requirement; and
- (e) netting-off is permitted where there is a legally enforceable contractual arrangement with the counterparty under which any obligation to each other to deliver a given currency on a given date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single net amount for the previous gross obligations.

6.2 The Bank reserves the right to require a licensed takaful operator to hold additional capital against particular derivative positions where the licensed takaful operator enters into significant derivative transactions in relation to its capital position or if the Bank views the capital provided using the above approach to be inadequate in relation to the risks of the transactions involved.

⁴⁰ This equity add-on factor is to be used by contract maturity of up to five years. For period over five years, 10% add-on is used.

7. Investment in Collective Investment Schemes

- 7.1 Collective investment schemes are defined as any arrangement made for the purpose, or having the effect, of providing facilities for persons to participate in or receive profits or income arising from the acquisition, holding, management or disposal of securities, or any other property, or sums paid out of such profits or income in such schemes.
- 7.2 Such investments include investments in unit trust schemes, exchange traded funds (ETF), exchange-traded real estate investment trusts (including Real Estate Investment Trusts (REITs)), private real estate funds and investments in a licensed takaful operator's own investment-linked funds⁴¹.
- 7.3 The risk charge for investments in collective investment schemes shall be determined based on the actual asset composition at the valuation date, and if not available, the investment mandate of the schemes⁴². The following risk charges in Table 6 shall be applicable for individual asset classes composing the collective investment schemes.

Table 6: Risk charges for assets of collective investment schemes

Types of assets	Risk charges
(a) Government securities	0%
(b) Money market instruments, including cash	1.6%
(c) Shares	16%
(d) Debt securities	4%
(e) Properties	16%
(f) Foreign assets	relevant charges above plus additional 8%

⁴¹ Restrictions on a licensed takaful operator's investments in own managed investment linked funds are stipulated in the *Guidelines on Investment-linked Insurance/Takaful Business*.

⁴² For e.g. if a scheme is invested in a fund consisting of 50% equities, 40% Malaysian debt securities, and 10% foreign debt securities, the risk charge is $[(0.5 \times 16\%) + (0.4 \times 4\%) + (0.1 \times (4\% + 8\%))] = 10.8\%$.

- 7.4 If a scheme is mandated to invest more than 80% of its total assets in a particular asset class, the risk charge for such collective investment schemes may be based on the capital charge applicable for exposures to that dominant asset class.
- 7.5 The approach used to arrive at the weighted average capital charge shall be applied consistently.
- 7.6 Where the collective investment scheme invests in a structured product, the portion of the fund which is invested in the structured product shall be subject to a risk charge treatment as described in paragraphs 8.1 to 8.7 of this appendix.
- 7.7 Where the collective investment scheme has features that are similar to that of a structured product, the risk charge treatment as described in paragraph 8 of this appendix shall apply in addition to paragraph 4.1 of Appendix I. An example of such mechanism is one where the collective investment scheme is structured to provide principal protection upon the maturity of the fund.

8. Investment in Structured Products

- 8.1 In addition to being subject to credit risk charge as explained in paragraph 4.1 of Appendix I, the entire marked-to-market value of the investment in the structured product is subject to a market risk charge of 20%, if the structured product carries no embedded guarantee.
- 8.2 Where the structured product offers a certain minimum guaranteed amount (for example guaranteed principal or minimum percentage return), the present value of the guaranteed amount shall be subject to the profit rate risk charge calculations. The balance value of the investment will be subject to a 20% market risk charge.

- 8.3 The present value of the guaranteed amount shall be determined using a discount rate which reflects the credit worthiness of the product offeror and is consistent with the application of paragraph 4.1 of Appendix I.
- 8.4 The guaranteed amount shall be valued using a discounting period that is equivalent to the term to maturity of the structured product if the guarantee is provided upon the product maturity, or earlier, if the guarantee is provided up to a period prior to the maturity of the product.
- 8.5 Where the product is leveraged or enhanced by the structure of the investment, the effective value of the product shall be used. For example, where a product provides a return of 2x the market index performance, a licensed takaful operator must use 2x the notional exposure as the effective value of exposure.
- 8.6 Alternatively, a licensed takaful operator may adopt a look-through approach to determine the appropriate market risk charges to be applicable to such products, subject to prior approval from the Bank.
- 8.7 A licensed takaful operator shall consult the Bank on the capital treatment for structured products which have features that may not be directly addressed in this paragraph.

9. Capital Charges to Address Concentration Risks

- 9.1 Aggregate investments or exposures to individual counterparties in excess of the limits specified in Appendix III shall be subjected to 100% asset concentration risk capital charge. This is not applicable to investments in foreign assets, where investments exceeding the limits are strictly disallowed.

APPENDIX II (a) Illustration on Capital Computation for a licensed takaful operator with Derivatives Position

1. Position in equity derivatives

Assume a licensed takaful operator holds the following in its portfolio:

- Shares in X of RM100 mil, Y of RM100 mil, Z of RM200 mil

The licensed takaful operator entered into the following transaction to hedge its equity risk:

- Long Z put option with equivalent market value of RM200 mil (option delta = -0.7)
- Short, say, appropriate Shariah-compliant futures/forward with market value of RM200 mil,

Assume that it can be demonstrated that the positions in X and Y are effectively hedged by appropriate Shariah-compliant futures/forward

A licensed takaful operator will be subject to the following risk charge:

- X and Y exposures are carved out from the equity risk capital computation
- Capital exposure to Z = $[200 - (200 \times 1 - 0.71)] \times 20\% = \text{RM}12 \text{ mil}$

Therefore, total equity capital charge = RM12 mil

2. Portfolios of profit rate exposures (including derivatives)

Assume a licensed takaful operator holds the following in its portfolio:

- (a) An Islamic private debt securities (IPDS), with market value of RM20 mil, residual maturity 8 years;
- (b) A Government Islamic Instruments (GII), market value RM75 mil, residual maturity 2 months;
- (c) A profit rate swap, RM150 mil under which the licensed takaful operator receives floating rate and pays fixed. The next profit fixing occurs after 9 months and residual life of the swap is 8 years; and
- (d) A long position in GII futures of RM60 mil, maturing in 6 months' time with underlying government security of 4 years.

Residual Term to Maturity	1<X≤3 months	3<X≤6 months	6<X≤12 months	4<X≤5 years	7<X≤10 years
Long position	75 mil GII (b)		150 mil swap (c)	60 mil futures (d)	20 mil PDS (a)
Short position		60 mil futures (d)			150 mil swap (c)
Risk Charges (%)	0.2	0.5	0.8	3.2	4.6
Overall Net Position	+0.15 mil	-0.30 mil	+1.20 mil	+1.92 mil	-5.98 mil

Therefore, the overall net position is -3.01 mil (= +0.15–0.30+1.20+1.92–5.98 mil), leading to a capital charge of RM3.01 mil.

APPENDIX III Investment and Individual Counterparty Limits

1. Investment limits on individual asset classes which are applicable for **each of the family takaful, general takaful and shareholders' funds individually**:

	Maximum limits (as a ratio of total assets of individual takaful funds or shareholders' fund)
(a) shares not listed on the Main Market of Bursa Malaysia	5%
(b) debt securities with rating under rating category four ⁴³ or poorer	5%
(c) financings which are not secured in the manner set out in paragraphs 2 and 3 of Appendix I <ul style="list-style-type: none"> • limit for an individual counterparty 	5% 1%
(d) foreign assets in jurisdictions with sovereign ratings at least equivalent to that of Malaysia	10% ⁴⁴ (absolute limit ⁴⁵)

⁴³ Under paragraph 1 of Appendix VI.

⁴⁴ Not applicable for the investment of funds backing foreign currency denominated (FX) education policies and non-unit fund of FX investment-linked certificates.

⁴⁵ Refer to paragraph 9.1 of Appendix II.

2. Investment limits on individual asset classes which are applicable for **general** takaful funds only:

	Maximum limits (as a ratio of total assets of the general takaful fund)
(a) shares listed on the Main Market of Bursa Malaysia	30%
(b) immovable properties	20%
(c) liquid assets ⁴⁶	minimum limit of 10% ⁴⁷

3. Limits for exposure to individual counterparties, including guarantee given by the counterparties (except any transaction related to a contract of takaful):

	Maximum limits (as a ratio of total assets of all takaful funds and shareholders' fund)
(a) a counterparty licensed under the IFSA or the FSA, Cagamas Berhad, Khazanah Malaysia Berhad, Petroliaam Nasional Berhad, Telekom Malaysia Berhad and Tenaga Nasional Berhad	20%
(b) a counterparty listed on the Main Market of Bursa Malaysia	10%
(c) any other counterparties	5%

4. The exposure limits are applicable on the overall exposure to individual counterparties, including that arising from investments in shares of, debt

⁴⁶ Refers to cash in hand and deposits with unconditional withdrawal placed with a licensed bank, licensed investment bank, licensed Islamic bank and prescribed financial institution, and any papers issued or guaranteed by the Federal Government or Bank Negara Malaysia and its subsidiaries.

⁴⁷ As a ratio to the gross average total claims incurred for the three preceding financial years. For example, for a licensed takaful operator with financial years ending 30 June, the ratio will be computed based on the average total claims incurred for financial year ending 2005, 2006 and 2007, which will be valid from 1 July 2007 until 30 June 2008.

securities issued by or direct lending to a single counterparty, but excludes exposures from transactions relating to contracts of takaful.

5. The following principles shall be applied for exposures to related or interconnected counterparties:
- (a) a counterparty is deemed to be related to another if the counterparty controls more than 50% of the equities of the other party. In the case of exposures to Special Purpose Vehicles (SPVs), such exposure shall be grouped with the sponsor of the SPV if a licensed takaful operator has ultimate recourse to the sponsor in the event of default by the SPV;
 - (b) exposures to related/interconnected counterparties shall be grouped together and be treated as an exposure to a single counterparty, subject to the single counterparty limits above;
 - (c) exposures to the interconnected counterparties can be disaggregated and treated as separate single counterparties where the licensed takaful operator can establish that the counterparty(ies) are sufficiently independent from each other financially, to honour its individual obligations and liabilities by:
 - (i) drawing on its existing free financial resources without difficulty or encumbrances; or
 - (ii) obtaining a credit facility premised on its own financial standing;
 - (d) clear internal parameters for identifying the related/interconnected counterparties that:
 - (i) would constitute a single counterparty; or
 - (ii) are financially independent from each othershall be established, documented with supporting reason(s) and made available for review by the licensed takaful operator's internal control and risk management functions as well as the Bank at all times; and
 - (e) the identification for which (d)(i) or (d)(ii) would apply shall also take into consideration the materiality of any association or relationships⁴⁸ that may exist between the counterparties either directly or indirectly, that may give rise to an assumption of interconnected exposures.

⁴⁸ For example, entities with common marketing and/or branding platform.

6. The individual counterparty limits are not applicable to the Federal Government of Malaysia and Bank Negara Malaysia.
7. The exposure limits are not applicable to deposits protected under the Malaysia Deposit Insurance Corporation Act 2011 to the extent of the amount insured by the Malaysia Deposit Insurance Corporation.
8. Limits specified above shall only be applicable to funds in respect of business within Malaysia and shareholders' funds, where applicable.
9. The limits specified in paragraphs 1, 2 and 3 of this appendix shall be applied in the sequential order (before applying the risk charges).

APPENDIX IV Risk Charges for Liabilities of General Takaful Business

1. The following risk charges shall be applied in the computation of general takaful liabilities risk capital charges:

Class		Risk charge applicable for -	
		Claims liabilities	URR @ 75% confidence level
1.	Aviation	30%	45%
2.	Bonds	20%	30%
3.	Cargo	25%	37.5%
4.	Contractor's All Risks & Engineering	25%	37.5%
5.	Fire	20%	30%
6.	Liabilities	30%	45%
7.	Marine Hull	30%	45%
8.	Medical and Health	25%	37.5%
9.	Motor "Act"	25%	37.5%
10.	Motor "Others"	20%	30%
11.	Offshore Oil & Gas related	20%	30%
12.	Personal Accident	20%	30%
13.	Workmen's Compensation & Employer's Liability	25%	37.5%
14.	Others	20%	30%

2. For the purpose of computing the shareholders' fund expense liabilities risk capital charges for general takaful business, the best estimate expense assumptions shall be stressed by 20%.

APPENDIX V Stress Factors for Liabilities of Family Takaful Business

1. The following stress factors shall be applied in the computation of family takaful liabilities risk capital charges (FCC) and shareholders' fund expense liabilities risk capital charges (ECC) for family takaful business, as appropriate:

Valuation Parameters	Stress Factors
(a) Mortality (non-annuity) (i) guaranteed tabarru' (ii) non-guaranteed tabarru'	±40% of best estimate rates ±20% of best estimate rates
(b) Mortality (annuity)	Rates used in valuation with 5-year setback
Total and Permanent Disability (i) guaranteed tabarru' (ii) non-guaranteed tabarru'	±45% of best estimate rates ±22.5% of best estimate rates
Critical Illness (i) guaranteed tabarru' (ii) non-guaranteed tabarru'	±45% of best estimate rates ±22.5% of best estimate rates
Renewal Expense	±20% of best estimate rates
Persistency	±50% of best estimate rates

Note: Guaranteed here indicates guaranteed for 3 years or more

2. In computing each FCC and ECC, the Appointed Actuary is required to determine and declare, for each product separately, whether it is decrement-supported (e.g. lapse-supported, mortality-supported, etc), and to use the appropriate direction of stress factors accordingly. The selected direction of stress shall be the one that produces the higher liability value in each risk factor, to prevent any instances of negative FCC and ECC. The basis of selecting the stress factors for each product and each fund shall be described in the accompanying actuarial report.
3. The value of V^* shall be computed for each certificate by stressing all risk factors simultaneously in the direction selected for that product.

APPENDIX VI Risk Charges and Rating Categories

1. The rating categories below apply to both issuer and issue-specific ratings. The rating categories aim to map the respective spectrum to ratings of different rating agencies.

Rating Category	Standard and Poor's Corporation (S&P)	Moody's Investor Services (Moody's)	Fitch, Inc (Fitch)	Rating and Investment Information, Inc (R&I)	A.M. Best Company, Inc (AM Best)	RAM Holdings (RAM)	Malaysian Rating Corporation Berhad (MARC)	Risk Charge
(i) One	AAA	Aaa	AAA	AAA	AAA	AAA	AAA	1.6%
(ii) Two	AA+ to AA-	Aa1 to Aa3	AA+ to AA-	AA+ to AA-	AA+ to AA-	AA1 to AA3	AA+ to AA-	2.8%
(iii) Three	A+ to A-	A1 to A3	A+ to A-	A+ to A-	A+ to A-	A1 to A3	A+ to A-	4%
(iv) Four	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	BBB+ to BBB-	BBB1 to BBB3	BBB+ to BBB-	6%
(v) Five	BB+ to D or unrated	Ba1 to C or unrated	BB+ to D or unrated	BB+ to D or unrated	BB+ to D	BB1 to D or unrated	BB+ to D or unrated	12%

2. Debt facilities with original maturity of 1 year or less.

Rating Category	Standard and Poor's Corporation (S&P)	Moody's Investor Services (Moody's)	Fitch, Inc (Fitch)	Rating and Investment Information, Inc (R&I)	A.M. Best Company, Inc (AM Best)	RAM Holdings (RAM)	Malaysian Rating Corporation Berhad (MARC)	Risk Charge
(i) One	A-1	P-1	F1+, F1	a-1+, a-1	AMB-1+, AMB-1	P-1	MARC-1	1.6%
(ii) Two	A-2	P-2	F2	a-2	AMB-2	P-2	MARC-2	4%
(iii) Three	A-3	P-3	F3	a-3	AMB-3	P-3	MARC-3	8%
(iv) Four	Others	Others	B to D	b, c	AMB-4, d	NP, D	MARC-4	12%

APPENDIX VII Guidance Notes on Completion of Reporting Forms for the Framework

1. General Instructions for Completion of the Reporting Forms

1.1 The following is the list of reporting forms that shall be submitted to the Bank:

Category	Form Code	Title of Form
Capital Adequacy	A	Computation of Capital Adequacy Ratio
	B	Capital Available
	C	Capital Required
	D	Qard Account of Shareholders' Fund
Components of Capital Required	E1	Summary of Credit and Market Risks Capital Charges
	E1-1	Credit Risk Capital Charges
	E1-1-1	Composition of Credit Risk Capital Charges for Family Takaful Business
	E 1-2	Market Risk Capital Charges
	E 1-2-1	Composition of Market Risk Capital Charges for Family Takaful Business
	F	Family Takaful Liabilities Risk Capital Charges, Expense Liabilities Risk Capital Charges and Surrender Value Risk Capital Charges
	G	General Takaful Liabilities Risk Capital Charges and Expense Liabilities Risk Capital Charges
Takaful Liabilities Valuation	H1	Family Takaful Fund - Takaful Liabilities and Risk Capital Charges
	H1-1	Family Takaful Fund - Composition of Valuation Liabilities and Risk Capital Charges
	H1-2	Family Takaful Fund - Composition of Valuation Liabilities and Risk Capital Charges (Product Group Details)
	H1-2-1	Family Takaful Fund - Composition of Valuation Liabilities and Risk Capital Charges (Product-Wise Details)
	I	Family Takaful Fund - Valuation Results, Movement and Recommended Distribution of Surplus
	J	Family Takaful Fund - Sources Of Surplus Arising

Category	Form Code	Title of Form
	K	General Takaful Fund – Claim/Contribution Liabilities and Risk Capital Charges
Expense Liabilities Valuation	L1	Shareholders' Fund - Expense Liabilities and Expense Liabilities Risk Capital Charges for Family Takaful Business
	L1-1	Shareholders' Fund - Composition of Valuation Expense Liabilities and Expense Liabilities Risk Capital Charges for Family Takaful Business
	L1-2	Shareholders' Fund - Composition of Valuation Expense Liabilities and Expense Liabilities Risk Capital Charges for Family Takaful Business (Product Group Details)
	L1-2-1	Shareholders' Fund - Composition of Valuation Expense Liabilities and Expense Liabilities Risk Capital Charges for Family Takaful Business (Product-Wise Details)
	M	Shareholders' Fund - Expense Liabilities and Expense Liabilities Risk Capital Charges for General Takaful Business

1.2 These reporting requirements do not affect the need to comply with the reporting requirements under the Companies Act 1965 and Takaful Operators Statistical System.

1.3 The reporting forms are designed to capture the information according to the following categories:

- (a) Family Takaful Fund
 - (i) Business within Malaysia
 - Protection⁴⁹ Fund
 - Annuity Fund
 - (ii) Business outside Malaysia
 - Protection Fund
 - Annuity Fund
- (b) General Takaful Fund
 - (i) Business within Malaysia

⁴⁹ Covers takaful business of non-annuity products e.g. ordinary takaful and investment-linked takaful.

- (ii) Business outside Malaysia
 - (c) Shareholders' Fund
 - (i) Business within Malaysia
 - (ii) Business outside Malaysia
- 1.4 Where a licensed takaful operator segregates the family takaful funds into further sub-funds and manages these sub-funds separately, certain reporting requirements shall be provided for each sub-fund accordingly⁵⁰. For the purpose of reporting submission via Excel worksheets, the number of default reporting forms for sub-funds provided for protection and annuity funds are seven and three, respectively. In cases where the actual number of sub-funds managed by a licensed takaful operator is more than the number of forms provided, the licensed takaful operator shall submit a request for an enhanced reporting forms via email to rbct@bnm.gov.my with details on the number of sub-funds managed.
- 1.5 Where a licensed takaful operator's business outside Malaysia is small, the licensed takaful operator may combine the business with that within Malaysia, subject to the requirements stipulated in *Guidelines on Takaful Operational Framework*.
- 1.6 A licensed takaful operator is required to fill in only the yellow-shaded boxes as indicated in the reporting forms. A licensed takaful operator is not permitted to amend or vary in any manner, the standard programmes provided and the printouts of the reporting forms. Data shall generally be reported in the nearest Ringgit. Investment in assets or exposures denominated in foreign currencies must be translated into Ringgit based on the spot exchange rates at the end of reporting date.

⁵⁰ Applicable for Forms E1-1-1, E1-2-1, H1-2, H1-2-1, L1-2, and L1-2-1.

- 1.7 Unless otherwise permitted by this guidance notes, negative entries are not to be reported. Where negative entries do occur in one or more of the exception items, they shall be reported with negative sign (-) on the left-hand side of the figures.
- 1.8 Where the amount of a reportable item is zero, the entry made shall be the number "0", and not other symbols or words like "-" or "nil".
- 1.9 A licensed takaful operator shall submit the hardcopy of the reporting forms together with cover letter and softcopy of the reporting forms (password-protected via compact disk (CD)) to Pengarah, Jabatan Perkhidmatan Statistik, Level 4B Bank Negara Malaysia, Jalan Dato' Onn, 50480, Kuala Lumpur. A licensed takaful operator is required to provide the password of the file via email to rbct@bnm.gov.my.
- 1.10 The information provided in the quarterly reporting forms shall correspond to the information in the audited financial statements in the quarter within which the financial year end falls. In the event of any differences, the quarterly reporting forms for the quarter in which the financial year ends should be amended and re-submitted to the Bank not later than seven (7) days after the submission of the annual audited financial statements.
- 1.11 In the event of resubmission of any reporting forms due to amendments, a licensed takaful operator is required to submit a letter of explanation signed by the CEO.

- 1.12 A licensed takaful operator shall observe the following file-naming convention for the purpose of submission via CD:

Component	Data Type	Possible Values
Header	CONSTANT	RBCT
Company Code	CHAR (3)	601 [All Company Code as per FISCPS e.g. 601,602,603 etc]
Submission Type	CHAR (d)	FYE [for financial year end) or Q0x [for Quarter X)
Reporting Date	Date	31122013 [DDMMYYYY]
Extension		.xls

Example: RBCT601FYE31122013 (RBCT submission from licensed takaful operator 601 for financial year ending 31 December 2013)

2. General Instructions for Completion of the Reporting Forms

- 2.1 **Form A** – computes the capital adequacy ratio based on the calculated capital available and capital required contributed by each fund/sub-fund. The data are sourced automatically from Forms B and C.
- 2.2 **Form B** – computes the capital available for each fund/sub-fund. The valuation surplus maintained in family takaful fund refers to the unappropriated surplus carried forward, sourced automatically from Form I. Item qard to takaful funds is sourced automatically from Form D. Any negative amount of capital available for each individual fund will be automatically zeroised.
- 2.3 **Form C** – summarises the capital charges for each fund/sub-fund. The data are sourced automatically from Form E1, F and G, except for operational risk capital charges which need to be keyed in.
- 2.4 **Form D** – captures a licensed takaful operator's outstanding qard of the shareholders' fund and the movement of qard during the year. For family takaful fund, the repayment of qard to shareholders' fund is sourced automatically from Form I.
- 2.5 **Form E1** – summarises the credit and market risks capital charges for each fund/sub-fund. The data are sourced automatically from Form E1-1 and E1-2, except for asset concentration risk charge under market risk capital charges.
- 2.6 **Form E1-1** – computes the credit risk capital charges based on the calculated risk capital charges for debt obligations, financing and other assets. Separate forms shall be completed for each family takaful fund, general takaful fund and shareholders' fund. For family takaful fund, the data on credit risk capital charges are sourced automatically from Form E1-1-1 for each sub-fund managed by a licensed takaful operator.

- 2.7 **Form E1-1-1** – computes the credit risk capital charges based on the calculated risk capital charges for debt obligations, financing and other assets for each family takaful sub-fund. Separate forms shall be completed for each sub-fund.
- 2.8 **Form E1-2** – computes the market risk capital charges based on the calculated risk capital charges for equity, property, profit rate, currency and investment schemes. Separate forms shall be completed for each family takaful fund, general takaful fund and shareholders' fund. For family takaful fund, the data on market risk capital charges are sourced automatically from Form E1-2-1 for each sub-fund managed by a licensed takaful operator.
- 2.9 **Form E1-2-1** – computes the market risk capital charges based on the calculated risk capital charges for equity, property, profit rate, currency and investment schemes for each family takaful sub-fund. Separate forms shall be completed for each sub-fund.
- 2.10 **Form F** – summarises the capital charges for family takaful liabilities, expense liabilities and surrender values for family takaful business. The data are sourced automatically from Forms H1 and L1, except for surrender values capital charges which need to be keyed in.
- 2.11 **Form G** – summarises the claim liabilities and contribution liabilities risk capital charges, as well as the expense risk capital charges for each line of business for general takaful fund. The data are sourced automatically from Forms K and M.
- 2.12 **Form H1** – summarises the takaful liabilities and takaful liabilities risk capital charges for family takaful fund.
- 2.13 **Form H1-1** – captures details and key information on the valuation of takaful liabilities and takaful liabilities risk capital charges for each family takaful sub-fund. The data are sourced automatically from Form H1-2.

- 2.14 **Form H1-2** – captures, at product group level, the details and key information on the valuation of takaful liabilities and takaful liabilities risk capital charges for each family takaful sub-fund. Separate forms shall be completed for each sub-fund.
- 2.15 **Form H1-2-1** – captures, at product level, the details and key information on the valuation of takaful liabilities and takaful liabilities risk capital charges for each family takaful sub-fund. Separate forms shall be completed for each sub-fund and need to be completed only for financial year end submission.
- 2.16 **Form I** – captures the valuation results, movements and recommended distribution of surplus for family takaful fund. This form is to be filled for quarterly and financial year end submissions. However, for quarterly submissions, the following items are not required to be reported:
- (a) Distribution to participants (Item B5); and
 - (b) Remuneration to Shareholders' Fund (Item B6).
- 2.17 **Form J** – captures the sources of surplus arising in Participants' Risk Fund during the period. This form is to be filled for quarterly and financial year end submissions. Take note that the surplus arising for the quarterly period shall coincide with quarterly licensed takaful operator's financial statements. The components for each of the sources of surplus arising shall be as follows:
- (a) **Investment** refers to the following:
 - (i) profit, coupons, dividends and rents;
 - (ii) net gain / (loss) on disposal of investments;
 - (iii) net accretion / (amortization) of investments;
 - (iv) gain / (loss) from changes in fair value;
 - (v) impairment (loss) / reversal;
 - (vi) foreign exchange gain / (loss) on investments;
 - (vii) taxes on investments; and
 - (viii) direct investment related expenses as specified in *Guidelines on Takaful Operational Framework*.
 - (b) **Takaful benefits** refers to the following:

- (i) mortality;
 - (ii) TPD, CI and other incidence rate business;
 - (iii) all loss ratio business; and
 - (iv) direct claims related expenses as specified in *Guidelines on Takaful Operational Framework*.
- (c) **Change in valuation basis** (take note that “Expected” equals zero).
- (d) **Expenses** refer to expenses borne by the takaful fund.
- (e) **Lapse** includes the following:
- (i) surrenders; and
 - (ii) reinstatements.
- (f) **New business** (take note that “Expected” equals zero) refers to:
- (i) basic plans; and
 - (ii) riders.
- (g) **Others** includes the following:
- (i) options and guarantees (non-takaful in nature, i.e. other than item (b) above);
 - (ii) allowance for impairments (e.g. outstanding contributions, retakaful balances, etc);
 - (iii) other gain / (loss); and
 - (iv) balancing item.

2.18 **Form K** – captures the claim liabilities and contribution liabilities, as well as the risk capital charges for each line of business for general takaful fund.

2.19 **Form L1** – summarises the expense liabilities and expense liabilities risk capital charges for family takaful business.

2.20 **Form L1-1** – captures details and key information on the valuation of expense liabilities and expense liabilities risk capital charges for family takaful business sub-fund. The data are sourced automatically from Form L1-2.

- 2.21 **Form L1-2** – captures, at product group level, details and key information on the valuation of expense liabilities and expense liabilities risk capital charges for each family takaful sub-fund. Separate forms shall be completed for each sub-fund.
- 2.22 **Form L1-2-1** – captures, at product level, details and key information on the valuation of expense liabilities and expense liabilities risk capital charges for each family takaful sub-fund. Separate forms shall be completed for each sub-fund and need to be completed only for financial year end submission.
- 2.23 **Form M** – captures the expense liabilities and expense liabilities risk capital charges by each line of business for general takaful business.