



# **Insurance Capital Adequacy Framework for Labuan Insurers**

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## **PART A OVERVIEW**

### **1.0 Objectives**

1.1 The requirements detailed in this Insurance Capital Adequacy Framework (ICAF) aim to ensure that each Labuan insurer maintains a capital adequacy level that is commensurate with its risk profile at all times. This Framework has been developed based on the following principles:

- (i) allowing greater flexibility for a Labuan insurer to operate at different risk levels in line with its business strategies, so long as it holds commensurate capital and observes the prudential safeguards set by Labuan Financial Services Authority (Labuan FSA);
- (ii) explicit quantification of the prudential buffer with the aim of improving transparency;
- (iii) providing incentives for Labuan insurers to put in place appropriate risk management infrastructure and adopt prudent practices;
- (iv) promoting convergence with international practices so as to enhance comparability across jurisdictions and reduce opportunities for regulatory arbitrage within the financial sector; and
- (v) providing an early warning signal on the deterioration in the capital adequacy level of a Labuan insurer, hence allowing prompt and pre-emptive supervisory actions to be taken.

1.2 This Framework sets out:

- (i) the requirements to determine the adequacy of the capital available in Labuan insurer's insurance and shareholders' funds to support the 'Total Capital Required' (TCR). This serves as a key indicator of its financial resilience, and will be used as input to determine supervisory interventions by Labuan FSA; and
- (ii) the valuation bases for Labuan insurers' assets and liabilities and Labuan

FSA's expectations on Labuan insurers' investment and risk management policies.

## **2.0 Legal Provisions**

- 2.1 This Framework is issued pursuant to Section 4A of the Labuan Financial Services Authority Act 1996 (LFSAA) for the purpose of clarifying the requirements on margin of solvency for Labuan insurers under Section 109 of the Labuan Financial Services and Securities Act 2010 (LFSSA).
- 2.2 Any person who fails to comply with this Framework is guilty of an offence punishable under Section 36B and 36G of the LFSAA.

## **3.0 Applicability**

- 3.1 This Framework is applicable to all Labuan insurers and reinsurers excluding (re)insurance captives. Unless otherwise stated, the term "Labuan insurer" in this Framework includes a Labuan reinsurer.
- 3.2 The Labuan direct insurers (subsidiary and branch) and subsidiary (i.e. non-branch) reinsurers with headquarters in Labuan will be subjected to the full ICAF requirement on both the Malaysian and Labuan insurance business. Subsidiary reinsurers not headquartered in Labuan and branch reinsurers are only subjected to the ICAF requirement on the Malaysian business written while the risk charges in respect of offshore business are exempted from any capital requirements, subject to LFSA's approval. This is demonstrated in the table below:

<b>Business Underwritten</b>	<b>Direct Insurer (i.e. Subsidiary, Branch)</b>	<b>Reinsurers incorporated in Labuan IBFC (i.e. Subsidiary headquartered in Labuan IBFC)</b>	<b>Reinsurers incorporated in Labuan IBFC (i.e. Subsidiary not headquartered in Labuan IBFC)</b>	<b>Branch Reinsurers</b>
<i>Business within Malaysia (excluding Labuan IBFC)</i>	<i>Full ICAF requirement applies without distinction</i>			
<i>Business outside Malaysia (including Labuan IBFC)</i>	<i>Full ICAF requirement applies without distinction</i>	<i>Exempted from any solvency requirements subject to Labuan FSA's prior approval<sup>1</sup></i>		

3.3 Labuan Insurance Business<sup>2</sup> (insurance business underwritten within Labuan IBFC and from outside Malaysia) generated by a subsidiary reinsurer not headquartered in Labuan and a Labuan branch of a reinsurer may be exempted from this Framework, subject to Labuan FSA's prior approval, if:

- (i) there is an explicit undertaking from the reinsurer's parent company or head office to satisfy the liabilities arising from Labuan Insurance Business in the event that the reinsurer is unable to fulfil its obligations;
- (ii) the financial position of the reinsurer's group is strong;
- (iii) the reinsurer is subjected to consolidated supervision by a

<sup>1</sup> Exempted from capital risk charges in respect of Labuan insurance business.

<sup>2</sup> Labuan Insurance Business is an insurance business which is not domestic insurance business and which is transacted in foreign currency.

recognised and competent home supervisory authority; and

- (iv) the reinsurer's home supervisory authority is willing to cooperate with Labuan FSA in the supervision of the Labuan reinsurer.

**Question 1**

Aside from the proposed exemptions as per paragraph 3.3, is there a merit to allow an exemption (subject to Labuan FSA's approval) for direct insurers' branch underwriting Labuan Insurance Business? Please provide justification for your recommendation.

**4.0 Effective Date**

- 4.1 This Framework shall come into effect on DD/MM/2020 and would remain effective as well as applicable unless amended or revoked.

**Question 2**

Do you have a participating business? If yes, please provide the amount of participating business as at 31 Dec 2017.

## PART B CAPITAL ADEQUACY

### 5.0 Capital Adequacy Ratio – the Formula

5.1 The Capital Adequacy Ratio (CAR) measures the adequacy of capital available in the insurance and shareholders' funds of a Labuan insurer to support the Total Capital Required (TCR). A Labuan insurer shall compute the CAR as follows:

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

### 6.0 Total Capital Available

6.1 The 'Total Capital Available' (TCA) of a Labuan insurer shall be the aggregate of Tier 1 and Tier 2 capital of the Labuan insurer less deductions in paragraph 7.1. 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.

6.2 The total amount of Tier 2 capital of a Labuan insurer shall not exceed the amount of Tier 1 capital at all times.

6.3 Tier 1 capital of a Labuan insurer shall include the aggregate of any of the following:

- (i) issued and fully paid-up ordinary shares (or working fund, in the case of an insurer branch);
- (ii) share premiums;
- (iii) paid-up non-cumulative irredeemable preference shares;
- (iv) capital reserves;
- (v) retained profits<sup>3</sup>; and
- (vi) the valuation surplus<sup>4</sup> maintained in the insurance funds.

<sup>3</sup> In the event that an insurer has accumulated losses, the losses should be deducted from the capital.

<sup>4</sup> Gross of deferred tax, if any.



6.4 Capital instruments which qualify as Tier 2 capital shall include any of the following:

- (i) cumulative irredeemable preference shares;
- (ii) mandatory<sup>5</sup> capital loan stocks and other similar capital instruments;
- (iii) irredeemable subordinated debts;
- (iv) available-for-sale reserves<sup>6</sup>;
- (v) revaluation reserves for self-occupied properties and other assets;
- (vi) general reserves; and
- (vii) subordinated term debts.

6.5 Subordinated term debts, subject to the prior approval of Labuan FSA on a case-to-case basis, may include term debt and limited life redeemable preference shares which satisfy the following conditions:

- (i) unsecured, subordinated and fully paid-up;
- (ii) have a minimum original term to maturity of five years;
- (iii) early repayment or redemption shall not be made without prior written approval of Labuan FSA;
- (iv) the instruments should be subjected to straight line amortisation over the last five years of their life<sup>7</sup>;
- (v) no restrictive covenants; and
- (vi) 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

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<sup>5</sup>Refers to irredeemable loans stocks or capital instruments which are mandatorily convertible to equity.

<sup>6</sup> In the event that an insurer has fair value losses for available-for-sale instruments, the losses should be deducted from the capital.

<sup>7</sup> 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 remaining) of the issued amount.

consent of Labuan FSA.

- 6.6 A Labuan insurer that plans to issue any new capital instruments is required to seek Labuan FSA's prior written approval on the classification of the instruments under this Framework.

## **7.0 Deductions from Capital**

7.1 For the purpose of calculating CAR, the following deductions shall be made by a Labuan insurer from the aggregate of Tier 1 and Tier 2 capital to arrive at the TCA:

- (i) goodwill and other intangible assets (e.g. capitalised expenditure) of the Labuan insurer;
- (ii) deferred tax income or deferred tax expenses and deferred tax assets of the Labuan insurer;
- (iii) assets pledged to support credit facilities obtained by the Labuan insurer or other specific purposes<sup>8</sup>;
- (iv) investment in the Labuan insurer's subsidiaries; and
- (v) all credit facilities granted by the Labuan insurer and secured by its own shares.

## **8.0 Total Capital Required**

8.1 The TCR of a Labuan insurer shall be the aggregate of its TCR for each insurance fund and, the TCR for all assets in its shareholders' fund or, in the case of an insurer branch, in its working fund. Further details applicable to the TCR are set out in Part C of this Framework.

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<sup>8</sup> An insurer is allowed to pledge its assets as security or collateral to:

- (i) obtain utilities such as electricity, water, telephone, petrol supply and medical facilities;
- (ii) secure a mortgage loan where the property is assigned to a financial institution for the purpose of that property; and
- (iii) obtain overdraft facilities to meet temporary shortfall in current accounts.

The assets pledged for purpose (ii) above shall be sourced from the shareholders' fund. Pledging of assets for purposes other than those mentioned above requires prior written approval of Labuan FSA.

## PART C CAPITAL REQUIRED TO MITIGATE MAJOR RISKS

### 9.0 Total Capital Required

9.1 The TCR for each fund is the higher of (A) the aggregate of (i) the square root of the sum of (a) the squares of the aggregate of capital charges for credit and market risks, and (b) the squares of the capital charges for insurance risks, (ii) the capital charges for operational risks, or (B) the surrender value capital charges, where applicable.

A Labuan insurer shall compute the TCR as follows:

$$\begin{aligned} TCR_{Company} &= \sum_{all\ i} TCR_i \\ &= \sum_{all\ i} \max \left\{ \left[ \sqrt{\begin{aligned} &(Credit\ Risk\ Capital\ Charges_i + Market\ Risk\ Capital\ Charges_i)^2 \\ &+ Insurance\ Liability\ Capital\ Charges_i^2 \end{aligned}} \right. \right. \\ &\left. \left. + Operational\ Risk\ Capital\ Charges_i \right], Surrender\ Value\ Capital\ Charges_i \right\} \end{aligned}$$

where 'i' refers to the different types of funds in the respective Labuan insurer.

These fund types shall include the shareholders' fund, working fund and the sub-funds from the insurance fund.

#### **Question 3**

Labuan FSA seeks the industry's view on the formulae to compute TCR as per paragraph 9.1 which takes into account diversification benefit between assets and insurance liability risk charges.

#### **Question 4**

IFRS 17: Insurance Contract will come into effect on 1 January 2021. The transition into IFRS 17 may have an impact on the valuation of insurance liabilities and profit of insurers. Would your company foresee any major impact of the IFRS 17 on the proposed ICAF requirements? If so, what would be your plan or recommendation for transition into applying the proposed CAR formulae as per paragraph 5.1?

- 9.2 A Labuan insurer shall compute the TCR for all insurance funds and the shareholders' or working fund. In the case of an investment-linked fund, the Labuan insurer shall compute the TCR for the non-unit portion of the fund, except for operational risk capital charges, where the Labuan insurer shall compute the TCR for the entire fund.

### **10.0 Capital Charges for Credit Risk**

- 10.1 The credit risk capital charges (CRCC) aim to mitigate a Labuan insurer's risk 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.

- 10.2 A Labuan insurer shall compute the 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 funds.

- 10.3 A Labuan insurer shall apply the CRCC as set out in **Appendix I**.

## 11.0 Capital Charges for Market Risk

11.1 The market risk capital charges (MRCC) aim to mitigate a Labuan insurer's risk of financial losses arising from:

- (i) the reduction in the market value of its assets due to exposures to equity, interest rate, property and currency risks;
- (ii) non-parallel movements between the value of its liabilities and the value of its assets backing the liabilities due to interest rate movements (i.e. the interest rate mismatch risk); and
- (iii) its concentration of exposures to particular counterparties or asset classes as set out in paragraph 10.1 of **Appendix II**.

11.2 A Labuan insurer shall compute the MRCC as follows:

$$MRCC = \sum_{all\ i} [(market\ exposures_i \times market\ risk\ charge_i)]$$

where 'i' refers to different asset classes in the respective funds.

11.3 The MRCC for interest rate mismatch risks shall be applicable only for Malaysian business with discounted liabilities.

11.4 A Labuan insurer shall apply the MRCC as set out in **Appendix II**.

## 12.0 Capital Charges for General Insurance Liabilities

12.1 For a Labuan insurer carrying on general insurance business, the general insurance liabilities risk capital charges (GCC) aim to address the risk of under-estimation of its insurance liabilities and adverse claims experience, over and above the amount of its reserves already provided for at the 75% level of confidence.

12.2 A Labuan insurer shall compute the GCC as follows:

$$\begin{aligned}
 GCC &= \sum_{all\ i} [capital\ charge\ for\ claims\ liabilities_i] + \\
 &\quad [capital\ charge\ for\ premium\ liabilities_i] \\
 &= \sum_{all\ i} [value\ of\ claims\ liabilities_i \times risk\ charge_i] + \\
 &\quad [value\ of\ unexpired\ risk\ reserves_i \times risk\ charge_i]
 \end{aligned}$$

where 'i' refers to the different classes of the general insurance business.

- 12.3 A Labuan insurer shall apply the GCC risk charges as set out in **Appendix IV**.
- 12.4 To arrive at the GCC, a Labuan insurer shall apply the risk charges to its claims liabilities and unexpired risk reserves computed at the 75% level of confidence for each class of business after allowing for diversification.
- 12.5 A Labuan insurer is required to hold, among others, reserves in respect of premium liabilities, defined as the higher of (i) unexpired risk reserve (URR); or (ii) unearned premium reserve (UPR). Where the Labuan insurer holds a higher URR compared to UPR, this excess amount cannot be applied to reduce the amount of the GCC. The Labuan insurer shall apply the valuation basis for general insurance liabilities as set out in the **Guidelines on Valuation Basis for Liabilities of Labuan General Insurance Business**.
- 12.6 Where a Labuan insurer holds the UPR as the value of its premium liabilities, the Labuan insurer shall use the following formula to recognise a lower capital charge for premium liabilities:

$$\begin{aligned}
 &Capital\ charge\ for\ premium\ liabilities_i \\
 &= Max[0, (Value\ of\ unexpired\ risk\ reserves^*_i \times risk\ charge_i) - \\
 &\quad (Value\ of\ premium\ liabilities_i - Value\ of\ unexpired\ risk\ reserves^*_i)]
 \end{aligned}$$

where 'i' refers to the different classes of the general insurance business.

\* unexpired risk reserves computed at the 75% level of confidence

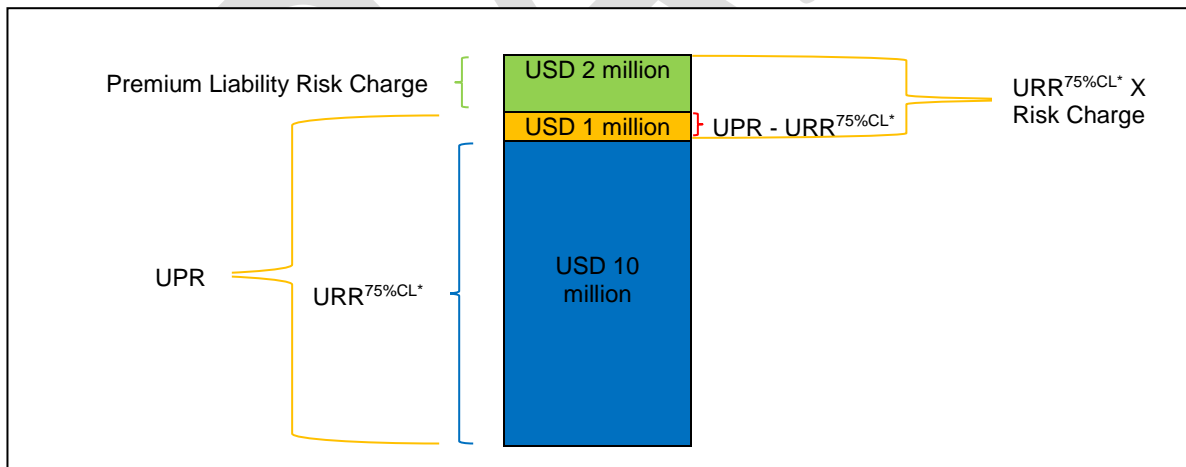
**Example:**

Let us assume a Labuan insurer writes Fire class of business with following the details.

- UPR = USD 11 million;
- URR<sup>75% Confidence Level</sup> = USD 10 million; and
- Effective risk charge = 30%

The effective risk charge is USD 3 million being 30% of the URR<sup>75% Confidence Level</sup>, but if the UPR is already greater than the URR<sup>75% Confidence Level</sup> by USD 1 million (i.e. USD 11 million – USD 10 million), a Labuan insurer is allowed to take credit for this USD 1 million excess. Essentially, the final premium liability risk charge for the Fire class reduces from the effective risk charge of USD 3 million to USD 2 million (i.e. USD 3 million – USD 1 million excess). For illustration purposes, Diagram 1 below shows the risk charge portion in a bar chart based on this example.

Diagram 1



*\*Confidence Level*

### 13.0 Capital Charges for Life Insurance Liabilities

13.1 For a Labuan insurer carrying on life business, the life insurance liabilities risk capital charges (LCC) aim to address the risk of under-estimation of its insurance liabilities and adverse claims experience, over and above the amount of its reserves already provided for at the 75% level of confidence.

13.2 A Labuan insurer shall compute LCC, (except for life insurance policies which are covered under paragraph 13.5), as follows:

$$LCC = (V^* - V - PAD)$$

Where

- 'V\*' is the adjusted value of life insurance liabilities computed using the parameters stipulated in **Appendix V**;
- 'V' is the best estimate value of life insurance liabilities; and
- 'PAD' is the Provision of Adverse Deviation as defined in the **Guidelines on Valuation Basis for Liabilities of Labuan Life Insurance Business**.

**Example:**

Let us assume a Labuan insurer applies the stress factors as prescribed in Appendix V and the resulting reserves for each scenario are as per below,

- High Mortality, High Lapse – USD 10 million;
- High Mortality, Low Lapse – USD 13 million;
- Low Mortality, High Lapse – USD 9 million;
- Low Mortality, Low Lapse – USD 11 million; and

V\* would be based on the scenario that results in the highest liability number which in this case is the High Mortality, Low Lapse reserve of USD 13 million.

Suppose that the best estimate reserve is USD 8 million and that the 75% level of confidence reserve is USD 9.5 million. The PAD is therefore USD 1.5 million (i.e. USD 9.5 million – USD 8 million).

The resulting LCC would be = USD 13 million – USD 8 million – USD 1.5 million = USD 3.5 million.

13.3 A Labuan insurer shall apply the stress factors for major risks inherent in life insurance liabilities as set out in **Appendix V**. Where the valuation assumptions are



not separated according to the categories as prescribed in **Appendix V**, the stress factors applied to derive  $V^*$  in respect of the combined risk rates shall be the highest stress factors of the constituent risks as prescribed in the same Appendix.

- 13.4 For products which have liabilities affected by risks other than those listed in **Appendix V** (e.g. products with investment guarantees that would have impact on the liabilities of the Labuan insurer in adverse market or credit risk events), the additional risks above the 75% confidence level shall be quantified and included by the Labuan insurer in the determination of its internal target capital level as per Part F of this Framework.
- 13.5 For a short-term medical and health insurance standalone policy or rider, as well as short-term personal accident plan for which premium and claims liabilities have been reserved, the applicable risk charges of the Labuan insurer shall correspond to that as required for general insurance liabilities in **Appendix IV**.

#### 14.0 Capital Charge for Operational Risk

- 14.1 The operational risk capital charges (ORCC) aim to mitigate a Labuan insurers' risk of losses arising from inadequate or failed internal processes, people and systems.
- 14.2 A Labuan insurer shall compute the ORCC for each fund as follows:

*$ORCC = [2.5\% \text{ of } GP_{1,i} + \text{Max}(\text{zero}, 2.5\% \times [(GP_{1,i} - GP_{0,i}) - 20\% \times GP_{0,i}])] \text{ subject to a cap of } 30\% \text{ of the sum of other risk charges (i.e. } LCC_i, GCC_i, MRCC_i, CRCC_i) \text{ after diversification benefit}$*

where

'i' refers to the different types of funds in the respective Labuan insurer.

$GP_1$  refers to the gross written premium for the 12 months preceding the valuation date; and

$GP_0$  refers to the gross written premium for the 12 months preceding  $GP_1$

#### **Example:**

Let us assume a Labuan insurer has the following amount in the General Insurance

(GI) fund.

- $GP_{1,GI}$  = USD 50 million;
- $GP_{0,GI}$  = USD 20 million; and
- Other risk charges<sub>GI</sub> = USD 5 million.

$2.5\%$  of  $GP_{1,GI} + \text{Max}(0, 2.5\% \times [ (GP_{1,GI} - GP_{0,GI}) - 20\% \times GP_{0,GI} ] )$  would give USD 1.9 million (i.e.  $2.5\% \times \text{USD } 50 \text{ million plus } 2.5\% \times \{ \text{USD } 30 \text{ million} - \text{USD } 4 \text{ million} \}$ ). This is then capped to 30% of USD 5 million (i.e. USD 1.5 million).

Hence the resulting ORCC would be USD 1.5 million.

### **Question 5**

Do you think that the proposed formulae to calculate the operational risk capital charges as per paragraph 14.2 is appropriate? Operational risk proxy based on the percentage of assets as adopted by some jurisdictions may not bode well with Labuan players with small assets size but possibly high operational risks.

14.3 The above method shall serve as a reasonable proxy to address the operational risk of a Labuan insurer for the time being in the absence of more established and internationally accepted methods.

## **15.0 Surrender Value Capital Charges**

15.1 For a Labuan insurer carrying on life business, the surrender value capital charges (SVCC) aim to address lapse risk in excess of the levels assumed in the calculation of its reserves and risk margins.

15.2 A Labuan insurer shall compute the SVCC as the aggregate of –

*Max [zero; aggregate surrender value of the business in force in respect of policies ]  
[in the insurance fund less the aggregate policy reserves of the insurance fund]*

for each of the life insurance funds. In the case of investment-linked business, the SVCC shall apply if there are guaranteed surrender values that exceed the sum of the unit fund values and non-unit reserves, in aggregate, at the valuation date.

**Example:**

Let us assume a Labuan insurer's aggregate surrender value of the Ordinary Life (OL) fund is USD 1 million and the aggregate policy reserves (i.e. reserves at 75% level of confidence) is USD 2 million. Based on paragraph 15.2, the SVCC for the OL fund is  $\text{Max}(0, \text{USD } 1 \text{ million} - \text{USD } 2 \text{ million}) = \text{USD } 0 \text{ million}$ .

Conversely, if the aggregate surrender value of the OL fund is USD 2 million and the aggregate policy reserves (i.e.. reserves at 75% level of confidence) is USD 1 million, the SVCC for the OL fund is  $\text{Max}(0, \text{USD } 2 \text{ million} - \text{USD } 1 \text{ million}) = \text{USD } 1 \text{ million}$ .

## **PART D VALUATION OF ASSETS AND LIABILITIES**

### **16.0 Overview**

16.1 A Labuan insurer shall value its assets and liabilities in accordance with the -

- (i) applicable approved accounting standards in accordance to the Directive on Financial Reporting Standards for Labuan Financial Institution, as modified by Labuan FSA under this Framework; or
- (ii) other standards specified by Labuan FSA pursuant to section 111, read together with section 116(b) of the LFSSA.

### **17.0 Valuation of Assets**

17.1 A Labuan insurer shall value its financial assets in accordance with the requirements of the Directive on Financial Reporting Standards for Labuan Financial Institution.

### **18.0 Valuation of Liabilities**

#### **(I) Financial Liabilities**

18.1 A Labuan insurer shall value its financial liabilities in accordance with the requirements as specified in the Directive on Financial Reporting Standards for Labuan Financial Institution.

#### **(II) Insurance Liabilities**

18.2 A Labuan insurer shall value its life and general insurance liabilities subject to the minimum requirements specified in paragraphs 18.5 to 18.8 in this Framework. This is to ensure that the Labuan insurer provides reserves at a specified level of adequacy with explicit prudential margins.

18.3 The valuation bases for life and general insurance liabilities are specified in this Framework in accordance with the principles which include, among others:

- (i) consistency with the principles of fair valuation, where possible and

appropriate, or otherwise consistent with the principle of prudence; and

- (ii) giving due regard to the regulatory duty of the Labuan insurer to treat policyholders fairly.

18.4 For the valuation of general insurance liabilities, life insurance liabilities, and non-unit investment-linked liabilities the prescribed valuation bases aim to secure an overall level of sufficiency of policy reserves at the 75% confidence level. To secure this level of adequacy, Labuan insurers are required to calculate the best estimate value of their insurance liabilities and apply a 'Provision of Adverse Deviation' (PAD).

18.5 For a Labuan insurer carrying on general business, risks for its general insurance liabilities shall relate to those associated with the uncertainty of outstanding claims and unexpired risks (with respect to unexpired premiums), resulting from the risks of adverse claims experience and under-estimation of premiums.

18.6 All Labuan insurers carrying on general insurance business shall value their general insurance liabilities in the manner as specified in the **Guidelines on Valuation Basis for Liabilities of Labuan General Insurance Business**.

18.7 For a Labuan insurer carrying on life business, the risks for its life insurance liabilities shall relate to those associated with the uncertainty in future claims contingent events, under-estimation of premiums and adverse claims contingent events.

18.8 All Labuan insurers carrying on life insurance business shall value their life insurance liabilities in the manner as specified in the **Guidelines on Valuation Basis for Liabilities of Labuan Life Insurance Business**.

## **PART E INVESTMENT OF INSURANCE FUNDS**

### **19.0 Investment and Risk Management Policy**

- 19.1 Greater investment flexibility is accorded to Labuan insurers under this Framework to allow for better management of assets appropriate with the nature and profile of the Labuan insurers' liabilities.
- 19.2 The oversight of and accountability for the investment of insurance funds rest ultimately with the Labuan insurer's board of directors. To ensure proper investment of insurance funds, the Labuan insurer shall put in place an investment and risk management policy that is in line with the risk appetite set by its board of directors. The investment and risk management policy shall be approved and reviewed regularly by the board of directors and cover overall investment strategy and proper risk management systems, including monitoring and control mechanisms.
- 19.3 A Labuan insurers' policy on overall investment strategy shall cover, at least, the following elements:
- (i) the investment objectives of the Labuan insurer, both at company and fund-specific levels;
  - (ii) the risk and liability profile of the Labuan insurer;
  - (iii) the strategic asset allocation of the Labuan insurer, i.e. its long-term asset mix for the main investment categories, and their respective limits;
  - (iv) the extent to which the holding of certain types of assets by the Labuan insurer is restricted or disallowed, e.g. illiquid or highly volatile assets; and
  - (v) the Labuan insurer's overall policy on the usage of derivatives and structured products.
- 19.4 A Labuan insurer's risk management systems shall cover the risks associated with investment activities that may affect the coverage of its insurance liabilities and capital positions. The main risks include market, credit and liquidity risks.

19.5 As part of good risk management practices and to ensure proper monitoring and control of its investments, a Labuan insurer shall also:

- (i) establish adequate internal controls to ensure that its assets are managed in accordance with approved investment policies, and in compliance with legal, accounting and relevant risk management requirements. These controls shall ensure that investment procedures are documented and subject to effective oversight. There shall be in place appropriate segregation of responsibilities for measuring, monitoring, settling and controlling asset transactions, from the front office functions;
- (ii) have in place rigorous audit procedures that include full coverage of its investment activities to ensure timely identification of internal control weaknesses and operating system deficiencies. If the audit is performed internally, it shall be independent of the function being reviewed;
- (iii) install effective procedures for monitoring and managing its asset-liability position to ensure that its investment activities and asset positions are appropriate in relation to its liability and risk profiles;
- (iv) put in place suitable plans to mitigate the effects arising from deteriorating market conditions;
- (v) undertake regular stress tests for a range of market scenarios and changing investment and operating conditions in order to assess the appropriateness of its asset allocation limits; and
- (vi) ensure its key staff involved in investment activities have the appropriate levels of skills, experience, expertise and integrity.

19.6 A Labuan insurer's senior management is responsible for setting, managing and reviewing the investment policies of the Labuan insurer. In the case of a participating life fund, Senior Management should ensure that the investment policy is consistent with the bonus and/or dividend distribution policy of the insurer. The senior management is also responsible for ensuring the proper implementation

of investment policies approved by the Labuan insurer's board of directors, as well as timely and regular reporting to the board of directors of the Labuan insurer's investment activities.

- 19.7 Labuan FSA may impose requirements on an individual Labuan insurer to invest in a specified manner, or to restrict or prohibit a Labuan insurer from investing in certain asset classes or individual asset to safeguard its insurance funds. Such requirements, restrictions or prohibitions will form part of Labuan FSA's supervisory actions as a result of its assessment of the Labuan insurer's risk profile and investment risk management function.



## **PART F INTERNAL AND SUPERVISORY TARGET CAPITAL LEVELS**

### **20.0 Internal Capital Target**

- 20.1 The TCR prescribed under this Framework assumes an average industry level of risk within each business activity and that risks arising from these activities are mitigated by standard risk management practices. In practice, the actual risk profile and the quality of risk management measures adopted by each Labuan insurer to mitigate its risk exposure may differ significantly from that assumed under this Framework.
- 20.2 Each Labuan insurer is therefore, expected to set an internal target capital level that better reflects its own risk profile and risk management practices. Labuan FSA expects the internal target to include additional capacity to absorb unexpected losses beyond those that are covered by this Framework. In general, the internal target capital level should be higher for Labuan insurers with higher risk profiles or weaker risk management practices. The assessment of an appropriate internal target capital level should be performed by the Labuan insurer by conducting appropriate stress and scenario tests.
- 20.3 A Labuan insurer's board of directors is primarily responsible for setting the internal target in the context of Labuan FSA's broader expectations for individual insurer to have in place an appropriate capital management plan that takes into account its strategic business direction and the changing business environment. Labuan FSA also expects each Labuan insurer to establish adequate processes to monitor and ensure the maintenance of an appropriate level of capital which commensurate with current risk profile.

### **21.0 Minimum Capital Level under the Risk-Based Supervisory Framework**

- 21.1 Labuan FSA's supervisory approach of pre-emptive intervention means that supervisory action will be taken during the early stages of financial difficulties faced by a Labuan insurer. To meet this objective, Labuan FSA has set a Minimum Capital Level of 120% subject to a minimum solvency of RM10 million for a Labuan reinsurer and RM7.5 million for a direct Labuan insurer (or its equivalent in foreign currency), below which supervisory actions of increasing intensity will be taken to

resolve the financial position of the Labuan insurer.

- 21.2 The Minimum Capital Level should be viewed as a benchmark against which a Labuan insurer shall establish its own higher internal target capital level. Labuan FSA will assess<sup>9</sup> whether the internal target capital level is appropriate for the Labuan insurer's risk profile, and on a case-by-case basis, may require an adjustment to the level of the Labuan insurer's internal capital target. A Labuan insurer shall not set its internal target capital level below the Minimum Capital Level.
- 21.3 When a Labuan insurer's CAR breaches its internal target capital level set by the Labuan insurer but remains above the Minimum Capital Level, Labuan FSA will assess the circumstances and the Labuan insurer's remedial plans to restore CAR above its internal target capital level, before deciding on the level of supervisory intervention required. Continued deterioration of a Labuan insurer's CAR below its internal target capital level will attract increasing levels of supervisory attention. A Labuan insurer whose CAR breaches the Minimum Capital Level of 120% subject to a minimum solvency requirement specified under paragraph 21.1 will face stricter supervisory action, which may include business restrictions and/or restructuring measures.

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<sup>9</sup> Under the Risk-Based Supervisory Framework, Labuan FSA will evaluate the inherent risks associated with an insurer's significant activities, and the quality of risk management applied to mitigate those risks. This enables Labuan FSA to assess the insurer's overall net risk with respect to its current level of capital and earnings.

## **PART G OTHER AREAS**

### **22.0 Capital Adequacy Position**

- 22.1 A Labuan insurer shall submit to Labuan FSA its CAR computations based on the financial year end positions, within 6 months after the end of each financial year end using the reporting forms specified by Labuan FSA. The financial year end CAR positions shall be certified by the Labuan insurer's external auditor and Principal Officer (PO).
- 22.2 Labuan FSA may require a Labuan insurer with a weak capital adequacy position to compute and report its CAR to Labuan FSA on a more frequent basis.

### **23.0 Minimum Paid-up Capital**

- 23.1 The minimum amount of capital funds or surplus of assets over liabilities which a Labuan insurer shall maintain at all times to carry on insurance business shall be as prescribed pursuant to section 103 of the LFSSA.

### **24.0 Other Conditions**

- 24.1 Labuan FSA may impose other conditions such as restrictions on payment of dividends if it reasonably believes that the CAR of Labuan insurer is below its internal target capital level or will fall below its internal target capital level as a result of the payment of dividend.

#### **Question 6**

Labuan FSA seeks comments on the overall proposed ICAF requirements and on any matters relevant to be considered in relation to its implementation.

## PART H APPENDICES

### Appendix I Credit Risk Capital Charges

#### 1.0 Overview

1.1 Credit risks relate to losses resulting from asset defaults and related loss of income due to the inability or unwillingness of a counterparty to fully meet its contractual financial obligations. The risk charges for exposures to various counterparties and/or debt obligations and asset types are set out in this Appendix.

#### 2.0 Debt Obligations

2.1 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 loans<sup>10</sup>. 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**

No.	Counterparty or debt obligations	Risk charge
1.	the Federal Government of Malaysia, Bank Negara Malaysia <sup>11</sup> , the federal government or the central bank of a G10 country <sup>12</sup> and recognised multilateral development banks (MDBs) <sup>13</sup>	0%

<sup>10</sup> Including policy loans, automatic premium loans and staff loans.

<sup>11</sup> Including special purpose vehicles 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).

<sup>12</sup> G10 countries are Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States of America.

<sup>13</sup> 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

No.	Counterparty or debt obligations	Risk charge
2.	Cagamas in respect of its obligations or that issued by its subsidiaries prior to 4 September 2004, Cagamas Covered Bonds and Covered Sukuk Wakalah	0.8%
3.	State government of Malaysia and the federal government or the central bank of non-G10 countries	1.6%
4.	Corporations and other organisations with the following rating categories (further details in <b>Appendix X</b> ):  (i) One (ii) Two (iii) Three (iv) Four (v) Five	1.6% 2.8% 4% 6% 12%
5.	Debt facilities <sup>14</sup> with original maturity of 1 year or less and with the following rating categories (further details in <b>Appendix VI</b> ):  (i) One (ii) Two (iii) Three (iv) Four	1.6% 4% 8% 12%
6.	Individual person:  (i) Staff of the Labuan insurer <sup>15</sup> (ii) Other individuals (except for policy loan)	4% 12%

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.

<sup>14</sup> Ratings are facility-specific and can only be used to determine the capital charge for exposure to the specific facility.

<sup>15</sup> Loans given to staff under the employment service contracts.

No.	Counterparty or debt obligations	Risk charge
7.	Policy loans <sup>16</sup>	0%

2.2 A Labuan insurer 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:

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

(a) In the event where the Labuan insurer'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 the Labuan insurer is not exposed, the Labuan insurer can use that debt security rating in determining the appropriate risk charge for its exposure to the counterparty. However, this is subject to the condition that the Labuan insurer'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 should apply to the unrated exposure; and

(b) 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.

(ii) If a debt obligation is rated by more than one rating agency, the risk charge should be based on the following principles:

<sup>16</sup> 'Policy loans' means a credit facility granted by an insurer underwriting life insurance business to its policyholders and the amount of the facility does not exceed the surrender value of the life policy of the policyholders on the date of granting the credit facilities.

- (a) Where two ratings are available, the lower rating is to be applied; or
  - (b) Where three or more ratings are available, the lower of the two highest ratings will be used.
- 2.3 Investments in innovative tier 1 capital instrument<sup>17</sup> issued by Labuan banks, BNM licensed banks, Labuan investment banks and BNM licensed investment banks are subjected to the same credit risk charge<sup>18</sup> that is applicable to an exposure to a similarly rated corporate debt obligation.
- 2.4 For debt obligations that are denominated in foreign currency or issued outside Malaysia, Labuan insurers should consider the appropriateness of the rating in reflecting transferability and convertibility risks. Where such risks are not adequately reflected in the rating, Labuan insurers should provide for this in the internal target capital levels set.

### **3.0 Credit Risk Mitigation using Collateral and Guarantees**

- 3.1 Labuan insurers may recognise a lower credit risk capital charge for debt obligations if the Labuan insurer holds certain types of credit risk mitigants (CRM), namely, eligible collateral against the debt obligations, or if the obligations are guaranteed by recognised guarantors.
- 3.2 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.
- 3.3 In order to achieve capital relief for the use of CRM, the following minimum conditions must be fulfilled:
- (i) All documentation used in the transactions shall be binding on all parties and legally enforceable in all relevant jurisdictions;
  - (ii) Sufficient assurance from legal counsel has been obtained with respect to the legal enforceability of the documentation; and

<sup>17</sup> This refers to instruments which do not fulfil the characteristics of equity but qualify as tier 1 capital instruments under the capital adequacy framework for banking institutions.

<sup>18</sup> In addition, investments in such instruments are also subject to the market risk charge treatment, described in Appendix II.

- (iii) Periodic reviews are undertaken to confirm the ongoing enforceability of the documentation.

Only collateral and/or guarantees that are actually posted 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.

- 3.4 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 Labuan insurers employ robust procedures and processes to control these risks. Labuan insurers shall be prepared and able to demonstrate to Labuan FSA that adequate risk management policies and procedures are in place to control these risks arising from the use of CRMs.

**(I) Collateral**

- 3.5 In addition to the minimum requirements specified in paragraph 3.3, the legal mechanism by which a collateral is pledged or transferred shall adequately provide for the right of the Labuan insurers 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, Labuan insurers shall take all steps necessary to fulfil those requirements under the law applicable to the Labuan insurer's interest in the collateral for obtaining and maintaining an enforceable security interest.

- 3.6 For a collateral to be eligible, it shall be regularly marked-to-market and should 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 cannot be classified as eligible collateral as both would generally exhibit a material positive correlation.

- 3.7 Labuan insurers 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.

3.8 Where collateral is held by a custodian, Labuan insurers 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.

3.9 The value of the collateral backing the debt obligations shall be determined:

- (i) at its market value; or
- (ii) where, for any reason, it is not possible to determine its market value, the value approved by Labuan FSA on an application by the Labuan insurer, which should set out the value arrived at by the Labuan insurer and the basis for it.

3.10 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:

- (i) the ‘adjusted debt outstanding’ shall be:

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

where,

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

### **Example:**

Let us assume a Labuan insurer has an asset exposure of USD 1 million in the debt capital market from company ABC with a rating category of one (i.e. credit risk charge of 1.6%). Company ABC provides CRM collateral to the Labuan insurer with a market value of USD 0.5 million in the form of shares listed in the Singapore Exchange. The adjusted asset exposure would be USD 1 million – [USD 0.5 million x (1 – 30% - 8%)] = USD 0.69 million.

The higher of USD 0.69 million and 15% of USD 1 million (i.e. USD 0.15 million) would be the new adjusted debt exposure.

The credit risk charge for the respective USD 1 million asset exposure would be USD 0.69 million x 1.6% = USD 11,040.

3.11 The values of the multiple adjustment ('Hc') are set out in **Table 2** below.

**Table 2: Multiple adjustments for eligible collateral**

Eligible Collateral	Residual term to maturity	Hc
(a) Cash (including certificate of deposits or comparable instruments) and bank deposits <sup>19</sup> with any Labuan bank, BNM licensed bank, Labuan investment bank, BNM licensed investment bank, Labuan Islamic bank, BNM licensed Islamic bank and prescribed BNM licensed development financial institution		0%
(b) Securities issued or fully guaranteed by the Federal Government of Malaysia, Bank Negara Malaysia <sup>20</sup> 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 or better <sup>21</sup> , issued by a corporation	$X \leq 1$ year	3.5%
	$1 < X \leq 5$ years	5.0%

<sup>19</sup> Structured deposits and Specific Investment Account (SIA) would not qualify as eligible collateral.

<sup>20</sup> Including special purpose vehicles 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).

<sup>21</sup> Under paragraph 1 of Appendix VI.

Eligible Collateral	Residual term to maturity	Hc
	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%

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

## (II) Guarantees

3.13 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:

- (i) the guarantee represents a direct claim on the guarantor and is explicitly referenced to specific debt exposure or pool of exposures, so that the extent of the cover is clearly defined and cannot be disputed;
- (ii) the guarantee is irrevocable except where the guaranteed party has not made the payment due to the guarantor. The guarantor shall 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;
- (iii) 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;
- (iv) 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.;
- (v) the guarantee period covers the full term of the debt obligations; and

- (vi) upon the default/non-payment of the counterparty, the Labuan insurer 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 the Labuan insurer or, the guarantor may assume the future payment obligations of the counterparty covered by the guarantee.

3.14 In calculating the capital charges, the portion of a debt obligation which is guaranteed would be subjected to the risk charge of the guarantor<sup>22</sup>, while the uncovered portion is subjected to the risk charge of the counterparty to the debt obligation.

3.15 The recognised guarantors are:

- (i) the Federal Government of Malaysia, Bank Negara Malaysia<sup>23</sup>, the federal government or the central bank of a G10 country or recognised MDBs;
- (ii) other rated entities (including financial guarantee insurer) which is rated at least under category two<sup>24</sup>; and
- (iii) Labuan banks, BNM licensed banks, Labuan investment banks, BNM licensed investment banks, Labuan Islamic banks, BNM licensed Islamic banks and prescribed BNM licensed 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.

#### **4.0 Debt Obligations Secured by Immovable Properties**

4.1 A Labuan insurer shall not accept immovable property as a security for debt facility unless it is a freehold property or leasehold property with at least 21 years

<sup>22</sup> 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%.

<sup>23</sup> Including special purpose vehicles 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).

<sup>24</sup> Under paragraph 1 of Appendix VI.

of unexpired period of lease.

- 4.2 A Labuan insurer shall not grant a debt facility for the purchase of immovable property in excess of 90% of the market value of the immovable property on the date of granting of the debt facility.
- 4.3 A Labuan insurer granting a debt facility which is secured by rights and interests in an immovable property, where applicable:
- (i) shall enter into an agreement in writing for the debt facility with the borrower;
  - (ii) 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;
  - (iii) 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;
  - (iv) shall ensure that the sale and purchase agreement does not prohibit the lodgement of a private caveat by the Labuan insurer or, being the financier for the purchase of the immovable property;
  - (v) 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
  - (vi) 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 Labuan insurer to acquire the immovable property in the event of any

default in the repayment of the debt facility.

- 4.4 A Labuan insurer shall only accept immovable property situated in Malaysia as security for a debt facility granted in Malaysia.
- 4.5 Debt obligations secured by immovable properties in the manner specified in this section shall be subjected to the following risk charges:

**Table 3: Risk charges for debt obligations secured by properties**

Types of properties		Risk charges
(a)	residential properties	
	- LTV < 80%	2.8%
	- $80\% \leq \text{LTV} \leq 90\%$	4%
(b)	other types of properties	
	- LTV < 80%	5.6%
	- $80\% \leq \text{LTV} \leq 90\%$	8%
(c)	Abandoned properties	12%

Note: LTV= Loan-to-Value ratio

- 4.6 A debt obligation that does not meet the requirements under this part shall be subject to the counterparty risk charges in **Table 1** of this Appendix.

## 5.0 Investment in Structured Products

- 5.1 A structured product usually refers to an investment which derives its value by reference to the price or value of an underlying reference<sup>25</sup>. Such products are exposed to counterparty credit risk charges, where the risk charge is determined based on the credit rating of the product offeror. The risk charge is applicable to the entire marked-to-market value of the investments.
- 5.2 In addition, separate market risk charges are applicable to the marked-to-market value of the structured investments, depending on whether the product

<sup>25</sup> "Underlying reference" means any security, index, currency, commodity or other assets or reference, or combination of such assets or reference.

is capital guaranteed or otherwise. Please refer to paragraphs 9.1 to 9.7 of **Appendix II** for the determination of the market risk capital charge.

## 6.0 Other Assets

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

**Table 4: Risk charges for other assets**

Types of exposure	Risk charges
(a) Cash (including certificate of deposits or comparable instruments) in hand and bank deposits <sup>26</sup> with Labuan banks, BNM licensed banks, Labuan investment banks, BNM licensed investment banks, Labuan Islamic banks, BNM licensed Islamic banks and prescribed BNM licensed development financial institutions	0%
(b) Deposit with other banking institutions with the following ratings categories <sup>27</sup> (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 Labuan (re)insurers and BNM licensed (re)insurers <sup>28</sup>	1.6%
(d) Credit exposures to (re)insurers <sup>28</sup> other than those Labuan (re)insurers and BNM licensed (re)insurers, with the rating	

<sup>26</sup> Structured deposits and Specific Investment Account (SIA) would not qualify as eligible collateral

<sup>27</sup> In the absence of issue-specific ratings, the issuer local rating may be used in determining the credit risk charge.

<sup>28</sup> Credit exposures to (re)insurers refers to -

- (i) Amount due from reinsurers (including amount due in respect of premiums outstanding, claims recoverable, commissions);
- (ii) Reinsurance recoveries in respect of claims incurred; and
- (iii) Reinsurance deposits in respect of reinsurance accepted.

Types of exposure	Risk charges
categories <sup>29</sup> (further details in Appendix VI):	
(i) One	1.6%
(ii) Two	2.8%
(iii) Three	4%
(iv) Four	6%
(v) Five	12%
(e) Outstanding premiums, balances and other receivables due from:	
(i) Other licensees under LFSSA and LIFSSA	4%
(ii) Others	6%
(f) Other assets <sup>29</sup>	8%

6.2 Credit exposures to (re)insurers under items (c) and (d) in **Table 4** includes reinsurance recoveries in respect of claims incurred (reported under claims liabilities) as well as claims paid (reported under other assets).

6.3 The ratings of the (re)insurers other than those Labuan insurers and BNM licensed (re)insurers and banking institutions other than those Labuan banks, BNM licensed banks, Labuan investment banks, BNM licensed investment banks, Labuan Islamic banks, BNM licensed Islamic banks and prescribed BNM licensed development financial institutions (other banking institutions) should be referred to in **Appendix VI** for the purpose of determining the Labuan insurer's exposure to the reinsurer(s) or other banking institutions and the corresponding credit risk charges. The rating principles in paragraph 2.2 shall apply as appropriate.

<sup>29</sup> Including other property, plant and equipment, except for those which are not exposed to counterparty risk (e.g. self-occupied properties).



## Appendix II Market Risk Capital Charges

### 1.0 Overview

- 1.1 The market risk capital charges (MRCC) aim to mitigate risks of financial losses arising from:
- (i) the reduction in the market value of assets due to exposures to equity, interest rate, property, currency risks;
  - (ii) non-parallel movements between the value of liabilities and the value of assets backing the liabilities due to interest rate movements (i.e. the interest rate mismatch risk); and
  - (iii) concentration of exposures to particular counterparties or asset classes.
- 1.2 The risk charges for exposures to various asset types and concentrations are provided in this Appendix.

### 2.0 Equity Risks

- 2.1 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 are traded and behave like shares. Equity risks arising from exposures to derivatives 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 section 3 below).
- 2.2 Exposures to equity instruments exclude investments in innovative Tier 1 capital instruments issued by Labuan banks, BNM licensed banks, Labuan investment banks and BNM licensed investment banks.
- 2.3 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, Hijrah Shariah Index or the indicative index of the recognised stock exchanges in a G10 country	16%
(d)	FBM Mid-70 Index or other stock market indices	25%
(e)	unlisted or private equity (including venture capital)	35%

2.4 Equity derivatives positions that can be applied to reduce a Labuan insurers' equity risk exposure shall be determined based on the following:

- (i) Futures and forward contracts relating to individual equities are reported at current market prices;
- (ii) Futures relating to equity indices are reported either as the current index value multiplied by the monetary value of one index point set by the futures exchange or market value of the notional underlying equity portfolio;
- (iii) Equity and stock index options are treated based on the delta equivalent approach described in paragraphs 6.1 to 6.5 below; and
- (iv) 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.

2.5 A simplified illustration on the application of the equity risk capital charge for a Labuan insurer with derivatives positions is provided in **Appendix II (a)**.

### 3.0 Property Risks

3.1 Property risks arise from exposures to immovable properties both for investment and self-occupied purposes.

3.2 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:

- (i) the entity wholly owns the property, including all rights, interests and benefits related to the ownership of the property; and
- (ii) The entity should 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.

3.3 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%

### 4.0 Interest Rate Risks

4.1 Interest rate risks arise from exposures to interest rate related assets<sup>30</sup> and liabilities, including debt securities, commercial papers, debentures, notes, negotiable instruments of deposits, mortgages, loans<sup>31</sup>, interest 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

<sup>30</sup> Including cash and deposits placement.

<sup>31</sup> Including policy loans, automatic premium loans and staff loans, as referred to in footnote 8 in Appendix I.

are convertible into ordinary shares of the issuer, will be treated as debt securities if the instruments are traded and behave like debt securities. Interest rate risk charges for life and general insurance fund shall be computed in accordance with paragraphs 4.4 to 4.13.

4.2 Interest rate risk exposures can be reduced by interest rate derivative positions, such as futures, forwards and options. Interest rate derivatives should be converted into exposures in the relevant underlying assets and subjected to appropriate interest rate risk charge calculations. To determine the capital charge, the amount reported should 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.

4.3 This paragraph outlines the treatment of interest rate derivative exposures by product class:

- (i) Futures and Forward contracts, including Forward Rate Agreements (FRAs)
  - (a) 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 interest rate future (taken in April) is to be regarded as a long position in a government security with a maturity of five months and a short position in a government security with a maturity of two months.
  - (b) 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.
  - (c) In the case of foreign currency forward contracts with an interest 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 interest rate risk.

(ii) Swaps

- (a) Swaps will be treated as two underlying positions in zero coupon government securities with relevant maturities. For example, a plain vanilla interest rate vanilla swap under which a Labuan insurer 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 interest fixing.
- (b) Where one of the swap legs involves payment relating to some other reference price, for example a stock index, the leg should 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 Labuan insurer 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.

(iii) Options

- (a) For options, the delta-weighted option position will be slotted into the respective 'maturity band' according to its underlying together with other interest rate related instruments. Paragraphs 6.1 to 6.5 below further explain the capital treatment of option positions.

**(I) Computation of interest rate risk charges for life insurance funds and general insurance funds with discounting of liabilities<sup>32</sup> (only applies to Malaysian Business)**

4.4 The capital charge to account for interest rate risks are reduced to the extent that the weighted average duration of the exposures in interest rate related assets match the weighted average duration of the insurance liabilities.

4.5 For each life insurance fund, the values of all interest rate related exposures (including interest rate derivatives exposures) and the insurance liabilities shall be computed as follows:

- (i) compute the value of the liabilities and the market value of interest rate related exposures under the base scenario (referred to as V0 and A0, respectively). V0 is the value of the insurance liabilities derived based on the valuation basis which includes the provision of adverse deviation as prescribed in the **Guidelines on Valuation Basis for Liabilities of Labuan Life Insurance Business**, and discounted as per the risk-free discount rate set out in paragraph 5.1 of the same Appendix;
- (ii) recompute the value of the liabilities and the value of interest rate related exposures under the increasing interest rate scenario (referred to as V1 and A1, respectively); and
- (iii) recompute the value of the liabilities and the value of interest rate related exposures under the decreasing interest rate scenario (referred to as V2 and A2, respectively).

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<sup>32</sup> Where the appointed actuary views that discounting is justified for the valuation of the general insurance liabilities, the interest rate risk charge for general insurance funds shall be computed in accordance to that specified in paragraphs 4.4 to 4.10 of Part I above.

The method is summarised below:

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

- 4.6 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 should be selected and applied consistently to all funds. Any resulting negative capital charges for each individual fund should be zeroised.
- 4.7 The yield to value the securities under the base scenario should be the risk-free yield, in the case of government securities (e.g. Malaysian Government Securities) 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 loans (and mortgages), the yield as implied by a debt security with similar tenor as the loan and carries a rating of category three or better<sup>33</sup>, shall be used as the base yield.
- 4.8 Where the interest rate exposures have embedded options, such as call or put provisions in the case of debt securities/ loans, or prepayment/ refinancing rights which give the borrowers the rights to prepay the amount of debt outstanding, Labuan insurers 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/ loans, under the scenarios of changes in the interest rate level. (Please refer to footnote 34 for additional guidance)

<sup>33</sup> Under paragraph 1 of Appendix VI.

4.9 For the purpose of revaluing interest rate related exposures and liabilities in the above scenarios, the base yield curve should be multiplied by  $(1 + \text{stress\_up})$ , and  $(1 - \text{stress\_down})$ , for the increasing and decreasing scenarios respectively. Values of  $\text{stress\_up}$  and  $\text{stress\_down}$  are based on the level of the prevailing MGS spot yields, and are prescribed in **Table 3** below. The derived values of  $\text{stress\_up}$  and  $\text{stress\_down}$  shall be further subject to a maximum of 40%, until otherwise specified by Labuan FSA.

**Table 3: Prescribed changes in interest rates**

Residual terms to maturity <sup>34</sup> (X)	stress_up	stress_down
$X \leq 4$ years	$0.15 + \text{Max} [ 0 ; 0.4(3.6 - \text{MGS}_3) ]$	$0.15 + \text{Max} [ 0 ; 0.2(\text{MGS}_3 - 3.6) ]$
$4 \text{ years} < X \leq 8$ years	$0.15 + \text{Max} [ 0 ; 0.4(3.7 - \text{MGS}_5) ]$	$0.15 + \text{Max} [ 0 ; 0.2(\text{MGS}_5 - 3.7) ]$
$X > 8$ years	$0.15 + \text{Max} [ 0 ; 0.4(4.2 - \text{MGS}_{10}) ]$	$0.15 + \text{Max} [ 0 ; 0.2(\text{MGS}_{10} - 4.2) ]$

Note :  $\text{MGS}_n$  denotes the spot yield of the n-year MGS at valuation date.

<sup>34</sup> 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 interest rate risk charges for general insurance and shareholders' funds without discounting of liabilities (applies to both life and general insurance Non-Malaysian business regardless whether the liabilities is discounted or not)**

4.10 A simplified approach is adopted for undiscounted liabilities in the general insurance and shareholders' funds for Malaysian business to address interest rate risks in view of the short-term nature of most of the insurance liabilities as well as for non-Malaysian business.

4.11 The net value of all positions in interest rate related exposures are determined for each maturity band<sup>35</sup>, to which risk charges are then applied. The overall interest 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 **Table 4** below.

**Table 4: Interest rate risk charges by residual term to maturity for related securities for general insurance (with undiscounted liabilities) and shareholders' funds as well as for non-Malaysian business**

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

<sup>35</sup> 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.

- 4.12 All interest rate derivative positions are subjected to interest 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.
- 4.13 A simplified illustration on the computation of interest rate risk capital charge for a Labuan insurer carrying on general business with derivatives positions is provided in **Appendix II(a)**.

## **5.0 Currency Risks**

- 5.1 An insurance fund 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.
- 5.2 To calculate the capital charge for currency risks, the net balance sheet positions for exposures to each of the different currencies are converted into USD 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.
- 5.3 The Labuan insurer's net position in each currency should be calculated by aggregating the following positions:
- (i) all asset items less liabilities; and
  - (ii) 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 interest rate transactions such as futures, swaps etc.

5.4 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	Ringgit Malaysia
Currency					
USD-equivalent value of net currency positions	+50	+150	-20	-180	-35
Total USD-equivalent value of net currency positions	+200		-235		

Capital charge = 235<sup>36</sup> X 8% = USD 18.8 million

**6.0 Treatment of Options**

- 6.1 For capital computation purposes, option positions should be reported as a position equal to the market value of the instrument underlying the option multiplied by the delta<sup>37</sup> of the option.
- 6.2 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 2.3 of this Appendix.
- 6.3 Delta weighted positions of interest rate options will be subject to interest rate risk charge calculations as set out in paragraphs 4.4 to 4.13. 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 interest 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.
- 6.4 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

<sup>36</sup> The higher of either net long currency positions or net short currency positions.

<sup>37</sup> Defined as the sensitivity of the option price relative to the instruments underlying the option.

currency position as described in paragraphs 5.1 to 5.4.

- 6.5 As the delta-approach above does not capture all risks associated with option positions, such as basis, gamma and vega risks, Labuan insurers should therefore take into consideration these additional risk dimensions when setting their internal target capital level.

## 7.0 Counterparty Credit Risk Charge for Derivative Positions

7.1 Where a Labuan insurer enters into derivative transactions which are transacted over the counter (OTC), it is required to hold additional capital for counterparty credit risk, using the method described below:

- (i) the capital charge for each OTC derivative contract is 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;
- (ii) the potential exposure add-on is determined by multiplying the notional principal amount<sup>38</sup> 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;

**Table 5: Add-on factor**

Maturity (x)	Interest rate contracts	Equity contracts	Foreign Currency contracts
$X \leq 1$ year	0.5%	6%	2%
$1 < X \leq 2$ years	1%	8% <sup>39</sup>	5%
$2 < X \leq 3$ years	2%		7%
Each additional year	1%		1%

- (iii) the asset equivalent value of each derivative contract should then be

<sup>38</sup> 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, an insurer shall use the actual or effective notional amount when determining potential exposure, e.g. a stated notional amount of USD 1 million with payments calculated at two times KLIBOR would have an effective notional amount of USD 2 million.

<sup>39</sup> 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.

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**);

- (iv) foreign exchange contracts which have an original maturity of 14 calendar days or less may be excluded from the requirement; and
- (v) 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.

**Example:**

Example of CRCC for OTC Derivatives

An interest rate swap with notional principal of RM450, 000 and mark-to-market value of RM7500 maturing within a year's time.

Assuming Bank A is a corporation with rating of "one" according to **Appendix 1, Table 1**, item no. 4.

<b>Position &amp; Counterparty<sup>[1]</sup></b>	<b>Mark-to-market value<sup>[2]</sup></b>	<b>Notional principal<sup>[3]</sup></b>	<b>Add-on factor<sup>[4]</sup></b>	<b>Applicable Risk Charge<sup>[5]</sup></b>
Interest Rate Swap with Bank A	7,500	450,000	0.5%	1.6%
<b>Capital Charge = ([2] + [3] x [4]) x [5] = 156</b>				

Notes: [5] Credit risk charges as prescribed in **Table 1** of **Appendix I**.

7.2 Labuan FSA reserves the right to require a Labuan insurer to hold additional capital against particular derivative positions where the Labuan insurer enters into significant derivative transactions in relation to its capital position or Labuan FSA views the capital provided using the above approach to be inadequate in relation to the risks of the transactions involved.

## 8.0 Investments in Collective Investment Schemes

- 8.1 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.
- 8.2 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 Labuan insurer's own investment-linked funds.
- 8.3 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 schemes<sup>40</sup>. The following risk charges in **Table 6** below 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%

- 8.4 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.
- 8.5 The approach used to arrive at the weighted average capital charge shall be applied consistently.

<sup>40</sup> For example, 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  $[(0.5 \times 16\%) + (0.4 \times 4\%) + (0.1 \times (4\% + 8\%))] = 10.8\%$ .

- 8.6 Where the collective scheme invests in a structured product, the portion of the fund which is invested in the structured product will be subject to a risk charge treatment as described in paragraphs 9.1 to 9.7 below.
- 8.7 Where the collective scheme has features that are similar to that of a structured product, the risk charge treatment as described in section 9 below shall apply in addition to paragraph 5.1 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.

## 9.0 Investment in Structured Products

- 9.1 In addition to being subject to credit risk charge as explained in paragraph 5.1 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.
- 9.2 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 interest rate risk charge calculations. The balance value of the investment will be subject to a 20% market risk charge.
- 9.3 The present value of the guaranteed amount shall be determined using a discount rate which reflects the credit worthiness of the product issuer and is consistent with the application of paragraph 5.1 of **Appendix I**.
- 9.4 The guaranteed amount is to 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.
- 9.5 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, the Labuan insurer shall use 2x the notional exposure as the effective value of exposure.

9.6 Alternatively, a Labuan insurer may adopt a look-through approach to determine the appropriate market risk charges to be applicable to such products, subject to prior written approval from Labuan FSA.

9.7 A Labuan insurer should consult Labuan FSA on the capital treatment for structured products which have features that may not be directly addressed in this section.

## 10.0 Capital Charges to address Concentration Risks

10.1 Aggregate investments or exposures to individual counterparties in excess of the limits specified in **Appendix III(a)** for Malaysian business and **Appendix III(b)** for offshore business will be subjected to 100% asset concentration risk capital charge. For Malaysian business, this is not applicable to investments in foreign assets, where investments exceeding the limits are strictly disallowed.

### Example:

Let us assume a Labuan insurer with total assets of USD 1,000 million has overall exposure of USD 120 million to a counterparty listed on the main board of Bursa Malaysia. The overall concentration capital charge due to excessive exposure to the individual counterparty is thus USD 120 million - (10% x USD 1,000 million) = USD 20 million.

Fund	Total assets	Total exposure (a)	Notional limit (b)	Individual fund's excess over notional limit Max [(a) – (b), 0]	Individual fund's concentration capital charge (apportioned)
Life Insurance Fund	800	110	80	30	20
General Insurance Fund	200	10	20	0	0
Total	1,000	120	100	30	20



## Appendix II(a) Illustration on Capital Computation for Labuan Insurers with Derivatives Position

### 1. Position in equity derivatives

Assume a Labuan insurer holds the following in its portfolio:

- Shares in X of USD100 mil, Y of USD100mil, Z of USD200mil

The Labuan insurer entered into the following transaction to hedge its equity risk:

- Long Z put option with equivalent market value of USD200 mil (option delta = -0.7)
- Short, say, KLCI futures with market value of USD200million,

Assume that it can be demonstrated that the positions in X and Y are effectively hedged by KLCI futures

The Labuan insurer 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 =  $[200 - (200 \times |-0.7|)] \times 20\% = \text{USD } 12\text{mil}$

Therefore, total equity capital charge = USD12 mil

### 2. Portfolios of interest rate exposures (including derivatives)

Assume a Labuan insurer holds the following in its portfolio:

- (i) A corporate bond, with market value of USD20mil, residual maturity 8 years;
- (ii) A Malaysian government securities (MGS), market value USD75mil, residual maturity 2 months;
- (iii) An interest rate swap, USD150mil under which the Labuan insurer receives floating rate and pays fixed. The next interest fixing occurs after 9 months and residual life of the swap is 8 years;
- (iv) A long position in MGS futures of USD60mil, maturing in 6 months 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	75mil MGS (ii)		150 mil swap (iii)	60 mil futures (iv)	20 mil PDS (i)
Short position		60 mil futures (iv)			150 mil swap (iii)
Risk Charges (%)	0.2	0.5	0.8	3.2	4.6
Overall Net Position	+0.15mil	-0.30mil	+1.20mil	+1.92mil	-5.98mil

Therefore, the overall net position is -3.01 million ( $=+0.15-0.30+1.20+1.92-5.98$  million), leading to a capital charge of USD3.01million.

## Appendix III Investment and Individual Counterparty Limits

### (a) Malaysian Business

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

	Maximum limits (as a ratio of total assets of individual insurance funds or shareholders'/working fund)
(a) Shares not listed on the Main Market of Bursa Malaysia	5%
(b) Debt securities with rating under rating category four or poorer <sup>41</sup>	5%
(c) Loans other than policy loans and loans which are not secured in the manner set out in section 3 and 4 of <b>Appendix I</b> ⇒ limit for an individual counterparty	5%  1%
(d) Foreign assets in jurisdictions with sovereign ratings at least equivalent to that of Malaysia	10% <sup>42</sup> (absolute limit <sup>43</sup> )

<sup>41</sup> Under paragraph 1 of Appendix X.

<sup>42</sup> Not applicable for the investment of funds backing foreign currency denominated (FX) education policies and non-unit fund of FX investment-linked policies.

<sup>43</sup> Refer to paragraph 10.1 in Appendix II.

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

	Maximum limits (as ratio of total assets of the <b>general</b> insurance fund)
(a) shares listed on the Main Market of Bursa Malaysia	30%
(b) immovable properties	20%
(c) liquid assets <sup>44</sup>	Minimum limit of 10% <sup>45</sup>

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

	Maximum limits (as a ratio of total assets of <b>all</b> insurance funds and shareholders'/working fund)
(a) Labuan banks, BNM licensed banks, Labuan investment banks, BNM licensed investment banks, Labuan Islamic banks, BNM licensed Islamic banks, Cagamas Berhad, Khazanah Malaysia Berhad, Petroliam 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%

<sup>44</sup> Refers to cash in hand and deposits with unconditional withdrawal placed with Labuan banks, BNM licensed banks, Labuan investment banks, BNM licensed investment banks, Labuan Islamic banks, BNM licensed Islamic banks and prescribed BNM licensed development financial institutions, and any papers issued or guaranteed by the Federal Government or Bank Negara Malaysia and its subsidiaries.

<sup>45</sup> As a ratio to the gross average total claims incurred for the three preceding financial years. For example, for insurers 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.

4. The exposure limits are applicable on the overall exposure to individual counterparties, including that arising from investments in shares of, debt securities issued by or direct lending to a single counterparty, but excludes exposures from transactions relating to contracts of insurance.
5. The following principles shall be applied for exposures to related or interconnected counterparties:
  - (i) A counterparty is deemed to be related/interconnected 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 the Labuan insurer has ultimate recourse to the sponsor in the event of default by the SPV;
  - (ii) Exposures to related/interconnected counterparties should be grouped together and be treated as an exposure to a single counterparty, subject to the single counterparty limits above;
  - (iii) Exposures to the related/interconnected counterparties can be disaggregated and treated as separate single counterparties where the Labuan insurer can establish that the counterparty(ies) are sufficiently independent from each other financially, to honour its individual obligations and liabilities by –
    - (a) drawing on its existing free financial resources without difficulty or encumbrances; or
    - (b) obtaining a credit facility premised on its own financial standing;
  - (iv) Clear internal parameters for identifying the related/interconnected counterparties that –
    - (a) would constitute a single counterparty; or
    - (b) are financially independent from each other

should be established, documented with supporting reason(s) and made available for review by the Labuan insurer's internal control and risk management functions as well as Labuan FSA at all times;

- (v) The identification for which (iv)(a) or (iv)(b) would apply should also take into consideration the materiality of any association or relationships<sup>46</sup> that may exist between the counterparties either directly or indirectly, that may give rise to an assumption of interconnected exposures.
6. The individual counterparty limits are not applicable to the Federal Government of Malaysia and Bank Negara Malaysia.
  7. Limits specified above shall only be applicable to funds in respect of business within Malaysia and shareholders'/working funds, where applicable.
  8. The limits specified in paragraphs 1, 2 and 3 shall be applied in the sequential order (before applying the risk charges).

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<sup>46</sup> For example, entities with common marketing and/or branding platform.

**(b) Non-Malaysian Business**

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

	Maximum limits (as a ratio of total assets of individual insurance funds or <u>shareholders'/working funds</u> )
(a) shares not listed on the primary board of recognised stock exchanges in a G10 country	5%
(b) debt securities with rating under rating category four or poorer	5%
(c) loans other than policy loans and loans which are not secured in the manner set out in sections 3 and 4 of <b>Appendix I</b> ⇒ limit for an individual counterparty	5% 1%
(e) foreign assets in jurisdictions with sovereign ratings at least equivalent to that of Malaysia	10%

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

	Maximum limits (as a ratio of total assets of the <b>general insurance fund</b> )
(a) shares listed on the primary board of recognised stock exchanges in a G10 country	30%
(b) immovable properties	20%
(c) liquid assets	minimum limit of 10%

3. Limits for exposure to individual counterparties, including guarantee given by the

counterparties(except any transaction related to a contract of insurance):

	Maximum limits (as a ratio of total assets of <b>all</b> insurance funds and shareholders'/working fund)
(a) a counterparty listed on the primary board of recognised stock exchanges in a G10 country	10%
(b) 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 securities issued by or direct lending to a single counterparty, but excludes exposures from transactions relating to contracts of insurance.
5. The following principles shall be applied for exposures to related or interconnected counterparties:
  - (i) A counterparty is deemed to be related/interconnected 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 the Labuan insurer has ultimate recourse to the sponsor in the event of default by the SPV;
  - (ii) Exposures to related/interconnected counterparties should be grouped together and be treated as an exposure to a single counterparty, subject to the single counterparty limits above;
  - (iii) Exposures to the related/interconnected counterparties can be disaggregated and treated as separate single counterparties where the Labuan insurer can establish that the counterparty(ies) are sufficiently independent from each other financially, to honour its individual obligations and liabilities by –
    - (a) drawing on its existing free financial resources without difficulty or encumbrances; or
    - (b) obtaining a credit facility premised on its own financial standing;



(iv) Clear internal parameters for identifying the related/interconnected counterparties that –

(a) would constitute a single counterparty; or

(b) are financially independent from each other

should be established, documented with supporting reason(s) and made available for review by the Labuan insurer's internal control and risk management functions as well as Labuan FSA at all times;

(v) The identification for which (iv)(a) or (iv)(b) would apply should also take into consideration the materiality of any association or relationships that may exist between the counterparties either directly or indirectly, that may give rise to an assumption of interconnected exposures.

6. The individual counterparty limits are not applicable to the government of the G10 countries.
7. Limits specified above shall only be applicable to funds in respect of business outside Malaysia and shareholders'/working funds, where applicable.
8. The limits specified in paragraphs 1, 2 and 3 shall be applied in the sequential order (before applying the risk charges).

Class		Risk charge applicable for -		
		Claims liabilities	URR @ 75% confidence level	
			Malaysian Insurance Business	Non-Malaysian Insurance Business
1.	Fire	20%	30%	24%
2.	Marine	30%	45%	36%
3.	Engineering	25%	37.5%	30%
4.	Motor	25%	37.5%	30%
5.	Aviation	30%	45%	36%
6.	Liabilities	30%	45%	36%
7.	Medical & Health	25%	37.5%	30%
8.	Personal Accident	20%	30%	24%
9.	Workmen's Compensation & Employers' Liability	25%	37.5%	30%
10.	Others	20%	30%	24%

Valuation Parameters	Stress Factors	
	Malaysian Business	Non-Malaysian Business
(i) Mortality (non-annuity)		
(a) guaranteed premium	±40% of best estimate rates	±25% of best estimate rates
(b) non-guaranteed premium	±20% of best estimate rates	±12.5% of best estimate rates
(ii) Mortality (annuity)	Rates used in valuation with 5-year setback	Rates used in valuation with 5-year setback
Total and Permanent Disability		
(a) guaranteed premium	±45% of best estimate rates	±25% of best estimate rates
(b) non-guaranteed premium	±22.5% of best estimate rates	±12.5% of best estimate rates
Critical Illness		
(a) guaranteed premium	±45% of best estimate rates	±40% of best estimate rates
(b) non-guaranteed premium	±22.5% of best estimate rates	±20% of best estimate rates
Renewal Expense	±20% of best estimate rates	±10% of best estimate rates
Persistency	±50% of best estimate rates	±50% of best estimate rates

Note: Guaranteed here indicates guaranteed for 3 years or more

1. In computing the life insurance risk capital charges, 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 should be the one that produces the higher liability value in each case, to prevent any instances of negative LCC. The basis of selecting the stress factors for each product should be described in the accompanying actuarial report.
2. The value of  $V^*$  should be computed for each policy by stressing all risk factors simultaneously in the direction selected for that product.

## Appendix VI Rating Categories and Risk Charges

1. The rating categories below apply to both issuer and issue-specific ratings.

Rating Category	S&P	Moody's	Fitch	R&I	AM Best	RAM	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	S&P	Moody's	Fitch	R&I	AM Best	RAM	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%