

## **GUIDELINES ON VALUATION BASIS FOR LIABILITIES OF LABUAN FAMILY TAKAFUL BUSINESS**

### **1.0 Introduction**

- 1.1 The 'Guidelines on Valuation Basis for Liabilities of Labuan Family Takaful Business' (the Guidelines) sets out prudential requirements that should be observed by Labuan (re)takaful operators in valuing liabilities of their family takaful business. The aim is to ensure those liabilities are reserved at a specified level of adequacy with explicit prudential margins.
- 1.2 The contract underlying takaful operations defines a unique relationship between takaful operator and participants of a takaful scheme. While takaful fund is responsible to meet contractual benefits accorded to participants on the basis of mutual assistance amongst participants, takaful operators are expected to duly observe fundamental obligations towards participants, particularly in terms of adhering to Shariah principles and undertaking fiduciary duties to prudently manage the takaful funds as well as meet costs involved in managing the takaful business.
- 1.3 In carrying out their fiduciary duty, takaful operators must put in place sufficient measures to ensure sustainability of family takaful funds to meet takaful benefits and shareholders' fund to support the takaful contracts for the full term. These measures include setting up of appropriate provisions for liabilities in shareholders' fund and on behalf of participants in family takaful funds, to ensure that adequate funds would be available to meet all contractual obligations and commitments as they fall due, with a reasonable level of certainty.

## **2.0 Applicability**

- 2.1 The Guidelines is applicable to all Labuan takaful operators and Labuan insurers that underwrite family takaful business licensed or approved under Part VII of the Labuan Islamic Financial Services and Securities Act 2010 (LIFSSA) excluding Labuan captive takaful business.
- 2.2 For the purpose of the Guidelines, the term ‘Labuan takaful operator’ includes Labuan retakaful operator undertaking family retakaful business as well as Labuan insurer approved to carry out family takaful business or Labuan reinsurer approved to carry out family retakaful business.

## **3.0 Legal Provision**

- 3.1 The Guidelines is issued pursuant to Section 4A of the Labuan Financial Services Authority Act 1996 (LFSAA) for the purpose of clarifying the requirements on appointment of actuary and margin of solvency for Labuan takaful operators under Section 83 and Section 84 of the LIFSSA respectively.
- 3.2 Any person who fails to comply with the Guidelines may be subject to an administrative penalty under Section 36B and Section 36G of the LFSAA or Section 148 and Section 154 of the LIFSSA and/or other enforcement actions provided under the LFSAA and the LIFSSA.

## **4.0 Effective Date**

- 4.1 The Guidelines shall come into effect from financial year beginning on and after 1 January 2023; and would remain effective as well as applicable unless amended or revoked.

## **5.0 Principles**

- 5.1 The principles and methods adopted by the Labuan takaful operator to value the liabilities of family takaful business shall:
- (i) be appropriate to the business and risk profile of the family takaful business;

- (ii) be consistent from year to year to preserve comparability;
- (iii) include appropriate margins for adverse deviations in respect of the risks that arise under the takaful certificate;
- (iv) be consistent with one another;
- (v) take into account Labuan takaful operator's fiduciary duty to treat participants or clients fairly;
- (vi) be in accordance with generally accepted actuarial principles; and
- (vii) secure an overall level of sufficiency of the reserves at 75% confidence level. The Labuan takaful operator may choose to maintain reserves at a higher level where additional margins are needed to ensure their adequacy.

5.2 Where Labuan FSA requires the value of liabilities to be determined at any point in time other than at financial year end, depending on the extent of the change in the business volume and profile, claims and underwriting processes, and, policy and business conditions since the last financial year, the Appointed Actuary may make adjustments to his last financial year end calculations or conduct a full revaluation as appropriate. The Appointed Actuary shall ensure that the value obtained is reflective of the liability profile at that point in time, in line with the requirements of the Guidelines and is consistent with the valuation basis at the last financial year end.

## 6.0 Definitions

6.1 In the Guidelines, unless the context otherwise requires, the terms used are defined as follows:

- (i) **'Participants' Risk Fund'** (PRF) refers to the fund in which a portion of contributions<sup>1</sup> paid by the takaful participants on the basis of tabarru' is allocated and pooled for the purpose of meeting claims on events or risks covered under the takaful certificate;

<sup>1</sup> This refers to the amount either directly allocated from the gross contribution paid by participants or deductible from the Participants' Investment Fund.

- (ii) **'Participants' Investment Fund'** (PIF) refers to the fund in which a portion of the contributions paid by takaful participants is allocated for the purpose of investment and/or savings. For investment-linked takaful, the PIF shall refer to the unit fund(s);
- (iii) **'Takaful benefit'** refers to the amount of benefit secured under a takaful certificate;
- (iv) **'Liabilities of family takaful fund'** refers to the obligation of the family takaful fund to meet takaful benefits stipulated in takaful certificates and expenses payable from takaful fund;
- (v) **'Expense liabilities of shareholders' fund'** refers to the obligation of the shareholders' fund to pay for the operating costs incurred in managing the family takaful fund for the full contractual obligation of takaful certificates;
- (vi) **'Liabilities of family takaful business'** refers to the sum of liabilities of family takaful fund and expense liabilities of shareholders' fund;
- (vii) The **'best estimate'** value is the statistical central estimate value of the liabilities concerned; and
- (viii) The **'provision of adverse deviation (PAD)'** is the component of the value of takaful liabilities that relates to the uncertainty inherent in the best estimate. PAD is aimed at ensuring that the value of liabilities is established at a level such that there is a higher level of confidence (or probability) that the provisions will ultimately be sufficient.

## 7.0 Appointed Actuary Requirements

### ***Appointment and Cessation***

7.1 Every Labuan takaful operator must appoint an Appointed Actuary where the responsibility of appointing the Appointed Actuary lies with the board of directors (Board)<sup>2</sup>. In carrying out this responsibility, the Board must ensure that the appointment of the Appointed Actuary is in accordance with the requirements set out in the Guidelines.

7.2 A Labuan takaful operator must ensure that a person being considered as a candidate for the Appointed Actuary fulfils the following:

- (i) The candidate is a Fellow of either:
  - (a) the Institute and Faculty of Actuaries of the United Kingdom;
  - (b) the Institute of Actuaries of Australia;
  - (c) the Canadian Institute of Actuaries;
  - (d) the Society of Actuaries of the United States of America;
  - (e) the Society of Actuaries in Ireland;
  - (f) the China Association of Actuaries<sup>3</sup>; or
  - (g) such other associations as may be approved by Labuan FSA.
- (ii) The candidate possesses at least three (3) years of relevant post qualification practical experience as a Fellow of one of the respective professional bodies highlighted in paragraph 7.2(i);
- (iii) The candidate meets the relevant continued professional development requirements; and
- (iv) The candidate has been assessed by the Board to have met the fit and proper requirements outlined in the Guidelines on Fit and Proper Person Requirements as issued by Labuan FSA.

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<sup>2</sup> For the purpose of the Guidelines, in relation to a Labuan takaful operator of a branch status; the Board shall refer to the parent company, regional office or head office overseeing the management of the branch Labuan takaful operator.

<sup>3</sup> Subject to completion of technical subjects relating to the life insurance liabilities or reserving as required under any of the actuarial professional bodies under paragraph 7.2(i) (a) to (d).

7.3 The Labuan takaful operator when carrying out the assessment on the suitability of the candidate must be satisfied, based on a reasonably robust assessment process, that the candidate has:

- (i) adequate technical experience (which includes the use of relevant analytics) and has had key responsibilities in performing valuations of actuarial liabilities for family takaful business;
- (ii) continuously be informed on emerging developments in takaful business and actuarial practice which are relevant to the duties of an Appointed Actuary;
- (iii) adequate experience in engaging with members of the Board and senior management, in particular the ability to communicate and contextualise the results of technical actuarial assessments in a clear and comprehensible manner to key stakeholders who may not have an actuarial background;
- (iv) a good professional track record;
- (v) not been the subject of findings of a material contravention of the standards of any actuarial professional body or any law or regulation relating to actuarial conduct; and
- (vi) no conflict of interest that would impair his ability to effectively discharge his duties as an Appointed Actuary. The candidate with multiple statutory appointments i.e. part of the group actuarial resources, must disclose any potential conflict of interest to the Board prior to the appointment. The Appointed Actuary must exercise professional accountability and impartiality in providing the actuarial services to the Labuan takaful operator at all times.

7.4 A Labuan takaful operator must notify Labuan FSA in writing of the appointment of the Appointed Actuary no later than ten (10) working days from the date of appointment. Similarly, the Labuan takaful operator shall also notify Labuan FSA in writing of the cessation of its Appointed Actuary and the reasons for it no later than ten (10) working days from the date of the Labuan takaful operator giving to or receiving from, the Appointed Actuary notice of cessation.

- 7.5 The Labuan takaful operator must appoint another person as its Appointed Actuary no later than three (3) months from the effective date of the cessation and notify Labuan FSA in writing no later than ten (10) working days from the date of appointment.
- 7.6 Where the Labuan takaful operator utilises its group actuarial resources including those with multiple statutory appointments or outsources to the third party actuarial function, the Appointed Actuary shall maintain professional accountability and impartiality needed in providing his actuarial services to the Labuan takaful operator. The outsourcing of actuarial function to third party would be subject to the prior approval of Labuan FSA in accordance with the Guidelines on External Service Arrangements for Labuan Financial Institutions. The Appointed Actuary, amongst others, must take reasonable steps to avoid actual and potential conflicts of interest in the course of carrying out his duties.
- 7.7 Pursuant to Section 153 of LIFSSA, Labuan FSA may remove an Appointed Actuary of a Labuan takaful operator if it reasonably believes that the Appointed Actuary is not carrying his roles and responsibilities in line with the requirements or the spirit intended by the Guidelines.

### ***Duties and Responsibilities of the Appointed Actuary***

- 7.8 The Appointed Actuary must:
- (i) Certify that the valuation of actuarial and other policy liabilities is in accordance with:
    - (a) generally accepted actuarial principles and practices; and
    - (b) valuation principles, methods and assumptions set out in the Guidelines;
  - (ii) Provide recommendations to the Board on the appropriateness of surplus distribution to participants as well as any relevant distribution to shareholders; and
  - (iii) Apply the appropriate tests to reasonably satisfy himself of the completeness and accuracy of the current database of business used to perform his duties.

7.9 The report by the Appointed Actuary to the Board and senior management on the matters covered in paragraph 7.8 must include:

- (i) a narrative of findings;
- (ii) recommendations and conclusions; and
- (iii) the basis for those conclusions.

7.10 This must be presented in a manner which clearly explains and gives sufficient prominence to significant issues and developments which have material implications on the family takaful liability valuation and reserving of the Labuan takaful operator, or the interests of its clients. The Appointed Actuary must be available to respond directly and in a timely fashion, to any questions or issues raised by the Board in relation to his report.

7.11 In relation to paragraph 7.8(i), the report by the Appointed Actuary must draw the attention of the Board to the following:

- (i) key trends in the business composition, the portfolio's experience for each class of business and movements in the reserves for actuarial and other policy liabilities;
- (ii) any material changes in selected assumptions;
- (iii) reasons for any deviation from the assumptions implied by the experience analysis;
- (iv) key assumptions in which small changes can cause significant variations in the valuation results; and
- (v) significant observations from the analysis of the experience and composition of surplus arising.

7.12 The Appointed Actuary must take appropriate steps to effectively engage the Board and senior management on the results of his investigations into the Labuan takaful operator's current and expected takaful liability valuation and reserving. The Appointed Actuary must present clearly and discuss directly with the Board, the plausible threats identified by the Appointed Actuary to the takaful liability valuation and reserving of the Labuan takaful operator, recommendations



to address those threats and observed actions of the senior management in response to the recommendations made in the previous year.

7.13 In relation to paragraph 7.8(ii), prior to making any recommendations for surplus or investment income distribution, the Appointed Actuary must consider and be satisfied that:

- (i) the proposed distributions among the different groups of participants are equitable and are consistent with the reasonable expectations of the participants; and
- (ii) there has been proper management of family takaful business.

7.14 The Appointed Actuary must keep adequate documentation of his work to facilitate continuity such that any party reviewing the Appointed Actuary's work would be able to understand his findings, recommendations and conclusions. This includes sufficient detail on:

- (i) his engagements, whether written or verbal, with stakeholders;
- (ii) the activities carried out as part of his duties, including processes relating to the certification of the valuation of liabilities and recommendations on the distribution of surplus or investment income; and
- (iii) the methodology employed to satisfy himself of the accuracy of data used in performing his duties.

### ***Board Oversight over the Appointed Actuary***

7.15 The Board must ensure that the duties of the Appointed Actuary are discharged without any hindrance. This includes ensuring that arrangements are in place to:

- (i) provide the Appointed Actuary with direct access to the Board;
- (ii) keep the Appointed Actuary informed about the Labuan takaful operator's business plans;
- (iii) ensure that the Appointed Actuary is provided with sufficient resources to effectively discharge his duties, including sufficient human resources as well as information technology and other appropriate systems;

- (iv) provide the Appointed Actuary with full access rights to relevant records, accounts and any other information of the Labuan takaful operator; and
- (v) enable the Appointed Actuary to request and receive information or explanation from the senior management and officers of the Labuan takaful operator as necessary.

7.16 Where the Appointed Actuary is to be assigned any other roles, the Board must be satisfied that there will be no conflict of interest. In particular, the role of the Appointed Actuary must be distinct from other executive functions and business line responsibilities. The Appointed Actuary's role must not be combined with other executive functions, i.e. "dual hatting" where the Appointed Actuary also serves as the chief executive officer, chief financial officer, chief operating officer or chief internal auditor. In addition, the Appointed Actuary must not have any management or financial responsibility in respect of business lines or revenue-generating functions.

7.17 The Board is required to review the reports submitted to it by the Appointed Actuary at a sufficiently granular level that enables the Board to form a well-founded view as to whether:

- (i) adequate provisions have been made to meet the Labuan takaful operator's obligations under takaful certificates which it has written;
- (ii) any major risks or concerns exist which affect the Labuan takaful operator's takaful liability valuation and reserving;
- (iii) business decisions taken or planned to be taken need to be reviewed in light of limitations and alternative conclusions highlighted by the Appointed Actuary; and
- (iv) corrective actions recommended by the Appointed Actuary have been implemented adequately.

## **8.0 Fund Segregation Requirement**

8.1 A Labuan family takaful operator must establish and maintain separate fund for its ordinary family takaful and investment-linked takaful funds.

- 8.2 For a Labuan family takaful operator with total gross written contribution exceeding USD 10 million, it would need to further segregate between its Malaysian certificates and non-Malaysian certificates, respectively for its ordinary family takaful and investment-linked takaful funds.
- 8.3 Notwithstanding paragraph 8.2, a Labuan takaful operator may maintain one takaful fund if the gross written contribution<sup>4</sup> of the smaller fund is less than:
- (i) 10% of the Labuan takaful operator's total gross written contribution; or
  - (ii) USD 2 million,
- whichever is lower.
- 8.4 For clarity, the requirements of 8.1 to 8.3 shall be applied in conjunction with the shariah requirements for fund segregation<sup>5</sup> in relation to family takaful business.
- 8.5 Should in subsequent financial years, the gross written contribution threshold specified in paragraph 8.3 be exceeded, the Labuan takaful operator must establish and maintain separate funds between its Malaysian certificates and non-Malaysian certificates.

## **9.0 Valuation Methodology**

- 9.1 A Labuan takaful operator must measure the best estimate liabilities gross of retakaful. The recoveries from retakaful arrangements, which are to be determined net of any payments to the retakaful operator, are to be measured separately.
- 9.2 In the event that the value of the best estimate liabilities is determined to be negative, a Labuan takaful operator must not zeroise the best estimate liabilities.
- 9.3 The Appointed Actuary shall be responsible to ensure that the level of provisions, based on his professional valuation of liabilities of each family takaful fund and expense liabilities of shareholders' fund, using a basis which is no less stringent than that specified in the Guidelines.

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<sup>4</sup> This refers to the gross written contribution of the immediate preceding financial year.

<sup>5</sup> This includes the need to establish and maintain PRF and PIF for each of the takaful funds of the family takaful operator.

- 9.4 The expected future cash flows used in valuing the liabilities of family takaful business shall be determined using best estimate assumptions and with due regard to significant recent experience. In determining the best estimate values, the Appointed Actuary shall use his professional judgment and considerations of materiality that reflect the individual nature of the business.
- 9.5 The Appointed Actuary shall ensure that all contractual benefits paid from PRF are provided for in accordance with the requirements of the Guidelines. The Appointed Actuary shall also provide for meeting reasonable expectations of the participants on benefits of takaful coverage, where an expectation has been created via marketing process or any other communication between the takaful operator or its representative and the participants. Any provision set aside to meet reasonable expectations as described above shall be held in the shareholders' fund.
- 9.6 The Appointed Actuary shall include an appropriate risk margin for adverse deviation from expected experience in the valuation of takaful liabilities. The risk margin i.e. PAD, shall meet the requirements as outlined in paragraph 12.0 of the Guidelines.
- 9.7 The liabilities of the family takaful business shall be valued for each takaful certificate i.e. on a certificate by certificate basis. However, where it is necessary for the liabilities of more than one certificate to be valued by considering the ages of persons on whose lives the certificates were issued or any periods of time connected with the certificates, the Appointed Actuary may not necessarily value the certificates based on the exact ages and period. Usage of model points shall suffice, as long as the liabilities determined by not valuing the certificates individually are reasonably approximate to the liabilities determined by doing so. In such cases, goodness of fit tests shall be carried out to ensure that the approximations are appropriate and will not lead to an understatement of the takaful liabilities.

**A. *Liabilities of Family Takaful Fund***

- 9.8 For all takaful certificates, unless otherwise specified, the liabilities of family takaful fund shall be valued using a prospective actuarial valuation based on the

sum of present value of future benefits and any expected future expenses payable from the takaful funds, less the present value of future gross tabarru<sup>6</sup> arising from the certificate, discounted at the appropriate risk discount rate as defined in the Guidelines.

- 9.9 Where tabarru' deductions of a family takaful certificate is dependent on the sustainability of the PIF (for example, for products such as investment-linked or long-term ordinary family takaful), the valuation of liabilities shall be conducted by a cash flow projection. The cash flow projection shall use a basis that is consistent with the requirements of the Guidelines. This valuation method shall be applicable to all family takaful certificates whose feature of tabarru' deductions into the PRF meets the characteristics as defined in this paragraph, except for those takaful certificates which are credit-related.
- 9.10 For a credit-related takaful certificate whose sustainability of tabarru' deductions is dependent on the performance of the PIF, the valuation of the liabilities shall be in line with the requirement stated in paragraph 9.8, subject to adjusting the future gross tabarru' cash flow such that it is limited to the period where the PIF can sustain the tabarru' and assuming that the takaful coverage is in force for the full duration of the takaful contract.
- 9.11 All options and guarantees offered by a family takaful certificate shall be explicitly identified. The liabilities of a family takaful certificate shall correspondingly include an amount to cover any increase in liabilities which may result from the exercise of the said options and/or guarantees in the future. The valuation method applied to the increase in liabilities must allow for appropriate decrements and all risks that will impact fund asset performance. This method shall also apply to products with crediting rates that are based on external variables or those that are not perfectly matched to the investment returns of underlying assets. The Appointed Actuary shall test future expected returns of underlying assets against future expected crediting rates, and establish any additional provision as may be required to ensure attainment of sufficiency level as required in the Guidelines. The provisions for options and guarantees offered

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<sup>6</sup> Shall include any loading imposed on the tabarru' that is allocated into the PRF.

by a family takaful certificate shall be appropriately held in the respective funds providing the options and guarantees.

9.12 Other actuarial valuation methods may be used (e.g. retrospective actuarial valuation) where such prospective method as per paragraph 9.8 – 9.10 cannot be applied to a particular type of certificate. The use of an alternative valuation method shall result a provision no lower than the provision required by a prospective actuarial valuation, where a prospective method can be used.

9.13 An extension to a family takaful certificate covering contingency of death, survival or critical illness shall be valued in accordance to paragraph 9.8 – 9.9 as appropriate. Meanwhile, liabilities of a 1-year family takaful certificate or 1- year extension to a family takaful certificate shall be valued according to the following:

- (i) For a certificate covering death or survival, the liabilities shall be valued on an unexpired risk basis using a prospective estimate of expected future payments arising from future events covered as at the valuation date. These future payments shall include allowance for direct claims related expenses, direct investment-related expenses, cost of retakaful and expected future contribution refunds expected during the unexpired period; and
- (ii) For a certificate covering contingencies other than death or survival, contribution and claim liabilities shall be valued separately in accordance to the Guidelines on Valuation Basis for Liabilities of Labuan General Takaful Business.

9.14 The Appointed Actuary shall consider the following events and set appropriate provisions as per paragraph 9.3:

- (i) an immediate payment of claims;
- (ii) contingent liabilities which exist or may arise in respect of takaful certificates that have lapsed and not included in the valuation;
- (iii) payment of benefits or waiver of contributions upon disability of a takaful participant;

- (iv) provision of benefits or waiver of contributions upon occurrence of disability of a takaful participant in the future unless, in the Appointed Actuary's judgment, such specific provision is not necessary;
- (v) a certificate covering substandard risk or high risk occupation; and
- (vi) any other liability, or contingent liability, under family takaful certificates or extensions of family takaful certificates not covered by 9.14(i) to 9.14(v) above, including extensions of family takaful certificates, other than those referred to in paragraph 9.13 above.

### **B. Expense Liabilities of Shareholders' Funds**

9.15 The Appointed Actuary shall conduct the valuation of expense liabilities separately in the shareholders' fund. The method used to value expense liabilities shall be consistent with the method used to value takaful liabilities of the corresponding family takaful certificate (for example, for a long-term ordinary takaful certificate, the valuation method for expense liabilities should also be long-term in nature).

9.16 When valuing expense liabilities, the Appointed Actuary shall consider the present value of expected future expenses payable from shareholders' fund in managing the takaful fund for the full contractual obligation of the takaful certificate. The cash flows to be considered as shareholders' fund income shall be future wakalah fees, remunerations from PIF and any other income that the takaful operator can determine with reasonable certainty.

9.17 For the purpose of paragraph 9.16, the Appointed Actuary may only consider distributable income from PRF as shareholders' fund income cash flow subject to the following conditions:

- (i) the Appointed Actuary can determine with reasonable certainty the distributable level of future income from the PRF or sub-funds for each future time period consistent with the expected experience then, and apply this at certificate level. The distributable income complied with takaful operator's own policy of such distribution; and

- (ii) the capital requirements that may be imposed on PRF by Labuan FSA have been met by the takaful operator.

9.18 Non-USD currency-denominated certificates shall be valued as per the requirements stipulated in the Guidelines and converted into USD currency using the spot currency conversion rate as at the valuation date. The method for determining the spot conversion rate should be consistently used.

## **10.0 Data and Information Used by the Appointed Actuary**

10.1 The Principal Officer (PO) of a Labuan takaful operator is responsible to ensure that the takaful operator's database is properly maintained so that the data on business in force provided to the Appointed Actuary is accurate and complete. The Appointed Actuary shall be given unrestricted access to the database and management shall furnish immediately, upon request, such data and explanation as the Appointed Actuary may require when conducting the valuation of liabilities of the family takaful business. The data shall include the takaful fund's experience and/or industry data where the takaful operator's own data is insufficient for the Appointed Actuary to make reasonable estimates. The PO shall also provide qualitative information on operational issues and other processes that are relevant to the Appointed Actuary in conducting the valuation of liabilities for the takaful business.

10.2 The Appointed Actuary shall apply reasonable tests to satisfy himself that the data on business in force is accurate and complete. A check for both integrity and completeness of data should precede the valuation work. Where he has reason to believe that the data may produce material biases in the results, he shall make appropriate allowance in his estimations to review and document the basis of such an allowance.

## **11.0 Valuation Assumptions**

11.1 The Appointed Actuary shall consider appropriate and reasonable assumptions to be used in conducting the valuation of family takaful fund liabilities and the shareholders' fund expense liabilities, accordingly. He shall conduct



comparative/experience analysis or other studies as appropriate, to justify the assumptions used.

11.2 The assumptions, based on but not limited to the following sections A - E, shall be considered such that the value of liabilities determined commensurate the features of the takaful certificates.

**A. Discounting**

11.3 Where discounting is used, a Labuan takaful operator shall adopt the discounting approach as outlined in section A to discount all future cash flows when determining the best estimate liabilities of the takaful contracts.

11.4 The Appointed Actuary shall disclose in the Report, the categories of claims in relation to which discounting has been applied and the rationale behind the use of discounting as well as the actual discounting rate used.

11.5 The base risk-free yield curve, with an adjustment where relevant shall be used to discount all cash flows to determine the liabilities of family takaful business.

**The base risk-free yield curve**

11.6 The base risk-free yield curve for discounting cash flows is determined based on a three-segment approach and the parameters to be used will depend on the currency denomination of the cash flows, as set out in **Appendix IV**.

Segment	Durations covered	Methodology & parameters for setting rates
1	Up to the duration of the last liquid point (LLP)	Rates set based on market information of government bonds (risk-free yield curve) or swaps with matching duration, where available. Where market information is not available, the rates are to be interpolated using the Smith-Wilson method.

Segment	Durations covered	Methodology & parameters for setting rates
2	After the LLP till the start of the third segment	<p>Rates extrapolated from Segment 1 using the Smith-Wilson method. The principles for determination of alpha parameter, which determine the speed of convergence between the LLP and long-term forward rate (LTFR), are as below:</p> <p>a) Determine the lowest possible alpha which would result in the difference between the extrapolated rate at the commencement of Segment 3 and the LTFR being no more than 0.001%;</p> <p>b) The lowest possible alpha determined in a) shall be rounded to the nearest 0.05; and</p> <p>c) subject to a floor of 0.1.</p>
3	<p>Start from the later of the following:</p> <ul style="list-style-type: none"> <li>• 30 years after the LLP</li> <li>• 60 years</li> </ul>	Rates determined by applying the LTFR.

Example: For Malaysian ringgit denominated cash flows, the market information up to the LLP of 15 years refers to the zero-coupon spot yield of Government Investment Issues (GII) for takaful contracts and the LTFR is 5%. The GII zero coupon spot yields shall be obtained from a recognised bond pricing agency in Malaysia, or any other recognised sources as may be specified by Labuan FSA.

11.7 In the event that the parameters for derivation of the base risk-free yield curve are not available in **Appendix IV**, the equivalent yield in the country where the liabilities were derived from or any other appropriate rate deemed suitable with the nature of the Labuan takaful operator's family takaful liabilities may be used

as the risk-free rate for discounting the non-Malaysian risks as determined by the Appointed Actuary.

### **Adjustments to the base risk-free yield curve**

- 11.8 In addition, a Labuan takaful operator may apply a positive adjustment to the base risk-free yield curve e.g. in the form of volatility adjustment, illiquidity premium or matching adjustment, as determined by its Appointed Actuary.
- 11.9 Adjustments can only be considered for contracts with highly predictable cash flows. A Labuan takaful operator is also required to have in place a clear governance structure and robust internal policies and procedures to ensure continuous adherence to the criteria when applying the adjustment to base risk-free yield curve.
- 11.10 The adjustment approach shall be based on the outcome of the assessment by the Appointed Actuary, taking into account Labuan takaful operator's business nature, type of takaful products, the level of predictability of cash flows and degree of matching between assets and liabilities etc., where relevant.
- 11.11 The Appointed Actuary is responsible to ensure the appropriateness of the adjustment, periodic confirmation of continuous adherence to the adjustment criteria set by the Labuan takaful operator and proper disclosure in the Report. In this regard, a Labuan takaful operator is required to disclose the adjustment made to the discounting rate in the Report which include, amongst others, the following:
- (i) The adjusted discounting rate
  - (ii) The method of adjustment chosen with justification
  - (iii) Fulfilment of conditions prior to the application of the adjustment
  - (iv) Confirmation of continuous adherence to the criteria for applicability of the adjustment on a periodic basis
- 11.12 Labuan FSA reserves the right to direct Labuan takaful operator to discontinue or modify its adjustment approach based on its supervisory assessment of the Labuan takaful operator concerned.

## **B. Expenses**

11.13 For liabilities of family takaful fund, expected future expenses payable from the takaful funds shall be included as the expense assumptions in the valuation. For expense liabilities of the shareholders' fund, management expenses and any other expected future expenses payable from the shareholders' fund in managing the takaful fund shall be included in the valuation.

11.14 The expense assumptions shall be derived based on the following:

- (i) Distribution expenses shall be based on the actual costs to be incurred; and
- (ii) Expenses payable from the takaful fund and management expenses payable for the shareholders' fund shall be based on recent expense analysis with due regard to likely improvement or deterioration of experience in the future.

11.15 Suitable expense inflation, estimates of future wage and price inflation derived from historical data and other available information shall be factored in as appropriate and recognised in the valuation of family takaful liabilities and expense liabilities, accordingly.

## **C. Mortality and Morbidity**

11.16 The mortality and morbidity assumptions shall be based on rates that are appropriate with the person whose life or health is placed under takaful coverage as well as the takaful operator's experience in providing such cover. Appropriate industry data may be used with due regard to credibility, availability and reliability of such information if the takaful operator's actual experience is inappropriate to be used in its entirety. The justifications for any such weights used shall be disclosed.

11.17 Where appropriate, any mortality or morbidity improvement and deterioration shall be explicitly considered in the valuation.

#### **D. Persistency**

- 11.18 The persistency rates shall be reflective of actual trends with due regard to changing business practices and market conditions.
- 11.19 Participants' behaviour due to specific features of the product or market condition shall be taken into consideration explicitly when determining the appropriate persistency assumption. This includes the possibility of anti-selection by participants and variations in persistency experience for different cohorts of participants.

#### **E. Growth Rate for PIF**

- 11.20 Where an inflow to be considered in valuing the liabilities of family takaful business is dependent on the growth of the PIF, the fund growth rate assumption shall be adjusted accordingly to meet the requirement for PAD in paragraph 12.0.

### **12.0 Methods of Evaluating PAD**

- 12.1 The PAD for the liabilities of takaful business shall be determined by adjusting significant valuation assumptions coherently, without necessarily setting all parameters to be at 75% confidence level. However, the overall value of liabilities of family takaful fund and expense liabilities of shareholders' fund shall secure 75% sufficiency, respectively.
- 12.2 For the valuation of family takaful fund liabilities, the 75% confidence level shall be secured with respect to each PRF accordingly. Where a takaful operator segregates the PRF into further sub-funds other than that required in prevailing guidelines and manages these sub-funds separately, the Appointed Actuary shall ensure 75% sufficiency of the liabilities of these sub-funds individually.
- 12.3 In estimating PAD, the Appointed Actuary may have regard to relevant findings in external work, e.g. recent actuarial research or literature, if this is deemed to be appropriate. If reliance is placed on external work, then the source of that

work shall be disclosed. If PADs are based on internal analysis, details of this analysis shall be provided.

- 12.4 To achieve the 75% sufficiency, the Appointed Actuary shall consider adjusting the valuation assumptions for liabilities of the PRF and shareholders' fund in a consistent manner and such adjustment shall be made for several scenarios (e.g. higher mortality assume in PRF shall be accordingly assume in shareholders' fund for a particular scenario). Based on the results of the valuation made under these scenarios, the Appointed Actuary shall select the scenarios that result in the highest provision for the PRF and shareholders' fund individually as the value of liabilities.

### **13.0 Retakaful Recoveries**

- 13.1 A Labuan takaful operator must determine the expected net recoveries from retakaful arrangements for each underlying contract by projecting the expected future cash flows arising from the retakaful arrangement.
- 13.2 In determining the amount of recoveries from the retakaful arrangement, a Labuan takaful operator must:
- (i) assess the substance of the retakaful arrangement in place by considering the retakaful operator's contractual obligations to the Labuan takaful operator. This must include an assessment on renewability of the retakaful contract and reviewability of the retakaful contributions; and
  - (ii) incorporate all relevant expected future cash flows, based on the assessment carried out under paragraph 13.2 (i), including future payments to the retakaful operator, in relation to the particular underlying contract.
- 13.3 In estimating the future cash flows for the retakaful arrangement, a Labuan takaful operator shall:
- (i) use assumptions that are consistent with those used to estimate the future cash flows of the underlying takaful contract; and
  - (ii) take into account the risk of counterparty default.

- 13.4 Where it is not practical for a Labuan takaful operator to explicitly determine the expected net recoveries from retakaful arrangements for each underlying contract according to paragraph 13.1 and the Labuan insurer uses a simplified method to derive the expected net recoveries from retakaful arrangements, this must be documented. For instance, for some retakaful arrangements which are non-proportional, the net retakaful recoveries may be derived as the difference between gross and net best estimate liabilities.

#### **14.0 Actuarial Valuation Report**

- 14.1 The Appointed Actuary shall prepare a report on the valuation of liabilities of family takaful business referred to as “The Report on Actuarial Valuation of Liabilities of Family Takaful Business” (the Report). The Appointed Actuary shall also disclose the extent of compliance with the requirements of the Guidelines and reasons for non-compliance, if any. The general format of the Report, outlining the minimum information required to be included, is set out in **Appendix I**. In addition, further details to the Report as per **Appendix I(a)** shall be maintained by the takaful operator. Labuan FSA may require for these additional information to be submitted as part of its supervision and monitoring of the takaful operator.
- 14.2 The Board shall provide effective oversight to ensure adequate controls are in place for the valuation process. The Board shall also ensure proper actions and timely follow ups are undertaken based on these results.

##### **A. *Presentation of the Valuation***

- 14.3 The Appointed Actuary shall provide relevant supporting documents, worksheets and other information with sufficient details on his estimations of the value of liabilities of family takaful business as appendices to the Report, such that any other suitably experienced actuary may verify the results independently.

## **B. Certification of the Valuation**

- 14.4 The Report shall be signed by the Appointed Actuary and the PO or his authorised signatory.
- 14.5 The Appointed Actuary shall state in the Report, his name and professional qualifications, and where the Appointed Actuary is an employee of the Labuan takaful operator or a related company, the capacity in which he is carrying out the investigation.
- 14.6 The Report shall be submitted to the Board annually, no later than three (3) months after the end of each financial year; and the Board as well as senior management should discuss with the Appointed Actuary the results of his valuation.

## **C. Reporting**

- 14.7 Labuan takaful operators are required to submit the Report to Labuan FSA within six (6) months from the financial year end together with the annual audited financial statements or on other such date as may be requested by Labuan FSA. The Report shall be submitted to the following:

Director  
Supervision and Enforcement Department  
Labuan Financial Services Authority (Labuan FSA)  
Level 17, Main Office Tower  
Financial Park Complex  
87000 Federal Territory of Labuan, Malaysia

Telephone no: 03-8873 2000  
Facsimile no: 03-8873 2209  
Email: [sed@labuanfsa.gov.my](mailto:sed@labuanfsa.gov.my)

- 14.8 Notwithstanding this, Labuan takaful operators are required to maintain a pro-forma valuation in the interim periods (e.g. half-yearly basis) which may be part of statutory returns and subject to supervisory review by Labuan FSA. The



presentation of the valuation shall be in accordance with **Appendix II** and **Appendix III**.

- 14.9 The Appointed Actuary is required to report to Labuan FSA immediately any significant findings uncovered in his valuation of the Labuan takaful operator's takaful liabilities that can impair the Labuan takaful operator's takaful liability valuation or reserving condition.

**Labuan Financial Services Authority**  
**29 August 2022 (Revised)**  
**1 November 2016**

**The Report on Actuarial Valuation of Liabilities of Family Takaful Business  
for the Year Ended dd/mm/yyyy**

Name of (Re)Takaful Operator : \_\_\_\_\_

Name of Appointed Actuary : \_\_\_\_\_

Qualification(s) : \_\_\_\_\_

**Section A: Business Profile**

1. Describe the operational model adopted and the basis of separation of sub-funds other than required in the prevailing guidelines.
2. Describe the company's business portfolio and comment on any significant changes in composition of business.
3. Describe the current retakaful arrangements. This may include matters such as:
  - The structure of retakaful arrangements, the affected blocks of business and share of participating retakaful operators.
  - Any significant changes to the programme over recent years.
  - Consideration of the potential risk of default of retakaful recoveries based on publicly available information.

**Section B: Data**

1. Document key features of the data, including:
  - The source of the data and how it was extracted;
  - Comments on the reliability and completeness of the data including the extent to which the Appointed Actuary relies upon the data provided by the takaful operator and any limitation of such reliance;
  - Description of steps taken to test the consistency, accuracy and completeness of the data;
  - Description of steps taken to ensure accuracy of valuation system;

- Documentation of any adjustments made to the data including the amount and rationale for the adjustment; and
  - Documentation of quantitative information which may have an impact on valuation.
2. If data is grouped, to state the principles used and/or if interpolation is resorted to, the formula used. Details of goodness of fit tests should be provided.

## **Section C: Valuation Methodology**

1. Valuation of Best Estimate:
- Describe the valuation methods for estimating the best estimate provision.
  - If a non-prescribed method has been used, provide detailed description of how the method works.
  - Disclose any approximation or simplification made.
  - Describe the methods by which provision has been made in respect of family takaful certificates or extension of family takaful certificates as described under paragraphs 9.13 and 9.14 of the Guidelines.
  - Describe any certificate or extension of a certificate that would be treated as an asset at the fund level.
  - Disclose details of any changes to the valuation methods used since the last valuation.
2. Valuation of Provision of Adverse Deviation (PAD):
- Describe the methods for the derivation of the PAD for the relevant valuation parameters.
  - Describe the methods for the derivation of PAD to ensure that the overall valuation of liabilities secures a 75% confidence level.
3. Presentation of the Valuation:
- Summarise the results of the valuation of takaful liabilities and expense liabilities in accordance to **Appendix II**.

- Comment on the level of sufficiency of the provision for liabilities of family takaful business.

#### **Section D: Valuation Assumptions and Analysis of Experience**

1. Describe and provide justification for the key assumptions made, including those related to participants' reasonable expectation, for the valuation methodology used.
2. Document the results and interpretation of experience analysis or comparative studies, for example:
  - Analysis of assumptions used in the previous valuation against the actual experience emerging during the year and where material differences are observed, to justify the differences and explain how these are reflected in the current valuation assumptions.
  - Justification for any material change in assumption from the previous valuation and quantify the financial impact of such change; and
3. Provide comments on the sufficiency of PIF to meet future tabarru' apportionment into PRF.

#### **Section E: Surrender Value Basis**

1. Describe the basis to determine the surrender value payable from PRF and Shareholders' Fund, for relevant certificates.

#### **Section F: Distribution of Surplus**

1. Describe the basis to determine the allocation of surplus to participants and remuneration to Shareholders' Fund in PRF.
2. Comment on any issues highlighted by the analysis of surplus (in the format as prescribed in **Appendix III** and participants' reasonable expectation before distributing the surplus.

## **Section G: Others**

1. Details of the Appointed Actuary:
  - Any potential conflict of interest and how this has been resolved.
  - Any restriction placed on him in carrying out the valuation.
2. Compliance:
  - Document the extent of compliance to the requirements of the Guidelines and the reasons for non-compliance of the requirements, if any.
3. Definition of terms:
  - Provide definition of terms and expressions used in the Report which may be ambiguous or subject to wide interpretation.
4. Recommendations:
  - Where applicable, provide recommendations or comments to improve the reliability of future valuations of the liabilities of the family takaful business.
  - In cases where recommendations have been made and there have been discussion with the board of directors or takaful operator's management, commentary should be provided on the responses given to those recommendations and any follow up actions to be taken.
  - Where applicable, comment on the actions taken by the board of directors in the current valuation year, in respect of recommendations made in the previous year's valuation.

## **Section H: Certification by Appointed Actuary**

The Appointed Actuary should provide a certification as set out below:

I hereby certify that:

1. I have applied such tests as I consider reasonable to satisfy myself about the accuracy and completeness of the database on business in force used in my valuation;

2. I have valued the takaful liabilities and expense liabilities in compliance with the guidelines and circulars issued by Labuan FSA to the extent they are applicable to the valuation;
3. I have valued the takaful liabilities and expense liabilities in respect of products for which the basis of valuation is not prescribed, on a basis, which I consider appropriate and adequate; and
4. I have recommended the allocation or part of surplus in family takaful fund for transfer to shareholders' fund in compliance with the guidelines and circulars issued by Labuan FSA.

Signature : \_\_\_\_\_

Name : \_\_\_\_\_

Date : \_\_\_\_\_

Appointed Actuary

### **Section I: Certification by the Principal Officer (PO)**

The PO should provide the following certification:

I hereby certify that the database is properly maintained and I have satisfied myself that the data provided to the Appointed Actuary is accurate and complete.

Signature : \_\_\_\_\_

Name : \_\_\_\_\_

Date : \_\_\_\_\_

Principal Officer

**Supporting Information to the Report on Actuarial Valuation of Liabilities of  
Family Takaful Business**

**Supporting Worksheets and Appendices**

1. Summary of Information:
  - Prepare detailed summary of all the data and other information used to conduct the valuation, including:
    - number of certificates;
    - sum participated;
    - contributions; and
    - expenses incurred in the shareholders' fund in administering the takaful fund.
2. Other Supporting Documents:
  - The following valuation tables shall be attached:
    - risk discount rates for GII (or equivalent risk-free rate for non-Malaysian policies);
    - mortality/morbidity and other risk rates; and
    - persistency rates
3. Workings on Valuation Method:
  - The workings of each valuation methodology should be sufficiently detailed and transparent to enable another actuary to review the adopted methodology.

**Summary of Valuation Result**  
Takaful Liabilities in Family Takaful Fund

		Ordinary					Investment-Linked				Total	
		Sub-fund 1	Sub-fund 2	Sub-fund 3	Sub-fund 4	Sub-fund 5	Total	Sub-fund 1	Sub-fund 2	Sub-fund 3		Total
(a)	Gross best estimate provisions											
(b)	PAD											
(c)	Gross provisions											
(d)	Net retakaful recoveries											
(e)	Net liability [(c) - (d)]											



### Expense Liabilities in Shareholders' Fund

		Ordinary					Investment-Linked				Total	
		Sub-fund 1	Sub-fund 2	Sub-fund 3	Sub-fund 4	Sub-fund 5	Total	Sub-fund 1	Sub-fund 2	Sub-fund 3		Total
(a)	Gross best estimate provisions											
(b)	PAD											
(c)	Gross provisions											
(d)	Net retakaful recoveries											
(e)	Net liability [(c) - (d)]											

## Family Takaful Fund: Composition of Valuation Liabilities

No.	Description	Particular of Certificates								Expected Present Value Statistics						Retakaful	Net Liability
		No. of certificates		No. of persons covered		Sum participated		Annual Office Contribution	Surrender Value	Benefits	Expenses	Tabarru'	Gross BE Provisions	PAD	Gross Provisions	Net Retakaful Recoveries	
		S	A	S	A	S	A			(a)	(b)	(c)	(d)	(e)	(f)=(d)+(e)	(g)	
<b>ORDINARY</b>																	
A	Sub-fund 1																
B	Sub-fund 2																
C	Sub-fund 3																
D	Sub-fund4																
E	Sub-fund 5																
<b>Total Ordinary</b>																	
<b>INVESTMENT-LINKED</b>																	
A	Sub-fund 1																
B	Sub-fund 2																
C	Sub-fund 3																
<b>Total Investment-Linked</b>																	
<b>TOTAL</b>																	

### Shareholders' Fund: Composition of Valuation of Expense Liabilities

No.	Description	Particular of Certificates						Expected Present Value Statistics						Retakaful	Net Expense Liability	
		No. of certificates		No. of persons covered		Annual Office Contribution	Surrender Value	Operating Costs	Wakalah Fees	Remuneration from PIF	Other Incomes	Gross BE Provisions	PAD	Gross Provisions	Net Retakaful Recoveries	
		S	A	S	A			(a)	(b)	(c)	(d)	(e)	(f)	(g)=(e)+(f)	(h)	(i)=(g)-(h)
<b>ORDINARY</b>																
A	Sub-fund 1															
B	Sub-fund 2															
C	Sub-fund 3															
D	Sub-fund 4															
E	Sub-fund 5															
<b>Total Ordinary</b>																
<b>INVESTMENT-LINKED</b>																
A	Sub-fund 1															
B	Sub-fund 2															
C	Sub-fund 3															
<b>Total Investment-Linked</b>																
<b>TOTAL</b>																

### Valuation Result, Composition and Distribution of Surplus in Family Takaful Fund

#### Valuation Result, Movement and Recommended Distribution of Surplus

		Ordinary					Investment-Linked				Total		
		Sub-fund 1	Sub-fund 2	Sub-fund 3	Sub-fund 4	Sub-fund 5	Total	Sub-fund 1	Sub-fund 2	Sub-fund 3		Total	
A	<b>Valuation Result</b>												
	1	Participants' fund carried forward <sup>7</sup>											
	2	Net liabilities under certificates											
	3	Surplus/Deficit [A(1) - A(2)]											
B	<b>Movement &amp; Recommended Distribution of Surplus</b>												
	1	Unappropriated surplus brought forward											
	2	Amount of outright transfer from shareholders' fund during the year											
	3	Total surplus arising during the year [A(3) - B(1) - B(2)]											
	4	Repayment of qard to shareholders' fund											
	5	Distribution to participants:											
		a) Annual/regular											
	b) Terminal												
6	Remuneration to shareholders' fund												
7	Unappropriated surplus carried forward [B(1)+B(2)+B(3)-B(4)-B(5)-B(6)]												

<sup>7</sup> Before repayment of qard to shareholders' fund, distribution to participants and remuneration to shareholders' fund.

### Source of Surplus Arising

	Investment	Takaful Benefits	Expense <sup>8</sup>	Lapse	Change in Valuation Basis	New Business	Others	Total
<b>Ordinary</b>								
<b>Sub-fund 1</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Sub-fund 2</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Sub-fund 3</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Sub-fund 4</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Sub-fund 5</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Total Sub Fund</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								

<sup>8</sup> Refers to direct claim related expenses and expense borne by the takaful fund.

<sup>9</sup> The columns for "Total" shall correspond to item B3 [Total Surplus Arising during the year] of 'Table Valuation Result, Movement and Recommended Distribution of Surplus' for the respective fund.

	Investment	Takaful Benefits	Expense <sup>8</sup>	Lapse	Change in Valuation Basis	New Business	Others	Total
<b>Investment-Linked</b>								
<b>Sub-fund 1</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Sub-fund 2</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Sub-fund 3</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Total Sub Fund</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								
<b>Total</b>								
Actual								
Expected								
Actual less Expected <sup>9</sup>								

<sup>8</sup> Refers to direct claim related expenses and expense borne by the takaful fund.

<sup>9</sup> The columns for "Total" shall correspond to item B3 [Total Surplus Arising during the year] of 'Table Valuation Result, Movement and Recommended Distribution of Surplus' for the respective fund.

## Parameters for Derivation of the Base Risk-free Yield Curve

The parameters to be used to derive the base risk-free yield curve are as set out in the table below.

Currency		Market information to be used as input to Segment 1	Last liquid point (LLP) (years)	Long-term forward rate (LTFR)
AUD	Australian Dollar	Government Bonds	30	3.8%
BRL	Brazilian Real	Government Bonds	10	7.0%
CAD	Canadian Dollar	Government Bonds	30	3.8%
CHF	Swiss Franc	Government Bonds	20	2.8%
CLP	Chilean Peso	Swaps	10	5.0%
CNY	Yuan Renminbi	Government Bonds	10	6.0%
COP	Colombian Peso	Swaps	10	6.0%
CZK	Czech Koruna	Swaps	15	3.8%
DKK	Danish Krone	Swaps	20	3.8%
EUR	Euro	Swaps	20	3.8%
GBP	Pound Sterling	Swaps	50	3.8%
HKD	Hong Kong Dollar	Swaps	15	4.4%
HUF	Forint	Government Bonds	15	6.0%
IDR	Rupiah	Swaps	10	8.0%
ILS	New Israeli Shekel	Swaps	20	4.4%
INR	Indian Rupee	Swaps	10	7.0%
JPY	Yen	Government Bonds	30	3.8%
KRW	Won	Government Bonds	20	4.4%
MXN	Mexican Peso	Government Bonds	20	5.0%
MYR	Malaysian Ringgit	Government Bonds	15	5.0%
NOK	Norwegian Krone	Swaps	10	3.8%
NZD	New Zealand Dollar	Swaps	20	4.8%
PEN	Sol	Swaps	10	6.0%
PHP	Philippine Peso	Swaps	10	7.0%
PLN	Zloty	Government Bonds	10	5.0%
RON	Romanian Leu	Government Bonds	10	5.0%
RUB	Russian Ruble	Swaps	10	7.0%
SAR	Saudi Riyal	Swaps	15	6.0%
SEK	Swedish Krona	Swaps	10	3.8%
SGD	Singapore Dollar	Government Bonds	20	3.8%
THB	Baht	Government Bonds	10	5.0%
TRY	Turkish Lira	Government Bonds	10	7.0%
TWD	New Taiwan Dollar	Government Bonds	10	4.4%
USD	US Dollar	Government Bonds	30	3.8%
ZAR	Rand	Government Bonds	30	7.0%

Source: International Association of Insurance Supervisors (IAIS)

These parameters are subject to periodic review by the IAIS. The updated parameters will be published on the Insurance Capital Standards section of the IAIS website. A Labuan takaful operator would be expected to ensure that the latest parameters are used when conducting the valuation of takaful liabilities.