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, with the aim of providing for those liabilities 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 (re)takaful captives.

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 reinsurer approved to carry out 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 margin of solvency for Labuan takaful operators under Section 84 of LIFSSA.

3.2 Any person who fails to comply with the Guidelines is guilty of an offence punishable under Section 36B and 36G of the LFSAA.

4.0 Effective Date

4.1 The Guidelines shall take effect from financial year beginning on and after 1 January 2018.

4.2 Notwithstanding paragraph 4.1, takaful operators may conduct the valuation of liabilities of family takaful business according to the requirements of the Guidelines, prior to the above implementation date.

5.0 Principles

5.1 In valuing the liabilities of family takaful business, the methods and assumptions shall:

(i) be appropriate to the business and risk profile of the family takaful business;

(ii) be consistent with one another and 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) take into account Labuan takaful operator's fiduciary duty to treat participants fairly; and

(v) be in accordance with generally accepted actuarial principles.

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[1] 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;

(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);

[1] This refers to the amount either directly allocated from the gross contribution paid by participants or deductible from the Participants' Investment Fund.

(iii) '**takaful benefit**' includes any benefits, whether pecuniary or not, which is payable 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 risk margin for adverse deviation (PAD)**' is the component of the value of 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)[2]. 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;

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

(f) the China Association of Actuaries[3]; or

(g) holds any other qualifications 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.

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.

[3] 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).

7.4 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 (3) months from the effective date of the cession 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, subject to Labuan FSA's approval, the Appointed Actuary shall maintain professional accountability and impartiality needed in providing his actuarial services to the Labuan takaful operator. 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 193 of LFSSA, 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 this 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 takaful liability valuation or 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 or 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 or 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 the proposed distributions among the different groups of participants are equitable and are consistent with the reasonable expectations of the participants.

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 policies which it has written;

(ii) any major risks or concerns exist that may affect the takaful operator’s 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 contributions exceeding USD 10 million, it would need to further segregate between its Malaysian policies and non-Malaysian policies, 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 contributions[4] of the smaller fund is less than:

(i) 10% of the Labuan takaful operator's total gross written contributions; 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[5] in relation to family takaful business.

8.5 Should in subsequent financial years, the gross written contributions threshold specified in paragraph 8.3 be exceeded, the Labuan takaful operator must establish and maintain separate funds between its Malaysian policies and non-Malaysian policies.

9.0 Valuation Methodology

9.1 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.

9.2 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.

9.3 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

[4] This refers to the gross written contributions of the immediate preceding financial year.
[5] This includes the need to establish and maintain PRF and PIF for each of the takaful funds of the family takaful operator.

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.

9.4 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.

9.5 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.

9.6 Where certificates or extensions of a certificate are collectively treated as an asset under the valuation method adopted, the Appointed Actuary shall make the necessary adjustment to eliminate the asset value at the fund level from the valuation.

9.7 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.

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[6]

[6] Shall include any loading imposed on the tabarru' that is allocated into the PRF.

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 liabilities shall be valued by projecting future cash flows to ensure that all future obligations can be met without recourse to additional finance or capital support at any future time during the duration of the certificate. 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 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 9.1:

(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 this 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 The risk-free discount rate shall be used to discount all cash flows to determine the liabilities of family takaful business.

11.4 The risk-free discount rate to be used for Malaysian risks shall be derived from a yield curve, as follows:

(i) for durations of less than fifteen (15) years: zero-coupon spot yield of Government Investment Issue (GII) with matching duration; and

(ii) for durations of fifteen (15) years or more: zero-coupon spot yield of GII with 15 years term to maturity,

where duration is the term to maturity of each future cash flow.

11.5 The GII zero-coupon spot yields shall be obtained from a recognised bond pricing agency in Malaysia, or any other source as may be specified by Labuan FSA. Where yields at certain durations are not available, these yields shall be appropriately interpolated from the observable data.

11.6 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 with the advice of the Appointed Actuary e.g. the United States' government zero-coupon spot yield, European's statutory zero-coupon spot yield.

11.7 Where discounting is used, 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 choice of rate selected.

B. Expenses

11.8 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.

11.9 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.

11.10 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

11.11 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.

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

D. Persistency

11.13 The persistency rates shall be reflective of actual trends with due regard to changing business practices and market conditions.

11.14 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

11.15 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

13.1 The liabilities of the family takaful business shall be valued on gross basis, and deducting retakaful or reinsurance[7] cessions only if:

(i) the retakaful arrangement achieve effective risk mitigation;

(ii) there is no obligation on the part of the ceding fund to repay any amount, other than the refund of deposit referred to below in (iv), to the retakaful operator in the event a certificate lapses or the retakaful contract is cancelled;

(iii) the valuation of liability placed under retakaful coverage is made in accordance to paragraph 9.1 above; and

(iv) there is a deposit held from retakaful operator other than a retakaful operator registered under the LIFSSA, as security for the said retakaful operator's due performance of its obligations under the retakaful contract, subject to the condition that any release of deposit shall not exceed the reduction of liability of the retakaful operator.

13.2 If only conditions stipulated in paragraphs 13.1(i), (iii) and (iv) are met, a deduction for retakaful may be made only to the extent of the net amount determined by deducting the amount repayable on the cancellation of the contract on the valuation date from the valuation of the credit for retakaful.

[7] The deduction for reinsurance cession is allowed if the takaful operator is unable to secure a retakaful arrangement for the takaful risks.

13.3 Where the retakaful is ceded to (re)takaful operators other than those registered under LIFSSA, the amount of deduction shall not exceed the amount of deposit held, where required on the date of valuation in respect of the corresponding retakaful.

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 Valuation of Liabilities of Family Takaful Business" (the Report). The Appointed Actuary shall 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**.

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

Telephone no: 087 591 200
Facsimile no: 087 453 442 / 413 328
Email: *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 family takaful liabilities that can impair the Labuan takaful operator's takaful liabilities valuation or reserving condition.

Labuan Financial Services Authority
1 November 2016

Appendix I

Report on Actuarial Valuation of Liabilities of Labuan 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 from which retakaful credit was taken in computing the provision for the liabilities.
   - Any significant changes to the programme over recent years.

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 and what steps have been taken to eliminate such asset from the valuation.
   - 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

Appendix I(a)

Supporting Information to the Report on Actuarial Valuation of Liabilities of Labuan 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 to enable another actuary to review the adopted methodology.

Appendix II

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)	Best estimate provisions											
(b)	PAD											
(c)	Gross provisions before zeroisation [(a) + (b)]											
(d)	Negative provisions (absolute value)											
(e)	Gross provisions after zeroisation [(c) + (d)]											
(f)	Amount of provisions ceded to retakaful operators											
(g)	Net liabilities [(e) - (f)]											

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)	Best estimate provisions											
(b)	PAD											
(c)	Gross provisions before zeroisation [(a) + (b)]											
(d)	Negative provisions (absolute value)											
(e)	Gross provisions after zeroisation [(c) + (d)]											
(f)	Amount of provisions ceded to retakaful operators											
(g)	Net liabilities [(e) - (f)]											

Family Takaful Fund: Composition of Valuation Liabilities

[For submission purposes, any column that is not applicable for retakaful operators should be marked as “Not Applicable” (NA) e.g. no. of persons covered, surrender value, etc.]

No.	Description	Particular of Certificates								Expected Present Value Statistics								Retakaful		Net Liabilities
		No. of certificates		No. of persons covered		Sum participated		Annual Office Contribution	Surrender Value	Benefits	Expenses	Tabarru’	BE Provisions	PAD	Gross Provisions before Zeroisation	Negative Provisions (Absolute Value)	Gross Provisions after Zeroisation	Amount of provision Ceded	Deposit Retained	
		S	A	S	A	S	A			**(a)**	**(b)**	**(c)**	**(d)**	**(e)**	**(f)=(d) + (e)**	**(g)**	**(h)=(f)+(g)**	**(i)**	**(j)**	**(k)=(h)–(i)**
ORDINARY																				
A	Sub-fund 1																			
B	Sub-fund 2																			
C	Sub-fund 3																			
D	Sub-fund4																			
E	Sub-fund 5																			
Total Ordinary																				
INVESTMENT-LINKED																				
A	Sub-fund 1																			
B	Sub-fund 2																			
C	Sub-fund 3																			
Total Investment-Linked																				
TOTAL																				

Shareholders' Fund: Composition of Valuation of Expense Liabilities

[For submission purposes, any column that is not applicable for retakaful operators should be marked as "Not Applicable" (NA) e.g. no. of persons covered, surrender value, etc.]

No.	Description	Particular of Certificates						Expected Present Value Statistics									Retakaful		Net Expense Liabilities
		No. of certificates		No. of persons covered		Annual Office Contribution	Surrender Value	Operating Costs	Wakalah Fees	Remuneration from PIF	Other Incomes	BE Provisions	PAD	Gross Provisions before Zeroisation	Negative Provisions (Absolute Amount)	Gross Provisions After Zeroisation	Amount of provision Ceded	Deposit Retained	
		S	A	S	A			**(a)**	**(b)**	**(c)**	**(d)**	**(e)**	**(f)**	**(g)=(e)+(f)**	**(h)**	**(i)=(g)+(h)**	**(j)**	**(k)**	**(l)=(i)–(j)**
ORDINARY																			
A	Sub-fund 1																		
B	Sub-fund 2																		
C	Sub-fund 3																		
D	Sub-fund4																		
E	Sub-fund 5																		
Total Ordinary																			
INVESTMENT-LINKED																			
A	Sub-fund 1																		
B	Sub-fund 2																		
C	Sub-fund 3																		
Total Investment-Linked																			
TOTAL																			

Appendix III

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	**Valuation Result**												
	1	Participants' fund carried forward[8]											
	2	Net liabilities under certificates											
	3	Surplus/Deficit [A(1) - A(2)]											
B	**Movement & Recommended Distribution of Surplus**												
	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)]											

[8] Before repayment of qard to shareholders' fund, distribution to participants and remuneration to shareholders’ fund.

Source of Surplus Arising

	Investment	Takaful Benefits	Expense[9]	Lapse	Change in Valuation Basis	New Business	Others	Total
Ordinary								
Sub-fund 1								
Actual								
Expected								
Actual less Expected[10]								
Sub-fund 2								
Actual								
Expected								
Actual less Expected[10]								
Sub-fund 3								
Actual								
Expected								
Actual less Expected[10]								
Sub-fund 4								
Actual								
Expected								
Actual less Expected[10]								
Sub-fund 5								
Actual								
Expected								
Actual less Expected[10]								
Total Sub Fund								
Actual								
Expected								
Actual less Expected[10]								

[9] Refers to direct claim related expenses and expense borne by the takaful fund.
[10] 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[9]	Lapse	Change in Valuation Basis	New Business	Others	Total
Investment-Linked								
Sub-fund 1								
Actual								
Expected								
Actual less Expected[10]								
Sub-fund 2								
Actual								
Expected								
Actual less Expected[10]								
Sub-fund 3								
Actual								
Expected								
Actual less Expected[10]								
Total Sub Fund								
Actual								
Expected								
Actual less Expected[10]								
Total								
Actual								
Expected								
Actual less Expected[10]								

[9] Refers to direct claim related expenses and expense borne by the takaful fund.
[10] 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.