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## **PART I – OVERVIEW**

### **1. Introduction**

- 1.1 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.
- 1.2 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.
- 1.3 The Shariah Advisory Council of Bank Negara Malaysia (the Bank) resolved that the setting up of provision for liabilities of takaful business is permissible. Holding provisions to ensure ability of takaful fund to meet its obligation is a prudent approach, as Shariah promotes taking precautionary measures to address future uncertainty.
- 1.4 The 'Guidelines on Valuation Basis for Liabilities of Family Takaful Business' (Guidelines) sets out prudential requirements that should be observed by 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. This Guidelines is intended to reflect the takaful operator's fiduciary duty to manage the takaful funds prudently, treat

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participants fairly as well as to ensure that the shareholders' fund can adequately support the takaful business.

## **2. Applicability**

- 2.1 All takaful operators<sup>1</sup> underwriting family takaful business shall value the liabilities of their family takaful business at the end of each financial year in the manner specified in this Guidelines. This Guidelines shall also apply to inwards retakaful business underwritten by takaful operators.
- 2.2 This Guidelines shall be read together with, but not limited to, the following documents:
- (a) Guidelines on Takaful Operational Framework; and
  - (b) Guidelines on the Role of the Appointed Actuary.

## **3. Effective Date**

- 3.1 This Guidelines shall take effect from financial year beginning on and after 1 July 2011.
- 3.2 Notwithstanding paragraph 3.1, takaful operators may conduct the valuation of liabilities of family takaful business according to the requirements of this Guidelines, prior to the above implementation date.

## **PART II – POLICY REQUIREMENTS**

### **4. Principles**

- 4.1 In valuing the liabilities of family takaful business, the methods and assumptions shall:
- (a) be appropriate to the business and risk profile of the family takaful business;

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<sup>1</sup> Includes retakaful operators and international takaful operators registered under the Takaful Act 1984.

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- (b) be consistent with one another and from year to year to preserve comparability;
- (c) include appropriate margins for adverse deviations in respect of the risks that arise under the takaful certificate;
- (d) take into account takaful operator's fiduciary duty to treat participants fairly;
- (e) be in accordance with generally accepted actuarial principles; and
- (f) accord a reasonable level of certainty for the provision held against the liabilities, which is no less certain than that accorded by a Government Investment Issues (GII).

## 5. Definitions

5.1 In this Guidelines, unless the context otherwise requires,

- (a) 'Participants' Risk Fund' (PRF) refers to the fund in which a portion of contributions<sup>2</sup> paid by the takaful participants is allocated and pooled for the purpose of meeting claims by takaful participants on the basis of mutual assistance or protection;
- (b) '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);
- (c) 'takaful benefit' refers to the amount of benefit secured under a takaful certificate;
- (d) '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;
- (e) '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;

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<sup>2</sup> This refers to the amount either directly allocated from the gross contribution paid by participants or deductible from the Participants' Investment Fund.

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- (f) 'liabilities of family takaful business' refers to the sum of liabilities of family takaful fund and expense liabilities of shareholders' fund;
- (g) the 'best estimate' value is the statistical central estimate value of the liabilities concerned; and
- (h) the 'provision of risk margin for adverse deviation (PRAD)' is the component of the value of liabilities that relates to the uncertainty inherent in the best estimate. PRAD 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.

## **6. Valuation Methodology for Liabilities of Family Takaful Business**

- 6.1 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, is sufficient to meet the requirements of this Guidelines using a basis prescribed in paragraphs 6.2 – 12.2.
- 6.2 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.
- 6.3 The Appointed Actuary shall ensure that all contractual benefits paid from PRF are provided for in accordance with the requirements of this 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.

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- 6.4 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. PRAD, shall meet the requirements as outlined in section 9 of this Guidelines.
- 6.5 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.
- 6.6 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<sup>3</sup> from the valuation.
- 6.7 Where the Bank 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 this Guidelines and is consistent with the valuation basis at the last financial year end.

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<sup>3</sup> The "fund level" referred to shall be consistent with requirement on fund segregation as specified by the Bank.

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## A. Liabilities of Family Takaful Fund

- 6.8 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<sup>4</sup>, **less** the present value of future gross tabarru'<sup>5</sup> arising from the certificate, discounted at the appropriate risk discount rate as defined in this Guidelines.
- 6.9 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 this 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.
- 6.10 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 6.8, 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.
- 6.11 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

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<sup>4</sup> Takaful operators shall ensure that expenses charged to the takaful fund are in line with the 'Guidelines on Takaful Operational Framework'.

<sup>5</sup> Shall include any loading imposed on the tabarru', that is allocated into the PRF.

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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 this 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.

- 6.12 Other actuarial valuation methods may be used (e.g. retrospective actuarial valuation) where such prospective method as per paragraph 6.8 – 6.10 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.
- 6.13 An extension to a family takaful certificate covering contingency of death, survival or critical illness shall be valued in accordance to paragraph 6.8 – 6.9 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:
- (a) 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
  - (b) 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 General Takaful Business.

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- 6.14 The Appointed Actuary shall consider the following events and set appropriate provisions as per paragraph 6.1:
- (a) an immediate payment of claims;
  - (b) contingent liabilities which exist or may arise in respect of takaful certificates that have lapsed and not included in the valuation;
  - (c) payment of benefits or waiver of contributions upon disability of a takaful participant;
  - (d) 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;
  - (e) a certificate covering substandard risk or high risk occupation; and
  - (f) any other liability, or contingent liability, under family takaful certificates or extensions of family takaful certificates not covered by 6.14(a) to 6.14(e) above, including extensions of family takaful certificates, other than those referred to in paragraph 6.13 above.

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

- 6.15 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).
- 6.16 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.

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6.17 For the purpose of paragraph 6.16, the Appointed Actuary may only consider distributable income from PRF as shareholders' fund income cash flow subject to the following conditions:

- (a) 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 the requirement of the 'Guidelines on Takaful Operational Framework' and takaful operator's own policy of such distribution; and
- (b) the capital requirements that may be imposed on PRF by the Bank have been met by the takaful operator.

### **C. Alternative Valuation Methodology**

6.18 Where the Appointed Actuary in his professional judgment, finds valid reasons to apply changes to the valuation method compared to the method used in preceding valuation, he shall disclose these changes in his report together with the reasons for and the impact of the change on valuation liability.

6.19 Where a family takaful certificate cannot be appropriately valued using the valuation methodology stipulated in this Guidelines, the Appointed Actuary shall value the certificate using a methodology approved by the Bank subject to requirement in paragraph 6.12.

## **7. Data and Information Used by the Appointed Actuary**

7.1 The Chief Executive Officer (CEO) of a 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<sup>6</sup>. 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

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<sup>6</sup> Takaful operators should refer to the Guidelines on Data Management and Management Information System (MIS) Framework.

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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 CEO 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.

- 7.2 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.

## **8. Valuation Assumptions**

- 8.1 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.
- 8.2 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. Discount Rates**

- 8.3 The risk-free discount rate shall be used to discount all cash flows to determine the liabilities of family takaful business.
- 8.4 The risk-free discount rate shall be derived from a yield curve, as follows:
- (a) for durations of less than 15 years : zero-coupon spot yield of GII with matching duration; and
  - (b) for durations of 15 years or more : zero-coupon spot yield of GII with 15 years term to maturity,

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

- 8.5 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 the Bank. Where yields at certain durations are not available, these yields shall be appropriately interpolated from the observable data.

## **B. Expenses**

- 8.6 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.
- 8.7 The expense assumptions shall be derived based on the following:
- (a) Distribution expenses shall be based on the actual costs to be incurred; and
  - (b) 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.
- 8.8 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**

- 8.9 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

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experience is inappropriate to be used in its entirety. The justifications for any such weights used shall be disclosed.

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

#### **D. Persistency**

- 8.11 The persistency rates shall be reflective of actual trends with due regard to changing business practices and market conditions.
- 8.12 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 of PIF**

- 8.13 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 PRAD in section 9.

### **9. PRAD**

- 9.1 The PRAD 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.
- 9.2 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

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Actuary shall ensure 75% sufficiency of the liabilities of these sub-funds individually.

- 9.3 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.

## **10. Retakaful**

- 10.1 The liabilities of the family takaful business shall be valued on gross basis, and deducting retakaful<sup>7</sup> cessions only if:
- (a) the retakaful arrangement achieve effective risk mitigation;
  - (b) 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 (d), to the retakaful operator in the event a certificate lapses or the retakaful contract is cancelled;
  - (c) the valuation of liability placed under retakaful coverage is made in accordance to paragraph 6.1 above; and
  - (d) there is a deposit held from retakaful operator other than a retakaful operator registered under the Takaful Act 1984 (the Act) or a qualifying retakaful operator, 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.

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<sup>7</sup> Shall also include reinsurance companies and qualifying reinsurance companies, which complies with the requirements specified by the Bank.

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10.2 For the purpose of paragraph 10.1(d), a qualifying retakaful operator refers to a (re)takaful operator<sup>8</sup> which is licensed under the Labuan Islamic Financial Services and Securities Act 2010<sup>9</sup> and satisfies either of the following conditions:

- (a) the (re)takaful operator carries a financial strength rating of category three<sup>10</sup> or better; or
- (b)
  - i) the (re)takaful operator has obtained an explicit and irrevocable guarantee<sup>11</sup> from its parent company (or head office<sup>12</sup>) to provide full support to the (re)takaful operator in the event of financial difficulties; and
  - ii) its parent company (or head office) is registered under the Act or carries a financial strength rating of category three<sup>10</sup> or better. For the purpose of meeting the rating requirement in the event that the parent company (or head office) does not have its own financial strength rating, the rating of subordinated debt issued by the parent company (or head office) that is rated with rating of category three<sup>10</sup> or better may be accepted. Where there are a number of ratings available, the following principles shall be applied:
    - a) Where two ratings are available, the lower is to be applied; or
    - b) Where three or more ratings are available, the lower of the two highest ratings is to be applied.

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<sup>8</sup> Includes a Labuan (re)insurer licensed under the Labuan Financial Services and Securities Act 2010 that is approved to carry out takaful and retakaful services.

<sup>9</sup> Administered by the Labuan Financial Services Authority.

<sup>10</sup> Refer to Appendix I

<sup>11</sup> The guarantee should at least:

- (i) Cover all retakaful arrangements between the retakaful operator and any Malaysian entities registered under the Takaful Act 1984;
- (ii) Cover the amount of the retakaful operator's liabilities to Malaysian entities arising from the retakaful arrangements referred to in (i) above in its entirety (including retakaful recoveries or other liabilities as agreed upon in the retakaful transactions);
- (iii) Be in place for the entire duration the retakaful operator is exposed to the risk of the arrangements; and
- (iv) Be irrevocable, subject to the validity of the retakaful claims, and the retakaful operator shall not unilaterally cancel the guarantee under any circumstances, as long as the arrangement in (i) above still exposes the retakaful operator to the risk of claims.

<sup>12</sup> For branches of retakaful operators, the head office shall provide an irrevocable and explicit undertaking to immediately transfer funds in the event (or expected) depletion of the working capital or in the event of a large loss being intimated.

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- 10.3 If only conditions stipulated in paragraphs 10.1(a), (c) and (d) 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.
- 10.4 Where the retakaful is ceded to (re)takaful operators other than those registered under the Act or qualifying retakaful operators, the amount of deduction which can be made under paragraphs 10.1 and 10.3 above shall not exceed the amount of deposit held, where required on the date of valuation in respect of the corresponding retakaful.

## **11. Business Outside Malaysia**

- 11.1 The valuation of liabilities in respect of family takaful certificates for business outside Malaysia shall be conducted on a basis:
- (a) not less stringent than the basis required by the laws of the country in which the certificate is issued; and
  - (b) not less stringent than the basis prescribed in this Guidelines.
- In the absence of any basis specified by the laws of that country, the certificates shall be valued in accordance to this Guidelines.

## **12. Foreign Currency-Denominated Certificates**

- 12.1 Foreign currency-denominated certificates shall be valued as per the requirements stipulated in this Guidelines and converted into Ringgit currency using the spot currency conversion rate as at the valuation date. The method for determining the spot conversion rate should be consistently used.
- 12.2 In determining the discount rate assumptions, the GII as referred to in Paragraph 8.4 shall be replaced by an appropriate risk-free security that is consistent with the currency the certificate is denominated in, such as government securities of the relevant country.

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### 13. Actuarial Valuation Report

- 13.1 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), including the Reporting Forms for Valuation of Liabilities of Family Takaful Business (Reporting Forms). The Appointed Actuary shall disclose the extent of compliance with the requirements of this Guidelines and reasons for non-compliance, if any. The general format of the Report, outlining the minimum information required to be included and the guidance notes for submission of the Reporting Forms are set out in **Appendices II** and **III**, respectively. The softcopy of the Reporting Forms to be completed is available via the Regulatory Handbook (refer to Attachment I).
- 13.2 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

- 13.3 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

- 13.4 The Report shall be signed by the Appointed Actuary and the CEO or his authorised signatory.
- 13.5 The Appointed Actuary shall state in the Report, his name and professional qualifications.

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### **C. Reporting to the Bank**

- 13.6 Takaful operators are required to submit the Report, including the hardcopy of the Reporting Forms to Pengarah, Jabatan Perkhidmatan Statistik within 3 months from the financial year end together with the annual audited financial statements or on other such date as may be requested by the Bank.
- 13.7 The softcopy of the Reporting Forms shall be zipped, password protected and submitted to *takafulval@bnm.gov.my*. Takaful operators are expected to provide the password(s) of the file(s) via a separate email to this email address. For softcopy submission, takaful operators shall be guided by the requirements as stipulated in paragraph 7 of Appendix III(a).

## Appendix I: Rating Categories

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

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

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## Appendix II: Report on Actuarial Valuation of Liabilities of Family Takaful Business for the year ended dd/mm/yyyy

Name of Takaful Operator/Retakaful Operator : \_\_\_\_\_  
Name of Appointed Actuary : \_\_\_\_\_  
Qualifications : \_\_\_\_\_

### 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/reinsurance 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.
  - 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.

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- 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 6.13 and 6.14 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 PRAD:
- Describe the methods for the derivation of the PRAD for the relevant valuation parameters.
  - Describe the methods for the derivation of PRAD 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(a)(i)**.
  - 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:
  - Justification for any material change in assumption from the previous valuation and quantify the financial impact of such change.
  - 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.
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.

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## 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 II(a)(ii)**) 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 this 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: 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.
    - 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.
    - mortality/morbidity and other risk rates.

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- persistency rates.
  - Specimens of current valuation of liabilities and surrender values of certificates for RM1,000 benefit, effect at each of the ages 5, 10, 20, 30 and 40 and having been in force for 5, 10, 15, 20, 30 and 40 years, where relevant.
3. Workings on Valuation Method:
- The workings of each valuation methodology should be sufficiently detailed to enable another actuary to review the adopted methodology.

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## Section I: 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 on 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 Bank Negara Malaysia 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 Bank Negara Malaysia.

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

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

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

Appointed Actuary

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## **Section J: Certification by the CEO**

The CEO 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 : \_\_\_\_\_

Chief Executive Officer









## Appendix II(a)(ii): Valuation Result, Composition and Distribution of Surplus in Family Takaful Fund

### Form FTL1-3:

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

		Protection					Annuity				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
<b>A</b>	<b>Valuation Result</b>											
	1	Participants' fund carried forward <sup>1/</sup>										
	2	Net liabilities under certificates										
	3	Surplus/Deficit [A(1) - A(2)]										
<b>B</b>	<b>Movement and 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>1/</sup> Before repayment of qard to shareholders' fund, distribution to participants and remuneration to shareholders' fund.



	Investment	Takaful Benefits	Expense <sup>1/</sup>	Lapse	Change in valuation basis	New Business	Others	Total <sup>2/</sup>
Expected								
Actual less Expected <sup>2/</sup>								
<b>Annuity</b>								
<b>Sub-fund 1</b>								
Actual								
Expected								
Actual less Expected <sup>2/</sup>								
<b>Sub-fund 2</b>								
Actual								
Expected								
Actual less Expected <sup>2/</sup>								
<b>Sub-fund 3</b>								
Actual								
Expected								
Actual less Expected <sup>2/</sup>								
<b>Total Sub Fund</b>								
Actual								
Expected								
Actual less Expected <sup>2/</sup>								
<b>Total</b>								
Actual								
Expected								
Actual less Expected <sup>2/</sup>								

<sup>1/</sup> Refer to direct claim related expenses and expense borne by the takaful fund (which are only applicable to certificates issued before 1 Jan 2012 where the management expenses are borne by the takaful fund).

<sup>2/</sup> The columns for "Total" shall correspond to item B3 [Total Surplus Arising during the year] of Form FTL1-3 for the respective fund.

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### **Appendix III(a): Guidance Notes for Submission of Reporting Forms for Valuation of Liabilities of Family Takaful Business**

1. The reporting forms on the valuation of liabilities of family takaful business to be submitted to the Bank are as follows:

- Form FTL1 : Family Takaful Fund – Takaful Liabilities;
- Form FTL1-1 : Family Takaful Fund – Composition of Valuation Liabilities;
- Form FTL1-2 : Family Takaful Fund – Composition of Valuation Liabilities (Product Group Details);
- Form FTL1-2-1 : Family Takaful Fund – Composition of Valuation Liabilities (Product-wise Details);
- Form FTL1-3 : Family Takaful Fund – Valuation Result, Movement and Recommended Distribution of Surplus;
- Form FTL1-3-1 : Family Takaful Fund – Sources of Surplus Arising;
- Form FTL2 : Shareholders’ Fund – Expense Liabilities for Family Takaful Business;
- Form FTL2-1 : Shareholders’ Fund – Composition of Valuation Liabilities of Expense Liabilities for Family Takaful Business;
- Form FTL2-2 : Shareholders’ Fund – Composition of Valuation Liabilities of Expense Liabilities for Family Takaful Business (Product Group Details); and
- Form FTL2-2-1 : Shareholders’ Fund – Composition of Valuation Liabilities of Expense Liabilities for Family Takaful Business (Product-wise Details).

These reporting requirements do not affect the need to comply with the reporting requirements under the Companies Act 1965 and Takaful Operators Statistical System. Please refer to Appendix III (b) for description of the individual form.

2. In line with paragraph 6.6 and 9.2 of this Guidelines, the reporting forms have been designed to capture information according to the following:

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- 2.1. For Family Takaful Fund
  - 2.1.1. Business within Malaysia
    - (a) Protection Fund
    - (b) Annuity Fund
  - 2.1.2. Business outside Malaysia
    - (a) Protection Fund
    - (b) Annuity Fund
- 2.2. For Shareholders' Fund
  - 2.2.1. Business within Malaysia
    - (a) Protection Fund
    - (b) Annuity Fund
  - 2.2.2. Business outside Malaysia
    - (a) Protection Fund
    - (b) Annuity Fund

Where a takaful operator segregates the above funds into further sub-funds and manages these sub-funds separately, certain reporting requirements shall be provided for each sub-fund accordingly<sup>1</sup>. For the purpose of reporting submission via Excel, the number of default reporting forms for sub-funds provided for protection and annuity funds are five and three, respectively. In cases where the actual number of sub-funds managed by a takaful operator is more than the number of forms provided, a request for an enhanced reporting forms shall be submitted via email to *takafulval@bnm.gov.my*.

- 3. Data shall generally be reported in the nearest Ringgit.
- 4. Unless otherwise permitted by this guidance notes, negative entries are not to be reported. Where negative entries do occur in one or more of the exception items, they shall be reported with negative sign (-) on the left-hand side of the figures.

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<sup>1</sup> Applicable for Forms FTL1-2, FTL1-2-1, FTL2-2, and FTL2-2-1.

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5. Where the amount of a reportable item is zero, the entry made shall be the number "0", and not other symbols or words like "-" or "nil".
6. In the event of resubmission of any reporting forms due to amendments, the takaful operator is required to submit a letter of explanation signed by the CEO via facsimile to Pengarah, Jabatan Perkhidmatan Statistik (Fax: 03-26985378).
7. For softcopy submission of the Reporting Forms, takaful operators shall observe the following file-naming convention:

Incoming File: Header | Company Code | Submission Type | Reporting Date.xls

Component	Data Type	Possible Values
Header	CONSTANT	FTL for Reporting Forms for Valuation of Liabilities of Family Takaful Business
Company Code	CHAR (3)	601 [All Company Code as per FICPS, e.g. 601, 602, 603 etc]
Submission Type	CHAR (3)	FYE [Financial Year End]
Reporting Date	Date	30062012 [DDMMYYYY]
Extension		.xls

Example:

FTL601FYE30062012.xls

(Valuation of Liabilities of Family Takaful Business submission from takaful operator 601 for financial year ending 30/06/2012)

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### **Appendix III(b): Descriptions of Individual Forms**

1. Form FTL1 – captures the family takaful liabilities. The data are sourced automatically from Form FTL1-1.
2. Form FTL1-1 – captures, at sub-fund level, the details and key information on the valuation of family takaful liabilities. The data are sourced automatically from Form FTL1-2.
3. Form FTL1-2 – captures, at product group level for each sub-fund, the details and key information on the valuation of family takaful liabilities. The data are sourced automatically from Form FTL1-2-1 for the corresponding sub-funds.
4. Form FTL1-2-1 – captures, at product level for each sub-fund as practiced by takaful operators, the details and key information on the valuation of family takaful liabilities.
5. Form FTL1-3 – captures the valuation results, movement and distribution of surplus for family takaful fund. The data on net liabilities under the certificates are sourced automatically from Form FTL1-1.
6. Form FTL1-3-1 – captures the sources of surplus arising in Participants' Risk Fund during the period. The components for each of the sources of surplus arising shall be as follows:
  - 6.1. **Investment** refers to the following
    - 6.1.1. profit, coupons, dividends and rents;
    - 6.1.2. net gain / (loss) on disposal of investments;
    - 6.1.3. net accretion / (amortization) of investments;
    - 6.1.4. gain / (loss) from changes in fair value;
    - 6.1.5. impairment (loss) / reversal;
    - 6.1.6. foreign exchange gain / (loss) on investments;
    - 6.1.7. taxes on investments; and
    - 6.1.8. direct investment related expenses as specified in Guidelines on Takaful Operational Framework.

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- 6.2. **Takaful benefits** refers to the following:
  - 6.2.1. mortality;
  - 6.2.2. TPD, CI and other incidence rate business;
  - 6.2.3. all loss ratio business; and
  - 6.2.4. direct claims related expenses as specified in Guidelines on Takaful Operational Framework.
- 6.3. **Change in valuation basis** (take note that “Expected” equals zero)
- 6.4. **Expenses** refer to expenses borne by the takaful fund.
- 6.5. **Lapse** includes the following:
  - 6.5.1. surrenders; and
  - 6.5.2. reinstatements.
- 6.6. **New business** (take note that “Expected” equals zero) refers to:
  - 6.6.1. basic plans; and
  - 6.6.2. riders.
- 6.7. **Others** includes the following:
  - 6.7.1. options and guarantees (non-takaful in nature, i.e. other than item 6.2 above);
  - 6.7.2. allowance for impairments (e.g. outstanding contributions, retakaful balances, etc);
  - 6.7.3. other gain / (loss); and
  - 6.7.4. balancing item.
- 7. Form FTL2 – captures the expense liabilities for family takaful business. The data are sourced automatically from Form FTL2-1.
- 8. Form FTL2-1 – captures, at sub-fund level, the details and key information on the valuation of expense liabilities for family takaful business. The data are sourced automatically from Form FTL2-2.
- 9. Form FTL2-2 – captures, at product group level for each sub-fund, the details and key information on the valuation of expense liabilities for family takaful

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business. The data are sourced automatically from Form FTL2-2-1 for the corresponding sub-funds.

10. Form FTL2-2-1 – captures, at product level for each sub-fund as practiced by takaful operators, the details and key information on the valuation of expense liabilities for family takaful business.