BANK OF PAPUA NEW GUINEA

LIFE INSURANCE PRUDENTIAL STANDARD

2/2008

VALUATION OF POLICY LIABILITIES FOR LIFE INSURANCE COMPANIES

ARRANGEMENT OF SECTIONS

Life Insurance Prudential Standard 2/2008 Valuation of Policy Liabilities for Life Insurance Companies

PART I—PRELIMINARY

1) ***Title***: This Standard may be cited as ***Valuation of Policy Liabilities for Life Insurance Companies Prudential Standard No.2/2008***.

2) ***Authorization****:* The Bank of Papua New Guinea ("Central Bank") is authorized to issue prudential standards under Section 48 of the *Life Insurance Act 2000* ('the Act') in relation to prudential matters to be complied with by licence holders, life insurance agents, life insurance brokers, shareholder controllers or indirect controllers.

3) ***Application***

a) This Standard applies in respect of each licensed life insurance company at all times commencing on or after 9 November 2003.

b) This Standard applies to the determination and reporting of policy liabilities for life insurance companies in PNG. The Central Bank recognises that life insurance reporting is renowned for being difficult to understand. This may be because of product complexity, industry jargon, a focus on solvency rather than presentation of financial results, or a lack of consistency in financial reporting between life insurance companies.

c) It is the overriding and absolute intention of this Standard that the Appointed Actuary and the directors of each life insurance company in PNG adopt and vigorously maintain principles and practices that record, present and publicly disclose information that is timely, transparent and comprehensible to policy holders, and comparable with other life insurance companies and with other types of companies. The Central Bank expects that any point or detail of this Standard will be applied to this end, towards meaningful disclosure.

d) This Standard seeks to provide a comprehensive framework for the development of life insurance in PNG. It goes beyond what is required for the range of products available at the time of writing this Standard.

e) This Standard therefore relies upon the professionalism of the Appointed Actuary of each life insurance company to ensure that this Standard is correctly interpreted and appropriately applied to that company in accordance with principles and intent of this Standard. It extends the maximum discretion to appointed actuaries in the exercise of the Standard.

f) In pursuit of its supervisory responsibilities, the Central Bank will assess the adequacy of any methodology, first and foremost, according to the extent to which a company's practices contribute to the effective communication of meaningful, comparable information to policy holders. No amount of prescription in this Standard can achieve this intent.

g) The onus is on the Appointed Actuary and the directors of a life insurance company to demonstrate and justify the appropriateness of any method adopted. In particular, the Central Bank expects that each life insurance provider of a similar type of life insurance product will adopt consistent and comparable methodologies. The Bank will enforce that intent.

4) ***Definitions***

a) Terminology used in this Standard, to the extent it is not specifically defined, takes the same meaning as that in the Act. The following definitions are specific to this Standard:

i) "Policy Liability": The present value of the amount expected to be required to meet the obligations and expenses of the current business in force of a life insurance company, or some specified part thereof, calculated in accordance with this Standard as the sum of the Best Estimate Liability and future profits.

ii) "Best Estimate Liability": The amount expected on Best Estimate Assumptions to be required to the end of the benefit period to meet future benefits and expenses related to past transactions for the business in force.

iii) "Best Estimate Assumptions": Assumptions about future experience of factors such as investment return and inflation used in calculation by the appointed actuary of the estimate of liabilities.

iv) "Profit Carriers": Any financially measurable indicator of the provision of a service or the income from that service.

v) "Reinsurance": An arrangement whereby some part of individual or aggregate insurance risk is ceded (transferred) to a company other than the company that initially undertook that risk.

vi) "Projection Method": One of the two main bases for calculating Policy Liability. Under the projection method, the Policy Liability is represented by the present value of expected future net cash outflows (or inflows) relating to the policy plus the expected future profit which is included because the net cash flows in practice differ from the accounted profit.

vii) "Accumulation Method": One of the two main bases for calculating Policy Liability. Under the accumulation method, the Policy Liability is calculated retrospectively. For *investment account* policies, this would be the value of the account balance (the capital and interest so far accumulated), less any acquisition costs to be recouped from that balance. For *risk* policies, this would be the value of any outstanding claims (including incurred but unreported claims) plus the value of the unexpired risk, less acquisition costs to be recouped from that balance.

PART II—STATEMENT OF POLICY

5) *Purpose*

a) The purpose of this Standard is to prescribe a set of principles and methodologies for the valuation of the policy liabilities and associated profit disclosure consistent for each life insurance company in PNG. The Central Bank notes that for life insurance, the profit and the financial standing of a company is determined through the valuation of policy liabilities.

b) Under this Standard, a valuation of the policy liabilities of a licensed life insurance company ('the company') must be performed at least once a year as part of the end of financial year reporting of the company. The value of the policy liabilities must appear in the financial statements in the balance sheet of the company. The increase (or decrease) in policy liabilities of the company over the financial year contributes directly to the operating profit.

c) This Standard expects that the valuation of assets will be made according to accounting standards and at net market value through the profit and loss account.

d) In particular, this Standard provides direction and guidance for the Appointed Actuary of each company. Section 99 of the Act provides that each life insurance company shall have an Appointed Actuary. This Standard recognises the role, responsibilities and discretion of the company actuary in applying the principles, methodology, and intent of this Standard.

e) The essential principle of this Standard is that the value of policy liabilities is represented by the best estimates of future net cash inflows or outflows plus an adjustment for the recognition of profit (or loss) for those policies.

f) It is not the purpose of this Standard to prescribe a single methodology for the valuation of policy liabilities but to provide a framework to apply the principles set out in this Standard. The onus for justification of a method rests with the actuary. This Standard considers that the major method for valuation may be the projection method. The Central Bank does not rule out the use of alternative methods such as the accumulation method and notes that its application in PNG may be preferred because of its ease of application and interpretation.

g) The principles for the valuation of policy liabilities set out in this Standard aims to:

   i) determine, as at the reporting date, a realistic valuation of the liabilities under life policies of the company (‘best estimate liability’); and

   ii) provide for the emergence of profit from life policies as it is earned.

h) The sum of these two measures, Best Estimate Liability and the value of the expected future profits is called the Policy Liability. The Best Estimate Liability is determined from the value of the expected future contractual payments to policy owners on the basis of best estimates of future income and outgo cash flows. It is essentially a forward looking assessment of the company’s financial position under a set of assumptions about the future performance of investment earnings, tax, inflation, expenses, mortality and other factors that impact on policy liability, known as the Best Estimate Assumptions.

i) The emergence of profits may be met by determining a best estimate value of the expected future profits to emerge under the policies. The explicit provision for future profits, through bonuses and/or profit margins, is a mechanism to facilitate the release of profit as it is earned through the provision of services and the receipt of the related income.

j) This Standard requires that all factors known to be material be taken into account in the calculation of Policy Liability including future premiums and any options under the policies. In particular, the Central Bank notes that the Best Estimate Assumptions are the key factors in determining liability and that these assumptions are set by professional judgement of the Appointed Actuary.

k) This Standard requires that the Assumptions used in calculation be disclosed and explained by the Appointed Actuary at each reporting date. This Standard expects that the setting of these Assumptions will be consistent with the term and nature of policies in PNG. The Best Estimate Assumptions used in the valuation of policy liabilities must be therefore be assumptions about future experience that can be justified from available statistics, judgement, training and experience.

l) Similarly, this Standard requires that the Appointed Actuary disclose and explain at each reporting date the processes and factors employed in calculations and projections for the Prudential Standards, including that for the Valuation of Policy Liabilities.

6) ***Scope:*** This Standard applies in respect of each life insurance company at all times during all periods commencing on or after 9 November 2003.

7) ***Responsibility***

a) It is the responsibility of the board of directors of each life insurance company to establish a system for monitoring, maintaining and ensuring compliance with this Standard.

b) Pursuant to Section 63 of the Act, the company shall ensure that its Appointed Actuary conducts a valuation of all of its policy liabilities for the accounting and reporting period for that company consistent with, and for inclusion in, the financial statements of that company in accordance with Section 62 of the Act.

c) The Appointed Actuary of a life company, in the performance of his or her duties and the exercise of his or her powers, must comply with this Standard. Pursuant to Subsection 102(2) of the Act, the actuary must also comply with generally accepted actuarial standards and principles.

d) The actuary must draw to the attention of the company and/or to the Central Bank such matters as required under Section 104 of the Act and any matters that, in his or her professional and ethical capacity, are required to be known to the company and/or to the Bank.

e) If, after licensing of a life insurance company under the Act, a change of circumstances has the result that:

   i) any information included in the application for registration, including that for relating to the application, or intent, of this Standard; or

   ii) any information given to the Central Bank, or contained in a document given to the Central Bank, including that relating to the application, or intent, of this Standard;

   ceases to be accurate in relation to the company, the company must provide written notice to the Central Bank of the matters in relation to which the information is inaccurate and, accordingly, set out the true position that has now arisen.

PART III—IMPLEMENTATION AND SPECIFIC REQUIREMENTS

8) *Choice of method*

a) This Standard notes that the projection method can be applied to value all policies. In practice in PNG, the accumulation method may be preferred because it is easier to understand and less complex to determine.

b) It is the principles which are paramount in determining the Policy Liability; methodology is incidental to the principles. Projection or accumulation methodologies may be appropriate provided the Appointed Actuary can demonstrate that the principles have been met. In general, the accumulation method is acceptable if the profit that emerges on a fee less expenses basis is consistent with the pattern of service provided.

9) ***Discount rate***

a) To the extent that the benefits under life insurance contracts are not contractually linked to the performance of the assets held, the life insurance liabilities shall be discounted for the time value of money using risk-free discount rates based on current observable, objective rates that relate to the nature, structure and term of the future obligations.

10) ***Profit Carriers***

a) The Policy Liability must provide for both a best estimate value of the liability of the company in respect of obligations under life insurance policies and a uniform emergence of profit from those policies relative to one or more appropriate Profit Carriers. While Profit Carriers are an explicit component of the valuation where a projection approach is used, the Profit Carriers are implicit where an accumulation approach is appropriately used.

b) Profits are earned on the provision of a service to the policy owner; and also on the receipt (or recognition) of income relating to that service. The profit emerging in the reporting period must recognise both the expected profits for the period and the profit experienced for the period. The valuation method must provide for the emergence of profit when it is earned. The emergence of earned profit must not be deferred nor must unearned profit be prematurely recognised.

c) When the valuation results in negative expected future, the value of those losses must be recognised immediately.

11) ***Change in assumptions***

a) Profit for the period must not be affected by a change in the Best Estimate Assumptions in respect of future periods, except that:

i) where previously recognised losses exist and that change in Best Estimate Assumptions results in expected future profits emerging, the present value of those profits must be released to the extent necessary to offset those previously recognised losses; or

ii) where that change is in the Best Estimate Assumption for investment earnings (or related economic assumptions), and the benefit has no discretionary entitlement to share in that investment experience, the present value of the expected future profits which emerge must be released. Where the change in Best Estimate Assumptions would result in a release of expected future profits otherwise than as above, the present value of those profits must not be released, but re-spread to emerge as a uniform proportion of the appropriate Profit Carrier(s).

12) ***Participating Benefits***

a) Participating Benefits are those where the policy owner is entitled to share in the profits of the business. The participation process is managed by the life company, through the declaration of bonuses. Company practice, and ultimately the requirements of the Act, controls the relationship between policy owner and shareholder entitlements to profits.

b) Where Non-Participating Benefits are provided, profit is entirely the entitlement of the shareholder. The valuation of policy liability may be expressed as being equal to the sum of Best Estimate Liability plus the Value of future Best Estimate of Shareholder Profits.

13) ***Treatment of Reinsurance***

a) It is the Policy Liability net of reinsurance that must be calculated in accordance with the principles of this Standard. The financial statements of a company are required to disclose Policy Liabilities gross of reinsurance (that is, before taking account of any outwards reinsurance) and to show separately the change to those liabilities due to the outwards reinsurance. However, it is the Net Policy Liability (or the change in the Net Policy Liability over the period) which contributes to profit. Accordingly, it is the determination of the Net Policy Liability to which the principles apply.

b) The Policy Liability gross of reinsurance to be disclosed in the financial statements should be determined as the sum of the Net Policy Liability and the

Reinsured Policy Liability. The Reinsured Policy Liability is the Best Estimate Liability based on premiums paid to, and benefits received from, the Reinsurer.

14) ***Transitional provisions****:* For the initial calculation of Policy Liability, this Standard requires that the Appointed Actuary employ the best estimate of the Policy Liability as if this Standard had been in force since the commencement of that policy.

PART IV—CORRECTIVE MEASURES

15) ***Remedial measures and sanctions****:* If a licence holder breaches any provision of this Prudential Standard in a flagrant manner that results, or threatens to result, in an unsafe or unsound condition or fails to comply with the instructions and reporting requirements, the Central Bank may pursue appropriate corrective actions and sanctions such as by imposing conditions, or varying conditions, on the holders licence as provided by Section 22 of the Act.

16) ***Actuarial investigation and remedial action****:* The Appointed Actuary of a licence holder is required by Sections 63, 102 and 104 of the Act to undertake actuarial investigation, report any contravention of requirements, and to put forward remedial action.

PART V—EFFECTIVE DATE

17) ***Effective date****:* The effective date of this Prudential Standard shall be 1 December 2008.

18) ***Supercedence:*** This standard supersedes and replaces *Life Insurance Prudential Standard 2/2005* issued on 1 January 2005.

19) ***Questions and enquiries***: Questions relating to this Prudential Standard should be addressed to:

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