

NEW ZEALAND SOCIETY OF ACTUARIES
PROFESSIONAL STANDARD No. 20
DETERMINATION OF LIFE INSURANCE POLICY LIABILITIES
MANDATORY STATUS
EFFECTIVE DATE: 31 March 2018

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1. INTRODUCTION

1.1 Application

This Professional Standard applies to a Member undertaking a determination of life insurance policy liabilities as required for general purpose financial reporting in conjunction with the Financial Reporting Standards issued by the New Zealand Accounting Standards Board of the External Reporting Board pursuant to Part 2 of the Financial Reporting Act 2013.

1.2 Background

In December 1998 Professional Standard 3 was created to provide guidance to Members determining life insurance policy liabilities. Changes in the regulatory environment led to a need to review the content and classification of this Professional Standard in 2007 and again in 2016. The current review includes amendments to ensure the Standard remain compliant with Financial Reporting Standards and the Society's Professional Standards Framework.

1.3 Purpose

The purpose of this Professional Standard is to provide Members with principles and directions that must be followed with regard to the determination of life insurance policy liabilities as required for general purpose financial reporting in conjunction with the Financial Reporting Standards issued by the New Zealand Accounting Standards Board of the External Reporting Board pursuant to Part 2 of the Financial Reporting Act 2013.

1.4 Previous Versions

This Professional Standard replaces the existing Professional Standard No. 20, previously known as Professional Standard No. 3, (effective 1 January 2007).

1.5 Legislation

1.5.1 This Professional Standard must be considered in the context of applicable legislation. Applicable legislation includes Prudential Standards issued by the Reserve Bank of New Zealand and Financial Reporting Standards issued by the New Zealand Accounting Standards Board of the External Reporting Board pursuant to Part 2 of the Financial Reporting Act 2013.

1.5.2 If there is a conflict between this Professional Standard and any applicable legislation then the legislation takes precedence.

1.6 Changes to Referenced Documents

When this Professional Standard refers to another document, the reference relates to the document as it was as at the effective date of this Professional Standard. The referenced document may be amended, restated, revoked, or

replaced after the effective date. In such a case, the Member should consider the extent to which the modification is applicable and appropriate to the guidance contained in this Professional Standard.

2. EFFECTIVE DATE

This Professional Standard is effective from 31 March 2018 and applies for reporting periods ending on or after 31 March 2018. Early adoption is permitted.

3. DEFINITIONS

“Acquisition Costs” means the fixed and variable costs of acquiring new business, including commissions and similar distribution costs, and costs of accepting, issuing and initially recording policies. Acquisition Costs do not include general growth and development costs.

“Adequacy Threshold” means the minimum value for Profit Margins of a Related Product Group under this Professional Standard - i.e. it is the level at which losses must be recognised. The Adequacy Threshold is to be determined in accordance with section 7.8 of this Professional Standard.

“Best Estimate Assumptions” means assumptions about future experience which are made using professional judgement, training and experience and are neither deliberately overstated nor deliberately understated.

“Best Estimate Liability” means the amount as calculated in accordance with section 7.2.3, using Best Estimate Assumptions and using a discount rate determined in accordance with section 7.5.2.

“Bonus” means an amount added at the discretion of the Life Insurer to the benefits due under a Discretionary Policy.

“Deposit Component” means a component of a contract that is not accounted for as a derivative under NZ IAS 39 and would be within the scope of NZ IAS 39 if it were a separate contract.

“Discretionary Participation Feature” means a contractual right to receive, as a supplement to guaranteed benefits, additional benefits:

- That are likely to be a significant portion of the total contractual benefits; and
- Whose amount or timing is contractually at the discretion of the Life Insurer; and
- That are contractually based on:
 - The performance of a specified pool of contracts or a specified type of contract;
 - Realised and/or unrealised investment returns on a specified pool of assets held by the Life Insurer; or
 - The profit or loss of the company, fund or other entity that issued the contract.

“Discretionary Policy” means a policy with a Discretionary Participation Feature.

“Economic Assumptions” means assumptions made in respect of factors influenced by the economy in which the Life Insurer operates. In particular these include investment returns, discount rates and inflation.

“Experience Profit” means the profit arising in a period from the difference between actual experience during that period and expected experience on the basis of Best Estimate Assumptions at the beginning of the period.

“Insurance Contract” means a contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder.

“Investment Management Costs” means the fixed and variable costs of managing the Life Insurer’s investment funds.

“Life Insurance Contract” means an insurance contract, or a financial instrument with a discretionary participation feature, issued by a life insurer.

“Life Insurer” means an insurer to which NZ IFRS 4 Appendix C applies.

“Life Investment Contract” means a contract which is not an insurance contract but is issued by a life insurer, and gives rise to a financial asset and financial liability (as defined by NZ IAS 39).

“Maintenance Costs” means the fixed and variable costs of administering policies subsequent to the sale and recording of the policies and the fixed and variable costs of administering the general operations of the Life Insurer. Maintenance Costs include all operating costs and expenses other than Acquisition Costs and Investment Management Costs.

“Management Services Element” means all activities and cashflows arising from the full range of management services provided under a life investment contract.

“Member” means a member of the New Zealand Society of Actuaries.

“Non-discretionary business” means Life Insurance Contracts other than a Discretionary Policy.

“NZ IAS 12” means the New Zealand equivalent to International Accounting Standard 12 *Income Taxes*.

“NZ IAS 18” means the New Zealand equivalent to International Accounting Standard 18 *Revenue*.

“NZ IAS 32” means the New Zealand equivalent to International Accounting Standard 32 *Financial Instruments: Presentation*.

“NZ IAS 39” means the New Zealand equivalent to International Accounting Standard 39 *Financial Instruments: Recognition and Measurement*.

“NZ IFRS 4” means the New Zealand Equivalent to International Financial Reporting Standard 4 *Insurance Contracts*.

“Policy Liability” means a liability that arises under a Life Insurance Contract or a Life Investment Contract including any asset or liability that arises under a Management Services Element of a Life Investment Contract.

“Profit Carrier” means a financially measurable indicator of the provision of a service or related income.

“Profit Margin” means an amount or amounts included in a Policy Liability to enable a systematic release of the expected profit as it is earned through provision of services over the future life of a contract.

“Profit Margin Percentage” means a Profit Margin expressed as a percentage of the value of a Profit Carrier.

“Pure Risk Policy” means a Life Insurance Contract that is either:

- (a) classified as a life insurance policy under the Income Tax Act 2007 and has a life risk component, but is not one of the following - an annuity, a profit participation policy or a savings product policy; or
- (b) a policy classified as a Life Insurance Contract under this standard but as general insurance under the Income Tax Act 2007 (for example a disability income policy);

where “general insurance”, “life insurance policy”, “profit participation policy”, “savings product policy” and “life risk component” are as defined in the Income Tax Act 2007.

“Related Product Group” means a grouping of products that have substantially the same contractual terms and were priced on the basis of substantially the same assumptions. The products must be considered by the Member to exhibit benefit characteristics and pricing structures sufficiently similar as to justify grouping for the purposes of profit margin calculation, loss recognition and reporting.

“Servicing Costs” means the combination of Maintenance and Investment Management costs.

“Supportable Additions” means the level of future bonus or crediting rate that it is expected on Best Estimate Assumptions can be added to a Discretionary Policy over its future life without supplementary income from sources outside the policy and exclusive of the policyholder unvested benefit liabilities, shareholders’ profit and contribution to capital, consistent with the Life Insurer’s stated bonus/crediting rate philosophy.

“Supportable Liability” means the liability calculated for Discretionary Policies including the Supportable Additions and shareholder Profit Margin due on the current Valuation date.

“Traditional Business” means whole of life and endowment contracts with either a single premium or with regular premiums that are level throughout the term for which premiums are payable.

“Unbundle” means to account for the components of a contract as if they were separate contracts.

“Valuation” (of Policy Liabilities) means a process which uses assumptions and calculation techniques to determine an estimate of the amount now required to meet the Life Insurer’s future obligations under policies currently in force.

“Value of Supporting Assets” means the value of assets determined in accordance with this Professional Standard as being available to support benefits with a Discretionary Participation Feature.

4. MATERIALITY

In case of omissions, understatements, or overstatements, the Member must assess whether or not the effect is material. The threshold of materiality under which the work is being conducted must be determined by the Member unless it is imposed by another party such as an auditor or the party who engages the provider of actuarial services. When determining the threshold of materiality, the Member must:

- Assess materiality from the point of view of the intended user(s), recognising the purpose of the actuarial services; thus, an omission, understatement, or overstatement is material if the Member expects it to affect significantly either the intended user's decision-making or the intended user's reasonable expectations;
- Consider the actuarial services and the entity that is the subject of those actuarial services; and
- Consult with the party who engages the provider of actuarial services if necessary.

Where materiality has been imposed by another party it should be stated as such.

5. CONTRACT CLASSIFICATION

- 5.1** NZ IFRS 4 sets out the basis on which contracts issued by Life Insurers are to be classified for the purpose of financial reporting. In particular it distinguishes between those contracts that meet the definition of an Insurance Contract for financial reporting purposes and those that do not (referred to as “Life Investment Contracts”).
- 5.2** Some contracts contain both an insurance component and a Deposit Component. If such a contract is not Unbundled such that the insurance component can be accounted for separately, then the Policy Liability in respect of the entire contract must be determined in accordance with the requirements of section 7 of this Professional Standard.
- 5.3** If such a contract is Unbundled then only the Policy Liability in respect of the insurance element must be determined in accordance with section 7 of this Professional Standard, while the Policy Liability in respect of the remainder of the contract must be determined in accordance with section 6 of this Professional Standard.
- 5.4** If a contract is a Discretionary Policy, then the Policy Liability in respect of the entire contract must be determined in accordance with the requirements of section 7 of this Professional Standard.
- 5.5** Section 4 of this Professional Standard applies to the determination of all policy liabilities within the Life Insurer.
- 5.6** For the purposes of this Professional Standard, an Unbundled component of a contract is to be treated as if it were a stand-alone contract.

6. VALUATION OF LIFE INVESTMENT CONTRACTS

- 6.1** The Policy Liability in respect of a Life Investment Contract is a financial liability as defined in NZ IAS 32.
- 6.2** A financial liability is recognised and measured according to the principles and methodology set out in NZ IAS 39.
- 6.3** The measurement of all liabilities and assets arising in respect of any Management Services Element of a Life Investment contract, which has been Unbundled from the financial instrument element, should be measured in accordance with the appropriate accounting standards.
- 6.4** These liabilities or assets include, but need not be limited to, the value of deferred fee revenue and deferred acquisition costs determined in accordance with NZ IAS 18.

7. VALUATION OF LIFE INSURANCE CONTRACTS

7.1 Valuation Principles and Method

- 7.1.1 It is the principles that are paramount in determining the Policy Liability; methodology is incidental to the principles. Projection or accumulation methodologies may be appropriate provided the Member can demonstrate that the principles have been followed.
- 7.1.2 The Policy Liability must provide for both:
- A best estimate value of the liability of the insurer in respect of obligations under life insurance contracts; and
 - A uniform emergence of expected profit in respect of Life Insurance Contracts relative to one or more appropriate Profit Carriers.
- 7.1.3 The profit emerging in the reporting period must recognise both:
- (a) the expected profits for the period; and
 - (b) the experience profit for the period.
- 7.1.4 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.
- 7.1.5 When the valuation results in expected future profits for a related product group that are below the Adequacy Threshold for that product group, the value of the shortfall must be recognised immediately as a loss.
- 7.1.6 In determining the Policy Liability, the Member must have regard to the impact on the liability of the distribution of potential future outcomes. Where the benefits being valued contain options that may potentially be exercised against the insurer, or the potential liability outcomes have an adverse asymmetrical distribution, then the policy liability must include an appropriate value in respect of these options and asymmetries.
- 7.1.7 Proper allowance must be made for reinsurance having regard to the nature and materiality of the arrangements, and the requirements of section 7.9.
- 7.1.8 Where the basis of asset valuation used for the financial statements is not consistent with the basis of asset valuation implicit in the Valuation of the liabilities, the Member must make appropriate adjustments to the Policy Liability.
- 7.1.9 For the purposes of paragraph 7.1.8, differences in the basis used for the valuation of assets and liabilities that are required under NZ equivalents to international accounting standards should not be adjusted for. These include, but are not limited to, valuation of deferred taxation assets, application of selling costs and use of bid price in valuing assets.

7.2 Valuation of Policy Liabilities – Non-discretionary business

- 7.2.1 The Policy Liability is equal to:
- Best Estimate Liabilities, plus
 - The future expected Profit Margins, to be released as services are provided.
- 7.2.2 The calculation process for Best Estimate Liabilities will take into account all factors which are known to be material.
- 7.2.3 The Best Estimate Liability is equal to:
- (a) The present value of expected future benefit payments; plus
 - (b) The present value of expected future Servicing Costs; less
 - (c) The present value of expected future receipts; plus
 - (d) The present value of expected taxation (where appropriate).
- 7.2.4 The Policy Liability may be less than the current surrender value of the policy and may be negative.
- 7.2.5 Any earning rate (discount rate) incorporated in the calculations of Policy Liabilities should be determined in accordance with paragraph 7.5.2, and, if not allowed for explicitly in the projection, should be net of Investment Management Costs.
- 7.2.6 The Policy Liability will usually be determined by a projection approach and hence will allow separately for the Best Estimate Liability and expected future Profit Margins.
- 7.2.7 Accumulation Approach
- (a) An approach of calculating the Policy Liability other than a projection approach may be used providing that the profit emerging in each year will not be materially different from that using a projection approach.
 - (b) An accumulation methodology may be appropriate where the benefit is in the nature of an accumulation starting from the currently accumulated value and where expected future benefit growth and expected future investment income occur in the same time pattern. A similar methodology may be appropriate for other contracts where revenue and costs are matched in the same time period, as for example is normally the case for group life contracts.
 - (c) Under an accumulation approach, the Policy Liability is equal to the current benefit accumulation less an amount representing the recoverable unrecouped portion of any Acquisition Costs, subject to a minimum of the Best Estimate Liability. In determining the recoverable unrecouped portion of Acquisition Costs it will be necessary to use projection techniques, so as to

reflect the incidence and amount of ongoing fees, surrender penalties and any other elements of a benefit associated with the recovery of Acquisition Costs.

- (d) The surrender value is not an appropriate basis for the Policy Liability unless the surrender penalty equals the recoverable unrecouped portion of Acquisition Costs.
- (e) An accumulation approach will cause Profit Margins to emerge as the excess of fee income over expenses and Acquisition Cost recovery amount in each period.

7.3 Expected Profit Emergence

- 7.3.1 Where a projection approach is used for calculating Policy Liabilities, Profit Carriers are selected and Profit Margins determined when a contract commences to enable the appropriate emergence of the expected profit over the term of the contract.
- 7.3.2 A Profit Margin is to be incorporated in a Policy Liability to generate a systematic release of expected profit over the future life of a contract. This profit release should coincide with provision of the relevant service under the contract (see paragraph 7.3.7)
- 7.3.3 The Profit Margin is equal to the Profit Margin Percentage multiplied by the present value of the Profit Carrier.
- 7.3.4 The Profit Margin Percentage is set at commencement of a contract by calculating:
 - (a) The present value of the future expected profit on Best Estimate Assumptions; divided by
 - (b) The present value of the Profit Carrier
- 7.3.5 The Profit Margin Percentage is recalculated at each Valuation date to ensure that future expected profits are neither released prematurely or deferred inappropriately. See section 7.7 for details.
- 7.3.6 To initially determine the future expected profit for new business, projected cash flows of premiums, commission and other expenses and claim or maturity payments (with an allowance for tax as appropriate) are generated using Best Estimate Assumptions for each new business case for each year until the expiry of the contract. The present value of each of the cash flows is then discounted to inception. The net total of these present values represents the present value at issue of expected future profits.
- 7.3.7 Profit Carriers
 - (a) A Profit Carrier is a financially measurable indicator of either the expected costs of the services provided to the policyholder or the expected income item relating to the services.
 - (b) A contract provides some or all of the following services:

- Insurance of mortality, morbidity and other similar risks
 - Investment return
 - Setting up the policy (sale or acquisition)
 - Ongoing administration
 - Investment management
 - Provision of bonuses
- (c) The Profit Carrier will relate to the services provided for the policyholder.
- (d) The choice of the appropriate type of Profit Carrier will depend on the service and income items applicable to the contract. It is generally simpler to adopt a single service or income item provided that this satisfies the requirements of paragraph 7.3.2. For instance, the one item of income (e.g. premium) may cover several services (e.g. insurance risk, administration) so it would be simpler as an approximation to adopt a single Profit Margin of a proportion of premiums rather than have two margins relating to cost of insurance and cost of administration.
- (e) If income items are used to approximate the provision of a service they should approximate the incidence of the service. In particular a contract which primarily provides investment service should use investment income and not premium income as a Profit Carrier.
- (f) The provision of capital to create reserves is not to be regarded as one of these services.
- (g) At the time of valuation of in force business, the service of setting up the contract has already happened, and therefore this service cannot be used as a Profit Carrier.
- (h) There will sometimes be several alternative Profit Carriers available and it will be a matter of judgement as to which is selected. Once a structure is chosen it must be retained for that block of business (subject to issues of materiality and error correction) unless in the judgement of the Member it is no longer appropriate to do so.
- (i) Where Profit Carriers are changed this must not result in a release of profit at the date of change.

7.3.8 Profit Margins

- (a) A Profit Margin must be expressed as a uniform proportion of one or more appropriate Profit Carriers.
- (b) All expected profits are to be incorporated in the future Profit Margins so that there will be no release of any expected profits at inception, or on any change in assumptions, except as provided in sections 7.3.9, 7.7 and 7.8.

- (c) Profit Margins must not be negative for a Related Product Group.

7.3.9 Treatment of Losses

- (a) If the value of expected future profits at commencement for new business in a Related Product Group is below the Adequacy Threshold, then that loss must either be recognised, or dealt with as per (b) below. Any losses recognised at commencement must be accumulated. If the Related Product Group subsequently generates profits above the Adequacy Threshold, the cumulative losses must be offset (see section 7.8).
- (b) Alternatively, new business may be grouped with existing in force business in the same Related Product Group for the purpose of calculating Profit Margins. In this case, any losses at commencement for that new business cannot be accumulated or subsequently offset.
- (c) The approach used by the insurer for treatment of losses on new business must be applied consistently over time.

7.4 Acquisition Costs

- 7.4.1 Acquisition Costs relate to the costs incurred in acquiring specific life insurance contracts during the reporting period. Acquisition Costs do not include general growth and development costs.
- 7.4.2 In setting Profit Margins (see section 7.3) allowance must be made for the Member's best estimate of Acquisition Costs.
- 7.4.3 The Best Estimate Assumption for Acquisition Costs at commencement must be the greater of:
 - (a) Establishment fees received at commencement; and
 - (b) Actual Acquisition Costs incurred.Both must be adjusted for tax as appropriate in accordance with section 7.5.4.
- 7.4.4 Where a projection is used to calculate the Policy Liability then the income which is used to recover Acquisition Costs is already implicitly incorporated in the Policy Liability calculation. Consequently, the identification of the value of the unrecouped portion of Acquisition Costs is purely presentational and does not affect the Policy Liability. However, under the accumulation approach the value of the unrecouped portion of Acquisition Costs is central to the calculation of the Policy Liability.
- 7.4.5 Where an accumulation approach is used to calculate the Policy Liabilities, a deduction must be made (as an identifiable item) in arriving at the Policy Liability in respect of the value of planned acquisition cost recovery components.

- 7.4.6 When planned acquisition cost recovery components are required to be calculated, the planned acquisition cost recovery components of each premium or other income item (including surrender penalties) are determined to recover Acquisition Costs.
- 7.4.7 Appropriate adjustment to Acquisition Costs and the planned recovery components may be needed where Acquisition Costs (notably initial commission instalments and writebacks) are expected to be incurred in a year subsequent to the year of issue.

7.5 Assumptions

7.5.1 General

- (a) Best Estimate Assumptions must be made about the future cost of the risks accepted and services provided, including probabilities of occurrence, having regard to available statistical and other evidence subject to any requirements in this Professional Standard.
- (b) The Member must review the assumptions at the time of each Valuation of Policy Liabilities.
- (c) The assumptions should be determined in consideration of the Life Insurer's own experience and management practices, published information on industry experience and emerging trends (both in New Zealand, and where relevant, overseas) and professional standards.

7.5.2 Investment Earnings and Discount Rates

- (a) Where the benefits are contractually linked to the performance of the assets, the Best Estimate Assumptions for investment earnings and discount rates must reflect the expected investment earnings applicable to the actual assets on which the cash flows depend.
- (b) For the purposes of (a), the expected earning rates are those applicable to the assets backing the Policy Liabilities, having regard to the value of assets adopted in the financial statements. It should include an allowance for future capital appreciation or depreciation in addition to interest, dividends and rents. The expected earning rate(s) should usually reflect the current mix of assets, and the expected earning rate on each category of relevant existing assets. The intended asset mix may be used in place of the actual asset mix and expected earning rates on reinvestment can be allowed for, so long as this is done consistently from year to year and is considered appropriate by the Member. The intended asset mix should only be used where the intended mix is likely to be achieved in the opinion of the Member.
- (c) Where the benefits are not contractually linked to the performance of the assets, the Best Estimate Assumptions for investment earnings and / or discount rates must reflect a risk

free discount rate (or rates) based on the current observable, objective rates that relate to the nature, structure and term of the future liability cash flows.

- (d) Allowance for tax must be made in accordance with section 7.5.4 and, if not allowed for elsewhere, allowance must also be made for investment expenses.

7.5.3 Servicing Costs

- (a) The Best Estimate Assumptions for Maintenance Costs should be of sufficient level that in aggregate across all business assumed to be in force in the year following the Valuation date they cover the estimated expenses (excluding Investment Management Costs) required in that year to fully support the administration of that business as a going concern.
- (b) The Best Estimate Assumptions for Investment Management Costs should be of sufficient level that they cover the estimated expenses required to manage an asset profile which would be expected to yield a return equal to the investment earnings and/or discount rate assumption in section 7.5.2.
- (c) It may be assumed (unless inappropriate) that the Life Insurer will continue to write new business with consequent impact on projected volumes of business in force, but the assumed levels of new business must be considered realistic by the Member.
- (d) The estimated Servicing Costs may exclude expenses which the Member considers to be "one-off" in nature.
- (e) For Maintenance Costs beyond the coming year the assumption should incorporate the rates of inflation considered appropriate.
- (f) In determining the level of Servicing Costs as they apply to differing Related Product Groups, or such other division as the Member considers appropriate, the following principles should be applied unless considered inappropriate by the Member:
 - Directly attributable expenses should be so allocated.
 - Other expenses should ideally be allocated as a result of an analysis of the Life Insurer's functional operations as they relate to various identified expense drivers, these expense drivers then being the basis of an allocation between Related Product Groups. In undertaking this analysis regard should be had to the purpose of the Life Insurer in incurring the expense as well as the contribution of the expense to the business of the Life Insurer.

7.5.4 Taxation

For a Pure Risk Policy, Policy Liabilities may be determined either net of tax or gross of tax. The approach taken must be consistent

with the accounting policies relating to income tax, including deferred tax, applied by the Life Insurer for reporting in its financial statements.

For other business, appropriate allowance must be made for the effect of taxation.

Where allowance for tax on investment earnings is required, it must be made in accordance with Best Estimate Assumptions, but based on an asset profile which would be expected to yield a return equal to the discount rate assumption in section 7.5.2.

Assumptions relating to taxation should be based on current legislation together with any relevant rulings by the Inland Revenue Department. The Member must take due account of the requirements of NZ IAS 12.

7.5.5 Mortality and morbidity

Assumptions relating to mortality and morbidity should be based on, or have regard to, the Life Insurer's own experience (where appropriate) and industry experience tables, making reasonable allowance for the estimated effects of factors relevant to the particular Life Insurer (e.g. underwriting practices).

7.5.6 Discontinuance

In respect of discontinuance assumptions the Member should take account of any actual experience, and where appropriate, the influence of product design, age, mode of premium payment, duration and any other material factors.

7.5.7 Policy Conditions

- (a) The Member should assume paid up values and surrender values on future discontinuance are calculated on the Life Insurer's current basis unless the Member is aware that a change will be made.
- (b) Under certain types of policy, the Life Insurer has the right to change the level of mortality, morbidity or management charges. For the purpose of determining the Policy Liabilities, the Member should assume the current level of charge including inflation allowances unless the Member is aware that a future change will be made.
- (c) The Member should allow for the actual frequency of premium payment and any experience of premium dormancy under the class of business where relevant and material, when projecting future premiums and the corresponding benefits.
- (d) In valuing any options the Member should have regard to materiality, given the expected take up rates and analysis of the Life Insurer's own experience.

- (e) The Member should be aware of, and make appropriate allowance for, the outworkings of any elements within the conditions of contracts, which are not explicitly addressed in this section.

7.6 Discretionary Policies

- 7.6.1 For Discretionary Policies, the Policy Liability is equal to:
- Best Estimate Liabilities; plus
 - The value of future Supportable Additions; plus
 - The value of future expected shareholder Profit Margins
- 7.6.2 Instead of retaining separate rates of supportable bonus for each year of issue, a uniform rate of bonus across all, or a selected cohort of, years of issue may be determined by equating Policy Liabilities.
- 7.6.3 The relationships between reversionary bonuses on sums insured and on previous reversionary bonuses, and terminal bonuses and shareholder transfers should be consistent with the Life Insurer's philosophy and practice.
- 7.6.4 Recalculation
- (a) For discretionary business the Supportable Additions, and shareholder Profit Margin, are recalculated at the time of each Valuation by equating the Supportable Liability using the assumptions applying at the Valuation date with the Value of Supporting Assets applicable to that business.
- (b) The recalculation is undertaken to ensure that the actual experience during the reporting period regarding investment returns is properly factored into the determination of future periods' Supportable Additions.
- 7.6.5 The Policy Liability is determined as the Supportable Liability, reduced by the cost of Supportable Additions on the Valuation date and the associated shareholder Profit Margin due on the Valuation date, but increased to allow for the cost of actual discretionary additions due on the Valuation date. In this way the value of the Supportable Additions and associated shareholder Profit Margin attributable to the past reporting period will emerge but is offset by actual discretionary additions to contracts.
- 7.6.6 The Value of Supporting Assets is determined as follows:
- Apply the net of tax investment yield applicable to the relevant assets during the past reporting period to the Policy Liability at the previous Valuation date;
 - Add the cost of declared bonus or crediting rate at the previous Valuation date;
 - Add the policy related cash flows during the reporting period;

- Deduct the expected shareholder profits emerging over the reporting period (in respect of interim and terminal bonuses);
- Deduct the Experience Profit on non-investment functions.

7.6.7 For Traditional Business the absorption of a change in asset value may be straight into terminal bonus or be spread by changing the reversionary bonus, depending on the Life Insurer's (stated) bonus philosophy. The spreading into reversionary bonus of an exceptional year's investment performance need not be on an "even across life time" basis if there is a structured bonus philosophy which designates a shorter spread period.

7.7 Change of Assumptions

7.7.1 On a change in assumptions, Profit Margins (and Supportable Additions if applicable) are to be recalculated resulting in the amortisation of the effect of the change over the remaining contract term rather than immediately recognising the value of the change, except as provided below for changes to Economic Assumptions due to changed market conditions applicable to assets and loss recognition.

7.7.2 Change of Assumptions for Non-discretionary business

- (a) The impact of a change in discount rates and related Economic Assumptions, due to changed investment market and general economic conditions, on the Profit Margin for Non-discretionary business is to flow directly to the Policy Liabilities. Changes to the Economic Assumptions for other reasons, where material, are treated in the manner described below.
- (b) Profit Margin Percentages are recalculated on a change in assumptions for non-discretionary business as follows:
 - The recalculated value of expected future profits equals the Best Estimate Liability (on basis 1) plus the value of expected future profits (on basis 1) less the Best Estimate Liability (on basis 2).
 - The new Profit Margin Percentage equals the recalculated value of expected future profits divided by the value of the Profit Carrier (on basis 2).
 - Basis 1 uses the Best Estimate Assumptions and Profit Margin Percentages at the previous Valuation date, except for the discount rate and related economic assumptions, which are adjusted only to the extent that there have been changes in market conditions.
 - Basis 2 uses the Best Estimate Assumptions at the Valuation date.
- (c) The Profit Margins are then recalculated by multiplying the new Profit Margin Percentage by the value of the Profit Carrier (on basis 2).

- 7.7.3 Where there is more than one Profit Margin for a policy and it is necessary to alter Profit Margins in accordance with sections 7.7 or 7.8, then the Profit Margin first to be altered will be that which relates to the reason for the change.

7.8 Loss Recognition

- 7.8.1 The Adequacy Threshold for the Profit Margins (and Supportable Additions if applicable) of a Related Product Group in respect of benefits that are contractually linked to the performance of the assets held (i.e. where a risk free discount rate is not used to discount future expected cash flows) is equal to the difference between
- The Best Estimate Liability calculated using a risk free discount rate (or rates) based on the current observable, objective rates that relate to the nature, structure and term of the future liability cash flows; and
 - The Best Estimate Liability calculated using the discount rate in accordance with paragraph 7.5.2.
- 7.8.2 The Adequacy Threshold cannot be less than zero.
- 7.8.3 For all other Related Product Groups the Adequacy Threshold is zero.
- 7.8.4 Where the assumptions made at the time of a Valuation establish that a Profit Margin would be below the Adequacy Threshold for a Related Product Group, then the difference between present value of the Profit Margins and the Adequacy Threshold shall be recognised as a reduction in the total profits of the Life Insurer at that Valuation.
- 7.8.5 This is achieved by setting the relevant Profit Margin Percentages such that the Profit Margins are equal to the Adequacy Threshold at the Valuation date.
- 7.8.6 A record of cumulative losses is kept for each Related Product Group. Before a Related Product Group can have Profit Margins in excess of the Adequacy Threshold, cumulative losses must have been offset.
- 7.8.7 When a Related Product Group has previously had future losses recognised and at a subsequent Valuation the assumptions made establish that profits will eventuate above the Adequacy Threshold then the present value of the future profits must be utilised firstly to offset the cumulative losses and then, to the extent available, in producing Profit Margins in excess of the Adequacy Threshold.
- 7.8.8 There must be no release of profit as a result of the combining of Related Product Groups. Where there is grouping of previously separate Related Product Groups, the Policy Liability of the combined Related Product Group must equal the sum of the Policy Liability of the separate groups immediately prior to the grouping. Cumulative losses that previously existed in respect of the separate groups, must be extinguished before any combined Profit Margins are recognised.

7.9 Reinsurance

- 7.9.1 The principles of this Professional Standard apply to both the calculation of the gross Policy Liability and the reinsured Policy Liability. The reinsured Policy Liability will consist of a reinsured Best Estimate Liability and reinsured Profit Margins.
- 7.9.2 If the reinsurance relates directly and solely to the direct business of a single Related Product Group then the reinsurance may be included within that same Related Product Group. Otherwise the reinsurance must be appropriately allocated to Related Product Groups.
- 7.9.3 As a result of the allocation of reinsurance business to Related Product Groups, losses expected in relation to the reinsurance business should be recognised to the extent they exceed the value of expected future profits in respect of the associated direct insurance business in the same group, and vice versa.