# Actuarial Standard 6.03 MANAGEMENT CAPITAL STANDARD



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# INTRODUCTION

### The Standard

The Management Capital Standard is established under the Life Insurance Act 1995 (the Act), and is an integral component of the prudential regulation regime for life insurance companies implemented under that Act.

The Act establishes a two tier capital requirement on the statutory funds of the life company with each tier considering the capital requirements in a different set of circumstances.

Further, it establishes a requirement to hold a minimum amount of capital outside the statutory funds of the company in relation to the risks associated with business activities undertaken outside the statutory funds but within the legal entity.

This standard looks at this latter capital requirement.

The stated purpose of the Management Capital Standard in the Act is:

"to ensure, as far as practicable, that:

- (a) the financial position of a life company reflects an appropriate capital commitment, outside of the statutory funds of the company, to the life insurance business of the company; and
- (b) a life company will be able to meet its obligations in respect of any business it carries on that is not life insurance business as those obligations fall due."

Therefore, the purpose of the Management Capital Standard is to prescribe the minimum capital requirement to be held outside the statutory funds to ensure that under a range of adverse operating circumstances the company would be expected to be in a position to meet its trading commitments and adequately service its policy owners.

### Application to Friendly Societies

The Act was amended in 1999 to extend its application to friendly societies that undertake life insurance business. This standard is applicable to all life companies (registered under the Act) including friendly societies. In its application, the standard will, at times, make distinction between friendly societies and other life companies.

### Interaction with Solvency and Capital Adequacy Standards

It is noted that certain risks related to the life business of a friendly society are incurred in the management fund, whereas for other life companies these risks are incurred, and provided for, in the statutory funds.

Therefore, the Solvency Standard, Capital Adequacy Standard and the Management Capital Standard involve a degree of interaction and should be considered together.

# **Application of the Management Capital Standard**

The Management Capital Standard is made for the purposes of section 73B of the Life Insurance Act 1995.

### It applies:

- a) in respect of a registered life company, other than an eligible foreign life insurance company where the business outside their Australian statutory funds is subject to appropriate overseas prudential regulation; and
- b) at all times from 31 December 2005.

The Standard has been written in the context of Australian legislation and bases of taxation. Appropriate adjustment must be made, for example to allow for different bases of taxation, where this Standard is being applied to overseas business.

# PART A - PRINCIPLES

# **SECTION 1** The Management Capital Standard

Overview

The Management Capital Standard requires that the life company maintains at all times a minimum amount of capital outside the statutory funds - the Management Capital Requirement.

The Management Capital Requirement is determined by considering the various risks which could impact the security of the company's operations and, by consequence, policy owner entitlements and requiring the provision of a prudent level of reserve against such risks.

The approach to determining the Management Capital Requirement recognises the separate and distinct nature of a life company's statutory funds in respect of its life insurance business and the extent to which the risks associated with undertaking life insurance business are provided for in the Solvency and Capital Adequacy Standards

Security of the entitlements of policy owners, however, cannot be considered totally isolated from risks associated with operations outside the statutory funds. In the case of friendly societies, the risks associated with the administration and operational support of the life insurance business are borne outside the statutory funds. Further, a life company may operate businesses (other than life insurance related business) outside its statutory funds. The risks incurred in all respects have implications for the overall security of the company and hence of the policy owners.

It is not the intention of the standard to provide absolute security for the company or to policy owners. To attempt to do so would be prohibitive to the viability of the industry and hence not in the best interest of the policy owners. Rather, the prescribed reserves provide for a range of adverse but reasonably possible conditions.

- 1.1 At any time, the life company must have available to the General Fund assets of a value considered sufficient to meet the obligations of the General Fund at that date, under a range of adverse conditions. The amount of assets so required is referred to as the Management Capital Requirement.
- In order that a life company complies with this Standard, any prudentially regulated business other than life insurance business undertaken by the company, either in a statutory fund or the General Fund, must satisfy the legislated capital requirements associated with that business. Examples include, health insurance

business undertaken in the statutory fund of a friendly society or general insurance business undertaken in the General Fund of a life company. Eligible foreign life insurance companies are excluded from this Standard provided the business outside their Australian statutory funds is subject to appropriate overseas prudential regulation.

1.3 For the purposes of this standard the General Fund refers to the management fund of a friendly society and the shareholders' fund of other life companies.

### **SECTION 2** Scenarios of Adverse Conditions

### Overview

In assessing the Management Capital Requirement of a life company consideration is given to:

- the risks which may affect the liabilities related to the operations of the life company other than life insurance business; and
- the risks which may affect the value of the assets supporting those liabilities.

The Management Capital Requirement broadly comprises the following components:

- the Liability Component;
- the Expense Reserve;
- the Inadmissible Assets Reserve;
- the Resilience Reserve; and
- the New Business Reserve.

# The Liability Component

A realistic value of the liabilities of the fund increased, in the case of life insurance related activities, to reflect assumptions which are more conservative (anticipate a more adverse experience) than best estimate assumptions.

### The Expense Reserve

Provision for the overrun expenses which can occur in the Fund under a closed to new business scenario.

### The Inadmissible Assets Reserve

A reserve against the risks associated with:

- assets, the value of which is dependent on the ongoing conduct of business;
- holdings in associated or subsidiary Financial Services entities; and

• for the purposes of this Standard, any asset in the regulatory financial statements not recorded at fair value.

### The Resilience Reserve

Mismatching of asset and liability exposures necessitates the provision of a reserve for adverse movements in the investment markets to the extent they will not be matched by a corresponding movement in the liabilities.

When determining the impact of the various risks and adverse conditions on the financial position on the fund, it is required to assess their impact consistently on all assets and liabilities affected. This includes both beneficial and adverse combined effects.

### The New Business Reserve

Provision for planned new business over a prescribed future period of three years, with the intention of securing the continuing capital needs of the company over that period.

- 2.1 The Management Capital Requirement, in considering scenarios of adverse experience, must provide for risks associated with both the liabilities and the assets of the General Fund.
- 2.2 The Management Capital Requirement, in principle, is to be determined on a basis consistent with the net realisable market values of the assets and other liabilities of the General Fund, including allowance for realisation costs and, if considered appropriate under the relevant scenarios, discounting of all future cash flows.
- 2.3 In considering scenarios of adverse experience and adopting a basis for the Management Capital Requirement, the Actuary must allow for all material risks associated with both the liabilities and the assets of the fund, including the interdependencies between these risks that the Actuary considers might apply under such adverse conditions. This is regardless of whether such risks are discussed in the rest of this Standard or not.
- In the case of a friendly society, when considering the scenarios of adverse experience, the Actuary must consider the ability of the benefit funds to be closed to new business and for the obligations of the friendly society to policy owners and creditors to be met as they fall due with a high level of confidence. The prescribed requirements set out within this Standard are designed to allow the obligations of the friendly society to be reliably met under circumstances where a judicial manager would most expeditiously seek for them to be secured. The Actuary should regard that as being achieved by a transfer of all of the assets and liabilities of the benefit funds, plus the expense reserve component of the

Management Capital Requirement, to a third party who would then be responsible for meeting the obligations as they fall due, out of the transferred assets. If the Actuary considers that the circumstances of the friendly society are such that the obligations of the friendly society are more likely to be secured by some other means, then the Actuary may need to establish additional reserves for any additional risks or costs that might be incurred under that scenario and that are not otherwise reflected in the prescribed requirements of this Standard or the Solvency Requirements of the benefit funds.

- 2.5 In determining the Management Capital Requirement for a friendly society the Actuary must allow for the consequences of closing the benefit funds to new business and subsequently meeting the obligations of the friendly society in the context of the circumstances assumed under paragraph 2.4, to the extent that they are not otherwise met by the Solvency Requirement of the benefit funds. This includes a loss of contribution to expenses, a loss of future tax deductions and a change in the value of tax assets and tax liabilities, and a loss of value of business related assets.
- Where the particular combination of risks affecting a company is not explicitly considered within this Standard, the Actuary must establish additional amounts within the Management Capital Requirement, beyond the amounts prescribed. The additional reserve must reflect the purpose and principles of the Standard. It must provide a level of reserving that is consistent with that applying under this Standard in respect of the risks explicitly considered under this Standard. For this purpose, the Actuary may regard the prescribed requirements set out within this Standard, when applied to a typical life company with the combination of risks explicitly considered in this Standard, as designed to provide a level of reserves which broadly meets the following requirements:
  - a) Able to cover a combination of adverse circumstances that would be expected to arise once every 200 years;
  - b) Allowing a general time frame of 12 months in which the circumstances arise and the actions under (c) and (d) below follow;
  - c) The reserve required at the end of the period in (b) is able to be determined in accordance with the Management Capital Requirement of this Standard, but allowing for the implementation of plausible risk reduction actions by management at, or after, that time (for example, exiting risky asset positions or other arrangements as would be permitted). For those risks that cannot be eliminated, sufficient reserve will still be required as set out in this Standard; and

- d) Allowance for management corrective action during the period in (b) is considered to be limited to highly reliable actions only, with conservative response time allowances.
- 2.7 The criteria of paragraph 2.6 are to be applied allowing for the benefit of any diversification across all risks affecting the company. For the purposes of paragraph 2.6, those risks requiring additional resilience reserves to be established under section 10.9 using the principles of paragraph 4.2.3 are considered to be adequately addressed by those additional reserves.
- 2.8 The guideline in paragraph 2.6 is intended as a guide when allowing for risks that are not explicitly dealt with under the prescribed basis in this Standard. It is not intended as an alternative basis for issues that are otherwise and adequately dealt with in the prescribed basis. For the avoidance of doubt, the Management Capital Requirement must not be less than that calculated using the basis prescribed in the rest of the Standard, but may be more where there are material risks that are not explicitly dealt with under the prescribed basis.
- 2.9 It is the principles that are paramount in determining the Management Capital Requirement; methodology is incidental to the principles. However, this does not override the requirement of paragraph 2.8 that the Management Capital Requirement must not be less than that calculated using the prescribed basis.

# **SECTION 3** The Liability Risks

# **The Liability Component**

- 3.1 The Liability Component must make provision for:
  - a) the realistic value of the total liabilities of the General Fund;
  - b) the risks pertaining to the life insurance activities of the company which are borne in the General Fund.
- 3.2 Risks related to Life Business Activities
- 3.2.1 In the case of a life company other than a friendly society, the margin for the risks described in this paragraph 3.2 is Nil; these risks are borne, and hence provided for, in the statutory funds. (Refer to the Solvency and Capital Adequacy Standards).

- 3.2.2 In the case of a friendly society, the Liability Component must include a reserve for:
  - a) the risks associated with inadequate provisioning for future servicing expenses; and
  - b) the additional risks that may be borne by the General Fund arising from investment-linked business in the statutory funds.
- 3.2.3 The bases for determining the reserves described in paragraph 3.2.2 are prescribed (see section 7).

# **Expense Reserve**

3.3 The Management Capital Requirement must provide for capital to be held against the risk of an overrun in the expenses of the General Fund in the particular circumstance of a run-off of the business activities of that fund.

### Other Liabilities

- 3.4 Where the other liabilities of the General Fund (other than a deficit in respect of a defined benefit superannuation fund to which the entity, or an associated entity, is an employer sponsor) are determined based on estimates of future cash flows, these must be reassessed and discounted to the valuation date, on a basis consistent with the overall scenarios of adverse experience being considered (per Section 2).
- 3.5 Where the entity, or an associated entity, is an employer sponsor of a defined benefit superannuation fund and the other liabilities of the General Fund include a deficit in respect of that fund, and the deficit has been determined using the corridor approach as defined under accounting standard AASB 119 *Employee Benefits*, the deficit is to be reduced (increased) by the amount of any Unrecognised Actuarial Gains (losses).

### SECTION 4 Asset Risks

### Overview

The risks associated with the assets supporting the liabilities are discussed below

### **Adverse Market Movements**

To the extent that the value of liabilities is not directly linked to the value of the underlying assets, an adverse movement in the value of the

assets effectively reduces the level of reserves supporting the liabilities. It is prudent that a company recognise this risk and hold sufficient capital such that the liabilities would still be able to be met following an adverse market movement.

The risk of adverse market movements is one of many potentially offsetting risks. It is presumed that, for the asset and liability profile of a typical life insurer, a Resilience Reserve set at the level of sufficiency described in section 4.2 will, with additional reserves determined independently in respect of other risks, produce an overall Management Capital Requirement at the level of sufficiency described in paragraph 2.6.

### **Asset Liquidation**

Certain assets are disclosed in the regulatory financial statements at a value which may be dependent on the ongoing operation of the business. On the cessation of business, the value of those assets would likely be less. Capital is held against that part of the value of such assets which would not be realisable in the adverse circumstance of a wind-down of business.

### Holdings in Associated and Subsidiary Financial Services Entities

Associated and subsidiary Financial Services entities may be exposed to essentially the same environmental and systemic risks as the life insurer. The value of such an entity in excess of its net tangible assets cannot therefore be relied upon to meet the capital requirements of the life insurance company under adverse circumstances. Furthermore, the value taken for such a holding is not to double count any legislated capital requirement of the entity itself.

### Credit Risks

In general, it is considered that the combined effect of adopting the net market value of the assets and the reserves for asset concentration would address the average costs of default and marketability/liquidity risks.

Where a fund has significant exposure to non-sovereign credit risks the Actuary is to provide an appropriate reserve allowance for such credit risks, along with any other asset risks.

### **Liquidity Risks**

The Actuary's general responsibility in assessing and advising management on the financial operations of the company would include consideration of liquidity risks.

### Overall Asset Risks

Notwithstanding the prescribed limits of this Standard, the Actuary must have regard to the particular circumstances of the company. If in the opinion of the Actuary the overall portfolio of admissible assets of the General Fund has too little diversification, is too illiquid or has too great an exposure to one obligor of low credit standing, the Actuary must increase the reserves appropriately.

Furthermore, the asset and other liabilities values disclosed in the regulatory financial statements may not be equal to the net market value of those assets and other liabilities, allowing for realisation costs. A reserve for the difference between the reported and net realisable market value of the assets and other liabilities is to be included.

### Note

It is not the intention of these reserves to limit the investment practices of life companies. Rather it is to ensure that the risks associated with particular investment strategies are appropriately assessed and provided for.

### 4.1 Reserve for Inadmissible Assets

- 4.1.1 The Management Capital Requirement must provide an amount of capital to be held the Inadmissible Assets Reserve in respect of:
  - a) an asset which has a value that is dependent upon the continuation of the business;
  - b) holdings in an associated or subsidiary entity which is a Financial Services entity;
  - c) non-realisable (in the context of the scenarios of adverse experience) intangible assets;
  - d) other assets not measured at fair value in the regulatory financial statements; and
  - e) alignment necessary to ensure the remaining assets and the other liabilities are based on net market value.

# 4.1.2 Assets Used for The Conduct of Business

The Inadmissible Assets Reserve must provide for the risk that, in the context of the run-off of the business of the General Fund, the value of the asset differs from the value disclosed in the regulatory financial statements.

4.1.3 Holdings in Associated and Subsidiary Entities which are Financial Services Entities

Where the associated or subsidiary entity is a Financial Services entity the Actuary must establish a reserve to the extent that the value of the entity exceeds its net tangible assets.

Furthermore, where the associated or subsidiary entity is subject to prudential regulation which requires the maintenance of minimum capital, (e.g. a financial institution or a health insurance institution), the Actuary must establish a further reserve to the extent that the net tangible assets of the entity are required to meet that capital requirement in the jurisdiction in which it operates and are not, therefore, available to support the life insurance company.

### 4.1.4 Non-Realisable Intangible Assets

The Management Capital Requirement must provide a reserve equal to the value of any intangible assets held that are related to the business of the General Fund itself and are not independently realisable, for example deferred acquisition costs assets.

### 4.1.5 Other Assets Not Measured at Fair Value

A company must have assets of sufficient value as measured in the regulatory financial statements to satisfy the Management Capital Requirement. Where assets are not measured at fair value in the regulatory financial statements, and not otherwise treated as inadmissible assets, an allowance must be made for the uncertainty surrounding the behaviour of the value of the asset under adverse circumstances, relative to other assets that are measured at fair value. Such assets are not therefore to be included at a value greater than either their net tangible asset value or their fair value.

### 4.1.6 Alignment to Net Market Value

The inadmissible assets reserve is to include the net difference between the value disclosed in the regulatory financial statements and the net realisable market value of all assets that are recorded in the financial statements at fair value and all financial liabilities of the General Fund.

### 4.2 Resilience Reserve

- 4.2.1 The resilience of the General Fund must be assessed and provision made for an appropriate reserve the Resilience Reserve.
- 4.2.2 Resilience is assessed as the ability of the General Fund to sustain shocks to the economic environment in which it operates and which are likely to result in an adverse movement in the value of assets relative to the value of the liabilities.
- 4.2.3 The Resilience Reserve as determined under the prescribed rules of Section 10 is based on the impact of market changes on the position of a fund with a simple asset and liability profile. Where the fund is materially exposed to changes in investment market conditions that are not captured by the application of the prescribed rules, a corresponding additional provision must be

made by the Actuary. The additional reserve must reflect the purpose and principles of the Standard. It must provide a level of reserving that is consistent with that applying under this Standard in respect of the changes in investment market conditions explicitly considered under this Standard. For this purpose, the Actuary may regard the prescribed requirements set out within this Standard, when applied to the asset and liability profile of a typical life office, as designed to provide a level of reserves which broadly meets the following requirements:

- a) Able to cover adverse changes in investment market conditions that would be expected to arise once every 20 years;
- b) Allowing a general time frame of 12 months in which the circumstances arise and the actions under (c) and (d) below follow:
- c) The reserve required at the end of the period in (b) is able to be determined assuming that a matched asset and liability profile is achieved and that the Management Capital Requirement of this Standard is otherwise satisfied at, or after, that time; and
- d) Allowance for management corrective action to achieve a matched asset and liability profile during the period in (b) is considered to be limited to highly reliable actions only, with conservative response time allowances.
- 4.2.4 The criteria in paragraph 4.2.3 apply in respect of resilience risk only, independent of any other risks.
- 4.3 Asset Exposure
- 4.3.1 The actuary in assessing the asset risks:
  - a) must take account of the effective exposure of the General Fund to various asset classes, regardless of the physical asset holdings; and
  - b) must consider exposure to counterparty risks including, but not limited to, futures and options, swaps, hedges, warrants, forward rate and repurchase agreements; and
  - c) must take account of the underlying exposure of the General Fund to assets by adopting a "look through" approach in respect of each unlisted or controlled investment entity that represents more than 1% in value of the General Fund. For this purpose, an investment entity is an entity whose assets are solely investments, where the sole purpose of the entity is investment activities and where the investor investing in that entity has security directly linked to those assets; and
  - d) must, where investments covered by (c) are geared, treat the debt as if it were a liability of the life insurance company, with appropriate allowance made for the sensitivity of the underlying assets and liabilities to market movements; and
  - e) may adopt the 'look through' approach as set out in paragraphs (c) and (d) above where the investment is in a listed unit trust.

- Alternatively, the Actuary is required to treat the holding as a single investment in the equity investment class as defined in the General Standard; and
- f) must assess the characteristics of the remaining admissible component of an investment where, following application of Section 9 of this Management Capital Standard, only part of the investment is admissible, by looking through to the underlying assets and liabilities where necessary and applying the Resilience Reserve requirements of Section 10 accordingly.
- 4.3.2 As indicated in paragraph 4.2.3, the Resilience Reserve calculation assumes largely generic asset structures. Where the Actuary can demonstrate that an asset can be disaggregated into two or more identifiable sub-assets, the Actuary may treat the sub-assets separately and hence categorise them into different asset sectors according to their substance for the purpose of applying the Resilience Reserve requirements in Section 10, provided that it is demonstrated to APRA's satisfaction that:
  - a) The substance of the sub-assets warrants their proposed asset sector categorisation;
  - b) The entire cash flows of the overall asset are fully reflected by the aggregated sub-assets;
  - c) The resilience parameters adopted appropriately reflect the substance of the sub-assets;
  - d) Where the sub-asset is equivalent in nature to an interest bearing security it is appropriately credit risk rated;
  - e) The resilience shocks applied to the sub-assets do not give a result in aggregate less than the prescribed shock for the overall asset under a scenario where all yields rise;
  - f) The diversification factor is not reduced (i.e. the diversification factor is to be calculated assuming that the asset is not disaggregated); and
  - g) The requirements of paragraphs 4.2.3 and 4.3.1 continue to be satisfied.

### SECTION 5 New Business Reserve

- 5.1 The Management Capital Requirement must provide for any additional capital required to ensure that the General Fund will be able to meet its Solvency Requirement over the next three years, given;
  - a) levels of projected business over that period in accordance with the realistic business plans of the company; and
  - b) experience during that period in accordance with Best Estimate Assumptions.

# **PART B - METHODOLOGIES**

# SECTION 6 Determination of the Management Capital Requirement

6.1 The Management Capital Requirement for a life company is to be calculated as follows:

# (a) CALCULATE LIABILITY COMPONENT

Calculate the Liability Component of the General Fund.

### (b) CALCULATE EXPENSE RESERVE

Increase the amount determined in (a) by the Expense Reserve.

### (c) ADD RESERVE FOR INADMISSIBLE ASSETS

Increase the amount determined in (b) by the reserve for Inadmissible Assets.

### (d) ADD RESILIENCE RESERVE

Determine the Admissible Assets of the General Fund, and on the basis of these assets, increase the amount determined in (c) by the Resilience Reserve.

The amount determined in (d) is referred to as the Solvency Requirement of the General Fund.

### (e) ADD NEW BUSINESS RESERVE

Increase the Solvency Requirement by any additional capital requirements for new business in respect of the General Fund.

### (f) TRANSITIONAL ADJUSTMENT

For the General Fund determine the amount of any transitional adjustment required to the Management Capital Requirement and deduct it from the amount determined in (e).

The overall calculation methodology involves systematically considering the values and risks underlying the reported values set out in the regulatory financial statements and assessing appropriate reserving adjustments or margins for each. The methodology requires that all such reserving adjustments are allowed for by means of increases to the Management Capital

- Requirement rather than decreases in the value of the assets against which the Management Capital Requirement is compared.
- 6.2 The performance of each subsequent step in the calculation process described in paragraph 6.1 must not reduce the progressive result from its amount at the completion of the previous step, with the exception of step 6.1(f).

# **SECTION 7** The Liability Component

- 7.1 The Liability Component is determined as the realistic value of liabilities of the General Fund plus, in the case of a friendly society, the reserve in respect of servicing expenses and investment-linked business.
- 7.2 Servicing Expense Reserve for a Friendly Society
- 7.2.1 The reserve in respect of servicing expenses arises where there is a deficiency between expected management fees to be received from the benefit funds and expected servicing expenses.
- 7.2.2 The reserve is to be determined, by the Actuary, as three times the deficiency expected to arise over the twelve months subsequent to the valuation date, with no adjustment for tax relief, between expected management fees in that period and expected servicing expenses.
- 7.2.3 Expected servicing expenses are to be determined for this purpose as the greater of:
  - a) the actual servicing expenses in the twelve months prior to the valuation date increased by a margin of 2.5%; and
  - b) the expected servicing expenses in the twelve months subsequent to the valuation date increased by a margin of 2.5%.
- 7.2.4 Where an allocation of the expenses of the General Fund relating to life insurance activities into Expense Categories is not undertaken by a friendly society, servicing expenses are to be taken as 50% of the total expenses related to the life insurance business.
- 7.2.5 Where the entity, or associated entity, is the employer sponsor of a defined benefit superannuation fund, and a surplus exists in the fund which is being utilised to reduce contributions to the fund, consideration needs to be given, when determining the expected servicing costs, to the extent to which that contribution reduction would continue in the context of the scenario being considered.

### 7.3 Investment-Linked Business

- 7.3.1 In the case of a friendly society where investment-linked business is undertaken in one or more of the benefit funds, the Liability Component must include a reserve determined as 0.25% of the greater of:
  - a) the Solvency Liability in respect of that investment-linked business; and
  - b) the Minimum Termination Value in respect of that investment-linked business;

as determined in accordance with the Solvency Standard.

# **SECTION 8** Expense Reserve

8.1 The Expense Reserve is determined as:

M x Run-Off Expenses plus Offset Statutory Capital

- 8.2 The multiple 'M' is the net of tax multiple based on a gross multiple of 1 adjusted for the tax deductibility of expenses only to the extent that a tax deduction would reasonably be expected to be realised on ceasing business.
- 8.3 Run-off expenses, for this purpose, is to be determined by reference to the total actual expenses of the General Fund for the 12 months prior to the valuation:
  - a) in the case of expenses related to life insurance business, the run-off expenses is total actual acquisition expenses less the variable expenses included in that amount; and
  - b) otherwise, the run-off expenses is total actual expenses less the variable expenses included in that amount.
- 8.4 For the purposes of paragraph 8.3, run-off expenses are not taken to include interest expenses on debt that is associated with the holding of assets in the General Fund.
- 8.5 In the case of a friendly society, where an allocation of the expenses of the General Fund relating to life insurance activities into Expense Categories is not undertaken, acquisition expenses must be taken as 50% of the total expenses related to the life insurance business.

- 8.6 Variable expenses, for the purposes of paragraph 8.3, are to be determined as those expenses otherwise included in run-off expenses to the extent it can be demonstrated that the expenses are not contracted, are abnormal, are easily eliminated or are sufficiently matched to income. Examples of variable expenses that relate to life insurance business may include commission, advertising costs and direct marketing expenses.
- 8.7 In the case of business other than life insurance business, for the purposes of subparagraph 8.3(b), examples of expenses that may appropriately be regarded as variable expenses include:
  - a) all expenses directly and wholly attributable to, and half of the overhead expenses attributable to, health insurance business;
  - b) all expenses directly and wholly attributable to, and half of the overhead expenses attributable to, general insurance business;
  - c) retirement village expenses which are well matched with income both in timing and flexibility to vary.
- 8.8 Offset Statutory Capital will not apply in the case of a friendly society or an eligible foreign life insurance company. In the case of other life companies, it is determined as the amount of Statutory Capital which has been utilised by the company in meeting the total (across all statutory funds) expense reserve requirements of the company under the Solvency Standard.
- 8.9 The determination of the Expense Reserve may require an allocation of the total expenses of the General Fund as between different business activities or expense types. Any such allocation adopted must be one regarded as reasonable in the opinion of the auditor and Actuary of the company.
- 8.10 The Expense Reserve must not be less than zero.

### SECTION 9 The Inadmissible Assets Reserve

- 9.1 The Inadmissible Assets Reserve is determined as the sum of:
  - a) the reserve prescribed in respect of assets used in the conduct of business;
  - b) the reserve prescribed in respect of holdings in associated and subsidiary entities which are Financial Services entities;
  - c) non-realisable (in the context of the scenarios of adverse experience) intangible assets;
  - d) other assets not measured at fair value in the regulatory financial statements; and
  - e) the alignment necessary to ensure the remaining assets and the other liabilities are based on net market value.

- 9.2 Assets Used in the Conduct of Business
- 9.2.1 The prescribed reserve for assets used in the conduct of business is determined as the amount by which the stated value of the asset in the financial statements of the General Fund exceeds the value the asset would have in a run-off situation.
- 9.2.2 For the purposes of paragraph 9.2.1, the conduct of business in the General Fund does not include holding of assets and associated debt.
- 9.2.3 For the purpose of paragraph 9.2.1, the value to be ascribed to certain assets is subject to the following specific requirements:
  - a) <u>Loans to Directors, Employees, Advisers and Related Parties</u> In respect of money loaned or advanced on an unsecured basis, no value is to be ascribed to the debt.

In respect of money loaned or advanced on a secured basis, the value to be ascribed to the debt must not exceed the amount of the security.

# b) **Equipment**, (incl. Computer Software)

The value of equipment (incl. computer software) owned by the company must not exceed the known resale value of that asset. If the resale value is not known, then a zero value must be assumed.

### c) Future Income Tax Benefits

The value of a future income tax benefit due to the company must not exceed the value of any income tax benefit that would accrue and be realised on ceasing business.

### d) Defined Benefit Superannuation Fund Surpluses

Where the entity is an employer sponsor of a defined benefit superannuation fund, no value is to be ascribed to any surplus of that fund which might otherwise be recognised as an asset of the General Fund.

# e) <u>Holdings in Associated and Subsidiary Entities Other Than</u> <u>Financial Services Entities</u>

Where the operations of an associated or subsidiary entity that is not a Financial Services entity are wholly dependent on those of the life insurance company, or the entity is itself an operational entity of the group to which the life insurance company belongs and is wholly dependent on the group, then the value ascribed to the entity must not exceed its net tangible assets.

Otherwise, to the extent that such an entity has a degree of financial or operational independence from the life insurance company that could lead to it having some value in excess of net tangible assets under adverse circumstances affecting the life company, such additional value may be admissible. The admissible amount must only reflect the likely realisation value of the entity in the scenario contemplated, taking into account the likely circumstances of the sale (eg perception of a forced sale, capacity to separately sell entity, and anticipated supply/demand for such entities).

The value ascribed to such an entity that is financially and operationally independent of the life insurance company must not exceed the value in the regulatory financial statements.

In any case, the value ascribed to the entity need not be less than zero, provided that there is no recourse to the life company in relation to the entity's obligations.

### **Holdings in Associated and Subsidiary Financial Services Entities**

9.3 The prescribed reserve in respect of holdings in associated and subsidiary entities that are Financial Services entities is to be determined by the Actuary as the amount by which the value of the entity in the regulatory financial statements exceeds its net tangible assets. This reserve is to be further increased by the amount of any prudential capital requirements of the entity in the jurisdiction in which it operates. The total reserve required need not be more than the value of the entity in the regulatory financial statements, provided that there is no recourse to the life company in relation to the entity's obligations.

### **Retirement Villages**

9.4 In determining the Management Capital Requirement in the case of a friendly society, an inadmissible asset is to be established in relation to a retirement village, to the extent the net value of that asset on the balance sheet exceeds the fair value of the asset determined by the Actuary.

### **Intangible Assets**

9.5 The regulatory financial statements of the General Fund may include intangible assets such as deferred acquisition cost assets, deferred origination cost assets, the value of in-force business and any goodwill asset. Where the values of such assets are not

realisable independent of the business in-force, such assets are to be treated as inadmissible.

### **Assets Not at Fair Value**

- 9.6 For the purpose of this Standard, the value ascribed to assets that are not measured at fair value in the regulatory financial statements, and not otherwise treated as inadmissible assets, must not exceed either their net tangible asset value or their fair value.
- 9.7 Alignment to Net Market Value
- 9.7.1 The inadmissible assets reserve is to include the net difference between the value disclosed in the regulatory financial statements and the net realisable market value (irrespective of whether this difference is positive or negative) of all assets that are recorded in the financial statements at fair value and of all financial liabilities of the General Fund. Net realisable market value means the mid market value (or equivalent estimated fair value) less (plus for liabilities) any marginal transaction costs that would be incurred on realisation.
- 9.7.2 This adjustment is not required in respect of assets already deemed inadmissible under this Standard.

# **Asset Concentration and Liquidity**

9.8 Notwithstanding the above requirements, if in the opinion of the Actuary the overall portfolio of admissible assets of the General Fund (when considered within the overall context of the business of the company and the requirements of this Standard) has too little diversification, is too illiquid and or has too great an exposure to obligors of low credit standing, the Actuary must add an amount considered appropriate to the reserve for inadmissible assets.

### SECTION 10 The Resilience Reserve

10.1 The Resilience Reserve is determined as the additional amount that needs to be held before the happening of a prescribed set of changes in the economic environment, such that after the changes the admissible assets of the General Fund are able to meet the liabilities of the General Fund, including the assessed liability risks in accordance with this Standard.

- 10.2 The Resilience Reserve is determined by reference to the Admissible Assets of the General Fund. It is not necessary to hold resilience reserves for that part of an asset which is inadmissible nor the free assets (in excess of the Management Capital Requirement) of the fund. It is not permitted to hypothecate assets to particular liabilities of the fund.
- 10.3 The Resilience Reserve allows explicitly for the beneficial implications for asset risks of diversification across asset sectors.
- 10.4 Determination of Resilience Reserve
- 10.4.1 The Resilience Reserve is determined in accordance with the following formulae:

Resilience Reserve, determined as:

$$L + RR = L' \times 1/f$$

where

RR = resilience reserve

L = the liability held for the purposes of this standard to reflect all liability risks (including the Expense Reserve i.e. as at step 6.1(b)) prior to the prescribed change in economic environment and asset values

L' = value of that liability after the prescribed change

f = A''/A

A = value of admissible assets of the General Fund prior to the prescribed change

A' = value of those assets at the Adjusted Yield.

A" = adjusted value of assets (A') further reduced by the sum of the Adverse Exchange Movement factor and the Credit Risk Default Factors.

### Adjusted Yield determined as:

Current Yield + Credit Risk Yield Movement + DF x Prescribed Yield Change

where

$$DF = \{ \sqrt{(E^2 + P^2 + F^2 + I^2)} \} / (E + P + F + I)$$

unless application of the diversification factor in determining the Adjusted Yield for a given asset sector would have the effect of increasing the overall resilience reserve, in which case the Actuary may adopt

$$DF = 1$$

for that asset sector for all scenarios.

where

DF = the diversification factor

E, P the proportionate holding of assets in the asset sectors Equities and Property respectively each multiplied by the factor for that sector:

(Prescribed Increase in Yield / Current

Yield)

F, I the proportionate holding of assets in the asset sectors Interest Bearing and Indexed Bonds respectively each multiplied by the factor for that sector:

{ (Asset Value at Current Yield / Asset Value at Yield after prescribed increase) - 1}

Note

1. DF is determined in the scenario of a prescribed increase in yields across all sectors, and is used to determine the Adjusted Yield in that and all other scenarios.

- 2. In determining F, cash is included in the interest bearing sector.
- 10.4.2 While for the determination of A' the most adverse scenario must be assumed, in determining the diversification factor the dynamics of that formula require that an increase in yields across all sectors be used (regardless of the fact that in certain circumstances this may not reflect the most adverse scenario).

- 10.4.3 The Resilience Reserve must not be less than zero.
- 10.5 Prescribed Yield Change
- 10.5.1 Subject to paragraph 10.5.2, the prescribed changes to the economic environment are movements, up or down, in yields as per the table below, which reflect corresponding movements in the value of instruments within those respective sectors:

INVESTMENT SECTOR	PRESCRIBED YIELD CHANGE %	
Equities	+ or - 1.25	
Property	+ or - 1.25	
Interest Bearing	+ or - 1.75 (subject to 10.5.2)	
Indexed Bonds	+ or - 0.60	
CURRENCY	ADVERSE EXCHANGE MOVEMENT	
All	10% reduction in value of assets exposed to a denomination other than that of the liabilities.	

- 10.5.2 The prescribed reduction (but not increase) in yield for the Interest Bearing investment sector must not exceed 20% of the current Mid Swap Rate.
- 10.5.3 Yield, as referred to in this Section 10, is determined in respect of the holdings of the General Fund and is to be taken to mean:
  - a) for Equities, dividend yield based on the dividend yield under the ASX200 Index as at the valuation date, unless the Actuary justifies otherwise;
  - b) for Property, rental yield, based on most recent leases in force and determined net of expenses;
  - c) for Interest Bearing Securities, redemption yield (running yield in the case of irredeemable securities); and
  - d) for Indexed Bonds, real yield.

### 10.6 Credit Risk

10.6.1 An addition to the resilience reserves is to be made for credit risk in respect of interest bearing and indexed bond assets, including cash deposits and floating rate assets. This will be achieved by a reduction in the value of assets under the relevant adverse scenario. The change will not affect the value of liabilities.

# 10.6.2 In calculating A":

- a) The applicable Credit Risk Yield Movement from the table below is first included in the Adjusted Yield as determined in paragraph 10.4.1 to determine A'. The duration used for this purpose may differ from that used to determine sensitivity to interest rate shocks (e.g. floating rate instruments not immediately redeemable may be regarded as dead short for the application of the prescribed yield change, but may have a longer term for the credit risk yield movement, depending on the extent to which credit risk deterioration can be mitigated).
- b) Each of the values determined in a) above (i.e. A') is then reduced by the sum of the applicable Credit Risk Default Factor taken from the table below and the Adverse Exchange Movement factor from the table in paragraph 10.5.1.

Credit factors to apply to fixed interest and cash investments				
Counterparty Grade	Credit Risk Default Factor	Credit Risk Yield Movement		
1 (OECD government)	0.00%	0.0%		
1 (other)	0.00%	0.20%		
2	0.00%	0.30%		
3	0.00%	0.40%		
4	0.75%	0.60%		
5	2.00%	0.80%		
6	6.25%	0.90%		
7	9.75%	0.90%		

10.6.3 In calculating the Adjusted Yield under paragraph 10.4.1 the Credit Risk Yield Movement is always positive, even though the Prescribed Yield Change may be positive or negative, depending on the relevant adverse scenario being tested.

- 10.7 Determination of L'
- 10.7.1 In determining the change to the discount rate for valuing the liabilities, it is the Prescribed Yield Change for the interest bearing investment sector determined under paragraphs 10.5.1 and 10.5.2 which is relevant. The Adjusted Yield as defined in paragraph 10.4.1 (including diversification and credit risk adjustments) is relevant only for asset values.
- 10.7.2 In determining the Resilience Reserve required, other assets and liabilities whose value is dependent on the value of investment assets, such as tax assets and liabilities, must be adjusted in a manner consistent with the action the company would take were asset values to change by the prescribed amount. However, in scenarios where asset values are assumed to fall, any resulting tax benefit may only be taken into account to the extent that the Actuary is satisfied that the tax benefit would actually be realised on the company ceasing business.
- 10.7.3 In calculating L' no adjustment is required for any potential impact that the Prescribed Yield Change would have on the value of a deficit held in respect of a defined benefit superannuation fund for which the entity, or an associated entity, is an employer sponsor.
- 10.7.4 The resilience reserve in respect of a retirement village is to be determined, by the Actuary, by reference to the value on a discounted cash flow basis.
- **10.8** Application of Prescribed Yield Changes
- 10.8.1 In applying the prescribed yield changes of paragraph 10.5 to the determination of A' and L', the Actuary must address the worst combination of rising or falling yields for the different asset sectors to which the business is realistically exposed. At the very least, the following two scenarios must be tested:
  - a) rising fixed interest yields (investment categories Interest Bearing and Indexed Bonds) and rising equity/property yields (investment categories Equities and Property), and
  - b) falling fixed interest yields (investment categories Interest Bearing and Indexed Bonds) and rising equity/property yields (investment categories Equities and Property).

Where the circumstances of the fund are such that other scenarios are potentially relevant then they must also be tested.

### 10.9 Other Asset Exposures

- 10.9.1 Paragraph 4.2.3 outlines the principles to be followed where the fund is materially exposed to changes in investment market conditions that are not captured by the application of the prescribed rules of this section, and where a corresponding additional provision must be made. In this regard, the Actuary needs to consider the impact on the fund of significant adverse changes in investment markets such as:
  - a) changes in the slope and shape of the yield curve, especially those that can give rise to difficulties with the reinvestment of assets backing long term liabilities; and
  - b) changes in yield, volatility and correlation parameters that would be reflected in the fair value of derivative assets or liabilities.
- 10.9.2 The Actuary must also consider whether the impact of credit risk is adequately provided for through the prescribed credit risk adjustments of paragraph 10.6 noting that the prescribed credit risk adjustments presume that the asset portfolio is highly diversified. If credit risks are not adequately provided for, for example because of a lack of diversification, the Actuary is to employ other additional reserving requirements.

### **SECTION 11** New Business Reserve

- 11.1 The New Business Reserve is determined as;
  - a) the additional amount required to ensure that the Solvency Requirement of the General Fund (refer paragraph 6(1)(e)) will continue to be met over the next three years, allowing for capital and profit emerging over that period from the existing business of the fund;

less

- b) the New Business Capital plus
- c) the Offset Statutory Capital.
- 11.2 New business capital is represented by existing, binding arrangements for the external raising of capital specific to the financing of new business within the General Fund.
- 11.3 Offset Statutory Capital will not apply in the case of a friendly society or an eligible foreign life insurance company. In the case of other life companies, it is determined as the amount of Statutory Capital which has been utilised by the company in meeting the total (across all statutory funds) new business reserve

requirements of the company under the Capital Adequacy Standard.

11.4 The New Business Reserve must not be less than zero.

# **SECTION 12** Transitional Arrangements

Overview

The Management Capital Requirement determined in accordance with this Management Capital Standard AS 6.03 may be significantly different from the equivalent amount determined in accordance with the previous version AS 6.02. To allow life companies that are significantly affected sufficient time to implement any necessary changes for either reducing the Management Capital Requirement or increasing the amount of assets in the General Fund to cover the new Management Capital Requirement it is appropriate to allow some short term transitional arrangements.

These transitional arrangements will be in the form of a reduction to the amount of the Management Capital Requirement, such reduction reducing to zero over the transitional period.

- Where, at the date of introduction of this Standard, the amount of the Management Capital Requirement determined prior to allowing for any Transitional Adjustment (i.e. after step 6.1(e)) exceeds the Management Capital Requirement that would have resulted at the same date from application of the previous version of this standard (AS 6.02) by an amount exceeding the Transitional Materiality Limit, the Actuary may, with APRA's agreement, apply a Transitional Adjustment to the Management Capital Requirement in accordance with the provisions of this section.
- 12.2 The Transitional Adjustment is determined at the date of calculation as:

 $(MCR - MCR') \times t/n$ 

#### where

MCR = the Management Capital Requirement determined prior to allowing for any Transitional Adjustment (i.e. after step 6.1(e)) as at the date of calculation

MCR' = the Management Capital Requirement that would have resulted at the same date from application of the previous version of this standard (AS 6.02)

t = the period from the calculation date to the Transition End Date

n = the period from application date of this Management Capital Standard to the Transition End Date.

# **SECTION 13** Materiality

### Overview

Particular values or components are considered material to the overall result of a calculation when their mis-statement or omission would cause that result to be misleading to the users of the information.

Materiality tests assess the significance of the particular value/component by relating it to the amount of the overall result to which it contributes.

- 13.1 The Management Capital Requirement determined in accordance with this Standard is subject to materiality standards applied at the General Fund level.
- 13.2 The base amount for materiality purposes is the difference between the assets of the General Fund and the Management Capital Requirement of that fund.
- 13.3 In applying the materiality standards described in paragraphs 13.1 and 13.2:
  - a) it is appropriate to use as the base amount for materiality purposes a rolling average of the base amount provided that the average so derived is a function of not less than three and not more than five years experience and is reflective of the current and anticipated future experience; and

- b) it is appropriate, as the base amount approaches zero, for alternative key indicators to be used in establishing materiality.
- While assessing materiality will always be a matter of professional judgement, the following quantitative thresholds are generally to be used:
  - a) variations in amounts of 10% or more of the base amount may be presumed material; and
  - b) variations in amounts of 5% or less of the base amount may be presumed immaterial.

# PART C - ACTUARY'S STATEMENT

# **SECTION 14** Statement Relating to the Determination

14.1 In respect of any determination of the Management Capital Requirement the Actuary must provide in the investigation report required by section 113 or 115 of the Act, details of the calculation processes and the assumptions used in deriving the results.