**Singapore Actuarial Society**

**SAS GN L01**

# Guidance Note for Appointed Actuaries of Singapore Life Insurance Funds

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# 1 BACKGROUND AND SCOPE

1.1 This document has been prepared as a guidance note for Appointed Actuaries advising direct life insurance companies on the management of life insurance business as required under the Insurance Act of the Republic of Singapore. Adherence to this guidance note is mandatory. If a member has any concerns about the operation of this guidance note then the issue should be referred to a member of the Council of the Singapore Actuarial Society or alternatively to the president of the member's examining professional body.

1.2 The statutory duties of the Appointed Actuary are to:

- Ensure appropriateness of premium rates (section 24);
- Investigate the financial condition of a company's life insurance business (section 37). This investigation must include a valuation of liabilities and a prospective test of the financial condition of each insurance fund under such economic and business conditions as the Authority may specify;
- Provide a written recommendation to the directors of the insurer on the allocation of the par fund by way of bonus to the participating policies and to the surplus account;
- Carry out other requirements contained in the Insurance (Actuaries) Regulations 2004 such as advising the insurer on the appropriate investment policy for each insurance fund and reporting on matters which have an adverse effect on each insurance fund.

1.3 Members of the Singapore Actuarial Society (SAS) who undertake activities covered in this guidance note should make reference to their compliance with this guidance note whenever they give advice. In particular, any area where the Appointed Actuary gives advice which is not consistent with this guidance note should be specifically highlighted. In this case the Appointed Actuary should ensure that adequate records are kept to justify any departure from this guidance note.

1.4 The SAS issues guidance Notes on various aspects of actuarial practice. In any report in the capacity as the Appointed Actuary, the Appointed Actuary should state which Guidance Note has been followed and the extent to which it has been followed.

1.5 The areas of practice covered in this guidance note are:

Section 2 Accepting the role of Appointed Actuary;

Section 3 Approval of Premium Rates;

Section 4 Financial Condition Investigations;

- Setting assumptions;
- Valuation of policy liabilities;
- Stress testing of financial conditions;
- Assessing the Financial Condition.

Section 5 Participating Fund Allocation Investigation;

Section 6 Investment Policy;

Section 7 Report on Adverse Events.

1.6 The responsibilities of actuaries who are appointed in terms of Section 31 of the Insurance Act are central to the financial soundness of life insurance business of their companies. The reputation of the profession, therefore, depends in no small measure on the proper discharge of these responsibilities. It is incumbent on all Appointed Actuaries to ensure, so far as is within their authority, that life insurance business is operated on sound financial lines.

1.7 The essence of a profession lies in upholding its standards, technical and ethical, in the public interest. Any Appointed Actuary who becomes doubtful as to the proper course to adopt in relation to a potentially significant problem is strongly advised to seek help and advice from the Council of the Singapore Actuarial Society.

## 2 ACCEPTING THE ROLE OF APPOINTED ACTUARY

2.1 An actuary, before accepting appointment as an Appointed Actuary, must consider most carefully in the light of previous experience and work whether acceptance would be in line with proper professional behaviour and standards. No actuary should act as an Appointed Actuary without the necessary practical experience and updated knowledge of the external environment that could impact the affair of the company

2.2 When considering an appointment as Appointed Actuary, an actuary should consider carefully the most appropriate approach to the task. This will depend on the circumstances of the company, the nature of its business and how it is conducted. For the Appointed Actuary to ensure that long-term business is operated on sound financial lines in a small company for example, particular care should be taken to ensure that deliberations are sufficiently broadly based to allow an assessment of the company's general financial condition and prospects, including its financial and management resources and the standard of its documentation.

2.3 A potential Appointed Actuary who has not already worked closely with the immediate predecessor in the role, has a professional duty to consult that person (if this is possible) to discover whether there are any professional reasons for not accepting the appointment. An actuary should make this clear to the prospective principal and seek permission to hold such consultations. If such permission were withheld it would be a material factor which would be relevant to the prospective appointee's decision as to the propriety of accepting the appointment.

2.4 An actuary must also ensure that, as an Appointed Actuary, there is a right of direct access to the board of directors of the company, adequate resources to carry out the relevant duties, and access to all relevant information to enable the duties of Appointed Actuary to be carried out satisfactorily; this must be explicit from the inception of the appointment. Where there is a group structure, consideration should be given to the implications of working within the group and having access to the appropriate decision makers.

2.5 Where a potential Appointed Actuary has financial interests in an insurance company, or related group company, which by their nature and size are or become such that a material conflict of interest would, in the normal course of events, arise or seem to arise, the actuary should not accept the position of Appointed Actuary or continue in it as the case may be. If temporarily in a special situation a conflict of interest arose, or would seem to arise, the Appointed Actuary before making a report should consider asking the company to obtain a report from an actuary who has no conflict of interest.

2.6 The Appointed Actuary should be guaranteed access to accounts, records and documents to provide an understanding of the company's obligations (nature of contracts, guarantees, options, marketing plans, expense and profit allocation to policyholder and shareholder, claims settlement procedures and costs, experience expected, pricing policies for existing and new business, underwriting and risk selection, acquisition and maintenance costs, commitment to costs for development of management information systems and new business acquisition structures, investments and investment policy, reinsurance arrangements, capital and surplus management plans).

2.7 The Appointed Actuary must be given access on an ongoing basis to the management of the company at a level senior enough to ensure receipt of full and prompt information on the company's affairs.

2.8 The potential Appointed Actuary must complete the SAS induction courses.

2.9 Outgoing Appointed Actuaries should make themselves available to an incoming Appointed Actuary as part of their transition into the role.

# 3 APPROVAL OF PREMIUM RATES

3.1 Under Section 24(1) of the Insurance Act, an actuary is required to approve premium rates before a company can issue a life policy or long-term accident and health policy. For this purpose, the Appointed Actuary should ensure that a report on the suitability of the premium rates is issued as part of the approval process.

3.2 For the avoidance of doubt, premium rates are taken to include any policy terms and conditions for both non linked and linked business.

3.3 A premium approval report should make reference to the fact that it is a premium approval document for the purposes of this guidance note. The Appointed Actuary should review the previous approvals from time to time and may withdraw the approval in the event that the circumstances change from those expected when the original approval was made.

3.4 The Appointed Actuary should also consider the suitability of premium rates as one of the factors for consideration when investigating the financial condition of a company's life insurance business.

3.5 In preparing the advice on the suitability of premium rates, the Appointed Actuary should:

- Include a statement that the Monetary Authority of Singapore (MAS) regulations have been met and identify where MAS requirements have not been followed;

- Include a statement covering which SAS Guidance Notes have been followed;

- Be satisfied that appropriate assumptions are used when deciding on the adequacy of the premium rates. The Appointed Actuary should indicate whether or not these assumptions are consistent with those used for business planning and stress testing;

- Reference material terms and conditions including surrender values, commission rates, reinsurance arrangements as well as claims and premium payment conditions;

- Consider the investment policy, asset / liability matching requirements and the implications for company capital requirements;

- Take into account new business strain and make sure that the company is able to set up the necessary reserve and a prudent solvency margin, and indicate any limits on the volume of business that may prudently be accepted;

- Have sufficient assets, in each Insurance Fund, to support the writing of projected new business and maintain solvency;

- Make clear the future demands on capital for any expense overrun and the necessary volume of business and degree of expense control needed to eliminate any expense overrun;

- Consider, for new investment-linked funds, the suitability of the unit pricing process and controls that are in place to ensure the fair treatment of new policyholders, exiting policyholders and continuing policyholders;

- Indicate, for participating policies, compliance with the participating fund internal policy, or otherwise;

- Consider the effect and cost of explicit and implicit policy options and guarantees.

# 4 FINANCIAL CONDITION INVESTIGATION

## 4.1 Introduction

4.1.1 At least once a year the Appointed Actuary should investigate the financial condition of the company, as required under Section 37(1)(a) of the Insurance Act.

4.1.2 The minimum statutory requirements for a financial condition investigation are:

- A valuation of liabilities of the insurer with respect to policies of its life business as at the end of each accounting period (this is called the "Valuation of Policy Liabilities" in this guidance note);
- A prospective test of the financial condition of each insurance fund established and maintained under the Act for its life business under various economic and business conditions (this is called " Stress Testing" in this guidance note).

4.1.3 The purpose of the investigation is to advise the board of current and future financial implications of current and planned activities in the light of an expected future experience and possible deviations from the experience.

4.1.4 The balance of this section provides guidance for the following processes:

- Setting Assumptions
- Valuation of Policy Liabilities
- Stress Testing
- Assessment of Financial Condition

## 4.2 Setting Assumptions

4.2.1 Best estimate assumptions should neither overestimate nor underestimate expected future experience. In determining best estimate assumptions the actuary should consider:

- the results of any experience investigation;
- pricing assumptions for new business;
- relevant industry experience;

- the comparison of previous best estimate assumptions with actual results;
- the credibility of data;
- the expected future distribution of outcomes;
- likely future trends;
- the interaction of assumptions e.g. mortality and lapses, asset mix and investment returns;
- the impact of reinsurance arrangements.

4.2.2 For the purpose of the Valuation of the Policy Liabilities, an additional margin is provided through the Provision for Adverse Deviation (PAD) as described in the regulations. The PAD represents an additional component of the liability value aimed at deriving an adequate level of the value of insurance liabilities.

### 4.3 Valuation of Policy Liabilities

4.3.1 The Appointed Actuary is required to perform an annual valuation of policy liabilities and to prepare a valuation report together with other related returns for submission to the MAS. The Appointed Actuary should also conduct and communicate regular valuation of life insurance liability in order to assess the ongoing solvency of the insurance funds.

4.3.2 In preparing the results of a valuation of policy liabilities the Appointed Actuary should:

- Consider the purpose of the valuation and the appropriate regulatory requirements. Where the valuation basis must meet a minimum standard the Appointed Actuary should consider whether or not a higher policy liability basis would be suitable. Where the valuation basis is specified by the regulator then this should be stated in the valuation report;
- Ensure the correctness and completeness of data and that appropriate valuation procedures have been carried out and adequately documented;
- Ensure that correct valuation methods are used and when assessing the liabilities of the long-term business of the company have regard to the policyholders' reasonable expectations;

– Adopt appropriate assumptions and make a confirming statement to this effect;

– Take into account in the valuation, the company's reinsurance arrangements including any financial reinsurance implicit therein and make sure that these arrangements are appropriate.

– Include a statement covering which SAS Guidance Notes have been followed.

## 4.4 Stress Testing on Financial Conditions

4.4.1 The Appointed Actuary must present a report on Stress Test on Financial Conditions ("Stress Test") to the board. A copy of that report is also forwarded to the MAS. That report should indicate that it is a Stress Test report prepared for the board and that the report has been prepared under this guidance note.

4.4.2 Whilst the MAS prescribes scenarios to be tested, the Appointed Actuary must propose scenarios in addition to the scenarios proposed by the MAS.

4.4.3 In the report the Appointed Actuary should clearly state:

– The base scenario and the other scenarios being tested;

– The reasons for choosing each scenario and why the Appointed Actuary considers each scenario to be appropriate. This would include comments on the MAS prescribed scenarios;

– The actuarial and management recommendations that apply to each scenario including considerations of bonus distributions, dividend distributions, investment policy and capital requirements;

– The impact of management actions where appropriate.

## 4.5 Assessment of Financial Condition

4.5.1 The Appointed Actuary should form and state an opinion on the financial condition of the company. In particular the Appointed Actuary should consider the likelihood of a breach of the MAS Capital Adequacy standards and any steps required to avoid such a breach.

4.5.2 If a separate Financial Condition Report is prepared, it is acceptable for the Appointed Actuary to refer to other reports prepared by the Appointed Actuary (notably the reports covering the Distribution of Surplus and Stress Test Report) rather than repeat the content of those reports. Where such documents are considered to be investigations into the financial condition of a company under Section 37, this should be explicitly stated in each document.

# 5 PARTICIPATING FUND ALLOCATION INVESTIGATION

5.1 The Appointed Actuary must advise the directors of the company on the extent to which it would be appropriate to allocate bonuses to policyholders and make transfers to shareholders.

5.2 The Appointed Actuary should comment on the Participating Fund Governance policy as defined in MAS 320.

5.3 In making such recommendations, the Appointed Actuary must carry out appropriate financial investigations including an appraisal of the relevant past experience. As a minimum this should include calculations of asset shares and a gross premium valuation.

5.4 The Appointed Actuary should be aware of the different ways in which asset shares are constructed and used. While the asset share does not constitute the actual liability under any individual policy, the sum of asset shares across blocks of business with similar bonus strategies should be considered in the investigation.

5.5 The Appointed Actuary must provide a report to the board including the above recommendations. The report should contain sufficient information and discussion about each factor and about the results of the financial investigations to justify and enable the board to judge the appropriateness of the recommendations and for the board to understand the implications for the future course of the insurer's business. The Appointed Actuary must include in the report:

- Reference to the Participating Fund Governance policy of the company;
- Conclusions from the appraisal of the relevant experience;
- Understanding of the insurer's financial and business objectives;
- Assessment of the insurer's ability to meet its minimum solvency margin following the recommended allocation;
- Comment on whether application of the bonus recommendations is fair, taking due account of policy literature and other publicly available information, benefit illustrations and past and current distribution practice as well as asset shares and expected future returns;
- Opinion on appropriateness of allocation between different groups of policyholders and between the shareholders and policyholders, including the form of the allocation.

- Advice regarding the sustainability of bonuses rates in the future.
- A statement on which Guidance Note of the SAS has been followed.

# 6 INVESTMENT POLICY

6.1 The Appointed Actuary shall assist the insurer in formulating a suitable policy on how the assets of an insurance fund are to be invested having regard to the nature and term of the liabilities and the availability of appropriate assets.

6.2 The Appointed Actuary is required to sit on the Investment Committee.

6.3 The Appointed Actuary should help the Investment Committee to determine an appropriate investment policy for each fund (participating, non-participating, shareholders' and linked) that should be reviewed from time to time. The asset allocation at any time should be compared with the benchmark asset allocation. The Appointed Actuary should then advise on the differences, reasons for the differences and the implications on the financial condition of the company.

6.4 In giving this advice the Appointed Actuary should also refer to:

- Policy terms and conditions, including any policy options and guarantees;
- The capital resources of the life insurance company;
- The impact of any financial derivatives;
- How investment returns are distributed to policyholders;

6.5 The Appointed Actuary should also consider:

- The expected future volatility that such a policy might suggest;
- Sustainability of any credit risk profile undertaken;
- The extent to which duration matching is required;
- The target returns required as priced for;
- The liquidity required under each life fund;
- The need for matching currency risks;
- The returns as illustrated to policyholders.

# 7 REPORT ON ADVERSE EVENTS

7.1 The role of the Appointed Actuary is a continuous role which requires monitoring of the financial condition of the life insurance business throughout the year.

7.2 The Appointed Actuary needs to monitor transactions which will have, or are likely to have, a material impact on the financial condition of the company and, if material, should undertake an investigation. The results of the investigation should be documented and where necessary a report should be produced.

7.3 If the above condition causes a material adverse effect on the company's financial condition and requires rectification, the Appointed Actuary should present a written report to the Principal Officer, including recommendations for corrective actions and a deadline for timely action. Having regard to the paramount importance of this advice in the context of long-term business, the Appointed Actuary must continue to have a right of direct access to the board of directors.

7.4 The Appointed Actuary may advise that the regulatory authority will be notified if timely action is not taken within the deadline.

7.5 If suitable action is not taken within the deadline, the Appointed Actuary should report to the regulatory authority in writing. The report should include concerns, the matters reported to management and a description of events since the writing of the report and management's response.

7.6 When a significant change is likely to take place, the Appointed Actuary should report to the Board the implications for fair treatment of its current and future participating policyholders.

7.7 The possibility of insolvency, or intervention by the Insurance Authority under Section 41 of the Insurance Act on the grounds of the company's being unable to fulfil the interests of its policyholders may arise from factors, some of which are within the control of the company and some not. Regardless of the cause, the Appointed Actuary's duty is to assess the limits within which the company must act and to advise the company of the necessity for these limits.

7.8 The Appointed Actuary must consider all material external factors outside the control of the company which could lead to insolvency and must then take whatever action he considers necessary. The profession requires that any Appointed Actuary should pay the most scrupulous regard to prudent judgement in these matters.