Singapore Actuarial Society

SAS SAP L01

Standard of Actuarial Practice

for

Appointed Actuaries of

Singapore Life Insurance Funds

Effective from
1 January 2018

Contents

1. BACKGROUND AND SCOPE

1.1 This document has been prepared as a Standard of Actuarial Practice (SAP) for members of the Singapore Actuarial Society (SAS) appointed as 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. If a member has any concerns about the operation of this SAP then the issue should be referred to a member of the Council of the Singapore Actuarial Society.

1.2 Some of the language used in SAPs is intended to be interpreted in a very specific way in the context of a decision to be made by the Appointed Actuary. In particular, the following verbs are to be understood to convey the actions or reactions indicated:

"Must" means that the indicated action is mandatory and failure to follow the indicated action will constitute a departure from this SAP.

"Should" (or "shall") means that, under normal circumstances, the actuary is expected to follow the indicated action, unless to do so would produce a result that would be inappropriate or would potentially mislead the intended users. If the indicated action is not followed, the Appointed Actuary must disclose that fact and provide the reason for not following the indicated action.

"May" means that the indicated action is not required, nor even necessarily expected, but in certain circumstances is an appropriate activity, possibly among other alternatives. Note that "might" is not used as a synonym for "may", but rather with its normal meaning.

1.3 The statutory duties of the Appointed Actuary are to:

- Ensure appropriateness of premium rates (Section 24 of the Insurance Act);
- Investigate the financial condition of a company's life insurance business (Section 37 of the Insurance Act). This investigation must include valuation of liabilities and a prospective test of the financial condition of each insurance fund under such economic and business conditions as the regulator 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 2013 such as advising the insurer on the appropriate investment policy for each insurance fund, assist in

risk management activity and reporting on matters which have an adverse effect on each insurance fund.

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

1.5 The SAS issues SAPs on various aspects of actuarial practice. In any report in the capacity as the Appointed Actuary, the Appointed Actuary should state which SAP has been followed and the extent to which it has been followed.

1.6 The areas of practice covered in this SAP are:

Section 2 Accepting the role of Appointed Actuary

Section 3 Approval of Premium Rates

Section 4 Financial Condition Investigation

- Stress Testing on Financial Condition
- Assessment of Financial Condition

Section 5 Participating Fund Allocation Investigation

Section 6 Investment Policy

Section 7 Reinsurance

Section 8 Report on Adverse Events

1.7 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.

1.8 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 behavior 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 is entitled to report on any matter relating to the insurer, to any member of its board committees, or any member of its board of directors, without having to report that matter to any other executive officer of the insurer. 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 Appointed Actuary must hold a valid Practicing Certificate issued by the Singapore Actuarial Society.

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

2.10 The Appointed Actuary must, at the end of each accounting period of the insurer, notify the insurer of every engagement he/she has accepted (whether for consideration or otherwise) to carry out any duty or function that is equivalent to any duty or function of an Appointed Actuary or a certifying actuary described in the Act for any other insurer carrying on insurance business in Singapore or elsewhere, being an engagement which remains outstanding as at the end of that accounting period.

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 In deciding whether or not to approve the premium rates, the Appointed Actuary must take into account the impact of the premium on the prospective financial condition of the insurer, the product design, the underwriting policy of the insurer and the relevant regulation.

3.3 To meet the requirements under 3.2, the Appointed Actuary should consider the following:

- 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;
- Assess if there are sufficient assets, in each Insurance Fund, to support the writing of projected new business and maintain solvency;
- Understand and communicate 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;
- Consider the effect and cost of explicit and implicit policy options and guarantees.

3.4 A premium approval report must make reference to the fact that it is a premium approval document for the purposes of this SAP 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.

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

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

- Include a statement covering which SAS SAPs have been followed;

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

- Be satisfied that appropriate assumptions are used when deciding on the adequacy of the premium rates.

4. FINANCIAL CONDITION INVESTIGATION

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

4.2 The 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;

- 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 as the Authority may specify in a direction to the insurer (this is called " Stress Testing" in this SAP).

- Other investigations of its liabilities that MAS may specify in a direction to the insurer.

4.3 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 expected future experience and possible deviations from the experience.

4.4 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.

4.5 The balance of this section provides the standard of practice for the following processes:

- Stress Testing

- Assessment of Financial Condition

4.6 The standard of practice on the setting of assumptions and valuation of policy liabilities are covered in SAS SAP L02.

Stress Testing on Financial Condition

4.7 If stress testing is required by MAS, the Appointed Actuary must present the report of the 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 SAP.

4.8 Whilst the MAS prescribes scenarios to be tested, the Appointed Actuary should consider whether other additional scenarios would be appropriate so as to illustrate the risks impacting the projected financial condition of the company.

4.9 In the report the Appointed Actuary must 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.

4.10 Even if such report is not required by MAS, the Appointed Actuary should satisfy himself that financial condition of the insurer is being assessed. This can be achieved by performing the necessary analysis or referring to relevant reports, such as the Own Risk and Solvency Assessment (ORSA).

Assessment of Financial Condition

4.11 The Appointed Actuary must form and state an opinion on the financial condition of the company. In particular the Appointed Actuary must consider the likelihood of a breach of the statutory capital requirements and any steps required to avoid such a breach.

4.12 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 must be explicitly stated in each document.

5. PARTICIPATING FUND ALLOCATION INVESTIGATION

5.1 The Appointed Actuary must advise the board of the company with a written recommendation 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 review the Participating Fund Governance policy (the document as defined in MAS 320).

5.3 In making recommendations in relation to the insurance fund that comprises wholly or partly of participating policies, the Appointed Actuary must carry out appropriate financial investigations including an appraisal of the relevant past experience. As a minimum this must include calculations of asset shares and a gross premium valuation, or any other equivalent measure (for example, Bonus Earning Power).

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 written recommendation to the Board of the company 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;
- Assessment of the insurer’s ability to meet its minimum solvency margin following the recommended allocation;
- Comment on fairness and equity considerations, 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 SAP of the SAS has been followed.

6. INVESTMENT POLICY

6.1 The Appointed Actuary must 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 must help the Investment Committee to determine an appropriate investment policy for each fund (participating (including each sub funds within the participating fund, if any), non-participating, shareholders' and linked) that should be reviewed from time to time. This includes ensuring the alignment of the investment strategy of the company's participating fund to its bonus philosophy, and that the investment strategy of each fund (including the deviation from the benchmark allocation) is tied to the company's risk appetite.

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. REINSURANCE

7.1 Reinsurance is an important lever for managing risk. The Appointed Actuary should assist the company to ensure that the reinsurance programmes put in place are sufficiently robust and protect the balance sheet vis-à-vis the company's risk appetite and capital strength, taking into account the objectives of the company in entering into reinsurance programmes and considerations for entering into such programmes.

7.2 A company may put in place a reinsurance programme with the following objectives (not exhaustive or mutually exclusive):

- reduce the impact of adverse claims experience; thereby stabilizing claim fluctuations and profits and aid in the smoothing of profit distributions;
- reduce the concentration risk by limiting the maximum risk retained on any one life;
- tap into the expertise of reinsurers in areas like underwriting, product design, etc, where the reinsurers have broader experience;
- provide capital benefits to the extent that the insurer is able to take credit for the reserves held by the reinsurers.

7.3 In designing and putting in place a reinsurance programme, the following are important considerations:

- objective of reinsurance;
- risk appetite of the insurer;
- the type of risk to be ceded and the effectiveness of cession;
- cost of reinsurance;
- the counterparty risk arising from the financial strength of the reinsurer;
- type of reinsurance arrangement;
- optimal retention limit;
- control cycle to review effectiveness and appropriateness of programmes in place.

8. REPORT ON ADVERSE EVENTS

8.1 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.

8.2 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.

8.3 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 Chief Executive, 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.

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

8.5 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.

8.6 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.

8.7 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.

8.8 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.