Institute of Actuaries of India

Check List on Professional Compliance on APS 2

Author: Life Insurance Board (approved by LIB in its meeting held on 11 08 2004 and by the Executive Committee in its meeting held on 28 08 2004)

Ver. 1.00/28 08 2004 1.01/ 01 07 2011

Subject of Compliance: APS 2: Additional Guidance for Appointed Actuaries and other Actuaries involved in Life Insurance

Introduction:

- * Duty to Public interest: Professional guidance is issued by the professional bodies to guide the members of the profession in interpretation of the various legislative provisions in the interest of consumer protection in particular and in public interest in general. IAI requires its members to serve the cause of Public Interest vide para 2.1 of the Professional Conduct Standards (PCS) (ver. 2.00/27 05 2003) issued within in the meaning of rule 29 ({) of the rules of the Society. This duty to public interest is expected to have been served if the PCS and applicable APS issued by IAI are fully complied with.
- * Nature of APSs: In Life Insurance the Appointed Actuaries are required to interpret the provisions of the Insurance Act, 1938, Insurance Rules, 1939 and the IRDA Regulations assisted by the APSs issued by the Institute of Actuaries of India (IAI). Some of these APSs are issued in "concurrence" with IRDA as required under some of the IRDA regulations and other APSs are issued in consultation with IRDA. The ones issued in concurrence with IRDA have the force of being a subordinate legislation and the other APSs are extension of PCS. All APSs are expected to be fully complied with and non-compliance of one or more aspect is expected to lead to disciplinary action which may mean cancellation of CoP and other penalties as per rules of the Society, besides the non-compliance of APSs issued in concurrence with IRDA may mean action by IRDA over and above action by IAI.
- * Objectives of this Checklist: This checklist has been prepared so as to assist Appointed Actuaries and other Actuaries to whom such APSs are

applicable, in self-evaluating for compliance and be of assistance to IAI to monitor compliance with the applicable APSs, through Insurance Board. The Appointed Actuary and other actuary such as Peer Reviewer may be required to file a compliance questionnaire with Life Insurance Board of IAI and the Appointed Actuary may also be required to produce evidence of its compliance Peer The implied interpretation of the APS to Reviewer. which this Checklist applies and the illustrative examples (*in bold italics*) as to how various provisions of the applicable APS can be complied with is that of the Life Insurance Board. It is emphIAlzed that ultimate interpretation and the manner in which the applicable can be complied with shall in the nature of things rests with the Executive Committee band the judicial authority in India.

Actuarial Practice Standard (APS) 2: Additional Guidance for Appointed Actuaries and other Actuaries involved in Life Insurance

1. Introduction

1.3 It is the Appointed Actuary's professional duty to make timely disclosures, both to the company and to the Authority about the financial viability of the life office. If for some exceptional reason the Appointed Actuary is unable to comply fully with this APS then the report given by him should be suitably qualified.

The Appointed Actuary is expected to discuss such circumstances with the Peer Reviewer in advance and if necessary with Member (Actuary), IRDA.

2. The Actuarial Valuation

- 2.1 Sub-clause 2 (4) of Schedule II-A of the ALSM Regulations requires prudent assumptions for all relevant parameters, and states that each such parameter shall be based on the insurer's expected experience and shall include an appropriate margin for adverse deviation. Sub-clause 5 (1) (b) of Schedule II-A of the ALSM Regulations requires the level of margin for adverse deviation for a parameter to depend on the degree of confidence the Appointed Actuary has in the assumption he has made about the expected level of that parameter. The margin for adverse deviation should also depend on the variability of the parameter concerned taking into account the financial significance of such variability.
- 2.2 The adjustment to reserves, required by Sub-clause 2 (5) (iii) of Schedule II-A of the ALSM Regulations, to ensure that reserves are at least as large as any guaranteed surrender value and never less than zero, should be entered as a separate column or row on forms NLB-1 and NLB-2 of the abstract of the Appointed Actuary's valuation report.
- 2.3 Sub-clause 2 (6) of Schedule II-A of the ALSM Regulations specifies that the method of valuation shall be "Gross Premium Method" but in terms of sub-clause 2 (7) thereof an Appointed Actuary can use other methods of valuation subject to the proviso thereto.

- 2.4 In terms of sub-clause 2 (9) of Schedule II-A of the ALSM Regulations the Appointed Actuary shall consider the resilience of the valuation to changes in circumstances, and provide appropriate margins in the valuation bIAIs or an additional reserve. The Regulations do not give any indication of the range of possible future changes in the value of assets that is to be allowed for. In determining an appropriate range, the actuary shall use professional judgement. If changes would result in a change in the aggregate liability that is not matched by a change in the market value of the corresponding assets, the actuary should consider as to what provision is required as a contingency margin, having regard to the consequences should the provision prove to be insufficient. In deciding whether a provision is required or the amount of any such provision the Appointed Actuary should consider the extent to which liabilities can be reduced by decreasing the rates of future bonus on with profits business. The Regulations apply equally to both non-linked and linked business with additional requirements for linked business as specified in clause 7 of Schedule II-A of the ALSM Regulations. 2.5 The Appointed Actuary shall ensure that the valuation basis for participating business is, in particular, consistent with the provisions of sub-clause 5 (5) (d) of Schedule II-A of the ALSM Regulations. Further the Appointed Actuary shall ensure that the liability in the changed investment conditions envisaged in 2.4 adequately covers latest view of policyholders' reasonable expectations.
- 2.6 Sub-clause 2 (8) of Schedule II-A of the ALSM Regulations refers to the method of calculation and assumptions used in the valuation not being subject to arbitrary discontinuities from one year to the next. This requirement shall not be interpreted to preclude changes to valuation interest rates which arise on account of actual or anticipated changes in market yields, or changes in other assumptions which arise from changes in the life office's actual or anticipated experience. This requirement shall not be interpreted to preclude changes in the valuation method. Any changes in either the valuation method or assumptions should be capable of justification.
- 2.7 Clause 3 of Schedule II-A of the ALSM Regulations requires an allowance for tax to be made. The Appointed Actuary should describe in his Valuation Report how such allowance for tax has been made.

The Appointed Actuary is expected to discuss in advance of putting in place the valuation processes with the Peer Reviewer of the year. However details of discussion will depend upon the scope of Peer Review i. e. whether restricted to only statutory valuation or whole of Appointed Actuary's work.

3. Valuation Parameters

- 3.1 Clause 5 of Schedule II-A of the ALSM Regulations sets out the criteria for the valuation basis of a life office. The basis shall be appropriate for the block of business to be valued.
- 3.2 Sub-clause 5 (2) of Schedule II-A of the ALSM Regulations requires that the mortality rates used shall be by reference to a published table, unless the life office has constructed a separate table based on its own experience. While making adjustment to the published mortality table adopted, due regard shall be given to the likely future experience of the life office, including the likely incidence of AIDS, and possible improvements in mortality. The morbidity rates shall also be determined in similar

manner.

- 3.3 Sub-clause 5 (4) of Schedule II-A of the ALSM Regulations requires that all expenses shall be increased in future years for inflation and that the rate of inflation assumed shall be consistent with the valuation rate of interest. Sub-clause 2 (4) of Schedule II-A of the ALSM Regulations requires prudent assumptions for all relevant parameters. These should not be interpreted to require a margin for adverse deviation in both the valuation interest rate and the valuation inflation rate. Provided that there is a margin for adverse deviation in the valuation interest rate then it is sufficient for the Appointed Actuary to ensure that there is a margin for adverse deviation in the difference between the valuation interest rate and the valuation inflation rate.
- 3.4 With the exception of investment expenses there must be explicit allowance for future expenses. If there is no explicit allowance for investment expenses then they must be allowed for by a prudent reduction in the valuation interest rate. Special care must be taken in determining the allowance for future expenses for policies for which premiums are no longer being paid.
- 3.5 All references to yield in sub-clause 5 (5) of Schedule II-A of the ALSM Regulations should be interpreted to mean prospective yield gross of tax.
- 3.6 Sub-clause 5 (5) of Schedule II-A of the ALSM Regulations refers to yields from existing assets attributable to blocks of life insurance business. This would help in determining the rates of interest to be used in valuing those blocks of life insurance business. This shall have due regard to the prudence concept. The yields on existing assets should be determined by reference to the statutory value of the assets to ensure consistency between the valuation of assets and liabilities. When derivative contracts are held in connection with particular assets or liabilities in the life insurance fund, then it will generally be appropriate to apportion those derivatives with the corresponding assets and liabilities.
- 3.7 Sub-clause 5 (5) (a) (ii) of Schedule II-A of the ALSM Regulations requires adjustment to the yield on assets to regulation the possibility of default. The Appointed Actuary shall make suitable provision for this taking into account any implicit or explicit provision for default in the statutory value placed on assets, and the manner in which the statutory value and the yield have been determined. 3.8 Sub-clause 5 (5) (c) of Schedule II-A of the ALSM Regulations requires that in respect of non-participating business the risk of a decline in the interest rate should be duly recognized and a suitable adjustment made. This is not sufficient on its own, the Appointed Actuary needs to consider all future interest rate scenarios that can reasonably be foreseen.
- 3.9 Sub-clause 5 (5) (e) of Schedule II-A of the ALSM Regulations requires that, in respect of single premium business, the Appointed Actuary should take into account the effect of changes in risk free interest rates. This should not be interpreted to mean that Appointed Actuaries do not have to take into account the effect of changes in risk free interest rates for business other than single premium.

Records need be kept of the modeling done whether to set assumptions for expense or any other and discussed with the Peer Reviewer.

4. Additional Requirements for Linked Business

4.1 The value to be placed on the unit reserve shall be the current value of the assets underlying the unit fund determined in accordance with the IRDA (Preparation of Financial Statements and Auditor's Report of Insurance Companies) Regulations. The IRDA has clarified that this should be interpreted to mean that the value to be placed on

the unit reserve shall be the current mid-market value of the assets underlying the unit fund.

- 4.2 If unit liabilities are not matched, a mismatch reserve shall be created.
- 4.3 Separate unit and non-unit reserves shall be held. The sum of these reserves would represent the total reserve for a policy.
- 4.4 The non-unit reserves should take into account morbidity benefits to the extent provided by the non-unit reserves, as well as death benefits.
- 4.5 The total reserve in respect of a policy shall not be less than the guaranteed surrender value on the valuation date. Neither the unit reserve nor the non-unit reserve in respect of a policy shall be negative.

5. Additional Requirements for Provisions

- 5.1 Provision shall be made for any options contained in policy contracts, and such provision should be based on prudent assumptions. The assumptions should take into account factors the internal or external to the company that might accompany the exercising of the option.
- 5.2 Provision shall be made for investment guarantees, on prudent assumptions and taking into account the changes in circumstances envisaged in section 2.4.

Methods used for modeling investment guarantees should be recorded and justified.

6. Solvency Margin

6.1 The Appointed Actuary shall, in terms of sub-regulation 8 (a) to 8 (e) of the AA Regulations, suitably advise the Directors to ensure that the company is at all times able to meet the solvency requirements as prescribed in section 64VA of the Act. He has to ensure that the company's available assets can provide explicit cover for the amount of required solvency margin.

This should be in writing and well communicated.