
**INSURANCE REGULATORY AND DEVELOPMENT AUTHORITY
(ASSETS, LIABILITIES, AND SOLVENCY MARGIN OF
INSURERS) REGULATIONS, 2000**

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**INSURANCE REGULATORY AND DEVELOPMENT AUTHORITY
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INSURERS) REGULATIONS, 2000**

F.No. IRDA/Reg/7/2000, dated 14th July, 2000.-In exercise of the powers conferred by CIs. (y), (z) and (za) of sub-section (2) of Sec. 114-A of the Insurance Act, 1938, (4 of 1938). read with Sec. 26 of the Insurance Regulatory and Development Authority Act, 1999(41 of 1999), the Authority, in consultation with the Insurance Advisory Committee, hereby makes the following regulations, namely:-

1. Short title and commencement :-

(1) These regulations may be called the Insurance Regulatory and

Development Authority (Assets, Liabilities, and Solvency Margin of Insurers) Regulations, 2000.

(2) They shall come into force from the date of their publication in the Official Gazette.

2. Definitions :-

(1) In these regulations, unless the context otherwise requires-

(a) "Act" means the Insurance Act, 1938 (4 of 1938);

(b) "Authority" means the Insurance Regulatory and Development Authority established under sub-section (1) of Section 3 of the Insurance Regulatory and Development Authority Act, 1999 (41 of 1999);

(2) All words and expressions used herein and not defined but defined in the Insurance Act, 1938 (4 of 1938), or in the Insurance Regulatory and Development Authority Act, 1999 (41 of 1999), or in any rules or regulations made thereunder, shall have the meanings respectively assigned to them in those Acts or rules or regulations.

3. Valuation of Assets :-

Every insurer shall prepare a statement of the value of assets in Form IRDA- Assets- AA in accordance with Sch. I.

4. Determination of Amount of Liabilities :-

Every insurer shall prepare a statement of the amount of liabilities in accordance with Sch. II-A, in respect of life insurance business, and in Form HG in accordance with Sch. II-B, in respect of general insurance business, as the case may be.

5. Determination of Solvency Margin :-

Every insurer shall prepare a statement of solvency margin in accordance with Sch. III-A, in respect of life insurance business, and in Form KG in accordance with Sch. III-B, in respect of general insurance business, as the case may be.

6. Health Insurance Business :-

Where the Insurer transacts health insurance business, providing health covers, the amount of liabilities shall be determined in accordance with the principles specified under these Regulations.

7. Business outside India :-

Where the insurer transacts insurance business in a country outside

India, and submits statements or returns or any such particulars to a public authority of that country, he shall enclose the same along with the Forms specified in accordance with these Regulations and the Insurance Regulatory and Development Authority (Actuarial Report and Abstract) Regulations, 2000:

Provided that if the appointed actuary is of the opinion that it is necessary to set additional reserves over and above the reserves shown in the statements or returns or any such particulars submitted to the public authority of a country outside India, he may set such additional reserves.

8. Furnishing of Forms :-

The Forms, namely. Form IRDA- Assets- AA, Form HG, and Form KG, shall be furnished separately for business within India and total business transacted by the insurer.

9. Personal visit of appointed actuary to the Authority :-

The Authority may, if considered necessary and expedient, ask the appointed actuary to make a personal visit to the office of the Authority to elicit from him any further information.

SCHEDULE 1

VALUATION OF ASSETS

SCHEDULE 2A

VALUATION OF LIABILITIES - LIFE INSURANCE

(See regulation 4) 1. Interpretation.-In this Schedule,- (a) "valuation date", in relation to an actuarial investigation, means the date to which the investigation relates. (b) "universal life contracts" means those contracts that are presented in an unbundled form. The contracts where policy-holders have an option to invest in units of Insurer's segregated fund(s) shall be treated as "linked business", and others shall be treated as "non-linked business". (c) "segregated funds" means funds earmarked in respect of linked business. 2. Method of Determination of Mathematical Reserves.- (1) Mathematical Reserves shall be determined separately for each contract by a prospective method of valuation in accordance with sub-paras (2) to (4). (2) The valuation method shall take into account all prospective contingencies under which any premiums (by the policy-holder) or benefits (to the policy-holder/beneficiary) may be payable under the policy, as determined by the policy conditions. The level of benefits shall take into account the reasonable expectations of policy-holders (with regard to bonuses, including terminal bonuses, if any) and any established practices of an insurer for payment of benefits. (3) The valuation method shall take into account the cost of any options that may be available to the policy-holder under the terms of the contract. (4) The determination of the amount of liability under each policy shall be based on prudent assumptions of all relevant parameters. The value of each such parameter shall be based on the insurer's expected experience and shall include an appropriate margin

for adverse deviations (hereinafter referred to as MAD) that may result in an increase in the amount of mathematical reserves. (5) (i) The amount of mathematical reserve in respect of a policy, determined in accordance with sub-para (4), may be negative (called "negative reserves") or less than the guaranteed surrender value available (called "guaranteed surrender value deficiency reserves") at the valuation date. (ii) The appointed actuary shall, for the purpose of Sec. 35 of the Act, use the amount of such mathematical reserves without any modification; (iii) The appointed actuary shall, for the purpose of Secs. 13, 49, 64-V and 64-VA of the Act, set the amount of such mathematical reserve to zero, in case of such negative reserve, or to the guaranteed surrender value, in case of such guaranteed surrender value deficiency reserves, as the case may be. (6) The valuation method shall be called "Gross Premium Method". (7) If in the opinion of the appointed actuary, a method of valuation other than the Gross Premium Method of valuation is to be adopted, then, other approximations (e.g. retrospective method) may be used: Provided that the amount of calculated reserve is expected to be atleast equal to the amount that shall be produced by the application of Gross Premium Method. (8) The method of calculation of the amount of liabilities and the assumptions for the valuation parameters shall not be subject to arbitrary discontinuities from one year to the next. (9) The determination of the amount of mathematical reserves shall take into account the nature and term of the assets representing those liabilities and the value placed upon them and shall include prudent provision against the effects of possible future changes in the value of assets on the ability of the insurer to meet its obligations arising under policies as they arise.

3. Policy Cash Flows.-The gross premium method of valuation shall discount the following future policy cash flows at an appropriate rate of interest,- (a) premiums payable if, any, benefits payable, if any, on death; benefits payable, if any, on survival; benefits payable, if any, on voluntary termination of contract, and the following, if any,- (i) basic benefits, (ii) rider benefits, (iii) bonuses that have already been vested as at the valuation date, (iv) bonuses as a result of the valuation at the valuation date, and (v) future bonuses (one year after valuation date) including terminal bonuses (consistent with the valuation rate of interest); (b) commission and remuneration payable, if any, in respect of a policy (This shall be based on the current practice of the insurer). No allowance shall be made for non-payment of commissions in respect of the orphaned policies; (c) policy maintenance expenses. If any, in respect of a policy, as provided under sub-para (4) of para 5; (d) allocation of profit to share-holders, if any, where there is a specified relationship between profits attributable to shareholders and the bonus rates declared for policy-holders. Provided that allowance must be made for tax, if any.

4. Policy Options.-Where a policy provides built-in options, that may be exercised by the policy holder, such as conversion or addition of coverage at future date(s) without any evidence of good health, annuity rate guarantees at maturity of contract, etc., the costs of such options shall be estimated and treated as special cash flows in calculating the mathematical reserves.

5. Valuation Parameters.- (1) The valuation parameters shall constitute the bases on which the future policy cash flows shall be computed and discounted. Each parameter shall have to be appropriate to the block of business to be valued. An appointed actuary shall take into consideration the following,- (a) The value(s) of the parameter shall be based on the insurer's experience study, where available. If reliable experience study is not available, the value(s) can be based on the industry study, if available and appropriate. If neither is available, the values may be based on the bases used for pricing the product. In establishing the expected level of any parameter, any likely deterioration in

the experience shall be taken into account; (b) The expected level, as determined in Cl. (a) of this sub-para, shall be adjusted by an appropriate Margin for Adverse Deviations (MAD), the level of MAD being dependent on the degree of confidence in the expected level, and such MAD in each parameter shall be based on the Guidance Notes issued by the Actuarial Society of India, with the concurrence of the Authority. (c) The values used for the various valuation parameters should be consistent among themselves. (2) Mortality rates to be used shall be by reference to published table, unless the insurer has constructed a separate table based on his own experience: Provided that such published table shall be made available to the insurance industry by the Actuarial Society of India, with the concurrence of the Authority: Provided further that such rates determined by reference to a published table shall not be less than hundred per cent of that published table. Provided further that such rates determined by reference to a published table may be less than hundred per cent of that published table if the appointed actuary can justify a lower per cent. (3) Morbidity rates to be used shall be by reference, to a published table. unless the insurer has constructed a separate table based on his own experience: Provided that such published table shall be made available to the insurance industry by the Actuarial Society of India, with the concurrence of the Authority: Provided further that such rates determined by reference to a published table shall not be less than hundred per cent of that published table: Provided further that such rates determined by reference to a published table may be less than hundred per cent of that published table if the appointed actuary can justify a lower per cent. (4) Policy maintenance expenses shall depend on the manner, in which they are analysed by the insurer, viz fixed expenses and variable expenses. The variable expenses shall be related to sum assured or premiums or benefits. The fixed expenses may be related to sum assured or premiums or benefits or per policy expenses. All expenses shall be increased in future years for inflation, the rate of inflation assumed should be consistent with the valuation rate of interest. (5) Valuation rates of interest, to be used by appointed actuary- (a) shall be not higher than the rates of interest, for the calculation of the present value of policy cash flows referred to in para 4, determined from prudent assessment of the yields from existing assets attributable to blocks of life insurance business, and the yields which the insurer is expected to obtain from the sums invested in the future, and such assessment shall take into account- (i) the composition of assets supporting the liabilities, expected cash flows from the investments on hand, the cash flows from the block of policies to be valued, the likely future investment conditions and the reinvestment and disinvestment strategy to be employed in dealing with the future net cash flows; (ii) the risks associated with investment in regard to receipt of income on such investment or investment of principal; (iii) the expenses associated with the investment functions of the insurer; (b) shall, not be higher than, for the calculation of present value of policy cash flows in respect of a particular category of contracts, the yields on assets maintained for the purpose of such category of contracts; (c) in respect of non-participating business, shall recognise the risk of decline in the future interest rates; (d) in respect of participating business, shall be based on the assumption (with regard to future investment conditions), that the scale of future bonuses used in the valuation is consistent with the valuation rate of interest, and (e) in respect of single premium business, shall take into account the effect of changes in the risk-free interest rates. (6) Other parameters, may be taken into account, depending on the type of policy. In establishing the values of such parameters, the considerations set out in this Schedule shall be taken into account. 6. Applicability to Reinsurance.-(1)

This Schedule shall also apply to the valuation of business in the books of reinsurers. (2) As regards the business ceded by insurers, this Schedule shall be applicable to the net sums at risk retained by the insurer. (3) Re-insurance arrangement with an element of borrowing in the form of deposit or credit of any kind from Insurer's reinsurers without the prior approval of the Authority shall not be treated as credit for re-insurance for the purpose of determination of required solvency margin. 7. Additional Requirements for Linked Business.-(1) Reserves in respect of linked business shall consist of two components, namely, unit reserves and general fund reserves. (2) Unit reserves shall be calculated in respect of the units allocated to the policies in force at the valuation date using unit values at the valuation date. (3) General fund reserves (non-unit reserves) shall be determined using a prospective valuation method set out in this Schedule, which shall take into account of the following, namely:- (a) premiums, if any, payable in future; (b) death benefits, if any, provided by the general fund (over and above the value of units); (c) management charges paid to the general fund; (d) guarantees, if any, relating to surrender values or minimum death and maturity benefits; (e) fund growth rates and management charges. (The values of these parameters, along with other, shall be determined in accordance with para 5); (f) negative reserves, if any, shall be dealt with in accordance with sub-para (5) of para 2. 8. Additional Requirements for Provisions.-The appointed actuary shall make aggregate provisions in respect of the following, where it is not possible to calculate mathematical reserves for each policy, in the determination of mathematical reserves:- (a) Policies in respect of which extra premiums have been charged on account of underwriting of under-average lives that are subject to extra risks such as occupation hazard, over- weight, under-weight, smoking history, health, climatic or geographical conditions; (b) Lapsed policies not included in the valuation but under which a liability exists or may arise; (c) Options available under individual and group insurance policies; (d) Guarantees available to individual and group insurance policies; (e)The rates of exchange at which benefits in respect of policies issued in foreign currencies have been converted into Indian rupees and what provision has been made for possible increase of mathematical reserves arising from future variations in rates of exchange; (f) Other, if any. 9. Statement of Liabilities.-An insurer shall furnish a statement of liabilities in accordance with the Insurance Regulatory and Development Authority (Actuarial Report and Abstract) Regulations, 2000.

SCHEDULE 2B

VALUATION OF LIABILITIES (GENERAL INSURANCE)

SCHEDULE 3A

DETERMINATION OF SOLVENCY MARGINS-LIFE INSURERS

1. Interpretation.-In this Schedule- (a) 'Available Solvency Margin' means the excess of value of assets (furnished in IRDA-Form-AA) over the value of life insurance liabilities (furnished in Form H as specified in regulation 4 of Insurance Regulatory and Development, Authority (Actuarial Report and Abstract) Regulations, 2000 and other liabilities of policy-holders' fund and share-holders' funds; (b) "Solvency Ratio" means the ratio of the amount of Available Solvency Margin to the amount of Required Solvency Margin. 2. Determination of Solvency Margin.-Every insurer shall determine the required solvency margin, the available solvency margin, and the solvency ratio in Form K as specified under Insurance Regulatory and Development Authority (Actuarial Report and Abstract) Regulations, 2000.

SCHEDULE IIIB

DETERMINATION OF SOLVENCY MARGINS-GENERAL INSURERS