## Securities and Exchange Commission of Pakistan Draft Life Insurance Valuation Regulations, 2005

- **1.Short title and commencement.----**(1) These regulations may be called the Securities and Exchange Commission of Pakistan Life Insurance Valuation Regulations, 2005.
- (2) They shall come into force from the date of their publication in the Official Gazette.
- **2. Definitions.** In these regulations all words and expressions used herein and not defined but defined in the Insurance Ordinance 2000 or in any Rules or Regulations made thereunder, shall have the meanings respectively assigned to them in the Ordinance, Rules or Regulations.
- 3. Valuation of Assets.--Every life insurer shall prepare a statement of assets in accordance with Form LI and LJ of Insurance Rules 2002
- **4. Determination of Amount of Liabilities.--**Every life insurer shall prepare a statement of the amount of liabilities in accordance with this Regulation.
- 5. Interpretation.--In this Schedule, --
  - (a) "Valuation date", in relation to an actuarial investigation, means the date to which the investigation relates.
  - (b) "Actuarial Reserve" means the "minimum actuarial reserve for policyholder liabilities" as referred to in Section (50), sub section (5) of the Ordinance
- **6. Method of Determination of Actuarial Reserves.**—(1) Actuarial Reserves shall be determined separately for each contract by a prospective method of valuation in accordance with sub-paras (2) to (5):
- (1) For a whole life policy, the actuarial reserve shall not be less than the mathematical reserve of a policy calculated on the following assumptions:
- (i) The policy takes effect one year later than the actual date of commencement;
- (ii) Total number of years' premium paid is reduced by one year;
- (iii) The interest rate is at the rate of interest in accordance with para 8
- (iv) The mortality in respect of the life assured under the contract is in accordance with para 8
- (2) For an endowment policy or a whole life policy where the premium paying period is not less than twenty years the actuarial reserve shall not be less than the mathematical reserve of a policy calculated on the following assumptions:
- (i) The policy takes effect one year later than the actual date of commencement;
- (ii) Total number of years' premium paid is reduced by one year;
- (iii) The interest rate is at the rate of interest in accordance with para 8
- (iv) The mortality in respect of the life assured under the contract is in accordance with para 8
- (3) For an endowment policy or a whole life policy where the premium paying period is less than twenty years the actuarial reserve shall not be less than the mathematical reserve of a policy calculated on the assumptions in sub para (3), and to the reserve so obtained shall be added one twentieth the number of years by which the premium paying period falls short of twenty years of the difference between the reserve obtained on the assumptions in sub para (3) and the reserve obtained as follows:
- (i) The policy takes effect on the date it commenced and for the premium paying period mentioned therein;
- (ii) Total number of years' premium paid is unadjusted
- (iii) The interest rate is at the rate of interest in accordance with para 8
- (iv) The mortality in respect of the life assured under the contract is in accordance with para 8

- (4) For a single premium policy the actuarial reserve shall not be less than the mathematical reserve calculated on the following assumptions:
- (i) The interest rate is at the rate of interest in accordance with para 8
- (ii) The mortality in respect of the life assured under the contract is in accordance with para 8

## 7. Considerations in determination of Actuarial Reserves:

- (1) The valuation method shall take into account benefit liabilities as determined by the policy conditions for each existing contract taking credit for net premiums payable after the valuation date.
- (1) The appointed actuary shall take appropriate steps to ensure that the amount of actuarial reserve is not "negative"
- (3) The valuation method shall be called "Net Premium Method'.
- (4) If in the opinion of the appointed actuary, a method of valuation other than the Net Premium Method of valuation is to be adopted, then, other approximations (e.g. retrospective method) may be used.
  - Provided that the appointed actuary is satisfied that the amount of calculated reserve is expected to be at least equal to the amount that shall be produced by the application of the Net Premium Method.
- (5) 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.
- **8.** Valuation Parameters.—(1) The valuation parameters shall constitute the bases on which actuarial reserves have to be computed.
- (2) **Mortality rates** to be used shall be in accordance with the table of mortality rates prescribed by the Pakistan Society of Actuaries.
- (3) **Morbidity rates** to be used shall be by reference to a table, the use of which can be justified by the appointed actuary.
- (4) Valuation rate of interest, to be used by appointed actuary shall be an effective rate of 3.75% per annum.
  - (a) This rate shall be subject to review by the Pakistan Society of Actuaries from time to time.
  - (5) **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 these Regulations shall be taken into account.

## 9. Applicability to Reinsurance.—

- (1) These Regulations shall be applicable on both Gross of reinsurance and Net of reinsurance valuation of business.
- **10.** Requirements for Linked Business.—(1) Reserves in respect of linked business shall consist of two components, namely, unit reserves and non-unit 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) Non-unit reserves shall be determined by the Appointed Actuary using generally accepted actuarial principles. These reserves shall also take into account guarantees, if any, relating to surrender values or minimum death and maturity benefits.

- 11. Requirements for Universal Life and Universal Life Hybrid Business.—(1) Reserves in respect of universal life and universal life hybrid business shall consist of two components, namely, Fund reserves and non-fund reserves.
- (2) Fund reserves shall be the account value at the valuation date of the policies in force at the valuation date
- (3) Non-fund reserves shall be determined by the Appointed Actuary using generally accepted actuarial principles. These reserves shall also take into account guarantees, if any, relating to surrender values or minimum death and maturity benefits.
- **12**. **Requirements for other business -** Reserves in respect of business not mentioned in these regulations shall be determined by the Appointed Actuary using generally accepted actuarial principles and provisions of Guidance Notes issued by the Pakistan Society of Actuaries.
- **13.** 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;
  - a) Lapsed policies not included in the valuation but under which a liability exists or may arise;
  - b) Options available under individual and group insurance policies;
  - c) Guarantees available to individual and group insurance policies;
  - **d)** The rates of exchange at which benefits in respect of policies issued in foreign currencies have been converted into Pakistan Rupees and what provision has been made for possible increase of mathematical reserves arising from future variations in rates of exchange;
  - **e)** Expense reserves where the expected future expenses exceed the margins built in the pricing of products;
  - f) Other, if anv.
- **14. Statement of Liabilities--** An insurer shall furnish a statement of liabilities in accordance with the Securities and Exchange Commission of Pakistan (Actuarial Report and Abstract) Regulations 2005