

## Public disclosure requirement (Sept 30 10)

### Data

Policy data is maintained on the following administration systems,

Life Asia	Individual retail products including some individual annuities
	Group bancassurance products
WEGA	Group Gratuity
	Group Term Insurance
	Superannuation
	Employer Deposit Linked Insurance (EDLI)
Leave Encashment Spreadsheet	Leave Encashment – 9 group schemes
Compulsory Annuity Management System (CAMS)	Group annuities
Annuity Spreadsheet	Individual tied annuities
Comprehensive Reinsurance Management System (CRMS)	Administration, premium calculations for life, group and health products
Claims Automated Processing System (CAPS)	Health and non-par Health claims, standalone CI, crisis cover
Claims Management System (CMS)	Managing death claims and living benefits for individual policies (not health claims)

The key considerations from the statutory valuation perspective are to ensure the completeness and accuracy of data.

There are a series of validation checks based on product rules built into the business systems of the four outsourced data centres for retail business. Data is then uploaded into the Life Asia system for policy issue. Besides this, the Actuarial Department carries out its own checks to be reasonably certain that the data is complete and accurate.

### Treatment of Valuation Parameters

The liability valuation calculations have been carried out using actuarial software called "Prophet". The assumptions for each plan are fed into a spreadsheet. This is independently checked. After this verification, a DCS (Data Conversion System) Program is used to make a "Prophet" readable table from the spreadsheet. Uploading of assumption into "Prophet" is therefore automated. Monthly cash flows are then projected by Prophet to determine the reserves using the specific characteristics of each policy such as age at entry, sum assured, term, etc. The calculations are exact and no approximations are made.

The valuation parameters were calculated as detailed here.

- Age at Entry was taken as age nearer birthday at the commencement of date of policy. This was extracted from LifeAsia.

- Valuation Age was calculated by summing Age nearer birthday at entry with curtate duration, i.e. the age would change only on policy anniversaries.
- Premium Paying Term under the plan is extracted from Life Asia.
- Maturity Date is obtained by summing up the date of commencement and policy term extracted from LifeAsia.
- Period from Valuation date to maturity is calculated in Prophet as the difference between the maturity date and the valuation date

### **Treatment of Future Premiums**

#### **Incidence of premium income**

The premiums are assumed to be received when due.

For linked business, premium income is recognized when the associated units are allocated. Fees on linked policies are recognized when due. For the purpose of projections in the actuarial models, future premiums are assumed to be received when due.

#### **Premiums payable otherwise than annually**

As premiums are taken to be received when due, no adjustment is required for non-annual plans.

#### **Valuation Method – Non Linked Business**

There have been no changes in the methods for the valuation as on Sept 30, 2010 as compared to June 30, 2010. The valuation methods are described below.

#### **Methods adopted in the determination of mathematical reserves**

The prescribed method of valuation is the Gross Premium Valuation. The reserve held represents the net present value of benefits and expenses less premiums. Following is the broad basis of the valuation.

- The cash flows are projected assuming zero lapses.
- The reserves are calculated on a per policy basis.
- Any negative reserves are zeroised, so that a policy is not treated as an asset.
- The minimum value of reserves is the Guaranteed Surrender Value if applicable or zero.

Valuation parameters are set prudently and include MAD in accordance to GN7.

The tables below summarise the specific methods used to value liabilities under each type of product.

### Non Participating Business

Contract Status	Category	Applicability	Method
In Force	Individual Products	Base Plan	Higher of the Gross Premium Reserve or Surrender Value (if applicable) or zero, with allowance for future bonus and associated tax and transfers to shareholders under participating plans
	Group Products-Non Par	Riders – Excluding Accident Benefit Riders Riders – Accident Benefit Riders All group risk products and riders	Higher of Gross Premium Reserve and Unearned Premium Reserve on a policy basis Unearned Premium Reserve  Higher of Gross Premium Reserve or Surrender Value for Mortgage and Auto Loans dependent term assurances and Unearned Premium Reserve for others. (The single premium MRTA has a surrender value.)
	Group Products-Par		Contributions plus declared bonus and Unexpired risk premium on mortality
Reduced Paid up	Individual Products	Base Plan	Higher of Gross Premium Reserve or Surrender Value on reduced benefit with no future premiums payable
Lapsed / Reduced Paid up	Individual Products	Reinstatement Reserve	Reinstatement rate is applied to the difference between the reserve assuming contract is In force and the outstanding premiums plus the paid-up reserve, subject to a floor of zero.

### Participating Business

For participating business, the methods applicable are the same as above but with allowance for future bonus and associated tax and transfers to shareholders funds.

For participating plans, the liability is set to prospective Bonus Reserve Valuation (BRV). But the BRV is equated to the Asset Share by solving for supportable bonus. The future reversionary bonuses are set so as to exhaust the asset share. Thus the reserve includes a provision for future bonuses at a rate consistent with the valuation rate of interest along with

a provision for associated tax and transfer to shareholders. These bonus rates are set keeping in mind the PRE.

**Bonus rates**

Details of bonuses declared in the previous financial years are given below:

	Par Assurance	Par Pension
FY 2006-07	3.25%	3.25%
FY 2007-08	3.00%	3.00%
FY 2008-09	2.25%	2.5%

**Bonus rates for the current year**

A reversionary bonus of 2.5% and a special one time reversionary bonus of 1.5% for par life products (including Mass product) and a reversionary bonus of 2.75% and a special one time reversionary bonus of 1.25% for the pension par products for the year 2009-10 has been proposed and approved by the Board of Directors.. The one time special reversionary bonus will be in excess of the Asset share and would be funded from the Funds for Future Appropriation in the respective funds.

A Terminal Bonus of 15% and 20% of the sum assured for all the contracts under the participating pension product Forever Life Regular Premium Series-I(UIN 105N001V01) and Series II (UIN 105N001V02) respectively and 25% of the sum assured for all contracts under the participating pension product Forever Life Single Premium (UIN 105N002V01) and 15% of the sum assured for the participating assurance product Save 'n' Protect Series I (UIN 105N004V01) has been proposed and approved by the Board of Directors.

Besides this a reversionary bonus of 8.5% and a one-time special reversionary bonus of 2.5% for the group participating product Group Superannuation Suraksha (UIN105N089V01), and 7.5% and a one-time special reversionary bonus of 3.5% for the group participating product Group Gratuity Suraksha (UIN105N090V01) has been proposed and approved by the Board of Directors.

**Policyholder Reasonable Expectations (PRE)**

Due consideration is given to the reasonable expectations of policyholders when making a distribution of surplus. "Reasonable" is not explicitly defined in the regulations and is left to the interpretation of the Appointed Actuary. Our interpretation of "Reasonable" refers to a well-informed, financially literate policyholder.

PRE can be formed with respect to many areas including the following.

- Nature of Bonus
- Reversionary (added each year) vs. Terminal (added only on claim)
- Type of Reversionary bonus
- Simple vs. compound vs. super compound
- Level of bonus
- Level of guarantees implicit in the declaration

The main drivers of PRE are currently our point of sale material, the level of guaranteed addition rates, the bonus rates declared last year and past communication with

policyholders. We interpret our point of sale material as having created the expectation that bonuses would be compound reversionary.

PRE ultimately needs to be set to the principle that each customer should receive a fair return on the premiums he has paid, allowing for the insurance protection and guarantees provided over the duration of his policy. The basic reference point for this, and therefore PRE, will be the asset share under the policy.

Policyholders enjoy the benefits and protection of both guarantees and smoothing for which they may be charged appropriately. However, the Company will not seek to make any systematic profit through these charges over generations of policies.

PRE will be shaped and actively managed through appropriate communication to the policyholder. The tools that will be used for this purpose are Sales Brochures, Policy Illustrations and annual communications of bonus rates.

Early duration surrender benefits will be established at a level that enables the Company to recover the cost of acquisition and capital support provided subject to the minimum surrender values written into the contracts.

#### **Tax Rate**

Tax is provided on surplus emerging under participating products. The current rate of tax is 14.1625%, which is a base rate of 12.50%, a surcharge of 10% and education cess of 3%.

#### **Valuation Method – Linked Business**

There have been no changes in the methods for the valuation as on Sept 30, 2010 as compared to June 30, 2010. The valuation methods are described below.

#### **Methods adopted in the determination of mathematical reserves**

For linked business, unit liabilities are fully matched. A non-unit reserve is also held which includes provision for the cost of any guarantee.

Further details are given here.

**Non Participating Unit Linked Business**

Contract Status	Category	Applicability	Method
In Force	Unit Reserves	Unit Fund	The unit reserve is number of units held by the policyholder multiplied by the NAV at the valuation date.
	Non-unit Reserves- except for Group Linked	Life Cover, Rider Benefits and Adequacy of charges to cover expenses	For base policy and associated mortality benefit we take the higher of the unearned risk benefit charges and all the projected cash flows allowing for zeroisation under all contracts at a policy level. For riders, where charges are taken by a deduction of units a UPR, in other cases higher of UPR or GPV
Reduced Paid up / Lapsed / Premium Holiday	Unit Reserves	Unit Fund	Paid up / Surrender Value to the credit of the policyholders
		Reinstatement reserve	A reinstatement rate is applied to the difference between the full unit value and the paid up / surrender value. Full values of units of Premier Life and Elite pension are held as reserve.
	Non-unit Reserves	Life Cover and Rider Benefits and adequacy of charges to cover expenses	Where benefit continues by cancellation of units, for mortality benefit the higher of the unearned risk benefit charges and the projected cash flows at a policy level. For riders, where charges are taken by a deduction of units a UPR, in other cases higher of UPR or GPV
		Reinstatement reserve	Reinstatement rate is applied to the difference between the reserve assuming contract is in force and the outstanding premiums.

Contract Status	Category	Applicability	Method
Additional Reserves	Cost of Guarantee	Linked Plans with capital guarantee	<p>For guarantees on products other than Pinnacle, the gross cost of guarantee is computed based on principles of market consistency. The fund values are projected using risk neutral asset return scenarios and the payout on account of the guarantee is calculated for each simulation. The present value of the payouts for each simulation is calculated by discounting using the forward rates of that simulation. The average of the present value of payouts from the simulations is the gross cost of the guarantee.</p> <p>For Pinnacle there is no requirement for additional reserves on account of guarantee as the guarantee will be managed by following a Constant Proportion Portfolio Insurance strategy on the assets. The strategy dynamically allocates the investments between risky assets (equity) and risk free assets (debt), based on the performance of risky assets and yields available on risk free assets.</p>
Group Linked	Non Unit reserves		No reserves are held on account of expenses as charges are currently higher than expenses- In case of mortality benefits Unexpired risk premium

### **Valuation assumptions**

There have been no changes in the assumptions for the valuation as on Sept 30, 2010 as compared to the assumptions as on June 30, 2010, other than revival rates for unit linked business. Further details of the assumptions are given below.

### **Interest Rate**

The valuation interest rates for the various lines of business along with the details of the previous valuation are set out below.

Line of Business	Valuation rate		Inflation rate	
	June 30, 2010	Sept 30, 2010	June 30, 2010	Sept 30, 2010
Par Assurance	5.89%	No change	4.30%	No change
Par Pension	5.97%		4.30%	
Non Par	5.84%		4.30%	
ULIP	5.10%		4.30%	
Non Par Annuity	6.23%		4.30%	
SP Bond	6.78%		4.30%	
Health	5.12%		4.30%	
Non Par Group	6.28%		4.30%	

For paid up policies in the non-par fund we use the non-par valuation discount rate.

#### **Medical Inflation**

As on June 30, 2010 the medical inflation was 14.30% and remains unchanged as on Sept 30, 2010.

#### **Mortality rates for each product**

The mortality assumptions for various products are given below.

Plan	As at 30 June 2010 Valuation Basis	As at 30 Sept 2010 Valuation Basis
NonPar Assurance, Non Par Investment, Par Pension, Par Assurance except for Smart Kid	For ages less than equal to 30: 80% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females For ages greater than 30: 70% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females	No Change
Smart kid	For ages less than equal to 30: 100% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females For ages greater than 30: 90% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females	No Change



Plan	As at 30 June 2010 Valuation Basis	As at 30 Sept 2010 Valuation Basis
Linked Business (Assurance, Pension) other than Smart Kid	For ages less than equal to 30: 80% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females For ages greater than 30: 70% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females	No Change
Smart kid Unit Linked	For ages less than equal to 30: 100% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females For ages greater than 30: 90% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females	No Change
Home Assure	80% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females	No Change
Credit Assure	Base: 90% of LIC 94-96 rated up by 1 year for males, rated down by 1 year for females  4 wheeler (Reducing Cover): 90% of LIC 94-96 rated up by 1 year for males, rated down by 1 year for females  2 wheeler (Level Cover): 110% of LIC 94-96 rated up by 1 year for males, rated down by 1 year for females  Personal Loan (Reducing and Level Cover): 135% of LIC 94-96 rated up by 1 year for males, rated down by 1 year for females  Commercial Vehicle Loan (Reducing Cover): 100% of LIC 94-96 rated up by 1 year for males, rated down by 1 year for females  Education Loan (Level Cover): 100% of LIC 94-96 rated up by 1 year for males, rated down by 1 year for females	No Change

Plan	As at 30 June 2010 Valuation Basis	As at 30 Sept 2010 Valuation Basis										
Group Term	Unearned Premium	No Change										
Rural products - Mitr, Suraksha (RP) and Suraksha (SP)	330%of LIC 94-96	No Change										
Suraksha Kavach (Individual)	330%of LIC 94-96	No Change										
Sarv Jan Suraksha	330%of LIC 94-96	No Change										
Social Product – SurakshaKavach (Group)	Unearned Premium	No Change										
Annuity	<p>Up to and including age 60: 40% LIC 96-98 for males, rated down by 4 years for females; with 2 year’s improvement applied.</p> <p>From age 61: 65% LIC 96-98 for males, rated down by 4 years for females; with 2 year’s improvement applied.</p> <p>The mortality improvement is set as</p> <table border="1"> <thead> <tr> <th>Age as on 1 April 2008</th> <th>Rate</th> </tr> </thead> <tbody> <tr> <td>&lt; 35</td> <td>4.50%</td> </tr> <tr> <td>&lt; 55</td> <td>3.50%</td> </tr> <tr> <td>&lt; 65</td> <td>2.00%</td> </tr> <tr> <td>≥ 65</td> <td>1.75%</td> </tr> </tbody> </table> <p>Mortality improvement factor would is applied based on annuitant’s age in 2007-08 and would include improvements since 2007-08 and would be fixed for life.</p>	Age as on 1 April 2008	Rate	< 35	4.50%	< 55	3.50%	< 65	2.00%	≥ 65	1.75%	No Change
Age as on 1 April 2008	Rate											
< 35	4.50%											
< 55	3.50%											
< 65	2.00%											
≥ 65	1.75%											
ADD and AD Riders	Unearned Premium Basis	No change										
Level Term Rider	<p>For ages less than equal to 30: 80%LIC 94-96 rated up by 1 year for males, rated down by 1 year for females;</p> <p>For ages greater than 30: 70%LIC</p>	No change										

Plan	As at 30 June 2010 Valuation Basis	As at 30 Sept 2010 Valuation Basis
	94-96 rated up by 1 year for males, rated down by 1 year for females.	
Income Benefit Rider	For ages less than equal to 30: 100% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females For ages greater than 30: 90% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females	No change
Crisis Cover	80% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 70% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Cancer Care	70% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 60% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Cancer Care Plus (	70% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 60% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Health Assure Plus	80% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 70% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Health Assure	70% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 60% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Hospital Care	70% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and	No change

Plan	As at 30 June 2010 Valuation Basis	As at 30 Sept 2010 Valuation Basis
	60% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	
Diabetes Assure	230% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 220% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Diabetes Care	Base: LIC 94-96 rated up by 1 year for males, and down by 1 year for females up to age 30 Males 0 Class 140% Males 1 Class 175% Males 2 Class 230% Males 3 Class 285% Males 4 Class 370% Females 0 Class 150% Females 1 Class 190% Females 2 Class 245% Females 3 Class 330% Females 4 Class 415% Above form for ages above 30 but with a reduction in mortality corresponding to 10% of the LIC 94-96 table	No change
Diabetes Care Plus	Base: LIC 94-96 rated up by 1 year for males, and down by 1 year for females up to age 30 Males 0 Class 170% Males 1 Class 210% Males 2 Class 280% Males 3 Class 350% Males 4 Class 450% Females 0 Class 185% Females 1 Class 230% Females 2 Class 300% Females 3 Class 375% Females 4 Class 475% For ages above 30 a 10% reduction in mortality corresponding to 10% of the LIC 94-96 table	No change

Plan	As at 30 June 2010 Valuation Basis	As at 30 Sept 2010 Valuation Basis
Diabetes Care Active	280% of LIC 94-96 rated up by 1 year for males and 300% of LIC 94-96 rated down by 1 year for females up to age 30 and for ages above 30 270% of LIC 94-96 rated up by 1 year for males and 290% of LIC 94-96 rated down by 1 year for females	No change
Death Benefit Rider	280% of LIC 94-96 rated up by 1 year for males and 300% of LIC 94-96 rated down by 1 year for females up to age 30 and for ages above 30 270% of LIC 94-96 rated up by 1 year for males and 290% of LIC 94-96 rated down by 1 year for females	No change
Major Surgical Benefit rider	80% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 70% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Critical Illness Accelerated and Standalone rider	Accelerated - Unearned Premium Standalone - 80% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 70% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
MediAssure	80% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 70% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change

Plan	As at 30 June 2010 Valuation Basis	As at 30 Sept 2010 Valuation Basis
Health Saver (Linked product)	For ages less than equal to 30: 70% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females. For ages greater than 30: 60% LIC 94-96 rated up by 1 year for males, rated down by 1 year for females	No change
Diabetes Rider	70% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 60% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Diabetes Rider (Modified)	70% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 60% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change
Waiver of Premium Benefit	70% of LIC 94-96 up to age 30 , rated up by 1 year for males, and down by 1 year for females and 60% of LIC 94-96 after age 30 , rated up by 1 year for males, and down by 1 year for females	No change

### **IBNR**

Late reported claims are analysed periodically and are allowed in the experience analysis for setting the valuation bases. However for one year renewable Group Term policies we hold an IBNR of 3.5 months of premium.

### **Expense Assumption**

Type of Expense (Rs)	June 30, 2010	Sept 30, 2010
<b>Renewal Expense</b>		
Conventional Single premium, Credit	160	No Change

Type of Expense (Rs)	June 30, 2010	Sept 30, 2010
Assure, Home Assure, Conventional paid up		
Annuity	Annual annuity payment-825 Semi annual payment-825 Quarterly annuity payment-859 Monthly annuity payment-974	No Change
Riders	0	No change
Mitr, Suraksha (SP, RP), Suraksha Kavach	77	No Change
Sarv Jan Suraksha	52	No Change
All other policies including paid up unit linked and single premium unit linked	425	No Change
<b>Claim Expenses per Policy (Rs)</b>		
Cancer Care	5,467	No Change
Cancer Care Plus	5,467	No Change
Crisis Cover	3,280	No Change
Diabetes Care	1,640	No Change
Diabetes Care Plus	1,640	No Change
Diabetes Assure	1,640	No Change
Diabetes Care Active	1,640	No Change
Heath Assure	3,280	No Change
Heath Assure Plus	3,280	No Change
Hospital Care	115p.a	No Change
Health Saver	115p.a	No Change
MediAssure	115p.a	No Change
Suraksha Kavach (SP)	28	No Change
Disability Claims	104	No Change
<b>Screening Expense per policy (Rs)</b>		
Diabetes Care	328 quarterly and 2,296 annually	No Change
Diabetes Care Plus	328 quarterly and 2,296 annually	No Change
Diabetes Care Active	328 quarterly and 2,296 annually	No Change
Cancer Care Plus		
Males (20 to 50 yrs)	364	No Change
Males (above 51 yrs)	1114	No Change
Females (20 to 40 yrs)	802	No Change
Females (above 41 yrs)	2177	No Change