

## L-42- Valuation Basis (Life Insurance) for the Year 2008-09

### a. How the policy data needed for valuation is accessed.

For **Individual Business**, the data needed for valuation at a per policy level is extracted from the policy administration system in 'csv' format. The valuation is done using the well known actuarial software package 'Prophet'. The data is then converted into a format required by Prophet using the 'Data Conversion System' module in Prophet.

For **Group Business**, the data in respect of Annually Renewable Group Term business is extracted from Group Operations in Microsoft Excel files. The valuation for this business is done using an Excel Program. The valuation of Group Single Premium decreasing term assurance business, namely the Kotak Complete Cover Plan ("credit life"), is done using 'Prophet'.

### b. How the valuation basis are supplied to the system

For **Individual Business**, the valuation basis is supplied to Prophet through various tables like the 'Parameter File', the 'Global File', and the 'Generic File'.

For **Group Business**, the parameters are included in various formulae in Excel sheets.

## 1) Interest :

### i. Individual Business

	First 5 yrs	After 5 yrs
a) Life- Participating policies	6.80%	6.10%
b) Life- Non-participating Policies	5.30%	4.60%
c) Annuities- Participating policies	NA	NA
d) Annuities - Non-participating policies	NA	NA
e) Annuities- Individual Pension Plan	6.80%	6.10%
f) Unit Linked	5.30%	4.60%
g) Health Insurance	NA	NA

<b>ii. Group Business</b>	5.30%	4.60%
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## 2) Mortality Rates:

a) Life- Participating policies

The mortality rates assumed for our participating plans ranges between 88% to 115% of IALM (94-96).

b) Life- Non-participating Policies

The mortality rates assumed for our Term/Preferred term plans depends on age and smoker status and ranges between 66% to 120% of IALM (94-96). The rates assumed for other non-participating products ranges between 88% to 165% of IALM (94-96).

c) Annuities- Participating policies

NA

d) Annuities - Non-participating policies

NA

e) Annuities- Individual Pension Plan

The mortality rates assumed are 88% of IALM (94-96).

f) Unit Linked

The mortality rates assumed ranges between 88% to 165% of IALM (94-96).

g) Health Insurance

NA

<b>3) Expense :</b>	<b>(in Rs) per policy</b>
Fixed Renewal Expenses (Regular Premium)	542
Fixed Renewal Expenses (Single Premium)	108
Fixed Expenses on Death	1550
Fixed Expenses on Maturity	271
Fixed Expenses on Surrender	271
Fixed Expenses on CI	7750
Fixed Expenses on Disability	3875
Group Complete Cover Plan (Renewal Fixed)	27 per member
Group Complete Cover Plan (on Death)	1550 per member
Group Complete Cover Plan (on Surrender)	88 per member

In respect of other Group Plans, expense provision is equal to 10% of the unexpired risk premium.

## 4) Bonus Rates

The bonus rates assumed were consistent with the interest rate assumptions used and the nature of the product.

## 5) Policyholders Reasonable Expectations

The level of benefits assumed is in line with the benefit illustrations provided at the point of sale and hence meets policyholders reasonable expectation.

6) Taxation and Shareholder Transfers	
Policyholders Tax Rate	14.16%
Shareholders Tax Rate	16.995%
Shareholder Transfer (With Profit Policies)	1/9 th of Cost of Bonus
Shareholder Transfer (Without Profit Policies)	100% of Surplus

## 7) Basis of provisions for Incurred But Not Reported (IBNR)

Individual	Provision for IBNR is 3 times the average claims paid (net of reinsurance) over the past ten months.
Group	Provision for IBNR reserve is based on the past claims experience using chain ladder approach.

## 8) Change in Valuation Methods or Basis

### i. Individuals Assurances

1. Interest	Interest rate has been reduced from previous year by 0.5%
2. Expenses	There was no change in expense assumption. They were increased by inflation from previous year.
3. Inflation	Inflation rate was assumed at 6%. There was no change from previous year.

### ii. Annuities

1. Interest	
a. Annuity in payment	Not Applicable
b. Annuity during deferred period	Not Applicable
c. Pension : All Plans	Interest rate has been reduced from previous year by 0.5%
2. Expenses	There was no change in expense assumption. They were increased by inflation from previous year.
3. Inflation	Inflation rate was assumed at 6%. There was no change from previous year.

### iii. Unit Linked

1. Interest	Interest rate has been reduced from previous year by 0.5%
2. Expenses	There was no change in expense assumption. They were increased by inflation from previous year.
3. Inflation	Inflation rate was assumed at 6%. There was no change from previous year.

### iv. Health

Not Applicable

### v. Group

1. Interest	Interest rate has been reduced from previous year by 0.5%
2. Expenses	For Complete Cover Plan, the renewal fixed expense has been reduced by 73%. The death expense has been increased by 9% and surrender expense has been increased by 6% from the previous year.
3. Inflation	Inflation rate was assumed at 6%. There was no change from previous year.