General

These guidelines form the basis of calculation, ruling and control.

The Company shall underwrite direct insurance and indirect insurance within European Economic Area limited to risks for the following classes of insurance:

Class 1a)	Life Insurance
Class 1b)	Supplementary insurances to Class 1a

Updates of these guidelines shall be decided by the Board of GMAC Life Försäkrings AB.

Determination of premium rating

Premium rates are made up of the following parts

Commission - a charge for selling
Retention - a cost for setting up & administering the program
Profit
Claim costs – made up of life benefits and disability benefits

Many existing programs have established rates refined over time as the program's experience grew. Initially, where no prior local experience was available, these rates were formulated using mortality and morbidity tables for life cover and disability cover respectively.
Similarly, for new program set-up, where no local experience exists, tables would ideally represent the geographical location where the insurance will be provided. However, if such data is not available then a similar geographical location's tables or experience may be used as a best estimate.

To calculate **Life** premiums where the benefit payable is the outstanding balance of the loan, three main sources of data are required:
- Age profile of anticipated population (expresses as a population percentage by age)
- Mortality tables
- Outstanding balance for each month of the life of the loan

Combining these three elements allows a rate to be calculated normally expressed as a percentage of the loan amount or monthly repayment. This rate applies to all insured regardless of age or gender. Separate rates are formulated for different duration of loan agreement.

The calculation of **Disability** premiums follows similar principles. Initially an expected claim cost is calculated using:
- Age profile of anticipated population (expresses as a population percentage by age)
- Morbidity tables
- Profile of sum at risk

Morbidity tables will not allow for propensity to claim. Therefore prudent adjustments should be made to this table to account for this. These adjustments may be based on experience from a similar program.
The profile of the sum at risk will depend on the definition of the cover and the assumed duration of a claim. This is usually the monthly payment amount payable for a maximum period (usually 12 months) or until the loan is repaid if this occurs first. Initially duration assumptions may be prudent estimates or based on a similar program's experience. A single or monthly rate can then be calculated.

In the case of single premium business the premium rates for **Life** and **Disability** may be adjusted to allow for investment income

These rates will be reviewed quarterly by comparing the implied expected experience with actual experience. Deviations of 'expected' from 'actual' shall be quantified and amendments may be made to the existing rates in accordance with the rules and regulations of the region and policy agreements.

Calculation of retention incorporates the costs assumed with running and setting-up of the program. This figure is dependant upon penetration rate assumptions, estimates of volumes sold & cancellations and may change as the experience develops.

Commission is an agreed figure with the broker/agent.

Profit is calculated on a pre determined Internal rate of return required on capital used to support the business.

These four elements:

- **Retention;**
- **Commission;**
- **Profit and**
- **Claim cost**

Combine to give the gross rate payable by the policyholder.

Calculation/estimation of technical reserves

GMAC Life Forsakrings AB will hold two main types of reserves – Premium Reserves and Claims Reserves

Premium Reserves

Premium Reserves are only held for single premium Business. These are required as a single premium is paid to cover claims that may occur at any time over a period of up to 5 years (say). Monthly premiums are earned immediately.

There are two rules that contribute to the calculation of the unearned premium reserves

- Rule of 78
- Rule of 12 (Pro Rata)

Rule of 78

$$\text{Unearned premiums} = \text{Single Premium Paid} \times \frac{t \times (t+1)}{n \times (n+1)}$$

t = term of cover remaining to be provided by the single premium in complete months

n = original term of cover provided by single premium in months

Under Rule of 78 a greater proportion of the premiums are earned earlier in the life of the policy representing a reducing sum at risk in the mature stages. Therefore Rule of 78 is used to calculate premium reserves for ***Life*** cover

Rule of 12

$$\text{Unearned premiums} = \text{Single Premium Paid} \times \frac{t}{n}$$

Rule of 12 can have two uses in the calculation of premium reserves:

1. If a profit share agreement exists then the slower rate of earning under Rule of 12 may be desirable for the payment of profit share.
2. Due to the nature of ***Disability*** cover, it is regarded that Rule of 78 underestimates the sum at risk at the mature stages and Rule of 12 overstates the sum at risk. Therefore a “mean” of Rule of 78 and Rule of 12 is used for the calculation of ***Disability*** premium reserves. This is also known as Rule of 45:

Rule of 45

$$\text{Unearned premiums} = \frac{\text{Unearned premium under Rule of 78} + \text{Unearned premium under rule of 12}}{2}$$

Claim Reserves

Three different types of claim reserves will be held by GMAC Life Forsakrings AB

In Course Of Payment (ICOP):

ICOP reserves cover the expected outstanding payments in respect of claims that are currently being paid

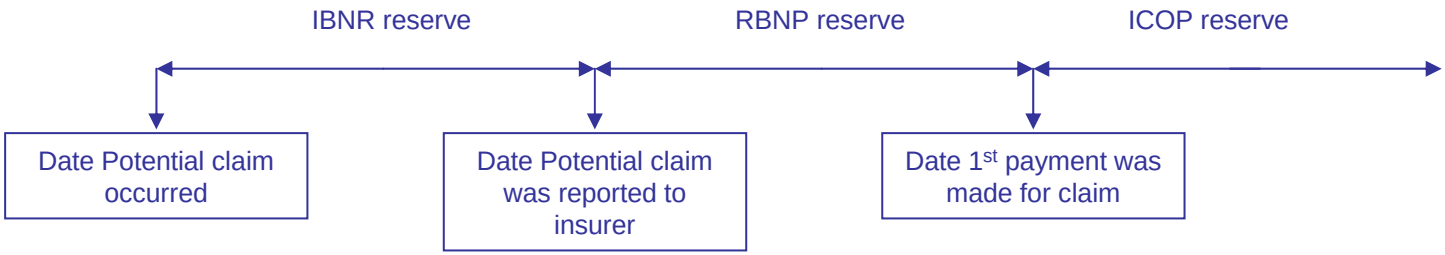
Reported But Not Paid (RBNP):

RBNP reserves cover claims that have been reported but have not yet been paid.

Incurred But Not Reported (IBNR):

IBNR reserves cover claims that have happened but have not yet been reported to us.

Diagrammatically



Claim Reserves

ICOP Reserving

This reserve is held only for disability business. It is calculated for claims in payment as follows:

Monthly benefit payable x Expected outstanding duration of the claim

RBNP Reserving

This reserve is held for each disability claim that is reported and follows a methodology of

Monthly benefit payable x Expected duration of the claim x Expected rejection of reported claims

A reserve will be created for each Life claim reported equal to the total benefits payable.

IBNR Reserving

This reserve is held at program level for Life & Disability business. IBNR reserves are calculated by use of the Bornhuetter-Ferguson Method BF). This method is a combination of the Expected Loss Ratio Method (ELRM) and the Chain Ladder Method (CLM).

The BF method calculates the Expected Ultimate Loss figures (BF-EUL) for Earned Premiums business. Therefore to derive IBNR reserves this figure should be adjusted as follows:

IBNR Reserve = BF-EUL - Paid Losses - ICOP Reserve - RBNP Reserve

See over for a basic illustration

Reserve Review

Reserves will be reviewed quarterly. This will be carried out using a range basis. Ranges are determined by producing indications under three separate scenarios: low, point, and high. For each scenario, factors have been selected after inspecting various averages of the historical development factors (after smoothing out any anomalies).
In general, the factors for the low scenario tend to be the average of the observed factors below the overall average. Factors for the high scenario tend to be the average of the observed factors above the overall average. Based on this process of selection, the indicated reserves do not represent the minimum and maximum possible outcomes.

Overall the carried reserve will target a reserve equal to or marginally above the ‘high’ range results.

Example of BF Method to calculate IBNR-BF

e.g. Claims paid to date from claims incurred in Accident Year 2001

Chain Ladder Method (CLM)

		Lag					CLM-UL	IBNR
		12	24	36	48	60		**CLM**
Accident Year	2000	100	200	300	400	400		
	2001	125	250	375	475	475		
	2002	150	300	450		583		
	2003	200	350			681		
	2004	225				837		
						2976		**1076**
	Link Factors		1.91	1.50	1.30	1.00		
	Ultimate loss Development Factors (DF)		0.73	0.49	0.23	0.00		

Expected Loss Ratio Method (ELRM)

Earned Premiums	Expected Loss Ratio	ELRM Ultimate	IBNR **ELRM**
550	80%	440	40
600	80%	480	5
700	80%	560	110
850	80%	680	330
1000	80%	800	575
		2960	**1060**

Note Claim amounts are cumulative both downward and horizontally

BF Method for calculating Ultimate lloss (BF - UL)

= Claims Paid + [ELRM Ultimate Loss] x DF

	Claims Paid	ELRM Ult. Loss	DF	BF-UL	IBNR **BF**
2000	400	440	0	400	
2001	475	480	0	475	
2002	450	560	0.23	578	
2003	350	680	0.49	680	
2004	225	800	0.73	810	
	1900	2960		2943	**1043**

Note: IBNR – BF needs adjustment for RBNP & ICOP

Repurchase and Mortgage

N/A

Distribution of Refund

Where a program rules allows for a refund of premiums in the event of cancellation after the 'cooling off period' a refund of premiums is given on a pro-rata basis. In these circumstances there will be a shortfall in the Unearned Premium Reserve and therefore a reserve will be set up.

This reserve will equal the product of:

- The calculated shortfall in the Unearned Premium Reserve; and
- The expected cancellation rate

When is reinsurance applicable

All insurance programs will be reinsured via a 90% Quota Share Reinsurance Treaty from the date risk starts.

Maximum Exposure

The maximum exposure to any one insured is £50,000 for life on auto business. This has been reflected in the attached business plan.

Assumed Business

GMAC LF does not intend to carry any Assumed Business. However, in the circumstance where passport-authorisation-delay and renewal date overlap this may create a necessity to insure the renewing program with a third party. This in turn would create a circumstance where it would be desirable for GMAC LF to proportionally reinsure the program with its insurance partner. In the event that a situation such as this arose GMAC LF would advise the FSA accordingly

Solvency

Bonus rights and distribution

Policyholders have no right to receive bonus on these policies

Right for policyholders to surrender, transfer and mortgage

No policies have any connection to such rights