



## Actuarial Valuation Mitchell Cotts Pension Fund

Produced: October 2009  
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## 1. Executive summary

The Mitchell Cotts Pension Fund (the "Fund") was established with effect from 1 July 1972. It is a defined benefit pension fund, with the objective of providing pensions and other benefits for members and their dependants.

This report on the actuarial valuation of the Fund as at 28 February has been prepared in compliance with Section 16 of the Pension Funds Act (the "Act"), which requires that each registered fund shall have its financial condition investigated and reported upon by a valuator.

This report has also been prepared in accordance with the professional guidelines issued by the Actuarial Society of South Africa, PGN 201.

This is the first valuation to be performed by Fifth Quadrant Actuaries and Consultants. The previous statutory valuation was performed by Prof. CJB Greeff as at 1 January 2000.

As this valuation is the first statutory valuation subsequent to the enactment of the Pension Funds Second Amendment Act, 28 February 2002 is also the surplus apportionment date of the Fund.

### 1.1 Financial Status of the Fund allowing for the Contingency Reserve Accounts

In respect of past service, the value of the accrued service actuarial liability is compared with the fair value of the assets at the valuation date.

The accrued service actuarial liability is the amount of money that is required in the Fund at the valuation date to fund existing pensions, with allowance for future pension increases.

The difference between the fair value of the assets and the accrued service actuarial liability is the surplus or, if negative, the deficit at the valuation date. The valuation revealed a surplus of R34.78 million and is made up as follows:

Fair value of assets	78 648 468	53 571 000
Plus improper use of surplus	628 899	Nil
Adjusted fair value of assets	79 277 367	53 571 000
Less accrued actuarial liability	(41 631 605)	(35 335 000)
Less solvency reserve	(1 745 749)	(Nil)
Less surplus expense reserve	(1 121 522)	(Nil)
<b>Actuarial surplus after establishing contingency reserves and surplus allocations</b>	<b>34 778 491</b>	<b>18 236 000</b>

### 1.2 Contribution Rate

There were no in-service members at the valuation date and as a result no further contributions are required.

## 2. Background

### 2.1 Previous valuation

The previous statutory valuation of the Fund was carried out as at 1 January 2000. That valuation revealed a past service surplus of R18 236 000 based on the best estimate actuarial liabilities and the actuarial value of assets, with a corresponding solvency ratio of 151.6%.

The required employer contribution rate, without allowing for the past service surplus in the Fund, was 29.4% of pensionable salaries. The valuator recommended that the employer continue with the contribution holiday on the basis of the large surplus.

### 2.2 Current valuation

This report sets out the results of the actuarial valuation of the Fund as at 28 February 2002, on the basis of the registered rules in force as at that date. A summary of the benefits is set out in Annexure I. The membership data used in the valuation is summarised in Annexure II.

### 2.3 Purposes of the valuation

The main purposes of the valuation are:

- to examine the financial position of the Fund, both for the purposes of the surplus apportionment required in terms of section 15B of the Act and in respect of the provision of future pensions for existing pensioners;
- to advise the Liquidator on the need for and level of contingency reserves.

### 2.4 Membership and data

As at the previous valuation date there were 6 active members in the Fund. Of these 6 members, only 2 have received benefits in the form of a pension from the Fund. We have been informed by the Liquidator that the remaining 4 members have forfeited their benefits. We have accordingly ignored these former members for the purposes of this valuation.

The two members that received benefits are RE and SA Bailey and the actuarial liability in respect of these members has been set with reference to the settlement reached between the members and the Liquidator.

The balance of the membership consists only of pensioners (including spouses and children) in receipt of pensions from the Fund. The data in respect of these members have been supplied by the current administrator and we have reconciled the data at the valuation date to the pension payments currently being made to pensioners. We are therefore satisfied that the data is materially correct.

### 2.5 Amendment of the Fund rules

The rules of the Fund were revised with effect from 1 December 2000 (registered by the Registrar of Pension Funds on 6 April 2001). The revised rules make provision for:

- The consolidation of previous amendments.
- Changes in legislation.

- Removal of the exemption from audit requirements.
- A change in the registered office of the Fund.
- A change in the period over which final salary is averaged from 24 months to 12 months.

The revised rules were amended with effect from 1 April 2001 (adopted by a resolution of the Trustees dated 7 August 2002 and registered by the Registrar of Pension Funds on 29 May 2003) to provide for:

- The delayed appointment of Alexander Forbes as administrator from the date originally planned of 1 December 2000 to the actual date of change of 1 April 2001.
- A change in financial year end to the last day of February each year.
- Further changes in legislation.
- Restriction in the death benefits payable in certain circumstances.

The rules will need to be amended to provide for the requirements of the Act in respect of contingency reserve accounts and member surplus account.

## 2.5 Pension increases

Over the period since the previous valuation, the following pension increases were granted:

- 1 March 2000            5.00%.
- 1 March 2001            5.40%.
- 1 March 2002            6.00%.

The liability in respect of the Fund's pensioners takes into account the above pension increases awarded, including the increase at the valuation date.

## 2.6 Reassurance of death benefits

The benefit payable on the death of a pensioner is not covered by any policy of insurance, but rather forms part of the members' actuarial reserve value, i.e. the benefit is funded for in the past service liability.

However in view of the small size of the benefit I do not believe that it is necessary to effect any reassurance in this regard.

## 2. Post Valuation Date Events

The effective date of the valuation is also the surplus apportionment date of the Fund. Normally, the financial position of the Fund would be established as at this date and the resultant surplus apportioned in terms of the Act. In other words, both the liabilities and assets are priced as at the surplus apportionment date with little, if any, account being taken of subsequent events.

In the case of the Fund, there have been significant events after the surplus apportionment date. Following an inspection by the Financial Services Board it has been established that certain amounts were illegally transferred out of the Fund prior to the surplus apportionment date. The Fund has been placed into liquidation and the Liquidator has managed the process of the recovery of the amounts illegally removed from the Fund.

In order to reflect the intention of the surplus legislation it is considered necessary to take account of the financial impact of the actions taken by the Liquidator in the determination of the actuarial value of assets and liabilities used for the purposes of this valuation.

Our comments in respect of the various items that need to be taken into account are as follows:

### 2.1 Employer contributions

A contribution was received from the employer, Mitchell Cotts (Pty) Ltd, described in the employer's 31 December 2005 financial statements as follows:

"The company did not contribute to the Mitchell Cotts Pension Fund for all active members. This was in contravention of the Pension Funds Second Amendment Act. Any contribution holiday taken after December 2001 is deemed improper use of surplus and must be repaid by the employer. As part of the funds surplus apportionment exercise, R800 000 was paid in February 2005"

The total required future service employer contribution rate as at the previous valuation date was 29,4% of pensionable salaries, but with a reported funding level of 151,6%, the valuator recommended that the employer continue with a contribution holiday until the next statutory valuation.

A contribution holiday is defined in terms of the Act as follows:

"in relation to a defined benefit category of a fund, means the payment by the employer of less than the contribution rate the valuator recommends be payable by the employer, taking into account the circumstances of the fund and ignoring any surplus or deficit."

Improper use should therefore be calculated as the value of 29,4% of in-service member salaries as from 7 December 2001 up until the date of exit of these members.

As stated before in this report, as at the previous valuation date there were 6 active members in the Fund. Of these 6 members only 2 have received benefits from the Fund. We have been informed by the Liquidator that the remaining 4 members have forfeited their benefits.

We understand that there is some doubt as to the legitimacy of the membership of the members concerned. It is also apparent that the salary data supplied by the administrator in respect of the 6 members cannot be relied upon. It is therefore not possible to quantify the value of the improper use of surplus as stipulated in the Act.

Subsequent to the surplus apportionment date the employer has been placed under liquidation and it is unlikely that any further recoveries will be made.

In the circumstances we believe that it is not unreasonable to regard the value of the contribution of R800 000 made in February 2005 discounted with interest to the surplus apportionment date as the value of the improper use of surplus arising from this source even though 4 of the members concerned will not receive any benefits from the Fund. The discounted value (R628 899) should therefore be added to the value of the Fund's assets at the valuation date.

## 2.2 Asset recovery

Subsequent to the Fund being placed into liquidation the Liquidator has made substantial recoveries from various parties. At the same time expenses have been incurred in the recovery process (including legal fees, forensic service fees and liquidation expenses) and a settlement agreement reached with RE and SA Bailey.

The net amount of the asset recovery, after allowance for the expenses incurred in the process is estimated to be R29 132 900. The discounted value of this net recovery has been included in the actuarial value of the assets used for the purposes of this valuation.

The amount of pensions paid to RE and SA Bailey together with that used to purchase pensions in respect of these pensioners amounted to R9 280 115. The discounted value of payments have been included in the actuarial liability used for the purposes of this valuation

## 2.3 Future litigation

The process of recovery of further amounts is still being pursued by the Liquidator. Any further recoveries made will be added to the amount of surplus to be apportioned in terms of Section 15B of the Act and it is therefore reasonable to provide for the expenses associated with future recoveries and the ongoing expenses of the Fund whilst the recovery process is underway. The amount is estimated to be R6 525 000 and the discounted value thereof has been deducted from the actuarial value of assets used for the purposes of this valuation.

## 2.4 Fund experience

Besides the above items which, we believe, relate directly to the recovery of assets, the experience of the Fund between 1 March 2003 and 28 February 2009 has differed from the assumptions inherent in the valuation basis adopted (including the strengthening of the assumptions in terms of the solvency basis).

In particular:

- The expenses of the Fund (including reinsurance premiums paid) have exceeded the allowance made in the valuation assumptions.
- The mortality of pensioners has been lighter than assumed.
- The pension increases granted to pensioners have been less than the allowance made in the solvency basis assumptions. Over the 7 years to 28 February 2009 the accumulated total of pension increases amounts to some 80.45%. The accumulated total of excess investment returns (ie gross investment returns actually earned less expected net post retirement returns) amounts to some 87.2% over the same period. In effect therefore an additional 3.74% of pension increases should have been awarded to pensioners.

I have carried out an approximate valuation as at 28 February 2009 and, after allowing for a further increase to pensioners of 3.74% and for the award to former members and pensioners in terms of the surplus apportionment scheme to be lodged with the Registrar of Pension Funds in terms of section 15B

of the Act, the liabilities of the Fund (on the basis of the solvency assumptions adopted for this valuation) exceed the assets of the Fund by some R6.2 million.

Note that the required solvency margin has strengthened significantly between 2002 and 2009 and this has not been included in the above result.

In view of the fact that this valuation allows for post valuation events I believe that all such events should be allowed for and that the actuarial liability at this valuation date should be increased by the discounted value of the deficit of R 6.2 million referred to above.

## 2.5 Surplus apportionment expenses

Certain expenses incurred between 2002 and 2009 are considered integral to the surplus apportionment exercise. The amounts involved are as follows:

Actuarial fees	503 682
Surplus apportionment expenses	149 294
	<b>652 976</b>

The discounted value of these should be included in the contingency reserve account established to cover the expenses of the surplus apportionment.

## 2.6 Discounted values and summary

The investment returns earned on the assets of the Fund between the valuation date and 28 February 2009 were derived from the estimated value of the assets held each month and the return earned during each month in respect of the asset in question. In respect of the Guaranteed Fund investment, the final declared rates of bonus (including that as at 30 June 2009) were used.

The monthly rates so calculated were adjusted so that the total return for each year was equal to the internal rate of return calculated from the annual financial statements, after adjustment for the final bonus declared in respect of the Guaranteed Fund.

In cases where the date of payment of a particular item was not known, the payment was assumed to be uniformly spread over the financial year concerned. Application of these discount rates results in the following:

Employer contributions	800 000	628 899	Improper use
Asset recovery	29 132 900	24 228 815	Actuarial value of assets
Bailey pensions	(9 280 115)	(5 782 684)	Actuarial liability
Future litigation	(6 525 000)	(2 693 774)	Actuarial value of assets
Post valuation experience	(6 200 000)	(2 559 601)	Actuarial liability
Surplus apportionment expenses	(652 976)	(357 770)	Contingency reserve
<b>Net financial impact</b>	<b>7 274 809</b>	<b>13 463 885</b>	

In effect therefore, the post valuation date events add R13 463 885 to the amount of actuarial surplus available for apportionment in terms of section 15B of the Act.

I believe that process described above achieves an equitable apportionment of the assets of the Fund between the current pensioners (in terms of the assets set aside to provide for future pension payments) and the other stakeholders in the surplus apportionment process.

### 3. Valuation Bases

#### 3.1 Assets of the fund

The fair value of the Fund's assets, taken from the audited financial statements (adjusted as described above and below) is broken down as follows:

<b>Investments</b>		<b>57 057 780</b>	<b>72.0%</b>
Guaranteed Fund	46 736 536		
Final bonus	1 202 744		
Old Mutual Shares	9 118 500		
<b>Current Assets</b>		<b>165 936</b>	<b>0.2%</b>
Cash at bank	163 968		
Accounts receivable	1 968		
<b>Current Liabilities</b>		<b>(110 289)</b>	<b>(0.2%)</b>
Accounts payable	(110 289)		
<b>Recovery adjustments</b>		<b>21 535 041</b>	<b>27.2%</b>
Asset recovery	24 228 815		
Future litigation	(2 693 774)		
<b>Improper use of surplus</b>		<b>628 899</b>	<b>0.8%</b>
Contribution holiday	628 899		
<b>Total</b>		<b>79 277 367</b>	<b>100.00%</b>

The Guaranteed Fund Policy value includes the value of interim bonuses declared by Old Mutual. We have added R 1 202 744 to the value reflected in the financial statements to reflect the final bonuses declared by Old Mutual for the period in question.

The assets have been valued at fair value since this is considered to be consistent with the best estimate valuation basis adopted for the valuation of the actuarial liabilities.

#### 3.2 Structure of assets

The Liquidator of the Fund is responsible for the investment of the Fund's assets, and needs to ensure that the investment strategy of the Fund remains appropriate given the nature of the Fund's liabilities.

In addition, circular P.F. 71 issued by the Registrar of Pension Funds requires the actuary to comment on the appropriateness of the Fund's investment strategy relative to the liabilities as part of the valuation report.

The Fund has been under liquidation since 30 September 2005, and the only liabilities left are those in respect of the pensioners as well as surplus payments owed to former members.

Given that the Old Mutual shares have been sold subsequent to the valuation date, I confirm that I am satisfied with the structure of the assets of the Fund and that the matching of the assets with the liabilities at the valuation date is, in my opinion, adequate. It will be necessary to purchase pensions from a registered insurer at some stage in the future and I recommend that this course of action be investigated.

### 3.3 Liabilities of the fund

The present value placed on future liabilities of the Fund depends on the assumptions made concerning pension increases that will be granted to pensioners, investment returns on the Fund's assets and the mortality experience of pensioners. The assumptions made in the valuation of the Fund are set out in Annexure III.

### 3.3 Pension increase policy

The liabilities in respect of pension payments were valued at a rate of 4.50% per annum (5.0% at previous valuation).

The allowance for pension increases depends on the reasonable benefit expectations of members and on the pension increase policy adopted and implemented by the trustees in accordance with the requirements of section 14B(3) of the Pension Funds Act. The liquidator has set a pension increase policy that targets 100% of the increase in the CPI.

## 4. Valuation Results

The accrued actuarial liabilities are set out in detail in Annexure V. Details of the contingency reserve accounts established below are set out in Annexure IV, with the calculation of the amount of the solvency reserve set out in Annexure VI.

### 4.1 Financial Status of the Fund allowing for the Contingency Reserve Accounts

In respect of past service, the value of the accrued service actuarial liability is compared with the fair value of the assets at the valuation date.

The accrued service actuarial liability is the amount of money that is required in the Fund at the valuation date to fund existing pensions, with allowance for future pension increases.

The difference between the fair value of the assets and the accrued service actuarial liability is the surplus or, if negative, the deficit at the valuation date. The valuation revealed a surplus of R34.78 million and is made up as follows:

Fair value of assets	78 648 468	53 571 000
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Less solvency reserve	(1 745 749)	(Nil)
Less surplus expense reserve	(1 121 522)	(Nil)
<b>Actuarial surplus after establishing contingency reserves and surplus allocations</b>	<b>34 778 491</b>	<b>18 236 000</b>

### 4.2 Contribution Rate

There were no in-service members at the valuation date and as a result no further contributions are required.

## 5. Inter-valuation Experience

The changes in the valuation basis compared to the previous basis include the following:

- the post-retirement mortality was changed to the PA(90) mortality tables with lives rated down 2 years, to allow for improvement in future mortality (previously a(55) rated down 3 years);
- as an allowance for pension expenses, a provision for R22.80 per month per member has been included (previously nil); and
- liabilities in respect of pension payments were valued at a rate of 4.5% per annum (previously 5.0%).

The impact of the change in valuation basis and the creation of contingency reserve accounts results in an actuarial strain as follows:

Mortality	387 090
Discount rate	1 171 956
Expense provision	349 862
Surplus expense reserve	1 121 522
Solvency reserve	1 745 749
	<b>4 776 179</b>

Even if a valuation is performed on exactly the same basis as was adopted at the previous valuation date, it is to be expected that a surplus or deficit will arise during the inter-valuation period, due to the actual experience of the various factors affecting the Fund differing to some extent from those assumed when assessing the required contribution rate and in calculating the liabilities at the previous valuation date.

It has not been possible to carry out an analysis of surplus since all of the required information is not available.

## 6. Certification

I certify that:

- The value of the assets of the Fund is sufficient to cover the accrued actuarial liability at the valuation date and therefore the Fund is financially sound;
- The financial condition of the Fund has been assessed by considering the assets of the Fund in relation to its liabilities based on best estimate assumptions. In addition, the amount of a solvency reserve to allow for some fluctuations in asset values and unexpected changes in liabilities has been determined;
- The Fund has sufficient assets to cover its liabilities plus the full amount of the solvency reserve at the valuation date. There is an actuarial surplus of R34.78 million after provision for these amounts.
- Given that the valuation is of necessity based on assumptions regarding the future, the assessed value of the liabilities and contingency reserves may prove to be more or less than is required in practice. However, given that the required contingency reserves can be fully set up at the valuation date, this decreases the chances that a deficit may arise in future.
- If the liabilities and the amount of the contingency reserves set up prove to be inadequate in future, Liquidator action will be required to rectify the position. This may involve, *inter alia*, the suspension of future pension increases.
- In particular, due to the reduction in the yield applicable to index linked bonds, it will not be possible to establish the full contingency reserve as at 28 February 2009.
- Subject to the above, the financial soundness of the Fund should be maintained until at least the next statutory actuarial valuation of the Fund, which should be no later than 28 February 2005.

I also certify that:

- I am satisfied with the structure of the assets of the Fund and that the matching of the assets with the liabilities is, in my opinion, adequate.

Signature:

Date:




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28/10/2009

Name	Colin Southey
Qualifications:	Valuator B. Sc. FIA
Name of Employer:	Fifth Quadrant
Position:	Director
Address:	1 <sup>st</sup> Floor 44 Melrose Boulevard Melrose Arch, 2196

## Annexure I: Summary of Benefits

Pensions in payment	<p>As stated previously in this report there were no in-service members as at the valuation who are entitled to benefits from the Fund.</p> <p>The benefits valued are the pensions payable to existing pensioners (including pensioners, spouses of deceased pensioners, spouses of deceased members and dependent children of deceased members) and, where applicable, the contingent pensions payable to the spouses of existing pensioners.</p> <p>All pensions are payable during the lifetime of the pensioner and in certain cases there is a continuation to the spouse on the death of the pensioner.</p> <p>Pensions payable in respect of children are payable as long as they remain dependent but to a maximum of age 25 years if still in full-time education.</p> <p>A lump sum benefit of R500 is payable on the death of a pensioner.</p>
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## Annexure II: Summary of Membership

## Pensioner Data as at 28 February 2002



63 – 67	2	5 136
68 – 72	9	59 429
73 – 77	17	35 975
78 – 82	25	76 719
> 82	16	21 508
<b>Total</b>	<b>69</b>	<b>198 767</b>



< 58	7	13 114
58 – 62	2	8 390
63 – 67	7	5 550
68 – 72	12	10 616
73 – 77	21	26 396
78 – 82	23	26 796
> 82	13	12 902
<b>Total</b>	<b>85</b>	<b>103 764</b>



All	4	2 153
<b>Total</b>	<b>4</b>	<b>2 153</b>

The monthly pensions reflected above include the allowance for expenses of R22.80 per month and the 6% increase awarded on 1 March 2002.

## Annexure III: Valuation Basis Adopted

### 1. Investment Returns and Pension Increases

Historically the Fund has been valued using traditional actuarial methods and assumptions. These methods assume, inter alia, that an "equity risk premium" will continue to apply and that the fair value of assets needs to be adjusted to achieve consistency between the assumptions used to calculate the value of the liabilities and the value of the assets.

In line with a move to fair value accounting, it is becoming the practice to use the fair value of assets and consequently, to derive assumptions used in the calculation of the value of liabilities that reflect market conditions at the valuation date. It has also become more common for the investment return assumptions to ignore the possibility of an equity risk premium and to be based on risk free returns available in the market at the valuation date. The method of derivation of the basis has thus changed from the previous statutory valuation.

The financial assumptions adopted have been set as follows:

Long-term inflation	7.50%
<b>Pensioners</b>	
Long-term investment return (A)	12.33%
Gross return on long term gilts	12.03%
Corporate bond premium	0.30%
Pension increases (100% of long term inflation) (B)	7.50%
<b>Net valuation rate for pensioners [(1+A) / (1+B)] -1</b>	<b>4.50%</b>

For the purposes of the above calculations the yields on the R186 and R197 stocks were used since the term to maturity of these stocks reflects the long-term nature of the liabilities.

The allowance for future inflation is the difference between the nominal and index linked bonds' effective annual yields, viz. {12.03% - 4.53%} = 7.50%.

A comparison of the valuation bases used at the current and previous valuation dates is thus:

Discount rate	12.33% pa	12.00% pa
Pension increase rate	7.50% pa	6.66% pa
Net post-retirement discount rate	4.50% pa	5.00% pa

It can be seen from the above table that the net post-retirement discount rate has decreased, resulting in an increase in the best-estimate liabilities, all else being equal.

### 3 Pension Increases

The liabilities in respect of pension payments have been discounted at a rate of 4.50% per annum.

The allowance for pension increases depends on the reasonable expectations of pensioners and on the pension increase policy adopted and implemented in accordance with the requirements of section 14B(3) of the Pension Funds Act. The pension increase policy targets pension increases of 100% of the increase in the consumer price index, subject to the affordability thereof.

### 5. Demographic Assumptions

In respect of the period after retirement, the PA90 (rated down two years) tables for males and females respectively were used. This assumption has changed from the previous valuation, where the a(55) tables (rated down three years) were used.

The actual ages of the pensioners and spouses were used and it was assumed that the childrens' pensions would continue until the age of 25 years.

## Annexure IV: Contingency reserves

The Act allows the Liquidator to set up such contingency reserves as he deems prudent based on the advice of the actuary. We have set out the methodology used to determine the value of the solvency reserve.

### Solvency reserve

I recommend that the Liquidator should establish a solvency reserve to give protection against investment and mortality risks.

The lowest risk investment strategy would be to match the pensioner liabilities using index-linked bonds. The investment risk contingency reserve should therefore be set relative to the cost of implementing such a strategy.

Accordingly, the solvency reserve has been calculated as the difference between:

- The past service liabilities calculated on the assumption that the Fund has implemented a matched investment strategy including an allowance for adverse future mortality experience; and
- The past service liabilities calculated on the realistic valuation basis.

In effect the solvency reserve represents the difference in past service liabilities on a conservative basis (to protect the long term solvency of the Fund and meet the reasonable benefit expectations of pensioners) and the liabilities on a realistic basis.

The provision of a solvency reserve on this basis is consistent with Circular PF 117 issued by the Financial Services Board in July 2004.

At the valuation date index-linked bonds were trading at an average yield of 4.53%. The average yield on long dated gilts at this date was 12.03%.

The maximum allowance for future inflation when determining the solvency reserve is the difference between the nominal and index linked bonds yields viz.  $\{12.03\% - 4.53\% = 7.50\%$ .

For the purposes of the above calculations the yields on the R186 and R197 stocks were used since the term to maturity of these stocks reflects the long-term nature of the liabilities.

An allowance is made in the solvency valuation basis for the costs of implementing and maintaining the matched investment strategy of 0.5%. This allowance is the maximum permitted in terms of PF 117. The solvency valuation basis is thus as follows:

Long-term inflation	7.50%
<b>Pensioners (and in-service members after retirement)</b>	
Long-term investment return (A)	11.53%
Gross return on long term gilts	12.03%
Cost of implementing and maintaining matched strategy	(0.50%)
Pension increases (100% of long term inflation) (B)	7.50%
<b>Net valuation rate for pensioners [(1+A / (1+B)] -1</b>	<b>3.75%</b>

For the solvency basis an adjustment has been made to the mortality assumptions in the valuation basis to reflect the assumed basis that would be used by an insurer for the relevant non-profit arrangements. For this purpose it has been assumed that the best estimate assumptions should be adjusted to allow for a 7.5% aggregate improvement in the mortality rates after retirement.

#### Surplus expense reserve

It is necessary to set up a reserve to allow for the expected expenses that will be incurred in the surplus apportionment process. Details of expected future costs are as follows:

	<b>Estimated costs</b>
Improper use investigation and quantification	R68,400.00
Former member data sanitization	R57,000.00
Minimum benefit calculations	R285,000.00
Minimum pension calculations	R114,000.00
Call centre registrations & substantiations	R3,420.00
Tracing	R210,053.66
Communicate SAS results to all individuals with contact	R45,663.84
Dealing with objections	R11,400.00
Develop SAS	R57,000.00
Prepare & submit SAS in prescribed format	R17,100.00
FSB Levy	R15,000.00
Trustee & financial reporting on benefit payment	R114,159.60
Prepare and submit letters to qualifying members	R66,973.63
Collate and validate payment instructions and key	R106,548.96
Former member data load and maintenance	R190,266.00
Former member benefit payments	R273,983.04
Former member representative	R75,000.00
Communication to non qualifying stakeholders	R46,899.60
Implementing & managing surplus payment processes	R28,500.00
OMAC Various	R63,631.66
<b>Total</b>	<b>R1 850 000</b>

The value of the expected costs discounted to the surplus apportionment date is R763 752 to which must be added the discounted value of the expenses already incurred amounting to R357 770. The total surplus expense reserve thus amounts to R1 121 522. The amount of this reserve will be reassessed at the time of approval of the surplus apportionment scheme on the basis of actual expenses incurred and the amount of surplus available for apportionment adjusted as required.

## Annexure V: Summary of Liabilities

**Accrued service actuarial Liabilities (Best estimate basis)**

<b>Active member liability</b>		<b>5 782 684</b>
Pensions paid to RE and SA Bailey	2 790 650	
Pensions purchased in respect of RE and SA Bailey	2 992 034	
<b>Pensioner liability</b>		<b>33 289 320</b>
Males	20 787 537	
Females	12 278 009	
Children	172 283	
Lump sum payable on the death of a pensioner	51 491	
<b>Experience adjustment</b>	<b>2 559 601</b>	<b>2 559 601</b>
<b>Total past service liabilities</b>		<b>41 631 605</b>

## Annexure VI: Solvency Reserve Details

## Accrued service actuarial liabilities (Solvency basis)

<b>Active member liability</b>		<b>5 782 684</b>
Pensions paid to RE and SA Bailey	2 790 650	
Pensions purchased in respect of RE and SA Bailey	2 992 034	
<b>Pensioner liability</b>		<b>35 035 069</b>
Males	21 852 320	
Females	12 957 068	
Children	170 827	
Lump sum payable of the death of a pensioner	54 854	
<b>Experience adjustment</b>	<b>2 559 601</b>	<b>2 559 601</b>
<b>Total past service liabilities</b>		<b>43 377 354</b>

## Accrued service actuarial liabilities (Best estimate basis)

<b>Total Past Service Liabilities (see Annexure V)</b>	<b>41 631 605</b>
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## Solvency reserve required

<b>Required Solvency reserve (item 1 – item 2)</b>	<b>1 745 749</b>
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