Executive Summary

Actuarial Valuation

of the

Cape Joint Pension Fund

as at

30 June 2013

prepared by

Momentum Specialised Solutions

22 November 2013

Executive summary

I take pleasure in presenting to the Trustees of the Cape Joint Pension Fund (the Fund) the results of the actuarial valuation of the Fund as at 30 June 2013.

The purpose of this executive summary is to set out the principles and results of the valuation. This summary considers the financial year ending 30 June 2013.

1.1 Summary statistics

	30 June 2013	30 June 2012
Active members		
DB Section		
Number	1 027	1 119
Annual pensionable salaries (Rm) [1]	171.4	170.6
Salary weighted average age (years)	50.6	50.0
Salary weighted average service (years)	23.6	22.7
Paid-up members (deferred/Sec 197)	1	2
DC Section		
Number	726	741
Annual pensionable salaries (Rm)	120.5	113.7
Salary weighted average age (years)	47.3	47.3
Salary weighted average service (years)	17.4	16.8
Pensioners (including deferred pensioners)		
Number	4 709	4 933
Annual pension (Rm)	199.8	202.79
Average pension (R)	42 432	41 108
Pension weighted average age (years)	74.3	73.7

1. The salary data supplied by Verso Financial Services was adjusted to allow for a salary increase of 6.84% effective 1 July 2013.

1.2 Statistics over the inter-valuation period (DB Section)

DB Section	Average % p.a.
Contribution rates	
- Local Authorities	23.06
- members	9.00
Yield on the assets of the DB Section	
- year ending 30 June 2013 based on market value	20.53
Salary increases	
- year ending 30 June 2013	10.08
Inflation	
- CPI for year ending 30 June 2013	5.50
Pension increase	
- effective 1 January 2013	3.00

With effect from 1 February 2012, the Fund required the Local Authorities to contribute at the recommended rate of 23.06% of salaries per the previous statutory actuarial valuation as at 30 June 2009. The contribution rate was 18% of salaries up to 31 January 2012 and was increased to 23.06% from 1 February 2012.

A number of Local Authorities have not contributed at the required rate. The outstanding contributions have been accrued for as amounts owing to the Fund.

1.3 Financial condition of the Fund

The valuation methodology was changed from an actuarial value approach at the previous valuation to a market value approach at the current valuation date. The actuarial value of the assets represents a smoothed long term value of the assets using a discounted cash flow valuation. The value of the liabilities is determined in a consistent manner to the value of the assets using long term assumptions. The market value represents the discontinuance basis i.e. broadly the position if the Fund were to wind up on the valuation date (ignoring termination expenses).

At the previous valuation date, the value of the assets included the value of the Rule 17(5) claim as impaired. At the current valuation the outstanding amount of the claim was fully impaired. A reserve is proposed for the value of amounts already paid into the Fund for Rule 17(5) in view of the Funds proposals to credit these amounts back to the employers as part of the restructuring process.

Financial condition DB Section	30 June 2013 R 000	30 June 2012 R 000
	Market Value excl. Rule 17(5)	**Actuarial Value incl. Rule 17(5)**
Value of DB Section assets	3 226 863	3 014 878
Rule 17(5) amounts paid [1]	38 094	-
Pensioner Account		
Value of assets	1 967 000	-
Pensioner liabilities	(1 967 000)	(1 881 659)
Solvency reserve [2]	0	-
Surplus	**0**	**-**
Funding level (Pensioner Account) [3]	**100.0%**	**-**
DB active members		
Value of assets	1 221 769	-
Active member liabilities [4]	(1 231 473)	(1 151 245)
Paid-up members	(326)	(261)
Surplus / (deficit)	**(10 030)**	**(18 287)**
Funding level (DB active members) [4]	**99.2%**	**-**
Overall funding level (DB Section)	**99.7%**	**99.4%**

1. Rule 17(5) amounts actually paid to the Fund amounted to some R38 million as at 30 June 2013. The Trustees resolved not to include any interest to these amounts for the purpose of the valuation.
2. The valuation is based on best estimate assumptions. An optimal solvency reserve of some R500 million would be required to protect the Fund from adverse future experience. The solvency reserve has been limited to zero so as not to increase the deficit. This is in line with the principles of PF Circular 117.
3. The funding level is determined by dividing the value of the assets by the past service liabilities plus the solvency reserve.
4. The active member liabilities are shown at actuarial value at both the previous and current valuation dates using the 30 June 2012 valuation assumptions. This in line with the terms of the proposed conversion to the defined contribution arrangement.

The Trustees resolved to ring-fence the pensioner assets as at 30 June 2013. A separate pensioner account is to be established in terms of draft rule amendment 20. The Trustees resolved that the opening balance of the pensioner account shall be the market value of the pensioner liability as at 30 June 2013.

The value of the DB active member liabilities does not include the impact of backdated salary increases that might arise following the outcome of any legal disputes.

The financial condition of the DC Section was as follows:

Financial Condition DC Section	30 June 2013 Interest 24.42% p.a. R 000	30 June 2012 Interest 9.58% p.a. R 000
Market value of assets	483 618	421 900
Members' Shares	(484 405)	(400 669)
Investment Reserve	(787)	21 231
Funding level (DC Section)	**99.8%**	**105.3%**

An investment return of 18.45% p.a. was earned on the DC Section for the year ending 30 June 2013. In addition, the Investment Reserve was distributed by means of a special bonus of 5% of Members' Shares. The total allocation to Members' Shares amounted to 24.42% for the year ending 30 June 2013.

A slight shortfall of R787 233 in the DC Section to actual expenses exceeding the allocation towards expenses and the impact of the timing of cashflows on investment returns allocated. The shortfall may be eliminated by a negative investment return allocation to Members Shares of -0.2%.

1.4 Future service contribution rate (DB Section)

The recommended future service contribution rate in the DB Section is made up of several elements:

- a special contribution to fund for any past service deficit, if applicable
- a contribution to fund the accrual of benefits and expenses over future service
- the cost of death benefits
- an allowance for expenses of the Fund.

The required contribution rate based on the Attained Age method of funding is summarised as follows:

Future service contribution rate (DB Section)	**30 June 2013 % of salaries**	**30 June 2012 % of salaries**
Future service benefits		
Retirement benefits [1]	31.31	31.05
Death and withdrawal benefits [2]	2.79	2.90
Expense allowance [3]	1.67	1.67
Total contribution	35.77	35.62
Less: member contributions	(9.00)	(9.00)
Recommended Local Authority contribution rate [4]	**26.77**	**26.62**
Average current Local Authority contribution rate	23.06	23.06
Over/(under) provision	(3.71)	(3.56)

1. The future contribution rate makes an allowance for post-retirement expenses.
2. Reinsurance premiums are not included in the required contribution rate, since it already funds for death benefits. Reinsurance premiums are offset against reinsurance recoveries as an 'outside bet' which results in a source of surplus or strain depending on the claims experience.
3. The expense allowance is based on the active members' share of actual expenses split in proportion to the number of active members and pensioners.
4. The Attained Age method of funding provides for a level of surplus to build up to help offset increases in future service costs as the membership ages.

1.5 Allocation of contributions (DC Section)

Contributions towards expenses and the costs of risk benefits are deducted from the Local Authorities' contribution rate to arrive at the percentage which is available for retirement benefits as follows:

Allocation of contributions at 30 June 2013 (DC Section)	**Total**	**Option A**	**Option B**	**Option C**	**Option D**	**Over age 60**
Number of members	726	304	301	36	85	0
% of membership	100.00	41.87	41.46	4.96	11.71	0.00
Annual payroll (Rm)	120.53	49.08	47.00	6.73	17.72	0.00
Contributions as a percentage of payroll						
Local Auth. contribution	18.00	18.00	18.00	18.00	18.00	18.00
Less:						
Death & disability	(4.09)	(5.00)	(5.00)	(2.00)	(0.00)	(0.00)
Funeral	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Expense allowance	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)	(1.39)
Net Local Auth. contribution	12.34	11.43	11.43	14.43	16.43	16.43
Plus:						
Member contribution:						
- Contract Employees	7.50	7.50	7.50	7.50	7.50	7.50
- Other members	9.00	9.00	9.00	9.00	9.00	9.00
Available for retirement:						
- Contract Employees	**19.84**	**18.93**	**18.93**	**21.93**	**23.93**	**23.93**
- Other members	**21.34**	**20.43**	**20.43**	**23.43**	**25.43**	**25.43**

The expense allowance of 1.39% of salaries was not sufficient to meet the allocation of expenses to the DC Section. This resulted in a slight cost over-run of R203 031 which was met from the assets of the Fund. The Trustees should consider whether to increase the expense allowance in the DC Section.

1.6 Annual pension increase

The pension increase policy of the Fund is as follows:

- *annually perform a review to target a pension increase of 60% of CPI effective 1 January but based on CPI to the preceding 30 June (subject to affordability as determined by the Actuary having regard to investment returns), including the value of any bonus;*

- *every three years perform a catch-up exercise to increase pensions to 100% of CPI since the date of retirement, subject to the value of the notional pensioner account and affordability.*

The pension increase that could be derived from the average investment yield is as follows:

	Yields based on market value of assets
	% p.a.
Average yield over the 3-years to 30 June 2013	11.70
Less: post-retirement interest assumption	(5.34)
Maximum pension increase which can be supported from investment returns	6.36
Target pension increase (60% of CPI)	**3.30**

The pension increase policy means that the Fund targets increases of 60% of CPI. Based on the CPI for the year ending 30 June 2013, the pension increase target is 3.30%. The investment returns achieved over the 3-year period ending 30 June 2013 indicate that the Fund is able to afford to grant a pension increase in line with the pension increase policy (equivalent to 60% of inflation). Cognisance should be taken of the overall affordability of the Fund to increase benefits. As the funding level of the pensioner account at the valuation date was 100% after allowing for the full impairment of Rule 17(5), the Trustees should be cautious about the level of pension increase granted.

A pension increase of up to 3.3% may be recommended which is in line with the pension increase policy.

1.7 Restructuring proposals

The Fund is investigating restructuring proposals including conversion of DB active members to a DC arrangement.

The conversion to a DC arrangement would eliminate the future contribution rate shortfall. Due consideration must be given to ensure that the pensioner liability continues to be appropriately funded and that pensioners reasonable benefit expectations are met. The pensioner assets have been ringfenced as at 30 June 2013 based on the market value of the pensioner liability.

1.8 Matching the pensioner liabilities

The Fund established a portfolio to better match part of the pensioner liabilities. The aim is for growth assets to achieve higher returns and target a fully funded market value position for the pensioner liabilities and improve the level of pension increases.

The Fund is a mature fund in that it has a high proportion of pensioner liabilities. In my view, a greater proportion of the pensioner liability should be matched with assets of appropriate term, nature and currency. Approximately 75% of the pensioner liability represents level pensions which should be secured with greater certainty. In my view it would be appropriate to match at least this amount of pensioner liability.

1.9 Conclusions

- The DB active members are underfunded with a deficit of **R10 million** as at the valuation date. An additional contribution of **2.2% of salaries** or a reduction in benefits would be required to eliminate the deficit over a period of three years.

- There is a future service contribution rate shortfall of **3.71%** of active member salaries in the DB Section. This translates to about **R6.4 million** a year based on DB Section active member salaries at the valuation date.

- The Trustees allocated -0.2% to DC Section Members' Shares in November 2013 to increase the Investment Reserve close to zero.

1.10 DC Section recommendations

I recommend the following:

- That the expense allowance in the DC Section is increased to 1.7% of salaries.

1.11 DB Section recommendations

- That the Local Authority contribution rate is increased to 26.77% of salaries with effect from 1 July 2014 in the event of the DC conversion not proceeding.

- A pension increase of up to 3.3% effective 1 January 2014 with pro-rata increases for pensions in payment for less than one year.

- That the Trustees consider matching at least 75% of the pensioner liability with appropriate liability driven investments.

- That the Trustees consider how to eliminate the deficit in respect of DB active members.

1.12 Certification

The actuarial liabilities and contributions reported are estimates of the amounts necessary to carry out the funding of the DB Section on a sound actuarial basis. They are based on assumptions as to future rates of investment returns, salary increases and demographic factors. The rates actually experienced in future will ultimately determine the cost of providing the benefits specified in the Rules of the Fund for the DB Section.

I certify that in my opinion:

- The pensioner account was 100% funded and is in a sound financial condition.

- The funding level in respect of the DB active members was 99.2% with a deficit of R10 million. Provided that the relatively small deficit is addressed as part of the restructuring process, the DB Section will be in a sound financial condition.

- After allowing for the allocation of -0.2% to Members' Shares in November 2013, the DC Section is in a sound financial condition.

- The nature of the assets is suitable for the Fund.

- The assets are appropriately matched relative to the term and nature of the *active* member liabilities. A greater proportion of the assets underlying the pensioner liabilities should be invested in assets that more closely match the pensioner liabilities.

- The Fund's investment strategy is suitable provided that the pensioner liabilities are adequately matched.

- The risk benefits are partially re-insured. I consider this to be appropriate for the size and nature of the Fund.

The next actuarial valuation will be performed as at 30 June 2014.

Sean Neethling BSc CFP® FASSA FIA
Fellow of the Actuarial Society of South Africa (primary regulator)
in my capacity as Valuator to the Fund and
as an employee of Metropolitan Life Limited

assisted by

Zaheer Bhikha BEconsSc
Senior Actuarial Specialist

22 November 2013

Appendix A Valuation assumptions

	Current Basis Market value 30 June 2013		Previous Basis Actuarial value 30 June 2012
Interest rate			
Pre-retirement (net of tax and expenses)	7.79% p.a.		8.50% p.a.
Post-retirement (net of allowance for post-retirement increases)	4.25% p.a.		5.34% p.a.
Price inflation	5.66% p.a.		5.00% p.a.
Dividend growth	-		5.50% p.a.
Salary increases			
General increases	5.50% p.a.		5.50% p.a.
Merit increases p.a.	**Age**	**Males**	**Females**
	20 – 24	8.4%	8.4%
	25 – 29	4.3%	3.7%
	30 – 34	3.1%	2.6%
	35 – 39	2.2%	1.4%
	40 – 44	1.6%	1.3%
	45 – 49	1.5%	1.3%
	50 – 54	1.4%	1.2%
	55 – 59	1.3%	1.2%
	60+	1.2%	1.1%
Normal retirement age	Optional Retirement Age		

Mortality			
Pre-retirement (sample rates)	**Age**	**Males**	**Females**
	20	0.1%	0.1%
	25	0.1%	0.1%
	30	0.2%	0.1%
	35	0.3%	0.1%
	40	0.4%	0.2%
	45	0.5%	0.3%
	50	0.8%	0.4%
	55	1.2%	0.5%
	60	1.8%	0.6%
Post-retirement	PA(90) – 2 years allowing for 1.5% p.a. improvement Ill-health retirements: age rated up by 10 years		
Withdrawals	**Age**	**Males**	**Females**
	20 – 24	10.0%	10.0%
	25 – 29	7.6%	10.0%
	30 – 34	4.8%	9.6%
	35 – 39	3.3%	7.8%
	40 – 44	2.3%	5.8%
	45 – 49	1.3%	3.8%
	50 – 54	0.5%	1.8%
	54 – 59	0.1%	-
	60+	-	-
Ill-health retirements	**Age**	**Males**	**Females**
	20	-	-
	25	-	-
	30	-	0.1%
	35	0.1%	0.2%
	40	0.3%	0.3%
	45	0.5%	0.4%
	50	1.3%	0.7%
	55	2.5%	1.3%
	60	4.0%	2.1%
Proportions married (assuming husband 4 years' older than wife)			
Active members reaching retirement	90%		
Pensioners qualifying for a spouse's pension	60%		