



PFS Consulting

---

**THE ACTUARIAL VALUATION OF THE  
SIMS GROUP SUPERANNATION PLAN  
AS AT 30 JUNE 2018**

**A SUB-PLAN OF BT LIFETIME SUPER – EMPLOYER PLAN**

**A REPORT TO THE TRUSTEE:  
BT FUNDS MANAGEMENT LIMITED**

**Prepared By:  
David R Lewis FIAA  
PFS Consulting**

Professional Financial Solutions Pty Ltd

ABN 84 096 646 178

AFSL No. 283650

Level 6, Challis House, 4 Martin Place, Sydney NSW 2000

Telephone: 0413 583 999

October 2018

## CONTENTS

<b>1</b>	<b>EXECUTIVE SUMMARY AND RECOMMENDATIONS .....</b>	<b>5</b>
1.1	INTRODUCTION .....	5
1.2	COMPLIANCE, SUPERANNUATION GUARANTEE AND APRA REPORTING .....	5
1.3	PLAN CREDITING RATE ERROR AND RECTIFICATION.....	6
1.4	PLAN MEMBERSHIP .....	6
1.5	ASSETS AND INVESTMENT .....	6
1.6	VALUATION RESULTS.....	6
1.6.1	<i>Financial Status</i> .....	6
1.6.2	<i>Contribution Rates</i> .....	7
1.6.3	<i>Insurances</i> .....	7
1.6.4	<i>Sensitivity of the Results</i> .....	7
1.7	NEXT ACTUARIAL REVIEW AND OTHER ACTUARIAL DOCUMENTATION .....	7
1.8	PROFESSIONAL STANDARDS .....	7
1.9	REPORT .....	8
<b>2</b>	<b>BACKGROUND.....</b>	<b>9</b>
2.1	PURPOSE OF THE VALUATION.....	9
2.2	PLAN HISTORY AND GENERAL COMMENTS .....	9
2.3	INVESTMENTS AND INSURANCE .....	9
2.4	CURRENT CONTRIBUTIONS .....	9
2.5	PAYMENT OF CONTRIBUTIONS FOR ACCUMULATION MEMBERS.....	10
2.6	ACTUARIAL CERTIFICATION .....	10
<b>3</b>	<b>MEMBERSHIP AND SALARIES.....</b>	<b>11</b>
3.1	MEMBERSHIP DETAILS .....	11
3.2	MEMBERSHIP RECONCILIATION.....	11
3.3	SALARY INFLATION .....	11
<b>4</b>	<b>ASSETS AND INVESTMENTS .....</b>	<b>12</b>
4.1	PLAN ACCOUNTS .....	12
4.2	PLAN INVESTMENTS .....	12
4.3	INVESTMENT OBJECTIVE AND STRATEGY .....	12
4.4	PLAN EARNING RATE .....	13
4.5	PLAN CREDITING RATE .....	13
4.6	REAL RETURN .....	13
<b>5</b>	<b>RECTIFICATION – PLAN CREDITING RATE .....</b>	<b>14</b>
5.1	ERROR IN THE CALCULATION OF THE CREDITING RATE .....	14
5.2	REASON FOR THE ERROR .....	14
5.3	EFFECT ON MEMBERS’ BENEFITS .....	14
5.4	RECTIFICATION.....	14
5.4.1	<i>Review all exits of the Plan since 30 June 2005 – recalculate the MRBs:</i> .....	14
5.4.2	<i>If the revised MRB is greater than the benefit paid:</i> .....	15
5.4.3	<i>Payment of the additional amount:</i> .....	15
5.4.4	<i>Rectification for active members</i> .....	15
5.4.5	<i>Communication with Sims</i> .....	15
5.5	FINANCIAL EFFECT ON THE PLAN .....	15



<b>6</b>	<b>PLAN BENEFITS AND COMPLIANCE</b> .....	<b>16</b>
6.1	DEEMED MEMBER CONTRIBUTIONS .....	16
6.2	ACTUARIAL CERTIFICATION AND REPORTING .....	16
6.3	CONTRIBUTIONS SURCHARGE.....	16
6.4	SUPERANNUATION GUARANTEE CHANGES.....	16
6.4.1	<i>OTE Requirement Changes from 1 July 2008</i> .....	16
6.4.2	<i>Increase in Superannuation Guarantee (SG) Rates From 1 July 2021</i> .....	16
6.5	NOTIONAL TAXED CONTRIBUTIONS .....	16
6.6	APRA REPORTING .....	17
<b>7</b>	<b>VALUATION OBJECTIVES, METHOD AND ASSUMPTIONS</b> .....	<b>18</b>
<b>8</b>	<b>VALUATION RESULTS</b> .....	<b>19</b>
8.1	SUMMARY OF RESULTS .....	19
8.2	PAST SERVICE FUNDING .....	19
8.3	REASONS FOR THE CHANGE IN THE FUNDING POSITION .....	20
8.4	FUTURE SERVICE COSTS.....	20
8.5	TOTAL CONTRIBUTION RATE.....	20
<b>9</b>	<b>FUNDING INDICES</b> .....	<b>21</b>
9.1	BACKGROUND .....	21
9.2	FIRST MEASURE - VESTED BENEFITS INDEX.....	21
9.3	SECOND MEASURE - ACCRUED BENEFITS INDEX.....	22
<b>10</b>	<b>RECOMMENDED COMPANY CONTRIBUTION RATE</b> .....	<b>23</b>
10.1	MATTERS TO CONSIDER .....	23
10.2	SENSITIVITY OF THE RESULTS .....	23
10.3	RECOMMENDED CONTRIBUTIONS .....	23
<b>11</b>	<b>INSURANCE</b> .....	<b>24</b>
<b>APPENDIX I SUMMARY OF PLAN PROVISIONS</b> .....		<b>25</b>
DEFINITIONS .....		25
DESCRIPTION OF CATEGORIES.....		25
ELIGIBILITY AND CONTRIBUTIONS .....		25
BENEFITS .....		26
<b>APPENDIX II ACTUARIAL ASSUMPTIONS</b> .....		<b>29</b>
INVESTMENT RETURN AND SALARY INCREASES .....		29
ASSETS.....		29
DEMOGRAPHIC ASSUMPTIONS .....		29
DEATH.....		30
EXPENSES .....		30
<b>APPENDIX III CHANGE IN NET ASSET VALUE FOR THE PERIOD 1 JULY 2012 TO 30 JUNE 2015</b> .....		<b>31</b>
<b>APPENDIX IV OTHER ACTUARIAL DOCUMENTATION</b> .....		<b>32</b>
INTRODUCTION .....		32
AUSTRALIAN ACCOUNTING STANDARDS AAS 25 - FINANCIAL REPORTING FOR DEFINED BENEFIT SUPERANNUATION PLANS .....		32



BENEFIT CERTIFICATE .....	32
FUNDING AND SOLVENCY CERTIFICATE .....	32
SHORT REPORT FOR MEMBERS .....	33

---

# 1 EXECUTIVE SUMMARY AND RECOMMENDATIONS

## 1.1 Introduction

The Sims Group Superannuation Plan (the “Plan”) is a Defined Benefit sub-plan of the BT Lifetime Super – Employer Plan (“BT”). There are two Sims sub-plans, an Accumulation sub-plan and a Defined Benefit sub-plan. This report is concerned with the Defined Benefit sub-plan only.

The Company, Sims Group Limited and its subsidiaries, is the Plan’s sponsor.

Under the Superannuation (Industry) Supervision Act 1993 (“SIS”), an actuarial valuation is required for the Plan at the date of commencement and every three years thereafter. This is the report on the valuation of the Plan based on the data as at 30 June 2018. The previous valuation was as at 30 June 2015 and my report was dated 25 September 2015.

The Plan is a “successor fund” to the Sims Consolidated Group Superannuation Fund (the “Sims Fund”) and the Sims Executive Staff Superannuation Fund (the “Executive Fund”).

Generally, accumulation accounts held in respect of defined benefit members i.e. amounts, if any, held in the Member’s Voluntary Account are held in the Accumulation sub-plan and are not included in the assets or liabilities of the Defined Benefit part of the Plan. Similarly, superannuation guarantee accounts for Category 5 members are included in the Accumulation sub-plan.

The accrued amount of any Superannuation Surcharge paid in respect of a Member, the Surcharge Account, has been included as a negative liability in the defined benefits liabilities.

The main conclusions and recommendations resulting from my valuation are set out below.

## 1.2 Compliance, Superannuation Guarantee and APRA Reporting

All required actuarial certification are attached to this report.

Please note that it is also a requirement under Funding and Solvency certificates that the Trustee monitors “Notifiable Events” as set down in the certificate and advise the actuary in the event of an occurrence of a Notifiable Event.

Under the Superannuation Guarantee legislation the current SG charge percentage of 9.5% of Ordinary Time Earnings (OTE) will not start to increase until the 2021/22 financial year. A replacement Notional Taxed Contributions certificate dated 15 October 2015 was issued to be consistent with the further revised scale of increases in the rate of SG contributions introduced from 1 July 2015.

The following statements are required in regard to the Trustee’s reporting requirements to APRA:

1. A Shortfall Limit of 99% was recommended by me in a letter to the Trustee dated 10 March 2015 and was accepted by the Trustee. I consider that this limit remains appropriate for the Plan;



2. I provide a spreadsheet with this report showing the accrued benefits as at 1 July 2018 for defined benefit members (including any allowance for surcharge accounts as shown);
3. I confirm that the weighted average term of defined benefit liabilities at 30 June 2018 is 4.8 years;
4. I confirm that the net assets meeting the defined benefit liabilities cover the Minimum Requisite Benefits for defined benefit members.

### 1.3 Plan Crediting Rate Error and Rectification

During the course of the valuation process I identified an error in the calculation of the crediting rate as applied to members' benefits since 2004. A full discussion of the error and the rectification process is set out in Section 5 of this report. Figures provided in this report take account of the rectification and, in particular, its effect on the financial position of the Plan.

### 1.4 Plan Membership

The Plan is closed to new members.

Membership details at the valuation date were supplied to me by the administrator, OneVue.

At the previous valuation of the Plan, effective 30 June 2015, there were 41 members. There have been 14 exits over the period resulting in there being 27 members as at 30 June 2018.

All of the members at the valuation date were members at the previous valuation date. These "continuous" members received average salary increases of 3.7% p.a. (compared to the previous valuation assumption of 4% p.a.). Nevertheless, I have decided to reduce the future salary increase rate assumption to 3% p.a. for this valuation.

### 1.5 Assets and Investment

Information regarding the assets covering the defined benefits of the Plan was supplied to me by the BT Financial Group. Over the inter-valuation period the Plan assets were invested in the Multi Manager Conservative option within BT. This option was chosen to help reduce the volatility of returns and maintain the healthy financial position of this closed DB Plan.

In the circumstances of the Plan it is considered that the Conservative option remains appropriate given the nature of the Plan's liabilities. The average return on the Plan assets over the inter-valuation period has been 4.6% p.a. compared with an assumption at the previous valuation of 6.0% p.a. I have reduced my assumption on investment return to 5% p.a. for this valuation.

### 1.6 Valuation Results

#### 1.6.1 Financial Status

At the valuation date, 30 June 2018, the Vested Benefits Index (VBI) for the Plan was 109.4%. At the previous valuation the VBI was 125.8%. The reasons for this reduction are discussed in Section 8.3.



The VBI is expected to be approximately 108% as at the next valuation (30 June 2021) if contributions are paid at the rate recommended in this report and the Plan's future experience is in line with my assumptions.

The Accrued Benefits Index (ABI) at 112.7% has also declined from its value of 131.2% at the previous valuation (see Section 8). Again, the reasons for this are discussed in Section 8.3. The ABI is expected to remain at or above 100% over the next three years if contributions are paid at the rate recommended in this report and the Plan's future experience is in line with my assumptions.

### 1.6.2 Contribution Rates

I recommend that the Company continues its contribution holiday and continues to contribute the salary sacrifice member contributions (5.88% of salary) for Categories 2X and 3X. Member contributions are also required at 5.0% of salaries for Categories 2, 3 and 4, and at 2.5% of salaries for Category 5.

This closed fund has a small group of older members (average age approximately 58). A funding objective is to ensure ongoing solvency but also to avoid excessive surpluses being generated. Therefore I also recommend that the vested benefits index should continue to be regularly monitored and adjustments made to the contribution rate if considered appropriate after discussions between the actuary, Trustee and sponsoring Company.

### 1.6.3 Insurances

At the 30 June 2018 review the formula used to calculate a member's sum assured was (subject to underwriting)

Death Benefit - (Accrued Retirement Multiple x FAS x 0.9) – Surcharge Account.

I recommend that this approach to calculating the insured amounts be continued.

### 1.6.4 Sensitivity of the Results

The financial position of the Plan and the contribution rates recommended are sensitive to the assumptions used in my calculations. While, in the long term, I believe that the assumptions are reasonable the future financial position of the Plan will depend on its actual experience in regard to demographic and economic factors, not on the assumptions about these factors. Further discussion and illustrations of this issue is provided in Section 10.2.

## 1.7 Next Actuarial Review and Other Actuarial Documentation

Superannuation legislation requires a valuation every three years and the next full valuation should, therefore, be carried out based on the data as at 30 June 2021. A number of other actuarial documents are required to ensure the continued compliance of the Plan. These are described briefly in Appendix IV.

## 1.8 Professional Standards

This report has been prepared under Professional Standard 400 issued by the Institute of Actuaries of Australia. It has been peer reviewed by Doug Drysdale BSc FIAA who is an experienced superannuation actuary.



---

## 1.9 Report

This report has been prepared by:

Signed

David R Lewis, FIAA  
PFS CONSULTING

30 October 2018

Dated

---

## 2 BACKGROUND

### 2.1 Purpose of the Valuation

The main purposes of this valuation are:

- (i) To examine the financial condition of the Plan as at the review date,
- (ii) To provide advice on the level of contributions required by the Company to enable the Plan to meet its continuing benefit obligations, and
- (iii) To consider the appropriateness of the Plan's insurance arrangements.

The valuation has been conducted based on the data as at 30 June 2018.

### 2.2 Plan History and General Comments

The Plan is a “successor fund” to the Sims Consolidated Group Superannuation Fund (Sims Fund) and the Sims Executive Staff Superannuation Fund (Executive Fund). The Plan provides defined benefits. There is also a Sims Accumulation Benefit plan. This report is concerned mainly with the defined benefit Plan.

The Trustee is BT Funds Management Limited. The Company, Sims Group Limited and its subsidiaries, sponsor the Plan.

The Plan is approved under SIS and hence employer contributions are tax deductible (but subject to tax in the hands of the Trustees) and investment income is subject to concessional rates of tax. The Plan is closed to new members.

The Company has been on a contribution holiday since 2014 as a result of the favourable financial position of the Plan.

### 2.3 Investments and Insurance

The assets of the Plan are invested in the BT Multi Manager Conservative option to help reduce the volatility of returns and help maintain the healthy financial position of this closed DB Plan. I consider this to be an appropriate investment strategy given that the Plan is closed to new members and the high average age of remaining members.

Death and total and permanent disability are provided within BT.

### 2.4 Current Contributions

In my report on the previous valuation I recommended that “the Company continues to contribute at the current rate of nil% of salaries. However, the financial position of the Plan as measured by the VBI should continue to be monitored on a quarterly basis with a view to recommencing additional monthly contributions as appropriate at the time.

Member (after tax) contributions are also required at 5.0% of salaries for Categories 2, 3 and 4 and at 2.5% of salaries for Category 5.

Notwithstanding the financial position of the Plan, in a closed fund such as this with a relatively small group of older members (average age approximately 58), while we want to ensure ongoing solvency we also want to avoid excessive surpluses being generated. It is



appropriate, therefore, that the vested benefits index should be regularly monitored and adjustments made to the contribution rate as considered appropriate after discussions between the actuary, Trustee and sponsoring Company”.

The Company also contributed the salary sacrifice member contributions for Categories 2X and 3X during the inter-valuation period.

## 2.5 Payment of Contributions for Accumulation Members

As a result of the financial position identified at the previous valuation the Trustee and the Company agreed that an amount of \$1,500,000 be taken from the net assets of the Plan and used to meet contributions for Accumulation members.

## 2.6 Actuarial Certification

Under the SIS legislation an actuarial valuation and report is required to be carried out at inception of a new fund and at least every three years thereafter. The report should be available within 6 months of the valuation date.

A **Funding and Solvency Certificate** is attached to this report. It took effect from 1 October 2018. It certifies that the Company contributions at the rates set out in that certificate, subject to no “Notifiable Events” occurring, would be sufficient to secure the Superannuation Guarantee legislation benefits provided by the Plan until 30 June 2023. Under the Regulations, this certificate should be replaced by 30 June 2022 or earlier in circumstances as described in the certificate.

It is a requirement under the Funding and Solvency certificate that the Trustee monitors “Notifiable Events” as set down in that certificate and advises the actuary in the event of an occurrence of a Notifiable Event.

A **Benefits Certificate** is also attached to this report. For Superannuation Guarantee legislation purposes this certificate certifies the Minimum Requisite Benefit (“MRB”) and the Notional Employer Contribution Rate to provide the MRB. This certificate is effective for the period 1 October 2018 to 30 June 2023 but may cease to have effect earlier in circumstances described in the certificate. It confirms, subject to certain conditions and to the extent set out in the certificate, that the Company is meeting its Superannuation Guarantee obligations for those employees who are members of this Plan.

**Notional Taxed Contributions** (“NTC”) for defined benefit members of the Plan are required so that the Trustee can calculate and report these notional amounts to the ATO. NTCs notionally paid in the year count towards the total Concessional Contributions paid by or on behalf of that member for the 2007/08 and subsequent tax years.

The current certificate is a replacement certificate dated 15 October 2015 and was issued as a result of a revised scale of increases in the rate of SG contributions from 1 July 2015.



### 3 MEMBERSHIP AND SALARIES

#### 3.1 Membership Details

The defined benefit membership details for the Plan as at 30 June 2018 and 30 June 2015 as supplied by the administrator (One Vue) are summarised in the following table.

Category	30 June 2018					30 June 2015				
	Number	Total Salaries (\$'000)	Average Salary (\$'000)	Average Age	Average Service for Benefits (years)	Number	Total Salaries (\$'000)	Average Salary (\$'000)	Average Age	Average Service for Benefits (years)
2	-	-	-	-	-	1	77.7	77.7	63.4	25.5
2X	3	918.3	306.1	58.7	35.1	4	929.4	232.4	58.3	30.5
3	1	164.3	164.3	57.4	26.3	3	639.0	213.0	59.5	24.9
3X	1	115.2	115.2	62.5	25.3	1	107.3	107.3	59.5	22.3
4	5	640.7	128.1	55.4	28.9	5	576.1	115.2	52.4	25.9
5	17	1,373.5	80.8	59.3	34.4	27	1,923.2	71.2	58.5	31.7
<b>Total</b>	<b>27</b>	<b>3,212.0</b>	<b>119.0</b>	<b>58.5</b>	<b>32.8</b>	<b>41</b>	<b>4,252.7</b>	<b>103.7</b>	<b>57.9</b>	<b>30.0</b>

#### 3.2 Membership Reconciliation

The following table reconciles the membership movements over the inter-valuation period:

Category	2	2X	3	3X	4	5	Total
Membership at 30 June 2015	1	4	3	1	5	27	41
Exits	1	1	2			10	14
Total							
Membership at 30 June 2018	-	3	1	1	5	17	27

#### 3.3 Salary Inflation

All of the members at the valuation date were members at the previous valuation date. These "continuous" members received average salary increases of 3.7% per annum over the three years since 1 July 2015 (compared to the valuation assumption at the previous valuation of 4% p.a.). Salary increases cause members' benefits (and therefore the liabilities of the Plan) to increase. Lower than expected salary inflation has a positive effect on the Plan's long-term financial position. Almost all the members of this Plan are now aged 55 (the early retirement age) or older and so the effect of salary increases is more significant.

Notwithstanding the experience over the last three years I have decided to reduce my assumption regarding future salary increases to 3% per annum for this valuation. See Appendix II for further details.

## 4 ASSETS AND INVESTMENTS

### 4.1 Plan Accounts

For this valuation I had access to the special purpose financial reports for the Plan for the periods ending 30 June 2016, 2017 and 2018 as prepared by OneVue. These reports have not been audited. On the basis of the information provided the net assets backing the benefits under the Plan at 30 June 2018 were \$12,459,699. After adjustment for the Crediting Rate rectification exercise (estimated at \$586,000) the net assets reduce to approximately \$11,874,000.

A reconciliation of the Net Asset Value of the Plan based on the OneVue special purpose reports is shown in Appendix III.

### 4.2 Plan Investments

Over the three years to 30 June 2018 the assets of the Plan have been invested in the BT Multi Manager Conservative option. Considering:

- the financial position of the Plan;
- the continuing decline in numbers of members and their aging;
- the desire to reduce the volatility of the returns into the future;

I consider this remains a suitable investment strategy for the Plan.

### 4.3 Investment Objective and Strategy

The **investment objective** of the BT Multi Manager Conservative Option is:

“to provide income with a low risk of capital loss over the short to medium term with some capital growth over the long term.”

The strategy is to invest in a diverse mix of assets with a majority in the defensive assets of cash and fixed interest (around 70%) and a modest investment in growth assets such as shares and property (around 30%). The underlying fund’s exposure to these asset sectors is obtained primarily by investing into Advance’s sector specific funds. The underlying fund may also hold assets directly, including derivatives, currency and other unit trusts.

The international share exposure has been split into two components. One component is passively hedged back to the Australian dollar (‘A\$’). The second is unhedged. The fund may opportunistically partially un-hedge its international asset exposure.

The benchmarks and ranges for this option are:

SECTOR	RANGE (%)	BENCHMARK (%)
Australian Shares	0 to 28	13.5
International Shares	0 to 23	6.5
Property and real assets	0 to 23	4
Alternative Investments	0 to 25	6
<b>TOTAL GROWTH ASSETS</b>		<b>30</b>
Australian Fixed Interest	0 to 29	)
International Fixed Interest	14 to 54	)70
Cash	7 to 47	)
<b>TOTAL DEFENSIVE ASSETS</b>		<b>70</b>

The benchmark position is therefore 30% growth assets and 70% defensive assets.

I consider that this is a reasonable investment to back the defined benefit liabilities of the Plan given that the Plan is closed to new entrants, is declining in membership and is in a reasonable financial position.

#### 4.4 Plan Earning Rate

Period	Plan Earning Rate % p.a.
1/7/2015 – 30/6/2016	4.17
1/7/2016 – 30/6/2017	5.18
1/7/2017 – 30/6/2018	4.54
<b>Compound Average Return (p.a.)</b>	<b>4.6</b>

Hence the Plan Earning Rate has been 4.6% p.a. over the inter-valuation period. This is 1.4% p.a. less than the 6% rate assumed at the last valuation. For the purposes of this valuation I have assumed that the Plan Earning Rate will be 5.0% per annum into the future. See Appendix II for further details.

#### 4.5 Plan Crediting Rate

The present practice under the Plan is to credit the actual earning rate over the given period.

During the process of carrying out this valuation it became evident that an error had been made in the calculation of the Plan Crediting Rate for the years from and including the Plan year ending 30 June 2005. Section 5 below discusses the error, its rectification and the effect on the financial position of the Plan.

#### 4.6 Real Return

Of particular importance to the ongoing position of the Plan is the degree to which investment returns (on the actuarial value of assets) exceed salary increases. This excess return is often referred to as the "real return" and measures whether the Plan's assets grow at a faster rate than its liabilities.

The "real return" achieved over the inter-valuation period was 0.9% i.e.  $(1.046/1.037 - 1) \times 100\%$ . The rate assumed at the current valuation was 1.9% i.e.  $(1.05/1.03 - 1) \times 100\%$  and this is the same as that used at the previous valuation. Hence, over the inter-valuation period the Plan has had a 1.0% p.a. lower real return than assumed and this has had a negative effect on its financial position.



## 5 RECTIFICATION – PLAN CREDITING RATE

### 5.1 Error in the Calculation of the Crediting Rate

During the course of the valuation process I identified an error in the calculation of the crediting rate as applied to members' benefits since 2004.

### 5.2 Reason for the Error

The error relates to the Management Fee charged by BT.

BT's practice is to deduct a standard Management Fee of 1.35% (of the assets of the Plan) in its calculation of the unit price for the relevant investment. It then rebates to the Plan the difference between 1.35% and the actual administration fee negotiated as payable in respect of the Plan. In the years 2004 to 2008 the negotiated fee for the Plan was approximately 0.18% of assets (and hence resulted in a 1.17% rebate) and this was reduced effective 1 July 2008 to 0.1% of assets (resulting in a 1.25% rebate).

In my calculations of the crediting rates since 2005 I did not include the rebate and hence underestimated the crediting rate I recommended by approximately 1.17% p.a. in the four years ending 30 June 2008 and 1.25% p.a. in subsequent years. The actual \$ value of the rebate varies from the above percentages according to the specific rebate calculation each year.

I became aware of this issue after investigations following a question to me from the Trustee as to why I did not include the rebate in my calculation of the crediting rate for the year ending 30 June 2018.

### 5.3 Effect on Members' Benefits

The effect of this oversight is that the Minimum Requisite Benefit (MRB) for current members, and for those who have left after 30 June 2005, has been understated.

The Sims Defined Benefit Plan provides benefits for members on leaving service on resignation and retirement. The benefit payable is essentially the larger of an accumulation benefit (essentially the MRB) and a Final Average Salary (FAS) related benefit. The accumulation benefit is equal to the sum of accounts held in the name of the member with each of these accounts being increased each year by the crediting rate declared by the Trustee. In many cases (mainly Category 1EX, 3EX and 5 members) the FAS related benefit is the greater benefit but for some members (mainly Category 2, 2x, 3, 3X and 4 members) this may not be the case.

Hence, several members who have exited the Plan have received a smaller benefit than should have been paid.

### 5.4 Rectification

In overview, the following rectification process has been put in place:

#### 5.4.1 Review all exits of the Plan since 30 June 2005 – recalculate the MRBs:

Calculate the revised MRB as precisely as possible. Err on the side of generosity to the members in the event that approximations are required. Compare the actual benefit paid and the revised MRB and assess whether it is likely in the circumstances that the revised MRB

may be greater than the benefit actually paid. If it is, proceed as in Section 5.4.2, if not, no further action is required.

#### 5.4.2 If the revised MRB is greater than the benefit paid:

The excess amount of the revised MRB over the benefit actually paid should be increased by the revised crediting rates for the period from exit to the expected (current) date of payment.

#### 5.4.3 Payment of the additional amount:

The calculated amount should be paid to the member (or their current superannuation fund on behalf of the member). A letter explaining the reason for the additional payment will be required as will consideration of the tax position applying to the payment. Finally, in some cases, finding the contact details for the person may be difficult.

#### 5.4.4 Rectification for active members

Recalculate the MRB for all active members or, if a precise calculation is not possible, make a reasonable approximation which errs on the side of generosity to the members.

#### 5.4.5 Communication with Sims

I have met with Sims management personnel and discuss with them the error, its effects and the rectification program. We also discussed methods of contacting exited employees as well as communication of the error to affected members.

### 5.5 Financial Effect on the Plan

From the investigations I have been able to do in regard to exited members I have identified 13 exited members who require an additional payment. The total value of these additional payments rolled up with interest at the Plan Crediting Rate from date of exit to 30 June 2018 is approximately \$586,000.

The accounts of all current members have been affected by this issue and have been re-calculated as at 30 June 2018. I have identified 4 members whose vested benefit has increased as a result of this re-calculation. The total increase for these members is approximately \$117,000. However, where a member has a Surcharge Account and a vested benefit which is FAS related then, for such a member, their vested benefit would reduce slightly.

The effect on the Plan's VBI as at 1 July 2018 is to reduce it from approximately 116% to 109.4%.



## 6 PLAN BENEFITS AND COMPLIANCE

### 6.1 Deemed Member Contributions

The Company has been paying member contributions for Categories 2X and 3X in addition to the recommended Company contribution rate. Other members make after tax member contributions. If any of these other members make contributions by salary sacrifice, then the Company should make contributions at 5.88% (Category 2, 3 and 4).

### 6.2 Actuarial Certification and Reporting

As set out in Section 2.5 above, various actuarial certifications are attached to this report.

### 6.3 Contributions Surcharge

Contribution surcharge ceased to be applied in respect of employer contributions paid after 30 June 2005. Any contributions surcharge on employer contribution paid prior to 1 July 2005 is accumulated in a Surcharge Account and subtracted from the member's eventual benefit.

### 6.4 Superannuation Guarantee Changes

#### 6.4.1 OTE Requirement Changes from 1 July 2008

Changes to the Superannuation Guarantee Administration Act came into effect on 1 July 2008. In order for employers to meet their Superannuation Guarantee (SG) obligation for an employee these changes required that minimum superannuation contributions would have to be paid at the prescribed rate (currently 9.5%) of Ordinary Time Earnings (OTE). The SG rules up to 30 June 2008 allowed the earnings base on which contributions could be paid to be less than OTE if, prior to August 1991, contributions to superannuation were paid on an earnings base of less than OTE.

In order to meet the SG requirements from 1 July 2008, where applicable, the notional 9.5% contribution reported to the Trustee each month was calculated by Sims based on the definition of Ordinary Time Earnings as prescribed under the SG Regulations. In the main this required bonuses to be allowed for in addition to the salary definition for superannuation purposes.

#### 6.4.2 Increase in Superannuation Guarantee (SG) Rates From 1 July 2021

The Superannuation Guarantee legislation has now been amended such that the current SG charge percentage of 9.5% of Ordinary Time Earnings (OTE) is not legislated to increase to 10% until the 2021/22 financial year, eventually reaching 12% in 2025/26.

### 6.5 Notional Taxed Contributions

In a letter dated 15 October 2015 I provided revised certification of the Notional Taxed Contributions ("NTC") for defined benefit members of the Plan as per the Income Tax Assessment Amendment Regulations 2007 (No. 3), as amended. NTCs are required so that the Trustee can calculate and report these notional amounts to the ATO. NTCs notionally paid in the year count towards the total Concessional Contributions paid by or on behalf of that member in a tax year.



## 6.6 APRA reporting

The following statements are required in regard to the Trustee's reporting requirements to APRA:

1. A Shortfall Limit of 99% was recommended by me in a letter to the Trustee dated 10 March 2015 and accepted by the Trustee. I consider that this limit remains appropriate for the Plan;
2. I provide a spreadsheet with this report showing the accrued benefits as at 1 July 2018 for defined benefit members (including any allowance for additional accumulation accounts as shown);
3. I confirm that the weighted average term of defined benefit liabilities is 4.8 years (4.5 years as at the previous valuation);
4. I confirm that the net assets meeting the defined benefit liabilities cover the Minimum Requisite Benefits for defined benefit members.



---

## 7 VALUATION OBJECTIVES, METHOD AND ASSUMPTIONS

The objective of the valuation process is to determine a contribution rate that will ensure that benefits are funded as they arise, and will meet the requirements of the Company and the Trustees with respect to predictability and stability.

For the purposes of this valuation, an Aggregate Funding Method has been used. Under this method, both benefit payments and contributions for current members are projected into the future. Included in these projections are allowances for a wide range of factors including investment earnings, salary increases and the chances that members will die, become disabled or withdraw from the Plan at various times in the future.

In this valuation the present value of projected benefits is apportioned between liabilities relating to service already completed at the valuation date ("Past Service") and service completed after the valuation date ("Future Service"). The value of the Past Service Liability is then compared with actuarial value of the assets. Any "surplus" or "deficit" arising as a result may be used to offset the Company contributions required to support the Future Service Liability.

The assumptions adopted for this valuation are set out in Appendix II.

## 8 VALUATION RESULTS

### 8.1 Summary of Results

The results of the calculations described in the previous Section of this report are set out in the table below. I have shown my results as an average contribution rate for the Plan membership as a whole.

	2018	2015
<b>PAST SERVICE</b>		
Retirement	9,287	8,866
Death	614	626
Permanent Disability	722	728
Resignation	<u>53</u>	<u>130</u>
<b>Total</b>	10,676	10,350
DB Member Surcharge Accounts	-140	-167
Additional DB Accounts	-	2,924*
<b>Total Past Service Liability</b>	10,536	13,107
<b>Value of Assets</b>	<u>11,874</u>	<u>17,193</u>
<b>Surplus/(Deficit)</b>	1,338	4,086
<b>FUTURE SERVICE</b>		
Retirement	1,556	1,520
Death	232	277
Permanent Disability	253	298
Withdrawal	<u>4</u>	<u>7</u>
<b>Total Future Service Liability</b>	2,045	2,102
Less Future Member Contributions	<u>426</u>	<u>528</u>
Residual	1,619	1,574
<b>NET COMPANY RATE</b>	9.8%	7.7%
Expenses	2.2%	1.3%
Tax	<u>1.1%</u>	<u>0.9%</u>
<b>GROSS COMPANY RATE</b>	13.1%	9.9%
<b>Gross Company Rate adjusted for Surplus (Deficit)</b>	3.6%	nil%

\* The additional DB accounts item at the 2015 valuation was in respect of three current members who are aged 65 next birthday but still members of the Plan at the time.

### 8.2 Past Service Funding

The first section of the table below headed "Past Service" shows that the actuarial value of the Plan's assets of \$11,874,000 exceeds the present value of benefits arising from past service for existing members, \$10,536,000, by \$1,338,000. This shows that, on the assumptions used for this valuation, the Plan assets would be expected to meet all its future liabilities arising out of membership to 30 June 2018. This is a decrease from the position at the previous valuation where the assets exceeded the past service liabilities by \$4,086,000.

This decrease in the excess of assets over past service liabilities is analysed below.

### 8.3 Reasons for the Change in the Funding Position

The following table provides an approximate analysis of the financial effects of various matters on the excess of the assets over the past service liabilities since the 2015 valuation.

Source	\$'000
<b>PS Excess at 30 June 2015</b>	<b>4,086</b>
To meet Accumulation Member contributions	-1,500
Rectification exercise	-686
Lower salary increases than expected	62
Lower investment returns than expected	-496
Return on excess assets over the valuation period	428
Three years additional past service liabilities	-750
Other items	194
<b>PS Excess at 30 June 2018</b>	<b>1,338</b>

### 8.4 Future Service Costs

The second section of the table shows the Company contribution rate required to support the future service of existing members. The average Company contribution rate required to support **future service** benefits is 13.1% of salaries, an increase from the 9.9% at the previous valuation. This increase is mainly due to the increase in the average age of the members and the increase to the allowance for expenses (expressed as a percentage of a significantly lower figure for the total salaries of members).

### 8.5 Total Contribution Rate

Combining the effect of the past service excess of \$1,338,000 (equivalent to a gross of tax contribution rate of approximately 9.5%) with the future service contribution rate of 13.1% gives a 3.6% future Company contribution rate provided that the actual experience of the Plan is in line with the assumptions made.

This calculation assumes that member contributions are paid at 5.0% of salaries for Categories 2, 3 and 4 and at 2.5% of salaries for Category 5 and that member contributions (at 5.88%) for Categories 2X and 3X are paid by the Company.

Further discussion of this position is provided in Section 10.

## 9 FUNDING INDICES

### 9.1 Background

The aim of the indices below is to examine the financial progress of the Plan from the previous valuation to the current valuation date by comparing the total assets of the Plan with members' entitlements according to the Trust Deed.

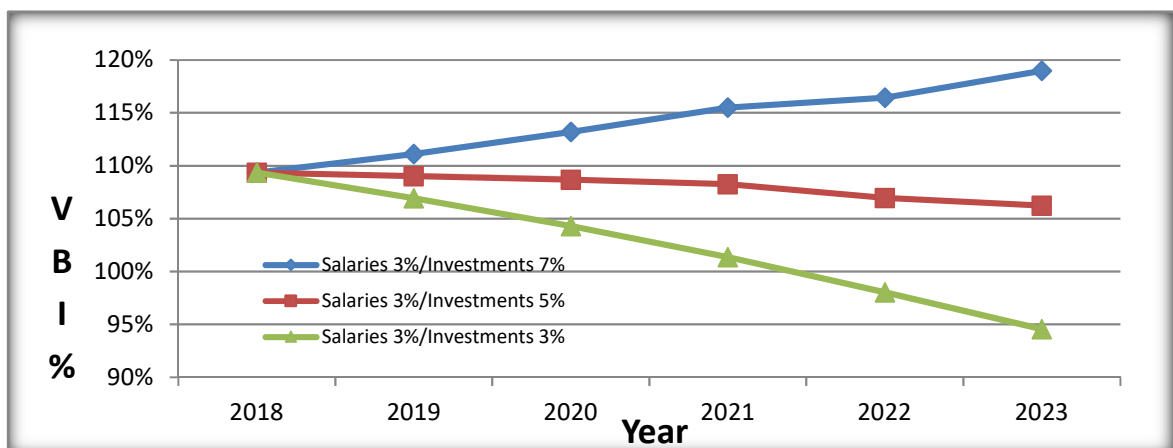
### 9.2 First Measure - Vested Benefits Index

The first measure tests the ability of the Plan's assets to meet members' immediate vested entitlements. Members' vested entitlements are the benefits payable on members leaving employment and becoming entitled to a resignation benefit, or an early retirement benefit if the member is 55 or older.

	30 June 2018 (\$'000)	30 June 2015 (\$'000)
Members' Vested Benefits	10,857	13,668
Market Value of Assets	11,874	17,193
Ratio of Assets to Benefits	109.4%	125.8%

The Vested Benefits Index ("VBI") is a very important test of the immediate solvency of the Plan. The Plan's index value at 109.4% shows that there are sufficient assets to meet all immediate benefits payable at the valuation date. Clearly the position has declined since the previous valuation when the VBI was 125.8%. This decline is due to the matters referred to in Section 8.3 above.

I consider that in the circumstances of this Plan (a small number of members and closed to new members) the most important measure of the financial position is the VBI. I therefore provide a projection of the VBI below based on various sets of assumptions concerning investment returns and salary increases. In these projections I assume that all existing members survive in the Plan and retire at age 65 and that contributions are paid at the rate recommended in this report (0% of DB members' salaries). I have used the financial assumptions as set out in this report (5% p.a. investment return and 3% p.a. salary increases), a conservative set of assumptions (3% p.a. investment returns and 3% p.a. salary increases) and a favourable set of assumptions (7% p.a. investment returns and 3% p.a. salary increases). It is the gap between the salary increase and investment return assumptions that is important rather than the absolute value of each. I plot the results below:





If future contributions are paid at the recommended rate and the Plan experience is in line with the assumptions I have made in this valuation then I would expect that the VBI would be approximately 108% by the time of the next valuation (1 July 2021) and approximately 106% by July 2023.

Of course, the actual experience of the Plan in terms of salary increases and investment return will not emerge in a consistent gap between salary increases and investment returns on a year by year basis. While the salary increase rate may well be reasonably stable around the 3% level over the period we are very aware from the experience of recent years that investment returns can vary from year to year quite dramatically (e.g. from negative 6% one year to positive 12% the next), although less so as a result of the decision to move the investments to the Conservative investment from the Balanced investment. Hence it is likely that the results below will over or underestimate the position at a particular year end. However, I would have a reasonable expectation that the illustrations of the possible outcomes at the end of five years would represent the likely range of outcomes after that time. The exercise of projecting results over this period is to provide a "feel" for the possible volatility and range of likely outcomes.

From the information available to me the Minimum Requisite Benefits (essentially the level of assets necessary to meet minimum benefit as described under the Superannuation Guarantee legislation) remained well covered and hence in terms of Regulation 9.06(3) of the SIS Regulations the Plan has not become "technically insolvent" during the period to the next valuation as at 1 July 2021.

### 9.3 Second Measure - Accrued Benefits Index

The second measure tests the progress of the Plan in setting aside assets to meet salary related retirement benefits. It is derived by comparing the assets to the "Accrued Benefits" of all Defined benefit members. "Accrued Benefits" are the same as the "Past Service Liabilities" shown in Section 8.

	<b>30 June 2018</b>	<b>30 June 2015</b>
	<b>(\$'000)</b>	<b>(\$'000)</b>
<b>A. Value of members' accrued benefits</b>	10,536	13,107
<b>B. Value of assets</b>	11,874	17,193
<b>Accrued Benefits Index ("ABI") A/B</b>	112.7%	131.2%

Under the Aggregate Funding Method, the ABI normally increases above 100% during the early years of a fund's life, falling back to 100% as the fund matures. The present value of 112.7% again shows a very acceptable state of funding. However, it represents a decrease from the position at the previous valuation when the ABI was 131.2%.

If no future contributions are paid by the Company (apart from some member contribution payable by the Company) and the Plan experience is in line with the assumptions I have made in this valuation then I would expect that the ABI would be lower than the present value (but well in excess of 100%) at the time of the next valuation (1 July 2021).

---

## 10 RECOMMENDED COMPANY CONTRIBUTION RATE

### 10.1 Matters to Consider

Section 7 indicates that the per annum Company cost of funding benefits in respect of defined benefit members is 2.8% of salaries (nil% at the previous valuation). Member contributions are also required at 5.0% of salaries for Categories 2, 3 and 4 and at 2.5% of salaries for Category 5. Since the Plan is closed to new entrants it is not necessary to consider the effect of new entrants in my recommendations.

The total salaries are \$3.2 million so 1% is \$32,000. Therefore, contributing at the theoretical rate of 3.6% is equivalent to about \$115,000 in the first year. Given the level of surplus of \$1,338 million as at 30 June 2018, the current contribution holiday can continue to be met from the surplus for several years.

In my recommendation of a Company contribution rate to pay at least until the next valuation in 2021 I have also considered the funding objective of ensuring ongoing solvency but avoiding excessive surpluses being generated.

### 10.2 Sensitivity of the Results

The financial position of the Plan and the contribution rates recommended are sensitive to the assumptions used in my calculations. While, in the long term, I believe that the assumptions are reasonable the future financial position of the Plan will depend on its actual experience in regard to demographic and economic factors, not on the assumptions about these factors. Also, in the short term, the assumptions could vary very significantly to the actual experience of the Plan and therefore effect the future short-term financial position very significantly. It is to monitor these short-term variations that we consider the vested benefit index at least every year and APRA requires triennial actuarial investigations.

To illustrate the sensitivity of the results to the assumptions used I have calculated the results using a 4% per annum assumption for future investment returns (rather than the 5% rate) and the results on that basis show a reduced actuarial excess (from an excess of \$1.338m to an excess of \$0.830m with a past service liability of \$11.044m and assets of \$11.874m). The calculated contribution rate increases to 9.1% of salaries (from 3.6%) under the more conservative assumption.

### 10.3 Recommended Contributions

After considering the matters discussed above I recommend that the Company continues its contribution holiday and continues to pay the salary sacrifice member contributions (5.88% of salary) for Categories 2X and 3X.

In addition, member contributions are also required at 5.0% of salaries for Categories 2, 3 and 4, and at 2.5% of salaries for Category 5.

This closed fund has a small group of older members (average age approximately 58). A funding objective is to ensure ongoing solvency but also to avoid excessive surpluses being generated. Therefore I also recommend that the vested benefits index should continue to be regularly monitored and adjustments made to the contribution rate if considered appropriate after discussions between the actuary, Trustee and sponsoring Company.

## 11 INSURANCE

As part of the valuation the levels and appropriateness of the benefits payable under the Plan's insurance policies have been investigated.

The Death & Total and Permanent Disablement (TPD) Benefit are partly insured under an insurance policy through BT.

The benefit payable on death or permanent disability of a member is normally considerably in excess of the amount of money then available in the fund with respect to that member. In a fund with relatively few members the amount payable in such an event could cause a significant strain on the assets. Hence it is prudent to insure some of the amount payable.

However, the smaller the amount of insurance required the more this benefits members who have restricted insurance levels, because of underwriting, as the \$ amount of the insurance restriction is deducted from the death or TPD benefit to which the member would otherwise be entitled.

The current formula used to calculate a member's sum assured is (subject to underwriting)

Death Benefit - (Accrued Retirement Multiple x FAS x 0.9) – Surcharge Account.

The following table shows the excess of the Plan assets over the Death & TPD liability under this insurance formula if all members of the Plan were to die or become disabled. It is based on the position as at 30 June 2018.

	<b>\$'000</b>
Total Death and TPD Benefits	15,457
Total Sums Insured	<u>(4,711)</u>
Residual Liability	10,746
Total Plan Assets	<u>11,874</u>
“Excess”	(1,128)

Clearly the Plan Assets well cover the uninsured part of the Death and TPD liabilities. Hence, I recommend that this insurance formula continues to be applied for the members of the Plan.

## APPENDIX I SUMMARY OF PLAN PROVISIONS

### DEFINITIONS

#### Annual Salary:

The annual rate of salary as advised to the Trustees by the Employer.

#### Final Average Salary ("FAS"):

The average of the member's Annual Salaries as at the review dates in the three (five for Category 5 members) years immediately preceding the date of retirement.

#### Years of Membership:

Calculated in years and complete months as the period from the date the member joined the Plan, Former Fund or Previous Fund.

#### Normal Retirement Date:

65th Birthday (60 for a female who joined before 1 July 1987).

#### Review Date:

1st July each year.

### DESCRIPTION OF CATEGORIES

The following are defined benefit categories

Category 1E	Senior Executives (Ex Executive Fund)
Category 2	Senior Staff
Category 2X	Senior Staff (employer pays member contribution)
Category 3	Staff (Non Award)
Category 3X	Staff (Non award) (employer pays member contribution)
Category 3E	Staff (Ex Executive Fund)
Category 4	Junior Staff (Award)
Category 5	Contributing Employees (Plan II)

For some Category 2 and 3 members the employer pays the member contributions. These members are known as Non-Contributory (Category 2X and 3X) members.

There is also an accumulation category which allows member investment choice.

A member may be in a defined benefit category and if the member has additional voluntary accounts will be in the accumulation category for those additional voluntary accounts.

### ELIGIBILITY AND CONTRIBUTIONS

#### Eligibility:

The members in the defined benefit categories were members of defined benefit categories in the SIMS Consolidated Group Superannuation Fund (Sims Fund) or the SIMS Metal Executive Staff Superannuation Fund (Executive Fund). No new members are being admitted to these categories.

All new employees are only eligible for the accumulation category.

#### Contributions:

Members:

Category	Contribution Rate (% of Salary)	Employer makes contribution
1E	5	Yes
2	5	No
2X	5	Yes
3	5	No
3X	5	Yes
3E	5	Yes
4	5	No
5	2.5	No
6	Nil	

Employer: Balance of the cost of benefits.

## BENEFITS

### DEFINED BENEFIT CATEGORIES

#### Normal Retirement:

Category 1E A lump sum benefit calculated as  
 $15.0\% \times \text{FAS} \times \text{Years of Membership prior to 1 October 1987}$   
 plus  
 $20.0\% \times \text{FAS} \times \text{Years of Membership from 1 October 1987 to 1 January 1990}$   
 plus  
 $18.0\% \times \text{FAS} \times \text{Years of Membership thereafter}$

Category 2 & 2X A lump sum benefit calculated as  
 $15.0\% \times \text{FAS} \times \text{Years of Membership prior to 1 October 1987}$   
 plus  
 $17.5\% \times \text{FAS} \times \text{Years of Membership from 1 October 1987 to 1 January 1990}$   
 plus  
 $15.5\% \times \text{FAS} \times \text{Years of Membership thereafter}$

Category 3 & 3X & 3E: A lump sum benefit calculated as  
 $12.5\% \times \text{FAS} \times \text{Years of Membership prior to 1 October 1987}$   
 plus  
 $15.0\% \times \text{FAS} \times \text{Years of Membership thereafter}$

Category 4: A lump sum benefit calculated as  
 $12.5\% \times \text{FAS} \times \text{Years of Membership prior to 1 October 1987}$   
 plus  
 $15.0\% \times \text{FAS} \times \text{Years of Membership thereafter}$

Category 5: A lump sum benefit calculated as  
 $7.5\% \times \text{FAS} \times \text{Years of Membership}$

A maximum retirement benefit multiple of 7 applies to Categories 2, 2X, 3, 3X and 4.

Former members of “CMP” and Sims Funds have an additional Past Service benefit.

#### Late Retirement:

For members who remain in service after age 65 the amount paid is the benefit at Normal Retirement Date plus any Superannuation Guarantee contributions paid after age 65, all accumulated with interest.

#### Early Retirement:

Early retirement is available after age 55. Category 5 members can also take early retirement from age 50 with Company consent, or on ill-health if the Trustee agrees.

The benefit payable is calculated in the same manner as the Normal Retirement Benefit, but is based on the Years of Membership and FAS at the date of early retirement.

For members of Category 1, 2, 2X, 3, 3X, 3E & 4 the benefit is reduced by 1/800<sup>th</sup> for each month remaining to age 60. No discount applies for members of Category 5. This discount can be removed with Company consent.

#### Death:

A lump sum benefit calculated as the benefit that would have been payable on normal retirement at age 65 (but calculated based on Salary at review date preceding the date of death rather than FAS). Category 5 members may also have an optional insured benefit.

#### Total and Permanent Disablement:

A lump sum benefit calculated as the death benefit.

#### Withdrawal:

##### Categories 1E, 2, 2X, 3, 3X, 3E & 4

A lump sum benefit calculated as the aggregate of:

- (i) The member's (deemed) contributions accumulated with interest, plus
- (ii) After two years of membership, an amount equal to the members reserve less (i), multiplied by a vesting factor.

Where:

Member's Reserve is calculated in the same way as for the early retirement benefit but with a maximum discount of 30%.

Vesting Factor is 10% per Year of Membership with a maximum of 100%.

##### Category 5:

A lump sum calculated as above but where the early retirement benefit is not discounted and the vesting factor is 10% plus 6% for each year of membership after 5, subject to a maximum of 100%.

### **Additional Benefits**

The Surcharge Account is subtracted from all benefits.

Category 5 members receive in addition to other benefits accumulated Superannuation Guarantee contributions. Members of other defined benefit categories may have residual award or superannuation accounts from previous category membership.

### **SGC Benefits**

All lump sum benefits are subject to the application of a minimum benefit relating to the Superannuation Guarantee legislation. Some members of former funds have other guaranteed minimum benefits.

### **ACCUMULATION CATEGORY**

Category 6 members receive a benefit equal to the sum of all accounts held in the accumulation section. There may also be an insured benefit on death or total and permanent disablement.

---

## APPENDIX II ACTUARIAL ASSUMPTIONS

The assumptions used for this valuation are similar to those used at the previous valuation and are outlined below.

### INVESTMENT RETURN AND SALARY INCREASES

#### Investment Return:

In setting investment return assumptions for the valuation of a superannuation fund the focus is long term.

Superannuation fund investment income is taxed at 15%. This tax may be reduced by a credit for dividend imputation. The effective rate of tax is usually in the range of around 5% to 10% per annum. An effective tax rate at the lower end of this range of 5% per annum has been adopted for this valuation.

I have elected to use an investment earnings rate of 5% p.a. net of investment management fees and tax on investment income, as compared with a rate of 6% at the previous valuation.

#### Salary Increases:

Salary increases arise as a consequence of:

- promotional increases arising through normal career progression, which commonly have a correlation with age; and
- salary inflation, being general increases in salaries related to inflation of prices etc. and to increases in productivity

I have made no explicit assumption concerning promotional salary increases. I have assumed that salary inflation will be 3% p.a. for all members, as compared with a rate of 4% used at the previous valuation.

#### Real Return:

In valuing a superannuation fund the critical factor is the assumed excess of the rate of investment return over the rate of salary increases. The effective gap for this valuation is 1.9% p.a. ( $105/103 - 100$ ) which is the same as the assumption used at the previous valuation.

### ASSETS

As at the previous valuation I have elected to use the market value of assets for this valuation.

### DEMOGRAPHIC ASSUMPTIONS

In order to evaluate the cost of future benefits, assumptions are required as to rates of mortality, disablement, withdrawal, and early retirement. For the current valuation I have used the rates shown in the table below which are the same as used at the previous valuation.



Age	Assumed number of members leaving at each age last birthday per 100,000 members at that age			
	Death	Disability	Retirement	Resignation
20	151	36	-	15,000
25	100	23	-	15,000
30	98	21	-	15,000
35	117	43	-	10,000
40	172	79	-	5,000
45	268	172	-	2,000
50	421	334	-	-
55	666	621	10,000	-
60	1,094	1,294	30,000	-
65	1,785	2,725	100,000	-

## EXPENSES

### Investment Expenses

The assumed investment returns have been determined after allowance for investment expenses and hence no specific allowance has been included for this item.

### Administration Expenses

Expenses have been allowed for at the rate of 2.2% of salaries compared to 1.3% as at the previous valuation of the Plan. This increase is mainly because of a reduction of 52% in the total salaries of defined benefit members rather than an increase in the \$ amount of fees.



**APPENDIX III**  
**CHANGE IN NET ASSET VALUE**  
**FOR THE PERIOD 1 JULY 2012 TO 30 JUNE 2015**

	\$	\$
<b>NET ASSETS AT START OF PERIOD</b>		<b>17,714,420</b>
<b>Investment Revenue</b>		
Change in Market Value	1,406,187	1,406,187
<b>Contributions</b>		
Member Contributions	258,909	
Employer Contributions	141,537	
		400,446
<b>Other Revenue</b>		
Fee rebate	574,631	
Insurance Recoveries	-	
		574,631
<b>Expenses</b>		
Administration Fees	156,147	
Actuarial and Consulting	52,700	
Insurance Expense	144,322	
		353,169
<b>Surcharge</b>	-	-
<b>Income Tax Expense</b>	0	0
<b>Benefits Paid</b>	7,282,816	7,282,816
<b>Net Change in Position</b>		<b>-5,254,721</b>
<b>NET ASSETS AT END OF PERIOD</b>		<b>12,459,699</b>

The above summary excludes administration and investment expenses that are deducted from the assets before the unit price is struck. I have taken account of these expenses in assessing the expected expenses to be paid by the Plan in the future.

---

## APPENDIX IV OTHER ACTUARIAL DOCUMENTATION

### INTRODUCTION

There are a number of other documents that must be provided by the actuary of a defined benefit superannuation fund. Brief details are provided in this Appendix.

### AUSTRALIAN ACCOUNTING STANDARDS AAS 25 - FINANCIAL REPORTING FOR DEFINED BENEFIT SUPERANNUATION PLANS

This standard governs preparation of financial statements for defined benefit superannuation funds. It includes specifications for the calculation and disclosure of the "accrued benefits" of the Plan. AASB 1028 "Accounting for Employee Entitlements" also requires certain information prepared in accordance with AAS 25 to be disclosed in the Company accounts.

The letter to the Trustees enclosed with this valuation provides the relevant information for AAS 25. It is normally prepared every three years in conjunction with the actuarial valuation. The Institute of Actuaries of Australia has issued a Guidance Note 456 dealing with the provision of AAS 25 advice by actuaries.

In addition, AAS 25 requires an excerpt of the actuarial valuation to be included in the notes to the accounts. Professional Standard 401 issued by the Institute of Actuaries of Australia governs preparation of summary reports.

### BENEFIT CERTIFICATE

This is a certificate provided by the actuary as evidence that the Plan benefits specified in the Trust Deed and Rules are adequate to meet the requirements of the Superannuation Guarantee Legislation.

This certificate is typically updated once every three or four years or when the Plan benefits are altered. The Institute of Actuaries of Australia has issued a Guidance Note 456 dealing with the Benefit Certificates.

### FUNDING AND SOLVENCY CERTIFICATE

This is a certificate that the Trustees must, under the Superannuation Industry (Supervision) Act, obtain from the Plan actuary. It serves three primary purposes:

- (i) It certifies the immediate solvency of the Plan with respect to Superannuation Guarantee benefits,
- (ii) it sets minimum Company contribution rates necessary to ensure that the Plan continues to be able to provide Superannuation Guarantee benefits, and
- (iii) It sets limits for the Plan experience. Any events outside these boundaries require a new certificate to be issued.

This certificate would typically be updated every three years as part of the actuarial valuation. However, it must be updated where the Plan experience falls outside certain



boundaries. The Institute of Actuaries of Australia has issued a Guidance Note 456 dealing with the Funding and Solvency Certificates.

## SHORT REPORT FOR MEMBERS

Regulation 2.41 of the Superannuation Industry (Supervision) Act requires that a copy of the most recent "actuarial report" be provided to a member *on request*. Regulation 9.31 specifies that this "actuarial report" must contain

- (a) A statement of the value of assets of the Plan at the valuation date,
- (b) A statement of the actuary's opinion on whether, at the valuation date, "..the value of the assets of the Plan is adequate to meet the value of the liabilities of the Plan in respect of accrued benefits ..",
- (c) A statement recommending Company contribution rates,
- (d) A statement about whether the financial position of the Plan is "unsatisfactory" - i.e. whether vested benefits are covered by assets,
- (e) a statement that
  - (i) All necessary Funding and Solvency Certificates have been obtained, and
  - (ii) A statement about the projected solvency of the Plan over the next three years, and
- (f) Certain statements with respect to "pre 1 July 1988 funding credits".