Super SA Triple S Insurance Review as at 30 June 2016

February 2017

pwc

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Contents

1. Executive summary

1.1 This actuarial investigation of the insurance arrangements of the Triple S Scheme is required by Section 17 of the Southern State Superannuation Act 2009. This is the sixth actuarial investigation, the previous investigation having been carried out by Catherine Nance in a report dated May 2014.

1.2 We were provided with electronic data by Super SA, and we are satisfied that any errors or omissions are not material. We adjusted the data to include allowance for claims which had been incurred prior to 30 June 2016, but which had not been finalised.

Overall conclusions

1.3 The industry is continuing to experience significant increases to TPD and income protection claims. This is due to increased member engagement and awareness of superannuation related insurance benefits, and a continued increased presence of legal firms in claims.

1.4 The premium subsidy for death and TPD was $3.5 million at 30 June 2016. We believe this is sufficiently supported by free reserve of $36.8 million, and could continue to be for the next three years.

1.5 There has been a clear deterioration in the income protection claims experience to the point that the current level of premiums is insufficient to cover claims by $4.2 million for 2016, based on claim rates for 2013-2016. The additional cost will be met from reserves which will deplete these reserves quickly unless the current premium rate is adjusted.

1.6 Current fixed cover claims are expected to be lower than premiums received for 2016 ($0.4 million, or 10%). However, as premiums remain fixed and members age, fixed cover claims are expected to exceed premiums. Therefore, a reserve of $10 million was established at the previous review to allow for the expected future subsidy, and we believe this continues to be appropriate.

1.7 Since the last valuation, Super SA has reviewed its insurance offering and made significant progress towards establishing new offerings. We have been advised that changes to the insurance offering and/or new products will not be implemented prior to October 2017 and therefore are not reflected in the experience analysis in this report.

Death and TPD

1.8 The cost of standard cover remains approximately $1 per unit per week, but this is high for younger members (i.e. they are paying more than the cost of claims).

1.9 If standard cover premiums remain at $0.75 per unit per week in order to share part of the asset surplus with members, the expected premium subsidy is $3.5 million per annum.

1.10 The reserves are sufficient to cover the premium subsidy. However, providing a subsidy for voluntary units may not be the best use of reserves.

1.11 Members are no longer able to apply for Fixed cover. However, members who already have Fixed cover prior to the cessation retain their current level of cover. The current fixed cover premiums exceed claims by $0.4 million, or 10%, but will potentially run at a loss in the future. A reserve of $10 million has been established to allow for the expected future subsidy required for fixed cover. It is expected the fixed cover reserve will be sufficient for approximately 10 years.

Income protection

1.12 The cost of cover over the review period (2013 to 2016) has increased to 0.31% of salary after expenses, which exceeds the current premium (at 0.20% of salary). Allowing for IBNR and IBNER it is expected that claims will exceed premiums by $4.2 million for 2016, based on claim rates for 2013-2016.

1.13 The additional claims cost would need to be met from the reserves and this will deplete these reserves quickly unless the premium rate is changed.

1.14 The industry standard approach would be to charge age based rates rather than one rate for all ages, although any change in premium rates would need to consider intergenerational issues. We understand this is one of the product design changes expected to be implemented in 2017/18.

Reserves

1.15 The insurance reserves remain substantial at $141.3 million at 30 June 2016 (compared to $132.2 million at 30 June 2013).

1.16 Free reserves increased from $34.2 million to $36.8 million due to strong investment returns, offset by increased prudential reserves ($45.7 million to $48.3 million) required to cover increasing levels of expected claims.

1.17 We believe the Board is entitled to take the view that the free reserves remain adequate to support the current premium subsidy of Death and TPD claims for at least the next three years. However, as Income protection claims keep increasing, the additional claim cost will deplete these reserves quickly unless the premium rate is changed.

Death and TPD

1.18 The Death and TPD actual claim cost (including Incurred But Not reported, "IBNR") reduced marginally from 0.10% of sum insured for 2010-2013 to 0.09% for 2013-2016.

Claims as % of sum insured

2010-13* total	2013[1]	2014	2015	2016	2013-16* total
0.10%	0.08%	0.08%	0.10%	0.11%	0.09%

*The 2010-13 and 2013-16 totals are four year averages and are inclusive of 2010 and 2013 respectively. All references to 2010-13 and 2013-16 throughout this report reflect the respective four year period.

1.19 Observations of TPD claim experience are that:

a. TPD claims are continuing to increase across the industry

b. There is an increasing presence of legal firms in claims and an increase in mental health claims

c. The previous claim experience may reflect apathy of members and may not be the case in the future

d. Previous improvements in Super SA claims management, which saw more late claims being admitted up to 2013, may have marginally corrected itself. That is, claims appear to be notified earlier for 2013-16 than those observed for the 2010-13 period.

1.20 The cost of standard cover remains at approximately $1 per unit per week, but is high for younger member (i.e. they are paying more than the cost of claims). For example, the cost of claims ranges from approximately $0.25 per unit per week at ages 20 to 25 up to approximately $0.44 per unit per week for ages 35 to 40, compared to the subsidised premium of $0.75 per unit per week.

1.21 If standard cover premiums remain at $0.75 per unit per week, the expected premium subsidy is $3.5 million per annum, of which $0.7 million is in respect of additional voluntary cover over 2 units. Given "free reserves" of $36.8 million, a subsidised premium is sustainable, however providing a subsidy for voluntary units may not be the best use of reserves.

1.22 Members are no longer able to apply for Fixed cover. However, members who already have Fixed cover prior to the cessation retain their current level of cover. Currently, fixed cover premiums exceed claims, but while premiums remain fixed, expected claims will increase as fixed cover members age. Therefore, the excess premium should be considered as a contribution to reserves and hence, a reserve ($10 million as at 30 June 2016) has been maintained for this group.

[1] This figure is different to the 2013 claim rate in May 2014 report (which showed a claim rate of 0.11%). It is based on actual claims reported for 2013 (rather than estimates for Incurred But Not Reported claims) and incorporates any updates to insured member information since the last review.

Income Protection

1.23 The level of Income Protection claims has been steadily increasing from 2013 to 2016, with the claim rate as a percentage of members as below:

Claims as % of members

	2010-13	2013[2]	2014	2015	2016	2013-16
Claims	1,206	351	432	445	471	1,699
Claim rate	0.41%	0.43%	0.52%	0.54%	0.55%	0.51%

1.24 The cost of Income Protection claims has been increasing and this is consistent with experience across the industry.

1.25 The claim cost as a percentage of salary insured was 0.25% for 2013-2016, but has been increasing through the period. The claim cost experience is lower than the claim rate experience (shown above) mainly due to low average duration of claims (including adjustment for Incurred But Not Enough Reported, "IBNER"[3]).

Claims as % of salary insured (cost of claims, excluding allowance for insurance admin fees)

	2010-13	2013[4]	2014	2015	2016	2013-16
Claims cost as % of salary	0.20%	0.18%	0.26%	0.27%	0.29%	0.25%
Average duration (yrs)		0.59	0.68	0.66	0.65	

1.26 The cost of Income Protection benefits for 2010-13 was 0.20% of salaries (after allowing for IBNER and IBNR). Since 2013, claims experience has continued trending upwards, averaging 0.25% for 2013-16, and reaching 0.29% for 2016. The claims costs were 0.27% for 2013-16 and 0.31% for 2016 after allowing for insurance administration fees[5].

1.27 The industry standard approach would be to charge age based rates rather than one rate for all ages, however any changes in premium rates would need to consider intergenerational issues.

Reserves

1.28 The insurance reserves increased by 7% from 2013 to 2016 to $141.3 million (2.2% per annum). This was mainly due to favourable investment returns, which averaged 8.9% per annum for 2013 to 2016 (13.8% in 2014, 9.4% in 2015 and 3.8% in 2016).

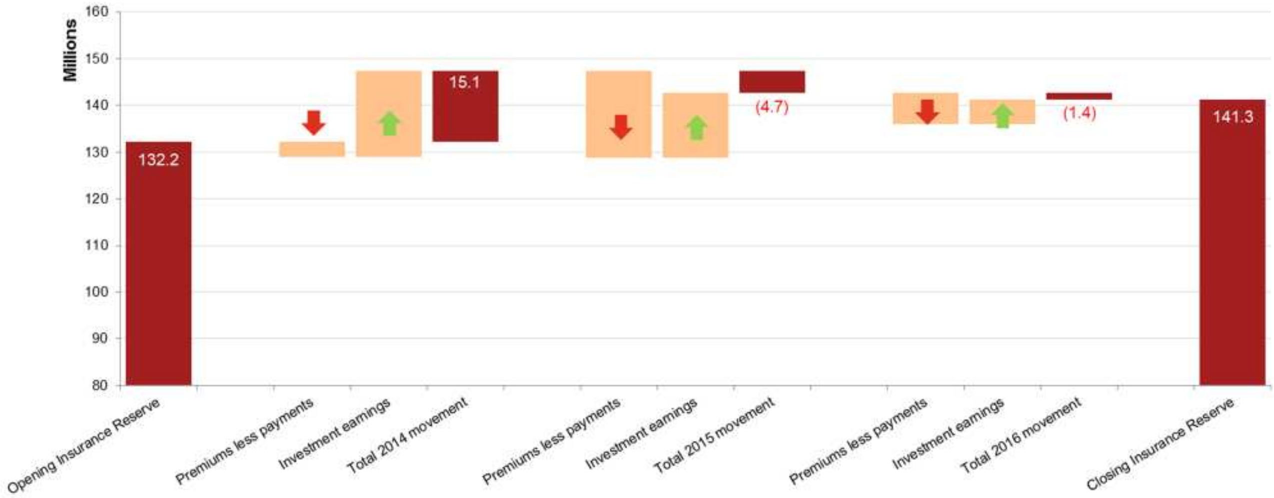
1.29 There was a $15.1 million gain on reserves in 2014, which was offset by losses in 2015 and 2016 ($4.7 million and $1.4 million respectively) as premiums were less than payments and expense outflows.

[2] This figure is different to the 2013 claim rate in May 2014 report (which showed 385 claims and a claim rate of 0.46%). It is based on actual claims reported for 2013 (rather than estimates for Incurred But Not Reported claims and Incurred But Not Enough Reported claims) and incorporates any updates to insured member information since the last review.

[3] Incurred But Not Enough Reported (IBNER) claims, allows for additional payments to be made for Income protection in progress.

[4] This figure is different to the 2013 claim rate in May 2014 report (which showed claims cost of 0.20%). It is based on actual claims reported for 2013 (rather than estimates for Incurred But Not Reported claims and Incurred But Not Enough Reported claims) and incorporates any updates to insured member information since the last review.

[5] Estimated based on Insurance Administration Fees from accounts ($1.1m for 2016).



1.30 The level of recommended Prudential Reserves ($48.3 million) and self-insurance reserves ($56.2 million) leave "free reserves" of $36.8 million, increased from $34.2 million in 2013. Going forward, free reserves will meet the cost of the death, TPD and income protection premium subsidies, and any additional costs in the event that prudential and self-insurance reserves are insufficient.

$ million	Death and TPD	Income Protection	Total at 30/06/16	Total at 30/06/13
Insurance reserve[1]	**124.5**	**16.7**	**141.3**	**132.2**
Prudential Reserves				
IBNR & IBNER[2]	(15.1)	(13.2)	(28.3)	(25.7)
Fluctuation reserve	(5.0)	(5.0)	(10.0)	(10.0)
Fixed Cover Reserve[3]	(10.0)	0.0	(10.0)	(10.0)
Total Prudential Reserves	**(30.1)**	**(18.2)**	**(48.3)**	**(45.7)**
Self-insurance Reserves				
Asset resilience reserve	(4.5)	(2.7)	(7.2)	(6.8)
Contingency reserve	(27.1)	(21.9)	(49.0)	(45.5)
Total Self Insurance Reserves	**(31.6)**	**(24.6)**	**(56.2)**	**(52.3)**
Expected 'free reserves'	**62.8**	**(26.1)**	**36.8**	**34.2**
Ongoing Subsidy				
Standard default cover	(2.3)	-	(2.3)	(2.3)
Voluntary cover	(1.2)	-	(1.2)	(1.1)
Income protection[4]	-	(4.2)	(4.2)	-
Total subsidy	**(3.5)**	**(4.2)**	**(7.7)**	**(3.3)**

[1] Insurance reserve of $141.3m was split into Death and TPD and Income Protection based on Triple S accounts.

[2] Includes allowance for higher than expected IBNR & IBNER at 50%.

[3] Estimated based on current member cohort.

[4] Income protection subsidy show the current cost of claims in excess of premiums (based on 2016 exposure and 2013-16 claim rates).

1.31 The insurance reserves remain substantial, at $141.3 million at 30 June 2016. With free reserves of $36.8 million, we believe they remain adequate to support the current premium subsidy of Death and TPD claims for at least the next three years. However, as Income protection claims keep increasing, the additional claim cost will deplete these reserves quickly unless the premium rate is changed.

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2. Introduction

Purpose and scope of report

2.1 This report has been prepared at the request of the Department of Treasury and Finance of South Australia, acting on behalf of Super SA as required by Section 17 of the *Southern State Superannuation Act 2009* (see Appendix A).

2.2 The valuation date for this report is 30 June 2016.

2.3 The previous triennial report was prepared as at 30 June 2013 by Catherine Nance of PwC.

Changes since the last investigation

2.4 Due to the Commonwealth Government's Stronger Super reforms along with a significant rise in the volume and value of insurance claims, Super SA have reviewed its insurance offering and claims assessment maturity. Since the last valuation, significant process has been made towards establishing new offerings, including the establishment of a revised scheme.

2.5 Also, since 13 November 2014, members are no longer able to apply for Fixed units of cover. Members who already have Fixed cover prior to the cessation of this offering retain their current level of cover.

2.6 Members with Fixed insurance can only increase their level of cover by opting out of Fixed insurance and switching to Standard cover. Members with Fixed Insurance also have the option of reducing their level of Fixed cover.

2.7 There have been no other significant changes to the benefits since the last investigation.

Insurance arrangements provided by Triple S

Death and Total and Permanent Disablement (TPD)

2.8 Triple S provides Death and Total and Permanent Disablement (TPD) insurance (with TPD including terminal illness) paid as a lump sum. All members, including those who work part time or who are employed on a casual basis, are entitled to insurance cover. Casual employees may choose not to have insurance.

2.9 There are two alternatives:

a. Standard Cover – for a fixed weekly premium of $1 per unit per week (which is subsidised from reserves to $0.75 per unit per week), the insurance is a specific dollar amount of insurance which varies with current age, up to age 65. The default insurance is two "units" of Standard cover (6 units for Police and Ambulance), and members may apply for additional units, subject to evidence of good health.

b. Fixed Cover – the fixed cover offers insurance up to age 65, in units of $75,000 each. The premium is also fixed, and is based on the age at which the cover is taken out. Since 13 November 2014 members are no longer able to apply for Fixed units of cover. Members with Fixed insurance can only increase their level of cover by opting out of Fixed insurance and switching to Standard cover.

2.10 The maximum insurance cover a member can hold is $1,500,000 or $750,000 if the employee is employed on a casual basis.

2.11 Lump Sum Scheme, Pension Scheme and Police Pension Scheme members, who are also members of Triple S, do not automatically receive two units of Standard cover. However, these members can apply to purchase insurance through Triple S in addition to the insurance provided through their current super scheme.

2.12 Spouse members have the option of applying for voluntary Death insurance cover, subject to evidence of good health. The maximum insurance cover a spouse member can hold is $1,500,000.

2.13 The insurance and premiums for Standard and Fixed cover are included as Appendix C.

2.14 Death and TPD Insurance does not cover medical conditions that existed at the time of joining Triple S, for a period of six months.

2.15 Approval of a TPD benefit requires permanent incapacity for all kinds of work of at least 60% or more of total incapacity.

Income protection insurance

2.16 Triple S provides Income Protection insurance, payable as a fortnightly income for a limited period following temporary disablement.

2.17 The benefit is 75% of salary for a period of up to 24 months, up to age 60, with a waiting period of 30 days. The premium for this benefit is 0.2% of the member's salary.

2.18 Income Protection insurance is provided automatically to most members of Triple S. Casual members are not automatically provided with Income Protection insurance but can elect to be covered (subject to evidence of good health), and members with income protection elsewhere may opt out of Income Protection insurance (excluding Police and Ambulance).

Future changes to insurance offering and experience

2.19 In FY2018 Super SA expect to implement a number of changes to both death and TPD and income protection arrangements. As these changes are yet to be implemented they do not impact on this review.

2.20 Since the previous valuation, Return to Work Act 2014 (SA) has now replaced the former Workers Rehabilitation and Compensation Act 1986 (SA) in its entirety. Under the new Act:

a. new criteria apply for whether an injury is compensable,

b. generally, entitlement to weekly payments ceases after 2 years, and

c. the new emphasis is on getting injured employees back to work.

2.21 The latter changes will be expected to lead to higher claims, particularly for income protection, as members replace workers compensation benefits with payments from the Triple S scheme. The extent of the impact of the expected changes will be assessed in a report subsequent to this review.

Statement of compliance

2.22 Our advice to you constitutes Prescribed Actuarial Advice as defined in the Code of Professional Conduct (the Code) issued by the Institute of Actuaries of Australia and our advice complies with the Code in this respect.

2.23 The report has been prepared in accordance with Professional Standard 400, issued by the Institute of Actuaries of Australia.

3. Data

Data provided

3.1 The data was provided by Super SA as an Access database containing details of all members of Triple S who were covered for insurance between 1 July 2009 and 30 June 2016.

3.2 We carried out data validation checks and were satisfied that overall the data appears to be reasonable when compared with the previous triennial valuation as at 30 June 2013.

3.3 Overall, we believe the data is reasonable. However, we do not assume any responsibility for the accuracy or completeness for the data provided to us.

Approach

3.4 This investigation covered the four year period to 30 June 2016 ("investigation period") because the insurance benefits were relatively consistent over this period. The previous investigation covered the period up to 30 June 2013, so the investigations overlap by one year. We considered this useful as a way of checking on the consistency of the two investigations.

3.5 We note that some information provided for the period before 30 June 2013 has been updated since the previous valuation, and hence the 2013 results have been updated from those in the May 2014 report. We don't believe this will have a material impact to the overall results and consider the update to be a refinement on the 2013 results as it is based on more up-to-date information.

3.6 We extracted relevant data from the database into a spreadsheet and analysed the claims experience separately for Death and TPD insurance and Income Protection, for each of the four years of the investigation, and for the whole period.

3.7 Members with "cover##" of more than zero are considered insured members for death and TPD for the applicable year (where "##" refers to the applicable financial year). Members with a salary of more than zero and a "cl_ttd##" flag of "Y" are considered insured members for income protection for the applicable year.

3.8 We grouped the data into five yearly age groups, as in the previous investigation, because there is insufficient data to produce meaningful results for individual ages.

3.9 We have examined the experience both by number of claims, and by amounts of insurance.

Death and TPD

3.10 A summary of the data in respect of Death and TPD insurance is set out below, separated by cover type.

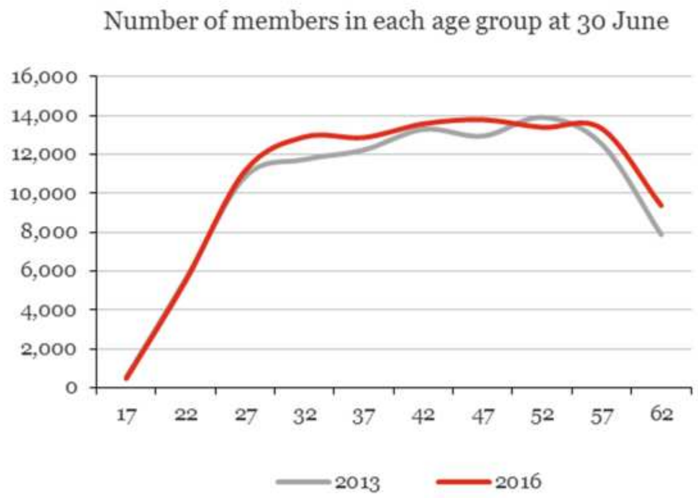
	1 Unit	2 Units	6 Units[1]	Voluntary	Total Standard	Fixed cover	Total Cover
Number of members	816	78,006	3,181	18,293	**100,296**	5,995	**106,291**
Total cover ($m)	28	7,621	1,120	2,841	**11,610**	2,723	**14,332**
Average cover ($)	34,334	97,695	352,120	155,289	**115,754**	454,165	**134,841**
Total units	816	156,012	19,086	90,947	**266,861**	40,730	**307,591**

[1] Police and Ambulance only

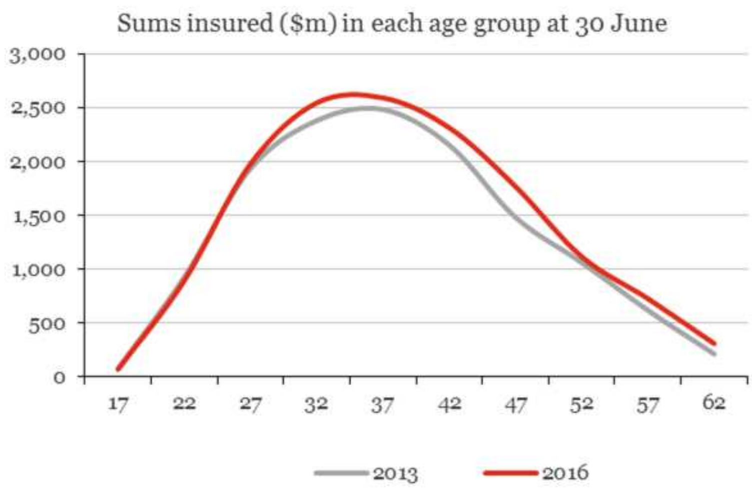
3.11 The number of insured members increased to 106,291 as at 30 June 2016, compared to 101,456 at 30 June 2013. We note that the number of insured members at 30 June 2013 for the previous review was 105,831 (4,375 higher) which is potentially due to the processing delay for resignations. A similar decrease in the number of insured members may be expected as at 30 June 2016 as updated data becomes available.

3.12 Total sum insured increased 7% to $14.3 billion as at 30 June 2016, from $13.4 billion as at 30 June 2013.

3.13 The number of insured members and overall age distribution has remained relatively unchanged, as shown below.



3.14 Similarly, the sum insured by age has increased steadily over the period, as shown below, from an average of $131,592 to $134,841 (2%) over the 3 year period.



Breakdown of cover types

3.15 Fixed cover members:

a. represent 6% of total members, but 19% of the total sum insured (6% of total members, 18% of total sum insured in 2013)

b. accounted for 37 claims (6% of total number and 26% of total claim amount) during the investigation period (25 claims and 5% of total number and 16% of total claim amount in 2013).

3.16 Voluntary cover members:

a. represent 17% of total members, with 20% of sum insured (19% of total members, with 20% sum insured in 2013)

b. accounted for 195 claims (34% of total number and 30% of total claim amount) during the investigation period (200 [6] claims in 2010-13, which accounts for 38% of total number and 42% of total claim amount).

[6] The 2013 report stated 69 claims but this wasn't over the full investigation period, so should have read 200.

3.17 The Triple S Insurance Scheme consists mainly of active members in the Triple S fund (approx. 99%). Other groups include:

a. Flexible rollover product: 675 members (471 members)

b. Spouses: 99 members (104 members)

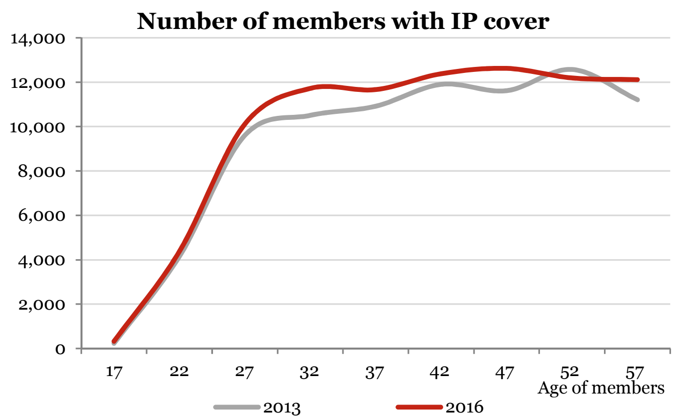
c. Salary sacrifice: 129 members (127 members)

d. SA Select: 98 members (133 members).

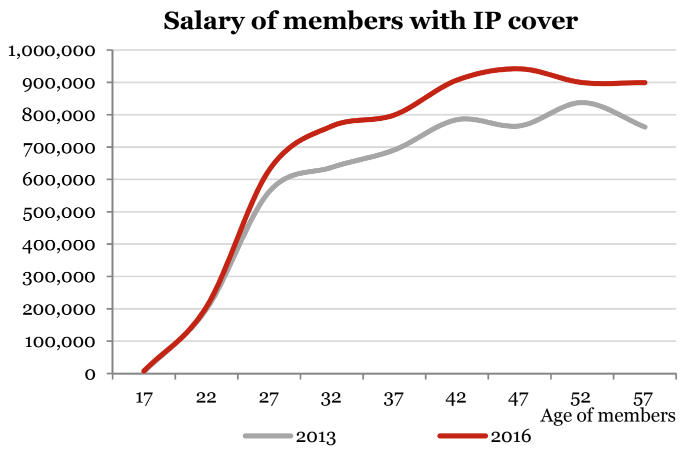
3.18 Throughout the report, the claims experience refers to all members unless stated, as the number of members (and claims) in each sub group (fixed, voluntary and other groups) is too small to be statistically significant.

Income Protection

3.19 The number of members with Income Protection cover increased 6% from 30 June 2013, from 82,723 members to 87,516 members as at 30 June 2016 and the total salary of members with cover increased 15% (from $5.2bn to $6.1bn). We note that the number of insured members at 30 June 2013 for the previous review was 86,544 (3,821 higher) which is potentially due to the processing delay for resignations. A similar decrease in the number of insured members may be expected as at 30 June 2016 as updated data becomes available.



3.20 The average Income Protection benefit for insured members is $51,868 per annum as at 30 June 2016, based on 75% of the average salary of $69,158. This has increased 2.9% per annum from 30 June 2013 when the average benefit was $47,544 (average salary $63,392).



4. Death and TPD experience analysis

Adjustment for incurred but not reported (IBNR) claims

4.1 The data provided to us was effective at 30 June 2016, and was produced towards September 2016.

4.2 Claims are recognised on the administration system not when they occur, but when they are approved, which can take a number of months.

4.3 This means that a number of claims which occurred prior to 30 June 2016 are not included in the data, because they are still being processed. We need to estimate and include the value of these claims, to ensure we capture all claims occurring in the period under review. This is similar to the way in which accounts need to include expenses which have been accrued but not yet incurred.

4.4 We analysed the historic delay between date of claim and date of settlement. Because the date of exit shown in the data is always the date of leaving employment, we were also provided with date of last employer contribution, which we were advised was suitable as an estimate of date of claim.

4.5 Historically, industry observed delay periods have showed approximately:

a. 90% of claims being reported within 6 months and 98% within 12 months for death claims

b. 50% of claims being reported within 6 months, 80% within 12 months and 90% within 24 months for TPD claims.

4.6 More recently however, funds are receiving more late claims, particularly for TPD. This is due in part to increased member engagement and awareness, and a continued increased presence of legal firms in claims.

4.7 Super SA experience was showing slightly lower delays from that in 2010-13. TPD claim delays are similar to the historical observations above, and are showing increasing numbers of late claims in more recent years. The results are summarised in Appendix B.

4.8 For the 2013 review, we were advised that TPD claims management has been made more rigorous, increasing approval times, which could explain alignment to industry averages for TPD claims. Death claims are now checked by Claims Management before payment which may have be delaying some payments. A slight improvement in delays has been observed, offsetting the increase shown for 2010-13, suggesting some potential efficiencies have been gained now the new process has been in place for a few years.

4.9 A review of claims advised to have been incurred in 2013 (based on data in 2016) showed the potential claims (31 claims) and IBNR (72 claims or 66% of claims) that was included for the 2013 valuation was slightly overstated compared to the actual experience (84 claims in addition to the 77 already notified at 2013, resulting in 161 actual claims for 2013). Additional reserves were also held in 2013 to cover IBNR being higher than expected, at a level of 50% of IBNR.

	2010	2011	2012	2013	Total
Claims in 2013 data **(unadjusted for IBNR)**	157	142	148	77	**524**
Potential claims (1) **(% of claims in 2013 data)**	-	-	19 (13%)	31 (40%)	**50**
IBNR claims (2) **(% of claims with potential)**	-	-	23 (14%)	72 (66%)	**95**
Number of expected claims **(% of claims with potential and IBNR)**	**157**	**142**	**191 (29%)**	**179 (133%)**	**669**
Actual claims in 2016 data	159	142	161	161	**623**
Actual/Expected	101%	100%	84%	89%	**93%**

[1] Potential claims are claims arising from pending and declined claims at 30 June 2013, assuming 85% of all TPD claims will be approved. 43 claims that were declined or pending at 30 June 2013 were subsequently approved. This compares to an allowance of 50 potential claims.

[2] IBNR claims are determined as 66% of the known 2013 claims, after allowing for potential claims, e.g. for 2013: (77 + 31) x 66% = 72 IBNR claims.

4.10 Overall, after allowing for potential and IBNR, actual claims were 16% lower than expected in 2012 and 11% lower in 2013.

4.11 Based on the observed delay pattern, review of 2013 IBNR allowance and industry trends, the IBNR allowance for 2016 has been determined as follows:

% of claims	2015	2016
Death potential claims	1%	0%
TPD potential claims	4%	38%
Death IBNR	6%	59%
TPD IBNR	20%	66%

4.12 So for TPD claims for 2016, allowances for pending and declined claims which may be approved in the future is estimated at 38% of claims known at 30 June 2016, and claims which have been incurred but not notified are assumed to be 66% of the claims known at 30 June 2016.

4.13 The following table shows impact on claim amounts ($'000)

Claims known at 2016	2013	2014	2015	2016	Total
Amount of claims (unadjusted for IBNR)	10,933	10,298	11,457	6,318	**39,005**
Amount of potential claims(1) (2)	0	0	320	1,840	**2,160**
Amount of IBNR claims	0	0	1,912	6,690	**8,602**
Amount of claims (with potential and IBNR)	10,933	10,298	13,688	14,848	**49,767**
Total potential and IBNR allowance(2)	-	-	19%	135%	

[1] Potential claims are claims arising from pending and declined claims at 30 June 2016, assuming 90% of all claims will be approved

[2] The average TPD claim size for 2013-2016 is $66,000 ($63,000 - $68,000); average size for Death claims is $68,000 ($55,000 - $92,000). As this is lower than the assumed claim size of $90,000 adopted in the previous valuation, we have reduced the average claim size assumption to $80,000 for death and TPD claims for potential and IBNR claims.

4.14 The potential claim amount of $1.840 million in 2016 is based on 23 potential claims and an average claim size of $80,000. Similarly, the estimated IBNR of $6.690 million in 2016 is determined based on approximately 84 IBNR claims. Please refer to Appendix B for more details on the number of Death and TPD claims and allowances for 2013 to 2016.

4.15 The overall claims amount (including potential and IBNR) is increasing from $10.9 million for 2013 to $14.8 million for 2016 (36% increase or 11% p.a.). This is due to:

a. Increased sum insured of 7% from 2013 to 2016, or 2.4% p.a. (from $13.3 bn to $14.3 bn)

b. Increased average claim size of 7% from 2013 to 2016, or 2.4% p.a. (from $67,907 to $72,916)

c. Increased frequency of claim of 23% from 2013 to 2016, or 7% p.a. (see section below)

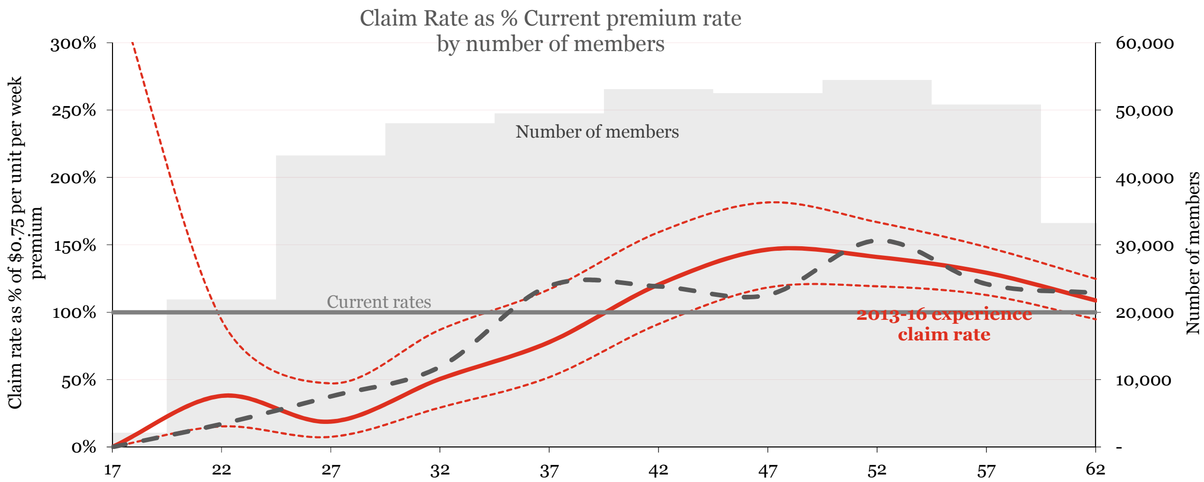
4.16 The allowance for IBNR claims is $8.6 million of claims, which is up from $8.5 million in 2013. The actual IBNR could still be higher than $8.6 million (based on past experience) so an allowance of 50% of IBNR is maintained for claims being higher than expected ($4.3 million).

4.17 The number of claims and amount of claims following this point in the report include the IBNR allowance (unless advised otherwise).

4.18 The effect of the IBNR on the actual number of claims for Death and TPD Insurance for 2013 to 2016 is detailed in Appendix B.

Claims experience by number of claims

4.19 The claim rates for Death and TPD Insurance, based on the number of claims and the number of insured members, are shown below:



4.20 By way of explanation:

a. The solid red line shows the rate of claim for each age group, relative to the expected rate implied by the current insurance rates, net of expenses.

b. The dotted red lines show the "95% confidence interval", i.e. the true claim rates should be somewhere within the dotted lines with a 95% probability.

c. The shaded bars in the background show the number of members in each age group. The dotted confidence intervals are narrowest where there is the most data.

d. The grey dashed line shows previous equivalent rates from the 2010-2013 investigation (claims rate of 0.17% of number of members).

4.21 The graph shows that the 2013-16 claim rate based on number of number of claims exceeds the premiums for members over approximately age 40.

4.22 Over the review period, claim rate rose from 0.16% of members insured in 2013 to 0.20% in 2016.

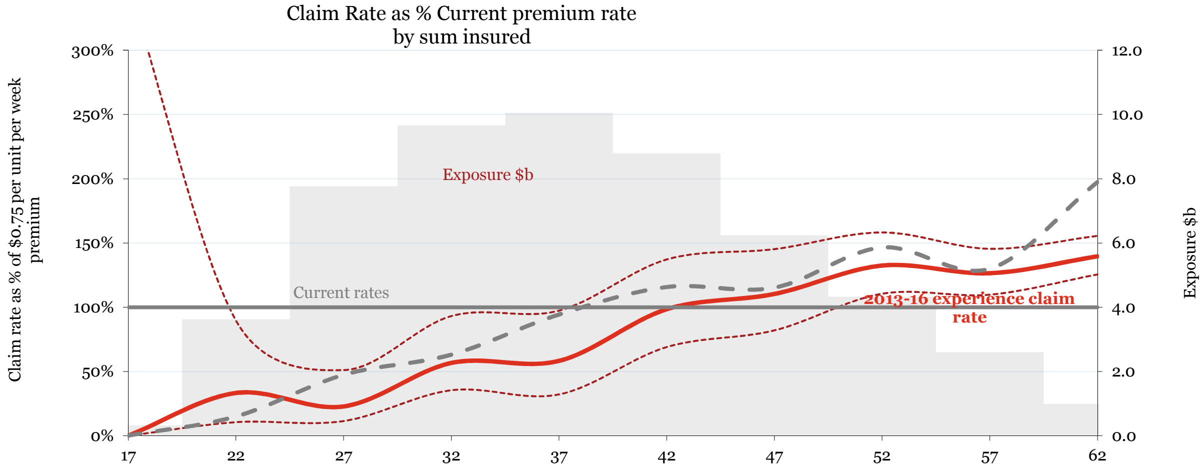
4.23 The average claim rate over the 3 year period (2013-16) remain relatively stable compared to the previous 2010-13 period at 0.17% (down from 0.20% from 2007-10).

Claims as % of members insured

2010-13 total	2013	2014	2015	2016	2013-16 total
0.17%	0.16%	0.17%	0.18%	0.20%	0.17%

Claims experience by amount of claims

4.24 The claim rates for Death and TPD Insurance, based on the amount of claims and the sum insured, are shown below:



4.25 Similarly to the graph above, the claim rate based on amount of claims exceeds the premium rate for members over approximately age 40.

4.26 The cost of claims (including IBNR) has marginally reduced from 0.10% for 2010 to 2013 to 0.09% for 2013 to 2016.

4.27 For all age groups over 25, the claim rate for 2013-16 was lower than that for 2010-13. This was primarily due to:

a. Less claims arising for 2013 than allowed for in the IBNR (26% lower based on claim amounts as average claim amount and number of claims are less than assumed)

b. More favourable claim experience in 2014, being 22% lower than the 2010-13 experience

Offset by

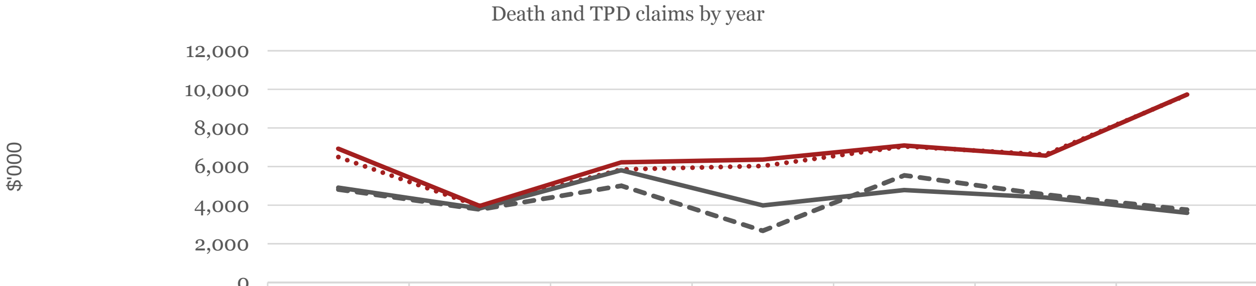
c. Higher claims for 2015 and 2016 (after IBNR) compared to 2010-13 experience, 2% and 8% respectively.

Claims as % of sum insured

2010-13 total	2013	2014	2015	2016	2013-16 total
0.10%	0.08%	0.08%	0.10%	0.11%	0.09%

Claims payment experience

4.28 Actual payments made in 2016 appear significantly higher than other years for TPD (as shown in the chart below).



	2010	2011	2012	2013	2014	2015	2016
Death (2016 database)	4,813	3,772	5,004	2,672	5,552	4,542	3,769
TPD (2016 database)	6,497	3,929	5,853	6,034	7,050	6,623	9,720
Death (accounts)	4,910	3,828	5,807	3,988	4,780	4,396	3,608
TPD (accounts)	6,929	3,959	6,222	6,358	7,091	6,562	9,740

4.29 There is a clear increase in the number of TPD claims paid, especially since 2011. The number of claims paid has increased 87% (from 69 to 129), with the amount of claims 145% higher. This is partly due to there being more insured members and an increase in the average claim size. The higher claims paid is also a result of the increase in the rate of claims (as discussed earlier). This increase is consistent with observations across the industry.

Number of claims[1]	2010	2011	2012	2013	2014	2015	2016
Death paid in year	65	62	66	45	66	58	57
TPD paid in year	89	69	80	95	110	105	129
Total paid in year	**154**	**131**	**146**	**140**	**176**	**163**	**186**
Death claims in year	67	65	66	54	59	55	26
TPD claims in year	92	77	95	107	112	96	71
Total claims in year	**159**	**142**	**161**	**161**	**171**	**151**	**97**

[1] Payments are the actual payments made in a year, whereas claims incurred are the claims that arise in any year but due to the assessment process may be paid out in later years.

4.30 For years to 2013, figures may be different to those in the 2013 report due to:

a. Updated information – reassigning claims to different years, and/or approving previously declined/withdrawn/deferred claims or vice versa

b. New claims arising which hadn't been reported at 30 June 2013.

Death and TPD analysis by 'Group'

4.31 The insurance data enables analysis by pre-defined groups, however these designations do not allow for occupational analysis. The table and chart below detail the results for each group.

Group	Sum insured 2013-16 ($m)	Number of claims 2013-16	Total claims 2013-16 ($m)	Claim rate 2013-16 (% of sum insured)	Average claim size
Health	12,809	263	19.0	0.15%	72,120
Education	14,039	179	10.5	0.08%	58,811
Police	5,813	12	1.6	0.03%	129,500
Correctional Services	823	29	2.7	0.32%	92,731
Emergency	987	4	0.1	0.01%	31,500
Other	19,165	219	15.5	0.08%	70,775
No group	721	9	0.4	0.06%	0
Overall	54,358	715	49.8	0.09%	69,650

4.32 The analysis shows, similar results to previous years:

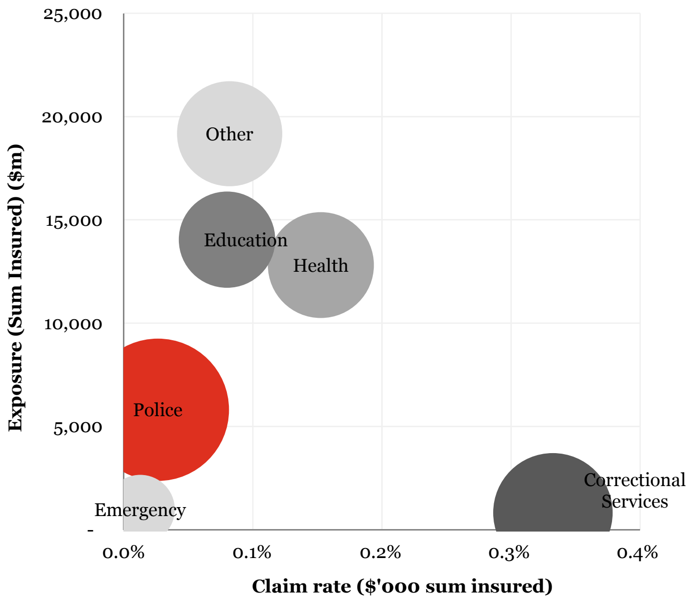
a. Correctional Services are exhibiting a high claim rate, though actual claim rate is highly uncertain due to statistically small number of claims

b. Police exhibiting largest average claim size due to higher level of default units (6 units compared to 2 units for other members)

c. Overall average claim rate 0.09% and claim size $69,650 (0.10% and $75,817 in 2013)

d. All rates are indicative only as the small number of claims per group makes rates unreliable.

4.33 The chart below illustrates these results, where the size of the bubble represents the average claim size.



5. Income Protection experience analysis

5.1 As with death and TPD, income protection claims are not entered on the system until they have been approved, and approval can take several months, so the data provided to us does not include all the claims which were incurred prior to 30 June 2016. We therefore need to adjust the data to allow for these claims.

5.2 There are two types of adjustments for Income Protection claims:

a. Incurred by not reported (IBNR) provisions are made for claims that are not reported or finalised for some time after they occur, and would otherwise be represented in the claims experience under review

b. Incurred but not enough reported (IBNER) provisions are made where the duration of Income Protection payments is potentially longer than the date of the next review.

Adjustment for incurred but not reported (IBNR) claims

5.3 As there is no accurate proxy for date of incident with IP claims, IBNR and IBNER are approximated based on observed claim amounts per month and delay patterns.

5.4 For the 24 months to 30 April 2016 IP claims averaged 38 claims per month. As claims in the later months of 2016 are yet to develop, targeting 38 claims for these months result in an IBNR of 10% of the observed claims for 2016. The IBNR for 2013 was also 10% of claims (targeting 31 claims per month for the months leading up to 30 June 2013).

5.5 The number of Income Protection claims adjusted for the expected number of Incurred but Not Reported claims is as follows:

Claims known at 2016	2013	2014	2015	2016	Total
Number of claims (unadjusted for IBNR)	351	432	445	428	**1,656**
IBNR claims allowance	0	0	0	43	**43**
Number of claims (with IBNR)	351	432	445	471	**1,699**
IBNR allowance	-	-	-	10%	

Adjustment for incurred but not enough reported (IBNER) claims

5.6 The claims data includes the date on which Income Protection payments will cease, or, if the date is beyond the date on which data was extracted, the date on which the member's medical condition will next be assessed. Clearly, many claims will continue beyond this date, so we need to adjust the dates to reflect the expected total payment period.

5.7 IBNER is estimated based on observed duration of claims. The average remaining duration for current IP payments is estimated based the distribution of completed IP claims.

5.8 Claims in payment, with a review date after 30 June 2016, are assumed to continue based on the following table, given their current duration (months):

Current duration (months)	0-3	3-6	6-9	9-12	12-15	15-18	18-21	21-24
Remaining duration (months)	9.0	9.5	9.5	8.5	8.5	7.5	4.5	1.5

5.9 For example, for members who have been receiving income protection payments for 9-12 months it is estimated they will continue to receive income protection for another 8.5 months on average.

5.11 IBNR and IBNER allowance equates to 81% of claims for 2016 and 6% for 2015. That is, $8.8 million, up from $5.6 million in 2013, as detailed below.

Claims know at 2016 ($'000)	2013	2014	2015	2016	Total
Amount of claims (unadjusted for IBNR)	9,264	14,069	14,443	9,674	**47,450**
IBNR & IBNER claims allowance	-	-	888	7,864	**8,752**
Amount of claims (with IBNR & IBNER)	9,264	14,069	15,331	17,537	**56,202**
IBNR and IBNER allowance	-	-	6%	81%	

5.12 For 2016, the $7.9 million IBNR and IBNER claim allowance comprises:

a. An IBNER allowance based on the observed duration of each claim in payment and adjusted for an estimated remaining duration (refer to table under 5.8). This equates to $6.3 million, or 65% of claims paid to 30 June 2016

b. An IBNR allowance of 10% of claims paid to 30 June 2016 ($1.6 million).

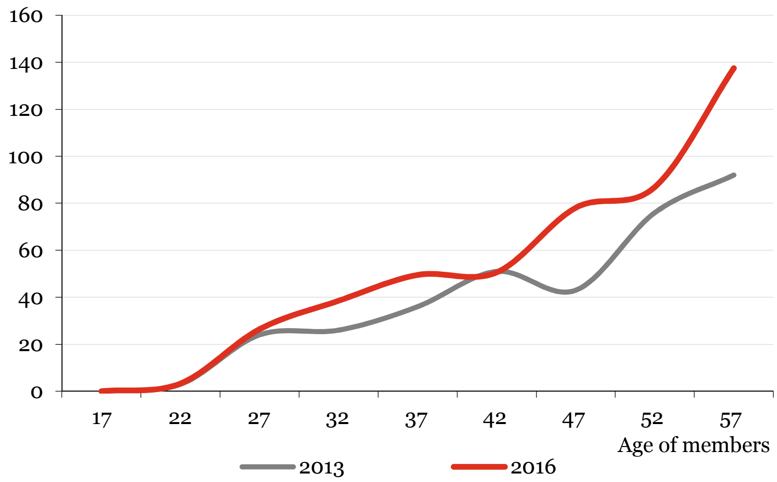
5.13 The level of IBNR and IBNER has remained relatively stable since the last valuation (6% for 2015 and 81% for 2016 compared to 8% for 2012 and 77% for 2013). However, the amount of IBNR and IBNER has increased 57% due to the higher level of claims the allowances are applied to. The increase in claims is discussed further below.

5.14 The actual IBNR and IBNER could still be higher than $8.8 million based on past experience. We have maintained a reserve of 50% of IBNR and IBNER for higher than expected claims ($4.4 million for 2016).

5.15 The number of claims and amount of claims following this point in the report include the IBNR and IBNER allowances (unless advised otherwise).

Claims experience by number of claims

5.16 The charts below shows the number of Income Protection claims by age group, after adjustment for IBNR and IBNER, as at 30 June 2013 and 2016.

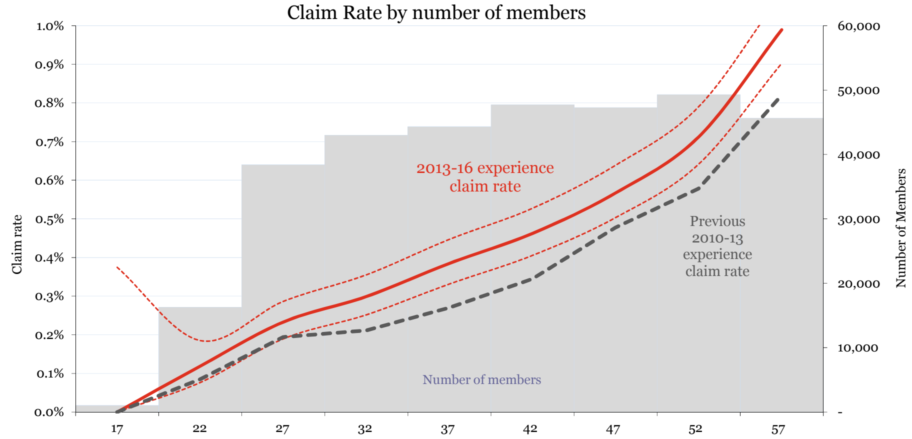


5.17 The number of claims notified for 2016 is higher at almost every age compared to the number for 2013. This reflects an increase in the number of incurred members (6% from 2013 to 2016) but moreso the increasing rate of income protection claims being observed for the fund and across the industry.

5.18 The claim rates have increased since the previous valuation, especially for older members. The rate for 2010-13 was 0.41%, with a trend to increasing claims with 2012 being 0.47% and 2013 0.46%. This trend has continued. The claim rates, as a percentage of members, from 2013 to 2016 were as followed:

Claims as % of members	2010-13	2013	2014	2015	2016	2013-16
Claims	1,206	351	432	445	471	1,699
Claim rate	0.41%	0.43%	0.52%	0.54%	0.55%	0.51%

5.19 The claim rates for Income Protection, based on the number of claims and the number of insured members, are shown below:



5.20 By way of explanation:

a. The solid red line shows the rate of claim for each age group, based on the number of insured members in that group.

b. The dotted red lines show the "95% confidence interval", i.e. the true claim rates should be somewhere within the dotted lines with a 95% probability.

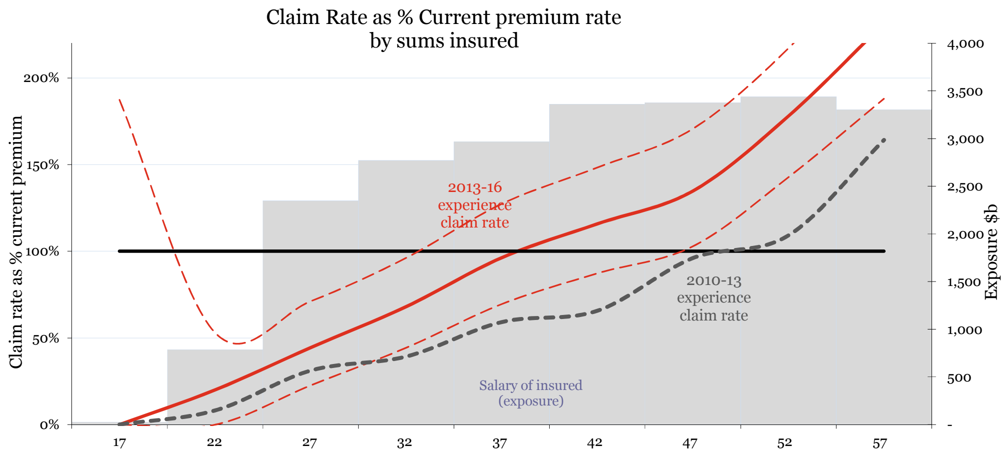
c. The shaded bars in the background show the number of members in each age group. The dotted confidence intervals are narrowest where there is the most data.

d. The grey dashed line shows previous equivalent rates from the 2010-2013 investigation, with allowance for IBNR and IBNER.

5.21 The graph above shows that income protection claim rates based on the number of claims have increased at all ages compared to those at the previous review.

Claim experience by amount of claims

5.22 The claim rates for Income Protection, based on the amount of claims and the salary of insured members, are shown below relative to the current premium level of 0.2% of salary:



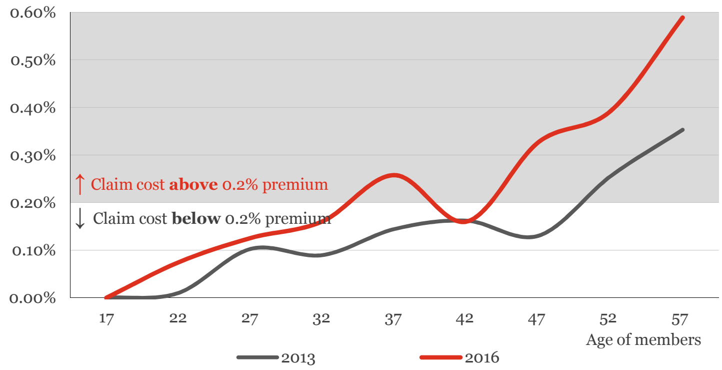
5.23 Similar to the previous graph, the graph above shows that income protection claim rates based on sum insured amounts have also increased at all ages compared to the previous review.

5.24 The overall amount of claims was 0.25% of salary for 2013-2016, but was as high as 0.29% for 2016. Allowing for insurance administration fees the total cost was 0.27% for 2013-16 and 0.31% for 2016[7]. The average duration has also increased from 0.6 years to 0.65 years.

Claims as % of salary insured (cost of claims)

	2010-13	2013	2014	2015	2016	2013-16
Claims cost as % of salary	0.20%	0.18%	0.26%	0.27%	0.29%	0.25%
Average duration (yrs)	0.60	0.59	0.68	0.66	0.65	0.65

5.25 There was a significant increase in claims for above 40 year olds since 2013.



5.26 The IP claim rate is now significantly above the current premium of 0.2% of salary. The rising cost and higher level of claims for older members is increasing the need for a premium scale that more closely aligns with expected claim rates across the membership (age based pricing).

[7] Estimated based on Insurance Administration Fees from accounts ($1.1m for 2016).

6. Profitability

Profitability of Death and TPD insurance

Industry Experience

6.1 TPD claims continue to increase across the industry, as was the case in 2013. This is due to increased member engagement and awareness of superannuation related insurance benefits, and a continued increased presence of legal firms in claims.

6.2 Super SA claims cost of 0.09% of sum insured for 2013-16 is lower than an "indicative benchmark rate", based on two comparable government funds.

6.3 The indicative benchmark rates are at least 30-45% higher based on published premium rates and allowing for a 30% margin for administration profit in the rates.

6.4 We have estimated the profitability of death and TPD rates as shown below.

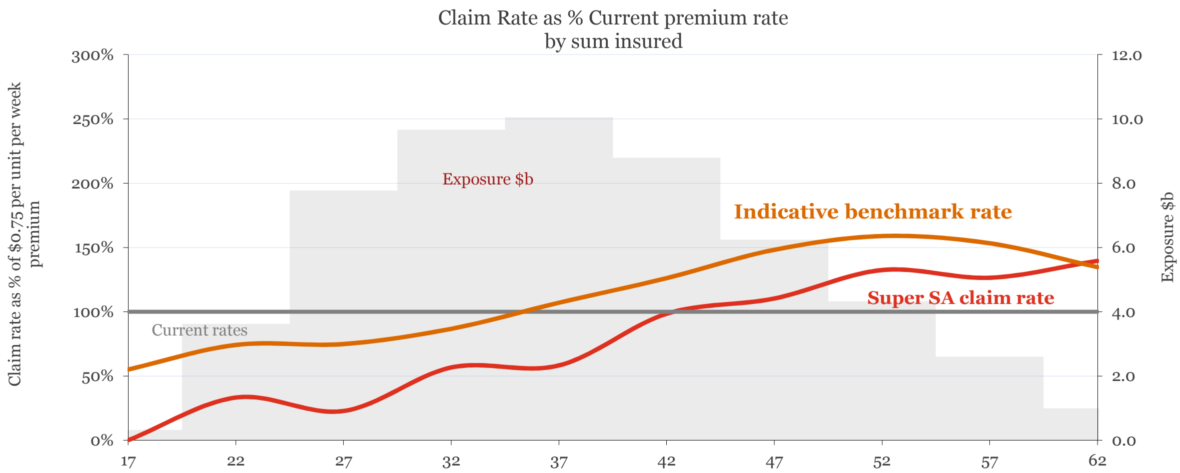
Expected cost of death and TPD claims

6.5 The current premium for one unit of Standard death and TPD insurance cover is $1 per week.

6.6 Based on Super SA claims experience, the expected cost of claims and expenses would generally be below $1.00 per unit (approximately $0.86 based on higher claim rates for 2016) for all members.

6.7 Based on indicative benchmark rates, the expected cost of claims and expenses would be at least $1.00, as shown in the graph below. ($1.02 per week, allowing for a 30% margin for administration profit)

6.8



Standard cover

6.9 The current premium is $1 per unit per week for Standard cover, however this is subsidised to $0.75 per unit per week from insurance reserves.

6.10 The table below illustrates that the current subsidised premium of $0.75 per unit per week remains sustainable given reserves.

Expected Values	2016 cover at $0.75/wk ($'000)	2016 cover at $1.00/wk ($'000)	Difference
Default Premiums [1]	6,861	9,148	2,287
Voluntary Premiums[2]	3,547	4,729	1,182
Total Standard Cover Premiums	**10,408**	**13,877**	**3,469**
Expected claims	(9,694) [3] to (12,957) [4]	(9,694) to (12,957)	-
Expenses[5]	(1,227)	(1,227)	-
Premiums minus payments	**(513) to (3,776)**	**2,956 to (307)**	

[1] Based on 175,914 units for members with 1 and 2 units and Police and Ambulance members with 6 units

[2] Based on 90,947 units, of which 54,361 are in excess of 2 units

[3] Expected claims based on 2013 – 2016 observed claim rate for Super SA and 2016 exposure. Expected claims for standard cover members are about 70% of overall claims.

[4] Expected claims based on industry claim rate and 2016 exposure

[5] Estimated as Insurance Administration Fees from accounts ($1.3m for death & TPD for 2016 and 94% of members having standard cover).

6.11 The cost of standard cover remains at around $1 per week per unit when we factor in industry experience.

6.12 The premium subsidy from reserves for $0.75 per unit per week is approximately $3.5 million per annum. This is made up of:

a. $2.3 million for default cover

b. $0.5 million for the first two voluntary cover units

c. $0.7 million for voluntary cover units over 2 units

6.13 Given free reserves of $36.8 million, (see Reserves section below) the premium subsidy is sustainable; however the Board may wish to consider the equity of subsiding voluntary cover.

Fixed cover

6.14 Fixed cover for a fixed premium is no longer offered.

6.15 The table below shows expected premiums currently exceed expected claims and expenses. However, premiums will remain fixed whereas expected claims will increase as the fixed cover members' age.

6.16 The excess premium should be considered as a contribution to reserves, as claims likely to exceed premiums in the future.

Fixed Cover Members	$'000
Expected Premiums	4,599
Expected claims[1]	(4,055)[2] to (4,937)[3]
Expenses[4]	(73)
Premiums minus payments	**471 to (411)**

[1] Based on 40,730 units

[2] Expected claims based on 2013 – 2016 observed claim rate for Super SA and 2016 exposure. Expected claims for fixed cover members are about 30% of overall claims

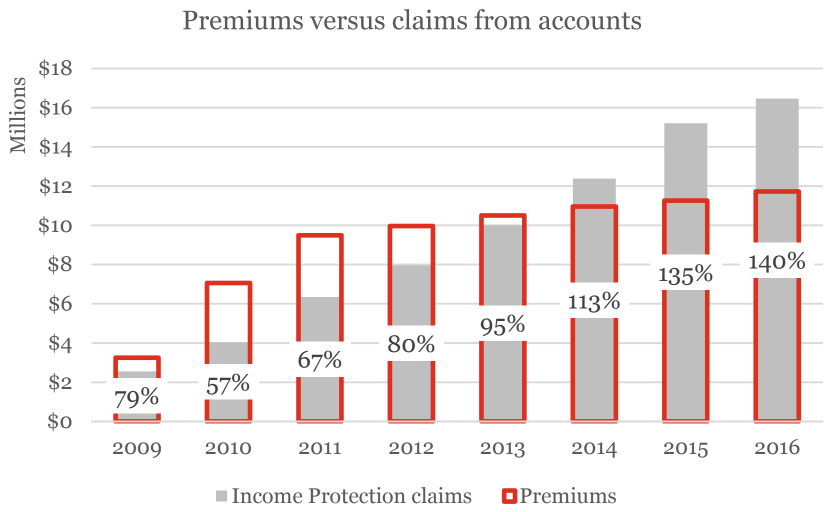
[3] Expected claims based on industry claim rate and 2016 exposure

[4] Estimated as Insurance Administration Fees from accounts ($1.3m for death & TPD for 2016 and 94% of members having standard cover).

Profitability of Income Protection insurance

6.17 The current premium for Income Protection is 0.20% of salary. At 2013, the claim rate was expected to reach this level (i.e. 0.2%, after allowing for IBNR and IBNER). Since 2013 claims experience has continued trending upwards, averaging 0.27% for 2013-16 and reaching 0.31% for 2016 (with IBNR and IBNER and insurance admin fee allowances).

6.18 As a result, current claims exceed premiums. The chart below shows this trend based on actual claims paid and premiums received from accounts.



6.19 The claim rate for 2016 is higher than the current premium (0.20% of salary). With an allowance for expenses, the cost is expected to increase to 0.31% of salary, with a potential for further increases.

6.20 The table below illustrates that expected subsidised premium could be between $4 million and$6 million. The additional claims costs above premiums will be met from reserves.

	Based on 2013-16 claim rates	**Based on 2016 claim rates**
Expected premiums	12,105	12,105
Expected claims	(15,199)	(17,537)
Expenses[1]	(1,074)	(1,074)
Premiums minus payments	**(4,168)**	**(6,507)**

[1] Estimated as Insurance Administration Fees from accounts ($1.1m for 2016)

6.21 The subsidy would need to be paid from the free reserves ($36.8 million as at 30 June 2016), on top of the subsidy for Death and TPD claims of $3.5 million per annum.

6.22 Furthermore, income protection claims are increasing across the industry. Further increases in Income Protection claims for Super SA is allowed for as an additional reserve, estimated as 50% of IBNR and IBNER estimates ($4.4m).

7. Reserves

7.1 The Triple S scheme needs to hold reserves because it has no recourse to the employer. We propose that they be as follows.

Prudential reserve

7.2 A prudential reserve may include an allowance for normal statistical fluctuations in claims from time to time, volatility of outstanding claims, and protection against exceptional events.

IBNR and IBNER reserve for claims not finalised

7.3 Our analysis has showed that some claims are not finalised, or even reported, for quite some time after they are incurred. A provision needs to be made in the Scheme accounts for these claims.

Death and TPD

7.4 The previous investigation recommended holding a provision of 59% of annual premiums for death and TPD claims.

7.5 We have calculated a provision of 57% of annual premiums for this valuation, consistent with the approach taken for the last valuation.

7.6 This amounts to $8.6 million at 30 June 2016 ($8.5 million at 30 June 2013).

7.7 In addition, we have made an allowance for potential claims expected to be approved and declined claims that may be approved on appeal in proportion to observed rates. This amounts to $2.2 million at 30 June 2016 (compared to a reserve of $4.5 million in 2013). The reserve has been reduced due to a lower number of potential claims, and a lower average claim assumption.

7.8 In total, the reserve for additional expected claims relating to the investigation period is $10.8 million as at 30 June 2016. (compared to $13.0 million was assumed at 30 June 2013)

Income Protection

7.9 Income Protection requires a reserve not only for claims which have not been reported, but also for continuing payments for current claims.

7.10 Based on the approach outlined in this report, we estimate this at about 73% of annual premiums for IBNR and IBNER (compared to 51% for 2013, reflecting the increasing number of income protection claims).

7.11 This amounts to $8.8 million at 30 June 2016 ($5.6 million at 30 June 2013).

Volatility of existing claims

7.12 The IBNR and IBNER are estimates based on a number of factors including industry knowledge and observed experience however there is a risk that these estimates may be higher than expected.

7.13 Consistent with the previous review, we recommend holding a reserve of 50% of the estimated outstanding claims (IBNER and IBNR), the reason being:

a. Observed margins are approximately 20% to 30% in the industry

b. Industry wide increase in insurance claim rates

7.14 This requires an additional reserve amount of $8.7 million in 2016 ($7.1 million in 2013).

7.15 We have included this reserve with the reserve for IBNR and IBNER, in the table which follows this analysis.

Fluctuation reserve

7.16 We estimate the random statistical variation in claim amounts for a fund of this size for Death & TPD and Income Protection combined, which is based on additional cost arising if claims experience is two standard deviation from the observed rate of claim. This gives claim costs at 95% level of confidence. We recommend the statistical fluctuation reserve to remain at $10 million as at 30 June 2013.

Fixed cover reserve

7.17 Fixed premium is currently operating at a profit but as members' age and premiums stay fixed, claims are expected to increase above the level of premiums.

7.18 Estimation of the reserve to be held in respect of this cohort of members has been based on the expected profit and loss assuming average claim rates will continue at current levels for 5 to 10 years. Based on this, we recommend a reserve for fixed cover members to remain at $10 million.

Self-insurance reserve

7.19 Certain additional reserves are needed for the Triple S scheme because it is a self-insurance scheme.

Asset resilience reserve

7.20 The insurance reserve is substantially invested in equity and property assets, whose value can fluctuate substantially. We suggest that it would be prudent to allow for this by holding an asset resilience reserve which approximates the amount by which the Prudential Reserves could fall. This ensures that the true value of the insurance reserve is not overstated, even when market values fall.

7.21 We propose setting the resilience reserve at 15% of the prudential reserves in line with the approach in 2010 and 2013. This results in a reserve of $7.2 million at 30 June 2016 (based on prudential reserves of $48.3 million). This is higher than the asset resilience reserve at 30 June 2013 ($6.8 million), due to the increase in the IBNR & IBNER reserves.

Contingency reserves

7.22 The main risk is from exceptional events which can incur large numbers of claims, such as a hospital epidemic, terrorism, or judicial risk (e.g. misinforming members about their benefits). Such rare events are extremely difficult to quantify.

7.23 On the one hand, Triple S is self-insured, and must meet its own claims unless it can obtain financial support from government. It may be prudent for the Board to hold substantial reserves to mitigate this risk. The difficulty is in quantifying the level of protection, and the corresponding reserve required to meet it.

7.24 On the other hand, reserves are financed completely from insurance premiums paid by Triple S members, and it would be unfair to those members to hold excessive reserves that had very little chance of being required.

7.25 The Board needs to balance these two potentially conflicting interests, but the difficulty of quantifying the level of protection means this has to be a matter of judgement rather than actuarial calculation.

7.26 As things stand now, Triple S has an insurance reserve of $141.3 million at 30 June 2016, which is some $85 million in excess of the reserves required for prudential and asset resilience reserves. This would pay for over 1,000 excess insurance claims.

7.27 The Board has previously considered this risk, and decided that the worst case would be a catastrophe affecting the buildings in which most Government employees work. The potential cost was estimated at $40 million in 2010, and $45.5 million in 2013. This equates to an event which affects 260 employees, assuming 130 (half) are death claims and 130 are Income Protection claims paid for 2 years followed by 130 TPD claims.

7.28 Based on current claim amounts, the contingency reserve would increase from $45.5 million in 2013 to $49.0 million as at 30 June 2016.

7.29 It is extremely difficult to set a contingency reserve because, by their nature, catastrophes are unexpected and can occur in many different ways. However, we believe that a reserve at this level provides a reasonable compromise between the interests of safeguarding Triple S and the interest of providing low cost insurance to members and therefore would be applicable for at least the next three years.

Reserve allocation

7.30 The existing insurance reserve is $141.3 million at 30 June 2016. If we allow for the reserves above, then we have the following:

$ million	Death and TPD	Income Protection	Total at 30/06/16	Total at 30/6/13
Insurance reserve[1]	124.5	16.7	141.3	**132.2**
Prudential Reserves				
IBNR & IBNER[2]	(15.1)	(13.2)	(28.3)	(25.7)
Fluctuation reserve	(5.0)	(5.0)	(10.0)	(10.0)
Fixed Cover Reserve[3]	(10.0)	0.0	(10.0)	(10.0)
Total Prudential Reserves	**(30.1)**	**(18.2)**	**(48.3)**	**(45.7)**
Self-insurance Reserves				
Asset resilience reserve	(4.5)	(2.7)	(7.2)	(6.8)
Contingency reserve	(27.1)	(21.9)	(49.0)	(45.5)
Total Self Insurance Reserves	**(31.6)**	**(24.6)**	**(56.2)**	**(52.3)**
Expected 'free reserves'	**62.8**	**(26.1)**	**36.8**	**34.2**
Ongoing Subsidy				
Standard default cover	(2.3)	-	(2.3)	(2.3)
Voluntary cover	(1.2)	-	(1.2)	(1.1)
Income protection[4]	-	(4.2)	(4.2)	-
Total subsidy	**(3.5)**	**(4.2)**	**(7.7)**	**(3.3)**

[1] Insurance reserve have been split into Death and TPD and Income Protection accounts by Super SA.

[2] Includes allowance for higher than expected IBNR & IBNR at 50%.

[3] Estimated based on current member cohort.

[4] Income protection subsidy show the current cost of claims in excess of premiums (based on 2016 exposure and 2013-16 claim rates).

7.31 This shows that 'free reserves' have increased since 2013 even after allowing for the increase of prudential and self-insurance reserves. This is mainly due to good investment returns, which averages to be approximately 9% per annum over the three years period from 30 June 2013 to 30 June 2016.

8. Reliance and limitations

8.1 Our work has been conducted for the sole use and benefit of the Department of Treasury and Finance of South Australia (the Department) in reviewing the insurance arrangements of Triple S, and for no other purpose. No third party may use or rely on our work for any purpose.

8.2 Unless required by law or by the terms of our engagement letter, no copy of or extract from this report is to be distributed to third parties without our prior written consent. We may at our discretion, grant or withhold our consent or grant our consent subject to conditions.

8.3 No oral or written reference to the content of this report may be made by the Department to any third parties without our prior written consent. We may, at our discretion grant or withhold our consent or grant it subject to conditions.

8.4 Our responsibilities and liabilities are to the Department in the context of the use of our report for the purpose set out above. We do not accept any liability or responsibility in relation to the use of our report for any other purpose.

8.5 This report must be read in its entirety. Individual sections of this report could be misleading if considered in isolation from each other.

8.6 All reasonable care has been taken to provide data that is accurate. However, we have relied on a range of external sources for data. As a result, we are unable to guarantee the accuracy of the data contained in this report.

8.7 The advice contained in this report is based on the circumstances of the Department as a whole. It does not take into account the specific circumstances of any individual.

8.8 Past performance is no guarantee of future performance and investment markets are volatile. PricewaterhouseCoopers Securities Ltd does not guarantee that any specific level of returns will be achieved.

Appendix A: Extract from Southern State Superannuation Act 2009

Schedule 1 Part 5, Clause 8—Repeal of Act

A.1 The Southern State Superannuation Act 1994 is repealed.

Section 17—Report as to cost and funding of insurance benefits

A.2 The Minister must obtain a report on the cost and funding of insurance benefits (including disability pensions) provided through the scheme within 12 months after 30 June 2010 and thereafter within 12 months after the end of each triennium following that date.

A.3 Each report must be prepared by an actuary (not being a member of the Board) appointed by the Minister and must report on:

a. the cost of insurance benefits

b. the extent to which premiums paid by members and held by the Board are sufficient to meet the scheme's anticipated insurance liabilities

at the time of the report and in the foreseeable future.

A.4 The Minister must, within 6 sitting days after receiving a report under this section, have copies of the report laid before both Houses of Parliament.

Section 22—Insurance benefits

A.5 The following is to be provided through the Triple S scheme on terms and conditions prescribed by regulation:

a. invalidity insurance, death insurance and income protection for members

b. death insurance for spouse members.

A.6 Invalidity or death insurance may also be provided through the scheme for other persons on terms and conditions prescribed by regulation.

A.7 Regulations made for the purposes of this section:

a. may provide

i) for different amounts of invalidity or death insurance depending on a person's age or occupation, or whether the person was employed on a full time, part time or casual basis, or on any other relevant factor; and

ii) for annual increases in the amount of invalidity or death insurance for the benefit of persons who wish to have annual increases in their insurance; and

iii) for the amount of premiums to be fixed by the Board; and

b. may make different provision according to the various classes of members, matters or circumstances to which they are expressed to apply; and

c. may provide that specified members or spouse members, or members or spouse members of a specified class, cannot apply for, or are not entitled to, invalidity insurance, death insurance or income protection.

Appendix B: IBNR calculations for Death and TPD insurance

B.1 As noted in the body of the report, historical industry observed delay periods showed approximately:

a. 90% of claims being reported within 6 months and 98% within 12 months for death claims

b. 50% of claims being reported within 6 months, 80% within 12 months and 90% within 24 months for TPD claims.

B.2 Super SA experience was showing slightly lower delays from that in 2010-13. TPD claim delays are similar to the historical observations above, and are showing increasing numbers of late claims in more recent years.

Cumulative	0-3 mths	3-6 mths	6-9 mths	9-12 mths	12-18 mths	18-24 mths	24-36 mths	36-48 mths
2010-13 % of claims paid Death only	32%	62%	71%	79%	87%	95%	100%	100%
2010-13 % of claims paid TPD only	45%	56%	66%	73%	82%	90%	100%	100%
2013-16 % of claims paid Death only	30%	69%	84%	90%	93%	95%	99%	100%
2013-16 % of claims paid TPD only	51%	56%	62%	66%	80%	87%	100%	100%

B.3 The effect of the IBNR on the actual number of claims for Death and TPD Insurance for 2013 to 2016 is shown below.

Claims known at 2016	2013	2014	2015	2016	Total
Claims in 2016 data (unadjusted for IBNR)	161	171	151	97	**580**
Potential claims (% of claims in 2013 data)	-	-	4 (3%)	23 (24%)	**27**
IBNR claims (% of claims with potential)	-	-	23 (15%)	84 (70%)	**107**
Number of expected claims (% of claims with potential and IBNR)	161	171	**179 (18%)**	**204 (110%)**	**715**

[1] Potential claims are claims arising from pending and declined claims at 30 June 2016, assuming 90% of all claims will be approved.

Appendix C: Death and TPD insurance cover tables

C.1 The table below shows the current standard cover.

Age last birthday	One unit cover ($)	Premium per week ($)	Age last birthday	One unit cover ($)	Premium per week ($)
Up to 34	75,000	0.75	**50**	27,000	0.75
35	72,000	0.75	**51**	24,000	0.75
36	69,000	0.75	**52**	22,000	0.75
37	66,000	0.75	**53**	20,000	0.75
38	63,000	0.75	**54**	18,000	0.75
39	60,000	0.75	**55**	16,000	0.75
40	57,000	0.75	**56**	14,000	0.75
41	54,000	0.75	**57**	12,500	0.75
42	51,000	0.75	**58**	11,000	0.75
43	48,000	0.75	**59**	10,000	0.75
44	45,000	0.75	**60**	9,000	0.75
45	42,000	0.75	**61**	8,000	0.75
46	39,000	0.75	**62**	7,000	0.75
47	36,000	0.75	**63**	6,000	0.75
48	33,000	0.75	**64**	5,000	0.75
49	30,000	0.75	**65+**	Not offered	Not offered

C.2 The table below shows the current fixed Death and TPD cover.

Age last birthday	One unit cover ($)	Premium per week ($)	Age last birthday	One unit cover ($)	Premium per week ($)
20 and under	75,000	0.80	**43**	75,000	2.90
21	75,000	0.85	**44**	75,000	3.10
22	75,000	0.85	**45**	75,000	3.30
23	75,000	0.90	**46**	75,000	3.50
24	75,000	0.95	**47**	75,000	3.70
25	75,000	1.00	**48**	75,000	3.90
26	75,000	1.05	**49**	75,000	4.10
27	75,000	1.10	**50**	75,000	4.40
28	75,000	1.15	**51**	75,000	4.70
29	75,000	1.20	**52**	75,000	5.10
30	75,000	1.25	**53**	75,000	5.50
31	75,000	1.30	**54**	75,000	6.00
32	75,000	1.40	**55**	75,000	6.50
33	75,000	1.50	**56**	75,000	7.10
34	75,000	1.60	**57**	75,000	7.70
35	75,000	1.70	**58**	75,000	8.40
36	75,000	1.80	**59**	75,000	9.20
37	75,000	2.00	**60**	75,000	10.10
38	75,000	2.10	**61**	75,000	11.00
39	75,000	2.30	**62**	75,000	12.00
40	75,000	2.40	**63**	75,000	13.00
41	75,000	2.60	**64**	75,000	14.10
42	75,000	2.70	**65+**	Not offered	Not offered