Telstra Superannuation Scheme, TSS

Report on the Actuarial Investigation as at 30 June 2021

10 December 2021

Towers Watson Australia Pty Ltd
ABN 45 002 415 349 AFSL 229921

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Section 1: Executive Summary

1.1 We are pleased to present our report to the Trustee on the actuarial investigation of the Telstra Superannuation TSS (the TSS or the Scheme) as at 30 June 2021.

Scope

1.2 The purpose of this report is:

- To identify the long-term funding rate of the TSS's benefits and to recommend the rate at which Telstra should contribute to the TSS in accordance with Part 1.20.1 of the Trust Deed;
- To assess the TSS's financial position and identify and address issues (if any) relating to its short to medium term financial position;
- Review the amount of the reserve in respect of pre 25 September 2005 self-insurance;
- To meet the requirements of Superannuation Prudential Standard SPS 160 Defined Benefit Matters (SPS 160).

1.3 This report focuses on the defined benefit divisions of the Scheme, as assets and account balances are materially the same in respect of the TSS's accumulation benefits and no actuarial oversight is required on the funding of these benefits.

Defined Benefit Membership

1.4 The defined benefit members in Divisions 2, 5 and 8 of the TSS are summarised in the following table. No defined benefit members remain in Division 8 at 30 June 2021.

	30 June 2018	30 June 2021
	Total	**Total**
Number of Members	3,841	2,258
Average Age (years)	53.1	54.5
Average Past Membership* (years)	29.2	31.3
Average Salary	$102,888	$111,385

Assets

1.5 The amount of the defined benefit net assets as at 30 June 2021 was $1,626.5 million.

TSS Experience

1.6 The main features of the TSS's experience over the three years to 30 June 2021 were as follows:

- Telstra contributed in accordance with actuarial recommendations, and contributed at a rate of 15% of defined benefit members' salaries until 31 October 2018. Since 1 November 2018, Telstra has been contributing at 5% of defined benefit members' salaries. As per our letter dated 18 August 2021, Telstra is expected to continue to contribute at a rate of 5.0% of salaries from 1 November 2021 until 30 June 2022, rather than revert to 15.0% of salaries as was recommended in the previous actuarial investigation;

- The net investment return earned on the assets supporting defined benefit liabilities averaged 3.6% p.a. for the three years to 30 June 2021. This was lower than the rate of investment return of 3.7% p.a. assumed in the 2018 investigation over the same period and, considered in isolation, had a slightly negative impact on the financial position of the TSS;

- Salary increases for defined benefit members who remained in the TSS over the three years to 30 June 2021 averaged 2.4% p.a. The rate of general salary inflation increases assumed in the 2018 investigation was 3.0% p.a. and promotional salary increases equivalent to approximately 0.6% p.a. were implicit in the assumed promotional salary scale. Therefore, salary increases for the period were lower than assumed. Considered in isolation, this had a positive impact on the financial position of the TSS; and

- Defined benefit members have exited the Scheme at a higher rate than expected. This was driven primarily by the number of retrenchments during the three years, which has been significantly higher than expected. While other exits, such as retirement and resignation, have been significantly lower than expected, this was not enough to offset the impact of retrenchments in the overall number of exits. This has resulted in the surplus of assets over liabilities being spread over fewer members and, as a result, had a favourable impact on the financial position of the TSS.

1.7 Overall, the total effect of the TSS's experience over the three years to 30 June 2021 was that the TSS's financial position has improved compared to that expected based on the 2018 investigation results, primarily due to the high retrenchment experience and lower than expected salary increases over the intervaluation period.

Valuation Assumptions

1.8 In summary, the financial assumptions used for this and the previous investigations are as follows:

Assumption	30 June 2018	30 June 2021
Rate of Investment Return	3.3% p.a. for year to 30 June 2019 and 3.9% p.a thereafter.	3.2% p.a.
Rate of Inflationary Salary Increases	3.0% p.a.	2.5% p.a.
Real Rate of Return (excluding the impact of promotional salary increases)	0.9% p.a. from 1 July 2019	0.7% p.a.

1.9 The long term investment return assumption has decreased from 3.9% p.a. to 3.2% p.a., and the rate of inflationary salary increases has also decreased from 3.0% to 2.5%. Overall, the Real Rate of Return (excluding the impact of promotional salary increases) has decreased slightly from 0.9% as at 30 June 2018 to 0.7% as at 30 June 2021. This decrease in the assumed real return has a small negative impact on the assessment of the long term financial position.

1.10 Based on an analysis of the Scheme's demographic experience, we have:

- Extended the retrenchment assumption for three years;

- Retained the promotional salary scale (which averages about 0.6% p.a.) to reflect observed experience; and

- Updated the death and disability decrements to reflect the latest rates from the insurer.

Financial Position

1.11 The coverage of the defined benefit members' vested benefits, discounted present value of accrued benefits and minimum requisite benefits by the fair value of assets supporting defined benefits at 30 June 2018 and 30 June 2021 are shown below.

	30 June 2018	30 June 2021
Vested Benefits Index (VBI)	111%	113%
Discounted Accrued Benefit Index (DABI)	113%	115%
Minimum Requisite Benefits Index (MRBI)	150%	153%

1.12 The results show that the financial position of the TSS as at 30 June 2021 is at a slightly higher level than that at 30 June 2018. This is due to the net investment return (return on assets less salary increases) being greater than expected and due to the high number of exits over the period.

1.13 As at 30 June 2021, the TSS is in a satisfactory financial position under the meaning given in SPS 160.

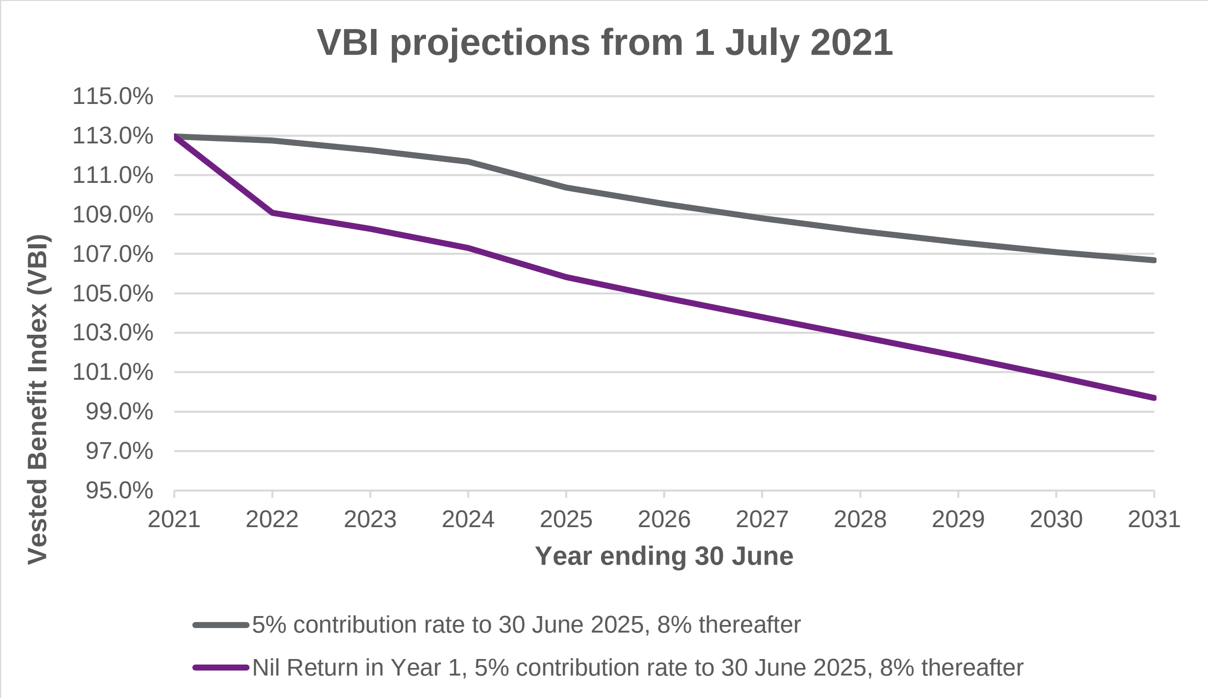
Valuation Results

1.14 Based on the current membership together with the funding method and assumptions adopted for this investigation, the long term contribution required to fund the future benefits for existing defined benefit members is 6.1% of defined benefit member's salaries. This is lower than the rate of 8.8% determined in 2018, due to reasons set out in Section 10. The rate of 6.1% reflects that some of the future funding of benefits is from the available surplus, so the financial position will be expected to decline over time if Telstra contributes at this rate and experience is as expected.

1.15 Telstra (and associated employers) currently contribute at a rate of 5% of salaries in respect of defined benefit members. As per our letter dated 18 August 2021, Telstra is expected to continue to contribute at a rate of 5.0% of salaries from 1 November 2021 until 30 June 2022, rather than revert to 15.0% of salaries as was recommended in the previous actuarial investigation.

1.16 Telstra has expressed its preference to continue to contribute 5% of salaries beyond 1 July 2022. Considering the existing surplus, it would be reasonable for Telstra to continue to contribute at a rate of 5% of salaries of defined benefit members to 30 June 2025, by which time the results of the next Actuarial Triennial Investigation is expected to be available. In the absence of further information, we expect that contribution requirements would increase at the next investigation to around 8% of salary. This contribution program should be reviewed if the VBI reduces to below 105% during the three-year period. In the meantime, Telstra will continue to contribute at the required contribution rates (including payment of relevant insurance premiums) under the relevant agreements in respect of accumulation members.

1.17 The following graph illustrates the projected VBI under two bases, if Telstra contributes at 5% of defined benefit members' salaries to 30 June 2025 and then at 8% of such salaries thereafter. First, it assumes that the future experience will be as expected. It also illustrates the projected financial position, if there is a zero percentage investment return for the year to 30 June 2022, but all other experience is as expected. To show the sensitivity of the projection to the investment return, we have assumed that Telstra would continue to contribute at the same rates even though the VBI reduces below the trigger of 105% or below 100% (in reality Telstra would be expected to increase its contribution rate at the 105% trigger, or to pay additional top-up contributions when the VBI is under 100%).



1.18 The graph shows that in this scenario while the VBI reduces materially it does not reduce to below 100% over the intervaluation period to 30 June 2024 (or indeed until at least 2029). This is not intended to be a worst case scenario.

Insurance

1.19 From 1 November 2014 the prospective component of member benefits on death or disablement have been externally insured. In addition, the insurer has also agreed to take on the prospective component of benefits that were incurred on or after 26 September 2005, but have not yet been reported.

1.20 Our analysis of Telstra's insurance arrangements has led to the following conclusions:

- It is appropriate to conclude that there are no self-insurance amounts in respect of future insurance risk, and
- Based on an analysis of relevant death and disability claims incurred and reported since 1 July 2018, and considering that we do not expect many more claims to arise given it has been over 15 years since 26 September 2005, it would be reasonable to retain the amount to be set aside for this purpose in the self-insurance run off reserve of $2 million.

Material Risks

1.21 The funding of the TSS defined benefit liabilities is dependent on future experience. There is a risk that the Scheme's financial position could deteriorate in the future. Significant factors that could lead to this include poorer than expected investment returns on the Scheme's assets, and higher than expected salary increases.

Recommendations

1.22 I recommend that Telstra and associated employers contribute:

- In respect of defined benefit members, at a rate of 5% of salaries for the next four years to 30 June 2025, by which time the results of the next Actuarial Triennial Investigation will be available. This contribution rate should be reviewed by the Actuary, and likely increased, if the VBI falls to below 105%;
- From 1 July 2025, contributions at the contribution rate recommended at the next actuarial investigation. The current estimate of the rate is 8.0% of salaries;
- In respect of accumulation members, the required employer contributions under the relevant agreements (i.e. Trust Deed or other contractual obligations);
- Insurance premium amounts for basic cover in respect of Corporate Plus members unless they are met by deductions from the relevant members' accounts; and
- Any salary sacrifice contributions.

1.23 I recommend that the self-insurance reserve be retained at $2 million.

1.24 I recommend that the next actuarial investigation be completed no later than 30 June 2024.

Events subsequent to 30 June 2021 and their implications

1.25 I am not aware of any event subsequent to 30 June 2021 that materially impacts my recommendations. Telstra Super has advised that the investment return has been 0.3% for the financial year to 31 October 2021. While this is lower than assumed it will not materially impact the results of this investigation.

Matthew Burgess

Matthew Burgess
Fellow of the Institute of Actuaries of Australia

10 December 2021

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Section 2: Introduction

Background

2.1 The Telstra Superannuation Scheme, was established on 1 July 1990 to provide superannuation benefits for employees of the Australian Telecommunications Corporation. The TSS is governed by the terms and provisions of the Trust Deed that was executed by the Australian Telecommunications Corporation and the Trustee of the TSS. From 1 February 1992, the Australian Telecommunications Corporation ceased to exist and the Australian and Overseas Telecommunications Corporation, later known as Telstra Corporation Ltd, assumed its role as principal employer under the TSS Trust Deed.

2.2 The TSS is a regulated fund under the provisions of the Superannuation Industry (Supervision) Act 1993 (“SIS”). It is a complying superannuation fund for tax purposes. This report has been prepared for Telstra Super Pty Ltd, the Trustee of the TSS.

2.3 At 30 June 2021 there are the following categories of membership in the TSS:

- Divisions 2 and 5 – closed defined benefit categories;
- Division 4 – open accumulation category for retained benefit and non-employer members (Personal Plus) and allocated pensions (RetireAccess); and
- Division 6 – open accumulation category for Telstra and other Associated Employer employees (Corporate Plus).

2.4 Divisions 2 and 5 provide defined benefits and have been closed to new members since 1 July 1999. All new employee members of Telstra and other Associated Employers who join the Scheme would join Corporate Plus and receive accumulation benefits of an accumulation style.

2.5 In this report references to Telstra include other Associated Employers, unless the reference notes it is specifically to Telstra as the Principal Employer. Appendix A to this report provides a detailed description of the Divisions 2 and 5 DB benefits valued in this investigation, as set out in the Trust Deed dated 16 July 2013.

Purpose of the Investigation

2.6 The Trust Deed governing the TSS does not set out specifically the timing for actuarial investigations of the TSS to be carried out, only that they be undertaken “when required by the Principal Employer and Trustee”. However, legislation covering the operation of superannuation funds in Australia requires actuarial investigations of defined benefit funds (with no lifetime pension liabilities) to be made at intervals of not more than three years.

2.7 This investigation is made as at 30 June 2021 and is presented to the Trustee of the TSS by Mr Matthew Burgess, FIAA, of Willis Towers Watson, Actuary to the TSS.

2.8 The main aims of this report are:

- To identify the long-term funding rate of the TSS’s benefits and to recommend the rate at which Telstra should contribute to the TSS in accordance with Part 1.20.1 of the Trust Deed;
- To assess the TSS’s financial position and identify and address issues relating to its short to medium term financial position; and

- To meet the requirements of Superannuation Prudential Standard SPS 160 Defined Benefit Matters (SPS 160) that requires:
  - regular actuarial investigations of funds with no lifetime pension liabilities to be completed at least every three years; and
  - regular actuarial oversight of self-insurance.

2.9 SPS 160 sets out legislative requirements for actuarial investigations including that the investigation consider the solvency and financial position of the TSS both as at the investigation date and during the ensuing three years.

2.10 This report has been completed meeting the requirements of the relevant professional standards of the Actuaries Institute including PS 400, PS402 and PS404.

Previous Actuarial Investigation

2.11 The previous actuarial investigation of the TSS was as at 30 June 2018 and was also carried out by Mr Matthew Burgess FIAA. The results of that investigation are set out in a report dated 14 December 2018.

2.12 An examination of the financial position at 30 June 2018 indicated that the TSS defined benefits was in a sound financial position.

2.13 It was recommended that:

- In respect of defined benefit members Telstra contribute 5% of superannuation salaries from 1 November 2018 to 31 October 2021, and 15% of salary from 1 July 2018 to 31 October 2018 and then again from 1 November 2021;
- In respect of accumulation members, Telstra contribute the required employer contributions under the relevant agreements (i.e. Trust Deed or other contractual obligations);
- Telstra contribute amounts required to pay the insurance premiums of Corporate Plus members for whom it meets this cost; and
- Telstra contribute the amount of members' salary sacrifice contributions;
- A self-insurance reserve of $2 million be maintained; and
- The effective date of the next full actuarial investigation be no later than 30 June 2021, as required in any case under legislation.

2.14 I am satisfied that the recommendations have been followed.

Events since Previous Investigation

2.15 Since the previous actuarial investigation the last of the Division 8 defined benefit members has ceased, so there now remain only Division 2 and Division 5 defined benefit members.

2.16 The Superannuation Guarantee charge has increased to 10.0% of Ordinary Time Earnings (OTE) from 1 July 2021 and is legislated to further increase gradually to 12.0% of OTE. The Benefit Certificate was amended to increase the Minimum Requisite Benefit (MRB) to reflect this.

2.17 Also, for accumulation funds legislation was amended to prohibit employers using salary sacrifice contributions from being used to satisfy the employer's Superannuation Guarantee requirements. While this legislation does not apply to defined benefit funds, it is our intention that when next updated that the TSS Benefit Certificate be updated consistently.

2.18 In our letter dated 18 August 2021 we recommended Telstra continue to contribute 5.0% of salaries from 1 November 2021 until 30 June 2022, rather than revert to 15.0% of salaries. This recommendation was adopted by Telstra.

2.19 There have been no other material changes that are relevant to the scope or purpose of this investigation that occurred during the investigation period.

2.20 The Deed of Rescission, covering the funding and monitoring of the TSS, was signed on 21 September 2015 and this was considered in the 2015 investigation report. It continues to apply.

2.21 Also, Telstra has continued to restructure its operations leading to further retrenchments and this is discussed in Section 7.

2.22 Based on preliminary results from this actuarial investigation and reflecting the existing surplus, Telstra has indicated that it will continue its contributions to 5.0% of salary for at least the next four years from 1 July 2021 to 30 June 2025, by which time the results of the next Actuarial investigation of the Scheme will be available. Also, that it would review its contribution rate based on actuarial advice if the VBI reduced to 105%.

2.23 Unless otherwise stated, the following investigation relates to the structure of the TSS as at 30 June 2021 plus any known changes between that date and the date of this report.

Section 3: Membership

Source and Veracity of Membership Data

3.1 The maintenance of member records, payment of benefits and other administrative tasks is undertaken by Telstra Super. Telstra Super provided files containing data in respect of TSS defined benefit members as at 30 June 2021 and in respect of members who had left the TSS between 1 July 2018 and 30 June 2021.

3.2 We have relied on the data provided in our calculations, and the findings in this report are limited to the accuracy of the data provided. However, detailed checks were performed to confirm the veracity of the data. Whilst it is not possible to be certain that no errors exist in a database of this complexity and size, we are satisfied that there are no discrepancies that would have a material effect on the results of this investigation.

Membership Summary – Defined Benefit Members

3.3 We have analysed the membership of Division 2, Division 5 and Division 8, both at the 30 June 2021 investigation date and over the three years to that date. As at 30 June 2021 there were no Division 8 members remaining in the Scheme.

3.4 The figures show that, as expected for closed categories, the number of members has declined.

Changes in TSS Defined Benefit Membership – 3 Years Ending 30 June 2021

	Division 2	Division 5	Division 8	Total
Number at 30 June 2018	**3,813**	**26**	**2**	**3,841**
Exits by Benefit Type				
■ Death	6	-	-	6
■ Disablement	-	-	-	-
■ Retirement	18	-	-	18
■ Retrenchment	1,519	6	1	1,526
■ Resignation and Transfer to other fund	32	-	1	33
Total exits	**1,575**	**6**	**2**	**1,583**
Adjustments	-	-	-	-
Number at 30 June 2021	**2,238**	**20**	**-**	**2,258**

3.5 Key membership statistics for Division 2 are summarised below:

	30 June 2018	30 June 2021
Number of Members	3,813	2,238
Average Age (years)	53.1	54.5
Average Past Membership* (years)	29.2	31.3
Average Salary	$102,625	$111,046

* Including Previous Fund Membership

3.6 Key membership statistics for Division 5 are summarised below:

	30 June 2018	30 June 2021
Number of Members	26	20
Average Age (years)	54.9	56.2
Average Past Membership* (years)	30.9	34.0
Average Salary	$137,343	$149,360

* Including Previous Fund Membership

3.7 The benefits of Division 2 and Division 5 DB members are based on Final Average Salary, which is the average of the superannuation salary of a member on each of his or her last three birthdays prior to leaving Telstra for the majority of members. The TSS's liability for defined benefits is therefore affected by the rate at which members' salaries increase.

3.8 The average salary for all defined benefit members (Division 2 and Division 5) has increased from $102,900 at 30 June 2018 to $111,385 at 30 June 2021. This represents an increase of 8.3% in the average salary, equivalent to approximately 2.7% p.a. over the three years.

3.9 However, the average salary of defined benefit members of the TSS is also influenced by membership changes to the TSS. For example, retrenchment programs targeting certain employees may influence the average salary of the remaining TSS members. It is therefore useful to remove the distortion in salary growth due to membership changes and consider the change in salaries for Division 2 and Division 5 members who were in the TSS for the entire investigation period, i.e., from 1 July 2018 to 30 June 2021.

3.10 The total increase in the average salary for members of Division 2 or Division 5 who were in the TSS at both 1 July 2018 and 30 June 2021 (i.e. "stayers") was 7.4% for the period, equivalent to 2.4% p.a. This is slightly lower, but consistent with, the increase in the average of all defined benefit members' salaries for the same period. It is lower than the increase reported in the last investigation for "stayers" of 11.3% for the three years to 30 June 2018.

3.11 The rates of increase in the average salary may be compared to the changes in related economic indicators as follows:

Increase in:			
Period	**Average Salary**	**Average Weekly Ordinary Time Earnings (AWOTE)**	**Consumer Price Index**
1 July 2015 - 30 June 2018 ▪ all members ▪ "stayers"	10.9% (3.5% pa) 11.3% (3.6% pa)	7.0% (2.3% p.a.)	5.1% (1.7% p.a.)
1 July 2018 - 30 June 2021 ▪ all members ▪ "stayers"	8.3% (2.7% pa) 7.4% (2.4% pa)	9.7% (3.1% p.a.)	5.1% (1.7% p.a.)

3.12 The table shows that the rate of growth of average salaries over the three years to 30 June 2021 of TSS members who were in the TSS throughout that period has been a little lower than the rate of change in AWOTE.

3.13 Benefits for Division 2 members also depend on the rate of member contribution chosen. The maximum level of employer-financed benefit occurs when a member contributes at a rate of 5% of salary or more. The member may contribute less than 5% for a period and then contribute more than 5% as a "catch-up", but in determining a member's benefit, their average contribution rate over their full membership does not exceed 5%.

3.14 The table below shows the distribution of member contribution rates (MCR) as at both 30 June 2018 and 30 June 2021 for Division 2 members. The results show that the distribution of contribution rates have remained fairly constant, with the average member contribution rate for all Division 2 members increasing from 5.2% at 30 June 2018 to 5.4% at 30 June 2021.

MCR	Distribution of Members			
(% of Salary)	30 June 2018		30 June 2021	
	Number	Proportion	Number	Proportion
Nil	400	10%	184	8%
1%	27	1%	15	1%
2%	28	1%	23	1%
3%	40	1%	25	1%
4%	12	0%	9	0%
5%	**2,485**	**65%**	**1,442**	**64%**
6%	146	4%	89	4%
7%	85	2%	58	3%
8%	62	2%	39	2%
9%	20	1%	18	1%
10%	508	13%	336	15%
Total	**3,813**	**100%**	**2,238**	**100%**
Average MCR	**5.2%**		**5.4%**	

Membership Summary – Accumulation Members

3.15 Telstra Super provided aggregate account balances for members with accumulation accounts. This report relies on the accuracy of the balances provided and we have not independently verified them.

Section 4: Assets and Investments

Analysis of TSS Assets

4.1 Telstra Super has provided us with the TSS's financial statements for each of the years ended 30 June 2019, 30 June 2020 and 30 June 2021. The fair value of net assets available to pay benefits of $24,122.6 million as at 30 June 2021 (being $24,261.6 million of net assets less $139.0 million of reserves) has been obtained from the TSS's audited financial statements.

Assets Available to Support Defined Benefits.

4.2 Telstra Super has advised that, of the total net assets available to meet benefits, the amount of the assets available to support defined benefit liabilities (the "DB Assets") as at 30 June 2021 was $1,626.5 million. We have relied upon the amount provided by Telstra Super and have been advised that the asset value has been calculated consistently with the audited financial statements.

4.3 Telstra Super has advised that the DB Assets are segregated. The DB Assets do not provide liquidity to any members of the TSS other than defined benefit members.

4.4 Although we rely on the advice from Telstra Super regarding the amount of the DB Assets, each quarter we review the Vested Benefits Index produced by Telstra Super. In doing so, we implicitly confirm that the amount of DB Assets advised is within a reasonable range. We have also confirmed that the account balances of all the accumulation style benefits closely align with the available assets as at 30 June 2021 based on the information provided by Telstra Super.

4.5 We have used the fair value of assets for the valuation of both the short and long term financial positions at 30 June 2021.

Investment Objectives and Strategy - Defined Benefit Assets

4.6 The overall objective of the TSS is to create target investment return objectives which match the risk appetite of those stakeholders who bear the investment risk:

- In the case of the accumulation section, members, via their investment choice(s); and
- In the case of the defined benefit division, the employer sponsor.

4.7 The table below shows the current Strategic Asset Allocation (SAA) and SAA ranges for the defined benefit division, which we have used to determine the financial assumptions for the purposes of this investigation.

	SAA Target*	SAA Range
Growth Assets	**28.0%**	
Australian Equity	6.5%	0 – 12.5%
International Equity	8.5%	2.5 – 14.5%
Direct Property	10.0%	5 – 15%
Private Markets	3.0%	0 – 8%
Mixed Assets	**5.5%**	
Hedge Funds	3.5%	0 – 8.5%
Alternative Debt (bank loans)	2.0%	0 – 6%
Defensive Assets	**66.5%**	
Diversified Debt	56.0%	43 – 69%
Cash	10.5%	4.5 – 16.5%
TOTAL ALLOCATION	**100.0%**	
Illiquid Assets**	**13.0%**	

Notes:

* The illiquid assets percentage relates to assets that would take more than 12 months to liquidate, specifically Direct Property and Private Markets. Some of the other assets could take some months to liquidate.

4.8 The current investment strategy has 28% growth, 5.5% mixed and 66.5% defensive assets.

4.9 As Telstra bears the investment risk for the defined benefit assets via increases or decreases in contribution rates, Telstra needs to be comfortable with the level of risk it accepts. At the time, Telstra was consulted extensively in the development of the investment strategy, which are key inputs in deciding whether their preferred contribution arrangement is viable.

4.10 I believe that the investment strategy outlined above is within the range of reasonable strategies for the defined benefit assets of the TSS, bearing in mind Telstra's preferences.

4.11 The investment strategy for the Defined Benefit Assets is currently under review, although we have been advised by TSS that it is not expected to change materially (including in respect of the estimated net investment return expected to be achieved).

4.12 The investment arrangements should be monitored and reviewed as the membership profile, funding position and the investment environment change.

Liquidity

4.13 Liquidity risk is the risk that the TSS will encounter difficulty in raising funds to meet commitments, both in relation to benefits payable, fund costs and taxes or investment transactions.

4.14 As noted above, the DB Assets do not provide liquidity for other TSS members.

4.15 The DB Assets are expected to be significantly cash flow negative because there has been no new members since 30 June 1999 and the average age of members is now well over 50. This means that the low level allocated to illiquid assets in the DB SAA is appropriate.

4.16 Telstra Super has advised that no new Private Equity commitments have been made in respect of the DB Assets for many years and in our view this is appropriate. The Direct Property would be expected to be able to sold in a timely way as the amount of the DB Assets reduces. Telstra Super has also advised that, while no decision has been made, the assets are likely to be suitable for transfer to the accumulation member investment portfolios. Overall, we believe the approach being adopted in relation to liquidity management is reasonable.

Deferred Tax Asset (DTA)

4.17 The market value of the TSS Assets did not include any Deferred Income Tax Assets (DTAs) as at 30 June 2021.

4.18 A Deferred Income Tax Liability of $326.6 million is recognised.

Investment Returns – Defined Benefits Assets

4.19 Telstra Super has advised us of the earning rates on the TSS's defined benefit investments for each of the three years prior to 30 June 2021. These returns, after tax and investment expenses, are as shown in the table below.

Period	TSS Defined Benefit Returns
1 July 2018 – 30 June 2019	3.7%
1 July 2019 – 30 June 2020	1.5%
1 July 2020 – 30 June 2021	5.8%
1 July 2018 – 30 June 2021 (3 year average)	**3.6% p.a.**

Unit Pricing

4.20 Within the TSS there are accumulation members as well as defined benefit members. The assets and liabilities of the defined contribution members are equal, subject to timing differences associated with daily unit pricing being used. There is no investment reserving. We have been advised that the assets of the defined contribution members are segregated from the defined benefit assets and that there are processes in place to limit cross subsidies between defined contribution and defined benefit members.

4.21 We have not identified any issues in the Scheme's Unit Pricing Policy that will lead to a material issue on the funding of defined benefits.

Shortfall Limit

4.22 The Trustee has set a Shortfall Limit in accordance with SPS 160 of 99% for the DB Assets. This means that between actuarial investigations, a restoration plan to restore the VBI to 100% is required when the Defined Benefit plan's VBI reduces to below 99%.

4.23 A Shortfall Limit is defined in paragraph 10 of SPS 160 as:

> "the extent to which an RSE licensee considers that a fund can be in an unsatisfactory financial position with the RSE licensee still being able to reasonably expect that, because of corrections in the temporary negative market fluctuations in the value of fund assets, the fund can be restored to a satisfactory financial position within one year."

4.24 Given the current strategic asset allocation of the DB Assets, we believe that the current Shortfall Limit continues to remain appropriate and consistent with the Actuaries' Institute Information Note providing guidance on this issue.

Section 5: Funding Method

General

5.1 Over the life of the TSS, the total income (mainly contributions and investment income) must be sufficient to meet the total expenditure (mainly benefits, tax and expenses). The funding method is the method by which the actuary considers the long-term financial position of the TSS defined benefit members with a view to ensuring the TSS's assets will be sufficient over the long term to meet its liabilities as they arise.

5.2 For defined benefit liabilities, a pool of assets is built up over time to meet benefits and expense payments as they arise. The pool of assets is built up by member and employer contributions and by investment income on assets already accumulated. The pool is reduced by benefit payments, tax and expenses.

5.3 The amount of defined benefits that the TSS will be liable to pay from the pool in the future cannot be known in advance since benefits depend on a number of factors, including the members' salaries near their date of leaving, their completed membership at that date and their reason for leaving. None of these things can be known with certainty before a member actually ceases employment. Nor can the amounts of future tax and expenses, which relate to the uncertain contribution and benefit amounts, be known in advance. It is therefore necessary to estimate these future liabilities and hence the amount that will be required in the pool of assets. The estimate is based on a set of assumptions about future experience for the pool, as it is easier to make assumptions about a pool of members and assets than about individuals – though, as the number of defined benefit members declines, greater variation from assumptions is expected.

5.4 Sections 6, 7 and 8 of this report provide details on the assumptions used.

5.5 The amount in the pool of assets at any time is determined by the level of contributions and investment income. The rate at which the employer contributes to the TSS is one variable inflow over which the employer can exercise control. The actuarial funding method is a method of determining this contribution rate.

5.6 A key purpose of conducting an actuarial investigation is to assess the adequacy of the pace at which funding is taking place and to make recommendations as to the rate of employer contributions that provides an appropriate pace of funding in the future.

5.7 Clause 1.20.1 of the Trust Deed requires Telstra to contribute at the amount or rate of contributions it determines from time to time after obtaining the advice of the actuary and consulting the Trustee. One of the purposes of this report is recommend a contribution rate for Telstra to contribute at.

Defined Benefit Funding Method

5.8 As in previous investigations, we have presented the long term valuation results on the Aggregate Funding Method. The Aggregate Funding Method calculates the required contribution rate based on the difference between total assets and total service liabilities at the investigation date. It is a long term rate because any shortfall of current assets over the accrued benefit liabilities is assumed to be funded over the future working lifetime of current members (while any surplus of assets reduces the employer contribution required over that working lifetime).

5.9 Given that the defined benefit divisions are closed to new entrants, we believe the Aggregate Funding Method is an appropriate method to use to determine the expected long-term cost of the TSS's defined benefits. However, it is also appropriate to consider the short term solvency position to ensure that the VBI is expected to remain above 100%, to address the requirements of SPS 160 regarding funding levels as well as the preferences of Telstra.

Short Term Funding Considerations

5.10 The Aggregate Funding Method considers the pace of funding of benefits over the working lifetime of members, i.e. it considers the long term funding of benefits. However, short term funding concerns have also become increasingly important in recent years, and funds are required to meet the requirements of SPS 160 in this respect.

5.11 If the net realisable value of assets is not sufficient to cover members' vested benefits, under SPS 160 the fund is considered to be in an "Unsatisfactory Financial Position". If the VBI reduces to below 100% when an actuarial investigation is being completed, or below the Shortfall Limit (currently 99%) at some other time, SPS 160 requires a restoration plan to be put in place by the Trustee. The plan must be expected to restore the VBI to 100% within a time period that is reasonable in the circumstances but which must not exceed three years.

5.12 Because of the SIS solvency requirements, and in particular the funding requirements under SPS 160, these short term measures are an important consideration in determining the pace of funding for the TSS.

5.13 Long term funding methods aim to produce an employer contribution rate that allows the TSS to meet its benefit obligations as they arise. However, even if the employer contributes at the long term funding rate, from time to time the TSS's short term funding position could be at a level that the Trustee and employer consider inadequate, or that is below that specified by the legislation.

5.14 To ensure that due emphasis is placed on both the long term and short term funding requirements, we have considered:

- the long term employer contribution rate as calculated under the Aggregate Funding method (this indicates the expected emergence of the employer cost for existing members without regard to any short term funding requirements);
- the long term future service employer contribution rate, effectively the contribution rate calculated using the Aggregate Funding Method but assuming that there is neither a surplus or shortfall in the funding of vested benefits;
- the impact of Telstra continuing to contribute in accordance with the recommendations in this report;
- short term solvency measures to determine the required pace of funding necessary, over and above the long term contribution rate otherwise calculated, to maintain various short term solvency levels; and
- the sensitivity of the contribution rates to experience and assumptions.

5.15 Recommendations are then made based on these short and long term considerations and the range of possible outcomes.

5.16 The results of this analysis are discussed in more detail in sections 9 and 10.

Section 6: Actuarial Assumptions

6.1 The valuation of the TSS's defined benefit liabilities is an essential part of examining the long term financial position of the TSS. In order to value the liabilities, it is necessary to make assumptions regarding the timing and amount of future benefit payments, expenses and contributions since these cannot be known in advance. These assumptions are divided into two categories:

i. Financial assumptions relating to the rates of inflationary salary growth and investment income; and

ii. Demographic assumptions relating to the rates of retirement, resignation, retrenchment, death and disablement. Assumptions about promotional salary growth are also included in this category.

6.2 While each of the assumptions used is normally the actuary's best estimate of future experience, in practice the TSS's actual experience in any period can be expected to differ from the assumptions to some extent. However, it is intended that over longer periods, and when all of the assumptions are combined, they will provide a reasonable estimate of the likely future experience and financial position of the TSS.

6.3 For the purposes of this actuarial investigation, we have analysed past experience.

- Section 7 considers the financial assumptions. These are not overly dependent on the past experience of the TSS.

- Section 8 provides a brief discussion of the demographic experience for the two years and six months period ending 31 December 2020 (compared to the assumptions adopted in the 30 June 2018 actuarial investigation) and then outlines the assumptions adopted for this investigation. The analysis was completed based on 31 December 2020 so that the demographic assumptions used in the actuarial investigation could be used for the TSS 30 June 2021 accounting disclosures.

6.4 All of the actuarial assumptions adopted are detailed in Appendix B.

6.5 Any change in the assumptions will affect the financial position of the TSS as measured by the long-term funding calculations described in Section 5 and solvency as measured by the Discounted Accrued Benefits Index. The assumptions do not affect the short term solvency as measured by the VBI or the coverage of MRBs.

Section 7: Experience and Assumptions – Financials

7.1 The assumption of major significance in the valuation of the TSS's future benefit liabilities and contributions is the difference (or "gap") between the assumed future rate of investment earnings (net of tax and investment expense) and the assumed rate of future growth in salaries due to general wage increases, i.e. the real rate of return on invested assets. The difference between the rates is more important than the absolute values ascribed to them. The higher the real rate of return assumed, the lower the value placed on the liabilities (as more of the future funding is assumed to arise from investment earnings) and the lower the resulting estimated required employer contribution rate.

Real Rate of Return - Experience

7.2 During the three years to 30 June 2021, the investment return and rate of salary increase are shown in the following table.

	Three years to 30 June 2021	
	Actual	**Assumed**
Investment Return	3.6% p.a.	3.3% p.a. to 30 June 2019 3.9% p.a. from 1 July 2019
Salary Increases*	2.4% p.a.	3.0% p.a.
Real gap	1.2% p.a.	0.9% p.a. from 1 July 2019

* Actual is calculated based on the members who remained in the TSS from 30 June 2018. The assumed salary increases includes promotional increases (i.e. last investigation assumed 3.0% p.a. inflationary increase plus promotional increases of about 0.6% p.a.).

7.3 The actual real rate of return achieved by the TSS over the three years to 30 June 2021 on defined benefit assets was 1.2% p.a. This has been higher than expected, particularly when it is considered that the assumed real gap is gross of promotional salary increases, and would in isolation have improved the financial position of the Scheme.

Real Return - Assumptions

7.4 Telstra Super provided us with its estimate of the future net of tax and investment fees return under the current SAA, which was 3.2% p.a.. We consider this estimate reasonable and have adopted it for this actuarial investigation.

7.5 Based on our analysis of the salary experience and the latest information from Telstra, we have chosen to reduce the salary inflation assumption from 3.0% pa to 2.5% p.a.. Based on the Willis Towers Watson and JANA economic outlooks, the rate of future price inflation is assumed to be in the order of 2.0% p.a., meaning that the assumed salary inflation is 0.5% above inflation which we believe is reasonable. A promotional scale is also applied.

7.6 In summary, the financial assumptions used for this investigation and those adopted for the previous investigation are as follows:

Assumption	30 June 2018	30 June 2021
Rate of Investment Return	3.3% p.a. year to 30 June 2019 and then 3.9% p.a. thereafter	3.2% p.a.
Rate of General Salary Inflation	3.0% p.a.	2.5% p.a.
Real Rate of Return (ignoring promotional salary increases)	0.9% p.a. from 1 July 2019	0.7% p.a.

7.7 The slight decrease in the assumed long-term real return (before allowing for promotional salary increases) has a small negative impact on the assessment of the long term financial position.

7.8 Considering the impact of the assumed promotional salary increase scale, with assumed promotional salary increases of about 0.6% p.a,, future investment returns are assumed to exceed future salary increases by in the order of 0.1% p.a..

Expenses

7.9 We will assume for this investigation that the administration costs charged on the defined benefit assets would be the actual level levied, i.e. $1.50 per week per defined benefit member, plus 0.18% p.a. of assets. We have assumed this amount is the net of tax cost.

Taxation

7.10 We have assumed that the tax rates presently applying to the TSS will be maintained in the future (i.e. that the TSS will remain a regulated and complying fund under SIS and the Tax Act respectively and will have a concessional tax rate of 15% applied to net deductible contributions).

Section 8: Experience and Assumptions – Demographic

8.1 The following discussion considers the demographic experience and assumptions for the defined benefit membership (Divisions 2 and 5) over the two years and six months to 31 December 2020.

Impact of Retrenchments

8.1 There were 1,309 retrenchments of defined benefit members from the TSS. This is an increase in the prior rates of retrenchment and represents over 30% of the membership as at 30 June 2018.

8.2 During times when there are large numbers of retrenchments and uncertainty surrounding employment conditions, the number of people voluntarily leaving employment can be much lower than would be expected otherwise. Thus, it is likely that the resignation and retirement exit experience of the TSS over the period since the previous investigation is not representative of normal conditions. When considering the resignation and retirement experience over the period, it is important to keep this in mind.

8.3 In the 2018 Actuarial Investigation, retrenchments were expected at approximately 6% p.a. of defined benefit membership for each of the three years to 30 June 2021. The table below shows the actual and expected retrenchments over the two years and six months to 31 December 2021.

8.4 Retrenchments have been split between those under age 55 and those over age 55 to aid in the analyses of resignations and retirements later in this section.

Retrenchment Experience of the TSS over the 2.75 years to 31 March 2018								
Under 55			Over 55			Total		
Actual	Expected	A/E	Actual	Expected	A/E	Actual	Expected	A/E
515	272	189%	794	185	429%	1,309	457	286%

8.5 The table shows that the numbers of retrenchments were considerably heavier than expected overall, particularly for members over age 55.

8.6 As retrenchment benefits are equal to the undiscounted accrued retirement benefit (i.e. the same as the resignation benefit), the retrenchment experience does not have a significant impact on the long-term accruing cost of TSS benefits. This is particularly the case because the expected investment return is only a little higher than members' expected salary increases. While the VBI is over 100%, additional exits would be expected to further increase the VBI. The converse is true if the VBI were below 100%.

8.7 We discussed with Telstra planned future retrenchments. After considering the aggregate retirement, resignation experience below as well the retrenchment experience we have decided to retain a retrenchment rate of 6.0% p.a. for the three years to 30 June 2024, acknowledging that future experience is particularly dependent on Telstra's actions and hence there is considerable uncertainty.

Retirement

8.8 As can be observed in the table below, the retirement experience was significantly lighter than expected. The number of male retirements was 10% of the number expected based on the assumptions adopted in the previous investigation, while the number of female retirements was 10% of the number expected. Overall, actual retirement experience was 10% of that expected.

	Actual	Expected	A/E
Males	15	156	10%
Females	3	30	10%
Total	18	186	10%

8.9 In the previous three-year period (i.e. to 30 June 2018), the retirement experience was also considerably lighter than expected, with the number of total retirements being 35% of that expected.

8.10 As discussed previously, the number of retirements may be lower than otherwise expected because of ongoing retrenchment programs. A large proportion of the employees being retrenched during the investigation period were aged over 55, some of whom may otherwise have taken an early retirement benefit. Overall there has been more retrenchment and retirements than expected.

8.11 Taking into account the above circumstances we have decided to retain the current retirement assumptions for both males and females. Similar to retrenchments, the impact of changes to the retirement rates on the long term accruing cost of benefits is small. However, because of the current surplus, each retrenchment or retirement releases excess assets for funding other members' benefits so it is prudent not to overstate these exits.

Resignation

8.12 Actual resignations were 29% of the number expected over the two year and six month period from 1 July 2018 to 31 December 2020. Resignations were 24% of expected for males and 44% of expected for females.

	Actual	Expected	A/E
Males	16	66	24%
Females	10	23	44%
Total	26	89	29%

8.13 The actual resignation experience for the prior three years to 30 June 2018 was also lighter than expected, with a ratio of actual to expected resignations of 36%.

8.14 Similar to the retirement experience, we believe that the large number of retrenchments over the period has likely had a significant impact on the resignation experience, as those who may have otherwise resigned may now have been retrenched instead. Overall the retrenchment and resignation experience was higher than expected.

8.15 We have decided to retain the current resignation assumptions for both males and females.

Death and Total and Permanent Disablement (TPD)

8.16 The following table sets out the A/E ratios for the number of deaths and Total and Permanent Disablements (TPDs).

	Deaths			TPD		
	Actual	Expected	A/E	Actual	Expected	A/E
Males	6	14	43%	0	19	0%
Females	0	2	0%	0	3	0%
Total	6	16	38%	0	22	0%

^ Numbers subject to rounding

8.17 Overall, the number of deaths and total and permanent disablements over the period to 31 December 2020 of the Scheme's defined benefit members has been lower than that expected. Deaths were 38% of that expected, while there were no disablements for the members active in the 30 June 2018 valuation.

8.18 The ratios above are based on the number of death and total and permanent disablement benefits paid to members who were active during the period, rather than the number incurred. The number of claims tends to be variable because of the smaller number of members remaining. Given that the Scheme's long-term funding position is not particularly sensitive to these assumptions (as the Scheme has externally insured the future service component of members' death and disablement benefits, and also because of the declining number of defined benefit members and the low number of expected death and disablement benefit payments), this analysis is sufficiently accurate for this investigation and the previous assumptions have been retained.

8.19 The TSS externally insured the future service component of death and disablement benefits of defined benefit members of Divisions 2 and 5 from 1 November 2014. The future service component of death and disablement benefits for accumulation members were already externally insured.

8.20 For employee accumulation members, members meet the external premium costs of any additional cover and the Income Protection insurance cover, but the premiums for the basic level of Death and TPD insurance cover are met by Telstra. This cost is met by Telstra directly and is not from the DB Assets. This approach is expected to continue in future years. There is therefore no requirement to allow for this additional cost in the funding calculations for the defined benefit categories.

8.21 The cost of the external insurance premiums for defined benefit members is included in the valuation of the defined benefit liabilities via the use of the external insurer's premium rates. The resulting defined benefit employer contribution rate therefore also includes this cost and it is not necessary to add a further insurance adjustment. We have updated the insurance premiums to the most recently available premium rates charged by the insurer.

8.22 The defined benefit insurance arrangements are considered in greater detail in section 12.

Promotional Salary Increases

8.23 In previous investigations, we adopted promotional salary scales for males and females, with promotional salary increases based on a member's period of membership of the TSS.

8.24 We have reviewed the previously adopted scales based on a duration/salary analysis of the members at 31 December 2020, by graphing the average salaries of members with various years of service as at 31 March, and comparing it to the expected trajectory of members' salaries with the current promotional scales.

8.25 The actual promotional salary increases for males were reasonably consistent with assumed. As such, we decided to retain the promotional salary scale.

Selected Member Contribution Rate

8.26 The table in 3.14 shows that the distribution of the selected member contribution rates has remained relatively stable over the investigation period, with around two thirds of members electing to contribute at 5% of salary and most members contributing at the same rate as they did as at 30 June 2018.

8.27 Given the stability of selected member contribution rates, it is reasonable to assume that members will continue to contribute at their selected rates in future. This is consistent with the assumption adopted for the 2018 investigation.

Summary

8.28 In light of the experience and with regard to experience over prior investigation periods and public information about planned retrenchments, we have decided to:

a Extend the 6% per annum retrenchment rates to 30 June 2024; and

b Update the death and disablement rates to match the revised premium rates used by the external insurer.

8.29 We have retained all other demographic assumptions used for the previous investigation as at 30 June 2018.

8.30 A sample of the demographic decrement rates used can be found in Appendix B.

Section 9: Solvency

Solvency Measures

9.1 Three short term solvency measures are traditionally considered in an actuarial investigation – the Termination position, the Vested Benefits Index and the Accrued Benefits Index. SIS legislation also requires that coverage of Minimum Requisite Benefits (MRBs) be considered and sets out Actuary and Auditor obligations when the TSS is in an “unsatisfactory financial position”.

9.2 Each of these is described and discussed below.

Termination Position

9.3 The Trust Deed of the TSS does not contain specific provisions regarding the termination of the TSS. However, Part 1.21 of the Trust Deed sets out the sequence of events that would follow the termination of contributions by the Principal Employer under Part 1.21.1, or following the wind-up of the Principal Employer under Part 1.13.3.

9.4 Under these circumstances, the TSS would effectively be closed to new members and to future member contributions. Benefits would be paid from the TSS as members cease employment with the Principal and Associated Employers. However, if the assets were inadequate to provide the expected benefits, the Trustee could reduce benefits to the extent that it considers necessary.

9.5 In effect, this power to reduce benefits means that technically the TSS is always able to cover the benefits payable on termination (or, more strictly, closure) of the TSS.

9.6 In practice, the exercise of the power to reduce benefits would be considered undesirable. One measure of solvency in these circumstances would be to assess whether the TSS has sufficient assets to meet the benefits payable if all members resigned or were retrenched immediately after closure of the TSS. This is measured by the Vested Benefits Index, referred to below.

Vested Benefits Index (VBI)

9.7 This index represents the ratio of the value of assets to the “vested benefits”. The value of vested benefits represents the total amount that the TSS would be required to pay if all members were to voluntarily leave service (resign or retire) on the valuation date.

9.8 The VBI has been calculated as the ratio of the value of assets supporting defined benefits divided by the vested defined benefits of defined benefit members only (i.e. excluding any voluntary accumulation accounts they may have). This is the measure used by Telstra Super to regularly monitor the financial position of the TSS. This approach recognizes that the DB assets are segregated and members’ accumulation accounts are considered to be 100% matched by the accumulation assets.

9.9 I have determined the Vested Benefits of defined benefit members as the amount of the defined resignation benefit, or the defined early retirement benefit for members who are eligible to retire. These amounts are not reliant on any financial or demographic assumptions.

9.10 The TSS's defined benefit VBI at 30 June 2021 was 113%. This is shown in the following table, together with the VBI at 30 June 2018, the date of the previous actuarial investigation.

Date	DB Assets ($ million)	Vested Benefits for defined benefits ($ million)	DB Vested Benefits Index (%)
30 June 2021	1,626.5	1,439.9	113%
30 June 2018	2,337.4	2,103.4	111%

9.11 The VBI has slightly increased over the three year period to 30 June 2021, and it has remained above the 100% threshold during the period. It is thus in a satisfactory financial position as at 30 June 2021 under the meaning given in SPS 160.

9.12 The VBI has remained at a similar level as that as at 30 June 2018. Because Telstra has been contributing at 5% of salary, below the expected long term contribution rate required, the VBI was expected to reduce to in the order of 108% as at 30 June 2021. The VBI has actually increased primarily because:

a The actual real investment return above salary increases was higher than expected, largely because salary increases were lower than expected; and

b The significantly higher than expected number of retrenchments means that the surplus is now spread over few members.

9.13 The vested benefits and retrenchment benefits for the vast majority of defined benefit members are identical, therefore the coverage of retrenchment benefits would be very similar to the coverage of vested benefits. As such, we have not considered the coverage of retrenchment benefits any further in this investigation.

Discounted Accrued Benefits Index (DABI)

9.14 For the "Discounted Accrued Benefits Index" (DABI), the "Accrued Benefit" means the benefit payable in future (based on expected rates of resignation, retirement, death and disability) that has accrued in respect of service to the investigation date. The accrued benefits for the DABI are then discounted between the investigation date and expected payment date. The calculation of the discounted accrued benefits for the DABI is therefore dependent on the financial and demographic assumptions adopted. The portion of benefits arising due to service before the investigation date has been calculated for all modes of exit based on past membership as at 30 June 2021, with allowance for future salary increases to the assumed exit date. As in the 30 June 2018 actuarial investigation, because external insurance is in place, the calculation excludes any amount in respect of the future service component of these benefits.

9.15 The index is more a measure of the ongoing capacity of the current assets of the TSS to meet accrued benefits in the long term. It is calculated as the ratio of the assets over the amount of the Accrued Benefits.

9.16 The TSS's Discounted Accrued Benefits Index at 30 June 2021 was estimated to be 115%. This is shown in the following table, together with the DABI at the previous valuation date of 30 June 2018.

Date	DB Assets ($ million)	Discounted Accrued Benefits for defined benefits* ($ million)	Discounted Accrued Benefits Index (%)
30 June 2021	1,626.5	1,419.8	115%
30 June 2018	2,337.4	2,069.6	113%

9.17 The DABI has increased since 30 June 2018. The increase in the ABI is due to the same reasons as the increase in the VBI over the inter-valuation period. The change in financial and demographic assumptions compared to the previous valuation did not have a large impact on the DABI.

9.18 With the defined benefit assets in the TSS expected to be invested in primarily defensive assets, and with the DB membership categories closed to new members, it is reasonable that the DABI would be close to the VBI. Over time, as the membership ages and the period of discounting in the DABI reduces, it is expected that the DABI will move closer to the VBI.

Minimum Requisite Benefits Index (MRBI)

9.19 The TSS's Funding & Solvency Certificate (FSC) aims to ensure that the MRBs are adequately secured. MRBs are the minimum benefits payable out of the TSS to ensure that Telstra satisfies its Superannuation Guarantee (SG) obligations. There was a current FSC in place for the current investigation period, with a new FSC issued effective from 27 April 2021. This FSC continues to apply, but would cease if any of the events detailed in section 6 of the FSC were to occur.

9.20 "Technical insolvency" occurs if the value of a fund's assets falls below its MRB obligations and under the SIS legislation employers should then contribute at a rate that is expected to ensure technical solvency. The MRBI measures the ability of the TSS to meet its MRB obligations and is calculated as:

$$\frac{\text{Net Market Value of Assets}}{\text{Total MRBs for all members}}$$

9.21 In order to issue an FSC, the actuary must certify the minimum contributions reasonably required to secure the solvency of the TSS over the term of the FSC (usually between one year and five years).

9.22 In the current FSC (which covers the period from 27 April 2021 to 31 December 2022), we have certified that I expect the TSS will be solvent if the employers makes contributions at the rate of 5% of defined benefit members' salaries. Employers are also required to contribute salary sacrifice contributions for defined benefit members and contribute as required by the Trust Deed (or other contractual obligations) plus pay insurance premiums for basic cover in respect of accumulation members.

9.23 For most defined benefit members of the TSS, their MRB are still expected to be significantly lower than their vested benefits. This is because the majority of the defined benefit members in the TSS are Division 2 members contributing at 5% with a benefit accrual rate of 20%, so their benefit accrual rate is considerably higher than the effective future MRB accrual rate of 15% (the current SG rate of 10% plus 5% of member contributions).

9.24 We have relied on Telstra Super's calculation of the MRBs. The ratio of the TSS's assets to MRBs was estimated to be 153% as at 30 June 2021, as shown in the table below:

Date	DB Assets ($ million)	MRB in respect of defined benefits ($ million)	Minimum Requisite Benefits Index (%)
30 June 2021	1,626.5	1,064.0	153%
30 June 2018	2,337.4	1,560.6	150%

9.25 The MRBI has increased slightly from 150% as at the last investigation to 153% as at 30 June 2021. The increase in the MRBI is due to the same reasons as the increase in the VBI over the inter-valuation period.

9.26 As the MRBI is above 100%, the TSS was not technically insolvent (as defined in legislation) at that date. We expect that the MRBI will remain in excess of 100% as long as the Defined Benefit VBI remains in excess of about 75%.

Section 10: Valuation Results

Long Term Funding Results

10.1 Telstra is currently contributing at 5% of salaries. In the previous triennial actuarial investigation we recommended this contribution rate increase to 15% of salaries on 31 October 2021. However, given the favourable experience we have subsequently recommended that the contribution rate of 5% of salary continue until the results of this actuarial investigation are able to be implemented.

10.2 Before considering if maintaining the 5% of salary contribution rate is expected to be sustainable it is useful to consider what the long term contribution rate would be without Telstra's preference being known.

10.3 The following discusses the results of the long term valuation of the TSS based on the assumptions (financial and demographic) discussed in sections 7 and 8. As discussed in section 5, the funding method used was the Aggregate Funding Method.

10.4 The long term results of the investigation as at 30 June 2021 using the Aggregate Funding method have been calculated assuming a long term investment return of 3.2% (based from the proposed SAA) as set out in Section 7. The results are summarised as follows:

As at 30 June 2021	$ million
Total Service Liabilities in respect of Defined Benefit Members	
Retrenchment, Retirement and Resignation	1,732.7
Death and Total and Permanent Disablement	71.0
Present value of future administration costs	27.9
Total	**1,831.6**
Value of Assets supporting Defined Benefits:	
Present Value of Future Member Contributions (net of tax)	102.9
Market Value of Assets	1,626.5
Total Value of Assets supporting Defined Benefits	**1,729.3**
Value of Liabilities to be funded by Future Employer Contributions	102.3
Present Value of 1% of future defined benefit salaries	19.6
Resulting Aggregate Employer Contribution rate	5.2%
Aggregate Employer Contribution Rate allowing for contributions tax	**6.1%**

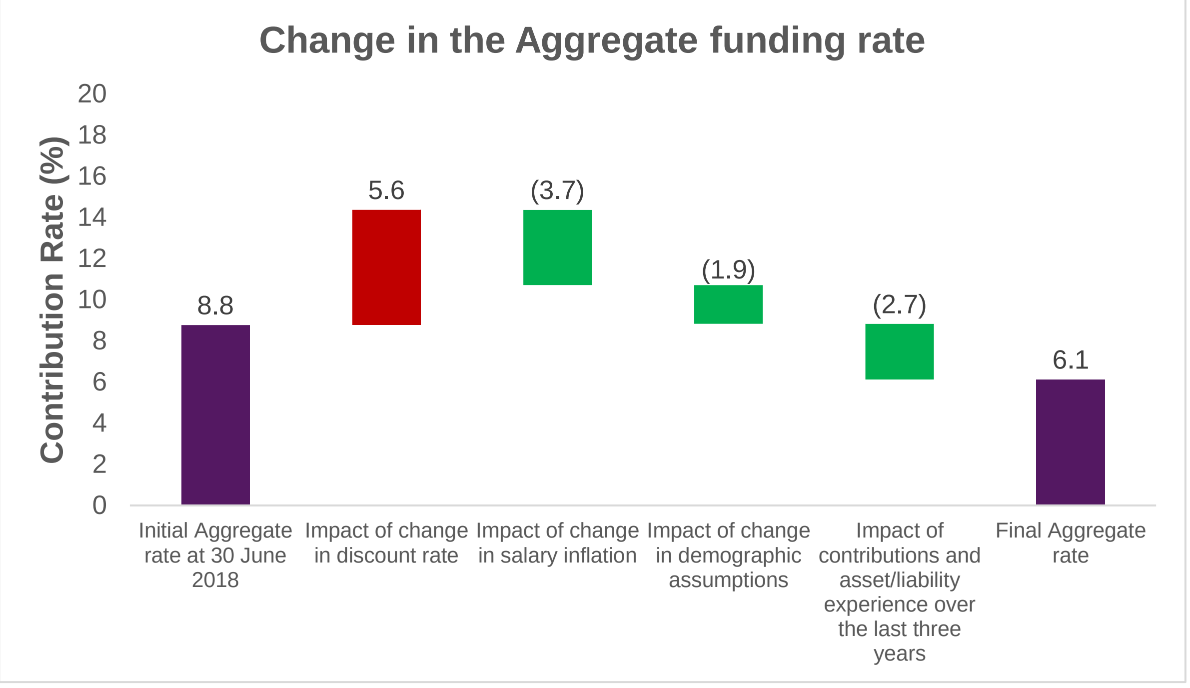
10.5 The table shows that based on the current members and assets, the contribution rate calculated using the Aggregate Funding method and assuming a 3.2% p.a. long term return is 6.1% of DB members' salaries. This means that if experience is as expected, employer contributions of 6.1% of salary for all future years would be expected to be sufficient, together with the current value of assets, to fund the future benefits payable. However, this does not consider any short term funding considerations.

10.6 This result confirms that the 5.0% of salary contribution rate is not quite expected to be sustainable in the long term. If Telstra were to contribute at 5.0% of salary until 30 June 2025 (i.e. by which time the results of the next triennial actuarial investigation will be available) the required contribution would then be expected to be around 8% of salary. If Telstra was to contribute at this rate until the next investigation, in the absence of further information, we would expect that contribution requirements would increase at the next investigation to around 8% of salary.

10.7 This rate of long term contribution, i.e. 6.1% of salaries, is lower than the 8.8% rate determined at the 30 June 2018 actuarial investigation. The reduction is mainly due to the following key factors:

- Decrease in the long term salary increase assumption from 3.0% per annum to 2.5% per annum which reduces the value placed on the DB liabilities and the contributions expected to be required;
- Retrenchments that have occurred since 30 June 2018 together with a continuation of the retrenchment assumption for the three years to 30 June 2024 mean that the surplus is expected to be available to fund a greater proportion of future benefits for the fewer expected remaining members;
- The actual real investment return (i.e. investment return less salary increases) over the period since 30 June 2018 was higher than that assumed in the previous actuarial investigation; and
- These factors that acted to reduce the required contribution rate were partially offset by the reduction in expected investment return and the employer contributing at an overall lower rate (5% per annum of salaries) compared to the Aggregate long-term contribution rate from the previous valuation (8.8% per annum of salaries).

10.8 The following chart estimates the impact of the key factors that have led to the change in the long term Aggregate Funding method contribution rate (assuming a 3.2% p.a. long term return).



10.9 The overall impact of the changes in the financial and demographic assumptions set out above was negligible with the changes offsetting each other. However, the higher than expected real investment returns (i.e. above salary increases) and higher than expected retrenchment reduced the long term contribution rate.

Normal Contribution Rate if VBI 100%

10.10 To supplement the above discussion on the recommended contribution rate, it is also worthwhile considering what the Aggregate Funding Method would require to be contributed if the VBI as at 30 June 2021 was 100%, i.e. there was no surplus over vested benefits to assist funding future benefits. If future experience was worse than expected (and so the excess over vested benefits was reduced), this gives an indication of the contribution rate that may be required to be made by Telstra.

10.11 If the VBI were 100% (i.e. assets and vested benefits both equal to $1,439.9 million), the long term required employer contribution rate would increase from 6.1% to 17.3% of salary.

As at 30 June 2021	$ million
Total Service Liabilities in respect of defined benefit members:	**1,831.6**
Value of Assets supporting defined benefits:	
Present Value of Future Member Contributions (net of tax)	102.9
Market Value of Assets equal to Vested Benefits	1,439.9
Total Value of Assets supporting Defined Benefits	**1,542.8**
Value of Liabilities to be funded by Future Employer Contributions	288.9
Present Value of 1% of future defined benefit salaries	19.6
Resulting Aggregate Employer Contribution Rate	14.7%
Aggregate Employer Contribution Rate allowing for contributions tax	**17.3%**

10.12 This rate of 17.3% is higher than the rate of 6.1% calculated in section 10.4, which reflected the fact that the existing surplus (and the investment earnings on surplus) could be used in lieu of employer contributions to meet benefit payments as they fall due.

Sensitivity of results to experience and financial assumptions

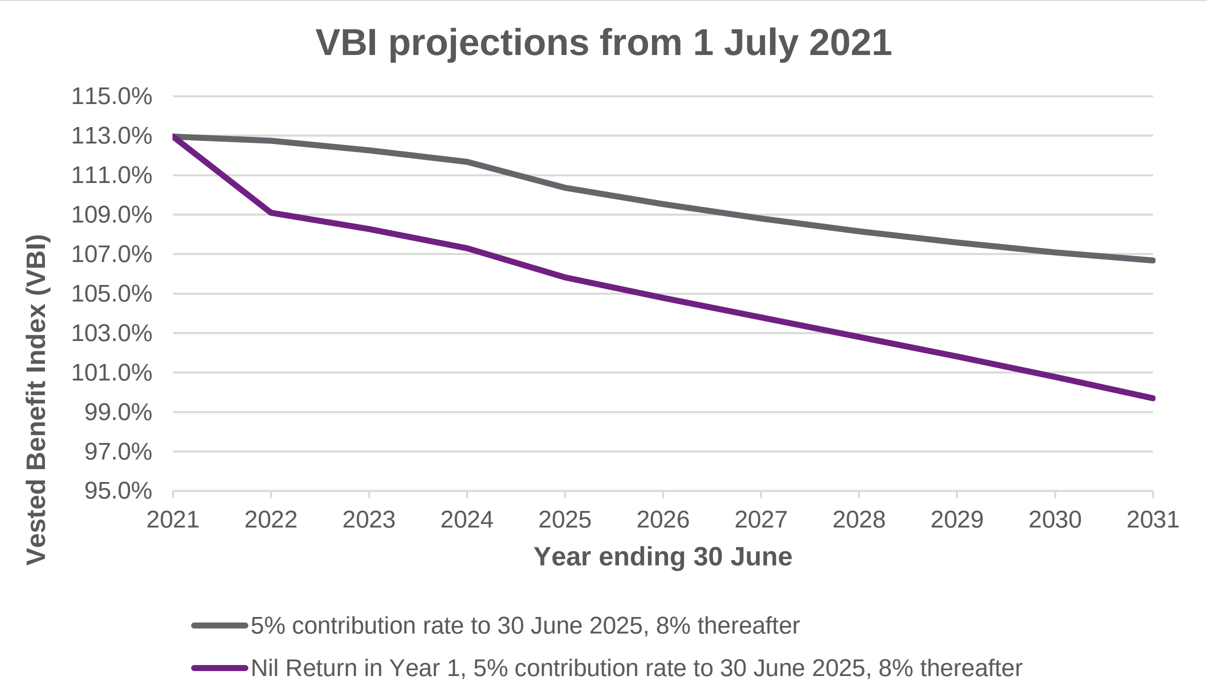
10.13 The valuation results are sensitive to the financial assumptions, in particular the “gap” between the assumed future investment return and salary growth as this reflects the expected rate of growth in the assets compared to the growth in the liabilities. They are less sensitive to changes in the decrement assumptions.

10.14 The impact of adopting a “gap” that is 0.5% p.a. lower than the gap assumed would be an increase in the required long-term future service contribution rate of approximately 3.7% of salaries (from 6.1% of salaries to 9.8% of salaries) – reflecting that less of the benefits would be funded by investment returns and so the employer contributions may need to be increased. The impact of a 0.5% p.a. higher gap would reduce the required contribution rate by a similar amount.

10.15 We have also considered an adverse experience scenario, where the investment return over the 2021/2022 financial year is zero, and contributions are as proposed, i.e. at 5% of salaries. In this scenario, the VBI is expected to reduce to 109.9% at 30 June 2022.

10.16 The following graph shows how the VBI would be expected to change over the next 10 years under this scenario if Telstra continues to contribute at 5% of defined benefit members salaries to the next investigation, and then at the expected rate recommended at the next investigation of 8% of salaries from 1 July 2025. In practice it is likely that additional contributions would be required when the VBI reduces to the 105% review trigger (to allow for the higher ongoing cost due to the lower surplus) and when it reduces to 100% (for top-up contributions to meet legislative requirements), but we have not reflected these additional contributions in the projections for ease of comparison.

10.17 The projection also assumes that the investment return from 1 July 2021 is 3.2% p.a. and all other experience is as expected. For comparison, the graph also shows the VBI under the adverse return scenario where the return for the 2021/2022 financial year is zero, with all other assumptions being the same.



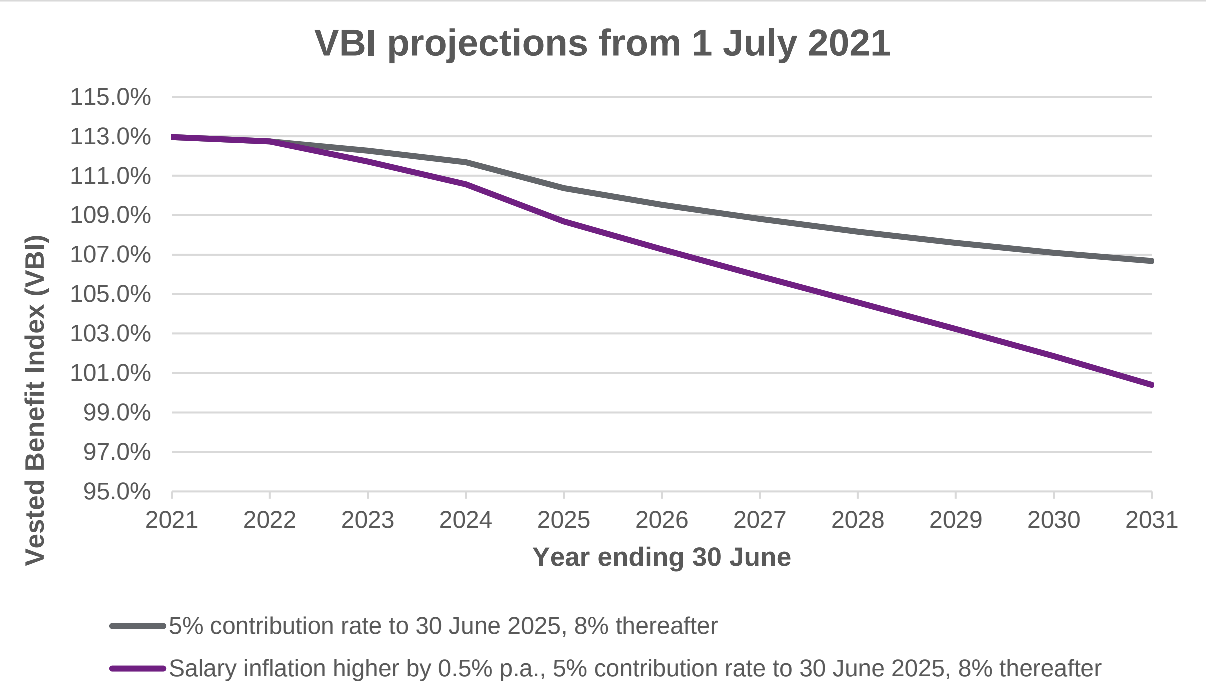
10.18 This chart confirms that the current 5% of salary contribution rate is expected to be sustainable for the period to 30 June 2025, by which time the results of the next triennial actuarial investigation would be available.

10.19 It can be observed that adverse investment returns in the early years (in this case a zero return in the first year) could result in a significant reduction in the VBI. The VBI is also then expected to reduce more quickly in the medium to long term. This is because the benefits are funded by a combination of employer contributions, interest on surplus and the surplus itself. At higher levels of surplus, as in the base scenario without the adverse first year return, the proportion of liabilities being funded by the interest on the surplus and surplus on exits is greater than that at lower levels of surplus, meaning that at lower levels of surplus the surplus itself is expected to reduce more quickly.

10.20 A lower VBI level, or lower level of surplus, also increases the risk that a top-up contribution or an increase in the contribution rate would be required if investment experience continues to be lower than expected. In the adverse scenario above, it would be expected that in 2025 when the VBI breached 105% we recommend that a review of the contribution rate be triggered and a higher contribution rate would commence to prevent the surplus from eroding further. Top-up contributions would also be required in the years where the VBI reduces to below 100%, which has not been taken into account in the projections above.

Impact of long-term salary inflation

10.21 The following graph shows how the VBI would be expected to change over the next 10 years if Telstra continues to contribute at 5% of defined benefit members' salaries to 30 June 2025, and the salary increase from 1 July 2021 is higher by 0.5% p.a. and all other experience is as expected. For comparison, the graph also shows the VBI under all assumptions being the same as the base scenario.



10.22 It can be observed that, similar to the adverse return scenario, higher salary inflation could result in reduction in the VBI over the long-term. As the VBI is not expected to fall below 105% until at least 30 June 2026 under this scenario, a contribution rate of 5% p.a. until 30 June 2025 is still expected to be viable.

10.23 Note that the above sensitivities and scenarios are provided as examples. They do not represent the best or worst cases that could occur. More extreme outcomes are also possible.

Contributions in respect of Accumulation Liabilities

10.24 In respect of accumulation liabilities (including additional voluntary contributions made by defined benefit members), Telstra should continue to contribute amounts that are credited to members on their behalf. These include:

- Amounts required under the Trust Deed and other contractual obligations;
- Insurance premium amounts for basic cover in respect of Corporate Plus members unless they are met by deductions from the relevant members' accounts; and
- Any salary sacrifice contributions.

Division 2 and Division 5

10.25 The benefits of Division 2 and Division 5 are different. We have not considered different contribution rates for each because Telstra funds both divisions and it is significantly simpler to have a single contribution rate for all defined benefit members.

Conclusion

10.26 The results of the analysis in this section indicate that based on the Aggregate Funding Method, the long term employer contribution rate currently required to fund the TSS defined benefits is assessed as 6.1% of salaries, assuming experience matches the assumptions made. This rate would also be expected to be sufficient to fund all future benefits and maintain the VBI above 100%.

10.27 Telstra has expressed a preference to contribute at 5% of salary in respect of defined benefit members until the results of the next actuarial investigation become available. We recommend that:

a Telstra contribution 5% of salary until 30 June 2025 (i.e. one year after the date of the next actuarial investigation);

b That if the VBI reduces to 105% that the contribution rate be reviewed; and

c That Telstra contribute from 1 July 2025 at the rate recommended in the next actuarial investigation. Telstra Super should expect an increase in contribution rate to around 8% of salary.

Section 11: Insurance

Background

11.1 Member benefits on death or disablement generally exceed the value of the benefits accrued for membership to the date of death or disablement. The excess represents the prospective component of the benefit, i.e. amounts in respect of membership from the date of death or disablement to retirement age.

11.2 In addition, an income benefit is also payable to Division 5 members who suffers a Total Disability as defined under the Trust Deed.

11.3 From 1 November 2014 to 30 June 2020 the prospective component of the benefits and the Total Disability income benefit for all DB members was externally insured by TAL, from 1 July 2020 these amounts have been externally insured with MLC Life. External insurance of accumulation members has applied since 26 September 2005. In addition, TAL has also agreed to take on the liability in respect of the prospective component of the benefit for claims from DB members that were incurred on or after 26 September 2005 but reported after 1 November 2014.

11.4 The TSS is therefore exposed only to the death and disability benefit risk in respect of claims, for both DB and Accumulation members, that occurred prior to 26 September 2005 but which have not yet been notified at 1 November 2014.

11.5 In this section I will examine the TSS's exposure to death and disability risk (including volatility in claims experience) by considering:

- whether there is any prospective component of the death or disablement benefits that is not appropriately covered by insurance; and
- the extent to which the TSS is exposed to claims that occurred prior to 26 September 2005 but has not yet been notified and an appropriate amount of reserve.

Prospective benefits not covered by insurance

11.6 We have examined the external insurance policies, both in relation to the amounts of cover and the events under which benefits are paid, and believe it is reasonable to conclude that Telstra Super is materially covered in relation to the prospective component of death or disablement benefits for claims arising after 25 September 2005.

11.7 If the TSS experiences adverse death and disablement experience, the gap in insurance relative to vested benefits identified above would not be expected to have a material impact on the financial position of the Scheme. As such, consistent with the Actuaries Institute's discussion note on self-insurance arrangements, it is appropriate to conclude that there are no self-insurance amounts in respect of future insurance risk.

Incurred But Not Reported Claims

11.8 As discussed above, Telstra Super has entered into an arrangement with an external insurer to cover claims for DB members that occurred on or after 26 September 2005 (but are reported after 1 November 2014) and the cover for accumulation members was already externally insured from that date. This means that the Scheme remains exposed only to claims, from either DB or Accumulation members, that occurred prior to 26 September 2005 and which had not yet been reported (referred to as IBNR claims, i.e. Incurred But Not Reported claims) as at 1 November 2014. As at the investigation date of 30 June 2021, this would relate to claims having a lag period (i.e. the difference between the date the injury occurred and the date that the claim was reported) of over fifteen years.

11.9 In the past a lag distribution was developed and used to estimate future claims made in respect of disablements that occurred prior to 26 September 2005. However, a detailed analysis has not been undertaken for this investigation because of the long period of time that has elapsed since 26 September 2005, and also due to the small amount of data available at durations greater than fifteen years which was used to develop the distribution.

11.10 In lieu of this analysis, we have examined the number and amount of self-insured incurred but not reported claims that have been paid for the three years to 30 June 2021. During this period, seven defined benefit disablement claims and no accumulation disablement claims have been reported (and admitted) to the TSS with a date incurred prior to 26 September 2005, with amounts totalling $1,193,631.

11.11 Because the numbers are small, any reserve set is unlikely to match the actual amount required. Moreover, if the self-insurance reserve ultimately proves insufficient it can be increased in the future from defined benefit assets without any expected material impact on funding as is currently required under the Scheme's Reserves Policy. For these reasons we recommend that the self-insurance reserve be maintained at $2 million.

Conclusion

11.12 Based on the above analysis, I recommend that the Scheme's self-insurance reserve be maintained at $2 million. I believe Telstra Super's insurance arrangements are appropriate to manage the insured risk.

Section 12: Material Risks

12.1 The funding of the TSS defined benefit liabilities is dependent upon future experience. I have briefly considered below the material risks. If adverse outcomes relating to these risks occur then the financial position of the VBI would be adversely affected. For example, a VBI above 100% may fall below 100%, it may take longer than expected for a VBI below 100% to return to 100%, or it may become necessary for Telstra to make additional contributions.

Ongoing funding to maintain financial position

12.2 At 30 June 2021, the TSS's VBI was estimated to be 113%, and the Scheme was in a satisfactory financial position.

12.3 If in future the Scheme's VBI is determined to be below 100% at an actuarial investigation (or below the pre-determined "shortfall limit" of 99% at other times), SPS 160 requires the Trustee to set out a plan, in consultation with Telstra, to return the Scheme VBI to 100% within a period no longer than 3 years.

12.4 There may be occasions where Telstra is unwilling to (perhaps because it is unable to) make recommended top-up contributions within the required time-frame of SPS 160. In this situation the Trustee may need to apply to APRA for an extension of the three year funding program. APRA's view on providing such extensions is not yet known.

12.5 Whilst SPS 160 binds the Trustee and the Actuary to take certain actions, it does not bind Telstra – though it does also specify the actions required by the Trustee if Telstra does not make contributions as recommended. The future viability of the TSS is therefore dependent on Telstra agreeing and being able to make contributions sufficient to fund all future benefits. If Telstra does not make the required contributions then the TSS is unlikely to be able to fully meet members' resignation and retirement benefits as they arise.

Risk of poor experience

12.6 There is a risk that the Scheme's financial position could deteriorate in the future. The Scheme's VBI is monitored on a monthly basis by Telstra Super.

12.7 A significant factor that could lead to deterioration of the Scheme's financial position is poorer than expected investment returns on the Scheme's assets, or higher than expected salary increases. In addition, this could be exacerbated if there are significant exits from the defined benefit membership (including exits due to retrenchments) when the VBI is less than 100%. Section 10 considered sensitivity of the funding to certain elements of experience, and we note that the current VBI is well in excess of 100% and the defensive investment strategy adopted by the Trustee in respect of the DB assets also reduces the risk of significantly adverse investment experience.

12.8 The value of the Scheme's liabilities could also increase as a result of a change in assumptions, although any changes to assumptions will impact the Scheme's accrued benefit liabilities rather than vested benefits. Financial assumptions are reviewed on an ongoing basis to reflect changes circumstances, including the economic environment. Demographic assumptions are reviewed at each actuarial investigation.

Other Risks

12.9 Other risks include the risk that legislation changes could adversely impact the Scheme.

Section 13: Reliance Statement and Data

13.1 This report is provided subject to the terms set out herein and in our scope of work letter dated 24 March 2021 and the associated terms and conditions. This report is provided solely for the Trustee's and Telstra's use and for the specific purposes indicated in this report. It may not be suitable for use in any other context or for any other purpose.

13.2 Except where we expressly agree in writing or where required by law as noted below, this report should not be disclosed or provided to any third party. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by us for any consequences arising from any third party relying on this report or any advice relating to its contents.

13.3 The Trustee may make a copy of this report available to its auditors, Telstra and to any person to whom the Trustee may be required to provide a copy under relevant legislation (including on the Scheme's website), but we make no representation as to the suitability of this report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Trustee's auditors, Telstra, members or any other third party in this regard. The Trustee should draw the provisions to this paragraph to the attention of its auditors, Telstra, members or any person when passing this report to them.

13.4 As mentioned in various parts of the report, we have relied on the administrative records and investment information at 30 June 2021 provided to us by Telstra Super, as being complete and accurate. Where possible the information provided has been checked for reasonableness, but we have not independently verified the accuracy or completeness of the data or information provided. We consider the information received to be suitable for the purposes of this investigation.

13.5 The results presented in this report are directly dependent upon the accuracy and completeness of the underlying data and information. Any material inaccuracy in the data, assets, plan provisions or other information provided to us may have produced results that are not suitable for the purposes of this report and such inaccuracies may produce materially different results that could require that a revised report be issued.

13.6 In our opinion, all calculations are in accordance with applicable legislative requirements, and the procedures followed and the results presented conform with applicable actuarial standards of practice.

Appendix A: Summary of Benefits and Conditions for Divisions 2 and 5 (Defined Benefits) of the TSS

This report is based on the Trust Deed of the Scheme including all amendments to 16 July 2013.

Under the Trust Deed Telstra has the power to, with the consent of the Trustee, increase the amount of any benefit to be paid from the Fund. Other than the transfer of Division 2 members to Division 6 on 6 November 2014, this power has not been exercised historically.

A.1 Division 2 Definitions

Salary

The rate of normal permanent salary received by the member on his last birthday.

Final Average Salary (FAS)

The average of the member's Salaries on the three birthdays before exit.

Membership

The period during which the member is a member of the TSS and is eligible to contribute to the TSS, including any contributory period of membership of the Commonwealth Superannuation TSS.

Contributions and Benefit Multiple

Members are allowed to contribute at a number of "standard rates". They are also allowed to contribute at a number of "catch up" rates.

The accrual of the member's benefit multiple is dependent on the member's contribution rate, as follows:

Standard rates:

Member Contribution Rate (% of Salary)	Benefit Multiple Accrual Rate
0%	8.0%
1%	10.4%
2%	12.8%
3%	15.2%
4%	17.6%
5%	20.0%

Catch-Up Rates

Member Contribution Rate (% of Salary)	Benefit Multiple Accrual Rate
6%	21.0%
7%	22.0%
8%	23.0%
9%	24.0%
10%	25.0%

Accrued Benefit Multiple

The Accrued Benefit Multiple for a member is the sum of:

a. the lesser of the member's Fund Multiple (FM) and the member's Constant 5% Multiple (CM5); where

- the member's Fund Multiple (FM) is calculated as the sum, for all values of C, of

  (8% + 2.4 x C) x FMC

  where: C = Member contribution rate; and

  FMC = Division 2 Membership during which the member contributed at rate C

- the member's Constant 5% Multiple (CM5) is 20% times Division 2 Membership

b. the member's Excess Contributions Multiple calculated as the greater of zero and $\frac{(FM - CM5)}{2.4}$

c. in the case of a former CSS member, the sum of:

- 20% times the member's Credited CSS Service; and
- the member's Supplementary CSS Multiple.

A.2 Division 2 Benefits

All Benefits

The members' Other Division Benefit and Voluntary Account Balance as defined in the Trust Deed are payable in addition to the following benefits.

All benefits are subject to a minimum of the Minimum Requisite Benefit as defined in the Benefit Certificate of the TSS.

Retrenchment or Retirement

On retirement on or after age 55 or on retrenchment, the member will receive a lump sum benefit equal to the member's Accrued Retirement Benefit, which is the Accrued Benefit Multiple times FAS.

Resignation

As all members now have over five years of Membership, an amount equal to the Member's Accrued Retirement Benefit is payable on resignation.

Death and Total and Permanent Disablement

On death or total and permanent disablement before age 60 the benefit is calculated as the sum of:

a The member's Accrued Retirement Benefit as at the date of death; and

b If the member dies before attaining the age of 60 years, the amount determined according to the formula 20% x FAS x FM60, where FM60 is the number of years (and fractions thereof) between the date of death and the member's 60th birthday. FM60 is adjusted for the average part-time hours worked over the two years prior to becoming entitled to a death or disablement benefit.

Part (b) is externally insured with TAL for current members.

A.3 Division 5 Definitions

Salary

The annual rate of ordinary remuneration received by the member.

Final Average Salary (FAS)

The average of the member's Salaries on the date the member ceased to be an employee and on two dates preceding that date by 12 and 24 months respectively.

Contributory Membership

The period of Superannuation Membership during which the member makes Defined Benefit Contributions to the Fund, or contributed to the TSS No. 1 (their previous fund), measured in years and parts of a year.

Aggregate Contribution Percentage

The sum of each Defined Benefit Contribution Rate times the Membership during which the rate applied.

Average Contribution Percentage

The member's Aggregate Contribution Percentage divided by the member's Contributory Membership subject to a maximum of 5%.

Previous Fund Benefit Factor

In respect of a Previous Fund member, 20% times the member's Previous Fund Membership up to and including 1 July 1997.

Interim TSS Benefit

The Interim TSS Benefit is equal to 13% x FAS x Interim TSS Membership, where Interim TSS Membership is the period from the later of:

- 1 July 1990 and the date the member joined TSS No. 1

to the earlier of:

- 30 August 1991 and the date the member joined TSS No. 1

Supplementary Benefit

The member’s Supplementary Benefit is equal to A x (1 – R) where:

- A is the member’s Contribution Accumulation Account Balance; and
- R is 5% times the member’s period of Contributory Membership divided by the member’s Aggregate Contribution Percentage provided that R shall not be greater than 1.

A.4 Division 5 Benefits

All Benefits

The Productivity Accumulation Account Balance, Special Accumulation Account Balance and Voluntary Account Balance as defined in the Trust Deed are payable in addition to all benefits below.

All benefits are subject to a minimum of the Minimum Requisite Benefit as defined in the Benefit Certificate of the TSS.

Retrenchment or Retirement

On retirement on or before age 65 or on retrenchment, the member will receive a lump sum benefit equal to the sum of:

a. 8% x FAS x Contributory Membership; and

b. 2 x Average Contribution Percentage x Contributory Membership x FAS; and

c. FAS x member’s Previous Fund Benefit Factor (if any); and

d. The member’s Interim TSS Benefit (if any); and

e. The member’s Supplementary Benefit (if any).

(a), (b) and (c) are zero for non-contributory members.

Death or Total and Permanent Disablement (TPD)

If a member dies or becomes Totally and Permanently Disabled while an employee during a period of Division 5 Membership, the benefit payable is a lump sum equal to the sum of:

a. An amount equal to the greater of

i. the benefit (a), (b) and (c) from above had:

- the member survived to and/or retired at age 65; and
- the Salary of the member at the date of death or disablement remained unchanged; and
- the member's Member Defined Benefit Contribution Rate been 5% from the date of the member's death or disablement to age 65,

or

ii. the amount shown in the following table in accordance with the age and Salary of the member at the date of the member's death or disablement, interpolating between the amounts shown for whole years of age for additional complete months of age:

Age of Member at date of death or TPD	Multiple of Salary at date of death or TPD
55 or less	3.0
56	2.7
57	2.4
58	2.1
59	1.8
60	1.5
61	1.2
62	0.9
63	0.6
64	0.3
65	Nil

and

b. The member's Interim TSS Benefit (if any); and

c. The member's Supplementary Benefit (if any).

The externally insured benefit is the excess of the death or disablement benefit above the resignation or retirement benefit.

Temporary Total Disablement (TTD)

If a member becomes Temporarily and Totally Disabled before age 65 while an employee and while contributing to the Fund, an income benefit is payable to the member equal to an annual amount of 75% of the Member's Salary at the Date of Disablement. The benefit is payable for a maximum period of 2 years.

Termination of Employment

If a member ceases to be an employee in circumstances where no other benefit is payable, the benefit payable is a lump sum equal to the sum of:

a An amount calculated according to the formula (A x R) + V x [B – (A x R)] + C

where:

A = the member's Contribution Accumulation Account Balance;

B = 8% x FAS x Contributory Membership plus 2 x Average Contribution Percentage x Contributory Membership x FAS;

C = the Member's Previous Fund Benefit Factor x FAS;

R = 5% x Contributory Membership divided by the Member's aggregate contribution percentage, provided R is not greater than 1;

$$V = \frac{\text{Contributory Membership + Previous Fund Membership}}{4},$$

provided V is not greater than 1; and

b The member's Interim TSS Benefit (if any); and

c The member's Supplementary Benefit (if any).

Appendix B: Summary of Actuarial Assumptions

Financial Assumptions

I have assumed that the long term average future investment earnings and salary growth rates will be as follows:

- Investment returns, net of tax: 3.2% pa
- Salary Growth:
  - due to general wages growth: 2.5% pa
  - due to promotion: as illustrated in the scale below.

Promotional Salary Increases

Extracts from the assumed scales of salary progression (excluding general wage increases) are set out below. These factors indicate the relativities between salary levels for different durations of service and are not intended to indicate salary levels in dollar terms. Promotional salary increases are assumed to depend on duration of service only. As all defined benefit members have at least 10 years of service I have shown factors with service periods of 10 years and over.

Male & Female Promotional Salary Scale	
Years of Service	**Salary Scale**
10	10,000
15	10,433
20	10,815
25	11,181
30	11,538
35	11,885
40	12,225

Demographic Assumptions

Death and Total and Permanent Disablement

The table below illustrates the decrement rates adopted for death and total and permanent disablement. The figures represent the assumed numbers of exits due to death or disablement in the years of age shown per 10,000 members at each age.

Year of Age	Death		Disablement	
	Males	**Females**	**Males**	**Females**
20	11	11	1	0
30	6	7	2	1
40	6	5	4	5
50	17	18	19	18
60	74	71	55	59

Early Retirement

The table below illustrates the decrement rates adopted for early retirement. The figures represent the numbers of early retirements at each age shown per 10,000 members at each age.

Year of Age	Retirement
55	200
56	200
57	200
58	200
59	500
60	1,000
61	1,000
62	1,000
63	1,000
64	1,000
65	2,500
66	2,500
67	2,500
68	2,500
69	2,500
70	10,000

Retrenchment

The retrenchment rates will be calculated as 6.0% p.a. across all ages for each of the three years following the 30 June 2021 investigation date.

Resignations

The table below illustrates the decrement rates adopted for resignation. The figures represent the numbers of resignations at each age shown per 10,000 members at each age.

Year of Age	Resignations - Male	Resignations - Female
25	910	1,079
30	683	810
35	457	542
40	231	273
45	200	237
50	183	217

Other Assumptions

Expenses

Administration, actuarial, audit and other expenses have been assumed to be at 0.18% p.a. of the DB assets, plus $1.50 per member per week.

Premium Rates

The table below illustrates the premium rates that have been used to calculate the present value of expected future premium costs to be paid in respect of future insurance risk for defined benefits:

Age Next Birthday	Annual Rate per $1,000 Sum Insured
25	0.95
30	0.81
35	0.77
40	1.01
45	1.83
50	3.59
55	7.30
60	12.91

Taxation

We have assumed that the current taxation environment in respect of superannuation funds will remain unchanged and that the TSS will remain a complying fund and therefore be entitled to concessional tax treatment.

Accordingly, future employer contributions have been assumed to be taxed at 15%, with appropriate deductions as provided under taxation law.

Appendix C: Requirements under Superannuation Prudential Standard SPS 160

Telstra Superannuation Scheme (TSS) Actuarial Investigation at 30 June 2021

As the Actuary to the TSS, I hereby certify that:

a. At 30 June 2021, the total market value of the assets of the TSS available to pay benefits was $24,122.6 million, with the assets attributable to the funding of the defined benefit liabilities totalling $1,626.5 million. These amounts exclude amounts held in reserve, including amounts held to meet the Operational Risk Financial Requirement (ORFR). The defined benefit asset value of $1,626.5 million was used for the value of assets for the purpose of calculating solvency and long term funding calculations as at 30 June 2021.

b. The assets and liabilities in respect of accumulation accounts are expected to remain equal. The projected likely future financial position of the TSS in respect of defined benefits during the three years following the valuation date, based on my best estimate assumptions and assuming that Telstra contributes at 5% of salaries for at least the next three years to 30 June 2024:

Date	Vested Benefits Index (%)
30 June 2021	113%
30 June 2022	113%
30 June 2023	112%
30 June 2024	112%

c. In my opinion, the assets of the TSS at 30 June 2021, excluding the amount held to meet the ORFR, were adequate in value to meet the liabilities of the TSS in respect of accrued benefits in the TSS (measured as the present value of members' accrued entitlements using the valuation assumptions). I consider that the assumptions and valuation methods used are appropriate for determining the accrued benefit liability.

d. At 30 June 2021 the TSS was in a satisfactory financial position, as defined in SPS 160, and does not need to be treated as unsatisfactory. In my opinion the shortfall limit does not need to be reviewed.

e. At 30 June 2021 the value of the liabilities of the TSS in respect of minimum benefits of the members of the fund in respect of defined benefits has been estimated to be $1,064.0m.

f. The Funding and Solvency Certificates for the Scheme covering the period from 1 July 2018 to 30 June 2021 have been obtained. In my opinion, I expect the solvency of the TSS will be able to be certified in any Funding and Solvency Certificate under the Superannuation Industry (Supervision) Regulations during the three years immediately following this investigation.

g. In my report on the actuarial investigation of the TSS at 30 June 2021, I recommend that Telstra and associated employers continue to contribute to the TSS in respect of defined benefit members at a rate 5% of salaries until 30 June 2025. This contribution requirement should be reviewed and increased as deemed appropriate by the Actuary if the VBI falls to below 105% at any time. From 1 July 2025 I recommend Telstra and associated employers contribute at the rate recommended in the next actuarial investigation, with the contribution rate expected to be around 8.0% of salaries. I also recommend that Telstra and associated employers contribute to the TSS:

- In respect of accumulation members, the required employer contributions under the relevant agreements (i.e. Trust Deed or other contractual obligations);
- Insurance premium amounts for basic cover in respect of Corporate Plus members, as these premiums are not paid by the members; and
- Any salary sacrifice contributions.

Matthew Burgess

Matthew Burgess
Fellow of the Institute of Actuaries of Australia

10 December 2021