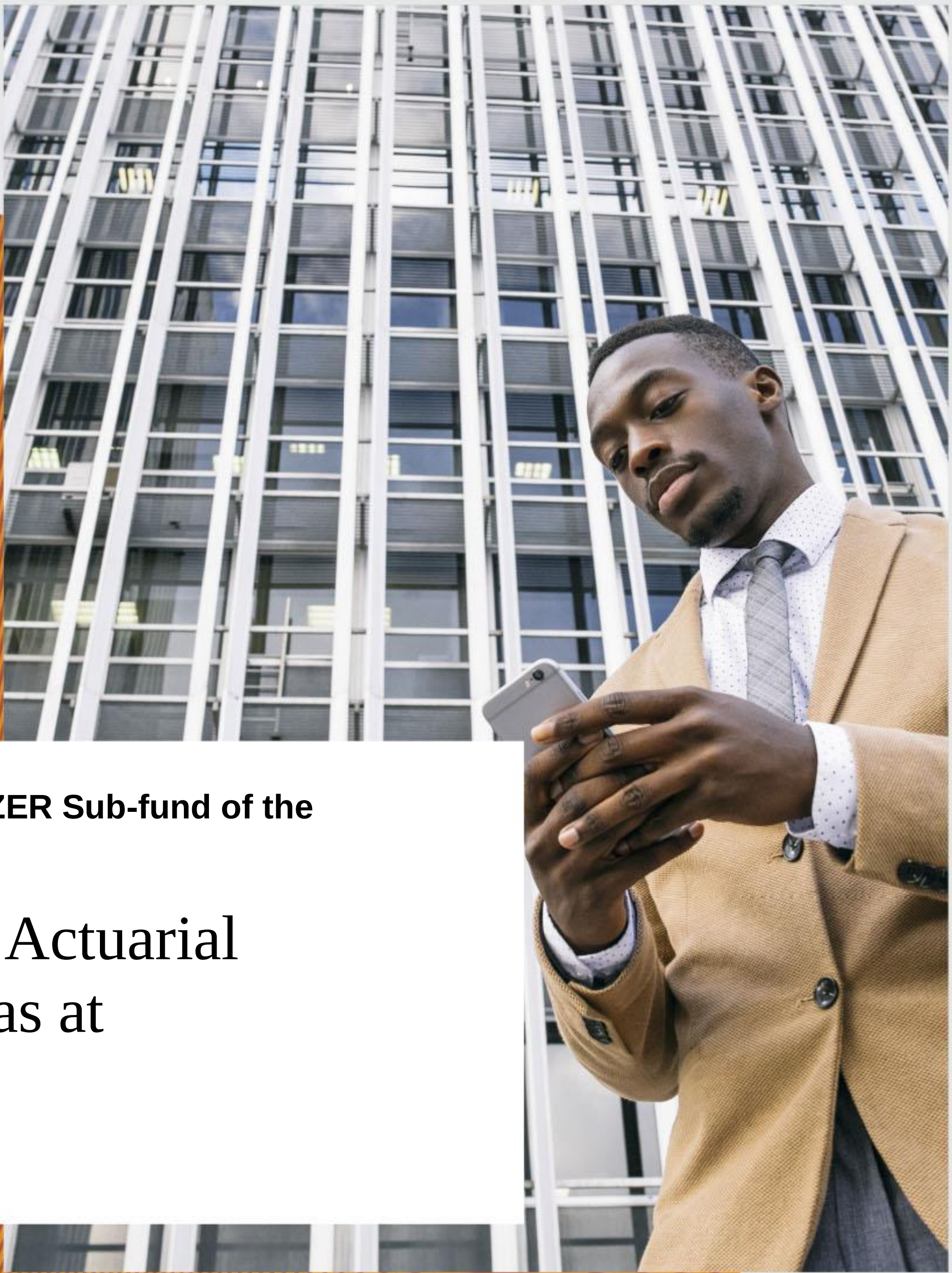


Maritime Super, SVITZER Sub-fund of the Seafarers Division

Report on the Actuarial Investigation as at 30 June 2022

6 December 2022

Summary

I am pleased to present my report to the Trustee of Maritime Super on the actuarial investigation into the Maritime Super, SVITZER Sub-fund of the Seafarers Division as at 30 June 2022.

This Summary sets out the key results and recommendations contained in this report.

Summary of Data

The assets of the Sub-fund are invested in the Fund's Balanced option through the Hostplus Pooled Superannuation Trust.

A summary of membership numbers and the value of net assets of the Sub-fund at 30 June 2022 and 30 June 2020 are shown below:

	30 June 2022	30 June 2020
Number of Members	24	44
Value of Net Assets	$29,677,000	$41,416,000

Solvency

The financial position of the Sub-fund has improved over the intervaluation period, as shown in the increased Vested Benefits Index from 104.9% as at 30 June 2020 to 125.2% as at 30 June 2022.

The solvency measures as at 30 June 2022 and 30 June 2020 are also shown below:

Measure	30 June 2022	30 June 2020
VBI	125.2%	104.9%
PVABI	127.1%	104.8%
MRBI	184.1%	179.6%

Funding

I recommend the following contributions are paid to the Sub-fund by the Employer for the period commencing 1 July 2022:

- From 1 July 2022 to 31 December 2022: 15.0% of Salary,
- From 1 January 2023: nil contributions (i.e. a contribution holiday).

Contents

Throughout this report the following terms are used:

Fund
Maritime Super

Sub-fund
Maritime Super, SVITZER Sub-fund of the Seafarers Division

Trustee
Maritime Super Pty Ltd, the Trustee of Maritime Super

Employer
SVITZER Group

Trust Deed or Rules
The Fund's Trust Deed dated 1 March 2009 and subsequent amendments

The Investigation Date or Valuation Date
30 June 2022

wtw

In addition to the above contributions, the Employer is also required to pay a contribution of 3% of Salary for certain members which is to be credited to the member's 3% Accumulation Account.

I continue to recommend that the Employer contribute at the required amounts to meet any Superannuation Guarantee, contractual or any other obligations in respect of accumulation liabilities in the Sub-fund.

Other Matters involving Actuarial Oversight

I further recommend that:

- The Trustee consider reviewing the investment strategy of the Sub-fund, in favour of a more conservative strategy in order to protect the current funding surplus against adverse market movements. The Trustee must give consideration to the impact on members' leaving service benefits which are accumulation in nature;
- The Trustee to retain the shortfall limit to 98% based on the current investment structure of the Sub-fund;
- The Trustee monitor the financial position of the Sub-fund quarterly throughout the following investigation period, with results reviewed by the Actuary;
- The Trustee obtain a letter from the Actuary in the intervening years between regular actuarial investigations which reports to the Trustee on the vested benefit position of the Sub-fund; and
- Current external insurance arrangements for death and disablement benefits be retained.

The next actuarial investigation of the Sub-fund should be conducted with an effective date no later than 30 June 2024. The recommended employer contribution rates will be reviewed at that time or at an earlier date if considered appropriate as a consequence of the regular review of the VBI or as required by legislation.

I am not aware of any event since 30 June 2022 that warrants review of the recommendations in this report.

Chris Porter
Fellow of the Institute of Actuaries of Australia

6 December 2022

ABN 45 002 415 349 AFSL 229921

Level 4, 555 Bourke Street, Melbourne VIC 3000

DO: HL | TR: EC | CR/ER: CJP

Section 1: Introduction

Scope

This investigation has been prepared effective 30 June 2022 for Maritime Super Pty Ltd, Trustee of Maritime Super, by the actuary to the Fund, Chris Porter, FIAA.

The Trust Deed governing the Fund requires an actuarial investigation and report to be due at least every three years. Under subparagraph 14(d) of Prudential Standard SPS 160 Defined Benefit Matters, APRA has determined that the Trustee require regular actuarial investigations of the Fund to be made every two years.

The main aims of the investigation are to examine the current financial position of the Sub-fund and the long-term funding of the Sub-fund's benefits, and to provide advice to the Trustee on the contribution rate at which the Employer should contribute and on any other matters the actuary considers relevant.

This investigation is primarily interested in the defined benefit liabilities of the Sub-fund, and unless otherwise specified, this report relates only to such defined benefit liabilities. The Defined Contribution liabilities of the Sub-fund, including those that relate to defined benefit members, are fully funded and do not impact upon the Defined Benefit liabilities. No investigation is required regarding the Defined Contribution liabilities, although in my recommendations I have continued to recommend that the Employer contribute to meet any Superannuation Guarantee, contractual or any other obligations in respect of such liabilities.

This report has been prepared in accordance with Professional Standard 400, dated March 2021, issued by the Institute of Actuaries of Australia.

Background

The Fund is governed by a Trust Deed which was consolidated as at 1 March 2009 and subsequent amendments. The Fund is a complying superannuation fund for the purposes of the Superannuation Industry (Supervision) Act (SIS Act) and for taxation purposes.

The Sub-fund is closed to new members.

Contributions

The level of Employer contributions is to be determined by the Trustee acting on the advice of the Actuary. This power is set out in Clause 8.1 of Schedule B3 of the Trust Deed which states:

> *"Subject to the Rules, each Participating Employer:*
>
> a. *must contribute to the Fund such amounts, or rates of contributions, as may be determined by the Trustee with the consent of the Principal Employer in consultation with the Actuary; and*
>
> b. *may contribute such other amounts as may be permitted by the Trustee."*

Further to this, Clause 6.1 of Schedule B3 of the Trust Deed specifies that the Employer will pay 3% of Salaries for certain members which is to be credited to the member's 3% accumulation account. Upon leaving the Sub-fund, members will be paid the balance of the 3% accumulation account in addition to their Defined Benefit. For the purposes of this investigation we have treated the 3% accumulation account as an accumulation liability and it is not considered any further as part of this investigation.

If the Employer fails to pay any contributions required by the Trustee, then the Trustee may vary the benefits payable to members.

Previous Actuarial Investigation

The previous actuarial investigation of the Sub-fund was carried out by Chris Porter, FIAA as at 30 June 2020, with the results of that investigation set out in a report dated 10 December 2020.

The report concluded that the Sub-fund was not in an unsatisfactory financial position (as defined by SIS legislation) at that date and recommended that the following contributions were paid by the Employer:

- 15.0% of Salaries; plus
- In respect of any exiting members with Employer consent for a retirement between ages 55 and 60, or as a consequence of retrenchment, an amount to maintain the financial position of the Sub-fund equal to the difference between the benefit paid and the vested benefit multiplied by the vested benefit index as measured at the most recent quarter end (if positive) plus contributions tax.

I understand that the Employer has contributed consistent with these recommendations.

Experience since 30 June 2022

Since 30 June 2022 the net return on the Sub-fund's assets to 30 September 2022 was approximately -0.6%.

The actual investment experience since 30 June 2022 has deteriorated the financial position of the Sub-fund. Because of this, I have taken into account investment experience since 30 June 2022 when carrying out the projection of the financial position of the Sub-fund from that date.

It is my understanding that the Fund is currently in the process of implementing a Successor Fund Transfer (SFT) to Hostplus Superannuation Fund, with an intended transfer date in 2023. I consider that the recommendations set out in this report remain appropriate with consideration to the Hostplus SFT.

Limitations

This report is provided subject to the terms set out herein and in our service agreement dated 24 July 2009 and signed on 3 August 2009, which was originally made with Russell Employee Benefits Pty Ltd and novated in March 2017 to Towers Watson Australia Pty Ltd. This report is provided solely for the Trustee's use and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose.

Except where we expressly agree in writing, this report should not be disclosed or provided to any third party, other than as provided below. 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.

We consent to the Trustee making a copy of this report available on the Fund's website where required in accordance with the relevant legislation.

The Trustee may make a copy of this report available to its auditors, the Employer or Unions and to any person to whom the Trustee may be required to provide a copy under relevant legislation, 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 the Employer or any third party in this regard. The Trustee should draw the provisions of this paragraph to the attention of its auditors and the Employer or Unions when passing this report to them.

In preparing this valuation, we have relied upon information and data provided to us orally and in writing by the Trustee and other persons or organisations designated by the Trustee. We have relied on all the data and information provided, including Fund and Sub-fund provisions, membership data and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for consistency. The data and information we have relied upon is shown in the "Additional Information" section of this report.

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

Section 2: Solvency

Solvency Measures

When assessing the adequacy of the assets and future contribution rates, both the long-term and short-term solvency positions should be considered. To assess the solvency position, I have considered the following funding solvency measures:

- Vested Benefits Index (VBI), the ratio of assets to the vested benefits, which represent the total amount which the Sub-fund would be required to pay if all members were to voluntarily leave service on the investigation date;
- The Present Value of Accrued Benefits Index (PVABI), the ratio of assets to the present value of accrued benefits, which represents the value in today's dollars, of expected future benefits payable based on membership completed to the valuation date,1 and
- The Minimum Requisite Benefits Index (MRBI), the ratio of assets to the portion of the Minimum Requisite Benefits (MRB) as defined in the Sub-fund's Benefit Certificate that relates to defined benefits.

The following table shows the above indices as at the valuation date, as well as the prior valuation date.

	As at 30 June 2022			As at 30 June 2020		
Measure	**Value of Liability**	**Value of Assets**	**Index**	**Value of Liability**	**Value of Assets**	**Index**
VBI	$23,702,000	$29,677,000	125.2%	$39,496,000	$41,416,000	104.9%
PVABI	$23,350,000	$29,677,000	127.1%	$39,510,000	$41,416,000	104.8%
MRBI	$16,121,000	$29,677,000	184.1%	$23,058,000	$41,416,000	179.6%

The VBI and PVABI indices have increased from those at the previous investigation date. This is primarily a result of positive experience of the Sub-fund since 30 June 2020, in particular, higher than expected investment performance, lower than expected salary increases, and exits while the Sub-fund was in surplus.

The PVABI has decreased by 0.3% as a result of assumptions changes in isolation. This was more than offset by gains due to experience over the intervaluation period.

The VBI is above 100% as at the valuation date, and as such, the Sub-fund is to be treated as being in a satisfactory financial position as at that date.

[1] Benefits have been apportioned to past service by calculating the projected benefit payable using only service that is completed to the valuation date in the benefits formula.

Retrenchment Benefits, Other Discretionary or Contingent Benefits

Additional indices have been provided for the following benefits:

- Leaving Service Benefit Index (LSBI), the ratio of assets to leaving service benefits, which is the amount which the Sub-fund would be required to pay if all members were to voluntarily leave service on the investigation date, and Employer consent was given for members between the ages of 55 and 60 to receive early retirement benefits;[1]
- Retrenchment Benefits Index (RBI), the ratio of assets to retrenchment benefits, which is the amount which the Sub-fund would be required to pay if all members were to be retrenched.[2]

	As at 30 June 2022			As at 30 June 2020		
Measure	Value of Liability	Value of Assets	Index	Value of Liability	Value of Assets	Index
LSBI	$23,930,000	$29,677,000	124.0%	$41,482,000	$41,416,000	99.8%
RBI	$23,930,000	$29,677,000	124.0%	$41,482,000	$41,416,000	99.8%

I note that as at 30 June 2022, the retrenchment benefit is equal to the leaving service benefit for all members.

I have been notified in the past that it is the Employer's policy that consent will not be provided to members who wish to retire between ages 55 and 60 (i.e. they will not qualify for the higher early retirement benefit).

I also note that both the LSBI and the RBI are above 100%. At 30 June 2022 there is only one remaining active member of the Sub-fund for whom an additional benefit would be payable. If the Employer was to provide consent for a member to retire before age 60 then the immediate funding strain on the financial position would be immaterial and hence, I do not anticipate any top-up contributions would be required.

Termination Benefits

Under the Trust Deed, on termination of the Fund, and by implication the Sub-fund, the assets of the Sub-fund must be used in the following order and the Fund must then be wound up:

a. In meeting costs and expenses of winding up that are not met by the Employer, and then

b. To meet in full the expected benefit obligations of pensioners and retained members of the Sub-fund, and then

c. To meet in full the benefits of members who have attained their Normal Retirement Age, and then,

[1] With the consent of the Employer, members are able to retire from age 55 (subject to preservation). The benefits payable to members on early retirement with Employer consent between the ages of 55 and 60 will generally be higher than the benefits payable on voluntary resignation without consent (i.e. their vested benefit).
[2] The benefits payable to members on retrenchment below age 60 will generally be higher than benefits payable on resignation (i.e. their vested benefit). Details of the benefits payable on retrenchment are set out in the 'Additional Information' section of this report.

d. In satisfying the employer obligations under Superannuation Guarantee legislation, and then

e. To meet the balance of the vested benefits of members, to the extent that this has not already been satisfied, and finally

f. In providing further benefits to members as the Actuary shall certify as being fair and reasonable.

Further, upon termination, it could become necessary to liquidate existing assets. Given the assets of the Fund are invested in Hostplus Pooled Superannuation Trust investment options, I do not expect there would be liquidity issues if it became necessary to quickly realise funds, and the full amount of the Sub-fund's assets at the date of termination would be available to use for meeting a. to f. (see above). Therefore, I have not allowed for any discount on assets to reflect the sale of illiquid assets in the event of termination.

Under the Trust Deed, the benefits required to be paid on termination are amounts determined by the Trustee with the advice of the actuary. In any case, the amounts to be paid would be limited by the amount of assets available in the Sub-fund.

The provisions under the Trust Deed mean that, by definition, the Sub-fund is able to meet its legal obligations to members upon termination.

If the Sub-fund was ever terminated, the Trustee would need to seek both actuarial and legal advice at that time to consider the method of determining and payment form of benefits from the Sub-fund

Section 3: Funding

This section considers the long-term funding of the Sub-fund and assesses the contributions required in order to fund benefits payable in future years. To determine the long-term contribution rates, I have used a projection method as described in the "Additional Information" section of this report.

Long Term Funding results

The long-term Employer contribution rate is calculated in the table below.

Long-Term Contribution Rate	
Future Service Liabilities	
Future Service Liability	$900,000
Less Present Value of Future Member Contributions	($298,000)
Liability to be Funded by Future Company Contributions	$602,000
Salaries	
Present Value of Future Salaries	$5,964,000
Contribution Rates	**% of Salaries**
Future Service Benefits	10.1%
Allowance for Administration Expenses	1.3%
Allowance for Group Life Insurance Premiums	3.1%
Allowance for Contributions Tax	1.0%
Total Long-Term Company Contribution Rate	**15.5%**

I note that the long-term contribution rate has reduced compared to the rate of 16.4% calculated in the previous investigation. This is primarily as a result of changes in valuation assumptions.

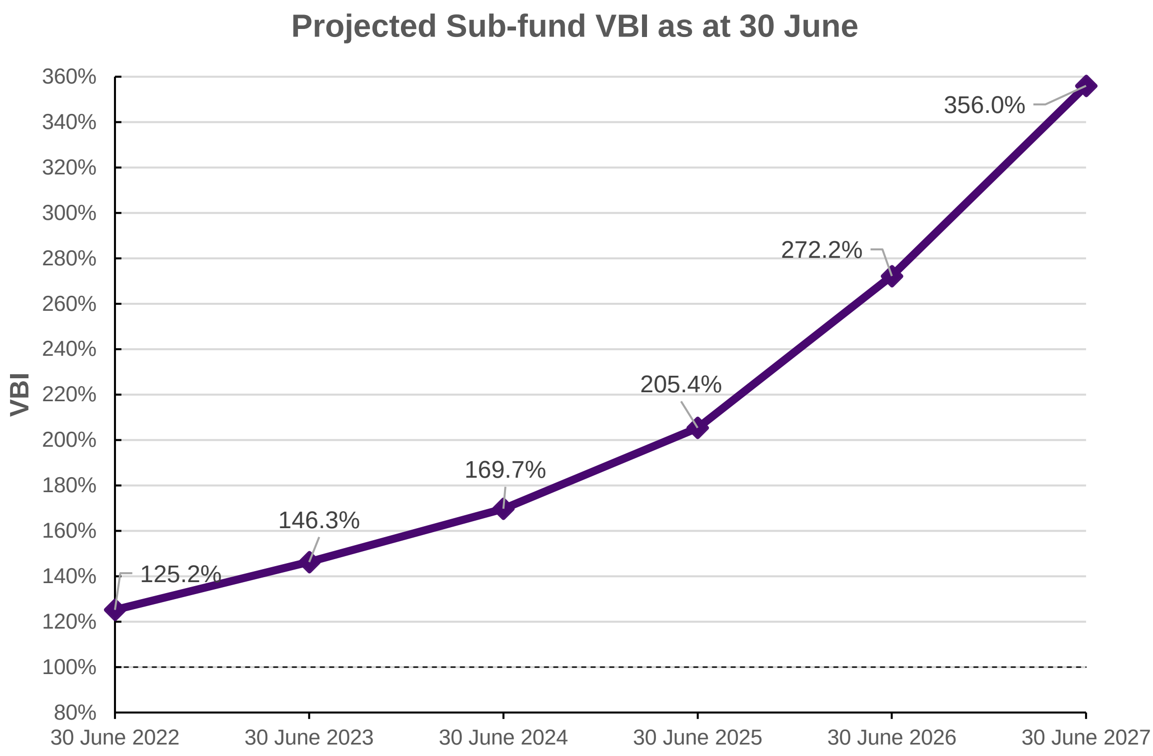
Vested Benefit Projection

The Trustee has a solvency target for the Sub-fund to maintain assets exceeding vested benefits in the Sub-fund and then to achieve 100% coverage of the leaving service benefits (with Employer consent), which is above the level required for the Sub-fund to be in a satisfactory financial position.

In order to assess whether the recommended contribution program is likely to meet this target, I have projected the Sub-fund's Vested Benefits Index over the next five years based on Employer contributions of:

- From 1 July 2022 to 31 December 2022: 15.0% of Salary,
- From 1 January 2023: nil contributions (i.e. a contribution holiday).

I have allowed for actual investment return experience to 30 September 2022 in this projection.



As can be seen from the graph, on the basis of the selected actuarial assumptions, the recommended contributions are sufficient to maintain a satisfactory financial position.

Leaving Service Benefits (with Employer consent)

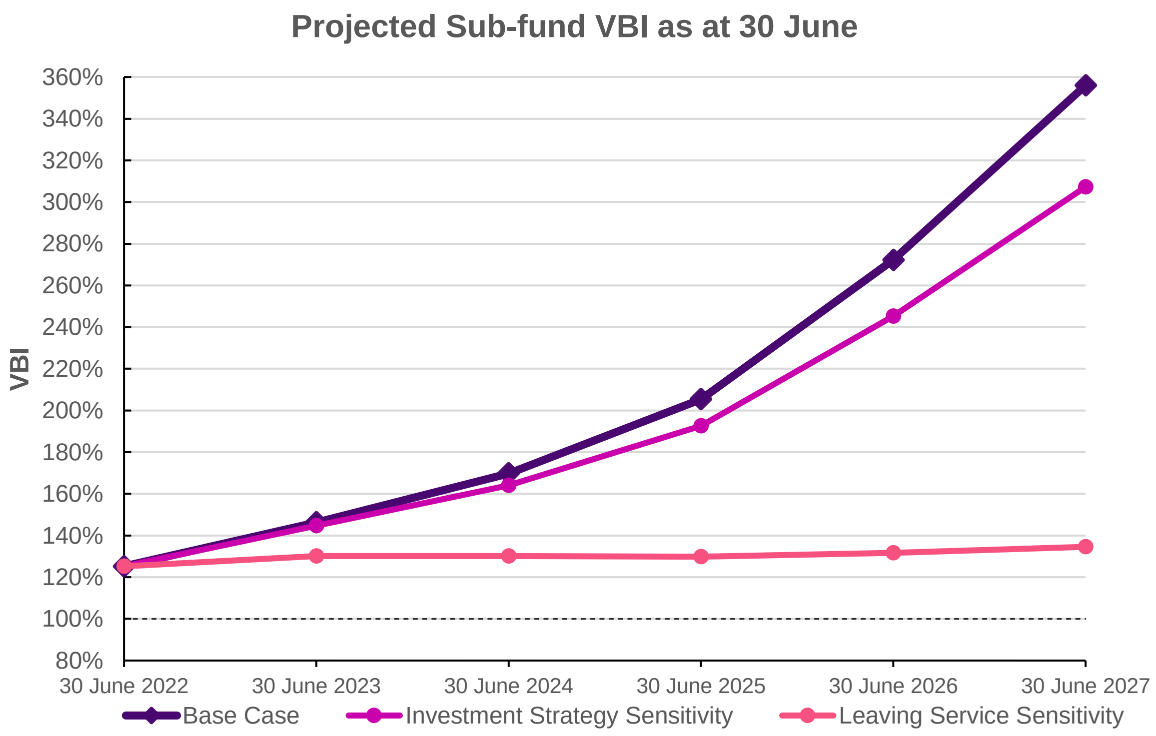
Over time, the LSBI will converge to the VBI as members attain age 60. As at 30 June 2022 there is one remaining member of the Sub-fund for whom there is an additional benefit payable on retirement with Employer consent between ages 55 and 60. Over the following 2 years, this member will attain age 60. I am therefore satisfied that the recommended contributions will be sufficient to maintain assets at least equal to the leaving service benefits.

Sensitivity Analysis

In making a recommendation on the level of contributions that the Employer should make to the Sub-fund, it is useful to consider the sensitivity of the analysis above to reasonable variations in the valuation assumptions. The following table shows the long-term contribution rate calculated, if key assumptions had been varied as described below:

	This Valuation Basis	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Description	**Base Case**	**Investment Return Sensitivity**	**Salary Inflation Sensitivity**	**Investment Strategy Sensitivity**	**Leaving Service Sensitivity**
Discount Rate	4.6%	3.6%	4.6%	2.0%	4.6%
Expected Salary Growth	2.9%	2.9%	3.9%	2.9%	2.9%
Present Value of Accrued Benefits Index	127.1%	126.1%	126.4%	124.2%	131.1%
Long Term Employer Contribution Rate	15.5%	16.1%	16.0%	17.6%	14.0%
Rates of leaving Service	Age based rates as set out in Section 5	Age based rates as set out in Section 5	Age based rates as set out in Section 5	Age based rates as set out in Section 5	All members remain in service and retire at age 70

Similarly, the Sub-fund's projected VBI over the next five years under the varied assumptions are shown in the graph below. In each case the Employer contributions are assumed to be nil from 1 January 2023.



The Sub-fund's projected financial position is not sensitive to long-term financial assumptions as a result of the relatively short expected future working lifetime of Sub-fund members and have therefore not been shown in the chart above. I have, however, included a projection on the basis of a lower discount rate assumption which may be consistent with a lower growth investment strategy.

The rates at which members leave service continues to have a material impact on the projected financial position of the Sub-fund.

While the sensitivities have been selected to be illustrative of reasonable changes in the valuation assumptions, they do not represent the upper or lower bounds of possible outcomes and more extreme outcomes are possible.

Summary

On the basis of the above results, I believe that the Employer contributions set out below are sufficient to meet the funding requirements of the Sub-fund:

- From 1 July 2022 to 31 December 2022: 15.0% of Salary,
- From 1 January 2023: nil contributions (i.e. a contribution holiday).

In addition to the above contributions the Employer is also required to pay a contribution of 3% of Salary for certain members which is to be credited to the member's 3% Accumulation Account.

Accordingly, I recommend that the Employer contribute at the rates set out above until at least 30 June 2025 in respect of defined benefit members.

I continue to recommend that the Employer contribute at the required amounts to meet any Superannuation Guarantee, contractual or any other obligations in respect of accumulation liabilities in the Sub-fund.

I further recommend that the VBI position continue to be monitored quarterly throughout the following investigation period, with the results reviewed by the Actuary, to ensure that these contribution recommendations remain appropriate. I also recommend that the Trustee obtain a letter from the Actuary in the intervening years between regular actuarial investigations which reports to the Trustee on the vested benefit position of the Sub-fund.

Section 4: Other Matters Involving Actuarial Oversight

Investments

The net market value of assets is based on the asset values declared by the respective external fund managers at 30 June 2022 which in turn are based on the market values of the assets after allowing for realisation costs.

I note that Professional Standard 404 defines the ‘Fair Value’ of assets as the value of assets before the deduction of transaction costs. Based on the type of assets held by the Fund I do not expect realisation costs to be material. I have therefore used the net market value of assets for the purpose of this investigation.

Investment Strategy

The assets of the Sub-fund are invested in the Fund’s Balanced option through the Hostplus Pooled Superannuation Trust.

The Balanced option is a diversified portfolio, including some growth assets and some lower risk investments. The Balanced Option’s target is to invest 76% of the fund in growth assets and 24% of the fund in defensive assets.

The return objective of the Balanced option is to outperform the annual rate of inflation (CPI) by 3.0% p.a. on average over 10 year periods, and by 4.0% p.a. on average over 20 year periods.

The strategic asset allocation of the Balanced option as at 30 June 2022 is shown in the below table:

Asset Class	Allocation
Australian Shares	21%
International Shares	29%
Property	11%
Private Equity	10%
Infrastructure	11%
Credit	7%
Alternatives	3%
Diversified Fixed Interest	3%
Cash	5%
Total Growth Assets	**76%**
Total Defensive Assets	**24%**

In my opinion, given the relatively short expected future lifetime of the Sub-fund and the strong funding position, the Trustee should consider adopting a more conservate investment strategy in order to protect the surplus of the Sub-fund against adverse market movements. The Investment Strategy Scenario set out in the table (Scenario 3) and chart on page 9 of this report demonstrates the impact on the funding status of investing in a lower growth investment strategy, where returns are expected to be 2% p.a.

The Fund's Capital Stable investment option invests in only 38% growth assets, and 62% defensive assets and has a return target to outperform CPI by 2.0% p.a. on average over 20 years.

However, it is important that the Trustee also consider the impact of any change in the investment strategy on members' benefits. The Sub-fund provides a benefit on leaving service or resignation (before age 60) which is equal to 2.25 multiplied by the accumulated normal member contributions with investment returns. This benefit is also applied as a minimum on retirement (after age 60). A more conservative investment strategy will have a lower expected return and hence reduce the expected value of members' leaving service benefit.

The Minimum Requisite Benefit is also in accumulation form but is not currently applying for any member.

The Trustee should also discuss any changes in investment strategy with the Employer, since the Employer bears the majority of the investment risk for the Sub-fund.

Unit Pricing and Investment Reserving Policy

The assets backing the Sub-fund's liabilities are not subject to member investment choice. The net rate of return for the Balanced option is credited to member accounts. In my view, this remains appropriate.

Investment reserves are not held as there is no smoothing of investment earnings in the setting of unit prices. This remains appropriate.

Liquidity

I understand that the Fund's Balanced option currently targets an illiquid allocation of 42% of assets. As at 30 June 2022, the value of the Sub-fund's defined benefit assets represents less than 1% of the total assets held by the Fund, and an immaterial proportion of the total assets under the Hostplus Pooled Superannuation Trust. As such, in my opinion the Fund has sufficient liquidity to meet payments from regular cashflows.

Shortfall Limit

The Trustee currently has an approved shortfall limit of 98%.

Based on the Sub-fund's benefit design and its target asset allocation described above, in my opinion the 98% shortfall limit remains reasonable for the Sub-fund.

Insurance

Death and Disablement Benefits

At the investigation date, the Sub-fund has death and total and permanent disablement (TPD) insurance with MLC Limited in respect of the future service portion of their death and disablement benefits.

The formula used to calculate the level of insurance is:

Death/TPD Benefit *less* Vested Benefit

Where Vested Benefit is the benefit payable if a member were to immediately, voluntarily leave service as outlined in Section 5 of this report.

Salary Continuance Benefits

The Sub-fund also offers a Salary Continuance benefit for members who become totally and temporarily disabled (TTD).

The benefit payable on TTD is:

- 75% of the member's annual salary
- Payable for up to 2 years for accumulation members or to age 65 for defined benefit members (unless the member recovers or receives a TPD benefit).

This benefit is also commercially insured for up to two years (after the three month waiting period) by MLC Limited.

For accumulation members, the TTD benefit is fully insured.

As the defined benefit members can receive a TTD benefit for a period in excess of two years (that is, until they recover or reach age 65), there is a potential liability retained by the Sub-fund where the benefit is paid for longer than two years. In practice, members who are temporarily disabled for more than two years generally return to work or become entitled to a TPD benefit. As such, the probability of paying a TTD benefit for longer than 2 years in respect of a defined benefit member is small.

For the two years to 30 June 2022, I am not aware of any TTD payments which have been ongoing for more than two years. Given this, for the purposes of estimating the long-term contribution rate there has been no explicit allowance for the payment of a TTD in excess of two years. I note, however, that if a TTD benefit becomes payable, the Company will ultimately be required to cover the cost of these benefits (beyond two years) as part of future contribution rate assessments.

Recommendations

I confirm that the amount of insurance in place satisfactorily covers the additional benefit payable on death/TPD, and that the Sub-fund funded portion of TTD benefits does not constitute a material risk to the financial position of the Sub-fund. On this basis, I consider the current insurance arrangements adequate and recommend that the current arrangements be maintained.

Section 5: Additional Information

Risks

The table below summarises the main risks to the financial position of the Sub-fund.

Risk	Approach taken to risk
Investment returns on the existing assets could be insufficient to meet the Trustee's funding objectives	The Trustee takes advice from the Fund Actuary on possible assumptions for future investment returns. In setting the future contributions, the Fund Actuary considers the effect on the future financial position if investment returns are less than expected. The Trustee is able to agree further contributions with the Employer at subsequent valuations if future returns prove insufficient.
Salary increases could be different from that assumed which could result in higher liabilities	The Trustee invests in assets that are expected to be correlated to future inflation in the longer term (sometimes referred to as "real" assets). This means that, over the longer term, such assets are expected to keep pace with inflation. Such assets include equities, property and index-linked bonds.
Falls in asset values might not be matched by similar falls in the value of the Sub-fund's liabilities	The Trustee considers this risk when determining the Sub-fund's investment strategy. It consults with the Employer in order to understand the Employer's appetite for bearing this risk and takes advice on the Employer's ability to make good any shortfall that may arise. To the extent that such falls in asset values result in deficits at future valuations, the Employer would be required to agree a recovery plan with the Trustee to restore full funding over a period of time.
Liquid assets are not sufficient to meet cashflow requirements of the Sub-fund when they fall due	The assets of the Fund are invested in the Hostplus Pooled Superannuation Trust. As such, the total assets under management are sufficient to cover any potential cashflows of the Sub-fund.
Options exercised by the Employer could lead to increases in the Sub-fund's liabilities	The Trustee has set funding objectives to achieve asset coverage of 100% of leaving service benefits available with Employer consent. The financial risk associated with this option being routinely exercised diminishes as the members of the Sub-fund age. With only one remaining member to whom such a benefit may be payable, to the extent that this option is exercised by the Employer, the subsequent deterioration of the financial position of the Sub-fund would not be material based on the current position. This risk can be considered as short term, as the remaining member will attain age 60 prior to 30 June 2024.
Sub-fund members work longer than assumed resulting in slower growth in the VBI	The Trustee is able to agree further contributions with the Employer at subsequent valuations if a sufficient buffer of assets over vested benefits does not emerge over the intervaluation period.
Legislative changes could lead to increases in the Sub-fund's liabilities	The Trustee takes legal and actuarial advice on changes in legislation and consults with the Employer or Unions, where relevant.

Economic risk | Demographic risk | Legal risk

Benefits summary

Definitions

Accumulation accounts	:	The total account balances of the various accumulation accounts, including Voluntary and 3% Accumulation (excluding member normal contributions).
Early Retirement	:	Retirement after age 60 and before age 65. Only available from age 55 with Company consent.
Normal Retirement	:	Retirement at age 65.
Late Retirement	:	Retirement after age 65.
Service	:	Number of completed years (and portions of a year) of service.
Final Average Salary	:	The greater of: a. Average salary over 3 years prior to the date of exit; and b. The average salary over 3 years immediately prior to the Member's 65th birthday, or if the member retires prior to their 65th birthday, immediately prior to the Member's early retirement date.
Member's contributions	:	5% (deemed or actual).
Normal Retiring Age (NRA)	:	65 years
Vesting factor	:	1 plus 0.125 for each year of service subject, to a maximum of 2.25 after 10 years

Defined Benefit Members

Contributions

Member's normal contributions are 5% of salary.

Employers contribute at a rate specified by the Actuary.

In addition, the Employers contribute at the rate of 3% of salary to the 3% accumulation account, for certain defined benefit members.

Benefit on Normal Retirement and Early Retirement

A lump sum equal to the lesser of:

a. final average salary multiplied by:
   - 15% for each year of service up to 30 September 1991; and
   - 17.5% for each year of service from 1 October 1991.

b. 7 times final average salary.

Subject to a minimum of the benefit payable on leaving service / resignation.

plus the balance of the member's accumulation accounts.

Benefit on Late Retirement

Benefit calculated as on normal retirement, with service continuing to accrue beyond normal retirement age.

Transfer to SVITZER Accumulation

A Member may, within one month after attaining age 65, elect to transfer to become a SVITZER Accumulation member, with the transferring benefit calculated at age 65.

Benefit on Total and Temporary Disablement (TTD)

A monthly income benefit of one-twelfth of 75% of the Member's annual salary as at the date of disablement (less any workers compensation payments received by the member). The TTD benefit is payable until the member recovers or until reaching normal retiring age, whichever is sooner.

Benefit on Total and Permanent Disablement (TPD)

Prior to age 65:

- A lump sum equal to the retirement benefit calculated using prospective service to age 65 and salary as at the date of disablement (subject to a maximum of 7 times salary) *plus* the balances of the member's accumulation accounts.

After age 65, the late retirement benefit.

Benefit on Death

Prior to age 65:

- A lump sum equal to the retirement benefit calculated using prospective service to age 65 using salary as at the date of death (subject to a maximum of 7 times salary) *plus* the balance of the member's accumulation accounts.

After age 65, the late retirement benefit.

Benefit on Leaving Service / Resignation (under age 60)

A lump sum equal to 2.25 multiplied by the accumulated normal member contributions with investment returns, subject to the Minimum Requisite Benefit as outlined in the Funding & Solvency Certificate plus the balances of the member's other accumulation accounts.

Benefit on Leaving Service / Resignation (with Company Consent) between 55 and 60

A lump sum equal to the greater of the early retirement benefit and the standard resignation benefit, subject to the Minimum Requisite Benefit as outlined in the Funding & Solvency Certificate.

Benefit on Retrenchment or Ill-Health

A lump sum equal to the greater of:

- 2.25 multiplied by the accumulated normal member contributions with interest, or
- discounted retirement benefit, based on a discount rate of 1.5% for each year prior to age 55.

subject to a minimum of the Minimum Requisite Benefit as outlined in the Funding & Solvency Certificate,

- *plus* the balance of the member's accumulation accounts

Summary of Data Used in this Investigation

Membership Data

Maritime Super has responsibility for maintaining member records, payment of benefits and other administrative tasks of the Sub-fund.

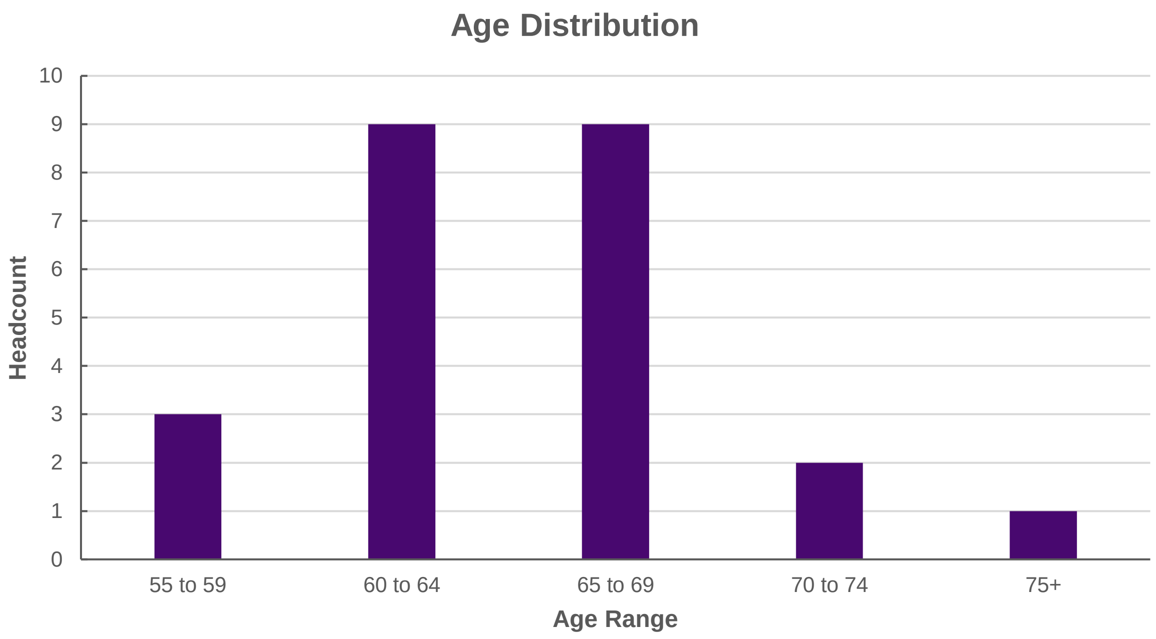
Maritime Super provided data in respect of members of the Sub-fund as at 30 June 2022, including members who had left the Sub-fund since the last investigation date.

I have checked a sample of the membership data for internal consistency and am satisfied as to the accuracy of this sample.

The following table shows a summary of the membership as at 30 June 2022 and 30 June 2020:

	30 June 2022	30 June 2020
Number of Members	24	44
Average Age	65.4	63.7
Average Service	26.0	24.8
Total Salaries	$4,757,000	$8,739,000
Average Salary	$198,000	$199,000

The following chart shows the age distribution of the membership at 30 June 2022:



Assets Data

We have been provided with audited accounts for the Fund as at 30 June 2022. The accounts were audited by Ernst & Young.

In addition to the Fund's accounts, I have also been provided with a breakdown of the Fund's assets into each of the Fund's various Sub-Funds which I understand has been subject to audit review. I have relied on this breakdown in determining the net asset relating to defined benefits in the Sub-fund.

The net assets exclude any amount held to meet the Operational Risk Financial Requirement.

I am satisfied that there are no material data discrepancies and that the data provided is suitable for the purpose of this investigation. I have relied on the information provided for the purposes of this investigation. Although I have no reason to doubt the quality of asset information provided, the results of this investigation are dependent on the quality of the asset information. Any changes to the asset values above will have an impact on the outcome of the investigation and any resulting recommendations.

Funding Method, Assumptions and Experience

Funding Method

In this valuation, I have used the attained age normal projection method. Under this method, the employer contributions are calculated as the cost of benefits accruing to members in respect of all future membership plus other relevant costs (such as administration expenses). These contributions are expressed as a percentage of salaries, by comparing the amount against the expected present value of members' salaries.

In producing my recommendations, I have also taken into account the pace of funding required to maintain certain short term solvency measures, in particular, that legislation requires the VBI to be above 100% and that the Trustee has a funding target of maintain assets exceeding vested benefits in the Sub-fund and then to achieve 100% coverage of the leaving service benefits (with Employer consent).

This is consistent with the method used in the previous investigation. In my view this method remains appropriate.

Assumptions

In order to determine the value of expected future benefits and Sub-fund assets, it is necessary to make assumptions regarding the timing and amount of future benefit payments, expenses and contributions. In doing so it is important to examine the experience of the Sub-fund since the last valuation to see whether the previous assumptions have been borne out in practice.

While each of the assumptions used is normally the actuary's best estimate of future experience, in practice, the actual experience in any (short) period can always be expected to differ from the assumptions to some extent. However, it is intended that over longer periods, they will provide a reasonable estimate of the likely future experience and financial position of the Sub-fund.

In the short-term, as the actual experience emerges differently to the experience implied by the assumptions, the financial position of the Sub-fund will also vary from that expected. However, adjustments to Employer contribution rates, if any, can be made to reflect these differences in the following actuarial investigation.

Financial Assumptions

Valuation assumptions can be broadly divided into demographic assumptions, which relate to characteristics of current and future members of the Sub-fund, and financial assumptions, which are assumptions other than demographic assumptions. The following sections first consider the financial assumptions that are to be adopted for this valuation.

Investment Returns

The rate of return on the Sub-fund's Assets (net of tax and investment expenses that are deducted from the investment return) from 30 June 2020 to 30 June 2022 are set out in the table below:

Year Ending	Net Investment Return[1]
30 June 2021	19.4%
30 June 2022	2.0%
Overall	10.4% p.a.

Over the two-year period to 30 June 2022 the assets held in the Sub-fund returned 10.4% p.a. which is higher than the rate assumed in the previous investigation of 4.4% p.a. (net of tax). In isolation, this has had a positive impact on the financial position of the Sub-fund.

While short-term differences between actual investment return experience and the actuarial assumption can affect the long-term financial position of the Sub-fund as measured by the actuarial investigation, the assumption used in the investigation must be based on long-term expectations since the investigation involves valuing payments in the future.

Based on models of future investment returns developed by WTW, the current expectations of investment returns over the remaining lifetime of the Sub-fund, net of taxation and investment management expenses and the current strategic asset allocation of the Sub-fund is 4.6% p.a. On this basis, I have assumed a long-term investment earning rate of 4.6% p.a. for this investigation, which is higher than the assumed long-term earning rate used for the previous investigation of 4.4% p.a.

Salary Increases

The average salary increases during the investigation period for the members remaining in the Sub-fund as at 30 June 2022 was 0.0% p.a. This is lower than the salary increases assumption adopted for the previous actuarial investigation of 2.0% p.a. This has had a positive impact on the financial position of the Sub-fund.

The Employer has confirmed that it expects long-term salary increases for the remaining members to average 2.9% p.a., which is consistent with current long-term expectations of price increases based on modelling by WTW. I have therefore adopted this rate for the purpose of this investigation.

[1] Based on the returns of the previous Maritime Super Growth MVP option from 30 June 2020 to 30 April 2021, and the Balanced option thereafter.

Administration Expenses and Insurance Costs

For this investigation, I assumed:

- General administration expenses of 0.215% p.a. of assets, in line with the administration expenses levied against all members of the Fund (equivalent to 1.3% of Salaries). This is lower than the rate of 0.28% p.a. of assets allowed for in the previous investigation.
- An allowance for insurance premiums of 3.1% of Salaries, based on the expected costs of such premiums, having regard to the premium rates charged to members of the Fund and the occupation rating of Sub-fund members. This is higher than the rate of 2.9% of Salaries allowed for in the previous investigation.

Demographic Assumptions

Rates at which Employee Members Cease Service

I have analysed the rates at which employee members cease service during the intervaluation period from 30 June 2020 to 30 June 2022. There were 20 exits, compared to the 26 expected.

Because of the small number of employee members remaining in the Sub-fund, I have retained the same assumed rates as the ones used in the previous investigation.

Sample exit rates per 10,000 members are shown in the table below:

Age	Death	Disablement	Withdrawal	Retirement
55	40.1	38.9	-	500
60	67.8	82.8	-	2,000
61	75.3	95.1	-	1,500
62	83.4	109.0	-	1,500
63	92.5	125.6	-	2,000
64	102.6	135.2	-	5,000
65	102.6	135.2	-	5,000
66	102.6	135.2	-	5,000
67	102.6	135.2	-	5,000
68	102.6	135.2	-	5,000
69	102.6	135.2	-	5,000
70	-	-	-	10,000

Statutory Statements Under SPS 160

Maritime Super, SVITZER Sub-fund of the Seafarers Division
Actuarial Investigation as at 30 June 2022

The statements required under paragraphs 23(a) to (i) of SPS 160 for interim and regular investigations are set out below:

A. Sub-fund Assets

At 30 June 2022 the net market value of assets of the Sub-fund, excluding any amount held to meet the Operational Risk Financial Requirement (ORFR), was $29,677,000.

B. Projection of Defined Benefit Vested Benefit Index

Based on the actuarial assumptions and the recommended contributions set out in G below, I project that the likely future financial position of the Sub-fund over the three years following the investigation date will be as follows:

Date	Defined Benefit Vested Benefits Index
30 June 2022	125.2%
30 June 2023	146.3%
30 June 2024	169.7%
30 June 2025	205.4%

C. Accrued Benefits

The value of the accrued liabilities of all members as at 30 June 2022 was $23,350,000.

In my opinion, the value of the assets of the Sub-fund at 30 June 2022 was adequate to meet the liabilities in respect of accrued benefits in the Sub-fund (measured as the present value of members' accrued entitlements using the actuarial assumptions).

This assessment has been made using assumptions and a valuation method which I regard as reasonable.

D. Vested Benefits

The value of the vested benefits of all members as at 30 June 2022 was $23,702,000.

In my opinion, the financial position of the Sub-fund is not unsatisfactory and the shortfall limit does not need to be reviewed at this time.

E. Minimum Benefits

The value of the liabilities in respect of the minimum benefits of members as at 30 June 2022 was $16,121,000 which is less than the value of assets held at that date.

F. Funding and Solvency Certificates

Funding and Solvency Certificates applicable to the Sub-fund covering the period from 30 June 2020 to 30 June 2022 required by the Superannuation Industry (Supervision) Act have been provided. In my opinion, I am likely to be able to provide Funding and Solvency Certificates for the Sub-fund covering the period from 30 June 2022 to 30 June 2025.

G. Employer Contributions

The report on the actuarial investigation of the Sub-fund at 30 June 2022 recommends the following Employer contributions until at least 30 June 2025:

- From 1 July 2022 to 31 December 2022: 15.0% of Salary,
- From 1 January 2023: nil contributions (i.e. a contribution holiday).

In addition to the above contributions the Employer is also required to pay a contribution of 3% of Salary for certain members which is to be credited to the member's 3% Accumulation Account.

H. Payment of Pensions

The Sub-fund does not have any lifetime pension members.

I. Pre-July 1998 Funding Credit

No pre-July 1998 funding credits have been granted to the Sub-fund.

Chris Porter
Fellow of the Institute of Actuaries of Australia

6 December 2022

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