

**Hostplus Superannuation Fund
Maritime Seafarers Part of Division 7 – Seafarers
Division**

Report on the Actuarial Investigation as at 30 June 2024

24 October 2024

Summary

I am pleased to present my report to the Trustee of Hostplus Superannuation Fund on the actuarial investigation into the Maritime Seafarers Part of Division7 – Seafarers Division as at 30 June 2024.

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

Summary of Data

The assets of the DB Reserve are managed by an external investment manager and invested in a hedging program which has the intended aim of reducing the probability of the DB Guarantee becoming more onerous than the DB Reserve (Hedging Program). We understand that the Hedging Program is a risk management strategy and is only expected to achieve long-term returns in line with 'risk-free' investments under neutral investment conditions. For the purpose of this investigation, we have therefore assumed that the Hedging Program maintains a neutral position with investment returns based on a cash portfolio.

The assets held in respect of defined benefit Sub-fund members' account balances that are subject to the DB Guarantee are invested in the investment options selected by members from the available choices.

A summary of membership numbers and the value of net assets of the Sub-fund at 30 June 2024 is shown below:

	30 June 2024
Number of Members (Active)	1,031
Member Account Balances subject to the DB Guarantee	\$255,480,000
DB Reserve	\$6,786,000
Net Market Value of Assets subject to the DB Guarantee	\$262,266,000

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Throughout this report the following terms are used:

Fund

Hostplus Superannuation Fund

Sub-Fund

Maritime Seafarers Part of
Division 7 – Seafarers Division

Trustee

Host-Plus Pty Limited, the
Trustee of Hostplus
Superannuation Fund

Employer

Seafarers Participating
Employers and the Union

Trust Deed or Rules

The Fund's Trust Deed dated
1 September 2023 and
subsequent amendments

The Investigation Date or Valuation Date

30 June 2024

Solvency

The solvency measures as at 30 June 2024 are shown below:

Measure	30 June 2024
VBI	102.4%
PVABI	102.5%
MRBI	102.7%

I note the solvency measures above are inclusive of member accumulation account balances subject to the DB Guarantee (Accumulation Benefits).

Funding

I recommend that the Employers contribute at the required amounts to meet any Superannuation Guarantee, contractual or any other obligations in respect of accumulation liabilities in the Sub-fund. In my opinion there is no current requirement to make additional contributions above the contributions required for accumulation members.

Other Matters involving Actuarial Oversight

I further recommend that:

- The Trustee complete the review of the current investment strategy of the Sub-fund that is currently underway;
- The Trustee undertake an investigation in respect of non-contributing members' insurance premiums, which are currently funded from the DB Reserve to the extent that the DB Guarantee applies for any member;
- The Trustee change the shortfall limit from 98% to 100% based on the current membership and benefit design of the Sub-fund;
- The Trustee monitor the financial position of the Sub-fund quarterly throughout the following investigation period, with the results reviewed by the Actuary; 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 2027. The recommended 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 2024 that warrants review of the recommendations in this report.



Chris Porter
Fellow of the Institute of Actuaries of Australia

24 October 2024

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Section 1: Introduction

Scope

This investigation has been prepared effective 30 June 2024 for Host-Plus Pty Limited, Trustee of Hostplus Superannuation Fund in respect of the Maritime Seafarers Part of Division 7 – Seafarers Division of the Trust Deed. This report has been prepared by the actuary to the Sub-fund, Chris Porter, FIAA (Actuary).

For members who joined before 1 July 2008 the Sub-fund provides benefits in an accumulation form subject to certain defined benefit guarantees. This report focuses on those accumulation benefits in the Sub-fund subject to a defined benefit guarantee.

The Trust Deed governing the Fund requires an actuarial investigation and report to be due at least every three 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 Employers 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 Employers 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

On 1 September 2023, members and assets of Maritime Super were transferred to the Fund via a successor fund transfer (SFT), providing continuity of the Seafarers Sub-plan in Division 7 of the Fund. The Trustee was granted an exemption from APRA on 31 August 2023 under paragraph 42 of Prudential Standard SPS 160 Defined Benefit Matters to make an adjustment to the timing requirement of an initial actuarial investigation as required under paragraph 15 of SPS 160. As such, this investigation as at 30 June 2024 is the initial investigation of the Sub-fund.

The Fund is governed by a Trust Deed which was consolidated as at 1 September 2023 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.

Defined Benefit Guarantee

As part of the transfer of the defined benefit members to an accumulation basis, the Trustee provided a defined benefit guarantee (DB Guarantee) for all defined benefit members as at 30 June 2008. Under the DB Guarantee, the Sub-fund benefit payable on the retirement of a member, or upon leaving employment of an employer within the Maritime industry where the member:

- a. is considered by the Trustee to have left the Maritime industry; or
- b. is remaining with an employer in the Maritime industry, but elects to crystallise their benefit at the date of leaving employment;

will not be less than that which would have applied had they not been converted to an accumulation basis.

A Defined Benefit reserve (DB Reserve) is held which may be called upon if a top-up payment (DB Top-up) is needed to meet the DB Guarantee for any eligible member. This could occur for a number of interconnected reasons:

- the actual investment returns of the selected member investment strategy are less than needed to offset the effect on the DB Guarantee due to the rate of growth of Benchmark Salary;
- the increase in the discount factor on the DB Guarantee is not matched for Accumulation Benefits;
- while longer serving members at 30 June 2008 have a significant surplus of Accumulation Benefits over the DB Guarantee to act as a buffer against adverse experience, this is not the case for shorter serving members who have the potential to accrue significant future service.

In addition, at any time, the DB Reserve needs to exceed the amount of the aggregate DB Top-ups, otherwise the Sub-fund would be determined to be in an unsatisfactory financial position. The inevitable movement of the Accumulation Benefits of members with investment market movements means that the amount of the DB Reserve required to fund the DB Top-ups will vary over time.

Contributions

The level of Employer contributions (in addition to the Employer contributions required to be paid to members' Accumulation Benefits) payable to the Sub-fund is to be determined by the Trustee acting on the advice of the Actuary as set out in Rule 6.9 of Schedule B1 of the Trust Deed which states:

If the result of the Actuary's investigation and valuation reveals a deficiency, the Trustee, with the agreement of a Majority of Seafarers Participating Employers and the Maritime Union:

- a. *shall, if in the opinion of the Actuary the assets of the Seafarers Division (other than those referable to Members' Accumulated Benefits) and the contributions required by Contributory Members under Schedule Rule 5.1 together with contributions required by Participating Employers under Seafarers Rule 8 and this Schedule Rule 6 would be insufficient to meet the cost of benefits (other than those in respect of Members' Accumulated Benefits) require 2008 Conversion Date Members to pay to the Trustee such further sum by way of contributions each week as may be determined by the Trustee on the advice of the Actuary, and in such event shall require Participating Employers to contribute an amount equal to such further contributions made by 2008 Conversion Date Members in that year increased by 100%; and/or*

- b. *may, subject to the approval in writing of the Actuary and the Relevant Law, resolve to remove such deficiency in whole or in part by making such changes in the terms and the conditions of the Fund and/or the benefits (other than Members' Accumulated Benefits) as are considered necessary, provided that the changes must not result in the Member receiving an insufficient level of benefit for the purposes of the Guarantee Act.*

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

Previous Actuarial Investigation

The actuarial investigation of the predecessor fund in respect of the Sub-fund was carried out by Chris Porter, FIAA as at 30 June 2022, with the results of that investigation set out in a report dated 6 December 2022. While this report represents the initial actuarial investigation of the Sub-fund, the results of the previous investigation as at 30 June 2022, as reported to the Trustee of Maritime Super, have been shown in this report for comparative purposes.

The previous investigation report concluded that the Sub-fund was not in an unsatisfactory financial position (as defined by SIS legislation) at that date, and that the reserves held by the Sub-fund were more than sufficient to meet expected immediate future requirements in respect of the DB Guarantee. There was therefore no requirement to make additional contributions above the current levels.

Experience since 30 June 2024

Since 30 June 2024, the return on the hedge position to 31 August 2024 was approximately 4.6%. I have taken into account known experience since 30 June 2024 when carrying out the projection of the financial position of the Sub-fund from that date.

At the date of signing this report, I am not aware of any events subsequent to the investigation which would have a material impact on the conclusions or recommendations in this report.

Limitations

This report is provided subject to the terms set out herein and in our Master Services Agreement dated 10 January 2024, signed 6 February 2024 and any accompanying or referenced terms and conditions. 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 relevant Employers 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 Employers, the Unions or any third party in this regard. The Trustee should draw the provisions of this paragraph to the attention of its auditors and the relevant Employers 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 (or are payable for benefits in the form of lifetime pension or deferred benefits) 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 date¹. Consistent with Professional Standard 400, dated March 2021, issued by the Institute of Actuaries of Australia, the PVABI does not include any allowance for future expenses; 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.²

The following tables show the above indices as at the valuation date, as well as the results of the previous investigation for the predecessor fund as at 30 June 2022.

The following table sets out solvency measures inclusive of member account balances subject to the DB Guarantee.

Measure	As at 30 June 2024			As at 30 June 2022		
	Value of Liability	Value of DB Assets	Index	Value of Liability	Value of DB Assets	Index
VBI	\$256,051,000	\$262,266,000	102.4%	\$259,520,000	\$269,875,000	104.0%
PVABI	\$255,933,000	\$262,266,000	102.5%	\$259,914,000	\$269,875,000	103.8%
MRBI	\$255,480,000	\$262,266,000	102.7%	\$258,891,000	\$269,875,000	104.2%

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.

² The MRBs are equal to the Sub-fund's members' Accumulation Benefits. This is consistent with the description of MRBs in the Fund's Benefit Certificate.

The table below sets out solvency measures excluding Accumulation Benefits, and therefore represent a direct comparison of the DB Reserve and the DB Top-up. As a result of the relative size of the Accumulation Benefits, inclusion of these amounts in the indices results in an index closer to 100%.

Measure	As at 30 June 2024			As at 30 June 2022		
	Value of DB Shortfall	Value of DB Reserve	DB Only Index	Value of DB Shortfall	Value of DB Reserve	DB Only Index
DB Top-up	\$571,000	\$6,786,000	1,188.4%	\$629,000	\$10,984,000	1,746.3%
PV DB Shortfall	\$453,000	\$6,786,000	1,498.0%	\$1,023,000	\$10,984,000	1,073.7%

To ensure adequacy to cover future operational and administration expenses, the DB Reserve currently needs to be maintained at a level well in excess of the DB Top-up. This required surplus will reduce with time as the future lifetime of the Sub-fund reduces.

The VBI and MRBI have decreased from those at the previous investigation date. This is primarily a result of negative experience of the Sub-fund since 30 June 2022 associated with the reduction in the value of the DB Reserve due to Sub-fund expenses and movement in the underlying Hedging Program. Additionally, the proportionately small reduction of the Accumulation Benefits has tended to push all indices towards 100%.

Considering the DB only index in isolation, the change in assumptions resulted in an increase in the PV DB Shortfall index of 726%, partially offset by movement in the DB Reserve and underlying benefits. The inclusion of Accumulation Benefits in the PVABI has resulted in the movement of the index towards 100% compared to the previous investigation date.

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.

Minimum Death and TPD Cover Reserve

The Sub-fund provides an amount of guaranteed death and TPD cover in respect of members as at 30 June 2008. This cover is provided by group life insurance, the premium for which is met from the DB Reserve.

I have estimated the future cost of this guarantee at 30 June 2024 to be \$112,600 calculated as the expected present value of the shortfall of the guaranteed minimum death and TPD benefits over the death and TPD benefits paid.

Consistent with the previous investigation, I have maintained the approach of including this amount in the Present Value of Accrued Benefits.

Retrenchment Benefits, Other Discretionary or Contingent Benefits

The benefit payable on retrenchment is the same as the resignation benefit, and therefore the Sub-fund does not have any material additional funding strain that would be caused by any retrenchments.

The Sub-fund has not historically paid any material discretionary benefits, so I have not analysed the impact of such discretionary benefits. There are no other material contingent benefits offered by the Sub-fund.

Termination Benefits

Under Rule 28 of Division 7 of the Trust Deed, upon termination of the Seafarers Division, 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:

- c. In paying the costs, charges and expenses of winding up the Seafarers Division, so far as they are not paid by the Employers; and then
- d. In the case of Members who are Employees and who have reached age 65 at the date of winding-up, in providing for their benefit the amounts they would have received under the Trust Deed if they had retired on the date of winding-up; and then
- e. In the case of Members who are Employees to whom b. above does not apply, in providing for their benefit the amounts they would need to have received under the Trust Deed if they had left service at the date of winding-up, as determined by the Trustee on the advice of the Actuary, in order to satisfy the obligations of the Employers under the SG Act; and then
- f. In the case of Members who are Employees to whom b. above does not apply, in providing for their benefit the amounts they would have received under the Trust Deed if they had left service at the date of winding-up to the extent that these amounts have not been provided under c. above; and then
- g. In providing further benefits to Members of such amount and in such manner as the Actuary shall certify as being fair and equitable.

In practice this means that on termination of the Fund or the Sub-fund, Sub-fund members are entitled to receive a benefit that the Actuary determines to be a fair and equitable apportionment of the Fund assets in respect of the Sub-fund after providing fully for the remaining benefits of members who had already become entitled to a benefit or who had reached age 65 (their normal retirement age) and not yet received a benefit.

By definition this means that the Sub-fund would have been able to meet all its legal obligations to members and as the VBI is greater than 100%, the Sub-fund would have been able to pay all members' benefits including the current vested benefits of all members if it had been terminated at the investigation date.

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 additional contributions from Employers (in addition to the Employer contributions required to be paid to fund members' accumulation accounts), I have conducted a series of stochastic projections as described in the *Additional Information* section of this report.

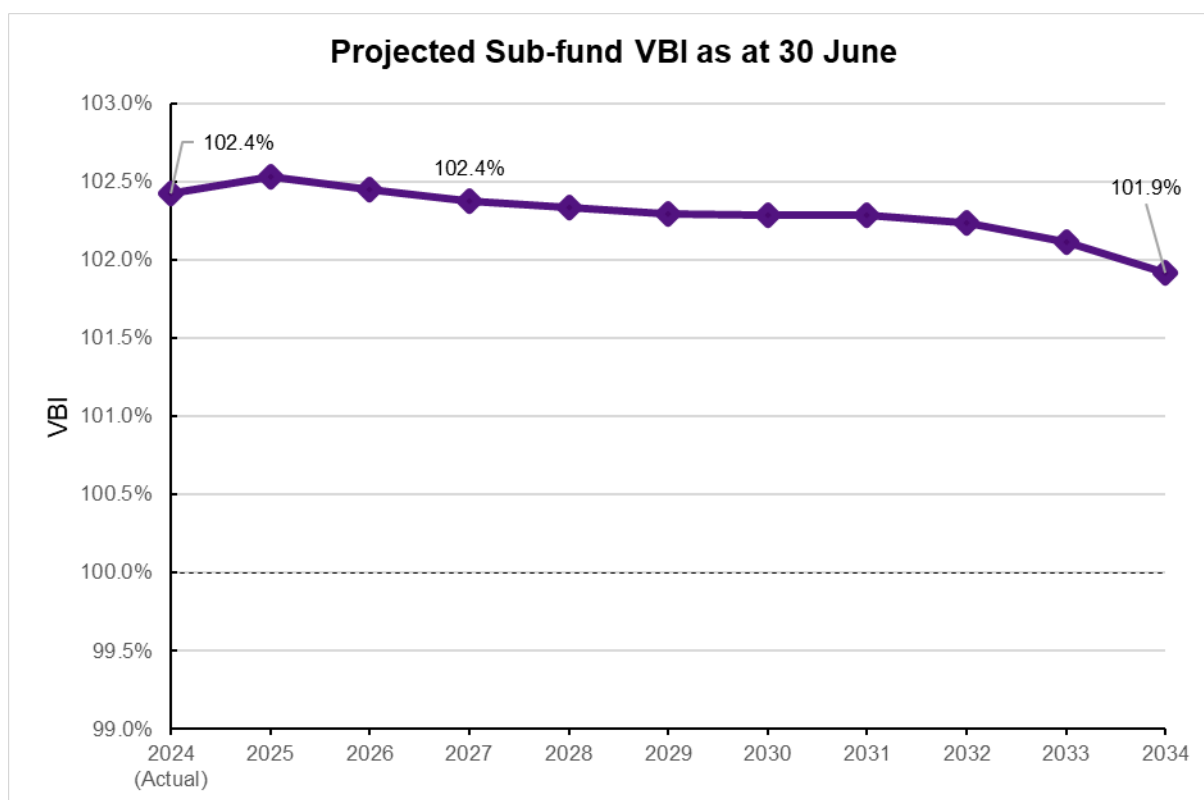
Vested Benefit Projection

In order to examine whether the DB Reserve will remain sufficient to cover the future DB Top-ups based on the selected assumptions, I have projected the vested benefits and assets, comparing:

- a. Expected value of Accumulation Benefits;
- b. Expected DB Guarantee in excess of a. above (i.e. the DB Top-up); and
- c. The expected DB Reserve.

In undertaking these projections, I have assumed that the members' Accumulation Benefits remain in their current investment option and the DB Reserve is invested in a cash portfolio. On the basis that, where experience is in line with our assumptions the effect of the Hedging Program can be expected to remain neutral, I have not allowed for any impact of the Hedging Program in my projections. I have allowed for actual cash returns on the DB Reserve, as well as actual returns of the underlying investment options on Accumulation Benefits to 31 August 2024 in my projection. Movement in the Hedging Program over the same period was also allowed for.

Date	a. Member Accounts (\$'000)	b. DB Top-up Benefits (\$'000)	c. DB Reserve (\$'000)	VBI ($\frac{a. + c.}{a. + b.}$)	DB Only Index $\frac{c.}{b.}$
30 June 2024	255,480	571	6,786	102.4%	1,188.4%
30 June 2025	241,651	414	6,549	102.5%	1,582.3%
30 June 2026	233,729	340	6,078	102.5%	1,790.2%
30 June 2027	223,351	312	5,637	102.4%	1,808.0%



The projection above assumes that all members contribute in line with their average contributory service over the year to 30 June 2024 for the full projection period. I note that of the 1,031 members, only 394 accrued at least one week of contributory service over the year to 30 June 2024, with only 59 accruing 50 weeks or more over this period.

In 2022, my projection assumed that all members recommenced full contributory membership following the valuation date, this contributed to a faster projected deterioration of the financial position of the Sub-fund. In light of actual experience data, I no longer believe the 2022 assumption represents an accurate projection of the future of the Sub-fund and hence I have amended the assumption to reflect recent experience which has, in isolation, improved the projection outlook.

Based on the selected assumptions, the Sub-fund is not expected to move to an unsatisfactory financial position over the next ten years. However, as the VBI of the Sub-fund is expected to decline, I continue to consider that the review of the investment strategy of the Sub-fund, which is currently underway, is appropriate.

Impact of Expenses

The projected deterioration of the financial position of the Sub-fund can be largely attributed to the significant expenses which are deducted from the DB Reserve (refer to the *Additional Information* section for details on these expenses), which are expected to increase as a proportion of the DB Reserve over time.

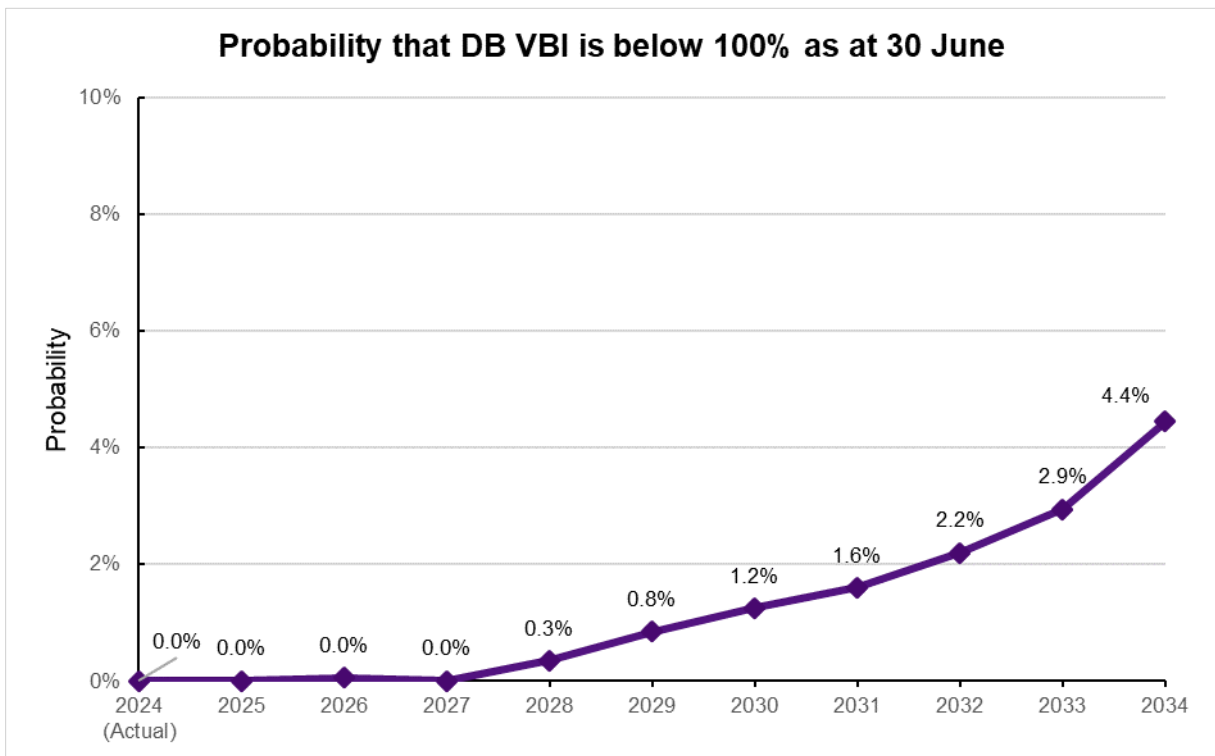
Stochastic Projections

The Sub-fund’s Hedging Program has the objective to offset movements in the value of the DB liability due to movements in capital markets, thereby reducing the likelihood of a funding shortfall. Where experience is in line with our assumptions, the effect of the Hedging Program can be expected to remain neutral.

The expenses of the Sub-fund currently being met from the DB Reserve are significant and are projected to erode the financial position of the Sub-fund even in scenarios where the DB Guarantee is less likely to apply.

In order to assess the probability of a future funding shortfall I have projected the Sub-fund’s Vested Benefits Index over a large number of simulated future investment market conditions. The projections assume the DB Reserve is invested in a cash portfolio, without making allowance for movement in the Hedging Program. I have continued to maintain the assumption that all members make future contributions in line with their average contributory service over the year to 30 June 2024. No allowance is made for additional funding. On this basis I can determine the probability of the DB VBI being less than 100% in each of the projection years of each simulation.

The following chart shows the probability that the DB VBI for the Sub-fund will be below 100% in that year.



The projections show that over the next 10 years, the probability that the DB VBI is below 100% increases from 0% in the first year to 4.4% after 10 years. The probability has reduced since the 2022 investigation due to the higher assumed return on a cash portfolio, the change in assumption regarding members future contributory service, and a reduction in the fees being charged to the DB reserve following the successor fund transfer of the Sub-fund to the Fund.

The combined conclusion of the above results is that there is currently a low probability of there being a need to put in place a restoration plan in any one year over the next 10 years. However, the probability that the DB Reserve will not be sufficient to provide for the DB Top-up can be expected to continue to increase beyond 10 years. Therefore, the risk to the ongoing viability of the Sub-fund should not be ignored.

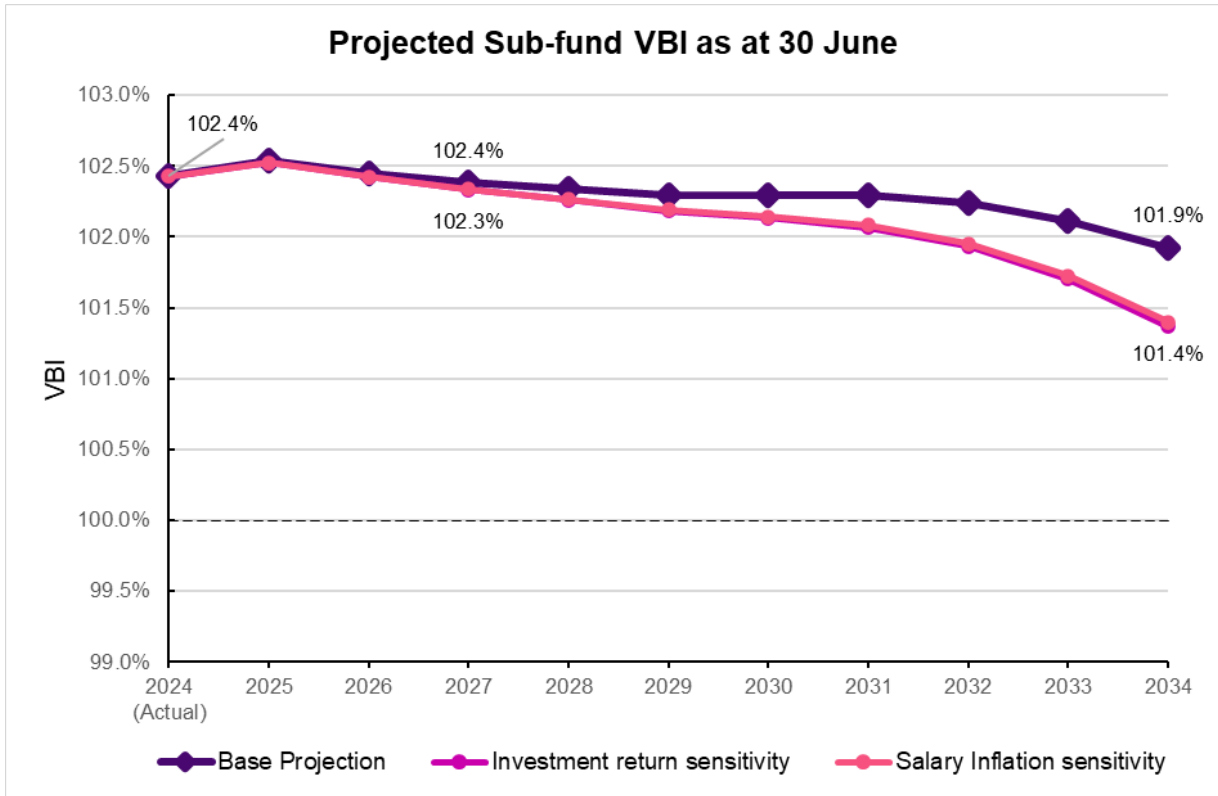
I note again that the above probabilities set out in these stochastic projections assume that the DB Reserve is invested in a cash portfolio and do not make allowance for the Hedging Program that is in effect.

I have previously recommended that the Trustee conduct a review of the investment strategy of the Sub-fund, including expense arrangements to determine whether the Hedging Program remains the most appropriate available investment vehicle. This review is currently underway.

Sensitivity Analysis

While the stochastic results above address the variability of results, it is also useful to consider the sensitivity of results to variations in key assumptions on a deterministic basis. The following table shows the VBI and PVABI if key assumptions had been varied as described below:

	This Valuation Basis	Scenario 1	Scenario 2
Description	Base Case	Investment Return Sensitivity	Salary Inflation Sensitivity
Discount Rate	3.7%	2.7%	3.7%
Expected Salary Growth	2.6%	2.6%	3.6%
VBI	102.4	102.4	102.4
PVABI	102.5%	102.4%	102.4%



These results show that the funding is not significantly sensitive to long-term actuarial assumptions. 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 there are no current requirements to make additional contributions above the standard contributions required for accumulation members.

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 prompt action can be taken if the financial condition deteriorates.

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 2024 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.

The net market value of assets subject to the DB Guarantee consists of the following components:

	30 June 2024
Accumulation Benefits	\$255,480,000
DB Reserve	\$6,786,000
Net Market Value of Assets subject to the DB Guarantee*	\$262,266,000

Investment Strategy

The assets of the DB Reserve are managed by an external investment manager and invested in a Hedging Program which has the intended aim of reducing the probability of the DB Guarantee becoming more onerous than the DB Reserve.

The primary objective of the Hedging Program is to offset movements in the value of the Sub-fund DB liability, which is calculated and maintained by the investment manager, due to movements in capital markets. This is achieved by trading derivatives in quantities which offset the sensitivity of the Sub-fund DB liability to certain market exposures, including:

- Changes in the underlying asset values, including changes due to foreign exchange movements i.e. poor investment returns which reduce the Accumulation Benefits relative to the DB Guarantee;
- Changes in the risk-free rates used to measure the Sub-fund DB liability;
- Changes in inflation which impact the Benchmark Salary and subsequently the DB liability i.e. high inflation which increases the value of the DB Guarantee.

The reduction to the DB Reserve is primarily the result of strong market returns which will have increased Accumulation Benefits and generally reduced the likelihood of DB Top-ups applying in the future (i.e. there has been an increased gap between Accumulation Benefits in excess of the DB Guarantee for most members), as well as increases in the risk-free rates which reduces the present value of the Sub-fund's DB liability.

The assets held in respect of defined benefit Sub-fund members are invested in the investment options selected by members from the available choices. As at 30 June 2024 the percentage invested in each investment option in respect to members' Accumulation Benefits were as follows (with 30 June 2022 shown for comparative purposes):

Investment Option	Percentage of Portfolio 30 June 2024	Percentage of Portfolio 30 June 2022
Australian Shares	1.2%	1.1%
International Shares	1.1%	0.7%
Shares Plus	17.0%	19.5%
Balanced	69.7%	65.8%
Balanced – Socially Responsible Investment	0.6%	1.4%
Indexed Balanced	1.3%	0.6%
Conservative Balanced	2.0%	1.4%
Capital Stable	2.8%	2.5%
Cash	4.3%	7.0%
Total	100.0%	100.0%

The strategic asset allocations as at 30 June 2024 of the two most commonly selected investment options, Balanced and Shares Plus are shown in the below table:

Asset Class	Balanced	Shares Plus
Australian Shares	21%	30%
International Shares	29%	41%
Private Equity	10%	8%
Property	10%	6%
Infrastructure	11%	7%
Credit	7%	5%
Alternatives	4%	3%
Diversified Fixed Interest	4%	0%
Cash	4%	0%
Total Growth Assets	76%	90%
Total Defensive Assets	24%	10%

I have recommended that the Trustee conduct a review of the investment strategy as described above, to determine whether the Hedging Program remains the most appropriate available investment vehicle. This review is currently underway.

Unit Pricing and Investment Reserving Policy

The net rate of return of the members' selected investment choice is credited to members' 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

The two most commonly selected Fund investment options in respect of Accumulation Benefits, Balanced and Shares Plus, currently have a soft limit for illiquid assets of 40% and 30% of assets respectively. As such, in my opinion the Fund has sufficient liquidity to meet payments in respect of Accumulation Benefits from regular cashflows.

In respect of the DB Reserve, we understand that the initial margin requirements of hedged assets are measured against cash available to maintain hedges and compared to a liquidity buffer on a daily basis. As such, in my opinion the Fund has sufficient liquidity to meet payments in respect of DB Top-ups or Sub-fund expenses from the available cash.

Shortfall Limit

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

Based on the Sub-fund's benefit design and membership, in my opinion the 98% shortfall limit should be amended to 100%. This is to ensure that, as assets reduce, the total Sub-fund assets cannot become less than Accumulation Benefits (which are equal to the MRB) without breaching the shortfall limit.

Insurance

Death and Disablement Benefits

At the investigation date, the Sub-fund has death, and total and permanent disablement insurance with MLC Limited in respect of death and disablement benefits in excess of the accumulation benefits payable to members on exit. The level of insurance is:

- The value of insurance units held in respect of the member; plus
- The amount of any guaranteed death and TPD cover in respect of the member, being the difference, if any, between:
 - The guaranteed minimum death and TPD benefit in respect of members as at 30 June 2008;
 - The member's accumulation benefit and their insured benefit.

Premiums in respect of the guaranteed death and TPD cover are paid from the DB Reserve.

In respect of non-contributing members, premiums are deducted from Accumulation Benefits subject to the DB Guarantee. To the extent that the DB Guarantee is applying for these members, the cost of insurance is therefore effectively met from the DB Reserve. Given the large number of non-contributing members, we recommend that the impact of this is investigated further.

The death and TPD benefits of defined benefit members of the Sub-fund are therefore effectively fully covered by insurance. On this basis, I consider the current insurance arrangements adequate and recommend that the current insurance arrangements be maintained.

Claims Prior to 30 June 2008

In addition, we understand that the Sub-fund has group insurance cover in respect of claims which may arise in respect of the period prior to 30 June 2008, which had not been advised to the Trustee at that date. The provision of this cover substantially removes any self-insurance risk in respect of periods prior to 30 June 2008. Some self-insurance may still apply in respect of any new claims not covered under the terms of the insurance policy, although I consider the likelihood of such claims arising to be small.

In my opinion these arrangements remain appropriate.

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	<p>The Trustee takes advice from the Actuary on possible assumptions for future investment returns. In setting the future contributions, the Actuary considers the effect on the future financial position if investment returns are less than expected.</p> <p>The Trustee is able to agree further contributions with the Employers and the Unions at subsequent valuations if future returns prove insufficient.</p>
Price inflation or salary increases could be different from that assumed which could result in higher liabilities	The Trustee invests in a hedging program which is designed to, in isolation, increase in value in response to high inflation. This means that, over the longer term, such assets are expected to keep pace with inflation.
Falls in asset values might not be matched by similar falls in the value of the Sub-fund's liabilities	The Trustee invests in a hedging program which is designed to, in isolation, increase in value in response to poor investment returns.
Liquid assets are not sufficient to meet cashflow requirements of the Sub-fund when they fall due	<p>The assets of the Sub-fund which back the Accumulation Benefits subject to the DB Guarantee are invested in the Fund investment options. As such, the total assets under management are sufficient to cover any potential cashflows of the Sub-fund.</p> <p>DB Reserve assets are monitored daily to ensure that available cash is maintained above a liquidity buffer.</p>
Sub-fund members leave service at rates different to long-term assumptions	<p>The level of benefits paid to members will depend on the timing of members exiting the Sub-fund. If actual rates of exit differ from the rates assumed, then the future financial position of the Sub-fund may not develop as expected.</p> <p>The Actuary conducts actuarial investigations at least every three years where actual experience is analysed. Where experience is significantly different from the assumptions, the Actuary may update the assumptions to more closely reflect experience.</p>
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 Employers or Unions, where relevant.

Economic risk

Demographic risk

Legal risk

Benefits summary

Since 1 July 2008 all members have been provided with benefits in accumulation form, however, for members that joined prior to 1 July 2008, a DB Guarantee applies based on the defined benefit rules that applied prior to conversion.

The following is a summary of the defined benefits applying at 30 June 2008 prior to the conversion to an accumulation basis. These form the basis of the underlying DB Guarantee after 1 July 2008.

Definitions

Accumulation accounts:	The total account balances of the various accumulation accounts, including Voluntary, Past Service Account, 3% Accumulation, SG, 2% Member and 4% Employer
Early Retirement:	Retirement after age 55 and before age 65
Fund Service:	The number of completed weeks of contributory membership of the Fund, in respect of which normal contributions have been made
Fund Service Benefit (FSB):	9.0% of weekly Benchmark salary per completed week of contributory Fund Membership
Member's normal contributions:	5.0% of Benchmark Salary
Normal retiring age (NRA):	65 years
Past service:	Specified service up to the commencement date of the Fund
Past Service Account:	\$145 for each completed year plus \$12.08 per completed month of past service plus credited interest

Contributory & Non-Contributory Members (before 1 July 2008)

Benefit on Retirement or Leaving the Industry

If the member joined Seafarers Sub-fund prior to 1 July 2008, the benefit is subject to a minimum of the benefit calculated in either 'Benefit on Normal Retirement or Early Retirement', or 'Benefit on Leaving the Industry' as set out below, depending on the mode of exit and calculated at the date of exit.

Benefit on Normal Retirement and Early Retirement

A lump sum of the member's FSB plus the sum of the member's accumulation accounts.

For members who joined pre 1 July 1998, this benefit is subject to a minimum of the sum of a defined benefit of 15% of weekly Benchmark salary per completed week of contributory Fund membership and the member's accumulation accounts but excluding the 2% Member and 4% Employer accounts.

Benefit on Leaving the Industry

A lump sum equal to the member's accumulation accounts at the date of leaving, plus a percentage (the "RW" factor) of the member's FSB. These "RW" factors are set out in the 'Leaving Industry Factors' table below.

For members who joined pre 1 July 1998, there exists a further minimum benefit equal to the sum of a percentage (R% from the table below) of 15% of weekly Benchmark salary per completed week of contributory Fund membership and the member's accumulation accounts but excluding the 2% Member and 4% Employer accounts.

This benefit is payable on leaving the industry and on resignation from an employer, partial disablement or redundancy.

Benefit on Total and Permanent Disablement

A lump sum equal to the member's accumulation accounts, the member's FSB at date of disablement plus a prospective benefit of 9% of benchmark salary for each year of future service. (Future service is calculated in complete months to age 62). Non-contributory members are not eligible to receive the future service benefit.

For members who joined pre 1 July 2008, there exists a minimum benefit equal to the benefit (in fixed dollar terms) at that date.

Benefit on Death

A lump sum equal to the member's accumulation accounts, the member's FSB at date of death plus a prospective benefit of 9% of benchmark salary for each year of future service (future service is calculated in complete months to age 62). Non-contributory members are not eligible to receive the future service benefit.

For members who joined pre 1 July 2008 there exists a minimum benefit equal to the benefit (in fixed dollar terms) at that date.

Contributions

Members' normal contributions are 5% of benchmark salary (2% to the accumulation accounts and 3% towards the defined benefits) indexed in line with the Benchmark salary. In addition members may make voluntary contributions which are paid, together with interest, as an additional benefit when membership terminates.

Employers contribute the full cost of past service benefits plus the balance of the cost of benefits for fund service, subject to the latter amount being not less than twice total normal contributions paid by members. Currently this contribution rate is 6% of benchmark salary.

In addition, the Employers contribute at the rate of 3% of the benchmark salary to the 3% Accumulation account, and at the rate of 4% of the Benchmark salary to the Employer 4% accumulation account. These amounts are accumulated with interest and fully vested in the member.

For those members where the full weekly member contribution is not payable, employers contribute to an SG accumulation account. These contributions are made at the prescribed minimum SG rate.

Leaving Industry Factors

Age in Years	"RW" Factors (%)	"R" Factors (%)
34 or less	75.00	70
35	75.00	71
36	76.25	72
37	77.50	73
38	78.75	74
39	80.00	75
40	81.25	76
41	82.50	77
42	83.75	78
43	85.00	79
44	86.25	80
45	87.50	81
46	88.75	82
47	90.00	84
48	91.25	86
49	92.50	88
50	93.75	90
51	95.00	92
52	96.25	94
53	97.50	96
54	98.75	98
55 or more	100.00	100

For intermediate ages, the factors contained in the above tables should be interpolated.

Minimum Benefit on Death or Total and Permanent Disablement

If the member joined Seafarers Sub-Fund after 1 July 2008, a lump sum equal to the member's Accumulated Amount, plus six units of death and disablement cover.

If the member joined Seafarers Sub-Fund prior to 1 July 2008, the above benefit is subject to a minimum of the benefit calculated in either 'Benefit on Total and Permanent Disablement' or 'Benefit on Death' depending on the mode of exit, calculated as at 30 June 2008.

Summary of Data Used in this Investigation

Membership Data

The administrator of the Fund, Australian Administration Services Pty Ltd, a member of MUFG Pension and Market Services (MUFG), has responsibility for maintaining member records, payment of benefits and other administrative tasks of the Sub-fund.

MUFG provided data in respect of members of the Sub-fund as at 30 June 2024, including members who had left the Sub-fund since the previous investigation of the Sub-fund under the predecessor fund as at 30 June 2022.

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 2024 and 30 June 2022:

Defined Benefit Membership	30 June 2024	30 June 2022
Number of Contributory Accumulation Members ¹	878	992
Number of Non-Contributory Members	153	171
Total Number of Members	1,031	1,163
Average Age	53.9	52.4
Average Service	24.8	23.3
Benchmark Salary (p.a.)	\$104,182	\$93,973

¹ 483 of the Contributory Accumulation Members had no contributory service credited during the year ended 30 June 2024.

Assets Data

I have been provided with financial statements of the Sub-fund which I understand, given the size and materiality of the Sub-fund, have not been subject to audit review. I have relied on these statements in determining the net asset relating to defined benefits in the Sub-fund.

The net assets exclude any amount held to meet the Trustee's 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 assessed the likely future financial position of the Sub-fund by projecting members' expected future benefits, and the expected level of future value of assets on the basis of selected assumptions.

To assign a probability of the Sub-fund VBI remaining above 100%, I have used a stochastic projection method. This process involves:

- Simulating 2,000 sets of asset returns over the next 10 years based on the Sub-fund assets allowing for the current investment choices of the defined benefit members;
- For each of the simulations, I calculate the expected Accumulation Benefits, the DB Guarantee and DB Top-up, as well as the DB Reserve available, taking into account expected contributions, benefit payments and expenses. For the purpose of these calculations, no allowance is made for additional rectification contributions that may be required in practice. The calculations do not make any allowance for the impact of the Hedging Program on the value of the DB Reserve, however, we assume that the expenses associated with the Hedging Program continue to be met from the DB Reserve.
- Using the information above, I calculate the Defined Benefit Vested Benefits Index ('VBI') of the Sub-fund, defined as the ratio of the market value of assets attributable to defined benefits and the Vested Benefits subject to a DB Guarantee.
- Establishing funding shortfall identifiers, namely the VBI falling below 100%.
- Using the results from the simulations I calculate the number of simulations where the VBI falls below 100% in each year.

The relative frequency of the event occurring can then form a basis for an estimate of the probability that the VBI falls below 100% and further funding, or other actions, may be required.

This funding method is suitable for this valuation as it takes into account the expected growth of the Sub-fund's assets and liability profile.

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%.

This is consistent with the method used in the previous actuarial 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 Employers' 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 actual rate of return in respect of the Balanced and Shares Plus investment options (the two most commonly selected Fund investment options) from 30 June 2022 to 30 June 2024 are set out in the table below:

Year Ending	Balanced Option	Shares Plus Option
30 June 2023	8.0%	11.2%
30 June 2024	7.6%	9.5%
Overall	7.8% p.a.	10.3% p.a.

The Fund's Balanced and Shares Plus options returned 7.8% p.a. and 10.3% p.a. over the two-year period to 30 June 2024 which is higher than the rates assumed in the previous investigation of 5.6% p.a. and 6.1% p.a. (net of tax) respectively.

Over the two-year period to 30 June 2024 the value of the DB Reserve decreased by approximately 21% p.a. The reduction in the DB Reserve indicates that the return is significantly less than the rate assumed in the previous investigation of 2.0% p.a. (net of tax) which reflects a neutral hedge position and investment returns based on a cash portfolio. We understand that this reduction primarily relates to strong market returns (which will have increased Accumulation Benefits), as well as increases in the long-term expectations for the risk-free rate of return over this period.

Additionally, the relative strength of returns on members' Accumulation Benefits relative to the DB Reserve has, in isolation, weakened the financial position of the Sub-fund as increases in the Accumulation Benefits will tend to push the funding indices towards 100%.

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.

The rate of return assumptions have been set 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 current strategic asset allocation of the Sub-fund and are set out in the table below for key Fund investment options, along with the assumptions used for the previous investigation for comparative purposes.

	DB Reserve ¹	Balanced Option	Shares Plus Option
30 June 2024 assumed rate of return (net)	3.7% p.a.	7.3% p.a.	7.6% p.a.
30 June 2022 assumed rate of return (net)	2.0% p.a.	5.6% p.a.	6.1% p.a.

The rate of return used in the projection of each member's benefit reflects the weighted average of the rate of return assumptions and the member's selected investment choice.

Salary Increases

The average salary increases during the investigation period for the members remaining in the Sub-fund as at 30 June 2024 was 5.3% p.a. This is higher than the salary increases assumption adopted for the previous actuarial investigation of 2.9% p.a. In isolation, this has had a negative impact on the financial position of the Sub-fund.

A long-term salary increase assumption of 2.6% p.a. 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.

Administration Expenses and Insurance Costs

For this investigation, I assumed:

- A weekly administration fee of \$4,188 per member, in line with the MUFG administration expenses;
- Operational expenses of \$105,000 p.a. paid from the DB Reserve;
- Additional expenses associated with the cost of operating the Hedging Program of \$300,000 p.a.; and
- Additional administration costs and the cost of death and TPD insurance are met from member accounts, with the exception of premiums relating to guaranteed death and TPD cover which are paid from the DB Reserve and have been calculated based on the premium rates charged to members of the Fund.

Fixed dollar expenses are assumed to increase in line with CPI.

In the previous investigation, I assumed:

- A long-term rate of expenses of 0.215% p.a. of net assets;
- Additional administration expenses of \$480,000 p.a. paid from the DB Reserve; and
- Additional expenses associated with the cost of operating the Hedging Program of 0.12% of all assets subject to the DB Guarantee (based on the estimated annual costs of \$325,000 advised by the Maritime Super).

¹ Based on a cash portfolio

Demographic Assumptions

Rates at which Employee Members Cease Service

I have analysed the rates at which employee members cease service during the period from 30 June 2022 to 30 June 2024. There were 132 exits, compared to the 181 expected.

I have retained the same assumed rates as the ones used in the previous investigation (which remain consistent with those provided to the investment manager in 2017 and used in managing the Hedging Program).

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

Age	Death	Disablement	Withdrawal	Early Retirement
35	8.6	11	340	-
45	21.5	46	170	-
55	67.3	128	-	500
58	91.5	190		500
61	123.4	295	-	1,000
63	150.3	390	-	2,500
65	-	-	-	10,000

Statutory Statements Under SPS 160

Hostplus Superannuation Fund, Maritime Seafarers Part of the Seafarers Division

Actuarial Investigation as at 30 June 2024

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

A. Sub-fund Assets

At 30 June 2024 the net market value of assets of the Sub-fund, excluding any amount held to meet the Operational Risk Financial Requirement (ORFR), was \$262,266,000. Comprised of the components below:

	30 June 2024
Accumulation Benefits	\$255,480,000
DB Reserve	\$6,786,000
Net Market Value of Assets subject to the Defined Benefit Guarantee	\$262,266,000

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 2024	102.4%
30 June 2025	102.5%
30 June 2026	102.4%
30 June 2027	102.3%

C. Accrued Benefits

The value of the defined benefit accrued liabilities (excluding accumulation account balances not subject to the DB Guarantee) of all members as at 30 June 2024 was \$255,933,000.

In my opinion, the value of the assets of the Sub-fund at 30 June 2024 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 defined benefit vested benefits (excluding accumulation account balances not subject to the DB Guarantee) of all members as at 30 June 2024 was \$256,051,000.

In my opinion, the financial position of the Sub-fund is not unsatisfactory. I recommend that the Trustee increase the shortfall limit to 100% based on the current membership and benefit design of the Sub-fund.

E. Minimum benefits

The value of defined benefit liabilities in respect of the minimum benefits (excluding accumulation account balances not subject to the DB Guarantee) of members as at 30 June 2024 was \$255,480,000 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 1 September 2023 (the date of the SFT) to 30 June 2024 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 2024 to 30 June 2027.

G. Employers Contributions

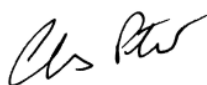
The report on the actuarial investigation of the Sub-fund at 30 June 2024 recommends that there is no need to make additional contributions above the contributions required to fund members' standard accumulation benefits.

H. Payment of Pensions

This investigation excludes the liabilities in respect of fixed term and lifetime pensioners of the Sub-fund, which have been investigated in conjunction with the liabilities of the fixed term pensioners within the Stevedores Division of the Fund with whom their underlying assets have been co-invested.

I. Pre-July 1988 Funding Credit

No pre-July 1988 funding credits have been granted to the Sub-fund.



Chris Porter
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24 October 2024

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

About WTW

At WTW (NASDAQ: WTW), we provide data-driven, insight-led solutions in the areas of people, risk and capital. Leveraging the global view and local expertise of our colleagues serving 140 countries and markets, we help you sharpen your strategy, enhance organisational resilience, motivate your workforce and maximise performance. Working shoulder to shoulder with you, we uncover opportunities for sustainable success — and provide perspective that moves you. Learn more at [wtwco.com](https://www.wtwco.com).