Mercer welcome to brighter

Report to the Trustee on the Actuarial Investigation as at 30 June 2023

ASP Ship Management Superannuation Plan

(an employer plan in the Plum Division of the MLC Super Fund)

19 December 2023

A business of Marsh McLennan

Contents

Section 1

Key Results and Recommendations

This report on the actuarial investigation as at 30 June 2023 of the defined benefit section of the ASP Ship Management Superannuation Plan (the Plan), an employer plan in the Plum Division of the MLC Super Fund, has been prepared to meet the requirements of the Plan's governing rules and the SIS legislation.

This report should not be relied upon for any other purpose or by any party other than the Trustee of the Plan. Mercer is not responsible for the consequences of any other use. This report should be considered in its entirety and not distributed in parts. The Trustee should share this report with ASP Ship Management Pty Ltd and other participating companies (collectively referred to as "the Employer" throughout this report).

The Plan has a closed defined benefit section and an accumulation section which is open to all new Plan members. The Trustee administers assets for the defined benefit and accumulation sections separately. The liability for accumulation section benefits is matched to the value of the underlying investments at any given time. Therefore, this actuarial investigation does not consider the assets or liabilities of the accumulation section.

1.1 Financial Position as at 30 June 2023

The following table summarises the Plan's financial position as at 30 June 2023, and shows the corresponding coverage of assets over liabilities at the previous investigation:

	As at 30 June 2023		
Defined Benefits Section	**$'000s**	**Asset Coverage**	**Asset Coverage as at 30 June 2022**
Assets	34,133		
Vested Lump Sum Benefits	32,007	106.6%	105.0%
Vested Benefits	32,276	105.8%	104.4%
Actuarial Value of Accrued Benefits	35,685	95.7%	104.1%
SG Minimum Benefits	25,134	135.8%	134.3%

The Self-Insurance Reserve is not included in the asset figure above.
The above totals exclude the account balances in the Plan's accumulation section. These balances are invested in accordance with members' investment choices and the value of the liabilities are matched to the value of the underlying investments.

Seagoing members are provided with a lifetime pension on retirement which can be commuted to a lump sum benefit using factors prescribed in the Fund's governing rules. The value of the lifetime pension is generally greater than the lump sum benefit when measured using the assumptions adopted for this actuarial investigation. Benefits for Shore-based members are provided only as a lump sum.

Vested lump sum benefits are the amounts payable as of right to active members should they voluntarily leave service at the investigation date and, if eligible for a retirement lifetime pension, elect to fully commute the lifetime pension to a lump sum, plus the estimated actuarial value of future payments for existing pensioners.

The vested benefits are similar to lump sum vested benefits except that allowance has been made for eligible members to elect a proportion of their retirement benefit as a lifetime pension rather than a lump sum.

As at 30 June 2023, the value of the Plan's assets is adequate to meet the liability for vested benefits. Therefore, the Plan is considered to be in a "satisfactory financial position", as defined in superannuation legislation.

The more significant factors affecting the coverage levels since the previous actuarial investigation were:

- The estimated rate of return on the Plan's investments was 6.8% per annum. This is higher than the previous average assumption of 7% per annum for assets supporting lifetime pension liabilities and 6% per annum for assets supporting active members' liabilities. The higher than assumed investment return had a positive impact on the Plan's financial position.
- Salaries for active defined benefit members increased by an average of 6.0% per annum over the year to 30 June 2022. The previous assumption was 4% per annum. The projections and recommendations made as part of this investigation allow for members' known salary increases effective from 1 July 2023 - these increases averaged 10.4%. Higher than assumed salary increases had a negative impact on the Plan's financial position as members' defined benefits increased by more than anticipated.
- In accordance with the contribution recommendations made at the previous actuarial investigation, the Employer resumed contributions to the Plan at a rate in excess of the estimated long-term cost of accruing benefits. This has had a positive impact on the Plan's financial position.
- Changes have been made to the salary increase assumption which has increased the actuarial value of accrued benefits.

Section 3 has more details of the Plan's experience. The actuarial assumptions adopted for the current investigation are set out in Section 4. The Plan's financial position is examined in detail in Section 7.

1.2 Recommended Employer Rates and Projections

Based on the results of this actuarial investigation, I recommend that the Employer makes contributions to the Plan of at least:

<u>Defined Benefit Section</u>

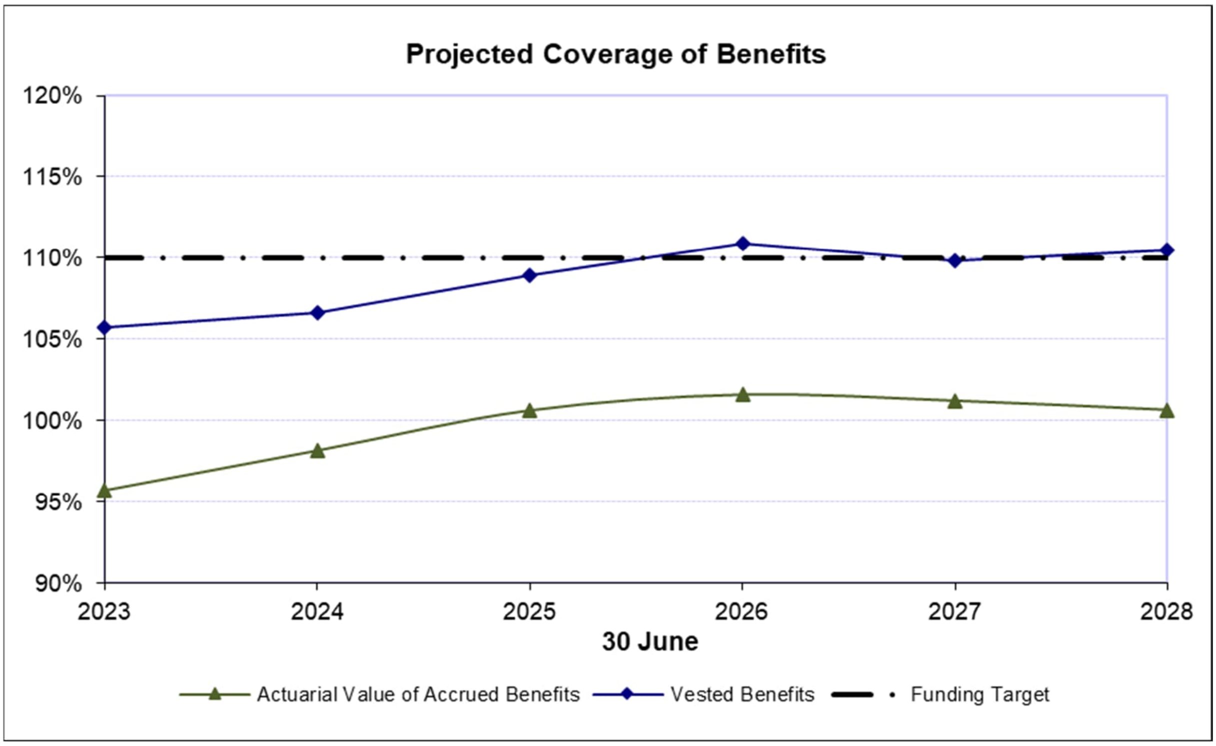
- For the period from 1 July 2023 to 31 December 2025, 31% of all Seagoing and Shore-based members' salaries; and
- From 1 January 2026, 12% of all Seagoing and Shore-based members' salaries.

Accumulation Section

- The amounts allocated to members' account balances (including 3% productivity contributions for Seagoing defined benefit members) as required by legislation and contractual obligations.

All members' contributions, including voluntary and salary sacrifice contributions for defined benefit and accumulation section members must also continue to be paid in addition to the above contributions.

A projection of the Plan's financial position, based on the assumptions adopted for this investigation and the above contribution recommendations, is shown below:



The chart shows that, if the Employer makes contributions in accordance with the recommendations, the Plan's coverage of vested benefits is projected to increase to the 110% financing objective during 2025 and then remain at the target level for at least the subsequent three years.

Please note, I have not taken account of actual investment performance since the actuarial investigation date in the above projections as the investment performance to date will not have a material impact on my contribution recommendations.

In my view, the Trustee should be satisfied with the expected level of security for members' benefits if the Employer makes contributions to the Plan on the basis recommended and the Plan's financial position continues to be monitored.

1.3 Risks

The Trustee should note that the projection of the Plan's financial position is based on the assumptions adopted, which represent a single scenario from a range of possibilities. The future is uncertain and the Plan's actual experience will differ from these assumptions; these differences may be minor in their overall effect, or they may be significant and material. In addition, different sets of assumptions or scenarios may also be within a reasonable range and results based on those alternative assumptions would be different.

The Trustee has a monitoring process which will identify if an adjustment to the contribution recommendations is required prior to the completion of the next formal actuarial investigation. The Trustee's monitoring of the experience specified in the Notifiable Events section of the Funding and Solvency Certificate will provide a further means of identifying adverse experience which warrants an immediate review of the Plan's financial position.

The liability measures shown in this report assume that the Plan continues to operate 'as is' until the last pensioner dies. In the event of a Plan wind-up, or termination of pension payments, prior to the natural cessation of the pension, different measures of the benefit liabilities may apply, and further financing from the Employer may be required to meet the resulting benefit liabilities.

Risks associated with the defined benefit liabilities are discussed in Section 8.

1.4 Other Findings and Recommendations

Suitability of Policies

I am satisfied with the following current policies for the defined benefit section of the Plan:

- The investment policy;
- The crediting rate policy subject to noting the additional risk with respect to Late Retirement members;
- The insurance arrangements for death and disability benefits (including self-insurance of TTD income benefits); and
- The Trustee's process for monitoring the Plan's financial position.

Previous Recommendations

I understand that the Plan's administrator has reviewed the late retirement benefits for defined benefit section members and determined that:

- Seagoing members retain the option for a lifetime pension after their Normal Retirement Date;
- A minimum annual interest rate of 7.5% per annum compound is applied on a Late Retirement member's Retirement Account between each January and July six monthly review;
- Contributions made to a Retirement Account after the Normal Retirement Date are subject to a minimum annual interest rate; and

- Contributions made after the Normal Retirement Date (plus interest) are payable as a lump sum if the late retirement benefit is ultimately paid as a lifetime pension.

Other Recommendations

- I recommend that the Shortfall Limit (for the purposes of SPS 160) be amended from 100% to 97.5% now that regular Employer contributions to the Plan have resumed.

1.5 Actions Required by the Trustee

The Trustee should:

- Consider this report and confirm its agreement (or otherwise) to the contribution and other recommendations;
- Seek formal agreement from the Employer to contribute in line with the recommendations;
- Continue to monitor the progress of the Plan’s coverage of vested benefits; and
- Continue to monitor the “Notifiable Events” specified in the Plan’s Funding and Solvency Certificate and advise the Actuary should any actual or potential Notifiable Events occur.

Section 2
Introduction

2.1 Background of the Plan

The ASP Ship Management Superannuation Plan (the Plan) is operated for the benefit of employees of ASP Ship Management Pty Ltd and other participating employers. It is an employer plan in the Plum Division of the MLC Super Fund. The Trustee of the MLC Super Fund, NULIS Nominees (Australia) Ltd, holds a Registrable Superannuation Entity Licence under the SIS legislation and operates the Plan as required under the Trust Deed.

The Plan has a closed defined benefit section and an accumulation section which is open to all new Plan members. The Trustee administers assets for the defined benefit and accumulation sections separately. The liability for accumulation section benefits is matched to the value of the underlying investments at any given time.

The defined benefit section includes a mix of active members and current lifetime pensioners. Active members are provided with lump sum or lifetime pension benefits on leaving service, death or disablement. Appendix A provides a high-level summary of the Plan's defined benefits.

The Plan is a resident regulated fund and a complying superannuation fund for the purposes of the SIS legislation. The Plan is taxed as a complying superannuation fund.

If the Plan was terminated, the liability to pay benefits under the Plan's governing rules is limited to whatever assets are then held in the Plan.

2.2 Purpose of Investigation

I have prepared this report exclusively for the Trustee of the Plan for the following purposes:

- To present the results of an actuarial investigation of the defined benefit section of the Plan as at 30 June 2023;
- To review Plan experience for the period since the previous actuarial investigation as at 30 June 2022;
- To recommend contributions to be made by the Employer intended to allow the Plan to meet its benefit obligations in an orderly manner, and to maintain an appropriate level of security for members' accrued benefit entitlements;
- To satisfy the requirements of the Plan's Trust Deed for actuarial investigations of the Plan's financial position; and
- To meet legislative requirements under relevant superannuation legislation.

This investigation has been prepared in accordance with the requirements of the Trust Deed, the Superannuation Industry (Supervision) Act 1993 and associated regulations (SIS legislation), ARPA Prudential Standard SPS 160 and Professional Standard 400 issued by the Actuaries Institute setting out requirements for actuarial investigations of defined benefit superannuation funds under SIS legislation.

This actuarial investigation has not considered the assets or liabilities of the accumulation section of the Plan.

The previous actuarial investigation was conducted as at 30 June 2022 by me, on behalf of Mercer, and the results are contained in a report dated 14 December 2022.

2.3 Significant Events since the Investigation Date

I am not aware of any significant events that may have occurred since the investigation date which would have a material impact on the findings or recommendations in this report.

Section 3

Experience Since the Previous Investigation

3.1 Membership

The Plan's defined benefit membership comprised:

As at 30 June 2023	Seagoing	Shore-based	Late Retirement	Pensioner
Number of members	27	-	4	15
Total annual salaries/pensions	$6,466,000	-	$1,019,000	$879,000
Average age (years)	52.5	-	69.4	70.6

Since the previous actuarial investigation as at 30 June 2022, four active members exited the Plan: one Seagoing member was paid a resignation lump sum benefit, one retiring Seagoing member elected to receive a lump sum benefit, one Shore-based member was paid a (lump sum) retirement benefit, and one Late Retirement member elected to receive a lump sum benefit. One Seagoing member also attained their Normal Retirement Date and became a Late Retirement member.

There was no change to pensioner membership.

I am satisfied that the quality of the data is suitable for the purpose of the actuarial investigation. Assumptions regarding the data are set out in Appendix B.

3.2 Investment Returns

The estimated rate of investment earnings (after tax, investment fees and asset-based administration fees) on assets supporting the Plan's defined benefit liabilities was 6.8% per annum over the year to 30 June 2023.

This is higher than the assumption used at the previous investigation of 7% per annum for assets supporting lifetime pension liabilities and 6% per annum for assets supporting active members' liabilities.

The higher than assumed return had a positive impact on the Plan's financial position.

3.3 Salary Increases

Salaries for the active defined benefit members increased by an average of 6.0% per annum over the year. The previous assumption was 4% per annum.

The projections and recommendations made as part of this investigation allow for members' known salary increases effective from 1 July 2023 - these increases averaged 10.4%.

Higher than assumed salary increases had a negative impact on the Plan’s financial position as members’ defined benefits increased by more than anticipated.

3.4 Contributions

In accordance with the contribution recommendations made at the previous actuarial investigation, the Employer resumed contributions to the Plan at a rate in excess of the estimated long-term cost of accruing benefits. This has had a positive impact on the Plan’s financial position.

Section 4
Actuarial Assumptions

The ultimate cost to the Employer of providing the benefits to members is:

- the amount of benefits paid out; and
- the expenses of running the Plan, including tax;

less

- members' contributions; and
- the return on investments.

The ultimate cost to the Employer will not depend on the actuarial assumptions or the methods used to determine the recommended Employer contributions, but on the actual experience of the Plan. The financing method and actuarial assumptions adopted will however affect the timing of the contribution requirements from the Employer.

The actuarial process includes projections of possible future Plan assets and benefit liabilities on the basis of actuarial assumptions about future experience. These assumptions include investment returns, salary/wage increases, crediting rates, the rates at which members leave the Plan for various reasons, and other factors affecting the financial position of the Plan.

It is expected that these assumptions will not be precisely borne out in practice, but rather that in combination they will produce a model of possible future experience that is considered a suitable basis for setting contribution rates.

4.1 Economic Assumptions

The most significant assumption made in estimating the cost of defined benefits is the difference between:

- the assumed rate of investment earnings; and
- the rate of salary increases used in the projections of future benefit payments.

This difference is commonly referred to as the "gap".

The key economic long-term assumptions adopted for this investigation are:

Assumption as at 30 June 2023	per annum
Investment returns (after tax, investment and asset-based administration fees)	
- assets supporting lifetime pension liabilities	7.0%
- assets supporting active members' liabilities	6.0%
Salary increases	5.0%

The assumed investment returns are based on the expected earning rates for the Plan's benchmark investment mix, over the likely remaining term of the defined benefit liabilities, calculated using Mercer's assumptions of the means and standard deviations of returns from the various underlying asset classes, the correlations of returns between those asset classes.

The return assumption for assets supporting current lifetime pension liabilities is higher than the assumption for assets supporting active members' liabilities as income from these investments is tax exempt.

The salary increase assumption is based on economic forecasts for future increases in average weekly earnings, the age profile of the remaining defined benefit members, and input from the Employer. The projections and recommendations made as part of this investigation allow for members' known salary increases effective from 1 July 2023 - these increases averaged 10.4%. The salary increase assumption used at the previous investigation was 4% per annum.

The assumed real rate of investment return in excess of salary increases is 1% per annum, a decrease from 2% per annum used for the previous investigation.

Lifetime pension payments are not indexed.

4.2 Demographic Assumptions

Rates of Retirement, Death in Service, Total and Permanent Disability and Resignation

The Plan is not large enough to obtain meaningful experience in relation to rates of decrement. The assumed rates of exit are unchanged from the previous investigation. Specimen rates are set out in Appendix B.

Retrenchment

No specific allowance is made for the possibility of future retrenchments. Any substantial retrenchment program would require specific assessment.

Form of Benefit

Seagoing members are provided with a lifetime pension on retirement which can be commuted to a lump sum benefit using factors prescribed in the Fund's governing rules. The value of the lifetime pension is generally greater than the lump sum benefit when measured using the assumptions adopted for this actuarial investigation. Benefits for Shore-based members are only provided as a lump sum.

For the purpose of this actuarial investigation, eligible members are assumed to elect 50% of their benefit as a lifetime pension benefit rather than the lump sum benefit on retirement. This assumption is unchanged from the previous investigation.

Pensioner Mortality

The Plan is not large enough to obtain meaningful experience in relation to pensioner mortality. I have continued to use the mortality rates from the most recent "Population Projections, Australia, 2017 (base) – 2066" published by the Australian Bureau of Statistics.

4.3 Other Assumptions

New Members

The Plan's defined benefit section is closed to new entrants. No allowance has been made for new members. All new members are assumed to join an accumulation section category.

Expenses

Administration and management expenses for the defined benefit section are met from Plan assets. Based on recent experience, expenses are assumed to average $280,000 per annum. This assumption is unchanged from the previous investigation.

All administration expenses and insurance costs for accumulation section members are assumed to be fully financed via deductions from members' account balances.

Tax

It is assumed that the current tax rate of 15% will continue to apply to the Plan's assessable income, along with current tax credits and deductions.

All future Employer contributions are assumed to be subject to 15% contribution tax, after deductible expenses. All contribution recommendations quoted in this report are gross of contributions tax.

No allowance has been made for tax which is payable by the individual such as excess contributions tax or additional Division 293 tax on contributions for those with high incomes.

The Superannuation Guarantee (Administration) Act 1992

The SG Act requires employers to provide minimum superannuation benefits that are fully vested in their employees within a complying superannuation fund.

The contribution rates recommended in this report and the projections of the financial position allow for benefits to be augmented as necessary to meet the minimum SG benefit described in the Plan's actuarial Benefit Certificate. The SG rate is currently legislated to increase from 11% by 0.5% each year until it reaches 12% from 1 July 2025.

4.4 Impact of Changes in Assumptions

The following table sets out changes in assumptions from those used in the previous investigation and the reasons for the changes:

Assumption	Current Investigation	Previous Investigation	Reason for Change
Salary increases	5% per annum	4% per annum	Input from Employer.

The overall impact of the changes in assumptions as at 30 June 2023 has been to:

- increase the Plan's total actuarial value of accrued benefits by $776,000; and
- increase the Employer's "normal" long-term cost of financing benefits accruing in future.

Section 5
Assets

5.1 Market Value

Based on unaudited data provided by the Plan's administrator, the net market value of assets available to pay benefits as at 30 June 2023 was $34,133,000, including an estimated net tax receivable of $207,000 ($48,000 payable on taxable contributions less expenses, $228,000 receivable in respect of exempt income on assets supporting current pensioners and $27,000 receivable in respect of notional insurance premiums). This value has been used for the purposes of the investigation.

A separate Self-Insurance Reserve is maintained and amounted to $585,000 as at 30 June 2023. The Self-Insurance Reserve is not included in the net asset figure above.

5.2 Operational Risk Reserves

The assets to meet the Trustee's Operational Risk Financial Requirement (ORFR) are held separately from the assets of the Plan.

The scope of this investigation does not include a review of the adequacy of assets held to meet the Trustee's ORFR or the Trustee's ORFR strategy.

5.3 Investment Policy

The assets supporting the Plan's defined benefit liabilities are invested in the MLC Balanced (previously MLC Moderate) and MLC Conservative Balanced investment options. The overall allocation between the two investment options as at 30 June 2023 was 56% ($19.0m) Balanced and 44% ($14.9m) Conservative Balanced. Applications and redemptions are generally being apportioned equally between the two options.

The Balanced option aims to achieve a rate of return (after fees and tax) of 3% per annum above inflation (Consumer Price Index) over 10-year periods. The Conservative Balanced option aims to achieve a rate of return (after fees and tax) of 2.25% per annum above inflation (Consumer Price Index) over 7-year periods.

The benchmark asset allocations for these investment options are:

Asset Class	MLC Balanced (%)	MLC Conservative Balanced (%)
Private equity	5	4
Australian shares	25	17
International shares	28	19
Property	6	5
Infrastructure	6	6
Alternatives and other	3	3
Fixed interest – credit	10	10
Fixed interest – diversified	8	22
Cash	9	14
Growth	**74**	**56**
Defensive	**26**	**44**
Total	**100**	**100**

"Growth" type asset classes such as equity and property are expected to earn higher returns over the long term relative to "defensive" type asset classes such as fixed interest and cash, but at the same time to exhibit more variation in returns from year to year.

SG minimum benefits, resignation and lump sum late retirement benefits are linked to the investment return on the Plan's assets. The other defined benefit liabilities are not affected the value of the Plan's assets. Volatility of the Plan's investment returns can therefore affect the financial position of the Plan from year to year and is likely to impact on the required level of Employer contributions. The expected term of the liabilities is such that the Plan is expected to benefit over the long term from higher returns generated from "growth" type assets, provided the Employer is comfortable with the volatility risk. The impact of investment volatility on the Plan's financial position is discussed in Section 8.

The Plan's investments are expected to provide a high level of liquidity in normal circumstances. Hence, I do not envisage any difficulty in being able to redeem investments to meet benefit payments as they arise.

I have reviewed the Plan's investment strategy for assets supporting defined benefit liabilities, taking into account the Plan's financial position and the nature and term of the benefit liabilities, and confirm that it is a suitable policy.

5.4 Crediting Rates

Crediting rates for the purposes of calculating the amount of investment earnings to be allocated to defined benefit members' non-member investment choice account balances are declared and applied quarterly. The account balances may include Productivity contributions, notional Superannuation Guarantee contributions, defined benefit member contributions and surcharge offsets.

A Higher Crediting Rate and a Lower Crediting Rate are declared for the Plan on a quarterly basis. The Higher Crediting Rate is calculated as the actual earning rate on the Plan's defined benefit assets. The Lower Crediting Rate is calculated as the actual earning rate on the Plan's defined benefit assets, less a notional allowance for Plan management expenses (currently 2.6% per annum). The unit prices from which the value of the Plan assets is derived allows for taxes and investment fees incurred. An interim rate, to apply during the period for which a declared rate is not yet available, is determined based on the yield on 10-year Australian Government bonds.

The Plan's governing rules require that the earnings applied to a Late Retirement member's Retirement Account be at a minimum annual interest rate equivalent to 7.5% per annum compound. The minimum annual interest rate is a significant risk to the Plan as there is a mismatch between the assets backing Late Retirement members and the crediting rate should assets return less than 7.5% each year.

Otherwise, the calculation methodology, including the timing of when rates of interest are declared, may be determined by the Trustee in any way it considers appropriate.

I have received a copy of the Trustee's Product Management Standard Operating Procedures (dated 17 July 2018) which details the Trustee's standard approach to be used for the allocation of investment earnings.

Based on a review of the main features, I consider that the crediting rate policy adopted is suitable, but there is a significant level of risk if the number of Late Retirement member's increases materially.

The Plan's current crediting rate policy is assumed to continue.

Section 6
The Actuarial Approach

6.1 Financing Objective

The defined benefit liabilities (other than SG minimum benefits, resignation and lump sum late retirement benefits) are based on members' salaries and service and do not depend on the value of the underlying investments (as is the case for accumulation section benefit liabilities).

The Employer bears the risks associated with financing the Plan to ensure assets are sufficient to meet the defined benefit liabilities and makes additional contributions if there is any shortfall.

The Trustee is focussed on the security of members' benefit entitlements. The financing objective used for this actuarial investigation is to maintain the value of the Plan's assets at least equal to 110% of defined benefit vested benefits (including lifetime pension liabilities).

A margin in excess of 100% of vested benefits provides some security against adverse experience (such as poor investment returns and pensioners living longer than expected) and reduces the risk of the Plan's financial position becoming unsatisfactory.

The contribution recommendations are reviewed at each actuarial investigation to ensure that the Plan remains on course towards the financing objective.

Based on the assumptions used for this investigation, achieving the financing objective of 110% of vested benefits would also result in at least 100% coverage of the actuarial value of accrued benefits and SG minimum benefits. Hence, it is not considered necessary to adopt specific financing objectives in relation to these benefit liability measures.

I have taken into consideration the provisions of the Trust Deed and any professional requirements as set out below.

Professional Requirements

Under Professional Standard 400 issued by the Actuaries Institute, the funding method selected by the actuary *"must aim to provide that:*

(a) members' benefit entitlements (including any pension increases provided by the Trust Deed or in accordance with either precedent or the intentions of the Trustee and/or Fund Sponsor) are fully funded before the members retire; and

(b) the assets of the Fund from time to time, after making full provision for the entitlements of any beneficiaries or members who have ceased to be employed, exceed the aggregate of benefits which employed members would reasonably expect to be payable to them on termination of membership, including the expenses of paying those benefits, and having regard to the provisions of the Trust Deed and the likely exercise of any Options or Discretions." (Paragraph 5.5.4 of PS400).

Accordingly, the actuary needs to be satisfied that any funding program is expected to provide a level of assets which meets or exceeds immediate benefit entitlements based on members' reasonable expectations. Should assets fall below that level, the funding program needs to aim to lift assets to at least the required level over a reasonable time period and to maintain assets at or above the required level thereafter.

The financing objective has been set on the basis that members' reasonable expectations on leaving service would be to receive their vested benefit entitlement including the option for a lifetime pension on retirement. Vested benefits for pensioners are equal to the lump sum value of future payments, determined using the actuarial assumptions adopted for this investigation.

Provisions of the Trust Deed

The rules of the MLC Super Fund include requirements that:

- the Trustee ensures an actuarial investigation of the Plan is conducted when required by legislation; and
- the Employer must contribute at the rate determined by the Trustee acting on the advice of the Actuary.

6.2 Financing Method

There are various financing methods that could be followed in setting the Employer contribution level. This investigation uses a "Target Funding" method.

Under this method, the Employer contribution rate is determined to provide a target level of coverage of a particular benefit liability measure. For this Plan, the target coverage is at least 110% of vested benefits. The level of Employer contributions will vary from time to time to ensure that the Plan remains on course with the financing objective.

The "Target Funding" method was also used at the previous actuarial investigation.

Section 7
Financial Position of the Plan

7.1 Liability Measures

Vested Lump Sum Benefits

Vested lump sum benefits are the immediate lump sum amounts payable to active members who voluntarily leave service at the investigation date, plus the estimated actuarial value of future payments for existing pensioners.

Vested Benefits

Some active members have the option to elect to receive their retirement benefit in the form of a lifetime pension rather than a lump sum. The vested benefits are similar to lump sum vested benefits except that allowance has been made for eligible members to take a proportion of benefits as a lifetime pension retirement benefit rather than the lump sum benefit. The value of the lifetime pension is greater than the lump sum benefit when measured using the assumptions adopted for this actuarial investigation.

Vested benefits for existing pensioners are equal to the estimated actuarial value of future payments.

Coverage of at least 100% of vested benefits is necessary for the Plan to be in a “satisfactory financial position” as defined in SIS legislation.

Actuarial Value of Accrued Benefits

The actuarial value of accrued benefits provides a longer-term measure of the Plan’s overall position. It is the present value (as at the investigation date) of all future expected benefit payments, based on membership to date, discounted to the investigation date, taking into account the probability of payment. This value is calculated using the actuarial assumptions and method outlined in the previous sections of this report. Further details concerning the calculation of the Actuarial Value of Accrued Benefits are set out in Appendix C.

The actuarial value of accrued benefits for existing pensioners is equal to the estimated actuarial value of future payments.

100% coverage of assets over this measure of benefit liabilities would generally indicate a sound level of long-term funding as, if no future benefits were to accrue to existing members, assets would be expected to meet all future benefit payments (assuming the actuarial assumptions are borne out in practice).

SG Minimum Benefits

SG minimum benefits are the minimum benefits required under SG legislation, as defined in the Benefit Certificate (also referred to as Minimum Requisite Benefits or MRBs).

SG minimum benefits for existing pensioners are equal to the estimated actuarial value of future payments.

The Plan assets at 30 June 2023 were greater than the SG minimum benefits and hence the Plan was considered to be "solvent" under SIS legislation.

7.2 Financial Position as at 30 June 2023

The following table summarises the Plan's financial position as at 30 June 2023, and shows the corresponding coverage of assets over liabilities at the previous investigation:

	As at 30 June 2023		
Defined Benefits Section	$'000s	Asset Coverage	Asset Coverage as at 30 June 2022
Assets	34,133		
Vested Lump Sum Benefits	32,007	106.6%	105.0%
Vested Benefits	32,276	105.8%	104.4%
Actuarial Value of Accrued Benefits	35,685	95.7%	104.1%
SG Minimum Benefits	25,134	135.8%	134.3%

The Self-Insurance Reserve is not included in the asset figure above.
The above totals exclude the account balances in the Plan's accumulation section. These balances are invested in accordance with members' investment choices and the value of the liabilities are matched to the value of the underlying investments.

As at 30 June 2023, the value of the Plan's assets is adequate to meet the liability for vested benefits. Therefore, the Plan is considered to be in a "satisfactory financial position", as defined in superannuation legislation.

The asset coverage of the Actuarial Value of Accrued Benefits has fallen below 100%. There is no legislative requirement for this liability measure to be above 100%. However, as it provides an indication of the long-term health of the Plan, the Trustee should aim for at least 100% asset coverage under this measure. Under the recommended Employer contribution rate program, outlined below, the asset coverage of the Actuarial Value of Accrued Benefits is projected to return to 100% by 30 June 2025.

The coverage levels at 30 June 2023 have changed since the previous actuarial investigation due to experience as discussed in Section 3.

7.3 Actuarial Balance Sheet

The following table shows the Plan's actuarial balance sheet, where projected future cash flows have been converted to a present value by discounting at the assumed rate of investment return:

As at 30 June 2023	$'000s
Actuarial present value of future benefit payments in respect of current pensioners accrued at the investigation date	8,926
Actuarial present value of future benefit payments in respect of active members accrued at the investigation date	26,759
Actuarial present value of future benefit payments accruing after the investigation date	5,782
Actuarial present value of all future benefit payments	**41,467**
Current value of defined benefit assets	34,133
Actuarial present value of future member contributions	2,054
Actuarial present value of future available assets (in the absence of other contributions)	**36,187**
Excess to be financed by future Employer contributions	**5,280**

The actuarial balance sheet does not include provision for future administration and management expenses of the Plan or any 3% productivity contributions paid for Seagoing members to the accumulation section.

7.4 Employer Future Service Cost

Based on the actuarial assumptions used for this investigation, the Employer's "normal" long-term cost of financing the defined benefits accruing in the future for current members, ignoring any surplus or deficit of assets relative to the actuarial value of accrued benefit contribution rates, is 9.3% of defined benefit members' salaries.

This rate is gross of contributions tax but does not include any allowance for future administration and management expenses for the defined benefit section or 3% productivity contributions paid for Seagoing members to the accumulation section.

This rate is higher than measured at the previous actuarial investigation (9% of defined benefit members' salaries) primarily due to the increased salary increase assumption.

7.5 Recommended Contributions

Based on the results of this actuarial investigation, I recommend that the Employer makes contributions to the Plan of at least:

Defined Benefit Section

- For the period from 1 July 2023 to 31 December 2025, 31% of all Seagoing and Shore-based members' salaries; and
- From 1 January 2026, 12% of all Seagoing and Shore-based members' salaries.

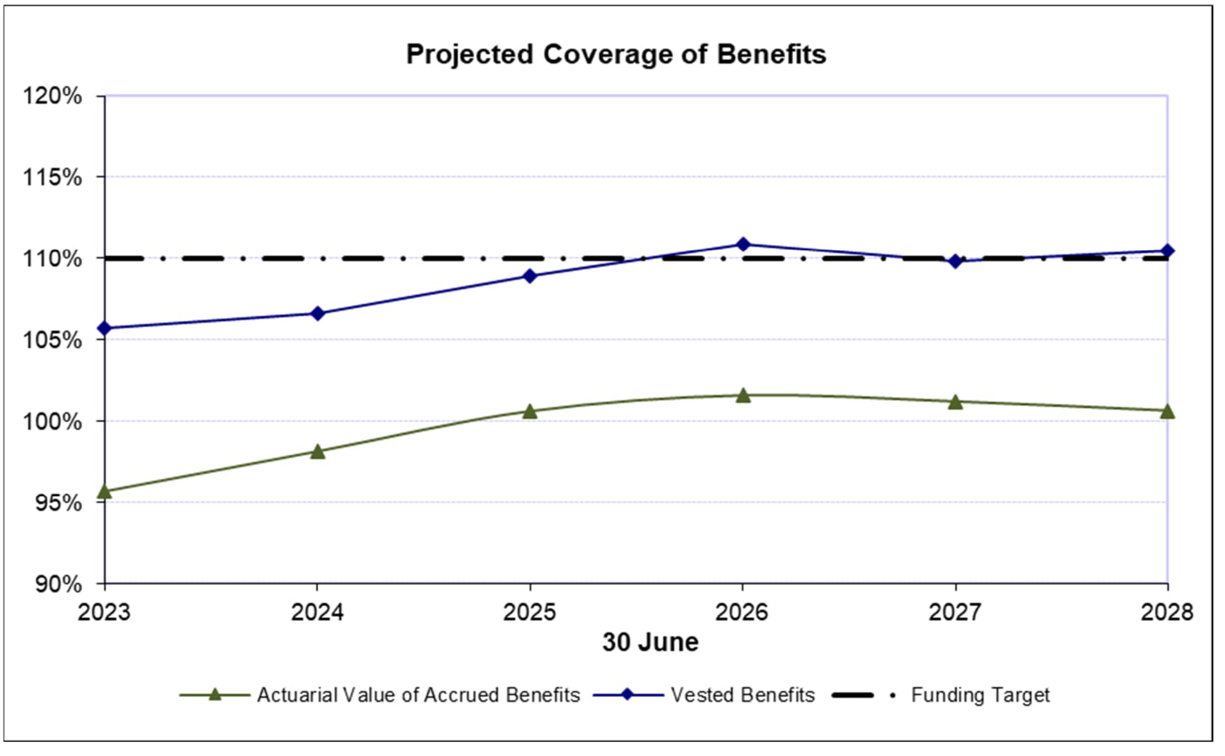
Accumulation Section

- The amounts allocated to members' account balances (including 3% productivity contributions for Seagoing members) as required by legislation and contractual obligations.

All members' contributions, including voluntary and salary sacrifice contributions for defined benefit and accumulation section members, must also continue to be paid in addition to the above contributions.

7.6 Projected Financial Position

A projection of the Plan's financial position, based on the assumptions adopted for this investigation and if the Employer makes contributions in accordance with the recommendations, is shown below:



The chart shows that, if the Employer makes contributions in accordance with the recommendations, the Plan's coverage of vested benefits is projected to increase to the 110% financing objective during 2025 and then remain at the target level for at least the subsequent three years.

The Trustee should note that this projection is based on the assumptions adopted, which represent a single scenario from a range of possibilities. The future is uncertain and the Plan's actual experience will differ from those assumptions; these differences may be minor in their overall effect, or they may be significant and material. In addition, different sets of assumptions or scenarios may also be within a reasonable range and results based on those alternative assumptions would be different.

In my view, the Trustee should be satisfied with the expected level of security for members' benefits if the Employer makes contributions to the Plan on the basis recommended and the Plan's financial position continues to be monitored.

Section 8
Key Risks

There are a number of risks relating to the operation of the Plan. The Plan's Risk Management Statement and Risk Management Plan should identify the full range of risks faced by the Trustee.

The more significant financial risks relating to members' defined benefits are discussed below.

8.1 Investment Volatility

The risk is that investment returns will be lower than assumed and that the Employer will need to make additional contributions to offset this shortfall.

For example, if the assumed future investment return was reduced by 1% per annum (with no other change in actuarial assumptions), the actuarial value of accrued benefits would increase by $3,109,000 (i.e. the Employer's funding cost impact would be $3,109,000 / 0.85 = $3,658,000 including allowance for tax), with a resulting reduction in the coverage of the Actuarial Value of Accrued Benefits from 95.7% to 88.0%.

Note however that the actual investment return achieved by the Plan in future may vary (positively or negatively) from the assumed return by much more than the (negative) 1% per annum illustrated in the example above.

I have also considered the impact of investment volatility on the Plan's financial position over the next few years using a "high return" and a "low return" scenario. The returns under both scenarios have been derived from assumptions about the likely risk attached to the Plan's investment strategy.

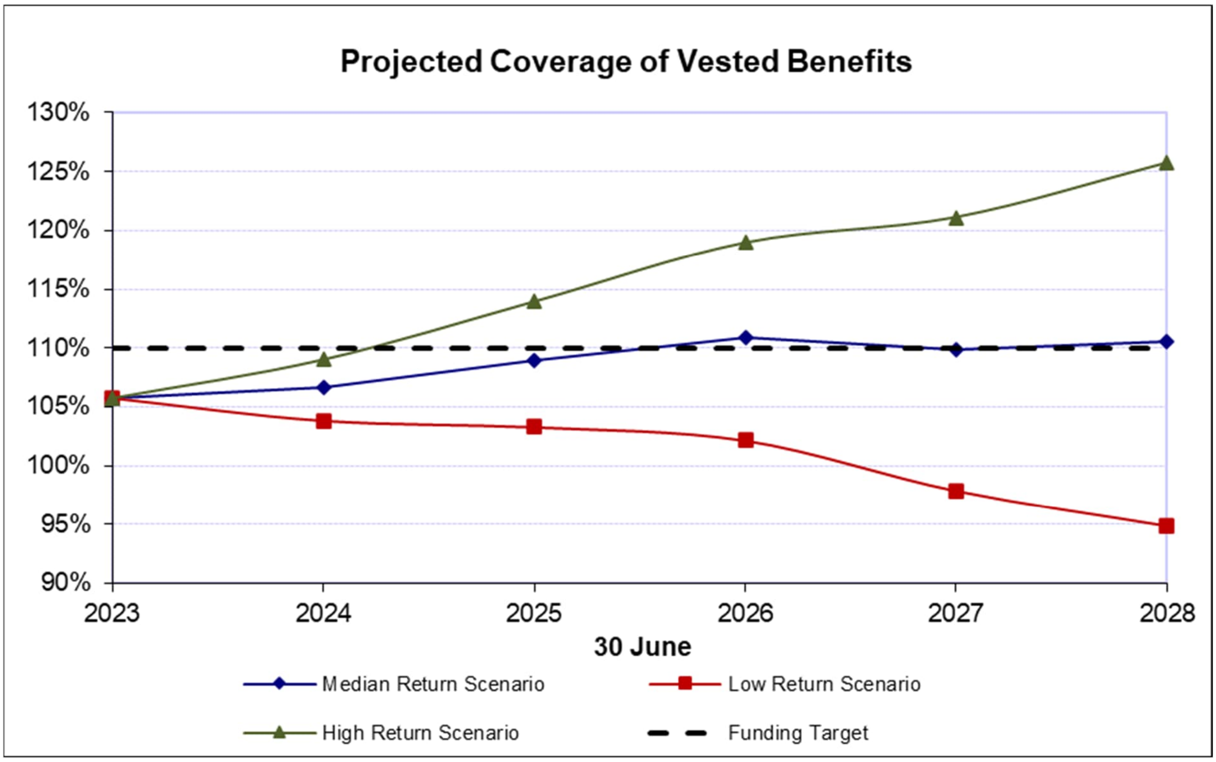
Using the investment return model and assumptions adopted, I estimate that there is an approximate 10% chance of the Plan's cumulative investment return being less than the "low return" scenario. Similarly, I estimate that there is an approximate 10% chance of the Plan's cumulative investment return being greater than the "high return" scenario.

1 July 2023 to 30 June	Assumed Cumulative Investment Return* (%)		
	"Low Return"	Investigation	"High Return"
2024	3.5%	6.0%	8.2%
2025	7.1%	12.4%	17.1%
2026	10.9%	19.1%	26.7%
2027	14.8%	26.2%	37.1%
2028	18.8%	33.8%	48.3%

* Higher assumed returns apply for assets supporting lifetime pension liabilities as earnings are tax exempt.

The cumulative investment return is the total return from the investigation date up to 30 June in the year shown. The extent of variation allowed for in these scenarios reflects the Plan's asset mix and Mercer's views on potential variability in investment results in various investment sectors.

The graph below shows the effect on the projected ratio of assets to vested benefits for defined benefit members under the "high return" and "low return" scenarios, with all other investigation assumptions remaining unchanged.



Based on fluctuations in investment returns only, and assuming other experience is in line with the assumptions adopted for this investigation, I estimate that there is an 80% chance that the coverage of assets over vested benefits in three years' time will fall within the range 102% to 119%. The consequences of the potential volatility in the projected financial position will be borne by the Employer.

Note that these scenarios are illustrations only to demonstrate what may occur if future investment returns differ from the baseline assumptions. These scenarios do not constitute upper or lower bounds. The actual future coverage of vested benefits may differ significantly from the range shown above, depending on actual future experience.

8.2 Salary Growth Risk

The risk is that wages or salaries (on which future benefit amounts will be based) will rise more rapidly than assumed, increasing benefit amounts and thereby requiring additional Employer contributions. This risk is borne by the Employer.

As an example, if the assumed future salary increase rate was 1% per annum higher (with no other change in actuarial assumptions), the actuarial value of accrued benefits would increase by $867,000 (i.e. the Employer's funding cost impact would be $867,000 / 0.85 = $1,020,000 including allowance for tax), with a resulting reduction in the coverage of the Actuarial Value of Accrued Benefits from 95.7% to 93.4%.

Note that the actual rate of future salary increases may vary (positively or negatively) from the rate assumed at this investigation by much more than the illustrative example.

8.3 Pension Take-up Risk

The risk is that eligible members elect to receive a higher proportion than assumed in the form of a lifetime pension rather than a lump sum. The value of the lifetime pension is greater than the lump sum benefit when measured using the assumptions adopted for this actuarial investigation.

For example, if all remaining active members were to ultimately elect the whole of their retirement benefit as a lifetime pension, the actuarial value of the Plan's accrued benefits as at 30 June 2023 would be approximately $476,000 higher than currently estimated.

This risk is borne by the Employer and may require the Employer to make additional contributions in future.

8.4 'Market Value' of Pension Liabilities

The basis used to value the Plan's lifetime pension liabilities for the purposes of this investigation is considered suitable taking into account the Plan's current circumstances, including the existing investment policy. In particular, the financing objective has been set on the basis that pensioners' reasonable expectations on termination of the Plan would be for a continuation of their existing lifetime pension entitlements through a complying superannuation fund with ongoing support of the Employer.

If instead the lifetime pension liabilities were to be valued on a "market value" basis – that is, the amount which would be required to be paid to a third party (for example, a life office) to take on the liability – a significantly higher lifetime pension liability value would likely be obtained. I am able to provide further information to the Trustee on this if required.

8.5 Longevity Risk

The risk is that lifetime pensioners live for longer than anticipated. If pensions are paid for longer than estimated, the Employer may be required to make additional contributions to meet the increased cost.

8.6 Legislative Risk

This risk is that legislative changes could be made which increase the cost of providing the defined benefits – for example, an increase in the rate of tax on superannuation funds. This risk is borne by the Employer.

8.7 Small Plan Risk

This risk relates to financing a defined benefit plan where there is a small and reducing number of members. The time horizon for the defined benefit liabilities will also be diminishing. Issues that may require consideration include:

- A greater focus may now be needed on the immediate funding of benefits which previously may be been financed on the basis of the defined benefit section continuing for many years;
- With fewer remaining members, the experience of a single member or event will have a proportionately larger impact on the Plan’s financial position. More frequent monitoring of the financial position may be required;
- Even if the average overall experience is ultimately in line with the actuarial assumptions, there could be occasions where short-term deviations in experience have a significant negative impact on the financial position warranting immediate additional Employer contributions;
- Contributions required to finance any shortfalls, particularly as a percentage of salaries of defined benefit members, can become much more significant;
- The investment strategy may need to be revised to reflect the reducing term of the liabilities; and
- Administration and management expenses for the Plan, particularly relative to the number of defined benefit members and/or the salaries of defined benefit members, can become significant. Many management tasks are essentially the same whether a fund has one or 1,000 members. In fact, increased monitoring of a small and sensitive defined benefit section may be warranted, increasing the costs.

Section 9

Insurance

Death and total and permanent disablement (TPD) benefits for both defined benefit and accumulation section members, and total and temporary disablement (TTD) income benefits for accumulation section members, are subject to external insurance policies underwritten by MLC Limited as set out in the policies commencing 1 February 2010.

No external insurance policy is in place for TTD income benefits for defined benefit section members – these benefits are self-insured.

9.1 Insured Risks

The purpose of the insurance policy is to protect the Plan against unexpectedly large payouts on the death or disability of members.

For accumulation section members, death and TPD benefits in excess of total account balances are fully insured, as are TTD income benefits.

For defined benefit members, the current group life sum insured formula for death and TPD benefits is:

Sum insured = Death/TPD benefit – 110% x Vested lump sum benefit

The definition of TPD in the policy is also used to establish a member's eligibility for the benefit under the Plan's governing rules, thus avoiding any definition mismatch risk.

Ideally, the total amount insured should cover the excess of the total death/TPD benefits over the Plan's assets. Based on the formula currently in use, the coverage of the Plan's death/TPD risk at the investigation date was:

As at 30 June 2022		$'000s
	Death/TPD benefits	38,401
less	Sum insured	13,586
less	Assets*	25,207
	Amount at risk	(392)

* Excluding assets equal to the liability for lifetime pension liabilities.

These calculations show that the insurance formula results in a small amount of over-insurance.

In my opinion, the current group life insurance arrangements, including the sum insured formula for defined benefit members, are suitable and provide adequate protection for the Plan.

9.2 Self-Insured Risks

A TTD income benefit is payable to eligible defined benefit members. Monthly instalments equal to one-twelfth of 75% of the member's annual salary at the date of disablement are paid, following a waiting period of 90 days, for up to a maximum period of two years.

The Plan's potential self-insured exposure as at 30 June 2023 is:

As at 30 June 2023	
Number of eligible members	27
Notional sum insured	$4,394,000
Average age (years)	52.5

The uninsured liability (or notional sum insured) in respect of each member has been calculated as 75% of their annual salary.

The Trustee maintains a separate Self-Insurance Reserve. As at 30 June 2023, the assets of this reserve amounted to $585,000.

I understand that the Employer and Trustee have executed a Deed dated 30 June 2004 obliging the Employer to make the required TTD payments to members which exactly replicates the benefits provided by the Plan. Therefore, in normal circumstances, no TTD benefits will need to be paid from the Self-Insurance Reserve.

However, it is possible that periodic transfers from Plan assets may be recommended to meet the cost of arising TTD benefits. Alternatively, assets deemed excess to requirements may be released from the Self-Insurance Reserve back to the defined benefit assets.

I consider the appropriate amount of the Self-Insurance Reserve as at 30 June 2023 to be:

- A current claims reserve i.e. the amount required for any known self-insured benefit claims and any potential incurred but unreported claims.
- A current year reserve i.e. the amount required to meet the cost of self-insured benefit claims expected to arise in the next year;
- A catastrophic risk claims reserve i.e. the amount required to meet the cost of self-insured benefit claims expected to arise as a result of a catastrophic incident.

There were no claims during the year to 30 June 2023 and there are no known pending claims. Therefore, I consider $0 to be sufficient for the purpose of a current claims reserve.

Based on the premium rates currently charged under the external insurance policy for TTD benefits for accumulation section members of the Plan, I have calculated a notional annual insurance premium for self-insured TTD benefits as at 30 June 2023 to be $86,000. This is considered sufficient for the purpose of a current year reserve.

The Trustee should understand that the current self-insurance arrangements leave the Plan exposed to the risk of a large number of payments caused by a single catastrophic incident. For example, if all eligible defined benefit members were to make a TTD claim from 30 June 2023 for the maximum period of two years, the total payments would be approximately $9 million. However, it is unlikely that all members would become TTD and not die or become TPD as a result of a catastrophic incident or otherwise be eligible for some other form of compensation which is offset against the Plan's TTD benefits. I consider a 1 in 40 year event of the maximum potential claim amount to be sufficient for the purpose of a catastrophic risk claims reserve. This results is an amount of $220,000.

I consider the inclusion of a further 50% contingency margin of $153,000 to be suitable to allow for fluctuations in the experience above the best estimates.

Therefore, the total liability for future self-insured benefit claims as at 30 June 2023 is estimated to be $459,000.

The current assets of the Self-Insurance Reserve is estimated to be remain sufficient to meet the cost of self-insured TTD income benefits as at 30 June 2023. Accordingly, no additional transfers to the Self-Insurance Reserve are required at that date.

I expect that the risk of additional contributions being required from the Employer should the cost of self-insured benefits be greater than anticipated is not any higher than could already be required due to investment volatility risk.

Therefore, I consider the current self-insurance arrangements suitable and in the members' best interest for the following reasons:

- The cost of the self-insurance is effectively financed by the Company. The Company is required under the Plan's governing rules to make contributions no less than the amount deemed necessary by the actuary to provide benefits.
- The presence of self-insurance means that members are covered for their full benefit entitlements under the Plan's governing rules, which may not be possible if self-insurance was removed.

Section 10
Prudential Standards

The Australian Prudential Regulation Authority (APRA) is responsible for the prudential regulation of the superannuation industry. APRA has issued a Prudential Standard SPS 160 relating to the financial management and funding of defined benefit funds. I have commented below on several requirements arising from SPS 160.

10.1 Shortfall Limit

The Trustee must determine a "Shortfall Limit" for each fund, being:

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

The Shortfall Limit is expressed as the coverage level of the defined benefits vested benefits (including liabilities for pensioners) by the defined benefit assets. I understand that the Plan's Shortfall Limit, determined by the Trustee on the basis of previous actuarial advice, is currently 100%.

It is appropriate to consider the following factors when assessing if the Shortfall Limit remains appropriate:

- The guidance provided in the relevant Actuaries Institute Information Note: Shortfall Limit in Prudential Standard 160 dated June 2013;
- The investment strategy for defined benefit assets;
- The results of this investigation regarding the extent to which the current and projected vested benefits are not linked to the investment return on defined benefit assets (i.e. the standard salary based defined benefits) and the current and projected relativity between vested benefits and SG minimum benefits.

Based on the above, I recommend that the Shortfall Limit be amended to 97.5% now that regular Employer contributions to the Plan have resumed.

The suitability of the Shortfall Limit will be reviewed as part of the next regular actuarial investigation. The Shortfall Limit should be reviewed earlier if the Trustee otherwise considers it appropriate to do so.

10.2 Monitoring Process

SPS 160 also requires the Trustee to determine and implement a process for monitoring the defined benefit vested benefits coverage against the Shortfall Limit. If this monitoring process indicates that the vested benefits coverage has (or may have) fallen below the Shortfall Limit, then under SPS 160:

- An "Interim Actuarial Investigation" may be required (depending on the timing of the next regular actuarial investigation).

- A Restoration Plan is required to be put in place if an Interim Actuarial Investigation finds the fund has breached its Shortfall Limit. The Restoration Plan must be designed to return the fund to a “satisfactory financial position”, so that the vested benefits are fully covered within a reasonable period that must not exceed three years, and this must be submitted to APRA.

The Trustee should continue to monitor the progress of the Plan’s financial position to ascertain if an adjustment to the contribution recommendations is required prior to the completion of the next formal actuarial investigation.

The Trustee should also continue to monitor the “Notifiable Events” specified in the Plan’s Funding and Solvency Certificate and advise the Actuary should any actual or potential Notifiable Events occur.

10.3 Requirements of Unsatisfactory Financial Position

Restoration Plan

Under SPS 160, a Restoration Plan is required to be put in place if the actuary finds in a regular actuarial investigation that a fund:

- Is in an unsatisfactory financial position (whether or not the Shortfall Limit has been breached); or
- Is likely to fall into an unsatisfactory financial position.

A Restoration Plan must be designed to return the fund to a “satisfactory financial position”, so that vested benefits are fully covered, within a reasonable period that must not exceed three years from the investigation date.

An SPS 160 Restoration Plan is not required if the fund is technically insolvent (in which case the insolvency rules must be followed). If an SPS 160 Restoration Plan is already in place then any changes to the contribution program (including its period) must be made within the framework of that Restoration Plan.

As indicated by the financial position and the projections, I consider that:

- The Plan is not in an unsatisfactory financial position; and
- The Plan is not likely to fall into an unsatisfactory financial position.

Hence the special requirements of SPS 160 for funds in an unsatisfactory financial position do not apply at this investigation.

Actuary’s Reporting Requirements

Section 130 of the SIS Act requires that if an actuary forms the opinion that a fund’s financial position may be unsatisfactory, or may be about to become unsatisfactory, and that opinion was formed in performing an actuarial function, the actuary must advise both the Trustee and the prudential regulator (APRA) in writing immediately.

These requirements do not currently apply as I am of the opinion that the Plan’s financial position is not unsatisfactory and is not projected to become unsatisfactory.

10.4 Statements Required by SPS 160

This section provides statements required to be made under APRA Prudential Standard SPS 160. Values cited relate to the defined benefit section of the Plan (exclusive of any accumulation section assets and liabilities).

(a) The value of the Plan’s assets as at 30 June 2023 was $34,133,000. This value excludes assets held to meet the Operational Risk Financial Requirement and Self-Insurance Reserve.

(b) In my opinion, the value of the liabilities of the Plan in respect of accrued benefits as at 30 June 2023 was $35,685,000. Hence, I consider that the value of the assets is not adequate to meet the value of the accrued benefit liabilities at the investigation date. Taking into account the circumstances of the Plan, the details of the membership and the assets, the benefit structure of the Plan and the industry within which the Employer operates, I consider that the assumptions and valuation methodology used are appropriate in relation to the determination of the accrued benefit liabilities for the purposes of this report. Further comments on the assumptions and valuation methodology are set out in Sections 4 and 6 of this report. Assuming that the Employer contributes in accordance with my recommendations, and based on the assumptions used for this actuarial investigation, I expect that assets will become sufficient to cover the value of accrued benefit liabilities over the three-year period to 30 June 2026.

(c) In my opinion, the value of the liabilities of the Plan in respect of vested benefits as at 30 June 2023 was $32,276,000. Hence, I consider that the value of the assets is adequate to meet the value of the vested benefit liabilities of the Plan at the investigation date. The Plan is in a “satisfactory financial position” as defined in SPS 160. Assuming that the Employer contributes in accordance with my recommendations, and based on the assumptions used for this actuarial investigation, I expect that assets will remain sufficient to cover the value of vested benefit liabilities over the three-year period to 30 June 2026.

(d) In my opinion, the value of the liabilities of the Plan in respect of the minimum benefits of the members of the Plan as at 30 June 2023 was $25,134,000. Hence, the Plan was not technically insolvent at 30 June 2023.

(e) A projection of the likely future financial position of the Plan over the three-year period following 30 June 2023, based on what I consider to be reasonable expectations for the Plan for the purpose of this projection, is set out in Section 7 of this report.

(f) Based on the results of this investigation, I recommend that the Shortfall Limit be amended from 100% to 97.5%.

(g) In respect of the three-year period following 30 June 2023, I recommend that the Employer makes contributions to the Plan of at least:

<u>Defined Benefit Section</u>

- For the period from 1 July 2023 to 31 December 2025, 31% of all Seagoing and Shore-based members' salaries; and

- From 1 January 2026, 12% of all Seagoing and Shore-based members' salaries.

<u>Accumulation Section</u>

- The amounts allocated to members' account balances (including 3% productivity contributions for Seagoing defined benefit members) as required by legislation and contractual obligations.

All members' contributions, including voluntary and salary sacrifice contributions for defined benefit and accumulation section members, must also continue to be paid in addition to the above contributions.

(h) The Plan is used for Superannuation Guarantee purposes:

- All Funding and Solvency Certificates required under Division 9.3 of the SIS Regulations have been issued for the period from the date of the last investigation to 30 June 2023; and

- I expect to be able to certify the solvency of the Plan in any Funding and Solvency Certificate(s) that may be required in the three-year period from 30 June 2023.

(i) In my opinion, there is not a "high degree of probability", as at 30 June 2023 that the Plan will be able to meet the pension payments as required under the Plan's governing rules. This is because the Plan does not currently hold sufficient reserves to meet the "high degree of probability" test and the Actuaries Institute's Professional Standard 410 does not allow future employer contributions to be taken into account in the assessment for the "high degree of probability" statement. In practice, it is anticipated that the Employer will provide adequate funding to enable pensions to be paid in full.

Section 11
Actuarial Certification

11.1 Professional Standards and Scope

This report has been prepared in accordance with generally accepted actuarial principles, Mercer's internal standards, and the relevant Professional Standards of the Actuaries Institute, in particular PS400 which applies to *"...actuarial investigations of the financial condition of wholly or partially funded defined benefit superannuation funds."*

11.2 Use of Report

This investigation report should not be relied upon for any other purpose or by any party other than the Trustee of the Plan. Mercer is not responsible for the consequences of any other use. This report should be considered in its entirety and not distributed in parts. The Trustee should share this report with the Plan's employer sponsor. The Employer may wish to consider obtaining separate actuarial advice on the recommendations contained in the report.

The advice contained in this report is given in the context of Australian law and practice. No allowance has been made for taxation, accountancy or other requirements in any other country.

11.3 Actuarial Uncertainty and Assumptions

An actuarial investigation provides a snapshot of the Plan's financial condition at a particular point in time, and projections of the Plan's estimated future financial position based on certain assumptions. It does not provide certainty in relation to the Plan's future financial condition or its ability to pay benefits in the future.

Future funding and actual costs relating to the Plan are primarily driven by the Plan's benefit design, the actual investment returns, the actual rate of salary growth and any discretions exercised by the Trustee or the Employer. The Plan's actuary does not directly control or influence any of these factors in the context of an actuarial investigation.

The Plan's future financial position and the recommended employer contributions depend on a number of factors, including the amount of benefits the Plan pays, the cause and timing of member withdrawals, expenses, tax and investment earnings. These amounts and others are uncertain and unknowable at the investigation date, but are predicted to fall within a reasonable range of possibilities.

To prepare this report, assumptions are used to select a single scenario from a range of possibilities. The results of that single scenario are included in this report. However, the future is uncertain and the Plan's actual experience will differ from those assumptions; these differences may be minor in their overall effect, or they may be significant and material. In addition, different sets of assumptions or scenarios may also be within a reasonable range and results based on those alternative assumptions would be different.

Actuarial assumptions may also be changed from one investigation to the next because of mandated requirements, evolving Plan experience and changes in expectations about the future. I did not perform, and thus do not present, an analysis of the potential range of all future possibilities and scenarios.

As actual Plan experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts and/or benefit related issues should be made only after careful consideration of possible future financial conditions and scenarios, and not solely on the basis of one set of investigation results.

11.4 Additional Information

The next **actuarial investigation** is required at a date no later than 30 June 2024 unless an exemption to obtain annual actuarial investigations is obtained from APRA. At the time of the next actuarial investigation, the adequacy of the Employer contribution recommendations will be reassessed.

A new **Funding and Solvency Certificate** will be required at least 12 months before the expiry of the current certificate (which expires on 30 June 2027) and will need to be replaced by 30 June 2026 at the latest.

The next **Benefit Certificate** will be required following the expiry of the current certificate on 30 June 2027. The current Benefit Certificate is designed to accommodate the existing changes to the legislated Superannuation Guarantee rate.

11.5 Further Information

Please contact me to provide any supplementary information or explanations about this actuarial investigation as may be required.

....

Mark Samuels
Fellow of the Institute of Actuaries of Australia

19 December 2023

I have reviewed this report under Mercer's professional Peer Review Policy. I am satisfied that it complies with the applicable professional standards and uses assumptions and methods that are suitable for the purpose.

....

Richard Raoul Codron
Fellow of the Institute of Actuaries of Australia

Appendix A
Summary of Benefits

A simplified summary of the main benefit provisions for the remaining Seagoing members is set out below. A full description of all the benefits is set out in the Trust Deed and the Plan's Participation Agreement, as amended from time to time. Reference should be made to the formal governing documents for definitive statements.

Component	Details
Normal Retirement Date (NRD)	65th birthday.
Members' Contributions	5% of salary (not required once attained age 65).
Final Average Salary (FAS)	The average of annual salaries at the three preceding 1 July review dates.
Discount Factor (DF)	100% less 3% per annum (simple) for each year and complete month before NRD.
Vesting Factor (VF)	12.5% per annum for each complete year of service in excess of 5 years, subject to a maximum of 125% after 15 or more years of service.
Resignation Benefit	A lump sum equal to: (1 + VF) x member's own contributions plus interest.
Retirement Benefit (from the earlier of 40 years of service or age 55, but no later than NRD)	A lifetime pension of 1.75% per annum (subject to a maximum of 70%) x FAS x DF. OR A lump sum effectively equal to 17.5% per annum (subject to a maximum of 7) x FAS;
Late Retirement Benefit (after NRD)	A lifetime pension equal to the NRD pension increased by 7.5% per annum (simple) for each year and complete month from NRD to the actual date of retirement. OR A lump sum equal to 10 x NRD pension plus interest (minimum annual rate equivalent to 7.5% per annum compound) from NRD to the actual date of retirement. Employer contributions are paid to an accumulation section Retirement Account for ongoing service after NRD.

Component	Details
Death or TPD Benefit (before NRD)	A lump sum equal to: 10 x prospective annual retirement pension had service continued to NRD.
TTD Benefit (before NRD)	An income of 75% of annual salary paid for up to a maximum period of two years.
Retrenchment Benefit (if not eligible for retirement)	A lump sum equal to the greater of: 17.5% per annum (subject to a maximum of 7) x FAS, reduced by 1.5% per annum (simple) for each year and complete month before age 55; AND 2.25 x member's own contributions plus interest.

Pension payments are guaranteed for five years. 50% of the pension is payable to a surviving spouse. Pensions are not indexed.

Benefits for Shore-based members are similar except that the retirement benefit is paid only as a lump sum.

Benefits on leaving service for any reason are subject to a minimum Superannuation Guarantee benefit described in the Plan's Benefit Certificate.

The table below indicates the material discretions available to the Trustee and the Employer and the member options specified within the Plan's legal documents, to the extent that these affect benefits. The table also shows the general prevalence of the past exercise of discretions and the options chosen by the members. Please note that past exercises of discretions should not be viewed as precedents which would constrain any future decisions.

Discretion or Option	Historical Prevalence (if known)
With the consent of the Employer, a member who is not eligible for retirement may, on retrenchment or otherwise leaving service, apply to defer payment of their benefit on such terms and conditions as agreed by the Trustee after obtaining actuarial advice. [Participation Schedule Clauses A4.14 and B4.13]	Not common
Some or all of a lifetime pension may be commuted to a lump sum. For members ceasing service, the lump sum is determined using specified factors. Once the pension has been in payment for at least six months, the lump sum is determined by the Trustee after obtaining actuarial advice. [Participation Agreement Clauses A4.15 and B4.14]	Common on immediately ceasing service. Not common once pension in payment.

Discretion or Option	Historical Prevalence (if known)
Late Retirement members are provided with the option of a lifetime pension or a lump sum benefit. [Product Disclosure Statements]	Common.

Appendix B
Data and Decrement Assumptions

Data

To prepare this report, I have relied on financial and participant data provided by the Plan's administrator. The data used is summarised in this report. I have not independently verified or audited the data provided but have performed a range of broad "reasonableness" checks and tested for consistency with previous records.

I have also relied upon the documents, including amendments, governing the Plan as provided by the Trustee. The Trustee is ultimately responsible for the validity, accuracy and comprehensiveness of this information.

If the data or Plan provisions are not accurate and complete, the investigation results may differ significantly from the results that would be obtained with accurate and complete information; this may require a revision of this report.

Decrements

Age	Retirement
55-64	15%
65-69*	30%
70	100%

* 100% from age 65 for Shore-based members.

Specimen resignation, death in service and TPD rates are shown below:

Age	Resignation	Death in Service	TPD
35	12%	0.07%	0.02%
40	8%	0.09%	0.04%
45	4%	0.15%	0.09%
50	2%	0.26%	0.21%
55	-	0.44%	0.47%
60	-	0.73%	0.93%
65	-	-	-

Specimen post-retirement mortality rates are shown below:

Age	Male	Female
55	0.445%	0.270%
60	0.668%	0.395%
65	0.992%	0.589%
70	1.578%	0.981%
75	2.655%	1.717%
80	4.703%	3.154%
85	8.688%	6.307%
90	15.277%	12.288%
95	24.025%	21.684%
100	34.682%	32.132%

Appendix C

Calculation of the Actuarial Value of Accrued Benefits

The calculation of the actuarial value of accrued benefits has been carried out using a method of apportionment of benefits between past and future membership that satisfies the requirements of Professional Standard No. 402 of the Actuaries Institute and is acceptable for Australian Accounting Standard AASB 1056 purposes.

The past membership components of all benefits payable in the future from the Plan in respect of current membership are projected forward allowing for future salary increases, credited interest rates and are then discounted back to the investigation date at the investment return rate assumed for the investigation.

The past membership component for each type of benefit is:

Retirement:	Based on the member's accrued benefit multiple at the investigation date.
Death and TPD:	Calculated by adjusting the total expected benefit in proportion to the accrued benefit multiple at the investigation date over the accrued benefit multiple at the projected date of death or disablement.
Resignation:	Based on the member's accumulated contributions at the investigation date, allowing for increases in vesting (where applicable) to the projected date of resignation.

If the value of past membership components of the above benefits for an individual member is less than the vested benefit, a minimum of the vested benefit is not applied.

The method used for the determination of the actuarial value of accrued benefits is the same as that used at the previous investigation.

Based on the actuarial assumptions used for this investigation, the weighted average term of the actuarial value of accrued benefits is nine (9) years.

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