

PNG Air Limited

Independent Adviser's Report

November 2023

This report is a report on the merits of the proposed allotment of additional PNG Air shares to MRDC and to particular MRDC subsidiaries having regard to the interests of those person who may vote to approve the allotment. This report has been obtained by the Directors of PNG Air. The purpose of this report is to express an opinion on the merits of the proposed allotment and whether or not it is fair and reasonable having regard to the interests of those persons who may vote to approve the allotment.

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22 November 2023

Dear Directors

Introduction

PNG Air Limited ("PNG Air" or the Company) is the second largest domestic airline in Papua New Guinea ("PNG"), providing regular passenger transport ("RPT"), charter and freight services, through 24 domestic routes. Jacksons International Airport, in Port Moresby, is the Company's primary hub, including head office and maintenance facilities.

In 2008, the Company listed on the PNG National Stock Exchange ("PNGX"), however as a result of historical recapitalisations, significant shareholdings in the Company are held, both directly and indirectly through its subsidiaries[1], by Mineral Resource Development Company Limited ("MRDC") (40.4%), a PNG state owned resources company and the National Superannuation Fund ("Nasfund") (39.2%), which is a major superannuation fund in PNG.

In 2019, trading of the Company's shares on the PNGX was suspended, due to the non-provision of audited financial statements. During 2020 and 2021, the Company's operations were negatively impacted by border closures and other restrictions that were imposed in response to the COVID-19 pandemic. As the Company had a relatively fixed cost base, the Company had limited ability to reduce its costs in response to the pandemic and was also impacted protracted maintenance delays and aircraft availability, contributing to the substantial decline in revenues and earnings during the period.

In 2022, the company commenced a process to restructure its debt position, which involved extensive negotiations with all key creditors. The Company explored a number of alternatives to restructure its debt and create a more sustainable business, with the intention of generating free cash flow for continued operations. The following alternatives were considered:

- Further on market capital raising
- Sale of the business as a going concern
- Agreeing informal arrangements with each of its key creditors
- Exploring whether there was any ability to raise (and service) additional debt.

These alternatives were all either unsuccessful or deemed not suitable by management.

As a consequence, the Company has proposed a scheme of arrangement ("Scheme") to the key creditors who have all signed letters of intent in relation to a proposed reduction or restructure of their respective debt arrangements.

[1] The subsidiaries are Mineral Resources OK TEDI No. 2 Limited and Mineral Resources Star Mountain Limited. MRDC and its subsidiaries are collectively defined as the "MRDC Entities" herein.

As part of the Scheme, it is proposed that additional shares are issued to MRDC Entities and Nasfund as follows:

- MRDC Entities have invested PGK 15 million and will invest another PGK 35 million over 18 months in exchange for additional shares at a price per share of 0.843 Toea.
- The MRDC Entities will subscribe for 208,333,333 additional shares to convert the MRDC group's debt of PGK 25 million to equity, at a price of 12 Toea per share, based on the last market trading price of PNG Air in 2019.
- Nasfund will invest PGK 8,225,200 as rescue capital in exchange for additional shares at the share price of 0.843 Toea per share.
- Nasfund will subscribe of 208,333,333 additional shares to convert part of the Nasfund debt to equity at a price of 12 Toea per share, and Nasfund will also receive a cash payment in extinguishment of part of its debt.

In addition to the above, the MRDC Entities have agreed to provide a guarantee to major Scheme creditor DAE Group Holdings Limited ("DAE") in respect of PNG Air's obligations to DAE under the letter of intent. It is a condition precedent to DAE's debt restructure under the Scheme that the rescue capital is received by PNG Air. We note that the details of the letter of intent with DAE are confidential, however broadly, DAE's debt restructure includes, among other items, a reduction in aircraft lease charges.

Following the proposed issue of additional shares to the MRDC Entities, and Nasfund, the MRDC Entities will hold c. 83.37% of the issued share capital of PNG Air, and Nasfund 15.87%. As a condition precedent to the restructuring arrangements with MRDC and Nasfund, Non-Associated Shareholders will be asked to attend a special shareholders' meeting and consider a vote on the proposed issue of shares to the MRDC Entities and Nasfund and the cash payment to Nasfund.

The proposed issue of shares to the MRDC Entities (the "Allotment") involves a shareholder that holds greater than 20% of the share capital increasing its holding. Under the Papua New Guinea Takeovers and Mergers Code ("Code"), issued by the Securities Commission of Papua New Guinea, Rule 12 (1)(b), a person who holds or controls 20% or more of the voting rights in a code company may not become the holder or controller of an increased percentage of the voting rights, unless this acquisition is approved by an ordinary resolution of the Non-Associated Shareholders (Rule 13 (d)).

Whilst the Scheme is not the subject of this report, shareholder approval of the issue of the additional shares to the MRDC Entities and to Nasfund, is a condition precedent in respect of the restructure of the debt held by the MRDC Entities and Nasfund. Further, the receipt of the rescue funding by the MRDC Entities is a condition precedent to the DAE debt restructure.

The Scheme and the issue of shares also remain subject to a number of other conditions precedent including Non-Associated Shareholders approvals, Court approval and other conditions precedent as discussed in Section 1.

The PNG Air Directors unanimously recommend that Non-Associated Shareholders vote in favour of the issue of shares to the MRDC Entities and to Nasfund in the absence of a superior proposal and, in the case of the additional shares to be issued to the MRDC Entities, subject to an independent adviser concluding and continuing to conclude that the issue of shares to the MRDC Entities is fair and reasonable to Non-Associated Shareholders. Subject to the same qualifications, the PNG Air Directors intend to vote the PNG Air Shares held or controlled by them in favour of the issuing of those shares.

Purpose of the report

The Directors of PNG Air have requested Grant Thornton Corporate Finance Pty Ltd ("Grant Thornton Corporate Finance", "Grant Thornton", or "GTCF") to prepare an Independent Adviser's Report ("IAR"). The report is required pursuant to rules 13(d) and 32 of Code.

"This report is a report on the merits of the proposed allotment of additional PNG Air shares to MRDC and to particular MRDC subsidiaries having regard to the interests of those person who may vote to approve the allotment. This report has been obtained by the Directors of PNG Air. The purpose of this report is to express an opinion on the merits of the proposed allotment and whether or not it is fair and reasonable having regard to the interests of those persons who may vote to approve the allotment".

The Code does not provide any specific guidance as to the content of the IAR, as such Grant Thornton Corporate Finance has had regard to equivalent guidance provided by the Australian Securities Investment Commission ("ASIC"), including Regulatory Guide 111 *Contents of expert reports* ("RG 111") and Regulatory Guide 112 *Independence of experts* ("RG 112"). The IAR also includes other information and disclosures as required by ASIC.

Summary of Opinion

Grant Thornton Corporate Finance has concluded that the Allotment is FAIR AND REASONABLE to PNG Air's Non-Associated Shareholders in the absence of a superior proposal.

In forming our opinion, Grant Thornton Corporate Finance has considered whether the Allotment is fair and reasonable to PNG Air's Non-Associated Shareholders and, as part of that consideration, have had regard to other quantitative and qualitative considerations.

Fairness Assessment

In accordance with the requirements of ASIC RG 111, in forming our opinion in relation to the fairness of the Allotment, Grant Thornton Corporate Finance has compared the value per PNG Air share prior to the Allotment on a control basis to the assessed value per share of the Company after the Allotment on a minority basis.

The following table summarises our fairness assessment:

Fairness Assessment PGK per Share	*Section Reference*	Low	High
Pre-Allotment Fair Market Value of PNG Air Shares (control)	*6.1.1*	nil	nil
Post-Allotment Fair Market Value of PNG Air Shares (minority)	*6.1.2*	0.0071	0.0082
Premium/(Discount)		**0.0071**	**0.0082**
FAIRNESS ASSESSMENT			**FAIR**

Source: GTCF analysis

Our assessment of the fair market value of PNG Air on a minority basis after the Allotment is higher than our valuation assessment of PNG Air prior to the Allotment on a control basis and accordingly, we have concluded that the Allotment is FAIR to the Non-Associated Shareholders.

Non-Associated Shareholders should be aware that the valuation of PNG Air represents a range of possible outcomes for which there are numerous different value comparisons that can be made. Non-Associated Shareholders should be aware that our assessment of the value per PNG Air share post the Allotment does not reflect the price at which PNG Air Shares will trade (if at all) if the Scheme is implemented and the Allotment completed. The price at which PNG Air shares will ultimately trade depends on a range of factors including the ability for PNG Air to continue operating as a going concern, macro-economic conditions, the underlying performance of the PNG Air business, the removal of the trading suspension and the liquidity of PNG Shares.

Value of PNG Air before the Allotment

PNG Air went through an exhaustive process to consider the alternatives to the Allotment in order to recapitalise the business and continue as a going concern, including sale of the business or assets and a capital raising, all of which were either unviable, inequitable or an inferior outcome to Shareholders compared with the Scheme.

Due to the fact the contribution of rescue capital by the MRDC Entities is one of the conditions precedent to DAE's debt restructure, in considering the value of PNG Air prior to the Allotment, we have assessed the value of PNG Air prior to the Scheme.

We have been provided with cash flow forecasts ("Management's Projections") for PNG Air's business prior to the Scheme, which show that whilst PNG Air can potentially grow their revenue base by increasing RPT revenue and increasing aircraft numbers to pre-COVID-19 numbers, the current terms of its aircraft lease agreements with DAE are prohibitive, resulting in a cash burn for the foreseeable future. In addition, the high costs of maintenance and increasing aircraft availability, exacerbates the cash flow shortfall, particularly in absence of the rescue capital proposed to be injected by the MRDC Entities. Utilising a discounted cashflow ("DCF") analysis and in absence of the Scheme and Allotment, the negative cash flows being forecast would result in a PGK nil enterprise value and outstanding debts in excess of any enterprise value.

As a cross check to the valuation based on a DCF analysis, we have considered the potential liquidation of the net assets of the business as considered as part of the Scheme assessment. We note that the Independent Expert[2] appointed in relation to the Scheme determined that in the event of a liquidation there would be PGK nil funds available to PNG Air Shareholders after settlement of balances outstanding with secured and unsecured creditors.

As such, whilst we have assessed the value of PNG Air before the Scheme on the basis of a knowledgeable and willing, but not anxious, seller that is able to consider alternative options to the Scheme and the Allotment, the ability of PNG Air to realise this value in absence of the Scheme is remote and should the Allotment not be approved, it is likely that PNG Air would become insolvent. Hence, we have also considered in our value assessment that if the Scheme is not implemented and a liquidation is required, the residual value for PNG Air Shareholders is likely to be PGK nil or limited.

Value of PNG Air after the Allotment

The Allotment both improves the balance sheet position of PNG Air by converting debt to equity and also provides PNG Air the rescue capital necessary to bring aircraft to operation and return to profitability. The overarching assumption is that the Scheme is approved and implemented. Given the interdependence between the Allotment and the debt restructure of major creditors under the Scheme, we have valued the business on the basis that the Scheme is implemented, the additional shares are issued to the MRDC Entities in accordance with the Allotment and to Nasfund in exchange for debt and on conversion of rescue capital.

[2] Matthew Byrnes of Grant Thornton Australia Limited

DCF Method

For the purpose of our valuation assessment of PNG Air post the Allotment utilising the DCF methodology, Grant Thornton Corporate Finance was provided with Management's Projections which we have incorporated into the GTCF Model to assess the fair market value of PNG Air. We have adopted 30 June 2025 as the terminal year as this is the time that PNG Air returns to pre-COVID levels, and a steady state based on expected flight demand. Management's Projections included specific cash flows relating to the implementation of the Scheme which includes the following adjustments:

- A renegotiation of aircraft leases to market rates and extension of lease terms, pursuant to the letter of intent ("LOI") between PNG Air and DAE, as well as between PNG Air and ATR[3].
- Repayment of arrears to the Internal Revenue Commission ("IRC") and National Airports Corporations ("NAC"). As the IRC and NAC are Government bodies, pursuant to their respective Letters of Intent, the arrears outstanding are to be repaid over an extended period.
- Capital injection from the PNG Government in relation to freight subsidies of K15 million, facilitated by MRDC.
- Capital injection of K35 million from the MRDC Entities which will be treated as debt until the shares are issued as part of the Allotment.

The table below sets out a summary of our valuation assessment of PNG Air Shares after the Allotment based on the DCF Method:

DCF Method - PNG Air Post-Allotment PGK'000	*Section Reference*	Low	High
Enterprise Valuation		198,494	210,110
Less Net Debt	*6.1.3*	(122,458)	(122,458)
Equity Value (Control Basis)		**76,036**	**87,652**
Number of Shares Outstanding (Fully Diluted)	*6.1.4*	8,224,982,471	8,224,982,471
Value per Share (Control Basis) (PGK per Share)		**0.0092**	**0.0107**
Minority Interest Discount	*6.1.4*	23%	23%
Value per Share (Minority Basis) (PGK per Share)		**0.0071**	**0.0082**

Source: GTCF analysis

Note: Minority interest discount has been calculated as the inverse of a 30% control premium.

In our valuation assessment of the Shares after the Allotment, we have relied on Management's Projections which was based on the following:

- *Aircraft Availability and Passenger Numbers* – a material increase in passenger revenue is forecast during the second half of CY2023 which is underpinned by an increase in daily passenger numbers as one additional ATR and one Dash 8 aircraft are returned to operation. As at the date of this report, we understand that there whilst there was a delay in returning these aircraft to operations they have now been returned to service, however an associated increase in passenger fares has somewhat mitigated any revenue impact of the delay in bringing the aircraft back to operation. A further two Dash 8 aircraft are assumed to return to operation during CY2024, driving an additional increase in passenger revenue. There are material restoration costs associated with return to operations of these additional aircraft assumed within the cash flow forecasts.
- The availability of the aircraft is expected to fluctuate over the forecast period due to scheduled maintenance. Historically the Company has had challenges in finding and retaining skilled

[3] Avions Regional de Transport GIE and ATR Eastern Support Pte Ltd. ATR is the lessor of various Dash 8 aircraft.

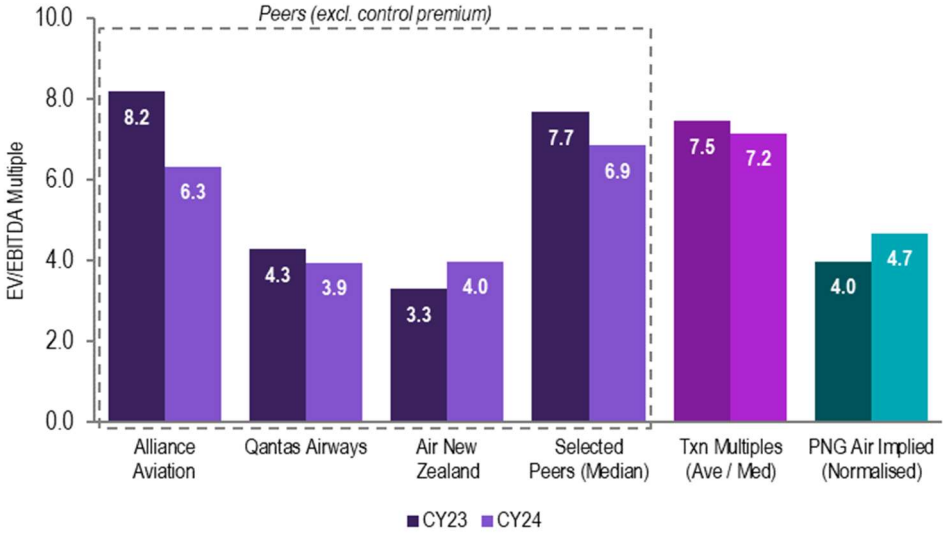
maintenance resources, which has resulted in aircraft being out of service for extended periods, disrupting the day to day operations. A number of experienced hires have been engaged, with an expectation that the improved maintenance function will ensure availability of aircraft to deliver the passenger revenue. However, despite this, there is a risk of unscheduled maintenance occurring and therefore the Company has 1 – 2 aircraft that will remain on reserve.

- *Gross Margin* – Management has assumed continued gross margin improvement to 2025, achieving a gross margin in excess of that achieved in CY2019. This is underpinned by an assumed decline in fuel costs from June 2023, which represents costs that are lower than what was experienced in CY2019 to CY2022. We have considered the impact of higher fuel costs in our sensitivity analysis (refer Section 6.1.5).
- In addition to fuel costs, direct employee costs are expected to increase in line with the return to scale. The current shortage of qualified pilots in the market has the potential to drive increases to pilots' salaries throughout the forecast period, with engineering costs (including salaries) are expected to increase in excess of those observed in CY 2019, due to the continued focus on improving the maintenance function.
- *Aircraft Lease Costs* – Management's Projections include a forecast for aircraft lease costs. As part of the Scheme, PNG Air renegotiated existing aircraft leases with DAE and ATR. In absence of the Scheme, lease costs for CY2023 approximated K64 million per annum. The debt restructure agreements with DAE and ATR included:
  - A reduction in aircraft rental costs to be paid to ATR, impacted by two Dash 8 aircraft currently under lease, being purchased by the Company as part of the proposed Scheme; and
  - In connection with the five leased Dash 8 aircraft with DAE, monthly aircraft rental costs per aircraft will be re-set to a reduced rate.
- The renegotiation of the aircraft leases is expected to reduce CY2024 aircraft lease expenses by almost 50%.
- *Maintenance Expenses and Capital Expenditure* – maintenance is a is significant contributor to the costs of PNG Air and is critical to enable aircraft availability. Maintenance and capital expenditure is expected to amount to cK65 million by CY2025. Maintenance costs and contributions to maintenance reserves are based on flying hours of each aircraft and these are expected to increase as PNG Air returns to normalised level in CY2025. In addition to the maintenance costs, Management's Projections include expenses associated with major maintenance and cyclical checks.
- In CY 2024, a provision for restoration costs of c. K18 Million has been included in Management's Projections to allow for significant maintenance works on Dash 8 aircraft prior to them being scheduled to return to operation.
- *Cash Injections* – during CY 2023 and CY 2024 cash injections relate to K15 million to be received from the PNG government in relation to a freight subsidy and K35 million in rescue capital from the MRDC Entities, in exchange for the issue of additional shares.
- *Net Debt* – Pro-forma net debt as at 30 June 2023 is estimated at K122.5 million after the implementation of the Scheme, which includes agreed outstanding balances of arrears and borrowings, excluding lease liabilities and amounts outstanding to IRC and NAC.
- *Discount Rate* – We have assessed the discount rate between 14.5% and 15.5% based on the WACC. In computing the WACC we have considered a country risk premium applicable to PNG as well as the specific risks of the underlying projections. Refer to Appendix B for further details.

Cross check – EBIT Multiple

We have considered the EBIT Multiple implied in our valuation having regard to a normalised Adjusted EBIT[4], of between K45 million to K50 million. We have adopted a normalised EBIT on the basis that between CY2023 and CY2025, PNG Air is in a ramp up phase in order to return the business to the pre-pandemic conditions. We note that the normalised earnings assume the renegotiation of the aircraft leases, resulting in a normalised EBIT higher than that observed in CY2019.

Earnings Multiples Observed in Comparable Companies



Source: S&P Global and GTCF analysis

The EBIT multiples observed from the selected peers typically lie between 4.0x and 8.0x on a minority basis. The EBIT multiples implied in our valuation assessment of between 4.0x and 4.7x is at the low-end of the selected peers. We consider this to be reasonable due to the following:

- A large number of the comparable companies are significantly larger than PNG Air, with operations covering both domestic and international throughout Asia Pacific and globally. These operators have well established and globally recognised brands.
- The selected peers have historically been more profitable than PNG Air, with EBIT margins ranging from 5% and 20% prior to the pandemic, with an average of 11.4%, compared to the 3.4% margin achieved by PNG Air in 2019. Whilst normalised EBIT assumes growth in margins, to levels broadly consistent with the peers, the significant maintenance costs expected to be incurred by PNG Air coupled with currency risks, place downward pressure on the multiples for PNG Air.
- PNG is exposed to the risks associated with operating in a developing country, with unique geography and macroeconomic conditions. The current pressures on the foreign exchange in PNG, with a number of PNG Air input costs being denominated in USD may obstruct the ability to achieve expected margins over the medium term.
- The EBIT Multiples determined for PNG Air represent a controlling interest whereas the comparable companies are presented on a minority interest basis.

[4] Post aircraft leases

Reasonableness Assessment

In considering the reasonableness of the Allotment, we have assessed the following advantages, disadvantages and other factors.

Advantages

RG 111 establishes that an offer is reasonable if it is fair. It might also be reasonable if, despite being not fair, there are sufficient reasons for the security holders to accept the offer in the absence of any superior proposal. In assessing the reasonableness of the Allotment, we have considered the following advantages, disadvantages and other factors.

Ability to Operate as a Going Concern

Since the COVID-19 pandemic, PNG Air has been loss making due to a number of key factors, including:

- PNG Air has relatively fixed cost base, and as a consequence of grounding planes and reducing routes during the pandemic, PNG Air has not generated sufficient revenue to allow for the ongoing costs of the business.
- Historically PNG has experienced significant disruption in its maintenance function due to the loss of key resources and the availability of aircraft spare parts. As a consequence, PNG Air experienced operational issues due to aircraft being unavailable due to lengthy and unexpected maintenance delays.
- Aircraft lease costs were above market rates and due to reduced passenger numbers and flight routes, PNG Air accumulated material arrears.
- During the COVID-19 pandemic, PNG Air lost considerable market share to its competitor Air Niugini who deployed jet aircraft on several of the Company's key target domestic routes, seizing market share away from PNG Air.

Whilst the Scheme provides the Company with an avenue to recapitalise its current debt position through debt extinguishment or renegotiated payment plans, the injection of capital through the Allotment provides the Company not only with the proceeds required to recapture market share and bring aircraft into operation, but also allow the Company to operate under more favourable aircraft lease arrangements. This will enable PNG Air to return to a financially sustainable position and provide a platform for future growth.

In the absence of the Allotment, the outstanding balances owed to the MRDC Entities will be treated as debt, with the ability for these creditors to call upon the debt owed. Further, due to the interdependency with DAE's LOI, should the Allotment not occur, the ability for the Company to renegotiate its aircraft leases may be threatened. Under these circumstances it is possible that PNG Air could face insolvency.

Improved share liquidity

PNG Air will seek quotation on PNGX of the additional shares to be issued in connection with the Allotment. In turn, PNG Air will also seek a lifting of the suspension of on-market trading in PNG Air shares which has applied since 2019. The resumption of on market trading in PNG Air shares will provide the Company's shareholders with improved liquidity for their shareholdings.

Strengthening market conditions

The aviation industry globally and in PNG is experiencing a period of high demand in the short term to medium term as airlines attempt to return to pre-COVID levels of operation. A global high inflationary environment, coupled with high demand has increased flight prices and therefore revenue available to PNG Air. With a more stable capital structure, PNG Air is well placed to take advantage of the current pent-up demand for aviation services and the potential to capture market share, through releasing additional aircraft and growing its fleet.

During the pandemic, the Company's key competitor Air Niugini deployed its international jet fleet to the domestic routes, capturing market share from PNG Air. It is expected that Air Niugini will redeploy the jet aircraft it placed the domestic routes to international routes, enabling PNG Air to compete in those routes and rebuild its market share.

Disadvantages

Dilution of voting rights

Following the Allotment, the MRDC Entities will move from 40.4% of the share capital to 83.4%. At the same time Nasfund, despite receiving additional capital through the debt to equity conversion, will reduce its voting power from 39.2% to 15.9%, leaving the Non-Associated Shareholders with only 0.7% of the voting rights of the Company. The Allotment results in a controlling stake for the MRDC Entities and as such the Non-Associated Shareholders have limited ability to influence or control the strategic direction of the Company.

However, as MRDC is a state-owned enterprise it is likely that any action by the MRDC Entities in relation to PNG Air in the future will be aligned to PNG's national interest.

Ongoing exposure to the risks of PNG Air

If the Scheme is implemented, PNG Air Shareholders will reduce their exposure to the ongoing risks associated with holding an investment in PNG Air, which are summarised below in a non-exhaustive manner:

- Exposure to the aviation industry – whilst the aviation is currently experiencing a high level of demand following the COVID-19 pandemic, it is likely that demand for aviation services will moderate in the medium term, as supply side constraints normalise. PNG Air's strategy is based on the assumption that it will be able to attract market share from Air Niugini. If PNG Air is unsuccessful in capturing that market share, it is possible that the current going concern issues may return.
- Key personnel risk: PNG Air's ability to develop and implement its business strategies is highly reliant on its ability operate an effective and efficient maintenance function. Historically the loss of key maintenance personnel in this function resulted in significant maintenance delays and reduced aircraft availability. Retaining key maintenance personnel is critical for PNG Air to maintain its current and projected operating performance.
- In addition to maintenance resources, there is a current global shortage of qualified pilots. The ability for PNG Air to continue as a going concern is heavily reliant on recruiting and retaining qualified pilots, which is likely to come at an increased cost, placing ongoing strains on profitability.
- Fuel costs – the global macroeconomic and geopolitical environment has led to volatility in fuel prices. Whilst it is expected that fuel prices will decline in the long term, shorter term volatility in fuel prices will place pressure on the profitability of PNG Air. This is exacerbated by the market constraints in PNG with PNG Air reliant on the sole importer of fuel to PNG.
- Foreign exchange issues – due to a shortage of foreign exchange in PNG, the central bank of PNG has rationed foreign exchange reserves. Much of PNG Air's supply base is denominated in USD and

the rationing of foreign exchange has led to fuel shortages and supply chain constraints, which is expected to continue for the foreseeable future.

Other Factors

Implications if the Allotment is not approved

The contribution of capital by the MRDC Entities is one of the conditions precedent to the letter of intent between PNG Air and DAE, a major creditor, and the key driver enabling reduced aircraft lease cost. In the event the Allotment does not proceed, the MRDC Entities' outstanding balance of K45 million including K20 million in rescue capital plus K5m of advisor fees are likely to be treated as debt and payable on demand and the MRDC Entities are unlikely to contribute the additional rescue capital required to support the business operations of PNG Air. Given the financial circumstances of PNG Air, the Company does not have sufficient funds to repay the debt owing to the MRDC Entities and insolvency may be a potential outcome. Further, if the Allotment does not proceed, the current agreement with DAE would have to be renegotiated, with uncertainty surrounding the outcome.

Directors' Recommendations and Intentions

As set out in the Explanatory Memorandum, as at the date of this Report, subject to an independent expert concluding and continuing to conclude that the Allotment is in the best interests of the PNG Air shareholders, the Board has unanimously recommended that the Shareholders vote in favour of the Allotment.

Reasonableness Conclusion

Based on the qualitative factors identified above, it is our opinion that the Allotment is REASONABLE to PNG Air Shareholders.

Overall Conclusion

After considering the abovementioned quantitative and qualitative factors, Grant Thornton Corporate Finance has concluded that the Allotment is FAIR AND REASONABLE and hence in the BEST INTERESTS of the PNG Air Non-Associated Shareholders in the absence of a superior alternative proposal emerging.

Other Matters

Grant Thornton Corporate Finance has prepared a Financial Services Guide in accordance with the Corporations Act. The Financial Services Guide is set out in the following section.

The decision of whether or not to vote in favour of the Allotment is a matter for each Shareholder to decide based on their own views of the value of PNG Air and expectations about future market conditions, together with PNG Air's performance, risk profile and investment strategy. If the Shareholders are in doubt about the action they should take in relation to the Allotment, they should seek their own professional advice.

Yours faithfully

GRANT THORNTON CORPORATE FINANCE PTY LTD

JANNAYA JAMES
Director

ANDREA DE CIAN
Director

22 November 2023

Financial Services Guide

1 Grant Thornton Corporate Finance Pty Ltd

Grant Thornton Corporate Finance carries on a business, and has a registered office, at Level 22, Tower 5 Collins Square, 727 Collins Street, Melbourne 3008. Grant Thornton Corporate Finance holds Australian Financial Services Licence No 247140 authorising it to provide financial product advice in relation to securities and superannuation funds to wholesale and retail clients.

Grant Thornton Corporate Finance has been engaged by PNG Air to provide general financial product advice in the form of an independent adviser's report in relation to the Allotment.

2 Financial Services Guide

This Financial Services Guide ("FSG") has been prepared in accordance with the Corporations Act, 2001 and provides important information to help retail clients make a decision as to their use of general financial product advice in a report, the services we offer, information about us, our dispute resolution process and how we are remunerated.

3 General Financial Product Advice

In our report we provide general financial product advice. The advice in a report does not take into account your personal objectives, financial situation or needs.

Grant Thornton Corporate Finance does not accept instructions from retail clients. Grant Thornton Corporate Finance provides no financial services directly to retail clients and receives no remuneration from retail clients for financial services. Grant Thornton Corporate Finance does not provide any personal retail financial product advice directly to retail investors nor does it provide market-related advice directly to retail investors.

4 Remuneration

When providing the Report, Grant Thornton Corporate Finance's client is the Company. Grant Thornton Corporate Finance receives its remuneration from the Company. In respect of the Report, Grant Thornton Corporate Finance will receive from PNG Air a fee of A$125,000 (plus GST) which is based on commercial rates, plus reimbursement of out-of-pocket expenses for the preparation of the report. Our directors and employees providing financial services receive an annual salary, a performance bonus or profit share depending on their level of seniority.

Except for the fees referred to above, no related body corporate of Grant Thornton Corporate Finance, or any of the directors or employees of Grant Thornton Corporate Finance or any of those related bodies or any associate receives any other remuneration or other benefit attributable to the preparation of and provision of this report.

5 Independence

Grant Thornton Corporate Finance is required to be independent of PNG Air in order to provide this report. The guidelines for independence in the preparation of independent expert's reports are set out in RG 112 *Independence of expert* issued by ASIC. The following information in relation to the independence of Grant Thornton Corporate Finance is stated below.

"Grant Thornton Corporate Finance and its related entities do not have at the date of this report, and have not had within the previous two years, any shareholding in or other relationship with PNG Air (and associated entities) that could reasonably be regarded as capable of affecting its ability to provide an unbiased opinion in relation the Allotment.

Grant Thornton Corporate Finance has no involvement with, or interest in the outcome of the Allotment, other than the preparation of this report.

Grant Thornton Corporate Finance will receive a fee based on commercial rates for the preparation of this report. This fee is not contingent on the outcome of the Allotment. Grant Thornton Corporate Finance's out of pocket expenses in relation to the preparation of the report will be reimbursed. Grant Thornton Corporate Finance will receive no other benefit for the preparation of this report.

Grant Thornton Corporate Finance considers itself to be independent in terms of RG 112 "Independence of expert" issued by the ASIC."

6 Complaint's Process

Grant Thornton Corporate Finance has an internal complaint handling mechanism and is a member of the Australian Financial Complaints Authority. All complaints must be in writing and addressed to the Chief Executive Officer at Grant Thornton Corporate Finance. We will endeavour to resolve all complaints within 30 days of receiving the complaint. If the complaint has not been satisfactorily dealt with, the complaint can be referred to the Australian Financial Complaints Authority who can be contacted at:

Australian Financial Complaints Authority Limited
GPO Box 3
Melbourne, VIC 3001
Telephone: 1800 931 678

Grant Thornton Corporate Finance is only responsible for this report and FSG. Complaints or questions about the General Meeting should not be directed to Grant Thornton Corporate Finance. Grant Thornton Corporate Finance will not respond in any way that might involve any provision of financial product advice to any retail investor.

7 Compensation Arrangements

Grant Thornton Corporate Finance has professional indemnity insurance cover under its professional indemnity insurance policy. This policy meets the compensation arrangement requirements of section 912B of the Corporations Act, 2001

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1. Overview of the Scheme and Allotment

1.1. Introduction

In 2022, PNG Air commenced a debt restructuring process by way of a Scheme of Arrangement with the key creditors of PNG Air ("Scheme Creditors"). The Scheme is conditional on the Scheme Creditors voting to approve the Scheme. Whilst the Scheme is not the subject of this report, the Scheme is a condition precedent to the Allotment, and the Allotment is critical to DAE's agreement with PNG Air.

The Scheme Creditors are listed as follows:

No	Scheme Creditor
1	Internal Revenue Commission ("IRC")
2	National Airports Corporation ("NAC")
3	Bank of South Pacific Limited ("BSP")
4	DAE Group Holdings Ltd ("DAE")
5	Avions De Transport Regional GIE and ATR Eastern Support Pte Ltd (Collectively, "ATR")
6	Jasmore Holdings Limited ("Jasmore")
7	PNG Sustainable Development Program Limited ("PNGSDP")
8	StandardAero Atlantic Inc., Standard France and Vector Aerospace Australia Pty Ltd ("StandardAero")
9	Mineral Resources Development Company Ltd, Mineral Resources OK Tedi No. 2 Ltd and Mineral Resources Star Mountains Ltd (Collectively, "MRDC Entities")
10	National Superannuation Fund ("Nasfund")

Source: Management

Under the Scheme, separate LOIs setting out the terms and conditions of the arrangement are entered into by the Company and the respective Scheme Creditors. The arrangements vary depending on the specific circumstances of the Scheme Creditors. We summarise the key terms relating to the LOIs with MRDC and Nasfund in Section 1.2. Details of the key terms of conditions of each of the LOIs of remaining creditors are confidential and therefore not disclosed as part of this report.

MRDC Entities

A LOI dated 18 September 2023 was executed and agreed between the Company and MRDC Entities in relation to the restructuring proposal to convert the existing debt to equity and a commitment to contribute rescue capital plus payment of K5 million for advisor's fees.

Prior to the Allotment, the MRDC Entities (directly and indirectly) hold 124,500,000 shares which represents c. 40.4% of the total outstanding shares in PNG Air.

The key terms of the arrangement are as follows:

- The MRDC Entities have committed to contribute K50,000,000 of rescue capital to PNG Air. The payment schedule is as follows:
  - K5,000,0000 was paid in March 2023.
  - K10,000,000 was paid in June 2023.
  - K10,000,000 is payable in September 2023.
  - K5,000,000 is payable in October 2023.

- K10,000,000 is payable in February 2024.
- K10,000,000 is payable in March 2024.

- On implementation of the Scheme, the above rescue contributions will be converted from debt to equity by way of issuing additional shares to the MRDC Entities at 0.843 Toea per share.
- The MRDC Entities will provide a guarantee capped at US$5,000,000 to DAE.
- The MRDC Entities will use its best endeavour to facilitate a freight subsidy payment of up to K15,000,000 to PNG Air.
- A total historical capital contribution of K25,000,000 made between 2015 and 2018 will be converted to equity by way of an issue of fully paid ordinary shares upon the Shareholder's approval at an extraordinary general shareholder meeting. These historical contributions have been recognised as equity in its financial statements, but no shares have been issued yet to the MRDC Entities in respect of these contributions. The Company will issue 208,333,333 shares to MRDC at 12 Toea per share in relation to the historical capital contributions, based on the last trading price before on-market trading in PNG Air shares was suspended in January 2019.

The resultant issue of shares will result in the MRDC Entities holding c 83.37% of the share capital.

The conditions precedent to the LOI with the MRDC Entities include:

- The Scheme involves the issuing of additional shares to the MRDC Entities that must be approved by ordinary resolution at an extraordinary general shareholder meeting and the additional share will not be issued to the MRDC Entities until the Scheme is approved by the Scheme Creditors and the National Court of PNG. In accordance with the PNGX Listing Rules, the MRDC Entities will not be permitted to vote on any shareholder resolution to approve the issuing of the additional shares to any MRDC Entity.
- Under the PNG Takeovers and Mergers Code, an independent advisor is required to provide a report to the Shareholders on the merits of the proposed allotment of shares to the MRDC Entities, having regard to the interests of the Shareholders who may vote on the Allotment.
- MRDC Entities will not take any action to recover any historical capital contribution, or the rescue payments already made while PNG Air is using reasonable endeavours to obtain the required approvals.
- National Court approval of the Scheme in accordance with Section 250 of the Companies Act

As at 30 June 2023, the status of the outstanding debt owed to the MRDC Entities:

- The outstanding debt owing to the MRDC Entities is K40,000,000, comprising the historical capital contributions and recue capital paid to date.
- There is a liability of K15,000,000 representing the contributions made in March 2023 and June 2023, included in the balance sheet of PNG Air as an unsecured loan from the MRDC Entities.

National Superannuation Fund

A LOI dated 27 September 2023 was executed between the Company and Nasfund to provide a restructuring proposal to convert the historical capital contributions made by Nasfund in 2016 and 2017 to equity.

Nasfund currently hold 121,000,000 ordinary shares which represents c. 39.2% of the total outstanding shares in PNG Air.

As at 30 June 2023, the historical capital contribution owing to Nasfund is K45,563,000.

Following the Allotment, Nasfund will hold 15.87% of the fully diluted shares of the Company.

2. Purpose and Scope of the Report

2.1. Purpose

The Scheme involves PNG Air issuing additional shares to the MRDC Entities and Nasfund. PNG Air will comply with the requirements of the *Companies Act*, the PNGX Listing Rules, the Takeovers & Mergers Code and PNG Air's Constitution before issuing those shares.

If the Shareholders vote to approve the issuing of all the proposed additional shares to the MDRC Entities and Nasfund, the likely shareholding of these entities will be:

- MDRC Entities – c. 83.37% of the issued Shares; and
- Nasfund – c. 15.87% of the issued Shares.

The Takeovers and Mergers Code 2023 (PNG)

The Code issued by the Securities Commission of Papua New Guinea ("SCPNG") pursuant to Rule 12 (Fundamental Rule) and except as provided in Rule 13 of the Code (Exceptions to Fundamental Rule) prohibits a person who holds or controls 20% or more of the voting rights in a code company from owning or controlling an increased percentage of the voting rights in the code company.

Rule 13 provides an exception (among others) whereby the issue of shares may be approved by an ordinary resolution of the code company. Further, Rule 32 of the Code provides that the directors of the code company must obtain a report from an independent adviser on the merits of the proposed acquisition or allotment of shares having regard to the interests of those persons who may vote to approve that acquisition or allotment. For the purposes of the Code, PNG Air is defined as a code company.

Pursuant to Rule 32 of the Code, an Independent Adviser's Report is to accompany a notice of meeting to be sent to the shareholders of the Company. Rule 32 of the Code provides that the purpose of the Independent Adviser's Report is to provide an opinion on the merits of the proposed Allotment and whether or not it is fair and reasonable having regard to the interests of those persons voting to approve the Allotment.

The Directors of PNG Air have requested that Grant Thornton Corporate Finance prepare an independent expert's report to express an opinion on the merits of the proposed allotment of shares to the MRDC Entities, having regard to the interests of the PNG Air shareholders who may vote on the Allotment.

2.2. Basis of Assessment

The Code does not provide any specific guidance as to the content of the IAR, as such Grant Thornton Corporate Finance has had regard to equivalent guidance provided by ASIC, including RG 111 and RG 112. The IAR also includes other information and disclosures as required by ASIC.

RG 111 establishes certain guidelines in respect of independent expert's reports prepared for the purposes of the Corporations Act. RG 111 is framed largely in relation to reports prepared pursuant to Section 640 of the Corporations Act and comments on the meaning of "fair and reasonable" in the context of a takeover offer. RG 111 requires an independent expert report prepared for a change of control transaction implemented by way of scheme of arrangement to undertake an analysis substantially the same as for a takeover bid.

In our opinion, the most appropriate way to evaluate the fairness of the Allotment is to compare the fair market value of PNG Air on a control basis prior to the Allotment with the fair market value of PNG Air on a minority basis following the Allotment.

In considering whether the Allotment is in the best interests of PNG Air's shareholders, we have considered a number of factors, including:

- Whether the Allotment is fair.
- The implications to PNG Air Shareholders if the Allotment is not approved.
- Other likely advantages and disadvantages associated with the Allotment.
- Other costs and risks associated with the Allotment that could potentially affect PNG Air Shareholders.

2.3. Independence

Prior to accepting this engagement, Grant Thornton Corporate Finance (a 100% subsidiary of Grant Thornton Australia Limited) considered its independence with respect to the Allotment with reference to RG 112 issued by ASIC.

Grant Thornton Corporate Finance has no involvement with, or interest in, the outcome of the approval of the Scheme or Allotment other than that of an independent expert. Matthew Byrnes of Grant Thornton Australia Limited acted as an Independent Expert in relation to the Scheme. Grant Thornton does not believe that it has any relationships with PNG Air that would in any way reduce our independence on this valuation engagement. Grant Thornton Corporate Finance is entitled to receive a fee based on commercial rates and including reimbursement of out-of-pocket expenses for the preparation of this report.

Except for these fees, Grant Thornton Corporate Finance will not be entitled to any other pecuniary or other benefit, whether direct or indirect, in connection with the issuing of this report. The payment of this fee is in no way contingent upon the success or failure of the Allotment.

In our opinion, Grant Thornton Corporate Finance is independent of PNG Air and its Directors, and all other relevant parties of the Allotment.

2.4. Consent and Other Matters

Our report is to be read in conjunction with the Explanatory Memorandum dated on or around 24 November 2023 in which this report is included and is prepared for the exclusive purpose of assisting PNG Air Shareholders in their consideration of the Allotment. This report should not be used for any other purpose.

Grant Thornton Corporate Finance consents to the issue of this report in its form and context and consents to its inclusion in the Explanatory Memorandum.

This report constitutes general financial product advice only and in undertaking our assessment, we have considered the likely impact of the Allotment to PNG Air Shareholders as a whole. We have not considered the potential impact of the Allotment on individual PNG Air Shareholders. Individual shareholders have different financial circumstances, and it is neither practicable nor possible to consider the implications of the Allotment on individual shareholders.

The decision of whether or not to approve the Allotment is a matter for each PNG Air Shareholder based on their views on the value of PNG Air and expectations about future market conditions, together with PNG Air's performance, risk profile and investment strategy. If PNG Air Shareholders are in doubt about the action they should take in relation to the Allotment, they should seek their own professional advice.

2.5. Compliance with APES 225 Valuation Services

This report has been prepared in accordance with the requirements of the professional standard APES 225 Valuation Services ("APES 225") as issued by the Accounting Professional & Ethical Standards

("APES") Board. In accordance with the requirements of APES 225, we advise that this assignment is a Valuation Engagement as defined by that standard as follows:

"An Engagement or Assignment to perform a Valuation and provide a Valuation Report where the Member is free to employ the Valuation Approaches, Valuation Methods, and Valuation Procedures that a reasonable and informed third party would perform taking into consideration all the specific facts and circumstances of the Engagement or Assignment available to the Member at that time."

2.6. Other Disclosures

Rule 32 of the Code requires an independent adviser's report in relation to the merits of any proposed acquisition under rule 13(c) or allotment under rule 13(d) having regard to the interests of those persons who may vote to approve the acquisition or allotment.

Grant Thornton is licensed under the Corporations Act as an investment adviser and licensed dealer in securities. The qualifications and experience of the personnel involved in the preparation of this report are outlined below:

Name	Position	Qualification
Jannaya James	Director	Bachelor of Arts Bachelor of Business Masters of Applied Finance Affiliate of Chartered Accountants Australia and New Zealand Accredited Business Valuer of CAANZ
Andrea De Cian	Director	Bachelor of Economics (Accounting) Chicago Business School - Leveraged Transaction Chicago Business School - Advanced Corporate Finance Arthur Andersen Business School, Milan, Italy - International and Italian Accounting Principles Rome School of Finance - Business Valuation

3. Industry Overview

3.1. Introduction

The airline industry in PNG is an essential component of the country's transportation infrastructure. Situated in the South Pacific region, PNG is a nation characterised by its diverse geography which includes rugged mountains, dense rainforests, and numerous islands, each with its own unique challenges for transportation and connectivity. Around 85% of the nation's population reside in rural regions, while over a million people reside in Port Moresby.

As a result, aviation plays a crucial role in bridging these geographical gaps, allowing for the movement of people, goods, and services across the country. Several domestic airlines, including PNG Air and Air Niugini, serve as lifelines for both urban centres and remote communities, where airlines serve not only as commercial carriers but as vital links that facilitate economic activity and essential services throughout the country.

PNG maintains a network of 24 airports offering scheduled flight services. The largest among them is Port Moresby, also known as Jacksons International Airport or Port Moresby Airport, which provides connections to 29 destinations spanning across 7 different countries.[5]

3.2. PNG Aviation Industry

Competitive Landscape

The PNG airline industry is composed of several players that provide air transport services to the country’s diverse and remote regions.

The main airline is Air Niugini, which is the national carrier and operates domestic and international flights from Port Moresby and Lae, as well as international routes in Asia, Oceania, and Australia. Air Niugini is the main provider of RPT services in PNG. The airline is essential for PNG’s economy and transportation needs, as there is no road connecting Port Moresby to other towns. The airline has a fleet size of 25 aircraft and provides air passenger and air freight services both domestically and internationally to 25 and 11 destinations respectively. Air Niugini also has a subsidiary company, Link PNG, which flies to smaller airports and offers charter services. Air Niugini’s freight services cater mainly to freight forwarders, large mining companies and other businesses, while its charter services, which are handled by Link PNG, target mostly corporate clients from the mining and petroleum sectors.[6]

Other players in the industry include Tropic Air, which is an air charter company in Africa that also operates in Papua New Guinea. Tropic Air was founded in the early 1990s in Kenya, where it operates a fleet of fixed wing Cessna aircraft and Squirrel AS 350 B3 helicopters. Tropic Air flies to various destinations in Kenya, Ethiopia, South Sudan, Uganda, Tanzania, Rwanda, and beyond.[7]

MAF Papua New Guinea is a Christian organization that uses aviation and technology to serve people in isolated areas. The airline has ten aircraft that fly to approximately 200 airstrips, providing help to the rural population. MAF depends on support from many parts of the world to be able to keep flying in PNG. However, the COVID-19 pandemic has affected the financial situation of many donors and supporters, making it harder for MAF to sustain its operations.[8]

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[5] Airports in Papua New Guinea, Flight Connections, 2023
[6] Our History, Air Niugini, 2023
[7] About Tropic Air, Tropic Air, 2023
[8] MAF Papua New Guinea, 2023

Qantas has resumed flights to Port Moresby from Brisbane, Australia in 2022, after a two-year hiatus, providing some competition and opportunities for cooperation with Air Niugini and PNG Air.

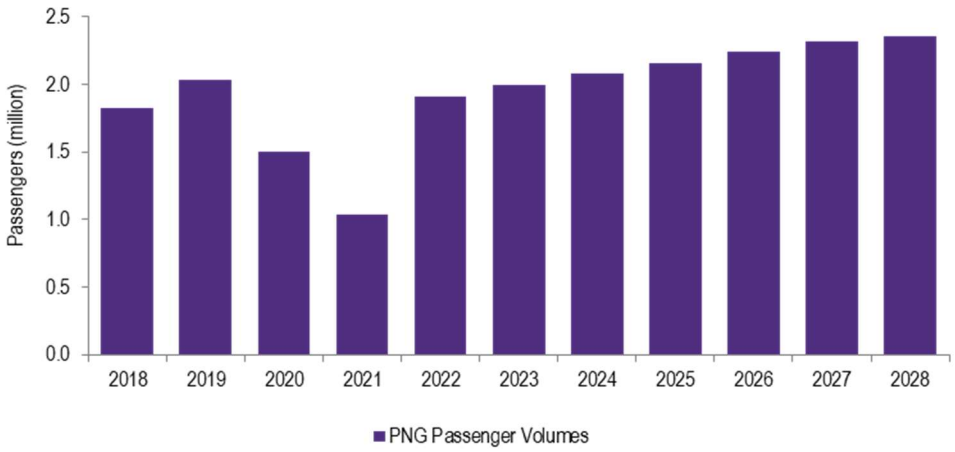
Challenges

The global aviation industry has faced numerous challenges over the past few years, which include:

- *Fuel Cost and Efficiency:* The airline industry has been affected by the availability and costs of aviation fuel for decades. The financial performance of airline firms is directly influenced by the spike in jet fuel prices. In 2021, the spending on airline fuel rose by almost 30% due to the relaxation of travel restrictions and the initial recovery in global passenger demand. The high fuel prices had a limited impact on consumer travel demand. However, this relation between price insensitivity and demand could change in 2023, once consumers have satisfied their travel needs.[9]
- *Aftermath of the COVID-19 Pandemic:* The pandemic presented an extreme challenge for aviation companies, with impacts persisting even after the lifting of travel restrictions in many parts of the world. According to the International Air Transport Association ("IATA"), the pandemic reversed almost 20 years of growth in passenger traffic. The report predicts that by 2040, air traffic will still be 6% lower than IATA's pre-pandemic forecast, highlighting the long-lasting effect of the COVID-19 crisis.[10] The COVID-19 pandemic has also caused a global pilot shortage.
- *Global Conflicts:* The conflict between Russia and Ukraine has led to various sanctions and several no-fly zones, which have created challenges for the aviation sector. The conflict has also caused oil price fluctuations, which could affect the fuel costs and profitability of airlines. In addition, current tensions in the Middle East are exacerbating fuel costs and availability.
- *Safety and Security:* Ensuring the safety and security of their passengers, crew, and the greater public is the top priority in the airline industry. Even with workforce challenges and the issues facing the airline industry, they maintain a steadfast commitment to safety and security. However, airlines also face threats from terrorism, cyberattacks, natural disasters, and human error, which require constant vigilance and innovation.

Passenger Numbers

Historic PNG Aircraft Passenger Volumes



Source: Statista

[9] The Most Important Issues Facing the Aviation Industry, U.S Chamber of Commerce, 2023
[10] Top 8 Challenges for the Aviation Industry in the Post-COVID 19 Era, Global Market Insights, 2022

In August 2023, there was a 28.4% year-on-year ("Y-o-Y") increase in industry-wide revenue passenger kilometres ("RPKs"), bringing them to 95.7% of the levels observed in August 2019. RPKs for the Asia Pacific region reflected a strong recovery, 7.4% ahead of the prior year, but still below pre-COVD levels. Seat capacity, gauged by available seat-kilometres ("ASKs"), increased by 24.9% Y-o-Y for the airline industry and remained just 3.1% below the levels observed in 2019.[11]

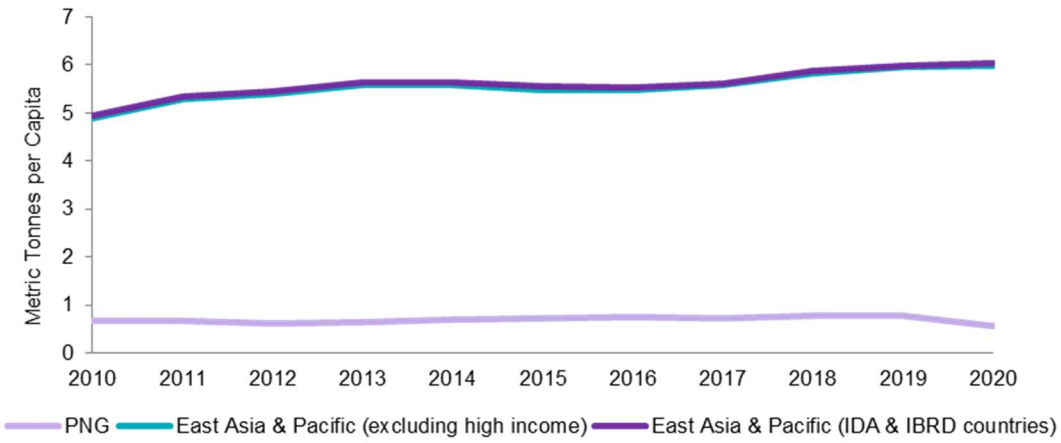
Airlines across all regions have experienced traffic growth and enhanced passenger load factors ("PLFs") compared to the same month in 2022. On a global scale, PLFs have consistently approached the figures from 2019, suggesting a robust demand for air travel and favourable financial outcomes for airlines.[12]

Air Passenger Market Metrics		Year-on-Year Growth		
August 2023 - Year-on-Year Growth	*Market Share*	RPK	ASK	PLF
Industry	*n/a*	28.4%	24.9%	2.3%
Africa	*2.1%*	24.8%	24.3%	0.3%
Asia Pacific	*22.1%*	73.4%	57.7%	7.4%
Europe	*30.8%*	11.6%	10.2%	1.1%
Latin America	*6.4%*	17.6%	14.5%	2.2%
Middle East	*9.8%*	26.4%	21.6%	3.2%
North America	*28.8%*	12.6%	13.0%	-0.3%

Source: IATA Sustainability and Economics

Sustainability

CO_2 Emissions



Source: World Bank

The airline industry in PNG faces several sustainability issues, such as the impact of the COVID-19 pandemic, the lack of funding and capacity for climate change adaptation and mitigation, and the risk of fuel shortages. While domestic CO_2 emissions are relatively low when compared to other countries, climate change remains a challenge for the airline industry in PNG. It poses threats to the environment, biodiversity, and human health. The country is vulnerable to natural disasters such as cyclones, floods,

[11] IATA Air Passenger Market Analysis, August 2023
[12] IATA Air Passenger Market Analysis, August 2023

droughts, and landslides, which can damage infrastructure and disrupt air transport services[13]. The airline industry also contributes to greenhouse gas emissions, which need to be reduced to meet the global targets of the Paris Agreement. However, the country lacks adequate funding, manpower, and capacity building to implement effective climate change adaptation and mitigation measures.[14]

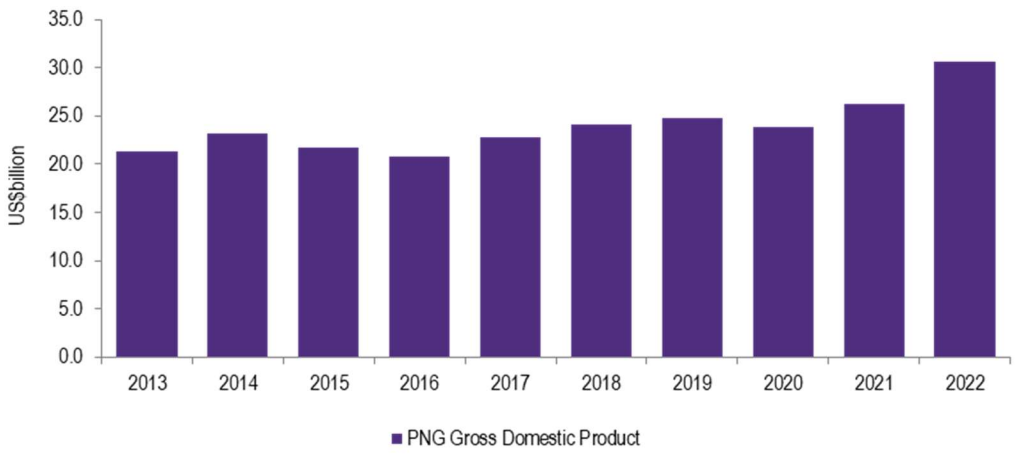
3.3. PNG Macroeconomic Overview

PNG boasts a two-tiered economy, encompassing a substantial public and corporate sector, alongside a significant subsistence farming-based community. The nation's economic expansion primarily hinges on the export of natural resources and agricultural products, underpinning its substantial dependence on imported goods. The economic fortunes of PNG are intricately linked to global commodity prices.

Historic Performance

PNG's economic trajectory has exhibited volatility, primarily intertwined with foreign direct investment in the resource sector and the movement in commodity prices. Over the period from 2015 to 2020, the nation recorded an average GDP growth rate of 2.8%, predominantly spurred by the extraction of valuable natural resources, including gold and liquefied natural gas ("LNG"). In contrast, growth in non-resource sectors lagged significantly, averaging merely 0.7%. Given that annual population growth exceeded 3.0%, it is probable that the average living standards of PNG citizens saw a decline during this timeframe.[15]

Historic PNG Gross Domestic Product

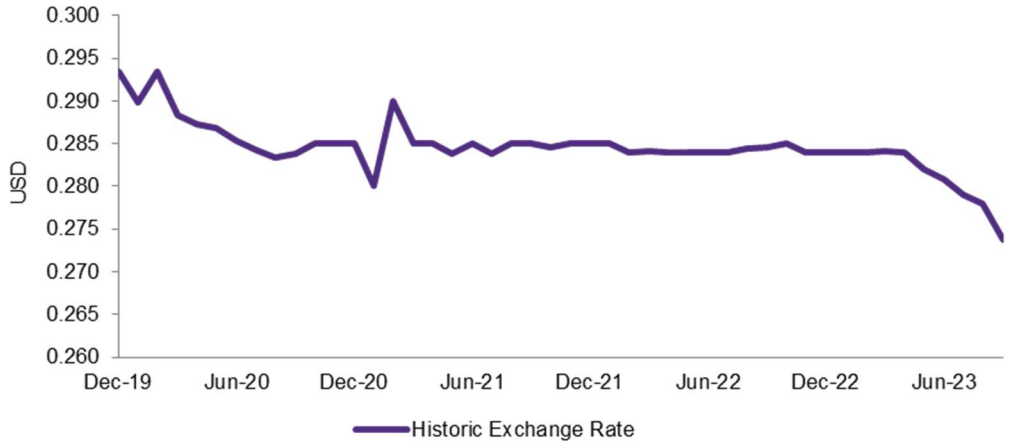


Source: World Bank

PNG's economic performance is a result of its limited economic foundations. Although the resource sector is expected to spearhead forthcoming growth, it is imperative for PNG to broaden its economic landscape and enhance its ability to navigate economic fluctuations, fostering enduring and all-encompassing growth. Various challenges demand attention, such as the insufficient government revenue collections, a mounting wage expenditure, governance deficiencies, an inflated exchange rate, and restrictions on foreign exchange transactions.

[13] Turbulent Times: Papua New Guinea's Airlines rise to the Challenge, Robert Upe, 13 May 2020
[14] Improved Climate Change Mitigation and Adaptation, UNDP, December 18, 202
[15] Pacific Economic Monitor, August 2023

Historic Kina-USD Exchange Rate



Source: S&P Global

The PNG economy has historically faced a shortage of foreign exchange, leading to a high backlog of orders, making it difficult for businesses to access foreign currency. This backlog has also contributed to the historic inflexibility in the Kina exchange rate. In response to this, the Bank of Papua New Guinea started rationing the market's access to currency, as opposed to letting the Kina depreciate. The bank made a one-off release of funds in May in an attempt to clear the existing order backlog, resulting in a depreciation of the Kina as demand for foreign currency increased.

Outlook

The GDP growth projection for 2023 has been downgraded due to a weaker than anticipated economic performance in the current year. Various sectors have reported a significant decrease in sales, ranging from 20% to 30% during the first half of the year. Import figures have witnessed a sharp 61% decline year on year in the first quarter, spanning all product categories, including machinery. This suggests a possible delay or abandonment of private investments.

Furthermore, the deceleration can be attributed to the challenges faced by businesses in procuring foreign exchange, with the central bank, the Bank of Papua New Guinea, releasing a monthly allocation of only US$100 million, which falls short of the prevailing demand. The Bank of Papua New Guinea has recently released updates regarding the exchange rate policy. The bank will be looking to implement a market-based exchange rate coming into 2024, however still face issues clearing current outstanding orders for Kina. Analysts believe the Kina is likely to depreciate further if importers gain access to more foreign exchange.[16]

Additional factors contributing to the slowdown include disruptions in power and water supply, frequent flight cancellations due to technical issues with Air Niugini's aging aircraft fleet, and complications arising from the implementation of a new operating system at the Bank of South Pacific, the country's largest bank. These issues have had repercussions on businesses and consumers, manifesting as delayed staff payments, difficulties in reconciling financial data, and disruptions in banking operations.[17]

Conversely, there are positive aspects affecting the current economic landscape. Several sectors are reaping the rewards of the resumption of international travel and the gradual alleviation of global supply chain challenges. Notably, this positive trend is benefiting areas such as accommodation and dining establishments, communication services, and the real estate sector. Moreover, additional government

[16] Development Policy Centre, October 2023
[17] Asian Development Outlook, September 2023

expenditures are expected to inject some stimulus into the economy this year. The outlook for LNG production has also seen improvement, thanks to higher-than-anticipated output in the first quarter. However, it's worth noting that the overall LNG production for 2023 is still likely to be lower than the levels seen in 2022. The growth forecast for 2024 remains unchanged, with the impetus for growth coming from non-resource sector activities.

Fuel supply challenges resurfaced in July 2023, leading to the government's declaration of a 30-day national emergency. This action was prompted by the suspension of domestic flights by the two major airlines. The reason behind this suspension was Puma Energy, the nation's sole aviation fuel provider, announcing its intention to curtail fuel distribution due to a dispute with the central bank concerning foreign exchange and regulatory matters. Nonetheless, the government's objective is to guarantee a consistent fuel supply and to investigate the possibility of introducing competition within the fuel market.[18]

In the first quarter of 2023, the headline inflation rate experienced a moderation, and the April forecast for the full-year inflation remains unaltered. Notably, Y-o-Y price increments in several categories, such as clothing and footwear, communication, health, and recreation, registered below 2.0%. Additionally, prices for alcoholic beverages, tobacco, and betel nut observed a noteworthy decline, down by 6.3% year on year, while education costs dropped by 22.9%. Nevertheless, certain essential consumer goods continued to face upward price pressures, including food and non-alcoholic beverages, which rose by 8.7% year on year, household equipment by 12.2%, and transportation by 4.9%. The Kina Facility Rate remains steady at 3.5%.

Papua New Guinea				
Selected Economic Indicators	2021	2022	2023F	2024F
GDP Growth	0.1%	3.2%	2.4%	2.6%
Inflation	4.5%	5.3%	5.0%	5.0%

Source: Bank of Papua New Guinea, Asian Development Bank

PNG's economy finds itself at a critical juncture. Following nearly a decade of economic challenges, the potential for a positive transformation is on the horizon. The rebound from the impact of the COVID-19 pandemic is already in motion, and the fresh IMF program holds the promise of assisting the government in addressing persistent macroeconomic policy issues, particularly the scarcity of foreign exchange, which as alluded to earlier, has hindered economic progress. Further adjustments to the exchange rate might be required to fully reinstate currency convertibility, an essential prerequisite for the economy to embark on a sustainable growth trajectory that benefits all citizens.

[18] *A national emergency has been declared in PNG over the country's fuel supply. What does this mean, and could petrol run out?,* Tim Swanston, ABC, 3 August 2023

4. Company Overview

4.1. Introduction

PNG Air is the second largest domestic airline in PNG, after Air Niugini (PNG's national carrier), and has been in operation since 1987. Jacksons International Airport in Port Moresby is the Company's primary hub and the location of the headquarters where the majority of staff are based. With approximately 600 staff, PNG Air services 24 destinations across PNG. PNG Air operates the country's youngest aircraft fleet consisting of seven ATR and ten Dash-8 aircraft.

The Company was listed on the PNGX in 2008 but has suspended trading since 2019 due to the non-provision of audited financial statements. Consequently, the Company was prohibited from conducting further on-market capital raises and the proposed restructure under the Scheme is intended to remedy this situation.

Following recapitalisations in 2014, the MRDC Entities and Nasfund currently own a c. 40% interest in PNG Air respectively. A summary of their shareholding is presented below:

Pre-Scheme - Top shareholders			
Rank	Name	No. of shares	Interest (%)
1	MRDC Entities	124,500,000	40.4%
2	Nasfund	121,000,000	39.2%
Top 2 shareholders total		**245,500,000**	**79.6%**
Remaining shareholders		**62,792,080**	**20.4%**
Total ordinary shares outstanding		**308,292,080**	**100.0%**

Source: Management

The timeline of key events since 2008 is summarised as follows:

PNG Air Event Timeline

Event	Year	Comments
1	2008	PNG Air listed on PNGX and 105m shares were issued.
2	2008	PNG Air commenced flights to Brisbane though partnership with Virgin Blue.
3	2011	PNG Air gained access to markets in New Zealand and Australia through partnership with Virgin Blue.
4	2013	The airline ceased international services to focus on expanding domestic operations.
5	2014	PNG Air undertook an ownership restructure with the airline buying back shares. MRDC and Nasfund injected PGK20m for new shares.
6	2014	PNG Air signed a contract to acquire 6 ATR 72-600 aircraft.
7	2014	Rebranding and fleet conversion from Dash-8s to ATRs within the next five years was the objective of the capital injection.
8	2016	Reported operating loss of PGK34.8m as a result of the softening of the economy, global downturn in the resources sector and a significant drop in charter revenue.
9	2020	Anthony Pereira was appointed as CEO in September.
10	2020	International and domestic border closures and flights suspended in response to the COVID-19 pandemic.
11	2021	Anthony Pereira resigned as CEO. Nisaal Jai was appointed as acting CFO and Stanley Stevens appointed as acting CEO in May. Simon Pitt was appointed as the CCO in September.
12	2021	Independent Consumer & Competition Commission (ICCC) declined Link PNG's proposal to acquire 49% shareholding in PNG Air. The offer price was not publicly disclosed.
13	2022	PNG Air officially appointed Nisaal Jai as CFO in March.
14	2022	PNG Air commences debt restructuring process.
15	2023	PNG Air appoints new CEO Brian Fraser.

Source: Management

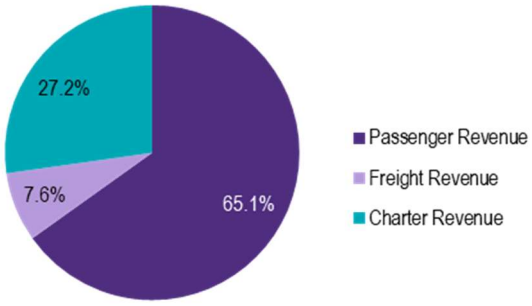
4.2. Business Operations

PNG Air has been in operation for over 35 years and currently has c. 30% - 40% share of the domestic aviation market.

4.2.1. Key Services

PNG Air generates diversified revenue from the following services:

Revenue Breakdown CY23YTD



Source: Management

Note: The above chart represents the proportion of the respective revenue streams as a percentage of PNG Air's total operating revenue excluding other revenue.

Regular Passenger Transport (RPT):

RPT services relate to the scheduled operation services provided by PNG Air where individuals can purchase tickets for pre-determined routes.

- The majority of PNG Air's revenue is generated from RPT services.
- PNG Air's share of the RPT market declined during the COVID-19 period as its key competitor, Air Niugini redeployed their international fleet to the domestic RPT market. During this period, PNG Air pivoted its focus to the charter services.
- As the PNG domestic aviation market recovers, PNG Air's passenger numbers are expected to return to pre-COVID-19 levels during FY23 as the Management anticipates that the Company will be able to recapture its domestic market share on underperforming routes and increased demand on routes to Lae.
- By 2025, Management forecast PNG Air to increase their RPT market share to 44%.

Charter Services:

Charter services are primarily provided to clients operating in the resources sector. PNG Air currently has two fixed term service agreements with Newcrest Mining Limited ("Newcrest") and Simberi Gold Company Limited ("Simberi"). Under these agreements, PNG Air is committed to operate a minimum number of charter flights in accordance with an agreed flight schedule. In addition, both Newcrest and Simberi are entitled to purchase additional 'variable' tickets on the Company's commercial flights at a discounted rate and these ticket sales are captured within passenger revenues.

- Newcrest Charter Agreement
  - PNG Air is engaged to provide regular schedules commercial flight services to Lihir Gold Limited on Lihir Island to support Newcrest Mining operations.

- The original contract was signed on 17 October 2014 and expired on 30 April 2022. On 6 December 2021, Newcrest provided written notice to PNG Air of the extension of the contract to be evergreen from 1 May 2022, where the agreement will continue indefinitely until notice is given by either party to terminate the agreement.

- Simberi Charter Agreement
  - Under the agreement, PNG Air provides Simberi with air transport services to the Simberi Gold Mine on Simberi Island in the New Ireland Province of PNG.
  - The original Fixed Wing Air Services Agreement was signed on 14 December 2015 with an initial three-year term, followed by an Air Services Agreement signed on 1 December 2019 with an initial two-year term (i.e. expiry in December 2022).
  - Management advised that following the expiry of the Air Services Agreement, PNG Air has recently renewed a contract with Simberi in August 2023 with the initial term expiring in 2026. Management also advised that a final executed copy of the agreement is pending at the date of this report.

In addition to Newcrest and Simberi, the Company also provides ad hoc freight charter to Exxon Mobil, ADA Gold, the Australian Defence Force, Police Charters, the National Department of Health and the Electoral Commission of PNG.

Freight Services:

Freight in PNG is primarily transported in the cargo hold of passenger aircraft. Whilst freight is generally carried on all commercial and charter flights, PNG Air also has a dedicated Dash 8 freight aircraft which is expected to return to operation in the second half of CY23. PNG Air's key clients include global logistics companies such as TNT and DHL.

PNG Air's market share in freight services decreased to 40% during the pandemic (from 52% in 2019) as Management focused on their charter services during the period. In the Company's three-year plan, Management have projected their market share to increase to 53% in 2025 as the Company refocuses on its freight services.

4.2.2. Fleet Management

PNG Air operates the country's youngest aircraft fleet comprising seven ATR 72-600 (72 seaters) and ten Dash 8-100 (36-seaters), of which five Dash 8 aircraft are in storage. Out of the operating fleet of twelve aircraft, two of the ATR aircraft are currently sub-leased to Air Moana.

We note the following regarding PNG Air's aircraft fleet:

- The Company historically had 17 aircraft (including operating aircraft and those in storage) in its fleet with an allowance of 1 – 2 aircraft retained in reserve to minimise any operational disruption due to unplanned maintenance.
- The existing fleet of PNG Air is relatively young at an average of c. 16 years. However, due to the subleasing of 2 leased ATR aircraft to Air Moana for 36 months, PNG Air has to rely on its older and smaller Dash 8 aircraft for its operations in the medium term.
- The historical seat factor was c. 63% in CY19 (i.e. pre-COVID) and c. 65% on average from CY20 to CY22.

4.2.3. Aircraft Lease Agreements

PNG Air has aircraft rental agreements with DAE and ATR for the leasing and maintenance of aircraft. The Company has a total of ten leased aircraft. Key terms with the lessors are outlined as follows:

- Aircraft Operating Lease Agreement with DAE

- PNG Air has seven leased ATR aircraft with DAE, of which two are currently sub-leased to Air Moana for 36 months.
- The average age of the leased ATR fleet is c. 6 years.

- Aircraft Lease and Repair Agreements with ATR
  - PNG Air has three leased Dash 8 aircraft with ATR, of which one Dash 8 aircraft was subleased to Maroomba and has returned to PNG Air's operations in March 2023.
  - The average age of the fleet is c. 34 years.

4.2.4. Aircraft Safety and Operations Quality

Aircraft Engineering & Maintenance

PNG Air has an in-house engineering and maintenance facility based at Jackson's Airport in Port Moresby. The facility can accommodate up to two aircraft at a time and comprises a maintenance hangar, technical library, inventory and specialist workshops for parts maintenance. The Engineering Department employs around 30-40 licensed aircraft engineers ("LAMEs") and over 50 trade assistants. The Engineering team holds maintenance certificates from European Union Aviation Safety Agency ("EASA") and Civil Aviation Safety Authority of Papua New Guinea ("CASA PNG") to perform aircraft engineering and maintenance work on aircraft. The Engineering department's technical procedures are audited regularly each year to ensure international standards are maintained.

Quality Systems

PNG Air has a Safety and Quality Systems Department to ensure the Company complies with the operational regulations in both PNG and Australia. There are Change Management and Hazard Risk Assessment ("HRA") processes to ensure new business and changes to existing standard operations are robust. The department conducts occurrence review meetings daily to address any internal incidents and runs a monthly Safety & Quality Review Board meeting to set the standards on the quality system. In addition, PNG Air Board holds bi-annually Audit and Risk Committee meeting to review critical risk areas within the business.

Line Operations Safety Audit

PNG Air has a structured continuous improvement program to identify key threats and operational risks. The Line Operations Safety Audit ("LOSA") program uses trained observers to collect pilot behavioural data and its situational context on "normal" flights and implement safety measures to manage any potential human errors. The flights are audited and observers will record potential threats, errors and provide measures to manage errors behaviour associated with accidents and incidents.

Flight Operations Quality Assurance

PNG Air has a Flight Operations Quality Assurance Program ("FOQA") that involves collecting and analysing flight data, reporting any unsafe occurrences and recommending corrective actions based on the flight data and trends. The flight data monitoring of FOQA, being a data driven approach, reduces reliance on flight data recorders and avoids delays on flight data monitoring. The program is intended to improve flight safety and operational efficiency by identifying hazards, managing and reducing incidents and accidents, improve operational insights, reduce costs and improve ground conditions.

4.3. Financial Information

4.3.1. Financial Performance

The table below illustrates PNG Air's unaudited statements of financial performance for the financial years ended 31 December 2019, 31 December 2020, 31 December 2021, 31 December 2022 and year-to-date ended 30 June 2023.

Consolidated statements of financial performance	CY19	CY20	CY21	CY22	CY23YTD [1]
PGK'000	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited
Passenger Revenue	223,354	133,833	108,723	126,616	75,897
Freight Revenue	32,232	23,077	19,935	18,502	8,881
Charter Revenue	56,346	38,089	84,319	78,333	31,738
Other Revenue	9,047	483	552	(1,062)	(7,114)
Total Revenue	**320,980**	**195,482**	**213,529**	**222,389**	**109,403**
Aircraft Fuel	(47,099)	(24,438)	(31,665)	(42,379)	(18,532)
Engineering	(26,714)	(21,425)	(27,761)	(26,742)	(11,444)
Insurance	(6,809)	(7,370)	(7,837)	(7,492)	(3,580)
Marketing	(5,581)	(2,800)	(1,875)	(3,542)	(1,384)
Handling	(8,835)	(5,342)	(5,663)	(4,862)	(2,598)
Other Direct Costs	(5,793)	(2,962)	(1,674)	(2,247)	(1,820)
Employee Costs - Flight Crew	(41,277)	(21,662)	(19,857)	(28,172)	(13,433)
Employee Costs - Engineering	(21,983)	(13,394)	(13,394)	(17,903)	(10,934)
Total Cost of Sales	**(164,092)**	**(99,393)**	**(109,726)**	**(133,339)**	**(63,725)**
Gross profit	**156,888**	**96,089**	**103,802**	**89,051**	**45,677**
Employee Overheads	(27,216)	(24,011)	(21,370)	(20,588)	(10,695)
Other Overheads	(23,374)	(33,590)	(24,897)	(20,131)	(13,114)
EBITDAR	**106,298**	**38,488**	**57,536**	**48,331**	**21,869**
Aircraft Lease Costs	(78,657)	(76,319)	(74,044)	(69,776)	(32,561)
EBITDA	**27,641**	**(37,831)**	**(16,508)**	**(21,445)**	**(10,692)**
Depreciation & Amortisation	(16,714)	(17,236)	(17,572)	(14,970)	(6,262)
EBIT	**10,927**	**(55,067)**	**(34,081)**	**(36,415)**	**(16,954)**
Aircraft Lease (Savings)	-	-	-	-	16,127
Adjusted EBIT	**10,927**	**(55,067)**	**(34,081)**	**(36,415)**	**(827)**
Key operational metrics:					
Passenger Revenue % of Revenue	*69.6%*	*68.5%*	*50.9%*	*56.9%*	*69.4%*
Freight Revenue % of Revenue	*10.0%*	*11.8%*	*9.3%*	*8.3%*	*8.1%*
Charter Revenue % of Revenue	*17.6%*	*19.5%*	*39.5%*	*35.2%*	*29.0%*
Gross Margin %	*48.9%*	*49.2%*	*48.6%*	*40.0%*	*41.8%*
EBITDAR Margin %	*33.1%*	*19.7%*	*26.9%*	*21.7%*	*20.0%*
EBITDA margin %	*8.6%*	*(19.4%)*	*(7.7%)*	*(9.6%)*	*(9.8%)*
EBIT margin %	*3.4%*	*(28.2%)*	*(16.0%)*	*(16.4%)*	*(15.5%)*

Source: Management

Note (1): CY23 financials include the 6 months to 30 June 2023.

We note the following in relation to PNG Air's financial performance:

- *Revenue*: Passenger revenue is PNG Air's key revenue contributor representing c. 69.4% of total revenue in CY23YTD, followed by charter revenue (c. 29.0%) and freight revenue (c. 8.1%). In CY23, PNG Air's total revenue has begun to return to a more normalised level with an expected c. 48.8% uplift in passenger revenue from CY22. This RPT revenue increase is slightly offset by a c. 22% decline in charter revenue as PNG Air refocuses on their RPT business. A breakdown of the total revenue is presented as follows:

Revenue Contribution	CY19	CY20	CY21	CY22	CY23YTD
Passenger Revenue	*69.6%*	*68.5%*	*50.9%*	*56.9%*	*69.4%*
Freight Revenue	*10.0%*	*11.8%*	*9.3%*	*8.3%*	*8.1%*
Charter Revenue	*17.6%*	*19.5%*	*39.5%*	*35.2%*	*29.0%*
Other Revenue [1]	*2.8%*	*0.2%*	*0.3%*	*(0.5%)*	*(6.5%)*
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Management's audited and unaudited accounts

Note (1): These services include baggage handling fees, early payment discounts, sales commissions paid to booking agents and other non-recurring items such as FX gains and losses reported from the sale of asset.

- Passenger Revenue
  - PNG Air has experienced a significant increase in its trading activities since COVID pandemic, with the upward trajectory in CY23YTD revenues expected to continue throughout the forecast period. This is due primarily to the return of 2 additional passenger aircraft and 1 Dash 8 Cargo aircraft in this period as the Company begins to scale its operations back to pre-COVID levels. CY19 is the last year that represents a more normalised trading level that was not affected by COVID-19.
  - In CY20 and CY21, passenger revenue declined significantly due to a reduction in air travel resulting from the COVID-19 pandemic as well as Air Niugini (PNG Air's main competitor) redeploying their international aircraft to PNG domestic routes. During this period, Air Niugini increased its market share in the PNG domestic RPT market.
  - Passenger revenue is expected to continue to rise as the business returns to a normalised level of operations, this in large is due to the return of two aircrafts (1 ATR, 1 Dash 8) back into operation at the end of CY23.
- Charter Revenue
  - Charter revenue increased significantly during the COVID-19 affected period as PNG Air reallocated aircraft from RPT services to charter customers when the demand for commercial passenger flights was negatively impacted by the pandemic restrictions.
  - In CY21 and CY22, the charter revenues were K84.3m & K78.3m respectively. These levels are expected to decline from CY23 as passenger aircrafts begin to return to their normal operations.
- Freight Revenue
  - Freight revenue has been declining year on year from K32.2m in CY19 to K18.5m in CY22. In CY23, the freight revenue is expected to increase slightly by c. 1.7%.
  - The proportion of the total revenue attributable to the freight revenue has declined over the last 3 years from 11.8% in CY20 to c. 7.3% in CY23.

- PNG Air has one dedicated cargo aircraft which has returned to operation in September 2023. Despite freight generally being carried on all flights, Management expects an uplift in freight revenue in the coming years due to the return of this dedicated freight aircraft as well as the additional passenger flights which will be able to carry freight.

- *Cost of Sales* primarily consists of aircraft fuel, engineering, and employee costs for flight crew and engineering.
  - The cost of sales declined year on year during the COVID-19 pandemic, following a similar trend as the movement in revenue during the same period.
  - *Aircraft fuel costs* relative to revenue have declined in the first half of CY23 despite the increase in trading activity with the return of aircrafts back into operations. This reflects a reduction in fuel pricing in the CY23 period, with Management forecasting fuel prices in CY23 and beyond to be lower than those observed in the period from CY19 to CY22.
  - *Engineering costs* pertain to maintenance costs for various parts of the Company's aircraft (e.g. engines, landing gear), general consumables required for aircraft repair and maintenance, and freight costs associated with transporting parts across the Company's network. The engineering costs are c. 10.8% of total revenue on average during the historic period.
  - *Employee costs (flight crew and engineering staff) and overheads* are major expenses of PNG Air. The employee costs pertain predominantly to salaries and wages of the Company's pilots, first officers, flight attendants and the engineering workforce. The total employee costs and overheads represented on average c. 19.1% of total revenue over the historical period.
- *Gross profit margin* has been in the range of 40.0% to 49.2% from CY19 to H1 CY23. The gross margin was its lowest at 40% in CY22, largely due to a large rise in aircraft fuel costs. The reduction in CY23 aircraft fuel costs is expected to increase to 45.5% in H1 CY23.
- *Employee overheads* comprise salaries and wages and other costs pertaining to training, motor vehicle costs and staff travel and accommodation allowances. The total employee overheads represented on average c. 10.0% of total revenue over the historical period.
- *Aircraft lease costs* relate to the fees that PNG Air paid to DAE and ATR for the rental of aircraft. The aircraft lease costs represented on average c. 30.9% of total revenue over the period from CY2019 to H1 CY2023. PNG Air has been paying above market rental rates to the lessors, DAE and ATR. As part of the Scheme, the rental rates will be reduced significantly to be more in line with the market rates.
- *Earnings before interest, tax, depreciation and amortisation and aircraft rentals ("EBITDAR")* declined significantly during the pandemic from K105m (CY19) to K38.5m in CY20, before increasing to K57.5m (CY2021). Whilst the EBITDAR margin declined from 33.1% in CY19 to 19.7% in CY20, it increased to 26.9% in CY21. In CY22, EBITDAR margin declined to 21.7% due primarily to the increase in aircraft fuel costs and employee costs. The EBITDAR is expected to increase to K65.6m in CY23, largely due to the uplift in the passenger revenue during the year.
- *EBITDA:* After deducting the aircraft lease costs, PNG Air was making losses at the EBITDA level during the pandemic (CY20 – CY21) from an EBITDA of K27.6m in CY19. The EBITDA is expected to improve in CY23 when the aircraft lease rentals started to reduce.
- *Adjusted EBIT*: Over recent years, PNG Air has been making losses at the EBIT level. Upon the implementation of the Scheme, PNG Air will benefit from lease savings of nearly 50%, which will lead stronger profitability going forward.

4.3.2. Financial Position

The table below illustrates PNG Air's unaudited statements of financial position as 31 December 2021, 31 December 2022, 30 June 2023 and the pro-forma as at 30 June 2023 post implementation of the Scheme.

Consolidated statements of financial position	Dec-21	Dec-22	Actual Jun-23 [1]	Pro-Forma Jun-23 [2]
PGK'000	Unaudited	Unaudited	Unaudited	Unaudited
Assets				
Cash	3,060	886	2,522	17,522
Trade and Other Receivables	16,825	22,772	21,547	26,547
Inventory	14,164	16,753	16,430	16,430
Right of Use Assets - Current [3]	36,845	34,621	-	-
Assets Held for Resale	-	3,604	-	-
Prepayments	100,454	114,260	125,144	88,978
Total current assets	**171,348**	**192,896**	**165,643**	**149,476**
Aircraft	68,661	64,141	63,757	39,303
PPE and Land & Buildings	51,583	52,128	51,786	51,786
Other Deposits	27,653	27,753	28,083	38,854
Future Income Tax Benefit	34,852	34,852	34,656	34,656
Right of Use Assets - Non-Current [3]	188,236	154,440	174,109	174,109
Aircrafts Major Overhaul & C Checks	31,398	28,934	40,479	40,479
Total non-current assets	**402,382**	**362,247**	**392,870**	**379,187**
Total assets	**573,730**	**555,143**	**558,512**	**528,663**
Liabilities				
Trade and Other Payables	193,487	256,513	285,872	222,898
Borrowings - Current	46,055	45,907	46,494	19,477
Other Financial Liabilities - Current [3]	311	1,605	-	-
Aircraft Lease Liability - Current [3]	31,455	32,994	-	-
Provisions - Current [3]	6,345	7,993	-	-
Unavailed Revenue	12,322	15,150	13,753	13,753
Total current liabilities	**289,975**	**360,162**	**346,119**	**256,128**
Borrowings - Non-Current	2,679	-	-	-
Other Financial Liabilities - Non-Current [3]	12,187	8,468	8,855	8,855
Aircraft Lease Liability - Non-Current [3]	243,561	210,135	237,329	237,329
Provisions - Non-Current [3]	21,303	21,097	28,188	28,188
Deferred Tax Liability	38,466	38,466	38,327	38,327
Total non-current liabilities	**318,197**	**278,166**	**312,700**	**312,700**
Total liabilities	**608,172**	**638,328**	**658,819**	**568,828**
Net assets	**(34,442)**	**(83,184)**	**(100,307)**	**(40,165)**

Source: Management

Note (1): The 30-Jun-2023 actual balance sheet represents the pre-Allotment balances.

Note (2): The 30-Jun-2023 pro-forma balance sheet represents the post-Allotment balances.

Note (3): A breakdown between current and non-current balances for CY23 has not been provided.

We note the following regarding PNG Air's financial position:

- We have presented above both the actual balance sheet as at 30 June 2023 as well as the pro-forma balances, which are adjusted for the restructuring outcomes of the Scheme and the arrangements that are agreed with the relevant creditors in their LOIs.
- *Trade receivables* balance was K26.5m as at 30 June 2023, with c. 50% of the balance attributable to the charter customers, being Newcrest and Simberi.
- *Inventory* relates to consumable items such as fuel, nuts and bolts and other everyday items utilised in the operation of aircraft. There is a requirement for Management to maintain a significant inventory level for events of delays when trying to obtain parts for maintenance urgently. The inventory balance has remained broadly consistent across the historical period with a balance of K16.4m as at 30 June 2023.
- *IFRS16 Leases*: PNG Air has adopted the accounting standard IFRS 16 with respect to its aircraft lease agreements. Accordingly, the right of use asset and lease liability have been recognised for all leases on the balance sheet. Based on the pro-forma balance sheet as at 30 June 2023, the right of use asset was K174.1m and the aircraft lease liability was K237.3m, following the restructure.
- *Prepayments* include general prepayments pertaining to software and subscriptions, aviation insurances, creditors prepayments and stamp duty paid on aircraft to the IRC. The prepayments balance was K89.0m at 30 June 2023, a reduction of c. K36.2m from 30 June 2023, prior to the implementation of the Scheme. This reduction was largely due to the restructuring adjustment in relation to negotiations with DAE as part of the Scheme. The Scheme has reduced the prepayments balance with DAE by K36.2m as they have used this balance from the maintenance reserve and applied it against the lease arrears.
- *Aircraft* owned by PNG Air was K39.3m as at 30 June 2023, compared to K64.1m as at 31 December 2022 due to an adjustment from the most recent aircraft revaluation in December 2022.
- *PPE and Land & Buildings* comprises warehouse equipment such as containers, forklifts, tools and other vehicles, land & buildings, and low value items such as software, furniture, fixtures and fittings. This balance has remained broadly consistent over the historical years from December 2019 to June 2023 where the balance is K51.8m.
- *Aircraft major overhaul and C checks* are prepayments made for regular cyclical and aircraft checks that can be drawn upon when the aircrafts are scheduled to be serviced. This balance as at 30 June 2023 was K40.5m, a K11.5m increase from the balance as at 31 December 2022.
- *Other deposits* have increased significantly by 40% from K27.8m as at 31 December 2022 to K38.9m as at 30 June 2023 due to K28.5m of pre-delivery payments made partially offset by the restructuring adjustments in relation to the deposit arrears with ATR and DAE.
- PNG Air had a *future income tax benefit* of K34.7m as at 30 June 2023. Management was unable to confirm the current balance of tax losses carried forward, however we understand that tax losses can only be carried forward for 7 years in PNG.
- *Trade and other payables* have been growing at a declining rate over the historical period. The balance has decreased from $285.9m (prior to the Scheme) to K222.9m (upon implementation of the Scheme) as at 30 June 2023. This is largely due to the reduction in payables to key scheme creditors IRC, ATR and DAE as a result of the Scheme. As part of the Scheme, there was a write off of c. K30.2m of trade payables.
- *Provisions (Current and non-current)* balance increased slightly at a compound average growth rate ("CAGR") of 2.0% from K26.1m as at 31 December 2019 to K28.2m as at 30 June 2023.

- Net debt balance has decreased from K56.0m as at 31 December 2020 to K45.7m as at 31 December 2021 and K45.0m as at 31 December 2022. As at 30 June 2023, the borrowings balance was significantly reduced to K19.5 due to renegotiations made with key creditors as part of the Scheme.

Net Debt	Dec-19	Dec-20	Dec-21	Dec-22	Jun-23 [1]
Borrowings	63,545	60,281	48,733	45,907	19,477
Less: Cash	(633)	(4,232)	(3,060)	(886)	(17,522)
Total	**62,912**	**56,049**	**45,674**	**45,021**	**1,955**

Source: Management

Note (1): Based on post-Allotment net debt balance and excludes short-term trade payables to certain Scheme Creditors.

4.4. Capital Structure

4.4.1. Pre-Allotment Shareholding

As at the date of this report, there are a total of 308.3 million shares on issue in PNG Air pre-Allotment. The table below summarises the top 20 largest shareholders of PNG Air as at 31 May 2023:

Top 20 shareholders as at 31 May 2023			
Rank	Name	No. of shares	Interest (%)
1	National Superannuation Fund Limited (Nasfund)	121,000,000	39.2%
2	Mineral Resources Ok Tedi No 2 Limited (MRDC)	50,500,000	16.4%
3	Mineral Resources Development Company Limited (MRDC)	40,000,000	13.0%
4	Mineral Resources Star Mountains Limited (MRDC)	34,000,000	11.0%
5	John Ralston Wild (Deceased)	15,750,000	5.1%
6	Paul Mclaren	8,987,100	2.9%
7	Tisa Investments Limited	7,000,000	2.3%
8	Credit Corporation (Png) Limited	2,000,000	0.6%
9	Steffen Wirth	2,000,000	0.6%
10	Bsp Capital Limited (BSP)	1,411,566	0.5%
11	Paul Anthony Povey	1,100,000	0.4%
12	Evangelical Lutheran Church Of PNG	1,000,000	0.3%
13	Star Mountain Properties & Investment Limited	750,000	0.2%
14	Dan Corporation Limited	700,000	0.2%
15	George Mannga Tagobe	600,000	0.2%
16	Pacific Mmi Insurance Limited C/- Kina Funds Management Ltd	500,000	0.2%
17	Nasfund Contributors Savings & Loan Society Limited	500,000	0.2%
18	Star Mountain Investment Holding Limited	500,000	0.2%
19	Tabubil Hotel Limited	500,000	0.2%
20	Philip Depis	500,000	0.2%
Top 20 shareholders total		**289,298,666**	**93.8%**
Remaining shareholders (2561 Investors)		**18,993,414**	**6.2%**
Total ordinary shares outstanding		**308,292,080**	**100.0%**

Source: Management

4.4.2. Post-Allotment Shareholding

Upon the completion of the Scheme, additional shares will be issued to MRDC Entities and Nasfund as follows:

- MRDC Entities: 6,732,651,245 shares
- Nasfund: 1,184,039,146 shares

The total number of shares on issue in PNG Air post-Scheme will be 8,224,982,471. A breakdown of the shareholding post-Allocation is presented as follows:

Post-Scheme - Top shareholders			
Rank	Name	No. of shares	Interest (%)
1	MRDC Entities	6,857,151,245	83.4%
2	Nasfund	1,305,039,146	15.9%
Top 2 shareholders total		**8,162,190,391**	**99.2%**
Remaining shareholders		**62,792,080**	**0.8%**
Total ordinary shares outstanding		**8,224,982,471**	**100.0%**

Source: Management

5. Valuation Methodologies

5.1. Introduction

As discussed in Section 2, we have been engaged to express an opinion on the merits of the proposed Allotment of shares to the MRDC Entities, having regard to the interests of the PNG Air shareholders who may vote on the Allotment. As part of assessing whether or not the Allotment is fair and reasonable to the Non-Associated Shareholders, Grant Thornton Corporate Finance has compared:

- The fair market value of PNG Air Shares before the Allotment on a control basis.
- The fair market value of PNG Air Shares following the Allotment (assuming implementation of the Scheme) on a minority basis.

In each case, Grant Thornton Corporate Finance has assessed the value of PNG Air using the concept of fair market value. Fair market value is commonly defined as:

"The price that would be negotiated in an open and unrestricted market between a knowledgeable, willing but not anxious buyer and a knowledgeable, willing but not anxious seller acting at arm's length."

Fair market value excludes any special value. Special value is the value that may accrue to a particular purchaser. In a competitive bidding situation, potential purchasers may be prepared to pay part, or all, of the special value that they expect to realise from the acquisition to the seller.

5.2. Appropriate Methodologies

RG 111 outlines the appropriate methodologies that a valuer should generally consider when valuing assets or securities for the purposes of, amongst other things, share buy-backs, selective capital reductions, schemes of arrangement, takeovers and prospectuses. These include:

- Discounted cash flow and the estimated realisable value of any surplus assets ("DCF Method").
- Application of earnings multiples to the estimated future maintainable earnings or cash flows of the entity, added to the estimated realisable value of any surplus assets ("FME Method").
- Amount available for distribution to security holders on an orderly realisation of assets ("NAV Method").
- Quoted price for listed securities, when there is a liquid and active market ("Quoted Security Price Method").
- Any recent genuine offers received by the target for any business units or assets as a basis for valuation of those business units or assets.

Further details on these methodologies are set out in Appendix A to this report. Each of these methodologies is appropriate in certain circumstances.

RG 111 does not prescribe any above methodologies as the method(s) that an expert should use in preparing their report. The decision as to which methodology to use lies with the expert based on the expert's skill and judgement and after considering the unique circumstances of the entity or asset being valued. In general, an expert would have regard to valuation theory, the accepted and most common market practice in valuing the entity or asset in question and the availability of relevant information.

5.3. Selected Valuation Methods

In our assessment of the fair market value of PNG Air, Grant Thornton Corporate Finance has relied on a number of valuation methodologies as outlined below.

5.3.1. Primary Valuation Approach

Grant Thornton Corporate Finance has selected the DCF Method as the primary valuation approach to assess PNG Air's equity value. We believe the DCF Method is appropriate to value PNG Air due to the following:

- PNG Air has strong visibility on the short-term future revenues based on the agreed leases and maintenance programs with their key Scheme Creditors and an expected increase in RPT revenue from the recapturing of the domestic market share from their key competitor, Air Niugini.
- PNG Air is currently undergoing a restructuring process which is expected to allow the Company to increase the scale of its operations to its pre-COVID period by CY25. The DCF Method allows us to properly capture both the costs and benefits pre and post-implementation of the Scheme.
- Capital expenditure requirements (including maintenance), which are key to the business operations, can be modelled in a more robust way.
- It allows for different sensitivities and assumptions to be modelled, including fuel costs, revenues, debt repayments.
- The DCF Method is one of the most commonly used methodologies for the valuation of airlines companies.

5.3.2. Cross Check Valuation Methodologies

We have cross-checked our valuation assessment prior to the Allotment based on NAV approach having regard to the liquidation value of the company. Prior to the Allotment and Scheme, the ability for PNG Air to continue as a going concern is limited and as such, we have crossed checked the outcome of our DCF analysis with the recoverable value of the net assets of the Company.

We have cross-checked our valuation assessment following the Scheme and Allotment based on the earnings multiple approach having regard to the EBIT multiple implied in our valuation assessment, which we have compared with listed peers and comparable transactions. Businesses are often valued with reference to an earnings multiple, as earnings are considered the best proxy for measuring a company's underlying financial performance and can be readily benchmarked against other comparable companies.

6. Valuation Assessment of PNG Air Shares

6.1. DCF Method

For the purpose of our valuation assessment of PNG Air utilising the DCF methodology, Grant Thornton Corporate Finance was provided with the Internal Projections which we have incorporated into the GT Model to assess the fair market value of PNG Air based on the nominal post-tax free cash flows between 1 July 2023 and 31 December 2025 at which point we have calculated the terminal value. We have adopted 31 December 2025 as the terminal year as PNG Air is expected to reach a steady state of performance. We note that whilst we have been provided with cash flows from 1 July 2023, this is prior to the Valuation Date of 31 October 2023. Based on our understanding of year to date performance, we consider the value derived utilising the cash flows from 1 July 2023 is not materially different from that as at the Valuation Date.

For the purpose of our valuation assessment of PNG Air utilising the DCF Method, Grant Thornton Corporate Finance has performed a critical analysis of the following:

- Historical financial performance of PNG Air.
- Board approved budget for 2023 and year-to-date performance.
- Management's 2024 and 2025 projections for the business ("Management's Projections").
- Key industry risks, growth prospects and general economic outlook.

In accordance with the requirement of RG111, we have undertaken a critical analysis of the forecasts contained in the Internal Projections before relying on them for the purpose of our valuation assessment. Specifically, we have performed the following analysis:

- Conducted high level checks, including limited procedures in relation to the mathematical accuracy of the Model.
- Performed a broad review, critical analysis and benchmarking with the historical performance of PNG Air and current trends in the industry.
- Held discussions and interviews with Management of the Company and its advisor to discuss the financials, Model and key underlying forecast assumptions.

Whilst Grant Thornton Corporate Finance believes that the assumptions underlying the Model are reasonable and appropriate to be adopted for the purpose of our valuation, we have not disclosed them in our Report as they contain commercially sensitive information and they do not meet the requirements for presentation of prospective financial information as set out in ASIC Regulatory Guide 170 "*Prospective Financial Information*". The assumptions adopted by Grant Thornton Corporate Finance do not represent projections by Grant Thornton Corporate Finance but are intended to reflect the assumptions that could reasonably be adopted by industry participants in their pricing of similar businesses. We note that the assumptions are inherently subject to considerable uncertainty and there is significant scope for differences of opinion. It should be noted that the value of PNG Air could vary materially based on changes to certain key assumptions.

6.1.1. Pre-Allotment Valuation Summary

Our valuation assessment of PNG Air prior to the Scheme under the DCF method is summarised below:

DCF Method - PNG Air Pre-Allotment PGK'000	*Section Reference*	Low	High
Enterprise Valuation		(3,749)	(335)
Less Net Debt	*6.1.3*	(331,829)	(331,829)
Equity Value (Control Basis)		**nil**	**nil**
Number of Shares Outstanding (Fully Diluted)	*6.1.4*	308,292,080	308,292,080
Value per Share (Control Basis) (PGK per Share)		**nil**	**nil**

Source: GTCF analysis

We have assessed the value per share of PNG Air prior to the Scheme to be PGKnil.

As a cross check to our valuation based on a DCF analysis, we have had regard to the potential liquidation values of the net assets of the business as assessed by the Independent Expert appointed in relation to the Scheme. A summary of the estimated return to creditors and shareholders under the liquidation scenario is presented below:

PGK	Debt (High)	Debt (Low)	Return (High)	Return (Low)	t/K return (High)	t/K return (Low)
BSP	10,249,679	10,249,679	10,249,679	10,249,679	100.0	100.0
Noteholders (Jasmore & PNGSDP)	20,926,672	20,926,672	8,200,556	5,292,830	39.2	25.3
Employee claims	4,075,358	4,075,358	4,075,358	4,075,358	100.0	100.0
DAE	122,411,771	359,973,552	5,405,482	339,034	4.4	0.1
ATR Regional	7,710,386	38,566,115	340,477	36,323	4.4	0.1
NAC	25,630,932	25,630,932	1,131,816	24,140	4.4	0.1
IRC	83,788,402	83,788,402	3,699,944	78,914	4.4	0.1
MRDC	15,089,359	15,089,359	666,319	14,212	4.4	0.1
Nasfund	-	45,563,000	-	42,913	n/a	0.1
StandardAero	-	-	-	-	n/a	n/a
Credit Corporation	317,442	317,442	14,018	299	4.4	0.1
General trade creditors	55,926,148	66,469,374	2,469,598	62,603	4.4	0.1
Taxes payable per balance sheet	9,925,669	9,925,669	438,300	9,348	4.4	0.1
Other lessors	8,854,779	8,854,779	391,011	8,340	4.4	0.1
Shareholders	**n/a**	**n/a**	**Nil**	**Nil**	**-**	**-**

Source: Independent Expert Report

Based on the above, our assessed PGKnil value per share is in line with the PGKnil funds available to PNG Air Shareholders after settlement of balances outstanding with secured and unsecured creditors assessed by the Independent Expert.

6.1.2. Post-Allotment Valuation Summary

Our valuation assessment of PNG Air upon the implementation of the Scheme and Allotment under the DCF method is summarised below:

DCF Method - PNG Air Post-Allotment PGK'000	*Section Reference*	Low	High
Enterprise Valuation		198,494	210,110
Less Net Debt	*6.1.3*	(122,458)	(122,458)
Equity Value (Control Basis)		**76,036**	**87,652**
Number of Shares Outstanding (Fully Diluted)	*6.1.4*	8,224,982,471	8,224,982,471
Value per Share (Control Basis) (PGK per Share)		**0.0092**	**0.0107**
Minority Interest Discount	*6.1.4*	23%	23%
Value per Share (Minority Basis) (PGK per Share)		**0.0071**	**0.0082**

Source: GTCF analysis

Note: Minority interest discount has been calculated as the inverse of a 30% control premium.

Should the Allotment and Scheme be implemented, we have assessed the value per share of PNG Air on a minority basis to be between K0.0071 and K0.0082. The uplift from the Scheme is largely driven by the following items:

Aircraft Rental Savings

Aircraft lease costs are one of the most significant expenses that PNG Air incurs. Upon implementation of the Scheme, PNG Air will benefit from aircraft rental savings as a result of negotiations with key existing lessors DAE and ATR. These rental savings are expected to reduce CY2024 aircraft lease expenses by almost 50%.

The Scheme agreement with DAE and ATR includes:

- A reduction in aircraft rental costs to be paid to DAE. PNG Air is currently paying above market rental rates. As part of the restructuring, PNG Air will pay to DAE US$1m per month from 1 January 2023 to the implementation date of the Scheme, to be applied pro rata towards rent or/and maintenance reserves for PNG Air's operating leased aircraft. Subsequently, PNG Air will make monthly rental payments of US$125k (FY23), US$135k (FY24), US$165k (FY25 and until the end of each lease term) and US$135k for each financial year during any extension period.
- A reduction in the monthly rental amounts payable to ATR. Annual increases in aircraft rental costs associated with five leased aircraft with ATR will be in accordance with the terms agreed within the LOI.
- A condition precedent to the LOI with DAE is the Allotment of shares to MRDC Entities. As such in our assessment of the fair market value of PNG Air prior to the Allotment, we have assumed that the aircraft leases remain unchanged.

Cash Injections

The implementation of the proposed Scheme will yield two cash injections of K15 million and K35 million in CY23 and CY24 respectively. K15 million will be received from the PNG government in relation to a freight subsidy, and K35 million in rescue capital will be received from MRDC Entities, in exchange for the issue of shares. These cash injections provide critical working capital support to PNG Air that will enable the Company to return to a positive cash position in the next 3 years. The injections from PNG Air will be treated as debt until the issue of shares under the Allotment.

For the purposes of determining the fair market value prior to the Allotment, we have assumed no rescue payments payable by MRDC Entities and any outstanding balances owing to MRDC Entities and Nasfund are treated as debt.

Reductions in Outstanding Debt

As part of the Scheme, the outstanding debt balances will reduce due to debt write offs as agreed with PNG Air's creditors. The pro-forma balance sheet as at 30 June 2023 is presented follow c. K134.7m in debt written off.

The outstanding debts with IRC an NAC are expected to be paid off in c. 61 and 75 years respectively and thus, for the purposes of our fair value assessment, we have not treated the outstanding balances a debt, but rather included the repayments in our cash flow forecast as per the terms in the LOI's.

The total reduction of outstanding debts and borrowings to Scheme creditors amounts to c. K255.4m as a result of the Scheme.

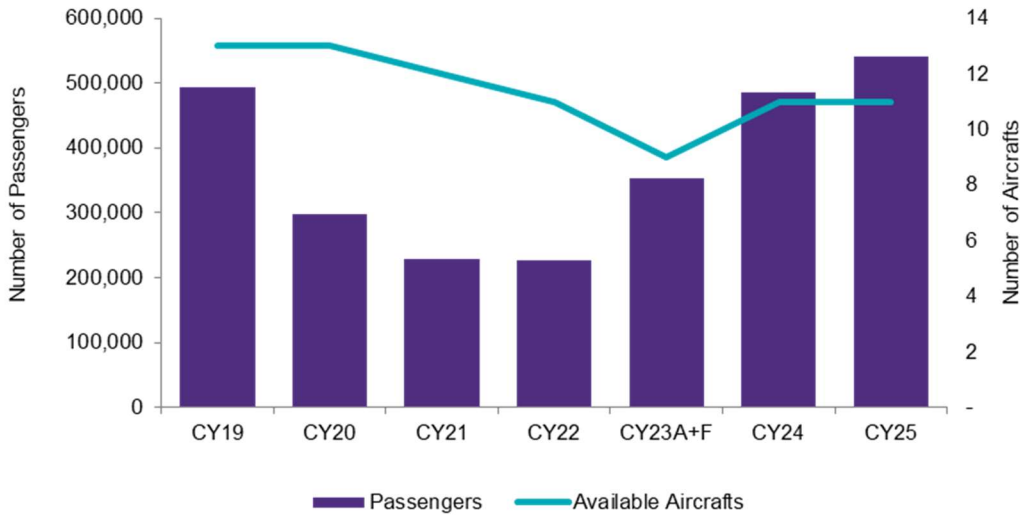
6.1.3. Key Financial Assumptions

Passenger Revenue

Passenger Numbers

After a period of lower revenue as a result of the pandemic, passenger revenue for PNG Air is expected to increase during the second half of 2023. This growth is largely driven by a return to operations of an additional ATR and an additional Dash 8 after an extended maintenance period. An increase to passenger numbers due to these returning aircraft results in revenue being forecast to surpass CY2022 level in CY2023. Two additional Dash 8 aircraft are scheduled to be available for operation in CY2024, leading to a further increase in passenger revenue. However, there are material restoration costs associated with preparing these aircraft back to operations in CY2024.

Aircrafts Available & Passenger Numbers



Source: Management

PNG Air also expects an increase in passenger numbers through recapturing the market share lost to its main competitor, Air Niugini, during the pandemic. As the industry recovers from the pandemic, Air Niugini is likely to reallocate its aircraft back onto international routes, reducing the competition on several of PNG Air's key domestic routes. This trend is expected to continue in the short term, allowing PNG Air's share of the domestic airline market to return to the pre-COVID levels by CY25.

Fare Prices

A strong demand for travel, in conjunction with reduced seat availability as the airline market recovers from the pandemic, has led to inflated passenger air fares. Management has indicated that they expect these higher fares to continue in the short term, however, have allowed for a decline in fares for ATR operated flights in the forecasts as the demand normalises back to pre-COVID levels. Dash 8 air fares are assumed to remain consistent with CY23 rates.

Aircraft Availability

Aircraft availability is another key driver of the forecast revenue. The aircraft in PNG Air's fleet each have scheduled maintenance periods where they are unavailable for operations. Historically, the Company has faced challenges finding and retaining resources to oversee and support this maintenance, resulting in reduced aircraft availability for extended periods. To combat this, Management has employed a number of experienced personnel with a focus on improving this maintenance function which is critical for the Company to achieve the forecast revenue. There is also an additional risk to aircraft availability of unscheduled maintenance. To mitigate this risk, PNG Air has either one or two aircraft in reserve that are not allocated to scheduled flight routes.

The table below summarises the existing operating fleet over the next few years:

Aircraft Model	Leased / Owned Aircraft	July FY23	December FY23	July FY24	November FY24	FY25
ATR 72-600	Leased	4	5	5	5	5
Dash 8 Passenger	1 Leased / Remaining Owned	3	4	5	6	6
Dash 8 Cargo	Owned	0	0	1	1	1
Total		**7**	**9**	**11**	**12**	**12**

Source: Management

We note the following regarding PNG Air's future operating aircraft fleet:

- PNG Air operated seven aircraft as at July 2023 following a period of unplanned maintenance. Management forecast the operating fleet will increase to 10 aircraft by the end of 2023 in anticipation of additional capacity and contingency.
- Management forecast two Dash 8 passenger aircraft to return to the operating fleet in July and November 2024 respectively.
- By end of 2025, the operating fleet will increase to twelve aircraft when the operations revert to pre-pandemic levels based on their three-year plan to recapture its market share lost during COVID period.

Seat Load Factor

The historical seat factor was c. 63% in CY19 (i.e. pre-COVID) and c. 65% on average from CY2020 to CY2022. Management has assumed a seat factor of c. 70% for its passenger aircraft in its forecast RPT revenue. The forecast increase in the seat factor is primarily due to an increased reliance on smaller 28-seater Dash 8 aircraft as opposed to the 72-seater ATRs to service the same route.

Freight Revenue

Similar to Passenger Revenue, Freight Revenue is expected to increase in the second half of CY2023. This increase is primarily driven by an operational return of a dedicated Dash 8 freight aircraft. Notwithstanding that, as all aircraft generally carry freight, the additional aircraft availability resulting from the return of two passenger aircraft and the improved maintenance function are also expected to have a positive impact on freight revenue.

The Company also expect to increase the frequency of flights made by the dedicated freight aircraft in early 2024, resulting in an increase in freight volumes from this point onwards. These additional flights are contingent on PNG Air sourcing the required additional staff to operate these flights.

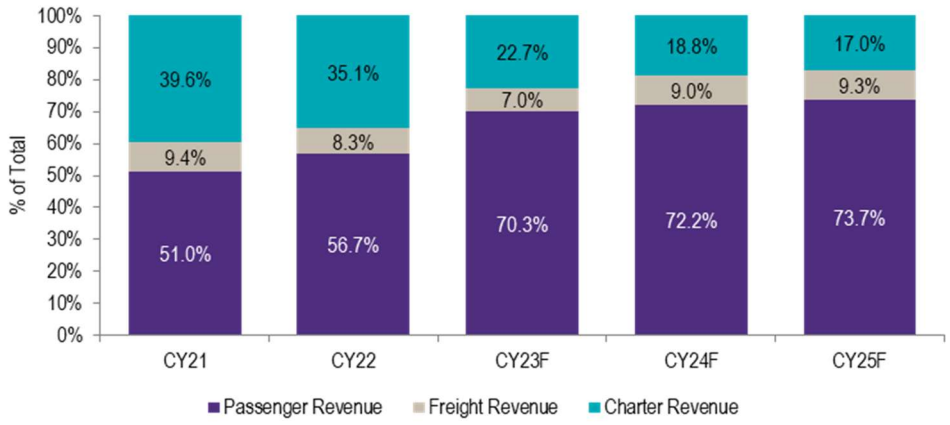
Management has factored in a decline to the average forecast freight rate from July 2023 onwards, which they consider a conservative assumption. A decrease in freight rates is expected to result in an increase in volumes due to more competitive pricing.

Charter Revenue

Forecast Charter Revenue is underpinned by the service agreements currently in place with Newcrest Mining Limited and Simberi Gold Company Limited. As discussed in Section 4.2.1, the Newcrest Agreement will continue indefinitely until notice is given by either party to terminate the agreement, while the initial term of the Simberi Agreement is scheduled to expire in 2026. Under each agreement, PNG Air is committed to providing a minimum number of charter flights detailed in an agreed flight schedule.

Management has placed bids for a number of potential new charter customers in the resources sector, but currently awaiting the outcome of the decision. Overall, there is positive outlook for the charter business and the potential revenue upside for new charter customers is currently not captured in the revenue forecasts.

Revenue Breakdown



Source: Management

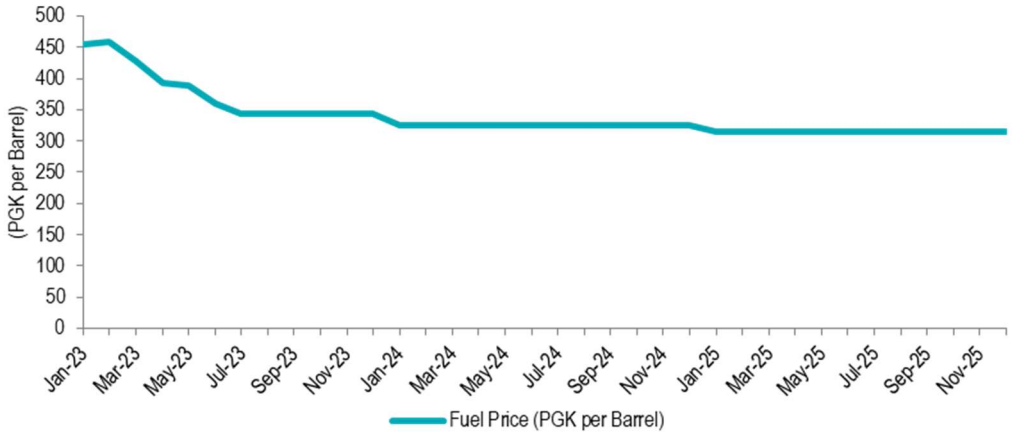
Note: The above chart represents the proportion of the respective revenue streams as a percentage of PNG Air's total revenue excluding Other Revenue.

Cost of Sales

Fuel Costs

Despite an increase in aircraft availability and flying hours in CY23, the Company expects their total fuel expense to decrease relative to CY22. This is driven by the drop in fuel prices observed over the first half of CY23. Management has forecast a further fuel price drop in both CY24 and CY25, however we note that these are marginal changes.

Forecast Fuel Prices



Source: Management

Given the recent volatility in fuel prices, the conflicts in Europe and the Middle East, and the fuel supply concerns in PNG, there is a risk that fuel prices may increase, rather than decline, in the short term.

Further, the fuel prices are paid in USD. Management has assumed a consistent exchange rate of 0.2765 PGK/USD in their forecasts. Considering the current economic climate of rising inflation rates and the expected depreciation of Kina against the USD, there is a risk of further increases in fuel costs in the near term. We have included in our sensitivity an analysis of potential increases in fuel costs.

Having had regard to the above risks, we have run a sensitivity analysis on the impact of higher fuel costs on the equity value of PNG Air in Section 6.1.5.

Employee Costs

Employee costs are expected to grow in line with PNG Air's return to scale. Salaries and wages for pilots, first officers, flight attendants and the engineering workforce make up the bulk of employee expenses. Other key employee costs include accommodation and training expenses, as well as fees for additional subcontractor resources scheduled to provide support to the engineering team. Management is forecasting engineering costs to exceed those observed before the pandemic throughout the forecast period, reflecting their increased commitment to maintenance and aircraft availability.

PNG Air notes that there is a scarcity of qualified pilots in the market currently. There is the potential for this to drive pilot salaries up in the short term. There is also an additional certification requirement for pilots to land at certain airports throughout PNG, which necessitates specialist training. Given these factors, we have run a sensitivity analysis on flight crew expenses in Section 6.1.5 to illustrate the impact on equity value if costs were to exceed those forecast by Management.

Engineering Costs

Non-employee engineering costs relating to the purchase and transportation of various parts and consumables required for aircraft maintenance are also expected to increase as the Company scales back to the pre-COVID levels. Management is forecasting this expense to be higher than the pre-COVID levels, driven primarily by a rise in transportation costs.

Despite increases in employee and engineering costs, Management expects the Company's gross margin to return to pre-pandemic levels by the end of CY2025, largely driven by an increase in passenger revenue and lower fuel costs.

Overhead Costs

PNG Air's overhead expenses are expected to increase in line with the improved trading activities, reflecting the additional headcount required to support a higher level of activity. Other employee costs are expected to remain lower than pre-pandemic levels moving forward, as the Company seeks to reduce discretionary travel and accommodation expenses for administrative staff. Professional fees are forecast to remain high for the remainder of the year as the Company continues to seek support developing and implementing the Proposed Scheme, however, are expected to normalise from CY2024 onwards.

Net Working Capital ("NWC")

PNG Air has a relatively short working capital cycle given c. 70% of their revenue is collected in advance at the point of sale, and the majority of creditors being paid on terms under 30 days.

In order to estimate future working capital changes, we have assumed that net working capital will remain at a consistent percentage of revenue at -20%, having had regard to the Company's historical balances and normalised level of creditors. We have paid particular attention to the CY2019 balances, as they reflect a more normalised position prior to the impact of the pandemic. We have also benchmarked our assumption against trading airline companies and note that our assumption is relatively consistent with the average level observed in the industry.

Company	NWC as % of Revenue
Alliance Aviation Services Limited	12%
Qantas Airways Limited	-45%
Regional Express Holdings Limited	-15%
Air New Zealand Limited	-36%
Air Canada	-29%
Chorus Aviation Inc.	6%
easyJet plc	-45%
Alaska Air Group, Inc.	-29%
Allegiant Travel Company	-22%
American Airlines Group Inc.	-25%
Delta Air Lines, Inc.	-29%
JetBlue Airways Corporation	-28%
SkyWest, Inc.	-14%
Southwest Airlines Co.	-35%
Spirit Airlines, Inc.	-12%
Air China Limited	-31%
Cebu Air, Inc.	-33%
Asia Aviation Public Company Limited	-61%
Bangkok Airways Public Company	-24%
VietJet Aviation Joint Stock Company	-21%
Average	**-26%**
Median	**-29%**

Source: S&P Global

Capital Expenditure ("Capex") and Depreciation

A significant proportion of PNG Air costs relate to the maintenance expenditure required to keep aircraft operational. As the Company returns to more normalised operations and flying hours increase, the variable aircraft maintenance costs will increase accordingly. Hence, Management has forecast maintenance expenditure to grow by 18% over 2024 and 2025, albeit at a lower rate than revenue. Management has also included provisions for major maintenance and cyclical checks in their forecasts. We note that any additional requirements to fund maintenance works could have a material impact on the Company's forecast cash position.

In addition to the above expenditure, the Company has included a provision of c. K18 million in CY2024 for the significant restoration works required on the two additional Dash 8 passenger aircraft to prepare them back to operations. This provision was estimated with reference to the estimated cost to replace missing aircraft components and the labour required to complete the maintenance works.

Net Debt

In order to determine the equity value of PNG Air, the net debt balance as at 30 June 2023 is subtracted from the enterprise value as determined using the DCF method. We have utilised the net debt balance as at 30 June 2023 as a proxy for that as at 31 October 2023 (the "Valuation Date"). We have set out

below our calculation of the net debt of PNG Air as at 30 June 2023 as well as the pro-forma net debt assuming implementation of the Scheme:

Net Debt as at 30 June 2023 PGK'000	Pre-Allotment	Post-Allotment
Cash	2,522	17,522
Borrowings - Current	(46,494)	(19,477)
Borrowings - Non-Current	nil	nil
Trade Payables to Scheme Creditors	(287,857)	(120,503)
Net Debt of PNG Air as at 30 June 2023	**(331,829)**	**(122,458)**

Source: Management, GTCF analysis

- The pre-Scheme net debt does not include restructuring adjustments upon the implementation of the Scheme. In calculating the post-Scheme net debt of PNG Air, we have considered:
  - Borrowings due to BSP, Jasmore, SNPSDP and MRDC Entities.
  - Trade payables due to certain Scheme Creditors, specifically ATR, DAE and Nasfund.
  - Cash balance post-Scheme includes a cash injection of K15m from MRDC received prior to the valuation date.
- Due to the length and nature of their repayment arrangements, we have excluded the outstanding balances due to IRC and NAC in the net debt adjustment in our Post-Allotment valuation. We have instead included the repayment cash flows in the DCF.

6.1.4. Other Assumptions

Inflation and Terminal Growth Rate

Management's projections, and hence the DCF model, has been prepared in nominal terms with the inflationary impact factored into the cash flows. Beyond 2025, we have adopted an inflation rate and a terminal growth rate of 5.0% in line with the Asian Development Bank's forecast inflation for PNG. We note that this is also not dissimilar to historic inflation observed in PNG, however, is higher than the forecast 2024 GDP growth of 2.6%.

We have estimated the terminal value of PNG Air using the Gordon Growth Model. We have assumed that the free cash flows forecast for 2025 are representative of those expected to be earned beyond this period.

FX Rate

The fuel costs are paid in USD and management has a consistent FX rate of 0.2765 in their forecasts from CY23 to CY25. As discussed in Section 3.3, Kina has been weakening against the USD in recent times. If this trend persists, it will potentially have a negative impact on earnings.

Tax Rate

We have assumed the PNG corporate tax rate of 30% applies in our DCF model. The model also reflects the benefits associated with future tax losses.

Discount Rate

We have assessed a reasonable discount rate range to be between 14.5% and 15.5% based on PNG Air's weighted average cost of capital ("WACC"). In computing the WACC, we have used the prevailing rates observed in the US and added a country specific risk premium for PNG, to reflect its geopolitical

and macroeconomic risks. Refer to Appendix B for further details on the assessment of the discount rate range.

Minority Interest Discount

Upon implementation of the Allotment, Non-Associated Shareholders of PNG Air will retain their shares and continue to own a minority stake in the company. As is consistent with the requirements of RG 111, the value of the shares must be determined on a minority interest basis. It is necessary to apply a discount to the value of a 100% equity interest in the company in order to estimate the value of a minority interest in PNG Air.

As outlined in Appendix D, this discount takes into account the lack of control that a minority shareholder has over the affairs of a company. Studies have indicated that control premiums generally range from 20% - 40%, implying a range of 17% - 29% for minority interest discounts.

Share Capital

PNG Air currently has 308,292,080 shares on issue. Following the implementation of the Proposed Allotment, this number of shares on issue will increase to 8,224,982,471. Refer to Section 4.4 for more details on the capital structure of PNG Air.

6.1.5. Sensitivity Analysis

It should be noted that the equity value of PNG Air could vary materially based on changes in certain key assumptions. Accordingly, we have conducted a sensitivity analysis to highlight the impact on PNG's equity value caused by movements in certain key assumptions. The following table summarises our results:

DCF Method - Sensitivity Analysis				
PGK per Share	**Low**	**High**	**Low**	**High**
Assessed Value per Share (Minority Basis)	**0.0071**	**0.0082**		
Aircraft Fuel Prices				
+ 5.0%	0.0057	0.0066	(20.4%)	(19.3%)
- 5.0%	0.0086	0.0098	20.4%	19.3%
Flight Crew Employee Costs				
+ 5.0%	0.0056	0.0066	(20.8%)	(19.7%)
- 5.0%	0.0086	0.0098	20.8%	19.7%
Discount Rate				
+ 0.5%	0.0066	0.0076	(6.6%)	(6.9%)
- 0.5%	0.0076	0.0088	7.3%	7.7%
Terminal Growth Rate				
+ 0.5%	0.0078	0.0091	10.1%	10.5%
- 0.5%	0.0065	0.0074	(9.2%)	(9.5%)

Source: GTCF analysis

These sensitivities do not represent a range of potential equity values for PNG Air, but rather they intend to demonstrate the sensitivity of our valuation assessment to changes in certain variables.

6.2. Cross Check – EBIT Multiple Method

In order to further cross-check our valuation conclusions under the DCF methodology, we have considered the trading EBIT Multiples of comparable companies and we have concluded that the EBIT multiples implied in our valuation assessment appear reasonable.

We have sought to benchmark the implied EBIT Multiple based on a normalised financial performance for the Company that is reflective of a more normalised position of PNG Air, including a return to scale

and the benefits of the proposed Scheme. We have adopted a normalised EBIT on the basis that between CY2023 and CY2025, PNG Air is in a ramp up phase in order to return the business to the pre-pandemic conditions. We note that the normalised earnings include the benefit of the renegotiation of the aircraft leases, resulting in a normalised EBIT higher than that observed in CY2019.

For the purpose of the cross-check, Grant Thornton has adopted a normalised EBIT range of between K45 million and K50 million. We set out the calculation of the normalised multiples implied by these assumptions below:

Implied EBIT Multiples		
PGK'000	Low	High
Enterprise Value (Control Basis)	**198,494**	**210,110**
GT Assessed Normalised EBIT	45,000	50,000
Implied EV/EBIT Multiples		
EBIT Multiple (Low)	4.0	4.2
EBIT Multiple (High)	4.4	4.7

Source: GTCF analysis

We compared the implied normalised EBIT multiples from our valuation to those of a group of selected peers that consists of listed airline companies operating in the Asia-Pacific region and globally. The EBIT Multiples determined for PNG Air represent a controlling interest whereas the comparable companies are presented on a minority interest basis.

Trading Multiples of Selected Peers

In this section we set out a table of listed companies that operate in the Passenger Airlines industry, both in Australia and globally in both developed and developing markets. In performing our analysis, we have made a selection of comparable companies whose operations are closely aligned with that of PNG Air's activities within the industry. In making our selection of Selected Peers, we have considered the following:

- There are few comparable companies that are of similar market capitalisation to PNG Air, with majority of listed comparable companies having a much larger market capitalisation. This has been considered when comparing multiples to PNG Air as we would expect PNG Air to trade at lower multiples than the Selected Peers.
- PNG Air operates within the passenger airlines sector and therefore we have selected companies that are operating within this sector, with a particular focus on those airlines that are smaller in size and have a strong domestic offering similar to PNG Air.
- PNG Air solely operates in PNG offering domestic flights around the country. As Papua New Guinea is a developing country, we have included a range of airlines that operate in similar developing regions. We have also looked at airlines operating in developed markets to provide a range of comparisons to PNG Air.

A brief description of the Selected Peers is set out in Appendix C. We note the following in relation to the comparable companies:

- The earnings multiples of listed peers reflect the value of the underlying companies on a minority basis and do not include a premium for control.
- Marketability is the ability to convert an asset to cash at minimal cost. Listed companies generally provide marketability, which has a benefit to the holder, and therefore value is attributed to it. Conversely, private companies such as PNG Air do not have the benefit of such liquidity as their

shares are not readily tradeable and therefore can be subject to a marketability discount. Discount for lack of marketability ("DLOM") is typically in the range of 10% to 30%.

- We have considered the following key value drivers when considering most relevant peers:
  - Companies with a higher prospective growth trade at higher multiples than their peers with lower growth prospects. This is based on the expectation of growth in market share.
  - Companies that earn higher margins tend to trade at higher multiples. This is based on the fact that these companies tend to have more pricing power, which is proving to be particularly important in the current high inflationary environment.
  - Companies with greater product or geographic diversification trade at higher multiples as diversification often results in a smoother earnings profile.

The following table sets out the trading EBIT multiples for our selection of Selected Peers.

			Market		EV/EBIT			
		FX to	Cap	EV	CY22	CY23	CY24	CY25
Company	Country	*PGK*	PGKm	PGKm	Actual	Projected	Projected	Projected
Alliance Aviation Services Limited	Australia	*0.43*	1,134	1,634	22.8x	8.2x	6.3x	5.6x
Qantas Airways Limited	Australia	*0.43*	19,723	24,225	8.4x	4.3x	3.9x	4.0x
Regional Express Holdings Limited	Australia	*0.43*	225	647	n/m	n/a	n/a	n/a
Air New Zealand Limited	New Zealand	*0.46*	4,859	3,677	n/m	3.3x	4.0x	3.8x
Air Canada	Canada	*0.37*	15,999	25,103	n/m	4.1x	4.5x	4.0x
Chorus Aviation Inc.	Canada	*0.37*	1,129	5,631	10.1x	8.9x	9.5x	10.4x
easyJet plc	United Kingdom	*0.22*	12,419	8,806	n/m	3.9x	3.2x	2.9x
Alaska Air Group, Inc.	United States	*0.27*	14,898	14,753	11.2x	4.9x	4.2x	3.4x
Allegiant Travel Company	United States	*0.27*	4,447	7,742	16.3x	7.5x	7.4x	4.8x
American Airlines Group Inc.	United States	*0.27*	26,999	109,744	13.3x	7.9x	8.8x	7.1x
Delta Air Lines, Inc.	United States	*0.27*	74,143	126,470	8.8x	5.5x	5.3x	4.6x
JetBlue Airways Corporation	United States	*0.27*	4,643	11,179	n/m	n/m	13.5x	7.0x
SkyWest, Inc.	United States	*0.27*	6,397	14,761	22.0x	n/m	9.9x	8.7x
Southwest Airlines Co.	United States	*0.27*	49,099	35,208	8.7x	11.7x	6.3x	4.6x
Spirit Airlines, Inc.	United States	*0.27*	4,643	13,348	n/m	n/m	n/m	15.2x
Air China Limited	China	*1.97*	58,763	120,888	n/m	n/m	18.1x	16.3x
Cebu Air, Inc.	Philippines	*15.34*	1,338	3,808	n/m	8.6x	6.0x	4.9x
Asia Aviation Public Company Limited	Thailand	*9.74*	2,382	3,166	n/m	13.7x	8.3x	7.0x
Bangkok Airways Public Company	Thailand	*9.74*	2,933	2,868	n/m	17.1x	18.2x	17.8x
VietJet Aviation Joint Stock Company	Vietnam	*6,630*	8,088	11,148	n/m	n/m	21.9x	18.6x
Low					**8.4x**	**3.3x**	**3.2x**	**2.9x**
Average					**13.5x**	**7.8x**	**8.9x**	**7.9x**
Median					**11.2x**	**7.7x**	**6.9x**	**5.6x**
High					**22.8x**	**17.1x**	**21.9x**	**18.6x**

Source: S&P Global and GTCF analysis

Notes:

(1) Does not include a premium for control.

(2) n/m = data is not meaningful, n/a = data is not available.

(3) Projected years were calculated through a consensus of broker reports.

(4) Market capitalisation and EV multiples are based on the information as at 31 October 2023.

The EBIT multiples observed from the selected peers typically lie between 4.0x and 8.0x on a minority basis.

The EBIT multiples implied in our valuation assessment of between 4.0x and 4.7x is at the low-end of the selected peers. We consider this to be reasonable due to the following:

- A large number of the comparable companies are significantly larger than PNG Air, with operations covering both domestic and international throughout Asia Pacific and globally. These operators have well established and globally recognised brands.
- The selected peers have historically been more profitable than PNG Air, with EBIT margins ranging from 5% and 20% prior to the pandemic, with an average of 11.4%, compared to the 3.4% margin achieved by PNG Air in 2019. We note that whilst the normalised EBIT demonstrates improved profitability from that observed historically, the significant maintenance costs and exposure the currency risks place downward pressure on the multiples implied.
- PNG is exposed to the risks associated with operating in a developing country, with unique geography and macroeconomic conditions. The current pressures on the foreign exchange in PNG, with a number of PNG Air input costs being denominated in USD may place downward pressure on earnings.
- For certain Selected Peers we make the following comments about their reliability as peers given certain identifiable characteristics.

Alliance Aviation Services Limited

Alliance Aviation Services Limited ("AAS") is an Australian airline based in Brisbane that provides contract, charter, and allied aviation services in Australia and Internationally. The company offers specialised aviation services, including aircraft wet leasing, dry leasing, airport management, aircraft trading, parts sales, engine leasing, and engineering services for airlines and clients. The company serves mining, energy, tourism, and government sectors, as well as corporates, and educational and sporting customers. Similar to PNG Air, AAS provide both charter services and passenger services. We would expect the AAS multiple to be at a premium to PNG Air given their size, service offerings and that they operate in a developed Australian market.

Air New Zealand Limited

Air New Zealand Limited ("Air NZ") provides passenger and cargo transportation services on scheduled airlines primarily in New Zealand, Australia, the Pacific Islands, the United Kingdom, Europe, Asia, and the United States. Being the biggest airline in New Zealand, Air NZ is a much larger operation than PNG Air, and thus have considered this when comparing the two companies.

Qantas Airways Limited

Qantas Airways Limited ("Qantas") is the largest airline in Australia and provides air transportation services both domestically and internationally. Qantas offers passenger flying, air cargo and express freight services. We would expect the multiple of Qantas to be higher than PNG Air (on a control basis) given its size, location and service offerings. We note that the Qantas share price has been under pressure due to government inquiries and change in leadership.

Asia Aviation Public Company

Asia Aviation Public Company ("AAV") provides airline services in Thailand. The company operates through passenger air transportation services and charter flight operations. AAV, similarly to PNG Air, operates in a developing Asian market with a similar product offering in passenger and charter flights.

Whilst it is still much larger in size, and thus would expect their multiples to be higher, we consider AAV as one of the more similar listed comparators to PNG Air in terms of location and operations.

Other Companies

The remaining companies are less directly comparable to PNG Air in terms of location and operations. While they are less comparable to PNG Air individually, when looked at as a group they give a view of the general earnings multiples observed for companies operating in the airline industry.

Transaction Multiples

We have also set out below the transaction multiples observed in recent transactions within the airline industry in the Asia-Pacific region:

Date	Target Company	Country	Stake (%)	Enterprise Value (PGKm)	EBIT Multiple
Sep-19	VietJet Aviation Joint Stock Company	Vietnam	2%	3,459.2	3.6x
Dec-17	Asia Aviation Public Company Limited	Thailand	36%	1,272.8	9.5x
Jun-16	Asia Aviation Public Company Limited	Thailand	39%	1,004.5	10.4x
Nov-13	Air New Zealand Limited	New Zealand	20%	4,926.5	7.2x
Low					**3.6x**
Average					**7.7x**
Median					**8.3x**
High					**10.4x**

Source: S&P Global and GTCF analysis

A brief description of the target companies listed in the table above is set out in Appendix C. We note the following in relation to the comparable transactions:

- There has been limited reliable transactions of airlines that have occurred recently and as such we have considered the transaction multiples as guidance only.
- The implied transaction multiples may incorporate various levels of control premiums and special value paid for by the acquirers. In particular, the multiples may reflect synergies paid which are unique to the acquirers.
- The EV / EBIT multiples have been determined having regard to the historical (when available) financial performance.
- Many of these transactions occurred prior to the implementation of AASB 16, which impacts both enterprise value and EBITDA.
- Many of the transactions took place prior to the introduction of COVID-19. As such, economic and market factors like competition dynamics, sales prices / mixtures and supply chain constraints may be materially different to those currently as at the date of valuation. These factors may influence the amounts paid by the acquirers of these businesses.

We have placed limited reliance on the multiples implied by the above transactions as they all occurred prior to the pandemic. However, we note that these multiples are broadly in line with the trading multiples observed in the previous section, albeit slightly higher. Given the transactions occurred prior to the pandemic and were for larger companies with more diverse operations, we would expect them to be at a premium to those implied by our valuation assessment.

7. Sources of Information, Disclaimer and Consents

7.1. Sources of Information

In preparing this report Grant Thornton Corporate Finance has used various sources of information, including:

- Explanatory Memorandum in relation to the issuing of additional shares to MRDC Entities and Nasfund.
- PNG Air Scheme Booklet Draft
- PNG Air – Share Register as at 31 May 2023
- Independent Expert Report prepared by Matthew Byrnes of Grant Thornton
- Forecast Analysis prepared by Grant Thornton Restructuring Team
- PNG Air – July 2023 Board Presentation Draft
- PNG Air – IER Briefing Pack v3
- Lease Agreements with DAE
- Charter Customer Contracts with Simberi & Newcrest
- PNG Air Aged Receivables Report – June 2023
- PNG Air Aged Payables Report – June 2023
- PNG Air Historical Financial Statements
- PNG Air Budget & Forecast Financial Information
- Contracts with Major Creditors of PNG Air
- Executed LOIs with Scheme Creditors
- PNG Air Property Valuation Report
- PNG Air Aircraft Valuation Report
- Constitution of Airlines of Papua New Guinea
- PNG Air Facility Agreements
- PNG Air Subscription Agreements
- Press releases and announcements by PNG Air.
- S&P Global / Capital IQ
- Various industry and broker reports.
- Other publicly available information.

In preparing this report, Grant Thornton Corporate Finance has also held discussions with, and obtained information from, Management of PNG Air and its advisers.

7.2. Limitations and Reliance on Information

This report and opinion is based on economic, market and other conditions prevailing at the date of this report. Such conditions can change significantly over relatively short periods of time.

Grant Thornton Corporate Finance has prepared this report on the basis of financial and other information provided by the Company, and publicly available information. Grant Thornton Corporate Finance has considered and relied upon this information. Grant Thornton Corporate Finance has no reason to believe that any information supplied was false or that any material information has been withheld. Grant Thornton Corporate Finance has evaluated the information provided by the Company through inquiry, analysis and review, and nothing has come to our attention to indicate the information provided was materially misstated or would not afford reasonable grounds upon which to base our report. Nothing in this report should be taken to imply that Grant Thornton Corporate Finance has audited any information supplied to us or has in any way carried out an audit on the books of accounts or other records of the Company.

This report has been prepared to provide an independent opinion as to whether the Allotment is in the best interests of the PNG Air Shareholders. This report should not be used for any other purpose. In particular, it is not intended that this report should be used for any purpose other than as an expression of Grant Thornton Corporate Finance's opinion as to whether the Allotment is in the best interests of PNG Air Shareholders.

PNG Air has indemnified Grant Thornton Corporate Finance, its affiliated companies and their respective officers and employees, who may be involved in or in any way associated with the performance of services contemplated by our engagement letter, against any and all losses, claims, damages and liabilities arising out of or related to the performance of those services whether by reason of their negligence or otherwise, excepting gross negligence and wilful misconduct, and which arise from reliance on information provided by the Company, which the Company knew or should have known to be false and/or reliance on information, which was material information the Company had in its possession and which the Company knew or should have known to be material and which did not provide to Grant Thornton Corporate Finance. The Company will reimburse any indemnified party for all expenses (including without limitation, legal expenses) on a full indemnity basis as they are incurred.

7.3. Consents

Grant Thornton Corporate Finance consents to the issuing of this report in the form and context in which it is included in the Explanatory Memorandum to be sent to PNG Air Shareholders. Neither the whole nor part of this report nor any reference thereto may be included in or with or attached to any other document, resolution, letter or statement without the prior written consent of Grant Thornton Corporate Finance as to the form and context in which it appears.

Appendix A – Valuation Methodologies

Capitalisation of Future Maintainable Earnings

The capitalisation of future maintainable earnings multiplied by appropriate earnings multiple is a suitable valuation method for businesses that are expected to trade profitably into the foreseeable future. Maintainable earnings are the assessed sustainable profits that can be derived by a company's business and excludes any abnormal or "one off" profits or losses.

This approach involves a review of the multiples at which shares in listed companies in the same industry sector trade on the share market. These multiples give an indication of the price payable by portfolio investors for the acquisition of a parcel shareholding in the company.

Discounted Future Cash Flows

An analysis of the net present value of forecast cash flows or DCF is a valuation technique based on the premise that the value of the business is the present value of its future cash flows. This technique is particularly suited to a business with a finite life. In applying this method, the expected levels of future cash flows are discounted by an appropriate discount rate based on the weighted average cost of capital. The cost of equity capital, being a component of the WACC, is estimated using the Capital Asset Pricing Model ("CAPM").

Predicting future cash flows is a complex exercise requiring assumptions as to the future direction of the company, growth rates, operating and capital expenditure and numerous other factors. An application of this method generally requires cash flow forecasts for a minimum of five years. However, we understand PNG Air Management only prepared three-year forecasts, as such we have considered extended cash flow forecasts based on our terminal value growth rate.

Orderly Realisation of Assets

The amount that would be distributed to shareholders on an orderly realisation of assets is based on the assumption that a company is liquidated with the funds realised from the sale of its assets, after payment of all liabilities, including realisation costs and taxation charges that arise, being distributed to shareholders.

Market Value of Quoted Securities

Market value is the price per issued share as quoted on the relevant recognised securities exchange. The share market price would, prima facie, constitute the market value of the shares of a publicly traded company, although such market price usually reflects the price paid for a minority holding or small parcel of shares, and does not reflect the market value offering control to the acquirer.

Comparable Market Transactions

The comparable transactions method is the value of similar assets established through comparative transactions to which is added the realisable value of surplus assets. The comparable transactions method uses similar or comparative transactions to establish a value for the current transaction.

Comparable transactions methodology involves applying multiples extracted from the market transaction price of similar assets to the equivalent assets and earnings of the company. The risk attached to this valuation methodology is that in many cases, the relevant transactions contain features that are unique to that transaction, and it is often difficult to establish sufficient detail of all the material factors that contributed to the transaction price.

Appendix B – Discount Rate

Introduction

The cash flow assumptions underlying the DCF approach are on a nominal, ungeared and post-tax basis. Accordingly, we have assessed a range of nominal post-tax discount rates for the purpose of calculating the net present value of the cash flows.

The discount rates were determined using the WACC formula. The WACC represents the average of the rates of return required by providers of debt and equity capital to compensate for the time value of money and the perceived risk or uncertainty of the cash flows, weighted in proportion to the market value of the debt and equity capital provided. However, we note that the selection of an appropriate discount rate is ultimately a matter of professional judgment.

Under a classical tax system, the nominal WACC is calculated as follows:

$$\mathrm{WACC} = \mathrm{R_d} \times \frac{\mathrm{D}}{\mathrm{D}+\mathrm{E}} \times (1-\mathrm{t}) + \mathrm{R_e} \times \frac{\mathrm{E}}{\mathrm{D}+\mathrm{E}}$$

Where:

- Re = the required rate of return on equity capital
- E = the market value of equity capital
- D = the market value of debt capital
- Rd = the required rate of return on debt capital
- t = the statutory corporate tax rate

Required Rate of Return on Equity Capital

We have used the CAPM, which is commonly used by practitioners, to calculate the required return on equity capital.

The CAPM assumes that an investor holds a large portfolio comprising risk-free and risky investments. The total risk of an investment comprises systematic risk and unsystematic risk. Systematic risk is the variability in an investment's expected return that relates to general movements in capital markets (such as the share market) while unsystematic risk is the variability that relates to matters that are unsystematic to the investment being valued.

The CAPM assumes that unsystematic risk can be avoided by holding investments as part of a large and well-diversified portfolio and that the investor will only require a rate of return sufficient to compensate for the additional, non-diversifiable systematic risk that the investment brings to the portfolio. Diversification cannot eliminate the systematic risk due to economy-wide factors that are assumed to affect all securities in a similar fashion.

Accordingly, whilst investors can eliminate unsystematic risk by diversifying their portfolio, they will seek to be compensated for the non-diversifiable systematic risk by way of a risk premium on the expected return. The extent of this compensation depends on the extent to which the company's returns are correlated with the market as a whole. The greater the systematic risk faced by investors, the larger the required return on capital will be demanded by investors.

The systematic risk is measured by the investment's beta. The beta is a measure of the co-variance of the expected returns of the investment with the expected returns on a hypothetical portfolio comprising all investments in the market – it is a measure of the investment's relative risk.

A risk-free investment has a beta of zero and the market portfolio has a beta of one. The greater the systematic risk of an investment the higher the beta of the investment.

The CAPM assumes that the return required by an investor in respect of an investment will be a combination of the risk-free rate of return and a premium for systematic risk, which is measured by multiplying the beta of the investment by the return earned on the market portfolio in excess of the risk-free rate.

Under the CAPM, the required nominal rate of return on equity (Re) is estimated as follows:

$$R_e = R_f + \beta_e (R_m - R_f)$$

Where:

- Rf = risk free rate
- βe = expected equity beta of the investment
- (Rm – Rf) = market risk premium

Risk-Free Rate

In the absence of an official risk-free rate, the yield on government bonds (in an appropriate jurisdiction) is commonly used as a proxy. Accordingly, we have observed the yields on the 10-year US Government bond.

United States Treasury Constant Maturity - 10 Year as at 31 October 2023	Range			Daily Average
Previous 5 Trading Days	4.84%	-	4.95%	4.88%
Previous 10 Trading Days	4.83%	-	4.98%	4.89%
Previous 20 Trading Days	4.58%	-	4.98%	4.80%
Previous 30 Trading Days	4.35%	-	4.98%	4.72%
Previous 60 Trading Days	4.00%	-	4.98%	4.48%
Previous 1 Year Trading	3.30%	-	4.98%	3.88%
Previous 2 Years Trading	1.35%	-	4.98%	3.22%
Previous 3 Years Trading	0.78%	-	4.98%	2.60%
Previous 5 Years Trading	0.52%	-	4.98%	2.24%
Previous 10 Years Trading	0.52%	-	4.98%	2.29%

Source: S&P Global, GTCF analysis

Given the recent volatility in Government Bond yields around the world over the last 18 months due to profound market uncertainty as a result of COVID-19, we have considered both the long-term average yield as well as recent spot rates in determining our risk-free rate assumption of 4.00%.

Market Risk Premium

The market risk premium represents the additional return an investor expects to receive to compensate for additional risk associated with investing in equities as opposed to assets on which a risk-free rate of return is earned. However, given the inherent high volatility of realised rates of return, especially for equities, the market risk premium can only be meaningfully estimated over long periods of time. In this regard, Grant Thornton studies of the historical risk premium over periods of 20 to 80 years suggest a risk premium of 6.00% for the US market.

For the purpose of the WACC assessment, Grant Thornton Corporate Finance has adopted a market risk premium of 6.00%.

Equity Beta

The beta measures the expected relative risk of the equity in a company. The choice of the beta requires judgement and necessarily involves subjective assessment as it is subject to measurement issues and a high degree of variation.

An equity beta includes the effect of gearing on equity returns and reflects the riskiness of returns to equity holders. However, an asset beta excludes the impact of gearing and reflects the riskiness of returns on the asset, rather than returns to equity holders. Asset betas can be compared across asset classes independent of the impact of the financial structure adopted by the owners of the business.

Equity betas are typically calculated from historical data. These are then used as a proxy for the future which assumes that the relative risk of the past will continue into the future. Therefore, there is no right equity beta and it is important not to simply apply historical equity betas when calculating the cost of equity.

For the purpose of the report, we have had regards to the observed betas (equity betas) of comparable listed companies operating in the airline industry as outlined in the following tables below. Given the extreme impact the pandemic had on the airline industry, we have elected to perform regressions of the historical betas over a 2-year weekly time period.

Beta Analysis		Market Cap	Equity	R-	Gearing	Ungeared	Regeared
Company Name	Country	(PGKm)	Beta	Squared	Ratio	Beta	Beta
Alliance Aviation Services Limited	Australia	484	0.83	0.13	46.4%	0.63	0.86
Qantas Airways Limited	Australia	8,412	1.26	0.31	37.2%	1.00	1.38
Regional Express Holdings Limited	Australia	96	0.80	0.15	215.6%	0.32	0.44
Air New Zealand Limited	New Zealand	2,072	0.91	0.10	54.5%	0.66	0.90
Air Canada	Canada	6,824	1.30	0.25	127.6%	0.67	0.93
Chorus Aviation Inc.	Canada	482	1.57	0.30	383.4%	0.41	0.57
easyJet plc	United Kingdom	5,297	1.03	0.20	33.0%	0.82	1.12
Alaska Air Group, Inc.	United States	6,354	1.57	0.47	25.9%	1.32	1.82
Allegiant Travel Company	United States	1,897	1.09	0.36	81.0%	0.68	0.94
American Airlines Group Inc.	United States	11,516	1.25	0.39	441.2%	0.30	0.41
Delta Air Lines, Inc.	United States	31,624	1.67	0.47	121.3%	0.89	1.22
JetBlue Airways Corporation	United States	1,980	1.40	0.41	166.9%	0.63	0.87
SkyWest, Inc.	United States	2,729	1.10	0.30	221.5%	0.42	0.58
Southwest Airlines Co.	United States	20,942	1.34	0.43	-18.8%	1.34	1.85
Spirit Airlines, Inc.	United States	1,981	1.12	0.16	275.3%	0.37	0.51
Air China Limited	China	17,407	0.91	0.44	228.5%	0.34	0.46
Cebu Air, Inc.	Philippines	571	1.09	0.33	351.8%	0.31	0.43
Asia Aviation Public Company Limited	Thailand	1,016	1.11	0.24	158.4%	0.49	0.67
Bangkok Airways Public Company	Thailand	1,251	1.17	0.20	67.6%	0.76	1.05
VietJet Aviation Joint Stock Company	Vietnam	3,450	0.32	0.07	25.9%	0.27	0.37
Average			**1.14**	**0.29**	**152.2%**	**0.63**	**0.87**
Median			**1.11**	**0.30**	**124.4%**	**0.63**	**0.86**

Source: S&P Global and GTCF analysis

*Note: Equity betas are c*alculated using data provided by S&P Global. The betas are based on a two-year period with weekly observations based on the local or MSCI index. Betas have been degeared based on the average gearing ratio (i.e., net debt divided by shareholders' equity based on market values). Betas have been regeared based on a regearing ratio of 54%.

It should be noted that the above betas are drawn from the actual and observed historical relationship between risk and returns. From these actual results, the expected relationship is estimated generally on the basis of extrapolating past results. Despite the arbitrary nature of the calculations, it is important to assess their commercial reasonableness. That is, to assess how closely the observed relationship is likely to deviate from the expected relationship.

Consequently, while measured equity betas of the listed comparable companies provide useful benchmarks against which the equity beta used in estimating the cost of equity for the predevelopment assets, the selection of an unsystematic equity beta requires a level of judgement.

The asset betas of the selected companies are calculated by adjusting the equity betas for the effect of gearing to obtain an estimate of the business risk of the comparable companies, a process commonly referred as de-gearing. We have then recalculated the equity beta based on an assumed 'optimal' capital structure deemed appropriate for the business (regearing). This is a subjective exercise, which carries a significant possibility of estimation error.

We used the following formula to undertake the de-gearing and regearing exercise:

$$\beta_e = \beta_a \left[1 + \frac{D}{E} \times (1 - t) \right]$$

Where:

- βe = equity beta
- βa = asset beta
- t = corporate tax rate

For the purposes of our valuation, we have adopted an equity beta in the range of 0.90 – 1.00.

Specific Risk Premium

A specific risk premium represents the additional return an investor expects to receive to compensate for the country, size and project related risks not reflected in the beta of the observed comparable companies.

Given we have used the prevailing rates observed in the US market in order to determine the risk-free rate, market risk premium and cost of debt, we have included an additional country risk premium in our cost of equity and cost of debt calculations to compensate for the economic conditions in PNG. These premiums have been estimated with reference to the Damodaran database, a widely used source in the finance industry. In addition, we have considered the risks of the cash flow forecasts.

We have assumed a specific risk premium range of 8.30% - 9.30% in our cost of equity calculations and an additional premium of 5.90% in our cost of debt calculations.

Cost of Debt

Grant Thornton Corporate Finance has assumed a cost of debt range of 5.50% - 6.50% in the WACC determination, having regard to the long-term BBB-rated corporate bond yields observed by the US Treasury.

Tax Rate

We have applied the corporate income tax rate for PNG in our calculations, being 30.00%.

Capital Structure

Grant Thornton Corporate Finance has considered the gearing ratio which a hypothetical purchaser of the business would adopt in order to generate a balanced return given the inherent risks associated with debt financing. Factors which a hypothetical purchaser may consider include the shareholders' return after interest payments, and the business' ability to raise external debt.

The appropriate level of gearing that is utilised in determining WACC for a particular company should be the "target" gearing ratio, rather than the actual level of gearing, which may fluctuate over the life of a company. The target or optimal gearing level can therefore be derived based on the trade-off theory which stipulates that the target level of gearing for a project is one at which the present value of the tax benefits from the deductibility of interest are offset by present value of costs of financial distress. In practice, the target level of gearing is evaluated based on the quality and variability of cash flows. These are determined by:

- the quality and life cycle of a company
- the quality and variability of earnings and cash flows

- working capital
- level of capital expenditure
- the risk profile of the assets

We have adopted a debt-to-enterprise ratio of **35%** debt and **65%** equity for PNG Air.

Discount Rate Summary

The discount rate range for PNG Air is set out below:

WACC Calculation	Low	High
Cost of Equity		
Risk-Free Rate	4.0%	4.0%
Beta	0.90	1.00
Market Risk Premium	6.0%	6.0%
Specific Risk Premium	8.3%	9.3%
Cost of Equity	**17.7%**	**19.3%**
Cost of Debt		
Base Cost of Debt	5.5%	6.5%
Additional Premium	5.9%	5.9%
Cost of Debt (Pre-Tax)	11.4%	12.4%
Tax	30%	30%
Cost of Debt (Post-Tax)	**8.0%**	**8.7%**
Capital Structure		
Proportion of Debt	35%	35%
Proportion of Equity	65%	65%
WACC (Post-Tax)	**14.3%**	**15.6%**
WACC (Selected)	**14.5%**	**15.5%**

Source: GTCF analysis

Appendix C – Comparable Company Descriptions

Company	Description
Alliance Aviation Services Limited	Alliance Aviation Services Limited provides contract, charter, and allied aviation services in Australia and internationally. The company offers specialized aviation services, including aircraft wet leasing, dry leasing, airport management, aircraft trading, parts sales, engine leasing, and engineering services for airlines and clients. It operates a fleet of 100 seat aircraft F100; 80 seat aircraft F70; and 1 Embraer aircraft. The company serves mining, energy, tourism, and government sectors, as well as corporates, and educational and sporting customers. Alliance Aviation Services Limited was founded in 2002 and is based in Brisbane, Australia.
Qantas Airways Limited	Qantas Airways Limited provides air transportation services in Australia and internationally. The company operates through Qantas Domestic, Qantas International, Jetstar Group, and Qantas Loyalty segments. It offers passenger flying, and air cargo and express freight services; and customer loyalty recognition programs. The company operates a fleet of aircraft under the Qantas and Jetstar brands. Qantas Airways Limited was founded in 1920 and is based in Mascot, Australia.
Regional Express Holdings Limited	Regional Express Holdings Limited engages in the air transportation of passengers and freight. The company operates through Regular Public Transport, Charter and Other, and Training segments. It provides fly in/fly out charter services; airfreight charter services; corporate jet charter services; and aeromedical transport services. The company also offers training programs to students and other airlines; and airline cadet pilot training for global carriers. It operates a fleet of 61 Saab 340 aircraft and 7 Boeing 737-800NG aircraft to 58 destinations throughout all states in Australia. The company was formerly known as Australiawide Airlines Limited and changed its name to Regional Express Holdings Limited in 2005. Regional Express Holdings Limited was founded in 1953 and is headquartered in Mascot, Australia.
Air New Zealand Limited	Air New Zealand Limited provides passenger and cargo transportation services on scheduled airlines primarily in New Zealand, Australia, the Pacific Islands, the United Kingdom, Europe, Asia, and the United States. The company also offers ground handling services; engineering and maintenance services, including aircraft and component maintenance, repair, and overhaul services; aviation services; and aircraft leasing and financing services. As of June 30, 2023, it operated a fleet of 7 Boeing 777-300ER, 14 Boeing 787-9 Dreamliner, 6 Airbus A320neo, 10 Airbus A321neo, 17 Airbus A320CEO, 29 ATR 72-600, and 23 Bombardier Q300 aircrafts. The company was formerly known as Tasman Empire Airways Limited and changed its name to Air New Zealand Limited in April 1965. Air New Zealand Limited was incorporated in 1940 and is based in Auckland, New Zealand.
Air Canada	Air Canada provides domestic, U.S. transborder, and international airline services. The company provides scheduled passenger services under the Air Canada Vacations and Air Canada Rouge brand names in the Canadian market, the Canada-U.S. transborder market, and in the international market to and from Canada, as well as through capacity purchase agreements on other regional carriers. As of December 31, 2022, it operated a fleet of 192 aircraft under the Air Canada mainline brand name comprising 110 Boeing and Airbus narrow-body aircraft, and 82 Boeing and Airbus wide-body aircraft; 114 aircraft under the Air Canada Express brand name, including 50 Mitsubishi regional jets, 39 De Havilland Dash-8 turboprop aircraft and 25 Embraer 175 aircraft; and 39 aircraft under the Air Canada Rouge brand name consisting of 14 Airbus A321 aircraft, 5 Airbus A320 aircraft, and 20 Airbus A319 aircraft. The company also provides air cargo services in approximately 50 countries, including Toronto, Halifax, St. John's, Miami, Atlanta, Dallas, Quito, Lima, Bogota, San Juan, Mexico City, Guadalajara, Madrid, and Frankfurt. In addition, it develops, operates, markets, and distributes vacation travel packages in the Caribbean, Mexico, the United States, Europe, Central and South America, South Pacific, Australia, and Asia; offers cruise packages in North America, Europe, and the Caribbean; and provides travel loyalty programs. The company was founded in 1937 and is headquartered in Saint-Laurent, Canada.

Source: S&P Global

Company	Description
Chorus Aviation Inc.	Chorus Aviation Inc., through its subsidiaries, provides aviation solutions in the United States and Canada. It operates through Regional Aviation Services and Regional Aircraft Leasing segments. The Regional Aviation Services segment provides contract flying services, charter services, and specialized contract flying, such as medical, logistical, and humanitarian flights; aircraft leasing; and maintenance, repair and overhaul services, and part sales and technical services. The Regional Aircraft Leasing segment engages in asset management business comprising management of aircraft investment funds and provision of lease services to aircraft operators. In addition, the company provides aeronautical products, which includes component and sheet metal; and avionics repair support services for airlines, leasing companies, aviation maintenance organizations, and original equipment manufacturers. Further, it offers in-house design and certification services including repair design and supplemental type certificate approvals for aircraft modifications, reconfigurations, and part replacements; and provides technical support, structural and system design, operational documentation, and project management. Chorus Aviation Inc. was formerly known as Jazz Air Income Fund. The company was founded in 2005 and is based in Dartmouth, Canada.
easyJet plc	easyJet plc operates as a low-cost airline carrier in Europe. It also engages in the sale of holiday packages; aircraft trading and leasing; development of building projects; financing and insurance business; and tour operator activities. As of September 30, 2022, it operated 320 aircrafts, 988 routes, and 153 airports. easyJet plc was founded in 1995 and is based in Luton, the United Kingdom.
Alaska Air Group, Inc.	Alaska Air Group, Inc., through its subsidiaries, operated airlines. The company operates through three segments: Mainline, Regional, and Horizon. The company offers scheduled air transportation services on Boeing and Airbus jet aircraft for passengers and cargo throughout the United States, and in parts of Mexico, Costa Rica, and Belize; and for passengers across a shorter distance network within the United States and Canada. Alaska Air Group, Inc. was founded in 1932 and is based in Seattle, Washington.
Allegiant Travel Company	Allegiant Travel Company, a leisure travel company, provides travel services and products to residents of under-served cities in the United States. The company offers scheduled air transportation on limited-frequency, nonstop flights between under-served cities and leisure destinations. As of February 1, 2023, it operated a fleet of 122 Airbus A320 series aircraft. The company also provides air-related services and products in conjunction with air transportation, including baggage fees, advance seat assignments, travel protection products, priority boarding, a customer convenience fee, food and beverage purchases on board, and other air-related services, as well as use of its call center for purchases. In addition, it offers third party travel products, such as hotel rooms and ground transportation, such as rental cars and hotel shuttle products; and air transportation services through fixed fee agreements and charter service on a year-round and ad-hoc basis. Further, the company operates a golf course. Allegiant Travel Company was founded in 1997 and is based in Las Vegas, Nevada.
American Airlines Group Inc.	American Airlines Group Inc., through its subsidiaries, operates as a network air carrier. The company provides scheduled air transportation services for passengers and cargo through its hubs in Charlotte, Chicago, Dallas/Fort Worth, Los Angeles, Miami, New York, Philadelphia, Phoenix, and Washington, D.C., as well as through partner gateways in London, Doha, Madrid, Seattle/Tacoma, Sydney, and Tokyo. As of December 31, 2022, it operated a mainline fleet of 925 aircraft. The company was formerly known as AMR Corporation and changed its name to American Airlines Group Inc. in December 2013. American Airlines Group Inc. was founded in 1926 and is headquartered in Fort Worth, Texas.

Source: S&P Global

Company	Description
Delta Air Lines, Inc.	Delta Air Lines, Inc. provides scheduled air transportation for passengers and cargo in the United States and internationally. The company operates through two segments, Airline and Refinery. Its domestic network centered on core hubs in Atlanta, Minneapolis-St. Paul, Detroit, and Salt Lake City, as well as coastal hub positions in Boston, Los Angeles, New York-LaGuardia, New York-JFK, and Seattle; and international network centered on hubs and market presence in Amsterdam, Mexico City, London-Heathrow, Paris-Charles de Gaulle, and Seoul-Incheon. The company sells its tickets through various distribution channels, including delta.com and the Fly Delta app, reservations, online travel agencies, traditional brick and mortar, and other agencies. It also provides aircraft maintenance and engineering support, repair, and overhaul services; and vacation packages to third-party consumers, as well as aircraft charters, and management and programs. The company operates through a fleet of approximately 1,250 aircrafts. Delta Air Lines, Inc. was founded in 1924 and is based in Atlanta, Georgia.
JetBlue Airways Corporation	JetBlue Airways Corporation provides air passenger transportation services. As of December 31, 2022, the company operated a fleet of 63 Airbus A321 aircraft, 14 Airbus A220 aircraft, 23 Airbus A321neo aircraft, 130 Airbus A320 aircraft, and 60 Embraer E190 aircraft. It also served 100 destinations in the 32 states in the United States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and 24 countries in the Caribbean and Latin America. JetBlue Airways Corporation has a strategic partnership with American Airlines Group Inc. to create connectivity for travelers in the Northeast. The company was incorporated in 1998 and is based in Long Island City, New York.
SkyWest, Inc.	SkyWest, Inc., through its subsidiaries, operates a regional airline in the United States. The company operates through two segment, SkyWest Airlines and SkyWest Leasing. It also leases regional jet aircraft and spare engines to third parties. As of December 31, 2021, the company's fleet consisted of 625 aircraft; and provided scheduled passenger and air freight services with approximately 1,620 total daily departures to various destinations in the United States, Canada, and Mexico. In addition, it offers airport customer and ground handling services for other airlines. SkyWest, Inc. was incorporated in 1972 and is headquartered in St. George, Utah.
Southwest Airlines Co.	Southwest Airlines Co. operates as a passenger airline company that provide scheduled air transportation services in the United States and near-international markets. As of December 31, 2022, the company operated a total fleet of 770 Boeing 737 aircrafts; and served 121 destinations in 42 states, the District of Columbia, and the Commonwealth of Puerto Rico, as well as ten near-international countries, including Mexico, Jamaica, the Bahamas, Aruba, the Dominican Republic, Costa Rica, Belize, Cuba, the Cayman Islands, and Turks and Caicos. It also provides inflight entertainment portal and connectivity services on Wi-Fi enabled aircrafts; and Rapid Rewards loyalty program that enables program members to earn points for dollars spent on Southwest base fares. In addition, the company offers a suite of digital platforms to support customers' travel needs, including websites and apps; and SWABIZ, an online booking tool. Further, it provides ancillary services, such as Southwest's EarlyBird Check-In, upgraded boarding, and transportation of pets and unaccompanied minors. The company was incorporated in 1967 and is headquartered in Dallas, Texas.
Spirit Airlines, Inc.	Spirit Airlines, Inc. provides airline services. The company provides front seats, including wider seats with extra legroom, carry-on and checked baggage, assigned seats, travel insurance, and onboard beverages and snacks, as well as hotels, cars, vacation packages, and cruises services. It serves 92 destinations in 16 countries in the United States, Latin America, and the Caribbean. As of December 31, 2022, the company had a fleet of 194 Airbus single-aisle aircraft. The company was formerly known as Clippert Trucking Company and changed its name to Spirit Airlines, Inc. in 1992. Spirit Airlines, Inc. was founded in 1964 and is headquartered in Miramar, Florida.

Source: S&P Global

Company	Description
Air China Limited	Air China Limited, together with its subsidiaries, provides air passenger, air cargo, and airline-related services in Mainland China, Hong Kong, Macau, Taiwan, China, and internationally. The company operates in Airline Operations and Other Operations segments. It provides aircraft engineering and airport ground handling services. The company is also involved in the import and export trading activities; and provision of cabin, airline catering, air ticketing, human resources, aircraft overhaul and maintenance, and financial services. Air China Limited was founded in 1988 and is headquartered in Beijing, the People's Republic of China.
Cebu Air, Inc.	Cebu Air, Inc., an airline, provides international and domestic air transportation services. The company offers scheduled air travel services to passengers, as well as airport-to-airport cargo services on its domestic and international routes. It also provides ancillary services, such as cancellation and rebooking options; in-flight merchandising, including sale of duty-free products on international flights; baggage services; and travel-related products and services. In addition, the company offers line maintenance services comprising certification and mechanic assistance; technical ramp, equipment handling; water and toilet servicing; aircraft ground support equipment operation; and light maintenance aircraft checks services. As of December 31, 2022, it operated a fleet of 76 aircraft, including 21 Airbus A320 CEO, 7 Airbus A321 CEO, 9 Airbus A320 NEO, 10 Airbus A321 NEO, 5 Airbus A330 CEO, 4 Airbus A330 NEO, 6 ATR 72-500, and 14 ATR 72-600. The company was incorporated in 1988 and is headquartered in Pasay City, the Philippines. Cebu Air, Inc. is a subsidiary of CP Air Holdings, Inc.
Asia Aviation Public Company Limited	Asia Aviation Public Company Limited provides airline services in Thailand. The company operates through Scheduled Flight Operations and Charter Flight Operations segments. The Scheduled Flight Operations segment offers passenger air transportation services to routine destinations for scheduled flights. This segment sells tickets through its distribution channels, including website, sale counters, travel agents, etc. The Chartered Flight Operations segment provides passenger air transportation services to non-routine destinations that serves tourist agency companies. It also operates an academy institution of learning and competency development for aviation tourism and hospitality industries. Asia Aviation Public Company Limited was founded in 2004 and is headquartered in Bangkok, Thailand.
Bangkok Airways Public Company Limited	Bangkok Airways Public Company Limited, together with its subsidiaries, provides air transportation and airport services. The company operates through three segments: Airline, Airport, and Supporting Airline Business. The Airline segment engages in the sale of tickets, as well as the provision of services for passengers. The Airport segment offers location services for passengers and airlines. The Supporting Airline Business segment provides ground handling, cargo, and catering services for airlines and customers. The company also offers aviation training, and REIT and other management services; development and management services for public airports; operates restaurants; distributes souvenirs; and produces and processes food for distribution. Bangkok Airways Public Company Limited was founded in 1968 and is headquartered in Bangkok, Thailand.
VietJet Aviation Joint Stock Company	VietJet Aviation Joint Stock Company provides passenger and cargo air transportation services, and airline-related support services. It also provides in-flight advertising services; and trades in and leases aircraft and aircraft components, as well as offers ancillary and payment services. The company was founded in 2007 and is based in Ho Chi Minh City, Vietnam.

Source: S&P Global

Appendix D – Premium for Control Study

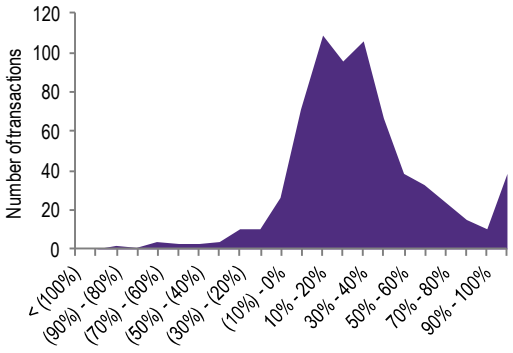
A control premium is defined as the additional consideration an investor would pay over a marketable minority equity value in order to own a controlling interest in the common stock of a company.

We have conducted a study of premiums paid in 667 Australian transactions completed between June 2000 and September 2019. We have sourced our transaction data from S&P Global and Mergermarket.

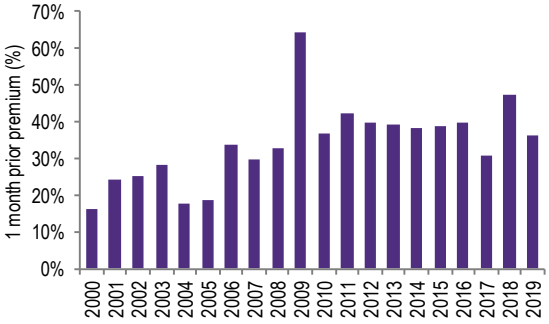
Our assessment of the premiums involves comparing the offer price of the closing price of the target company, one month prior to the date of the announcement of the offer. Where the consideration included shares in the acquiring company, we used the closing share price of the acquiring company on the day prior to the offer.

The following charts illustrates the premiums paid on transactions between June 2000 and September 2019.

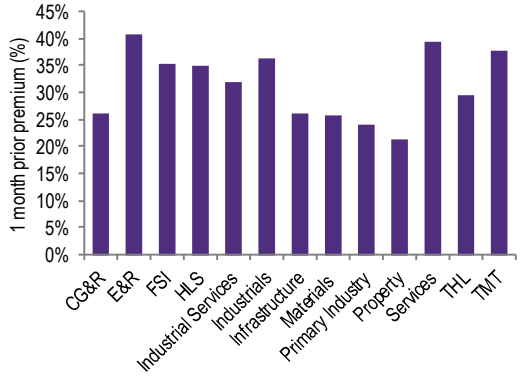
1 Month Prior Control Premium



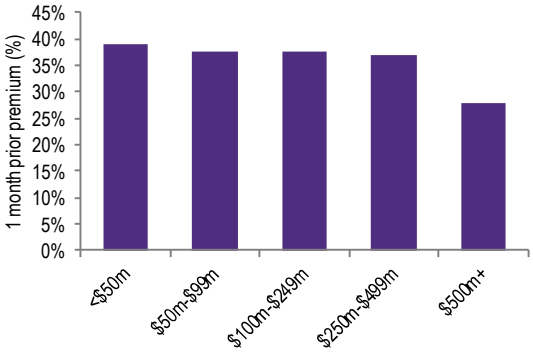
Control premium per completion date



Control premium per industry



Control premium and size



Control premium study	1 month prior control premium (%)
Average	35.13%
Median	29.87%

Source: S&P Global, Mergermarket, and GTCF analysis

Given the distribution of the control premiums in our study, we have assessed a range of 20% to 40% to be a reasonable representation of the market.

Appendix E – Glossary

A$	Australian Dollar
AAS	Alliance Aviation Services Limited
AAV	Asia Aviation Public Company
Air NZ	Air New Zealand Limited
Allotment	The proposed issue of shares to MRDC Entities.
APES	Accounting Professional and Ethical Standards
APES 225	Accounting Professional and Ethical Standard 225 "Valuation Services"
ASIC	Australian Securities and Investments Commission
ASK	Available-Seat Kilometres
ATR	Avions De Transport Regional GIE and ATR Eastern Support Pte Ltd
ATR Regional	Avions de Transport Regional / Regional Aircraft Corporation
Board	The Directors of PNG Air
BAU	Business As Usual
BSP	Bank of South Pacific Limited
CAGR	Compound Average Growth Rate
Capex	Capital Expenditure
CAPM	Capital Asset Pricing Model
CASA PNG	Civil Aviation Safety Authority of Papua New Guinea
Code	The Takeover and Mergers Code issued by the Securities Commission of Papua New Guinea pursuant to Rule 12 (Exceptions to Fundamental Rule) prohibits a person who holds or controls 20% or more of the voting rights in a code company from owning or controlling an increased percentage of the voting rights in the code company.
The Constitution	The Constitution of PNG Air dated 31 May 2010
Companies Act	Companies Act 1997 (PNG)
Corporations Act	Australian Corporations Act 2001
COVID or COVID-19	Coronavirus Pandemic, The World Health Organization declared a worldwide pandemic in March 2020.
CYxx	Calendar Year ended/ending 31 December 20xx
CY23A+F	CY23, 6 months audited, and 6 months forecast
DAE	DAE Group Holdings Limited
DCF	Discounted Cash Flow
DCF Method	Discounted Cash Flow and the estimated realisable value of any surplus assets
Director	Each director of PNG Air
DLOC	Discount for Lack of Control
DLOM	Discount for Lack of Marketability
EASA	European Union Aviation Safety Agency
EBIT	Earnings before interest and tax
EBITDA	Earnings before, interest, tax, depreciation and amortisation
EBITDAR	Earnings before, interest, tax, depreciation and amortisation, and rental costs
EV	Enterprise Value
FME Method	Application of earnings multiples to the estimated future maintainable earnings or cash flows of the entity, added to the estimated realisable value of any surplus assets
FOQA	Flight Operations Quality Assurance Program

FSG	Financial Services Guide
FX	Foreign Exchange
FYxx	12-month financial year ended 31 December 20xx
GST	Goods and Services Tax
GMA	Global Maintenance Agreement
GTCF, Grant Thornton, or Grant Thornton Corporate Finance	Grant Thornton Corporate Finance Pty Ltd (ACN 003 265 987)
HRA	Hazard Risk Assessment
IAR	Independent Adviser's Report
ICCC	Independent Consumer & Competition Commission
IER or Report	Independent Expert Report
IFRS	International Financial Reporting Standard
IFRS 16	International Financial Reporting Standard 16 "Leases"
IRC	Internal Revenue Commission
Jasmore	Jasmore Holdings Limited
k	Thousand
LAME	Licensed Aircraft Engineers
Listing Rules	The Listing Rules of PNGX effective 18 September 2023.
LOI	Letters of Intent
LOSA	Line Operations Safety Audit
m	Million
Management	Senior management and directors of PNG Air
Management's Projections	Cash flow forecasts provided by PNG Air
Model	Management's 2024 and 2025 projections for the business
MRDC	Mineral Resource Development Company
MRDC Entities	Collectively, Mineral Resources OK Tedi No.2 Limited, Mineral Resources Development Company Limited and Mineral Resources Star Mountains Limited
n/a	Not Available
NAC	National Airports Corporation
Nasfund	National Superannuation Fund
National Court	National Court of Papua New Guinea
NAV Method	Amount available for distribution to security holders on an orderly realisation of assets
Newcrest	Newcrest Mining Limited
n/m	Not Meaningful
Non-Associated Shareholders	Shareholders that are not participants of the Allotment
NWC	Net Working Capital
PBH Agreement	Pay by the Hour Agreement
PDP Arrears	Payable Predelivery Payments
PGK or K	Papua New Guinean Kina

PLF	Passenger Load Factor
PNG	Papua New Guinea
PNG Air or the Company	PNG Air Limited (formerly Airlines PNG)
PNGSDP	PNG Sustainable Development Program Limited
PNGX	PNG National Stock Exchange
PPE	Property, Plant and Equipment
Qantas	Qantas Airways Limited
Quoted Security Price Method	Quoted price for listed securities, when there is a liquid and active market
REX	Regional Express Holdings Limited
RG 111	ASIC Regulatory Guide 111 “Contents of expert reports”
RG 112	ASIC Regulatory Guide 112 “Independence of experts”
RPK	Revenue Passenger Kilometres
RPT	Regular Passenger Transport
Scheme or Proposed Scheme	Scheme of Arrangement between PNG Air and its Scheme Creditors
Scheme Booklet	Scheme of Arrangement Booklet in relation to the restructuring of the debts of PNG Air prepared by the
Scheme Creditors	Creditors of PNG Air apart of the Scheme of Arrangement
SCPNG	Securities Commission of Papua New Guinea
Share	A fully paid ordinary share in the capital of the Company
Shareholder	Shareholder in PNG Air who holders one or more Shares
Simberi	Simberi Gold Company Limited
StandardAero	StandardAero Atlantic Inc., Standard France and Vector Aerospace Australia Pty Ltd
S&P	Standard and Poor’s
t	Toea
T&M Agreement	Time and Material Agreement
US	The United States
USD or US$	United States Dollar
Valuation Date	31 October 2023
VWAP	Volume Weighted Average Price
WACC	Weighted Average Cost of Capital
Y-o-Y	Year on year
YTD	Year-to-date, the period between January and June 2023



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