AIRWAYS
making your world possible

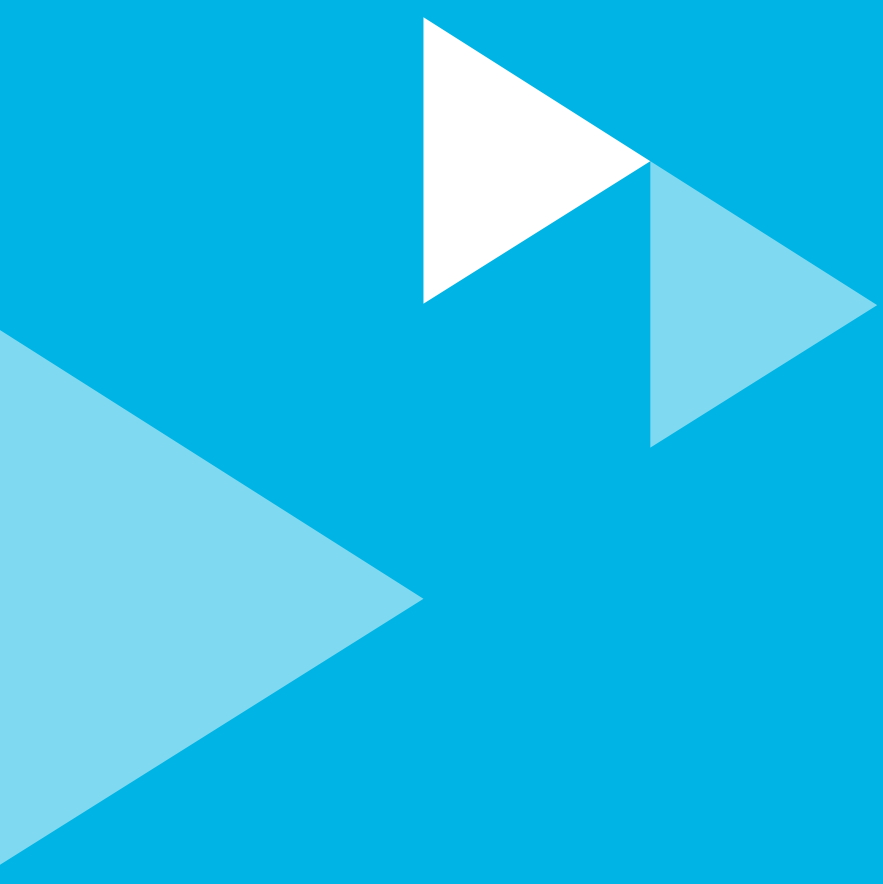
CONSULTATION DOCUMENT

PROPOSED PRICING FOR THE 2022-2025 PERIOD

APRIL 2022

DEADLINE FOR PRIMARY SUBMISSIONS:
29 April 2022

PLEASE SEND SUBMISSIONS BY EMAIL TO
submissions@airways.co.nz



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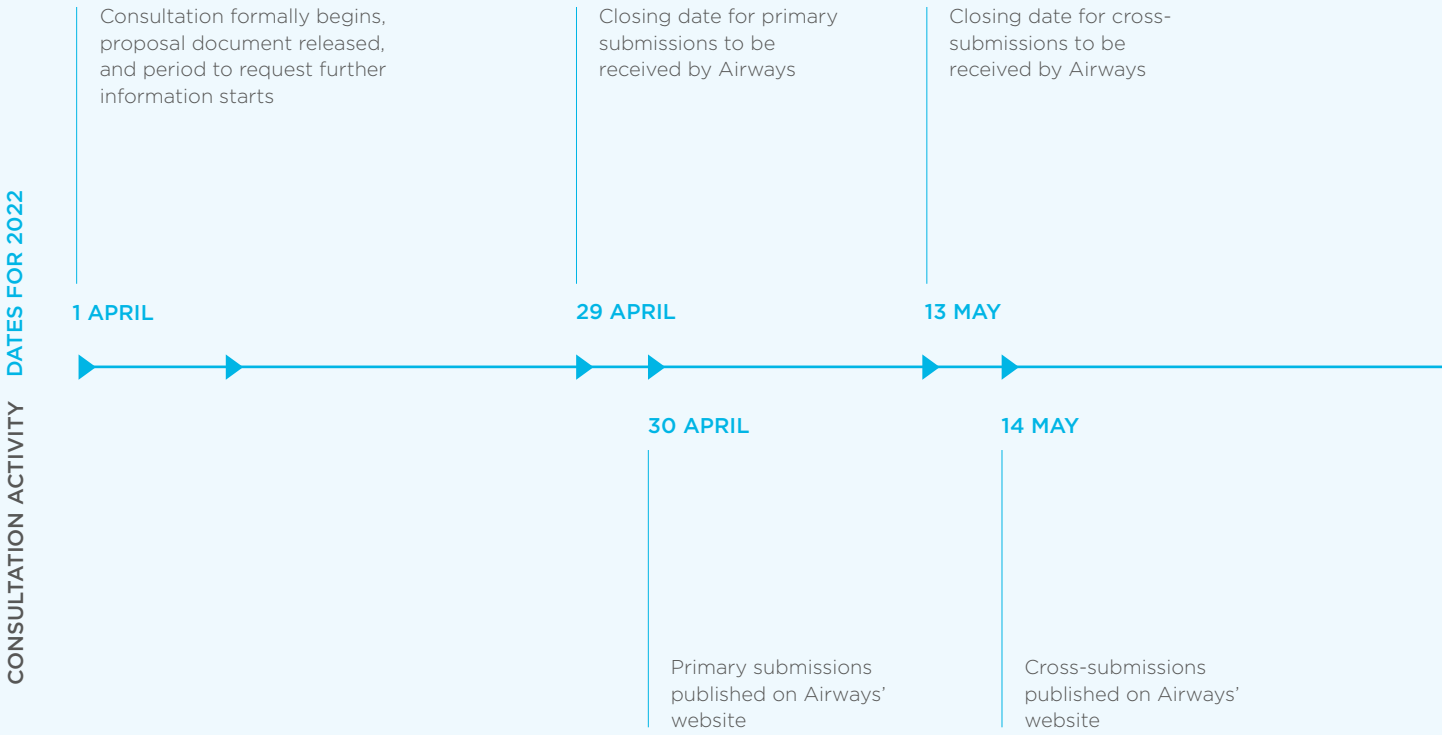
1. Consultation process

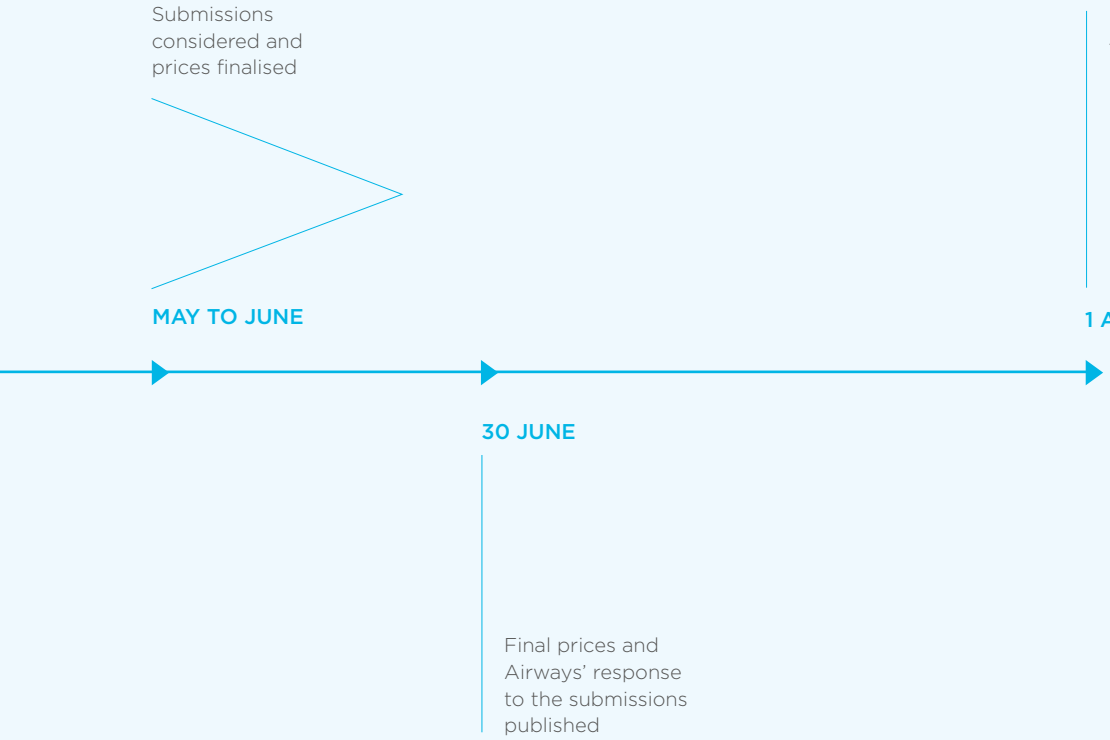
The consultation period starts on 1 April 2022 and the final day for primary submissions is 29 April 2022. All submissions received will then be posted on the Airways website.

Figure 1 – Public consultation timeline



This will provide customers, stakeholders and the industry the opportunity to review submissions received and allow them time to consider lodging a cross-submission. Cross-submissions close on 13 May 2022.

Airways will consider all feedback before making a final pricing decision. The final prices and responses to customer feedback will be published in June 2022. The planned consultation timeline is presented in figure 1.



CONSULTATION ACTIVITY DATES FOR 2022

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1.1 Guide to making a submission

Airways has highlighted a series of feedback questions throughout this document to help you develop your submission and help us analyse your feedback. You are welcome to comment on other topics relating to the proposed pricing should you wish to. To further assist in making submissions, a pricing consultation feedback template is available to download from Airways' website at:

https://www.airways.co.nz/about/performance-and-pricing/air-navigation-services-pricing-and-terms/ and within the section current consultations.

Submissions are to be emailed to submissions@airways.co.nz. All submissions and cross-submissions will be posted on the Airways website.

2. Executive summary

This document outlines Airways New Zealand's (Airways') proposed prices for the three-year period from 1 August 2022 to 30 June 2025. Airways acknowledges these are unprecedented times. It is committed to playing our part in the recovery of the industry, and building a safe and resilient aviation network for the future. This will see Airways develop and deploy technology that provides flexibility to customers as well as service resilience. Airways will also be transitioning to a greener future by optimising airspace, improving efficiency of flight paths and reducing aircraft fuel burn and carbon emissions.

To the extent reasonably possible, and in discussion with our customers, Airways has assumed a recovering industry over the three-year period. However, it is acknowledged that there is significant uncertainty around the volume outlook as a result of COVID-19. Prices will ultimately be set on the best available information as close to the reset period as practical. Forecasts and assumptions are therefore subject to change following the consultation period.

Airways is managing costs prudently and within inflationary bounds. The past two years have been very challenging for our customers, the wider domestic and international aviation industry, and ourselves.

Through continued collaboration and partnership, we are confident we will emerge united and stronger as an industry. To support the recovery of the industry, at least for FY23, Airways will not be seeking full recovery of cost. This has been made possible by the Government, as our shareholder, agreeing to continue their financial support of Airways, for which we are grateful. This will allow us to limit price increases to our customers and ensure that Airways recovers in step with the wider industry.

Airways' operating costs are lower than planned which is the result of cost adjustments made during the COVID-19 pandemic. Capital costs are also lower which reflects both lower capital investment over the period as well as a lower capital charge by removing work-in-progress from the asset base.

If Airways was to apply its Economic Value Add (EVA) framework such that EVA=0, target revenue would be $228.5m in FY23 year. With the support of our shareholder, we can under recover revenue of $45.3m and fund that through a mix of new debt and equity. The 'reduction in target revenue' represents under recovered revenue, such that EVA<0 in FY23.

FY23 target revenue is adjusted to $183.1 million. Figure 1 establishes the target revenue across the three-year period, identifying the key movements in operating cost and capital plan.

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Figure 1 – Target Revenue

	Revenue change $m			YOY % Change		
	FY23	FY24	FY25	FY23	FY24	FY25
Opening target revenue	242.5[1]	228.5	238.7			
Changes to operating costs	(2.1)	4.2	2.6	(1.0%)	2.0%	1.2%
Capital plan changes	(11.9)	6.0	4.6	(18.5%)	12.5%	7.2%
Total change in target revenue	**(14.0)**	**10.2**	**7.1**	**(5.8%)**	**4.5%**	**3.0%**
Target revenue	**228.5**	**238.7**	**245.8**			
Reduction in target revenue	(45.3)	(0.3)	0.0			
Subsidised target revenue	**183.1**	**238.4**	**245.8**			

Target revenue is a function of price and volume. Airways has assumed a volume position, in consultation with our customers, which is based on a recovery scenario broadly aligned to recovery patterns observed offshore, once COVID-19 restrictions are lifted. Figure 2 breaks target revenue into the current establishment revenue (current activity), additional revenue which is assumed from volume growth over the FY23-25 period and then the revenue contribution from price increases.

Figure 2 – Target Revenue breakdown

	Revenue change $m			% change			
	FY23	FY24	FY25	FY23	FY24	FY25	Total[2]
Establishment revenue	122.1	183.2	238.4				
Volume growth	47.5	32.5	8.2	39.1%	17.1%	3.2%	**68.4%**
Average price increase	13.6	22.7	(0.8)	8.0%	9.2%	(0.9%)	**16.9%**
Subsidised target revenue	**183.2**	**238.4**	**245.8**				

Based on the assumed volume forecast, prices charged to airlines will need to increase by an average of 8% in FY23 and 16.9% over the three-year period to achieve target revenue.

Following consultation, there may be further revision of volume forecasts and prices to get back to target revenue for the three-year period.

Airways is proposing an 8.6% price increase for General Aviation over the period, in line with underlying costs. Airways appreciates the industry is under strain in light of COVID-19 and remains committed to working through its recovery. Airways is of the view that now is not the appropriate time to implement a fundamental change to the complex balance of pricing between GA and airlines. Airways nonetheless remains open to engagement with all our stakeholders on this issue.

1 Proposed during the FY20-22 Pricing Budget. Assumed as the opening position for the FY23-25 price period.
2 Total % column includes the compounding effect of the changes.

We look forward to engaging with you on this consultation. We are cognisant of the impact COVID-19 continues to have on the aviation industry which is why, with your feedback, we are seeking to strike the right balance with respect to our pricing for the next three-year period while at the same time supporting the recovery of the industry. We have our sights firmly set on the future, with resilience, safety and efficiency of our operations in mind, so that we may contribute to a rejuvenated and strong aviation industry in New Zealand.

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3. Background

As a State-Owned Enterprise (SOE), Airways is wholly owned by the New Zealand Government. We are managed by an independent Board of Directors, and our aim is to deliver world class services and real value to customers; we do this by having skilled and committed staff and investing in leading technology solutions.

We are proud of Airways' safety and operational performance which consistently ranks amongst the top Air Navigation Service Providers globally. We believe our continuous improvement approach to air safety and operational efficiency is what makes us industry leaders and we recognise the importance of aviation to the country's economy.

We are committed to working with our aviation customers and stakeholders in enabling an efficient Air Traffic System. We understand that aviation has a key environmental impact and we continue to work with our customers to reduce fuel burn and carbon emissions.

Safety is at the heart of everything we do and our primary role is to provide a safe and efficient air traffic service. Our objective is to constantly achieve zero loss of separation incidents.

As part of Airways' Customer Strategy, we have taken the opportunity to review the Frameworks under which services are supplied to the industry. The Service Framework Review was completed in August 2021 and sets out the basis on which Airways supplies air traffic control services to the industry: https://www.airways.co.nz/assets/Service-Framework-2021-v2.pdf

The Pricing Framework Review was completed in January 2022. The principal substantive change concerned the treatment of work-in-progress (WIP) to better align with common practice. Removing WIP from the asset base has the effect of only charging customers for new services once they are commissioned rather than when they are being developed.

In summary, Airways provides the following published services:

Air Traffic Control services

Approach Service – separating arriving or departing flights, includes ATC clearances, instructions and information in accordance with the airspace classification and type of flight.

En-route Domestic / Oceanic Service – separating flights which are in the 'en-route' phase of flight in controlled airspace. This service provides for the issue of ATC clearances, instructions, and information, in accordance with the airspace classification and type of flight.

Aerodrome Air Traffic Management Service – provides clearances, instructions and information for the purpose of preventing aircraft collisions, maintaining runway and wake turbulence separation, expediting and maintaining a safe and efficient flow of traffic.

Other services

Flight Information Service in Uncontrolled Airspace – this includes meteorological conditions, other atmospheric conditions, changes in serviceability of aerodromes and navigation facilities, known hazardous conditions.

Alerting Service in Uncontrolled Airspace – for all flights in uncontrolled airspace to comply with Civil Aviation Rules.

Aerodrome Visual Navigation Aid Service – includes slope guidance to assist aircraft to position for visual landing, approach and runway lighting, illuminated signage and taxiway markings.

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4. Strategic objectives for FY23-25

- Deliver safe, resilient, and efficient air traffic services for New Zealand airspace.
- Make service enhancements to transition to the aviation environment of the future.
- Continue the development of systems and processes that enhance Safety Culture and evolve the operating environment and industry.
- Pursue airspace optimisation to reduce aircraft fuel burn, carbon emissions and improve efficiency of flight paths.
- Develop and deploy technology that provides flexibility to customers and resilience to service delivery in the areas of Tower Management, Drone Detection and Management.
- Support recovery of the industry by limiting price increases to our customers.

5. Cost changes impacting target revenue

Airways' Pricing Framework details the pricing methodologies used to price our services. It was developed and implemented following consultation with customers in 2012 and reviewed in 2022. The Pricing Framework demonstrates Airways' commitment to transparent price-setting. You can download the document from Airways' website at: https://www.airways.co.nz/about/performance-and-pricing/air-navigation-services-pricing-and-terms/

We note that to support the continuation of services at some aerodromes, Airways has side agreements in place where airport operators contribute towards the cost of services or accommodation costs of ATC staff who are required to travel to perform the services. As part of the price reset consultation process, Airways is reviewing these arrangements and intends on consulting with the small number of affected airports and airlines to work through how these will look going forward.

Using the Pricing Framework, Airways sets prices by calculating the overall revenue required (target revenue), allocating the revenue to specific services and calculating unit prices based on forecast volumes. Target revenue has been calculated using the Economic Value Added (EVA) Framework. The EVA framework calculates target revenue as the aggregate of costs and a commercial return (the building blocks). The EVA calculation outlining the building blocks is provided in Appendix 2.1.

Given the fragile state of the industry, with the support of our shareholder, Airways has limited price increases to the extent reasonably possible and within funding parameters. On this basis, Airways is not targeting an EVA=0 in FY23 but is targeting a return to EVA=0 in FY24 in order to stay within current funding parameters.

If Airways was to apply its Economic Value Add (EVA) framework such that EVA=0, target revenue would be $228.5m in FY23 year. With the support of our shareholder, we can under recover revenue of $45.3m and fund that through a mix of new debt and equity. The 'reduction in target revenue' represents the under recovery of revenue, that is EVA<0 in FY23. On this basis, Airways is seeking to recover in line with industry. FY23 target revenue is adjusted to $183.1 million. Figure 3 establishes the target revenue across the three-year period, identifying the key movements in operating cost and capital plan.

Figure 3 – Target Revenue

	Revenue change $m			YOY % Change		
	FY23	FY24	FY25	FY23	FY24	FY25
Opening target revenue	**242.5**[3]	**228.5**	**238.7**			
Changes to operating costs	(2.1)	4.2	2.6	(1.0%)	2.0%	1.2%
Capital plan changes	(11.9)	6.0	4.6	(18.5%)	12.5%	7.2%
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Airways operating costs are lower than planned, which in part is the result of cost adjustments made during the FY21-22 period of COVID-19, as well as a lower capital charge by removing work-in-progress from the asset base. Capital costs are also lower which reflect lower capital investment over the FY20-22 period.

5.1 Operating costs

For transparency, Airways breaks down the cost base into the component parts, clearly identifying the changes in underlying operating costs, inflationary uplifts and changes to the capital charge. Figure 4 summarises the component parts of the cost increase.

Figure 4 – Change in operating costs

	Operating costs change $m			YOY % change		
	FY23	FY24	FY25	FY23	FY24	FY25
A. Base operating costs	(7.2)	(0.6)	(1.6)			
B. Inflationary uplifts	5.9	4.8	4.2			
C. Change in treatment of WIP	(0.8)	(1.7)	(1.9)			
D. Capital charge rate movement	1.3	1.4	1.4			
E. Tax	(1.3)	0.4	0.4			
Total change in operating costs	**(2.1)**	**4.2**	**2.6**	**(1.0%)**	**2.0%**	**1.2%**

A. Base operating costs

Operating costs represent the largest component of Airways' total cost, accounting for approximately 70% of target revenue. FY22 operating costs are lower than planned which in part is the result of cost adjustments made during the COVID-19 pandemic.

Figure 5 – Change in base operating costs (excluding inflation)

			Proposed Plan $m			YOY % change		
	FY22 Pricing	FY22 Forecast	FY23	FY24	FY25	FY23	FY24	FY25
Labour costs	120.9	114.4	116.5	117.0	117.6	1.9%	0.4%	0.6%
Other costs	48.2	40.1	45.4	44.3	42.1	13.2%	(2.4%)	**(5.1%)**
Total operating costs	**169.1**	**154.5**	**161.9**	**161.3**	**159.7**	**4.8%**	**(0.4%)**	**(1.0%)**

This section describes the drivers of the operating cost (excluding inflationary uplifts):

a. **Headcount:** headcount was reduced during COVID-19 but pressure has come on staffing levels due to the number of in-flight projects and initiatives, roster resilience to manage COVID-19 and the contingency to move into the new operational facilities. In addition, we have an aging operational workforce which requires proactive recruitment due to the comprehensive and intensive training pathway to qualification.

b. **Operations facilities:** the IL4 buildings in Auckland and Christchurch are scheduled to become operational in FY23. This will result in some duplication of costs until the current facilities can be de-commissioned and existing leases terminated.

c. **Equipment costs:** the deferral of maintenance due to COVID-19 restrictions and aging infrastructure has resulted in a higher level of repairs and maintenance work scheduled over this period. Several end-of-life property and navigational assets will also be decommissioned.

d. **Maintenance and support contracts:** the delivery of our Capital Programme has resulted in additional maintenance and support contracts to cover the new/updated technology. Supplier price pressure has seen several of our existing, larger contracts increase at a rate higher than inflation.

FEEDBACK QUESTION

Q1: Do you agree that Airways' forecast of base operating costs is appropriate in light of the objective of maintaining safe and efficient services?

B. Inflationary uplifts

Airways, like other businesses, is faced with inflationary pressures across the organisation.

Assumptions for salary uplifts have previously tracked the New Zealand Institute of Economic Research's (NZIER) Labour Cost Index (LCI). There remain uncertainties for Airways at the time of writing. Significantly, collective employment agreements with NZALPA and AMEA have expired and are currently being negotiated at the time of publishing this document. Given that uncertainty, together with the market uncertainty more generally, Airways is not yet in a position to determine whether it is appropriate for FY23-25 to employ the NZIER LCI, or whether an alternative ought to be used. Airways will seek to update our customers as soon as more certainty is available. For instance, if a collective settlement is reached prior to finalising prices, Airways will update the pricing with the results of the collective settlement. If not, Airways will finalise prices based on its best estimate of salary and wage expectations. We also note that for employees on individual employment agreements, the lifting of pay freezes implemented during the pandemic will require adjustments.

General cost increases (excluding depreciation) are based on NZIER's Primary Producers Index (PPI) (inputs) forecast or contractual uplifts.

The inflation rates, along with salary and wage expectations will be updated to reflect the current forecast and market conditions at the time of setting the final prices.

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Figure 6 – Inflation assumptions 2

		Change			
Cost type	Source	FY23	FY24	FY25	Cumulative
ATC salaries	ATC collective settlement	tbc	tbc	tbc	**Tbc**
	NZIER LCI forecast (Sep 21)	tbc	tbc	tbc	**tbc**
Other labour costs	NZIER LCI forecast (Sep 21)	tbc	tbc	tbc	**tbc**
Other costs	NZIER PPI (inputs) forecast (Sep 21)	5.7%	4.2%	3.3%	**13.8%**

FEEDBACK QUESTION

Q2: Recognising that the inflation inputs will be updated with current information at the time of setting final prices, do you agree with Airways' inflationary inputs?

C. Change in the treatment of works-in-progress

As a result of the December 2021 consultation on the Pricing Framework, Airways amended the Pricing Framework to include a "works-in-progress" (WIP) account. This account sets aside the capex expenditure on projects that have not yet been commissioned and carries that capex forward using the capital charge rate until the asset is commissioned.

The change in approach removes WIP from the asset base and has the effect of only charging customers for new services once they are commissioned, rather than when they are being developed.

The capital charge calculation was also aligned with the New Zealand Commerce Commission (NZCC).

D. Capital charge rate movement

As a State Owned Enterprise (SOE), Airways is required to deliver a commercial return. That return is provided by the capital charge component of the cost building blocks. The capital charge is calculated by multiplying the capital employed (excluding WIP) and the capital charge rate. The capital charge rate has been calculated in line with the New Zealand Commerce Commission's (NZCC) input methodologies designed for sole providers of infrastructure services in New Zealand. This approach is consistent with the last pricing round and with many other regulated businesses.

Airways proposes a current capital charge rate of 7.01% for the 2022-2025 period. The capital charge rate was developed using the NZCC's Input Methodology for airports and parameter estimates that are reflective of the market. The rate is an increase from the 6.59% capital charge in the current pricing period. The increase is a result of alignment with the NZCC's more recent views on the methodology for the cost of capital, in particular around the debt premium, debt issuance costs and the market risk premium. This increased rate has resulted in an increase in price.

Figure 7 provides a summary of the inputs into the proposed capital charge rate and compares them to the inputs used for current prices. Appendix 2.4 provides further explanation of the inputs chosen.

Figure 7 – Capital charge inputs and components

Capital charge components	Inputs (2020-2022 pricings)	Inputs (2022– 2025) proposed prices	Current assumptions
Risk-free rate	1.67%	1.7%	The NZCC recommends using a bond rate that matches the period of the pricing agreement. The current estimate is based on the market three-year bond rates. This will be updated to reflect the current risk-free rate at the time of setting the final prices. At the time of writing, the NZCC released its latest determination which has a three-year risk-free rate of 1.96%.
Asset beta	0.6	0.6	An asset beta of 0.6 is still appropriate when comparing to international ANSPs and the NZCC's estimate for airports (0.6).
Tax adjusted market risk premium	7.0%	7.5%	Based on the NZCC's most recent input methodologies estimate in 2020.
Debt premium	1.09%	1.24%	The current estimate is based on NZCC's five-year calculation for airports. The NZCC uses a five-year premium for three-year pricing periods on the basis that shorter term debt would not be in the long-term interests of end-users.
Debt issuance cost	0.20%	0.33%	Based on the NZCC's input methodologies estimate for a three-year term.

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Capital charge components	Inputs (2020-2022 pricings)	Inputs (2022– 2025) proposed prices	Current assumptions
Leverage	58%	57%	Target leverage for Airways' statutory business, as reported in the *Statement of Corporate Intent*. This is consistent with the leverage of relevant and comparator ANSPs.
WACC range	67th percentile	67th percentile	The NZCC has used the 67th percentile for setting gas and electricity prices. The NZCC has used the midpoint as the starting point for airports based on its reasoning that there is a lower risk of underinvestment for airports compared to gas pipeline and electricity distribution businesses. The risk and cost of underinvestment for Airways is likely higher than that of airports, gas pipeline and electricity distribution businesses. Airways has conservatively used the 67th percentile.
Calculated capital charge rate	**6.59%**	**7.01%**	

FEEDBACK QUESTION

Q3: Recognising that the capital charge inputs will be updated with current information at the time of setting final prices, do you agree with the inputs into Airways' capital charge calculation?

6. Proposed capital plan

Airways is committed to supporting the long-term recovery of the aviation industry by matching our services to sector and customer needs while keeping safety at the forefront of our operations. Investment in systems and digital technologies remains a priority for Airways to maintain resilience, improve safety outcomes and drive positive change in the aviation industry.

Airways has developed a capital investment plan which advances strategic objectives and ensures operational safety and resilience. Airways appreciates the constraints on the industry and that customers only want to pay for investments which are essential and required. However, deferral of investment does introduce service risk and customer disruption which Airways wishes to avoid and minimise to the extent it reasonably can.

Many of the proposed investments are over an extended period of time. The change made to Airways' Pricing Framework removes 'work-in-progress' from the asset base and has the effect of only charging customers for new services once they are commissioned, rather than when they are being developed.

An investment programme of $188.3m is proposed for FY23-25. Detail of capital projects is set out in Appendix 2.2. Commissioning dates and project spend will be updated for prior to setting prices.

6.1 Major investments

The major investments proposed for the period FY23-FY25 are summarised in figure 8 below:

Figure 8 – Major capital investment

	Financial Year			
Major investment ($m)	**FY23**	**FY24**	**FY25**	**Total**
A. Auckland Tower replacement	7.0	10.0	10.0	**27.0**
B. Regional Tower services	–	1.0	3.0	**4.0**
C. Primary & Secondary Radar replacement	8.5	14.5	11.0	**34.0**
D. ATC transition (IL4'S + tower upgrades)	3.9	4.7	3.2	**11.8**
E. Drone management	1.5	1.5	3.3	**6.3**
Total	**21.0**	**31.7**	**30.5**	**83.1**

Auckland Tower replacement

The current Auckland Tower dates back to the early 1960s. The Tower is due for replacement and is currently located on the site of the planned passenger terminal development. Options for the replacement Tower are under consideration. These include conventional towers as well as digital solutions taking advantage of advances in technology. The initial project phase involves engaging with stakeholders to develop specifications and functional requirements, and to evaluate the replacement options.

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BENEFIT. Apart from the requirement to replace the existing end-of-life structure and physically relocate the replacement facility in accordance with the Auckland Airport Master Plan, there will be additional benefits. Airways now has the opportunity to assess and implement new digital technologies that will be able to support and enhance the delivery of Airways' services. By providing a well-designed, modern and efficient operating environment, Airways will have a platform that is capable of supporting the implementation of initiatives that will enhance operational safety and capacity, while also providing greater overall service resilience.

Regional Tower services

Investment in Regional Tower services will enable implementation of more flexible and efficient delivery models that leverage new technology. The ADS-B mandate will be effective from 31 December 2022 and provides an opportunity to replace procedural approach services with the enhanced safety and efficiency associated with surveillance. Use of 'limited surveillance' in towers is being investigated as an option to maintain the viability of units that would otherwise be marginal under the traditional Surveillance Approach / Aerodrome Control model. Existing towers could be retrofitted with digital technology with consideration for regional hubs. This would provide a platform allowing for more effective controller validation and rostering models while also supporting the provision of additional safety, efficiency and resilience benefits.

BENEFIT. New operating models will be supported by enhanced surveillance capabilities coupled with the introduction of digital technologies. These new models will provide a flexible and cost-effective operating environment while maintaining and supporting initiatives to enhance safety, efficiency and resilience.

Primary and Secondary Radar replacement

Airways currently operates three Primary Surveillance Radars (PSR) and six Monopulse Secondary Surveillance Radars (MSSR). These systems were first installed in the 1990s and had one midlife upgrade in the mid-2000s. Airways has been on a journey to transition from the traditional radar-based surveillance systems to operate ADS-B as the primary surveillance system. The ADS-B system implementation was completed in 2019. To support this transition, three Secondary Surveillance Radars will be installed to provide a terrestrial based contingency to protect main trunk operations in the event of GNSS outage. Primary radar systems will also be replaced.

BENEFIT. Improved resilience through providing contingent surveillance on the main trunk and compliance with the New Southern Sky mandate. It will maintain the provision of noncooperative surveillance at the main trunk airports into the future as current infrastructure is at end of life and requires replacement. Operating costs will be reduced going forward by moving from eight radar sites to three.

ATC transition (IL4s + tower upgrades)

We will complete the build, testing and operational proving of the new ATM platform and 'Go-live' with ATC operations in the new seismically resilient buildings in Auckland and

Christchurch. The project also includes the implementation of the Skyline X platform, new voice communication system and recorders, and the rollout of electronic flight strips in all remaining control towers across the country.

BENEFIT. Significantly improved operational resilience through delivering services from IL4 centres in Auckland and Christchurch with local and regional contingencies supported.

Drone management

To enhance the safety of controlled airspace around aerodromes, we will investigate the use of drone detection systems designed to recognise drones operating in controlled air space at major aerodromes. The presence of small, unmanned aircraft may be identified by a combination of radar, radio frequency electro optical, audio and infrared detection. The scope does not include any provision for disabling, capturing or otherwise preventing the operation of drones or UAVs.

BENEFIT. Enhanced airport safety from detection of drone incursions.

6.2 Investment by location

The major capital investments by service and location are summarised in figure 9 below:

Figure 9 – Capital investment by service and location

	Financial Year			
Service and Location ($m)	**FY23**	**FY24**	**FY25**	**Total**
Major investment (per figure 8)	21.0	31.7	30.5	**83.1**
Auckland	2.1	3.2	0.2	**5.6**
Christchurch, Wellington, Queenstown	2.9	7.9	8.1	**18.9**
Regional aerodromes	3.1	2.5	7.9	**13.4**
En-route	4.9	4.7	6.2	**15.8**
National operations	25.4	12.8	12.8	**51.0**
Other (Kapiti, Milford & unattended)	0.5	0.0	0.0	**0.5**
Total	**$59.7**	**$62.9**	**$65.7**	**$188.3**

Auckland

The existing Control Tower is not expected to be replaced until 2027. Until then, there is building work required to maintain the Tower and support power and networking systems. Also, there will be life-cycle replacement of the radar and multilateration (MLAT) surveillance systems. At the time of writing, Airways is in the final stages of negotiating a divestment of airfield power and lighting assets with Auckland Airport. The paper assumes no further capital investment on these assets.

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BENEFIT. The remedial building works required on the Tower prior to its replacement is required to ensure the building structure and its cladding remains safe. Failure to do so has a potential significant negative operational impact, as would failures of the power, surveillance and network systems. These life-cycle related works are being undertaken to maintain expected operational levels of service, safety and system resilience.

Christchurch, Wellington, Queenstown

These airports all have planned investment, summarised as: *Christchurch* - upgrades to power cables, transformers, and generators, plus the life-cycle replacement of the radar. Various smaller navigation aid projects are also planned. *Wellington* - the most significant project is the replacement of the Instrument Landing System (ILS) along with replacement of airfield navigation aids and radar system. *Queenstown* - replacement of the MLAT and the support network.

BENEFIT. Similar to Auckland, these, mainly life-cycle related projects, are undertaken in an effort to limit unexpected future service disruptions caused by failures within the power, surveillance, and navigational aid systems. Life-cycle related works are being undertaken to maintain expected operational levels of service, safety and system resilience.

Regional aerodromes

To varying degrees, Regional Towers require building maintenance and upgrades to power systems including UPS replacement. Various navigation aids are planned for replacement. The largest single project is the ILS replacement in *Dunedin*.

BENEFIT. Maintenance of facilities required to support operational service delivery, plus life-cycle related works on power and navigational aid systems. The building works and life-cycle related works are being undertaken to maintain the expected operational levels of service, safety and system resilience.

En-route

Key projects are: the installation of ground-based radio navigational aids (DVORs) that provide bearing information to aircraft to define air traffic control routes for en-route, terminal and instrument approach/departure procedures and the installation of Distance Measuring Equipment (DME) allowing aircraft to measure the time delay and calculate the slant range distance. There are also upgrades to VOLMET broadcasts to provide weather information to aircraft in flight, life-cycle power system works for the en-route navigational aid network, and micro-wave links.

BENEFIT. These projects are required to maintain the expected level of operational service, safety and system resilience.

National operations

Key projects include:

- functionality enhancements to Skyline X including flow management and conflict detection as well as integration of Skyline X with Oceanic platform
- enhanced contingency operations for the primary operation hubs
- replacement of the Aeronautical Information System (AIM) required on aircraft flight decks and for air traffic control
- operational network and communication upgrades.

Many of these works are required to ensure that we keep up-to-date in terms of network and system security, maintaining supportable hardware and software platforms, and providing the latest relevant application software.

BENEFIT. These projects support our efforts to maintain the required levels of system resilience and operational service.

Airspace optimisation

Flightpath proposals have been reviewed and track-shortening is being progressed for the Queenstown-Auckland RWY05 route with implementation planned for FY23. Sectorisation change proposals are more involved - details need to be refined, validated, and progressed and are subject to cost/benefit assessment and resource availability. Implementation is targeted for 2023-2026.

BENEFIT. QNAA05 track-shortening expected to provide immediate saving to operators. Sectorisation changes are still subject to validation over the next 3-4 year period, however when implemented these will provide additional savings to operators.

Other

This includes refurbishment works at Milford and power system maintenance at Timaru.

BENEFIT. These projects support our efforts to ensure we maintain our facilities and system resilience to provide the required operational service.

FEEDBACK QUESTION

Q4: Do you agree that Airways' investment programme is appropriate to enhance safety and system resilience, while transitioning to digital services over time?

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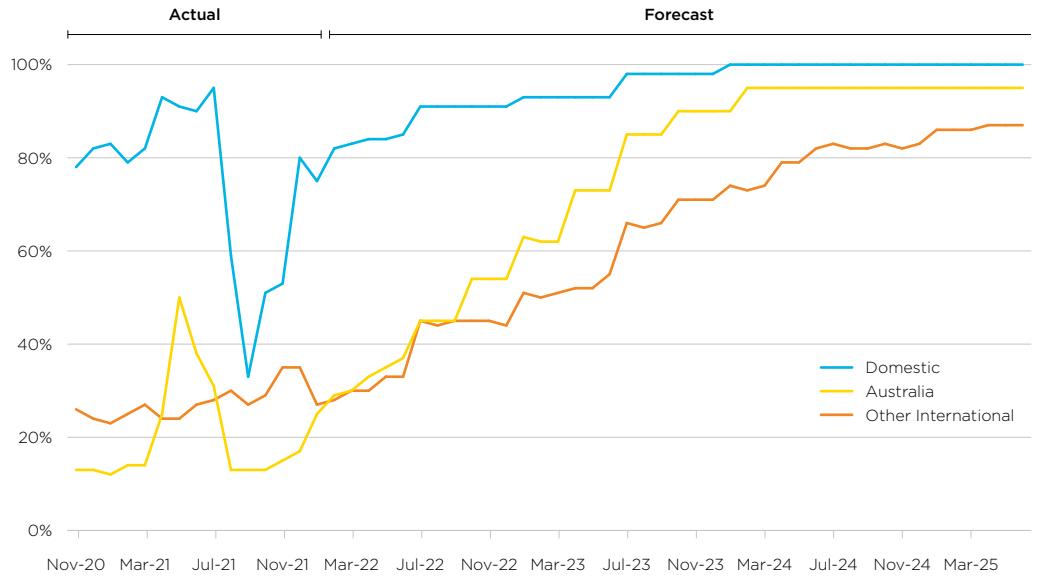
7. Assumed industry recovery

Airways is mindful of the need to balance its commercial objectives and investment profile with the difficult trading conditions our customers are experiencing. We will therefore be proposing a recovery path that aligns Airways' recovery with that of the broader industry.

Our forecasts indicate it will take three to five years for air traffic to return to pre-pandemic levels. Airways remains focused on supporting the recovery of the aviation industry and ensuring safety and reliability of the system. This requires us to continually review business requirements and provide services that meet customer and stakeholder expectations over a long-term planning horizon.

Prices are set directly in relation to the volume forecasts. Figure 10 summarises actual air traffic volumes over the pandemic period to December 2021, and the forecast future track. The information currently available to the industry suggests the domestic market may recover close to pre-pandemic levels from mid 2022. It is thought high domestic vaccination levels will lead to the elimination of future domestic restrictions.

Figure 10 – Assumed volume forecast



Recovery of international travel remains uncertain. Future demand for travel is challenged by rising supply chain costs, high oil prices, and lack of confidence around policy settings. Furthermore, the prospect of further lock downs cannot be ruled out as new variants emerge.

Airways welcomes supporting information from airlines concerning volume outlook. We are aware that under home isolation settings, international travel is highly constrained. In this respect, and based on informal feedback, Airways' forecast for international travel for the period up to October 2022 may be too optimistic.

Domestic:

Airways is forecasting domestic travel to recover to 93% of the pre-pandemic level in the first year of the new price round and eventually move to 100% in the second and third years. No new capacity has been assumed.

FEEDBACK QUESTION

Q5: Do you consider the position taken for domestic recovery is reasonable? Are there other material factors that should be taken into account that may influence the domestic volume forecast?

Trans-Tasman:

The reopening of the border with Australia to New Zealand citizens and critical workers from 28 February 2022 is cause for optimism, as is the planned reopening to progressively wider groups travelling from Australia between March and July 2022.

Airways has assumed a gradual pick-up over the year as restrictions are eased and New Zealand aligns with the rest of the world. Airways' forecast from mid-2022 assumes home isolation requirements will be removed and the final forecast position will be based on March/April data.

FEEDBACK QUESTION

Q6: Do you consider the position taken for Trans-Tasman recovery is reasonable? Are there other material factors that should be taken into account that may influence the Trans-Tasman volume forecast?

Other international:

The opening of other international sectors is forecast to be more gradual as international tourism re-emerges. Broad-based recovery is not expected until restrictions are removed.

Airways' current forecast assumes home isolation requirements will be removed from mid-2022. However, initial customer feedback suggests international volume recovery may be delayed to October 2022.

FEEDBACK QUESTION

Q7: Do you consider the position taken for other international recovery is reasonable? Are there other material factors that should be taken into account that may influence the other international volume forecast?

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The industry is managing through an exceptional period of disruption and uncertainty which makes volume forecasting especially difficult. This includes uncertainty around airline schedules and aircraft type. If actual movements differ significantly from the volume forecast, Airways has the ability to adjust its prices under the risk sharing mechanism set out in the Pricing Framework.

To ensure the final prices are as fair and accurate as possible, volume inputs will be adjusted close to the reset date having considered all the additional information supplied through the consultation process and weighed up as appropriate. The assumed growth forecast is summarised in figure 11 below.

Figure 11 – Assumed volume growth

	Forecast - % of pre-COVID levels			
Region	**June 2022**	**June 2023**	**June 2024**	**June 2025**
New Zealand	85%	93%	100%	100%
Australia	37%	73%	95%	95%
Pacific Islands	42%	66%	93%	97%
Asia	30%	48%	78%	85%
North America	33%	52%	78%	81%
South America	17%	37%	57%	66%

Risk sharing

The volume risk sharing mechanism set out in the Pricing Framework provides an opportunity to reforecast volumes (and reset prices) at the end of FY23 and FY24. This is provided the forecast for the following pricing years (i.e. FY24 and FY25) indicates that revenue will lie outside a range of +/- 2% of the target pricing revenue.

8. Proposed prices for FY23-FY25

Airways is forecast to generate cash losses of $88.7m over the pandemic period up to 30 June 2022. A further loss of $49.6m is anticipated in FY23 before moving towards a cash break-even position in FY24. No new financial support has been extended from the shareholder, however, there is agreement to extend the term of the current equity funding arrangement over the pricing period.

8.1 Airlines

Given the fragile state of the industry, with the support of our shareholder, Airways has limited price increases to the extent reasonably possible and within funding parameters. On this basis Airways is not targeting an EVA=0 in FY23.

Having established the required revenue to deliver services by location, the price per movement (unit price) is calculated by dividing the required revenue by forecast volumes.

Airways' proposed price increases, to a large extent, are the result of much lower current and forecast volume. To sustain safe and efficient operations there is also an ongoing need to invest in technology and infrastructure.

An average price increase of 16.9% is proposed over the three-year period.

Target revenue is a function of price and volume. Figure 12 breaks target revenue into the current establishment revenue (current activity), additional revenue which is assumed from volume growth over the FY23-25 period and then the revenue contribution from price increases.

Figure 12 – Revenue breakdown

	Revenue change $m			% change			
	FY23	FY24	FY25	FY23	FY24	FY25	Total[3]
Establishment revenue	122.1	183.2	238.4				
Volume growth	47.5	32.5	8.2	**39.4%**	**17.1%**	**3.2%**	**68.4%**
Average price increase	13.6	22.7	(0.8)	**8.0%**	**9.2%**	**(0.9%)**	**16.9%**
Subsidised target revenue	**183.2**	**238.4**	**245.8**				

Airways has assumed a volume position in consultation with our customers which is based on a recovery scenario aligned to recovery patterns observed offshore, once COVID-19 restrictions are lifted.

FEEDBACK QUESTION

Q8: Do you agree that Airways' proposed increase is necessary and appropriate to maintain safe and efficient services at lower volume levels?

3 Total % column includes the compounding effect of the changes.

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8.2 General Aviation (GA)

As part of the consultation response in 2013, Airways stated that it would adopt the use of the NZIER forecast sources as standard policy to provide a consistent long-term measure of inflationary impact. The proposed inflationary rates provided in figure 13 below reflect this approach.

GA prices were increased in FY20 by 2.4% and FY22 by 3.0%. In response to COVID-19, we did not increase prices in FY21. Therefore, to bring GA prices in line with inflation, an opening adjustment of 1.4% is required. This is the difference between actual/forecast inflation (6.9%) and the inflation applied in FY20 to FY22 (5.5%).

Airways is proposing an 8.6% price increase for General Aviation over the FY23-25 period, in line with underlying costs. Inflationary inputs will be updated prior to finalising prices.

Figure 13 - Proposed GA inflationary inputs

	FY23	FY24	FY25	Total[4]
Opening adjustment	1.4%			**1.4%**
NZIER LCI forecast (Sep 21)	2.6%	2.3%	2.1%	**7.2%**
Total	**4.0%**	**2.3%**	**2.1%**	**8.6%**

Airways is proposing GA prices continue to be increased by the level of inflation. Airways appreciates the industry is under strain in light of COVID-19. As noted, Airways is and remains committed to continuing its work with the industry in relation to recovery from the effects of the pandemic which has affected all sectors of the aviation industry. However, it does not consider it an appropriate time to implement a fundamental change to the complex balance of pricing between GA and airlines. Airways nonetheless remains open to engagement with all its stakeholders on this issue.

FEEDBACK QUESTION

Q9: Recognising that the inflation inputs will be updated with current information at the time of setting final prices, do you agree with the inflationary inputs used to uplift GA prices?

8.3 Milford services

Milford is the lowest cost location at which Airways provides air traffic services. To ensure Milford remains cost-effective, Airways' approach is to minimise investment as much as possible while ensuring safe services at a fit-for-purpose level.

As part of the Regional Tower Exit Programme, the service at Milford was reviewed. The CAA determined that an Aerodrome Flight Information Service provided by staff at Milford was still required.

4 Total % column includes the compounding effect of the changes.

The remote location of Milford presents operational challenges for Airways. Currently, staff travel from Queenstown and spend five days at Milford before returning. Short-term accommodation at Milford has been secured and longer-term options are being investigated, but costs are forecast to increase when tourism returns.

Airways' operating costs at Milford are summarised in figure 14 and the proposed price changes are outlined in figure 15.

Figure 14 – Milford operating costs

	FY23	FY24	FY25
Labour	0.4	0.4	0.4
Other operating costs	0.2	0.2	0.2
Depreciation and capital charge	0.0	0.1	0.1
Total costs	**0.6**	**0.7**	**0.7**

Figure 15 – Proposed price changes at Milford

	Minimum Price				Base Rate			
	2021/22	2022/23	2023/24	2024/25	2021/22	2022/23	2023/24	2024/25
Price	$32.36	$35.58	$46.57	$58.40	$88.91	$97.76	$127.96	$160.47
% Increase	–	9.9%	30.9%	25.4%	–	9.9%	30.9%	25.4%

FEEDBACK QUESTION

Q10: Do you agree with the proposed changes to Milford prices?

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9. Scorecard

This section proposes a Scorecard to track Airways' performance against the final pricing plan for the 2022-2025 period. This Scorecard, which would be shared with customers on a quarterly basis, would enable customers to track Airways' performance over the pricing period with a view to providing transparency and accountability to Airways' service delivery performance.

For the Scorecard to be effective, it is important that it is simple, transparent and has the right balance of measures that are important to customers. Appendix 3 provides a proposed set of measures.

The Scorecard measures are intended to be a summary of Airways' performance, not an exhaustive list. Airways will continue to actively seek opportunities to improve our safety, operational and financial performance on behalf of our customers.

FEEDBACK QUESTION

Q11: Would you find it useful to receive the Scorecard metrics in Appendix 3?

10. Independent review of pricing inputs

Airways has previously received feedback that customers were concerned about the possibility of cross-subsidisation between Airways' domestic business and international business. To give assurance that there is no cross-subsidisation, Airways has again employed PwC to provide a review for this pricing round.

Airways' calculation of the target revenue required to deliver the services in the Service Framework is based on a budget that forecasts the operational costs for the next three-year period. Airways engaged PwC to assess whether our controls were operating effectively during the calculation of prices to confirm that the:

- Budgets used to calculate prices only include costs that relate to the provision of services set out in the Service Framework, costs relating to the international businesses are excluded.
- Total revenue has been allocated by service and location in accordance with the Pricing Framework.

PwC's report found that Airways' controls throughout the price-setting process for the 2022-2025 pricing period were operating effectively and no exceptions were noted.

In completing the pricing process Airways has intentionally deviated from the Pricing Framework in the following instances:

- No business overheads have been applied to the Milford aerodrome because it operates as a satellite to the Queenstown aerodrome.
- No company-wide overheads have been allocated to the unattended approach service in recognition of the fact there are no direct labour costs involved in the provision of these services. Therefore, the allocation of overheads would not be a true reflection of the underlying cost of providing the unattended services.

Although PwC's report was prepared solely for Airways' directors, PwC has agreed that you can request a copy of the report. It will be provided on the understanding that you, in relying on the report, accept that PwC does not accept or assume a duty of care to you with respect to the report.

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Appendix 1 – Pricing tables and examples

Overall revenue is allocated to specific services and locations based on the cost of providing the service. This is done using the methodologies and costing policies set out in the Pricing Framework.

Revenue for specific services and locations will be influenced by the:

- Underlying cost of each service and location.
- General price adjustments to reflect factors such as inflation, volume adjustments and changes to Airways' cost base.
- Location-specific capital expenditure.

The pricing formula (set out in the Pricing Framework) charges based on aircraft weight - the heavier the aircraft the higher the price. Specific unit prices are set at a level that will collect the target revenue given expected volume forecast. The volume forecast provides the expected number of flights at each weight and distance category.

The unit prices are detailed in the following schedules along with example price calculations.

An online price calculator to calculate the price of a journey using several of Airways' services is available at:

https://www.airways.co.nz/about/performance-and-pricing/air-navigation-services-pricing-and-terms/ and within the section current consultations.

Appendix 1.1 Target revenue by location

Airways sets prices by calculating the overall target revenue to deliver services by location and dividing that by expected volume. Revenue is calculated using the Economic Value Added (EVA) Framework and represents the aggregate of costs and a commercial return on the assets invested. The EVA calculation outlining the building block inputs is provided in Appendix 2.1.

To support recovery of the industry, Airways will not seek to fully recover its costs in FY23 but is targeting a return to profit in FY24. The table below sets out the revenue targets for Airways' services at each of the locations we operate for the period FY23-25.

Service	2022 Target revenue	2023 Target revenue	2024 Target revenue	2025 Target revenue	Comments
Aerodrome services					
Auckland	24.0	11.8	13.1	13.7	FCR, AFPL & Digital Tower removed
Christchurch	8.9	9.0	9.3	9.5	Inflationary changes
Wellington	11.0	9.8	9.8	9.7	Reduced capex spend
Queenstown	4.1	3.6	3.7	3.9	Flight Service removed lowering labour and OH
Nelson	2.6	2.4	2.4	2.4	Lower capex spend
Hamilton	2.2	1.5	1.5	1.6	Pilots training school closed reducing labour

Service	2022 Target revenue	2023 Target revenue	2024 Target revenue	2025 Target revenue	Comments
Tauranga	1.8	1.7	1.7	1.8	Inflationary changes
Palmerston North	1.8	1.7	1.8	1.9	Inflationary changes
Napier	1.2	1.1	1.1	1.1	Inflationary changes
Dunedin	1.6	1.5	1.6	1.7	CCR & Power Centre MSB Upgrade
New Plymouth	1.3	1.2	1.3	1.3	Inflationary changes
Woodbourne	1.6	1.4	1.5	1.5	Lower labour costs due to change in staffing mix
Invercargill	2.1	1.0	1.0	1.0	Digital Tower project removed
Gisborne	0.8	0.8	0.8	0.9	Power upgrade project
Rotorua	1.3	1.2	1.2	1.2	Inflationary changes
Aerodrome services total	**66.3**	**49.8**	**51.9**	**53.2**	
Flight information services					
Milford	0.6	0.6	0.7	0.7	Accommodation required
Kapiti	0.6	0.5	0.6	0.6	Inflationary changes
Flight information total	**1.1**	**1.2**	**1.3**	**1.3**	
Approach services					
Auckland	36.7	37.8	40.0	42.6	Increased coverage, PSR/SSR replacement
Christchurch	15.1	15.2	16.0	16.3	PSR/SSR replacement
Wellington	12.3	13.1	15.2	17.1	Increased coverage, PSR/SSR & ILS replacement
Queenstown	2.9	3.1	3.4	4.2	MLAT Lifecycle
Nelson	1.9	2.0	2.1	2.1	Inflationary changes
Inflationary changes	1.3	1.3	1.4	1.4	Inflationary changes
Tauranga	1.2	1.3	1.4	1.4	Inflationary changes
Palmerston North	1.3	1.4	1.4	1.5	Inflationary changes
Napier	1.3	1.4	1.4	1.5	Inflationary changes
Dunedin	1.9	2.0	2.1	2.5	ILS Replacements
New Plymouth	1.1	1.1	1.2	1.2	Inflationary changes
Woodbourne	0.7	0.7	0.7	0.7	Inflationary changes
Invercargill	0.8	0.9	1.0	1.0	Higher labour due to customer requirements
Gisborne	0.7	0.8	0.9	0.9	Higher labour costs due to change is staffing mix
Rotorua	1.2	1.2	1.3	1.3	Inflationary changes
Approach services total	**80.4**	**83.4**	**89.5**	**95.5**	
Domestic en-route	**57.4**	**58.0**	**59.3**	**59.1**	Inflationary changes, movement in capex plan
Oceanic en-route	**29.0**	**27.2**	**27.6**	**27.3**	Inflationary changes, lower overheads

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Service	2022 Target revenue	2023 Target revenue	2024 Target revenue	2025 Target revenue	Comments
Unattended services					
Taupo	0.2	0.2	0.2	0.2	Inflationary changes, movement in capex plan
Timaru	0.2	0.2	0.2	0.2	Inflationary changes, lower overheads
Whanganui	0.1	0.1	0.2	0.2	
Hokitika	0.1	0.1	0.1	0.1	Inflationary changes
Whangarei	0.1	0.1	0.2	0.2	Main Switchboard Replacement
Kerikeri	0.1	0.1	0.1	0.1	Inflationary changes
Kapiti	0.1	0.0	0.1	0.1	Inflationary changes
Whakatane	0.1	0.1	0.1	0.1	Inflationary changes
Westport	0.0	0.0	0.0	0.0	Inflationary changes
Kaitaia	0.0	0.0	0.0	0.0	Inflationary changes
Great Barrier	0.0	0.0	0.0	0.0	Inflationary changes
Oamaru	0.0	0.0	0.0	0.0	Inflationary changes
Wanaka	0.0	0.0	0.0	0.0	Inflationary changes
Wairoa	0.0	0.0	0.0	0.0	Inflationary changes
Unattended approach total	**1.1**	**1.0**	**1.1**	**1.1**	
Other revenue[5]	7.0	7.9	8.0	8.2	
Total revenue	**242.5**	**228.4**	**238.7**	**245.8**	
Reduced target revenue		(45.3)	(0.3)	0.0	
Subsidised target revenue		**183.1**	**238.4**	**245.8**	

5 Other revenue includes Airways' contract with the Royal New Zealand Air Force (RNZAF), and other minor revenue streams, which are not covered in Airways' Standard Terms and Conditions.

Appendix 1.2: Pricing tables

This Appendix provides the formula and pricing tables used to calculate Airways' proposed unit prices. Prices are calculated by applying the inputs from the pricing tables into the pricing formula. Appendix 1.3 provides some examples of prices for different aircraft types.

The pricing formulas are presented below, and the pricing tables are provided on page 36 to 38.

Pricing formula for Aerodrome, Approach and Unattended Approach

The Aerodrome Price is the greater of the Minimum Price or:	
= base rate x MCTOW / 5	for aircraft < 5 tonnes
= base rate + weight rate x (MCTOW – 5)	for aircraft 5-30 tonnes
= base rate + weight rate x 5 x sqrt of (MCTOW -5)	for aircraft > 30 tonnes
The Minimum Price, Base Rate and Weight rate are provided by the applicable pricing tables below.	
MCTOW is an aircraft's maximum certified take-off weight measured in tonnes.	

Pricing formula for En-route

The En-route Price is the greater of the Minimum Price or:	
= Base Rate x Nautical Miles / 100	for aircraft < 5 tonnes
= [Base Rate + Weight Rate x (MCTOW – 5)] x Nautical Miles / 100	for aircraft 5-30 tonnes
= [Base Rate + Weight Rate x 5 x Sqrt of (MCTOW -5)] x Nautical Miles/ 100	for aircraft > 30 tonnes
The Minimum Price, Base Rate and Weight Rate are provided by the applicable pricing tables.	
MCTOW is an aircraft's maximum certified take-off weight measured in tonnes.	
For Domestic flights, Nautical Miles is the distance between the origin and destination aerodromes, less the terminal navigation radius at both aerodromes.	
For International flights, see Airways Standard Terms and Conditions for definition wording.	

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Aerodrome charges

	Minimum Price			Base Rate			Weight Rate >5 tonnes		
	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25
Auckland	$12.38	$12.66	$12.93	$16.07	$16.44	$16.79	$4.62	$4.04	$3.96
Christchurch	$12.38	$12.66	$12.93	$16.07	$16.44	$16.79	$8.14	$7.97	$8.00
Wellington	$12.38	$12.66	$12.93	$16.07	$16.44	$16.79	$11.07	$9.69	$9.45
Queenstown	$8.64	$8.84	$9.03	$16.07	$16.44	$16.79	$9.94	$9.78	$9.95
Regional airport (Group 1)	$8.64	$8.84	$9.03	$16.07	$16.44	$16.79	$16.42	$15.63	$15.92
Regional airport (Group 2)	$8.64	$8.84	$9.03	$16.07	$16.44	$16.79	$15.71	$14.99	$15.12
Milford	$35.58	$46.57	$58.40	$97.76	$127.96	$160.47	Not Applicable		
Kapiti	$8.64	$8.84	$9.03	$16.07	$16.44	$16.79	$70.52	$77.01	$78.63

Group 1 includes Nelson, Palmerston North, Tauranga and Hamilton.
Group 2 includes Dunedin, Gisborne, New Plymouth, Napier, Invercargill, Rotorua and Woodbourne.
Milford prices are required to offset low and declining traffic volumes.

Approach charges

	Minimum Price			Base Rate			Weight Rate >5 tonnes		
	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25
International towers	$6.19	$6.33	$6.46	$24.79	$25.36	$25.89	$10.20	$13.33	$13.66
Regional towers	$6.19	$6.33	$6.46	$24.79	$25.36	$25.89	$8.68	$11.36	$12.13
Additional Auckland CAT III weight rate (added to the international tower price for aircraft over 30 tonnes.)	Not Applicable						$0.43	$0.49	$0.46
Additional Queenstown Multilat weight rate (added to the regional tower price for aircraft over 5 tonnes.)	Not Applicable						$1.77	$1.68	$1.63

International towers includes Auckland, Wellington, and Christchurch.
Regional towers includes Queenstown, Nelson, Palmerston North, Tauranga, Hamilton, Dunedin, Gisborne, New Plymouth, Napier, Invercargill, Rotorua and Woodbourne.

Unattended charges

	Minimum Price			Base Rate			Weight Rate >5 tonnes		
	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25
Taupo	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$12.15	$13.37	$13.65
Timaru	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$18.66	$20.53	$20.96
Whanganui	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$11.30	$12.43	$12.69
Hokitika	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$12.03	$13.23	$13.51
Whangarei	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$5.54	$6.09	$6.22
Kerikeri	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$3.19	$3.40	$3.14
Kapiti	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$4.54	$4.99	$5.09
Whakatane	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$11.45	$12.60	$12.86
Westport	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$9.80	$10.78	$11.01
Kaitaia	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$14.93	$16.42	$16.76
Great Barrier	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$17.67	$19.44	$19.85
Oamaru	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$18.66	$20.53	$20.96
Wanaka	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$18.66	$20.53	$20.96
Wairoa	$3.78	$3.87	$3.95	$21.15	$21.64	$22.09	$18.66	$20.53	$20.96
Other unattended aerodromes	No charge								

En-route charges

	Minimum Price			Base Rate			Weight Rate >5 tonnes		
	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25
Domestic	$7.22	$7.39	$7.55	$7.18	$7.35	$7.50	$3.41	$3.43	$3.27
Oceanic	$21.66	$22.16	$22.63	$7.18	$7.35	$7.50	$0.82	$1.01	$0.90

Other proposed charges

	2022/23	2023/24	2024/25
Circuit charge	$4.07	$4.16	$4.25
Vicinity landing charge	$4.07	$4.16	$4.25
Controlled VFR transit charge	$4.07	$4.16	$4.25
VFR flight plans filed online	$5.50	$5.63	$5.75
VFR flight plans filed by other means	$7.90	$8.08	$8.25
Overdue SAR Time	$42.57	$43.55	$44.46
Out-of-hours – ATC	$425.15	$434.93	$444.06
Out-of-hours – FIS - AFIS	$255.09	$260.96	$266.44

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Proposed parachute charges

	Airspace Complexity								
	Low			Medium			High		
Aircraft weight	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25	2022/23	2023/24	2024/25
Low (<1,700 kg)	$2.40	$2.46	$2.51	$3.05	$3.12	$3.19	$12.16	$12.44	$12.70
Medium (1,700-2,500 kg)	$3.66	$3.74	$3.82	$4.88	$4.99	$5.09	$12.16	$12.44	$12.70
Heavy (>2,500 kg)	$4.88	$4.99	$5.09	$7.27	$7.44	$7.60	$12.16	$12.44	$12.70

Appendix 1.3: Example prices for FY23

This appendix provides examples of Airways' price calculation for a range of different flights to show the effect of different services. The prices in these examples are for the 2022/23 Financial Year.

Aircraft: Boeing 777-300 Weight: 344,500kg Seats: 342

From\To	Sydney	Los Angeles	Auckland	Christchurch
Sydney		1,133	2,255	2,453
Los Angeles	862		3,665	3,909
Auckland	809	2,144		2,855
Christchurch	722	2,179	2,570	

Aircraft: Airbus 320-200 Weight: 77,000kg Seats: 168

From\To	Nadi	Sydney	Auckland	Christchurch	Dunedin	Queenstown	Wellington
Nadi		248	1,147	1,467	1,778	1,479	1,522
Sydney	248		1,081	1,169	1,360	1,225	1,338
Auckland	459	393		1,350	1,882	1,681	1,259
Christchurch	648	350	1,219		1,282	1,127	1,115
Dunedin	703	293	1,494	1,025		983	1,397
Queenstown	573	320	1,464	1,041	1,153		1,405
Wellington	578	395	1,004	991	1,529	1,367	

Aircraft: Bombardier Dash-8 Q300 **Weight: 19,500kg** **Seats: 50**

From\To	Auckland	Christchurch	Dunedin	Gisborne	Hamilton	Invercargill	Napier	Nelson	New Plymouth	Palmerston North	Queenstown	Rotorua	Tauranga	Wellington	Woodbourne
Auckland		505	695	474	414	729	471	533	441	496	626	427	429	467	529
Christchurch	460		471	586	585	513	547	458	529	514	419	578	603	413	449
Dunedin	563	384		691	690	424	651	561	632	620	365	683	708	519	554
Gisborne	341	498	691		463	733	417	540	478	471	636	425	448	448	524
Hamilton	272	487	679	452		715	445	516	427	471	613	405	414	444	509
Invercargill	597	425	424	733	726		693	598	667	661	368	722	746	560	594
Napier	339	459	651	417	455	693		500	449	431	596	426	453	409	484
Nelson	390	360	551	529	516	587	490		458	457	487	512	536	367	402
New Plymouth	309	441	632	478	437	667	449	469		446	344	441	460	406	465
Palmerston North	353	416	610	461	471	650	421	457	435		553	454	481	366	440
Queenstown	551	389	423	694	682	426	654	555	402	621		680	703	521	554
Rotorua	294	490	683	425	415	722	426	523	441	465	622		412	442	512
Tauranga	286	505	698	438	414	736	443	536	450	481	635	402		458	526
Wellington	380	371	564	494	500	605	454	422	452	422	508	487	513		402
Woodbourne	397	361	554	524	520	594	484	412	465	451	495	512	537	357	

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Aircraft: Cessna Grand Caravan 208B Weight: 3,969 Seats: 12

From\To	Auckland	Christchurch	Dunedin	Gisborne	Hamilton	Invercargill	Paraparaumu	Napier	Nelson	New Plymouth	Palmerston North	Queenstown	Rotorua	Tauranga	Wellington	Woodbourne
Auckland		57	70	42	39	74	43	42	48	39	43	69	39	39	47	49
Christchurch	57		42	56	55	47	40	51	39	49	46	42	55	57	40	39
Dunedin	70	42		69	68	39	53	64	52	62	59	39	68	70	53	52
Gisborne	42	56	69		39	75	41	39	49	43	40	70	39	39	44	48
Hamilton	39	55	68	39		73	40	39	46	39	40	67	39	39	44	46
Invercargill	74	47	39	75	73		59	70	56	66	64	39	73	75	59	57
Paraparaumu	46	43	56	44	43	61		39	39	39	39	56	43	45	39	39
Napier	42	51	64	39	39	70	36		44	39	39	65	39	39	39	43
Nelson	48	39	52	49	46	56	36	44		40	39	51	47	48	39	39
New Plymouth	39	49	62	43	39	66	36	39	40		39	39	39	39	39	41
Palmerston North	43	46	59	40	40	64	36	39	39	39		59	39	42	39	39
Queenstown	69	42	39	70	67	39	54	65	51	39	59		68	70	54	52
Rotorua	39	55	68	39	39	73	40	39	47	39	39	68		39	44	47
Tauranga	39	57	70	39	39	75	42	39	48	39	42	70	39		46	49
Wellington	47	40	53	44	44	59	36	39	39	39	39	54	44	46		39
Woodbourne	49	39	52	48	46	57	36	43	39	41	39	52	47	49	39	

Appendix 2 – Supporting information

Appendix 2.1: Building block components of overall revenue

The proposed revenue is calculated using the Economic Value Added (EVA) framework. EVA measures the extent to which a business is performing above or below expectations. Over the last three years, due to the impact of COVID-19, we have recorded negative EVA.

In the FY2022/23 year we have proposed an average price increase of 8%. This increase is insufficient to cover costs and results in the negative EVA for that year. In FY2023/24, a 9.2% average price increase results in a nearly break-even EVA. In 2024/25, revenue is set at a level that recovers the cost to Airways of providing its services (the building blocks).

Economic value added

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
	Actual	Actual	Forecast	Plan	Plan	Plan
REVENUE						
Airways' charges	172,813	122,018	129,704	183,152	238,373	245,804
Other revenue	6,373	5,494	6,058	361	365	369
	179,187	**127,512**	**135,763**	**183,513**	**238,737**	**246,173**
Building Blocks						
Operating costs - labour	115,204	105,973	114,355	119,239	122,437	125,703
Operating costs – Other	37,514	37,642	40,125	48,184	49,113	48,482
Depreciation	29,593	23,109	26,143	30,694	35,416	38,393
Income tax	212	(3,559)	(12,658)	(4,089)	8,896	9,407
Cost of capital	16,260	17,205	20,310	22,099	23,103	24,188
EVA	**(19,596)**	**(52,859)**	**(52,513)**	**(32,614)**	**(228)**	**0**

The EVA will be updated for to reflect the current forecast and market conditions at the time of setting the final prices.

Other revenue: other revenue includes flight inspection income. Other revenue is offset against operating expenses. Other revenue in 2019 to 2022 includes the wage subsidy Airways received.

Operating costs labour: includes all employee remuneration and related employment costs.

Operating cost: includes all operating costs excluding labour and depreciation.

Depreciation: Airways calculates fixed asset depreciation on a straight-line basis. Depreciation will increase with any increase in the capital programme. Under EVA, amortisation is also recognised for leases.

Income tax: income tax is calculated at New Zealand's company tax rate of 28%.

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Cost of capital: the cost of capital is calculated as the capital charge rate multiplied by the historical asset base, adjusted for depreciation. Airways did not revalue its assets for pricing purposes.

Appendix 2.2: Capital programme

The figure below summaries all of Airways' capital expenditure outlined in this document.

Capital Expenditure

Capital Programme	FY23	FY24	FY25	Total
Auckland	**11.9**	**18.1**	**13.9**	**43.9**
Auckland Tower replacement	7.0	10.0	10.0	27.0
Primary / Secondary Radar replacement	2.8	4.8	3.7	11.3
MLAT Lifecycle	-	3.1	-	3.1
AAOC Site Complex - life extension	1.1	0.2	0.2	1.5
Minor capital works	1.0	-	-	1.0
Christchurch, Wellington, and Queenstown	**8.6**	**17.5**	**15.4**	**41.6**
Primary / Secondary Radar replacement	5.7	9.6	7.3	22.7
QN & South Area MLAT Lifecycle	-	-	6.8	6.8
ILS replacements (WN)	-	4.3	-	4.3
MLAT network lifecycle	0.5	0.5	0.5	1.5
Stop Bars & TWY Reconfigure	0.9	0.5	-	1.4
1kV Switchgear, transformers and power cable	0.5	0.8	-	1.3
Generators for new Radar sites	0.4	0.8	-	1.1
Minor capital works, less than $0.75m	0.6	1.0	0.8	2.4
Regional aerodromes	**3.1**	**3.5**	**10.9**	**17.4**
ILS replacements (DN)	-	-	4.3	4.3
Regional Digital Tower	-	1.0	3.0	4.0
Regional Tower UPS Replacements	-	-	1.7	1.7
Reils replacement at NV, PM, GS,	0.4	0.7	0.5	1.6
Runway edge lights replacement (NV, NS, AP)	0.3	0.4	0.4	1.1
Minor capital works, less than $0.75m	1.7	1.4	1.0	4.0
Kapiti and Milford	**0.3**	**0.0**	**0.0**	**0.3**
Milford Tower operations	0.3	0.0	0.0	0.3
Unattended aerodromes	**0.2**	**0.0**	**0.0**	**0.2**
TU main switchboard replacement	0.2	0.0	0.0	0.2

Capital Programme	FY23	FY24	FY25	Total
En-route	**4.9**	**4.7**	**8.0**	**17.6**
DVOR/ DME (Kaitaia, Hokitika and Tauranga)	2.4	2.4	-	4.9
5 DVOR/DME Sites (LX,WS,TU,AP,WR) GBNA MON	-	-	4.2	4.2
Drone management	-	-	1.8	1.8
DB upgrade of 58 Nav sites around NZ	0.3	0.4	0.5	1.2
Radio links (Microwave) lifecycle	0.3	0.6	-	0.9
Field test equipment lifecycle	0.3	0.3	0.3	0.8
Minor capital works, less than $0.75m	1.6	1.0	1.3	3.9
Network and supporting assets	**30.8**	**19.1**	**17.5**	**67.4**
ATC transition (IL4'S + tower upgrades)	3.9	4.7	3.2	11.8
AIM replacement HW/SW	5.0	-	-	5.0
National ATM System enhancements lifecycle	1.5	1.5	1.6	4.6
Drone management	1.5	1.5	1.5	4.5
MPLS network lifecycle	2.0	1.1	-	3.1
Minor project tower upgrades (SkylineX/VCS)	0.3	0.3	1.8	2.3
Networks and security	-	0.6	1.6	2.2
Christchurch campus refresh (Buildings)	2.0	-	-	2.0
IP MUX lifecycle	-	-	2.0	2.0
IT & SM asset update	1.1	0.4	0.4	1.9
IT & SM desktop refresh	0.6	0.6	0.7	1.8
ATM System implementation	1.5	0.2	-	1.7
Enterprise network lifecycle (corporate)	-	1.7	-	1.7
NOC network lifecycle	1.1	0.5	-	1.6
SkylineX – Oceanic Hardware Refresh	0.5	0.7	-	1.2
Maintenance vehicle replacement lifecycle	0.3	0.3	0.5	1.1
Network lifecycle (operations)	0.5	0.5	-	1.0
Electronic briefing system for ops staff (OIDS)	1.0	-	-	1.0
Consolidated access network	0.9	-	-	0.9
SDWAN - implementation	0.3	0.3	0.3	0.8
Minor capital works, less than $0.75m	7.0	4.2	4.0	15.2

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Appendix 2.3: Weights used to allocate approach and aerodrome-related overhead

Figure 24 – Weights

Aerodrome	Actual 18/19 tonnes landed
Auckland	8,289,414
Christchurch	2,149,026
Wellington	1,674,390
Queenstown	670,602
Dunedin	275,608
Nelson	258,728
Palmerston North	194,180
Napier	179,204
Tauranga	135,124
Hamilton	124,794
New Plymouth	120,742
Woodbourne	99,038
Rotorua	81,105
Invercargill	77,846
Gisborne	62,473
Paraparaumu	16,936

Appendix 2.4: Components of cost of capital

This appendix provides supporting rationale for the cost of capital inputs summarised in Section 5.1d.

The method used to estimate Airways' cost of capital has wide support in the New Zealand financial community and is the method used by the NZCC in its Input Methodologies to estimate the cost of capital for regulated businesses. The method involves estimating the cost of equity using the capital asset pricing model (CAPM) and combining that result with estimates of the cost of debt to arrive at the weighted average cost of capital (WACC). The method requires establishing values for various parameters and there is a degree of judgement required in establishing these values. The parameter values used to calculate the WACC are listed in figure 25 below.

Figure 25 – Components of capital cost

Capital charge components	Proposed
Risk-free rate	1.7%
Asset beta	0.6
Tax adjusted market risk premium	7.5%
Debt premium	1.24%
Debt issuance cost	0.33%
Leverage	55%
WACC range	67th percentile
Calculated capital charge rate	7.01%

For each parameter, Airways considers the approach used in the NZCC's Input Methodologies and other approaches used in the market to derive a range for WACC.

Airways calculated the 67th percentile for its cost of capital at 7.01%, using the NZCC's Input Methodology framework and its parameter estimates where available. Where the NZCC has not provided parameter estimates that are appropriate to Airways (asset beta and leverage), or the estimate is able to be updated (e.g. risk-free rate), Airways has followed the NZCC's methodology for calculating those parameters as close as practicable.

It is also worth noting that the cost-based building block method is primarily designed for use by large infrastructure providers and has some limitations for service businesses like Airways. The building blocks methodology calculates the commercial return as the asset base multiplied by the cost of capital rate. While it makes sense to link the return to shareholder with the amount invested in an entity, it does not incentivise innovation and can create inefficient investment decisions. For example, Airways could increase its return to shareholder by simply increasing its capital spend, even if that is not the most efficient way of providing services. Under the building blocks model, there is no explicit link between performance (safety, efficiency, cost-effectiveness or reliability) and return.

Risk-free rate – 1.7%

The NZCC estimates the risk-free rate as the yield on Government stock. To avoid the influence of unusual movements in the bond market, the NZCC estimates the rate as the average of the daily yields over the three-month period preceding the start of the disclosure year.

Rationale:

The NZCC is of the view that the term of the Government bonds used to estimate the risk-free rate should match the term of the pricing period. In Airways' case, the risk-free rate would therefore be based on a three-year Government bond rate. This approach is reflected in the risk-free rate estimate of 1.7% which is calculated using the NZCC's methodology with a three-year term and an estimation date of 1 December 2021. This rate will be updated again to reflect the current market rate, prior to prices being set.

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Asset beta – 0.6

Asset beta is the ratio of the covariance of a company's returns with the returns on the market, relative to the variance of returns on the market. It is thus a measure of the degree to which the entity's returns move with the market. The asset beta assumes zero leverage, whereas the equity beta reflects the company's leverage. For listed companies, beta can be estimated from observed returns but for unlisted companies the beta is estimated from an average of the betas of comparable listed companies.

Rationale:

As Airways is not a listed company, the estimation of asset beta must come from the (de-levered) betas of comparable companies. Airways considers that New Zealand airports are a suitable comparison because they operate in a similar economic environment to Airways in terms of fluctuations in demand from shifts in domestic and international economies. In addition, their costs tend to be fixed in the short to medium term (as are Airways') and they are thereby not able to shift costs up or down quickly in response to changes in demand (thus resulting in returns being very sensitive to volumes).

An asset beta of 0.6 was estimated by the NZCC for airports in New Zealand in 2016.

AirServices Australia, NATS, IAA and ENAV are the providers of ANS in Australia, the United Kingdom, Ireland and Italy respectively. These entities are therefore expected to be exposed to a similar level of systematic risk (which beta aims to reflect) to Airways. Airways considers that these businesses are comparable for estimating asset betas.

As AirServices, NATS and IAA are not listed, their asset betas used in pricing are set by regulators, generally using a reference group of comparable listed companies. AirServices Australia uses an asset beta of 0.55[6], NATS 0.5-0.6[7] and IAA 0.45-0.55.[8] Additionally, in estimating asset betas for comparable companies, IAA calculated an asset beta for ENAV of 0.45-0.55.[9] This gives a range of 0.45 – 0.6 and thus corroborates the use of the New Zealand airports beta of 0.6.

Furthermore, Airways considers that COVID-19 has increased the systematic risk of New Zealand airports and Airways, which suggests using 0.6 is conservative.

6 ACCC (2011), *Airservices Australia price notification: Final decision*, September 2011, pg.29. An asset beta range for AirServices of 0.55-0.75 was estimated using a reference group of comparable listed companies, and asset beta was ultimately set at the lower end of this range. See ACCC (2002), *Preliminary View: Airservices Australia – Proposed Price Increase*, June 2002, pg.25-26.; ACCC (2003), *Decision: Airservices Australia - Proposed Price Increase*, June 2003, pg.44.

7 CMA (2020) NATS (En Route) Plc / CAA Regulatory Appeal: Final report, 23 July 2020, para.13.129.

8 CAR (2021), Irish Draft Performance Plan for Air Navigation Services for Reference Period 3 (RP3) Single European Sky Regulation – Decision Document, 1 October 2021, para.5.43.

9 CAR (2021), Irish Draft Performance Plan for Air Navigation Services for Reference Period 3 (RP3) Single European Sky Regulation – Decision Document, 1 October 2021, para.5.38.

Tax-adjusted market-risk premium (TAMRP) – 7.5%

The tax-adjusted market-risk premium represents the premium for exposure to market risk. The NZCC's most recent estimate of TAMRP is the basis for the Airways input used.

Rationale:

The NZCC has most recently adopted an estimate of 7.5% in the 2020 Fibre Input Methodologies decision, an increase from the previous estimate of 7%.[10] This estimate is based on a range of evidence including historical returns and expected future returns and is consistent with a range of estimates made by New Zealand market participants.

The TAMRP is a market-wide, rather than industry-specific parameter. Therefore, it makes sense to use the most up-to-date evidence from the NZCC on this parameter, which is reflected in the input of 7.5% that Airways is proposing.

Debt premium – 1.24%

The debt premium represents the margin over the risk-free rate. The NZCC has most recently adopted an estimate of the debt premium for Airports of 1.24% using a five-year term.[11]

Rationale:

For airports, the NZCC estimates the debt premium as the margin over the estimated risk-free rate, for New Zealand dollar denominated bonds issued by comparison companies, putting higher weight on bonds that:

are issued by an airport,

are publicly traded,

have a qualifying rating of grade A-, and

have a remaining term to maturity of five years.

The NZCC's most recent application of this method, issued on 2 August 2021 for the disclosure year ending 30 June 2022 for Auckland and Christchurch airports, resulted in an estimate of 1.24% for the debt premium.

The NZCC uses a five-year premium for three-year pricing periods on the basis that three years is a relatively short term to issue debt for. The NZCC is of the view that this short-term would increase debt issuance costs and refinancing risks, neither of which would be in the long-term interest of end-users.[12]

10 NZCC (2020), *Fibre Input Methodologies: Main final decisions - reasons paper*, 13 October 2020, para.6.522
11 NZCC (2021), *Cost of capital determination for disclosure year 2022 for information disclosure regulation - For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end)*, 2 August 2021.
12 NZCC (2020), *Fibre Input Methodologies: Main final decisions - reasons paper*, 13 October 2020, para.6232.

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Debt issuance costs – 0.33%

The debt issuance costs are intended to reflect the cost of issuing publicly traded bonds. The NZCCs most recent estimate of debt issuance costs for a three-year term is the basis for the Airways inputs used.

Rationale:

The NZCC, in the 2020 input methodologies decision for fibre, set out its methodology for debt issuance costs for regulatory periods that are less than five years. The NZCC estimated debt issuance costs of 0.33% for a three-year term. This compares to the five-year figure of 0.20%. The three-year debt issuance costs were estimated by pro rating the five-year figure for three years.[13] This reflects the fact that debt issuance costs would be relatively higher as a proportion of total annual debt costs over a shorter pricing period.

Airways has therefore adopted a 0.33% debt premium to reflect Airways' three-year pricing period.

Leverage – 57%

The leverage input adjusts for the mix of a company's funding between debt and equity.

Rationale:

The adoption of a leverage estimate of 57% is based on Airways' medium-term targeted leverage for its statutory business. The leverage ratio of 57% reflects the true cost of capital for Airways.

The input methodologies specify an explicit leverage level for each of the industry sectors to which they apply. These leverage levels were derived from the same company dataset that was used to derive the asset betas. The leverage level for airports (for the purpose of calculating WACC) is set at 19%. The NZCC has not calculated a leverage dataset for the ANSP sector.

The leverage levels for AirServices Australia and NATS, whom Airways considers to be its closest comparators, are 58.8%[14] and 60%[15] respectively. Airways does not consider IAA and ENAV to be relevant for the purposes of determining leverage. In particular IAA has no leverage[16] and while ENAV has positive leverage in the most recent financial year for which annual reports are available,[17] previously it had no leverage and was consequently not considered when the CMA assessed NATS' leverage.[18]

Airways considers its target leverage level is the appropriate value to use when estimating its WACC and has therefore used 57% in its WACC estimate. This target level is comparable with Airways' industry peers, NATS and AirServices.

13 NZCC (2020), *Fibre Input Methodologies: Main final decisions - reasons paper*, 13 October 2020, para.6.301
14 AirServices actual leverage is 58.8% (is based on an average from FY2020 actuals and FY21-25 planned). AirServices, *Corporate Plan 2020-2021*, pg.22 and AirServices, *Corporate Plan 2021-2022*, pg.20,
15 NATS has a target leverage of 60%, see CAA (2021), *AIR TRAFFIC SERVICES LICENCE for NATS (EN ROUTE) PLC*, consolidated as of 24 October 2021, pg.34-35.
16 CAR (2021), Irish Draft Performance Plan for Air Navigation Services for Reference Period 3 (RP3) Single European Sky Regulation – Decision Document, 1 October 2021, para.5.8.
17 ENAV (2020), Annual Financial Report 2020.
18 CMA (2020) NATS (En Route) Plc / CAA Regulatory Appeal: Final report, 23 July 2020, para.13.115.

Percentile – 67th percentile

Given that the costs of debt and equity each require estimates, the final calculated WACC is subject to the risk of uncertainty or error. The NZCC recognises the asymmetrical effects of error. If prices are set too low, investment is disincentivised and may threaten the ability of the company to continue to provide services. To allow for this potential for error, Airways allows a margin on the point estimate by using the 67th percentile WACC.

Rationale:

The NZCC has recently reviewed the pricing decisions made by Auckland and Christchurch airports. The draft decisions indicate that the NZCC considers the risk of underinvestment from underestimation of WACC for these airports is lower than that of the electricity distribution and gas pipeline business, where the allowed WACC is set at the 67th percentile.

Although the business of Airways is strongly linked to that of the airports, it is considered that the cost of underinvestment by Airways is relatively high.

A possible outage of ANS services is significant in terms of the costs of disruption or worse an accident.

Inefficiently low levels of investment may cause economic cost due to travel delays and reduced levels of travel (as a result of fewer flights). A reduced number of travellers has a wider impact on the economy through lower expenditure on associated goods such as accommodation.

Airlines may experience higher costs, potentially as a result of less efficient flight times, or aircraft spending longer periods of time on the ground between flights.

There are also fewer factors that mitigate the risk of underinvestment in comparison to airports. Complementary commercial activities for airports potentially create an incentive for investment even if the WACC is set lower than the true cost of capital.

The 67th percentile adopted by Airways is based on the percentile applied to electricity distribution and gas pipeline businesses by the NZCC.

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Environmental (both Airports & Airlines)

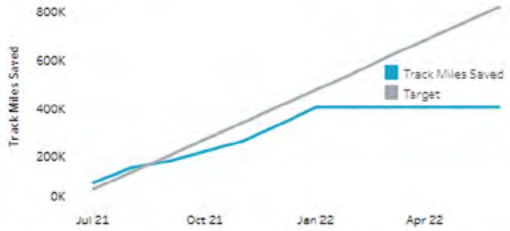
Draft

AIRWAYS

94.1%

Events by Day
Reporting Month
(Hover on a triangle)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



	TM Saved (NM) MTD	TM Saved (NM) YTD
Jul 21	95207	95207
Aug 21	61185	156392
Sep 21	28094	184486
Oct 21	40299	224786
Nov 21	42402	267188
Dec 21	68018	335205
Jan 22	73819	409025

Track Miles
Annual Target (NM)

825000

Track Miles
Monthly Target (NM)

68750

	CO2 Saved (t) MTD	CO2 Saved (t) YTD
Jul 21	1807	1807
Aug 21	1145	2952
Sep 21	491	3443
Oct 21	718	4161
Nov 21	742	4902
Dec 21	1286	6188
Jan 22	1389	7578

CO2 Reduction
Annual Target (t)

17500

CO2 Reduction
Monthly Target (t)

1459

making your world possible

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