# Airways' Prices and Scorecard for the 2013-2016 period

## Consultation Response Document

Version: Final

17 May 2013

AIRWAYS

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# Contents



# Executive Summary

This document outlines Airways New Zealand (Airways) prices for the three year 2013-16 period. These prices have been set following consultation with airlines, airports and general aviation (GA) customers and have been revised from proposed prices released in February, following careful consideration of each pricing input using customer feedback.

***An average price increase of a little over 5% per annum.***

Airways' final prices will result in the following overall price increases over the three-year period, as illustrated in figure 1 which compares the final price increase against Airways' proposed prices that customers were consulted on in February.

**Figure 1: Final price change**

| | 2014 | 2015 | 2016 | Total over 3 years |
|---|---|---|---|---|
| **Final overall price changes** | 10.6% | 3.5% | 1.2% | 15.7% |
| **Proposed price changes** | 13.4% | 4.9% | 3.4% | 23.0% |

Airways would like to thank all of its customers for providing feedback on its February pricing proposal. Customer feedback provided critical input into the price setting process, assisting Airways in the careful consideration of each pricing input, leading to a number of changes. Overall, these changes have resulted in a reduction in the proposed price increase from 23.0% to 15.7% over the pricing period.

## Consultation process

***Submissions provided a critical test of the appropriateness of each pricing input.***

Airways has been working with customers and stakeholders over the past 18 months to put in place a Service Framework and a Pricing Framework and, more recently, to consult on prices for its services. Airways issued its pricing consultation document in February 2013 and held nine workshops on the Pricing Consultation document throughout the country. Airways also responded to a number of requests to provide workshops on specific topics.

Written submissions were requested by mid-March and these submissions were made available on Airways' website on 20 March. This document completes the consultation process by providing Airways' responses to the issues raised in submissions, the impact of those responses on prices and the prices and the Scorecard for the next three years.

## Context

Airways is recognised as a safe, effective and innovative provider of Air Navigation Services (ANS), enabling aircraft to navigate safely and efficiently across the aviation network. Airways provides ANS across 30 million square kilometres of airspace to over one million movements per year.

The services that Airways provides include aerodrome air traffic management, aerodrome visual navigation aids, approach services, enroute domestic and oceanic services. Airways has a strong track record of delivering fuel savings, innovation and, above all, safety to its customers.

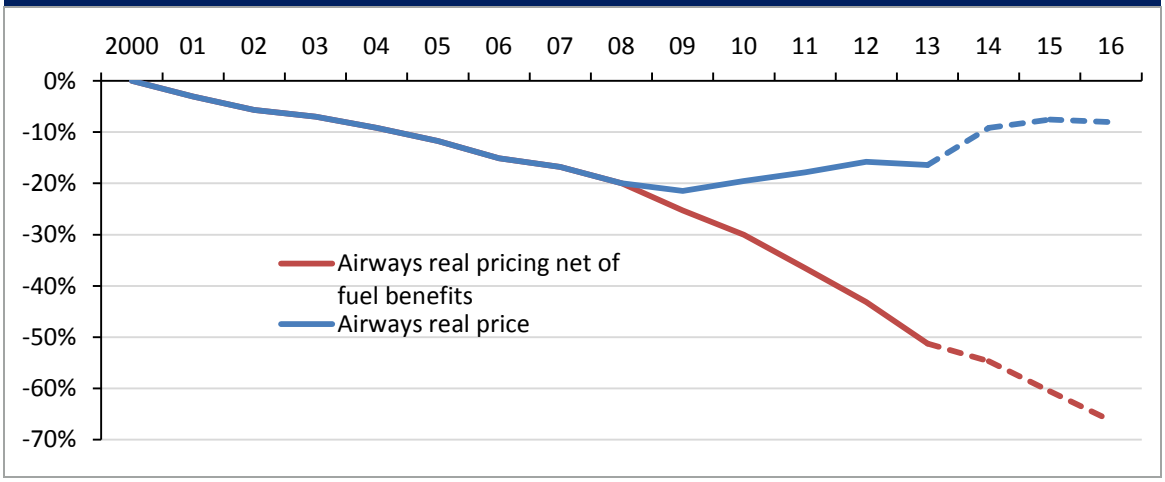
The adoption of satellite-based surveillance systems, together with sophisticated automation, to replace 60-year-old radar technology over the next five to 10 years, will transform the way in which ANS and associated information is provided and used by airlines and airports.

Airways is at the forefront of this trend, using innovations like performance-based navigation and collaborative arrival management to deliver fuel savings of $48m over the last four years. Airways estimates it will provide another $70m of fuel savings over the next three-year pricing period through initiatives like these.

***We will provide $1 of fuel savings for every $1 of extra revenue.***

The estimated $70m in savings generated by Airways' service improvements in the upcoming pricing period would offset price increases to airline customers[1] (illustrated in figure 2). Airways estimates that its price increase would increase the price of a ticket from Wellington to Auckland by 68c. However, this would be offset by Airways fuel saving benefits.

**Figure 2: Estimated real price net of fuel benefits compared with real price**




It is critical during this period of innovation and opportunity that Airways has adequate incentives and decision making flexibility to improve the efficiency of existing services, to enhance those services or develop new ones in ways that are valuable to customers. The Service and Pricing Frameworks, released last year, were designed to ensure Airways continues to offer and deliver services in this way.

[1] Airways' fuel saving initiatives mainly benefit airline customers, especially jet operators. GA customers probably will not see the same level of savings.

These Frameworks ensure prices are simple, transparent and reflect the cost of supplying each of the services, and that there is no cross-subsidisation between customer groups. Prices are being rebalanced to reflect the underlying cost of services and some new GA charges are being introduced to reflect the costs of servicing this sector. The Frameworks also ensure that Airways' stand-alone Global Services business is independent of Airways' core ANS business.

***The Service and Pricing Frameworks ensure prices reflect the underlying cost of the service.***

As a State-Owned Enterprise (SOE), Airways is expected to provide its shareholder with a commercial return. While this requirement has not changed from previous years, the shareholder has become more explicit in its expectations.

***We continue to rank in the world's top five most cost-effective ANS providers.***

Airways continues to benchmark its performance against its international peers. Over recent years Airways' costs and prices have been in the lowest quartile of CANSO[2] members. Airways will ensure it remains one of the most cost-effective ANS providers in the world by using new technology to optimise resource use, outsourcing services to take advantage of global economies of scale and by implementing low-cost service delivery models in low-volume locations.

## Consideration of airline and airport submissions

Airways received 12 submissions from airlines and one submission from airports during the pricing consultation process. The submission feedback and follow up discussion at the workshops on key topics gave Airways a detailed understanding of customer concerns. Customer feedback provided critical input into the price setting process, assisting Airways in the careful consideration of each pricing input. This critical review of pricing inputs led to a number of changes, the overall effect being a reduction in the price increase from 23.0% to 15.7% over the pricing period.

Submissions on the proposed pricing inputs focused on a number of key issues. These key issues along with their impact on final pricing are summarised in figure 3.

Each of these issues presented in figure 3 are then discussed in further detail, the discussion providing key submissions points and Airways' final decision. Final prices reflecting these changes are provided in section 6.

[2] Civil Air Navigation Services Organisation, the international association of ANS providers.

**Figure 3: Key issues in submissions and their impact on pricing[3]**

| Key issues | 2014 | 2015 | 2016 | Total over 3 years |
|---|---|---|---|---|
| Proposed prices | 13.4% | 4.9% | 3.4% | 23.0% |
| Changes relative to proposal: | | | | |
| Revised cost of capital | -1.2% | 0.0% | -0.1% | -1.3% |
| Volume growth | -1.0% | -1.4% | -1.7% | -4.0% |
| Revised capital programme | -0.5% | -0.3% | 0.2% | -0.6% |
| Revised inflation forecast | -0.4% | -0.4% | -0.4% | -1.2% |
| Updated opening position | 0.3% | 0.5% | -0.2% | 0.6% |
| Total change relative to proposed prices | -2.8% | -1.5% | -2.2% | -6.3% |
| Finalised change to prices relative to existing prices. | 10.6% | 3.5% | 1.2% | 15.7% |

## Revised cost of capital

In the February pricing proposal, Airways' estimated the cost of capital at 8.49%. Submissions suggested it should be lower, with submitters providing a number of reasons for a reduction. To assist decision making, Airways obtained expert advice to determine a reasonable range for the cost of capital, using the methods employed by the Commerce Commission when setting prices for regulated businesses. That range is 7.8% to 8.9%, with the lower figure reflecting the Commission's parameter estimates and the upper figure reflecting parameter estimates more reflective of market data.

***Our return of 7.8% is within the range judged reasonable by the Commerce Commission.***

Airways has decided to set the cost of capital at the lower end of the range at 7.8%. The lower end of the range applies the Commerce Commission's recommended approach by applying the Commission's Input Methodology parameter estimates, where they are available.

## Volume growth

***We expect volume growth to return to the long term average of 1.7%.***

The final volume position is both pragmatic and realistic and will avoid any additional complexity of volume-related discounts or ratchet clauses. In February's pricing proposal, Airways projected constant volumes (i.e. zero growth) over the three-year pricing period, reflecting recent experience. Submissions and discussions with some of the submitters provided evidence that volume growth will be higher.

[3] The percentages in the figure 3 don't add horizontally due to the compounding effect of the changes.

Airways considered these submissions carefully, including feedback on fleet changes. Since the proposal was released, Airways also completed its annual revenue forecast process using airline schedules. The forecast shows 1% growth for the 2013-14 year, a reliable figure with forecasts being historically accurate. Airways has, therefore, adopted 1% growth in volumes for 2013-14. Airways has then assumed that growth will revert to the long term average of 1.7% by year three, resulting in volume growth rates of 1.0% in 2013-14, 1.4% in 2014-15 and 1.7% in 2015-16.

## Revised capital programme

In February's pricing proposal, Airways included $97m in capital expenditure for the three-year period. Capital expenditure included a large programme of asset lifecycle replacement that will ensure Airways continues to deliver safe, reliable and resilient services. The programme also includes a number of value add service enhancements that will create significant additional value for airline customers by optimising operational efficiency and availability while, at the same time, significantly reducing customers' fuel costs. The importance of these types of initiatives was highlighted by the chief executive of International Air Transport Association (IATA), Tony Tyler, who highlighted that "Improving the efficiency of the network through the modernization of the ATM system" was essential to improving airline cost efficiency [4].

The majority of projects in the proposed capital programme were supported by customers. Some submissions suggested a small number of specific projects could be deferred and six projects that had some uncertainty could be treated as specific business cases. The suggested changes would reduce the total amount of capital expenditure used for the pricing calculation.

***Customer feedback was carefully actioned to ensure we can still deliver reliable and safe services.***

One submission provided explicit information supporting the proposed capital programme, noting the importance of Airways maintaining and upgrading its assets. Airways has reduced the total capital spend over the three years to $88m and shifted the expenditure profile toward the latter part of that period.

The adjustments to the capital programme were made carefully to ensure Airways can still deliver safe and reliable services and that Airways can still achieve the service improvements and value add enhancements to which it has committed.

[4] World ATM conference in Madrid, February 2013.

## Revised inflation forecast

***We evaluated customer suggestions to use NZIER inflation forecasts.***

In February's pricing proposal, Airways used inflation forecasts from The Treasury to index costs over the three-year period where actual collective agreement labour uplifts were unknown. Submissions suggested alternative and lower forecasts like the New Zealand Institute of Economic Research (NZIER) consensus forecast, which includes The Treasury's forecast as one of its inputs.

To assist decision making, Airways obtained expert advice on the possible indices and their forecasts to project these costs. The labour cost index and the Producers Price Index (PPI) for inputs provide the best measure of the shift in prices that Airways intends to forecast. The NZIER is the sole provider of forecasts for these indices for the period Airways requires. As a result, Airways has adopted these indices and the NZIER forecasts as policy. This, in turn, has led to a lower forecast inflation figure than that reflected in Airways' initial pricing proposal.

## Updated opening position

Since February's pricing proposal was released, Airways has re-forecast its 2012-13 financial expectations and updated its 30 June 2013 closing position. The opening position for the 2013-14 pricing model has been aligned, resulting in the following changes.

- An increase in volumes relative to those expected in late 2012 for the 2012-13 outturn. This change results in a decrease relative to the proposed prices.
- A decrease in capital expenditure in 2012-13 relative to plan, which reduces the depreciation and capital charge results in the 2013-14 financial year.
- Updated values in relation to year-end tax on interest and payroll accruals. This change results in an increase relative to the proposed prices.
- A number of other smaller adjustments to align the pricing model opening inputs to the re-forecast 2012-13 closing positions. The net adjustment results in an increase in prices.

## Cost efficiencies

Airways included projected improvements in cost efficiencies in February's pricing proposal. However, these initiatives were not visible as they were offset by increases in operating costs such as insurance and occupancy costs that have been driven by the Christchurch earthquake. In addition, Airways is limited in what it can disclose about the initiatives because their implementation may require development and consultation.

Feedback was clear in asking for more explicit commitments to labour and productivity gains. Labour and productivity initiatives have been integral to the management of Airways' costs. Evidence of this intent is shown by the current collective employment agreement settlement, which is below 2.5% a year over three years. Where it can, Airways has also provided more transparency around the cost efficiencies that have been included in the final prices (see section 3).

As these projected efficiency improvements were already included in the proposed prices they do not give rise to any further reduction in prices.

## Issues raised by General Aviation (GA)

***GA services will be streamlined and simplified to keep prices as low as possible.***

The Pricing Framework, released in 2012, introduced changes to streamline and simplify general aviation (GA) services, helping to keep prices as low as possible and to recover the costs GA activity is driving. The changes include the introduction of new circuit, vicinity landing and controlled VFR transit prices, the redistribution of discounts throughout the GA sector and the simplification of the pricing formula. To allow customers time to adjust to the new prices and the removal of GA contract discounts, Airways is phasing-in the changes over a three-year period (as set out in the Pricing Framework).

February's pricing proposal included prices for the revised GA pricing structure. The proposed prices did not increase revenue from GA relative to current levels, except for inflation and where GA activity was adding additional cost. Airways asked for customer feedback on the inputs into the proposed prices.

Airways received 27 submissions from GA customers. The key issues raised on the pricing inputs are summarised below.

- Assurance that Airways is using appropriate methods to forecast cost inflation over the pricing period. To remain consistent with airline prices, Airways will now use NZIER's labour cost index and the PPI (for inputs) to calculate inflationary cost increases. Known collective employment agreement increases will be used if available. The NZIER inflation forecast rates are lower than the proposed inflation rates from The Treasury, resulting in a decrease in Airways' final prices on what was initially proposed.
- Assurance that the level of the new GA prices (circuit, vicinity landing and controlled VFR transits) takes into account recent changes in GA volumes and any impact on resourcing levels. Airways has checked and confirmed the proposed new GA prices are appropriate for current resourcing requirements.

Airways' final Aerodrome, Approach, Parachuting and Flight Planning prices for the GA sector have decreased from those proposed in February, reflecting revised inflation forecasts. The new circuit, vicinity landing and controlled VFR transits prices have not changed from the proposed prices as these are set to recover the additional cost that is driven by GA activity, which has not changed. The final prices are provided in section 6.

The GA submissions also raised a number of issues that relate more to the Service or Pricing Frameworks than to Airways' current pricing consultation process. Airways' response to these submissions is provided in section 4.

To streamline the delivery of Airways' services and prices to GA, and to ensure services remain cost effective, Airways will be promoting electronic billing by introducing an administration fee for paper invoices and payment by cheque. The administration fee will be introduced in late December 2013, giving customers time to move to electronic invoices and payment methods, which will not incur the fee.

# Final prices and scorecard

Airways' consultation aimed to establish prices and set up a scorecard for ANS for the next three years. The Scorecard is set out in section 5, with price schedules provided in section 6.

## Drivers of change in prices

To illustrate the drivers of the proposed pricing increase, the February consultation document broke the increase down into key drivers, which were illustrated using a pie chart. Figure 4 provides the February pie chart and compares it with an updated pie chart, showing the final drivers of the price changes for the 2013-14 year relative to current prices. Figure 5 provides an explanation of each component of the pie charts.

**Figure 4: Drivers of changes in price (comparison of proposed and final prices)**

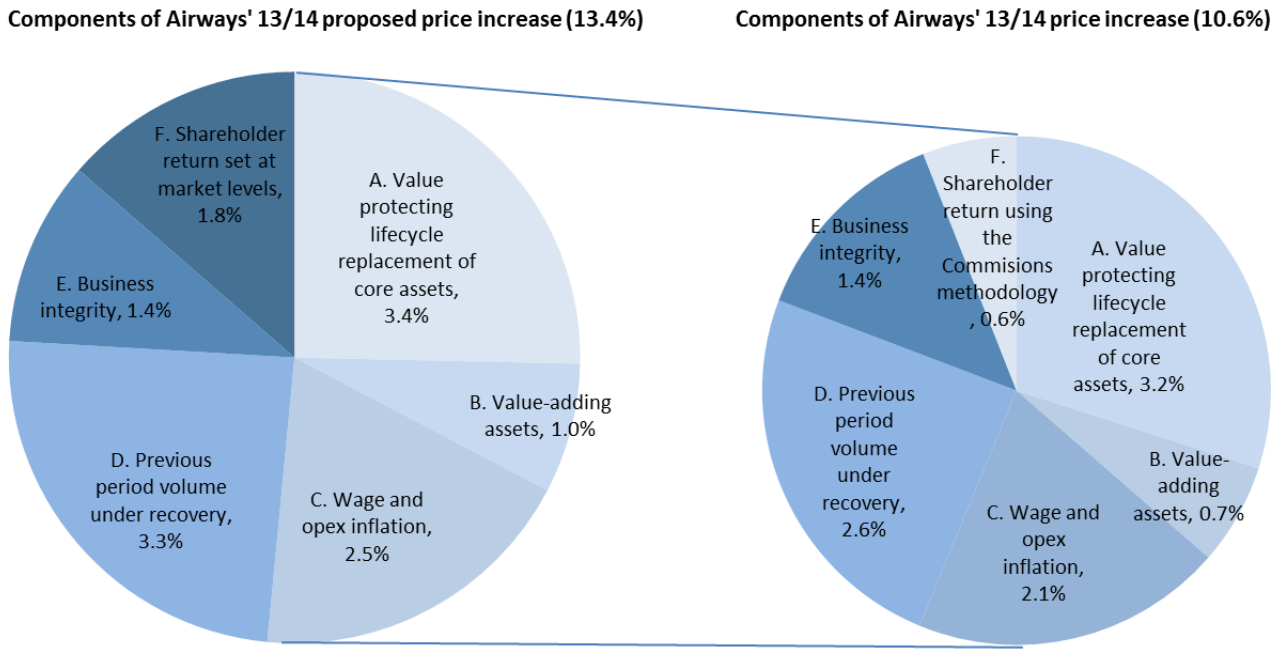


**Figure 5: Explanation of the key drivers of the price increase**

| Driver | Explanation |
|---|---|
| A: Value protecting lifecycle replacement of core assets. | This includes replacing assets coming to the end of their useful lives, seismic strengthening of operating and contingency facilities and a new Wellington control tower. While final prices have removed or delayed some asset replacement projects, the changes to the capital programme have been carefully made to ensure customers will keep receiving safe and reliable services. |
| B: Value-adding service enhancements. | This covers investment that improves services in a way that is valuable to customers. Examples of such investment include extending the successful performance-based navigation programme and taxiway efficiency improvements in Christchurch. Other value add initiatives include the full implementation of the arrivals manager technology. This is currently being trialled with the full roll out expected over the next year.<br><br>Queenstown non-day operations have been removed from the programme because of uncertainty around the implementation dates. As a result, this project will be treated as separate business case. It is important to note that customer feedback supported this enhancement. While it will be treated as separate business cases, Airways will be implementing the lighting upgrade. |
| C: Wage and operating expense inflation. | This includes the impact of the collective agreement and forecast price movements in other cost items. This also includes unavoidable legislative changes such as the legislation for rest breaks. |
| D: Previous period volume under recovery. | Volumes in the 2012-13 period are tracking below those forecast when current prices were set in 2010. As Airways' costs are largely fixed, and generally do not vary with volume fluctuations, the volume short fall means current prices do not generate enough revenue to cover costs. As a result, prices need to increase to adjust revenue levels back to a level expected under the current pricing arrangement.<br><br>The volume growth included in the final prices has been included as a part of this pricing input in the pie chart. |
| E: Business integrity. | This includes replacement of Airways' financial system, which is obsolete and unsupported by the software provider. It also includes investing in upgrading Airways' information systems, cyber security and customer management systems. |
| F: Shareholder return using the Commerce Commission methodology | This is in response to the shareholders' more explicit requirement for a commercial return and recognition that Airways' ANS business has been under-performing on this measure. |

## Scorecard

The Scorecard is an innovation designed to enhance Airways' accountability to its customers by providing a structured annual communication on financial and service performance. Airways received several submissions during the consultation process providing alternative measures. These submissions were considered in finalising the scorecard. The final Scorecard measures are provided in section 5. Airways will report against the Scorecard for the first time shortly after the 2013-14 year end.

## Conclusion

The Service Framework and the Pricing Framework, released in 2012, are designed to provide a more robust and transparent way for Airways and its customers to interact on service change issues and on the pricing of those services.

The prices for the next three years announced in this document enable Airways to continue to provide an efficient and safe service and to make the necessary investments to maintain and develop those services set out in the Service Framework.

# 1 Introduction

Airways Corporation of New Zealand Limited (Airways) is recognised as a safe, effective and innovative provider of Air Navigation Services (ANS), enabling aircraft to navigate safely and efficiently across the aviation network. Airways provides ANS across 30 million square kilometres of airspace to over one million movements per year. Airways is a State-Owned Enterprise (SOE), wholly owned by the New Zealand Government. The company is run as a commercial business and is governed by an independent Board of Directors.

***We are committed to delivering services that are safe, efficient and maximise value for all our customers.***

Airways' primary role is to provide safe and efficient ANS, with the aim of providing world-class services and real value to customers. Airways does this by having skilled, committed staff and investing in leading technology solutions. Airways' safety and operational performance consistently ranks among the best globally.

In competitive markets, prices are determined by market forces. As there is no competition for many of the services Airways provides, a different mechanism is used to set prices. Every three years, Airways sets its prices in a way that is consistent with Airways' Pricing and Service Frameworks and in consultation with Airways' customers and stakeholders.

Refer to figure 6 below for an outline of the three-stage consultation process, which started in November 2012 and concluded in May 2013.

**Figure 6: Three-stage consultation process for setting prices for 2013 – 2016**


**Stage 1**: In November 2012, Airways provided customers with an initial brief on what influences Airways' prices. On 1 February 2013, Airways released a consultation document setting out the proposed service enhancements and associated prices for customers and invited feedback.

**Stage 2**: Public meetings were held during February in Auckland, Hamilton, Christchurch, Wellington, Palmerston North and Queenstown. The purpose of the meetings was to clarify the proposals and assist stakeholders in developing their submissions. Customer workshops were held to further explain particular elements of Airways' proposals. Stakeholders were also invited to request further information during February. Submissions closed on 15 March 2013.

**Stage 3**: Airways carefully considered all the submissions and feedback received on the proposed service enhancements and prices. Airways then determined the final prices for the 2013-2016 pricing period. This document provides a summary of this final stage of the process.

Pricing for the 2013-2016 period has now been finalised. Prices are detailed in section 6 of this document. These prices come into effect on 1 July 2013.

## 1.1 Document purpose and structure

The purpose of this document is to:

- summarise the key issues raised by submitters to *Airways' Proposed Pricing for the 2013-2016 Period, Consultation Document*
- outline Airways' responses and the rationale for those responses
- describe any changes made to the proposed prices as a result of submissions
- announce the final pricing for the 2013-2016 period.

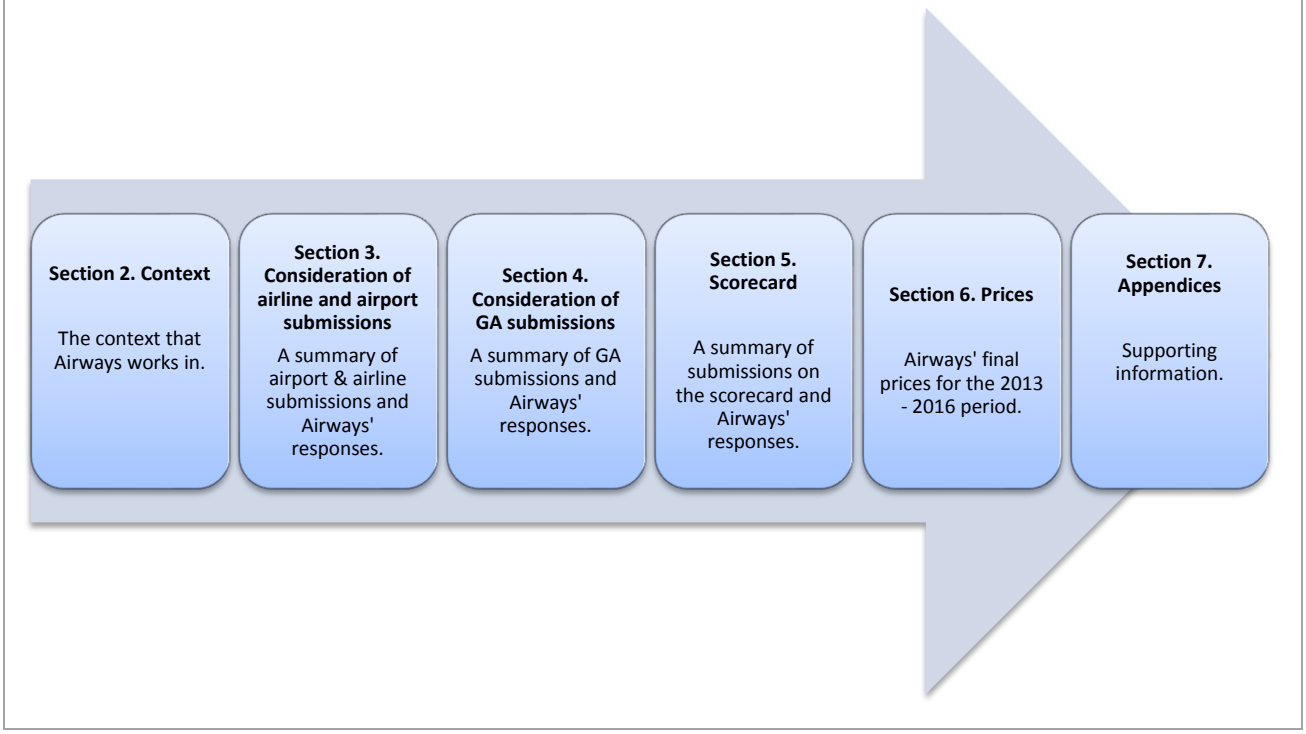
Figure 7 illustrates how this document is structured, providing a brief summary of what each section covers.

Airline, airport and general aviation (GA) submissions have been provided in separate sections to reflect the different pricing structures and inputs. Section 3 covers airline and airport submissions and section 4 addresses GA submissions.

Refer to section 6 for:

- final price tables for both airlines and GA
- pricing tables and example calculations that allow customers to calculate what their final prices will be
- an updated revenue by services and locations.

**Figure 7: Structure of this document**



## 1.2 Submissions received

A total of 40 submissions were received, 12 from airlines, 27 from the GA sector and one from airports. Refer to figure 8 below for a more detailed breakdown of the submissions received.

**Figure 8: Submissions received by customer**

| Customer | Detailed customer breakdown |
|---|---|
| **Airlines** | Air Freight, Air New Zealand, Air Tahiti Nui, Air Vanuatu, Airwork Flight Operations, Board of Airline Representatives of New Zealand (BARNZ), Cathay Pacific Airways, Express Couriers Limited, IATA, QANTAS, Virgin Australia. |
| **Royal New Zealand Defense Force** | RNZAF. |
| **GA training organisations** | Canterbury Aero Club, CTC Aviation Training New Zealand (CTC), Nelson Aviation College Limited and Wanganui Aero Club. |
| **GA industry associations** | Aviation Industry Association of New Zealand (AIA), Aircraft Owners and Pilots' Association (AOPA), Flying New Zealand, General Aviation Advocacy Group of New Zealand, Milford Users' Group, Royal New Zealand Aero Clubs (Inc) and Sport Aircraft Association of New Zealand. |
| **GA Individual operators** | 18 individual submissions, 12 of those were identical submissions from GA Association members. |
| **Airports** | New Zealand Airports Association. |

Customer submissions were published on Airways' website on 20 March to ensure a robust and transparent consultation process. The submissions were compiled into two documents (one for airlines and one for GA).

It should be noted that, while all feedback has been considered in finalising prices for the 2013-2016 period and this document provides a summary of the key points made in the submissions, this document is not intended to provide an exhaustive list of all points raised.

For a full list of submissions please refer to our website, at:
https://www.airways.co.nz/airways_Services/pricing_consultation.asp

# 2 Context

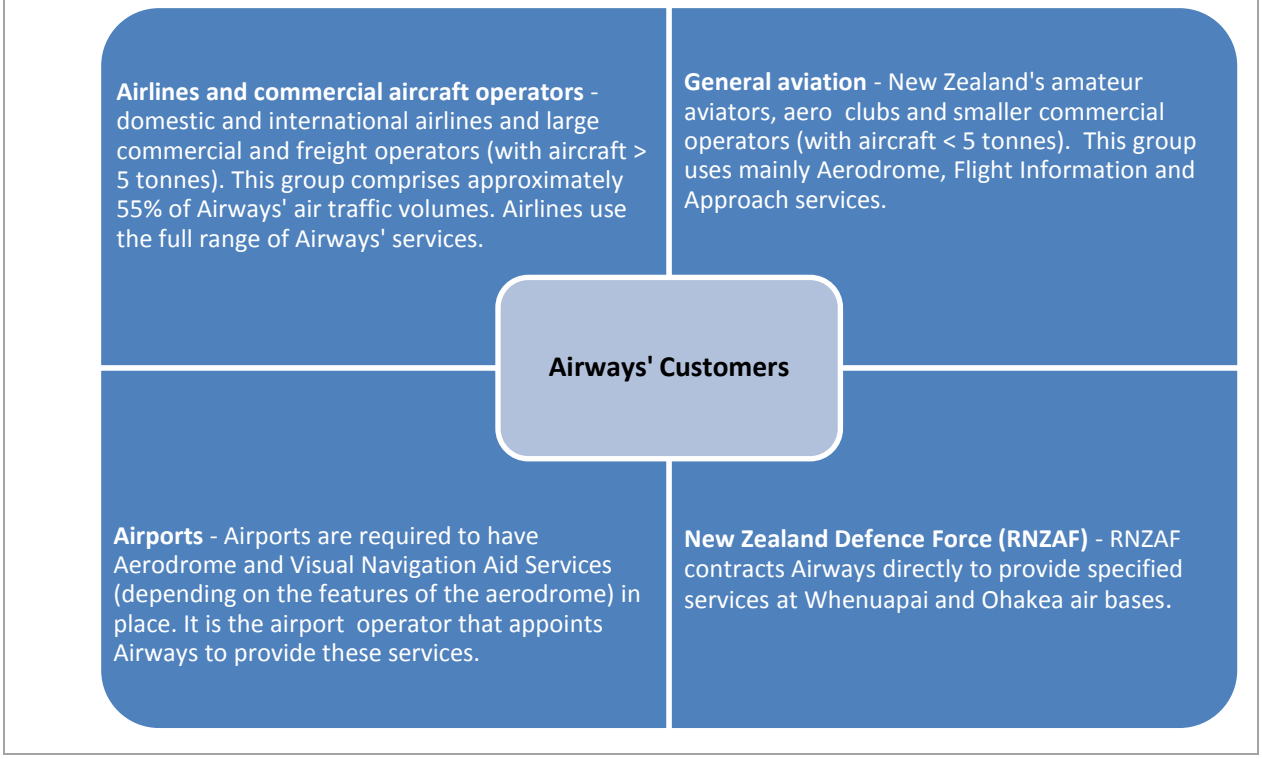
This section highlights the services, value and innovation underpinning Airways' prices and the business drivers that have influenced Airways' pricing inputs.

## 2.1 Airways' customers, services, value and innovation

### Airways' major customers

Airways has four major customer groups, represented in Figure 9 below.

**Figure 9: Airways' major customers**



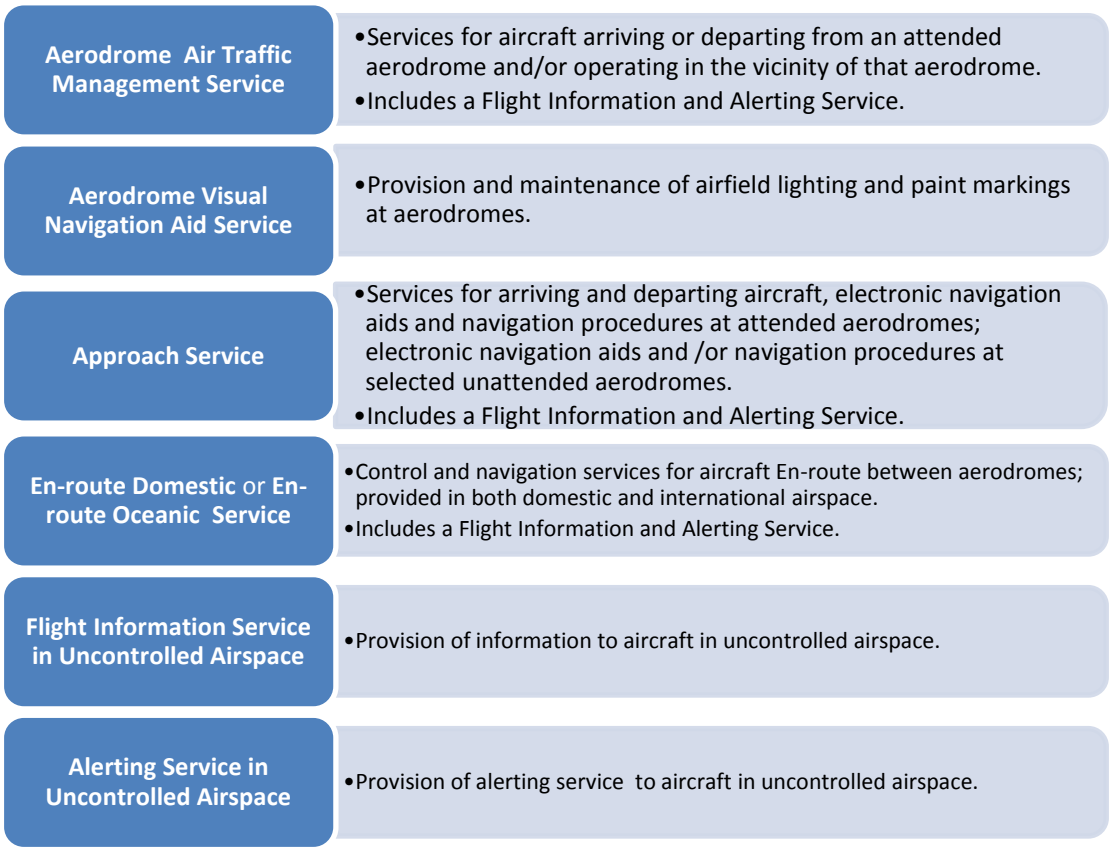

### Airways' services

***Our efficiency initiatives in Queenstown won the global Jane's award and reduced airborne delays by 75%.***

The proposed pricing set out in this document relates to Airways' services as New Zealand's provider of ANS. The services for which prices have been established through this consultation process are those defined in our Service Framework, also described in Figure 10.

Prices for all these services have been determined through the consultation process and are covered in this document.

**Figure 10: Airways' services as defined by the Service Framework**




## Value and innovation – real bottom line savings for airlines

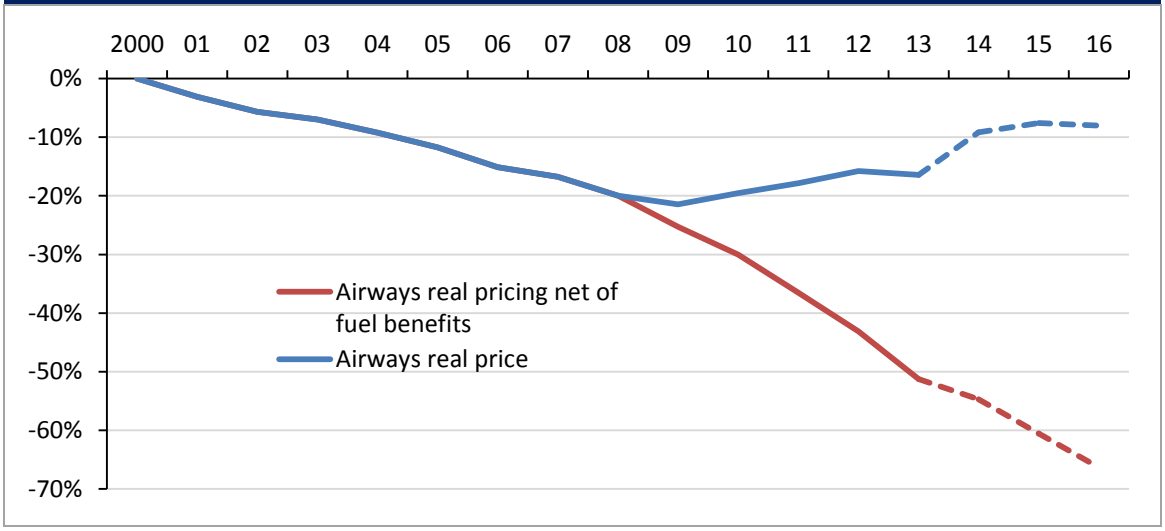
The technology used to provide ANS will change significantly over the next 10 years. Airways' navigation and surveillance systems comprise a national network of ground-based equipment. This traditional system will be replaced with satellite-based technology over time. These changes will transform the way information is delivered and used by aircraft and air traffic controllers.

Airways is already investing in this new technology and is providing service and technology improvements that provide benefits to our customers that include:

- fuel savings, resulting from more efficient flight profiles
- capacity enhancement in controlled airspace, resulting in more efficient management of the airspace
- on-time performance benefits to Airways' customers, resulting from improved scheduling and management of aircraft

Initiatives such as the Collaborative Arrival Manager (CAM) programme have delivered $48m in fuel savings to the industry over the four years ending 2012. Airways estimates that these and additional initiatives such as performance-based navigation and further flight optimisation tools will add a further $70m of savings over the next pricing period. This equates to a $1 fuel saving for every $1 of the final price increase. Figure 11 shows that while real prices will continue to increase over the next three years, the total cost to airlines, net of fuel savings[5], is expected to fall[6].

**Figure 11: Estimated real price net of fuel benefits compared with real price**




Airways' southern performance-based navigation initiative is a recent example of improving the efficiency of the network. The challenge was to deliver safe and more efficient air traffic management in the extreme-terrain airspace above Queenstown where full surveillance coverage is not available.

Airways created an air traffic management process based on performance-based navigation that more than doubled the airport capacity and significantly enhanced safety. At the same time, performance-based navigation design changes increased take off payloads (by more than 1,500 kilograms) and made it possible for traffic segregation between multiple GA operations and commercial flights.

[5] Fuel saving benefits have been calculated by sampling flight information, simulator modelling and Hale Twomey's 12 month average Jet A1 fuel price.

[6] These initiatives provide the most benefit to larger aircraft, and jet aircraft in particular. The benefits to other types of aircraft are limited.

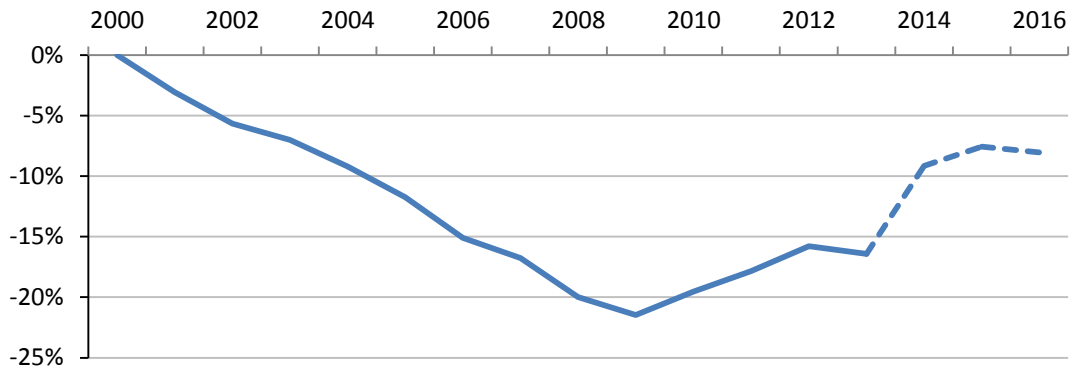
The results from the initiative include improvements in airborne holding delays which are now approximately 400 minutes per month (recorded in December 2012), compared to pre-initiative delays of 2,000 to 2,800 minutes, representing a 75% reduction. The annual fuel savings to customers total between $0.6m to $0.95m, while CO2 savings equate to more than two million kilograms a year. In addition to the fuel savings from reduced delays, this initiative also provides airlines with further benefits through the 1,500kg increased payload and the removal of 200 diversions per year to Invercargill.

This year, Airways' performance-based navigation initiative won the international Jane's Award for operational efficiency. Airways will complete a nationwide roll-out of performance-based navigation to all the international and regional airports by 2016.

## 2.2 Productivity and comparative analysis

Since 2000, Airways' prices have fallen by 16% in real terms, a trend made possible by increases in productivity in the early-to-mid 2000s and Airways' cost reduction measures such as consolidating its air traffic control centres in Christchurch and using technology to provide more efficient services. Figure 12 illustrates the real price (today's prices adjusted for inflation) decrease of 16% since 2000. Over this same period, Airways rebated $26m of revenue back to its customers and saved Airlines $48m in fuel costs through to the end of 2012. Price increases for the next three years will mean Airways' prices will have fallen by 8% in real terms by 2016 and Airways will have provided airlines with a further $70m in fuel savings.

**Figure 12: Airways' real pricing**




Airways is focused on achieving cost efficiencies and is continually refining its cost structure to provide more efficient services. Recent examples include:

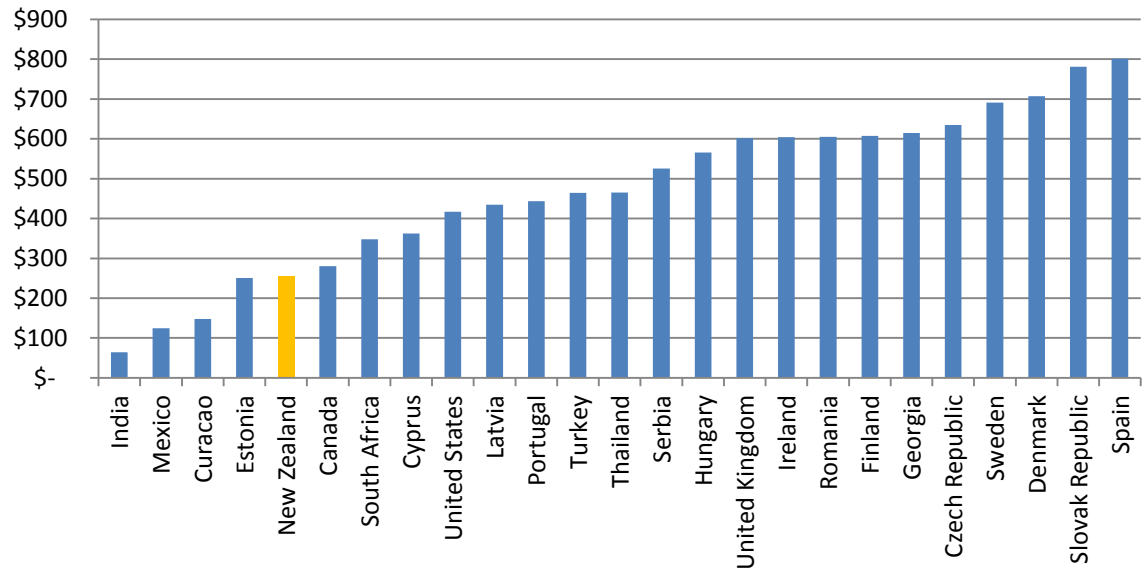
- Implementing electronic flight strips, which removed the need for flight information staff at international towers. The savings minimised the pricing impact of air traffic controller headcount numbers returning to optimal levels after a high number of staff took positions in the Middle East.
- Optimising the equipment maintenance programme using specialised computer software, resulting in reduced head count and material costs.

- Refinements of the terminal control roster have reduced the required headcount by four. Further productivity initiatives will be implemented over the next few years.
- Development of a low cost Airways 'lite' service at Kapiti.

## Benchmarking overall costs

International comparison data collated by CANSO[7] indicate that Airways consistently delivers a world-class service, ranking among the top ANS providers in the world for price and cost efficiency measures. Airways costs are the fifth lowest[8] of CANSO members, as illustrated by figure 13. The low overall cost is attributable to both low direct costs and low overhead costs.

**Figure 13: Cost $US per IFR flight hour for both Continental and Oceanic services**



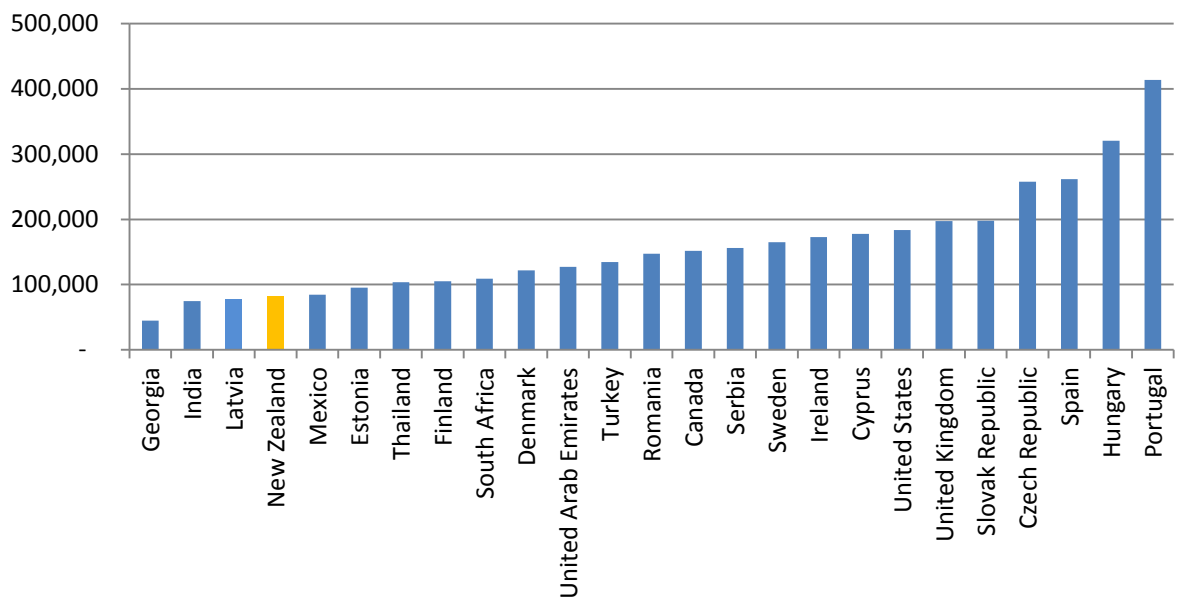

## Direct cost efficiency

Figure 14 shows Airways' air traffic controller labour costs ($USD per FTE) are competitive, at a time when controllers' skills are in demand and transferable across most countries. The recent collective settlement of 7.4% over three years demonstrates that Airways is committed to managing wage settlements within the bounds of productivity improvements and inflation.

[7] CANSO is the global association of ANS providers. The members participate in annual performance benchmarking. Twenty six members participate in benchmarking.

[8] The benchmarking information presented comes from the latest 2012 CANSO information released in December 2012.

**Figure 14: Comparison of air traffic controller labour costs, using purchasing power parity ($USD)**




## Low overhead costs

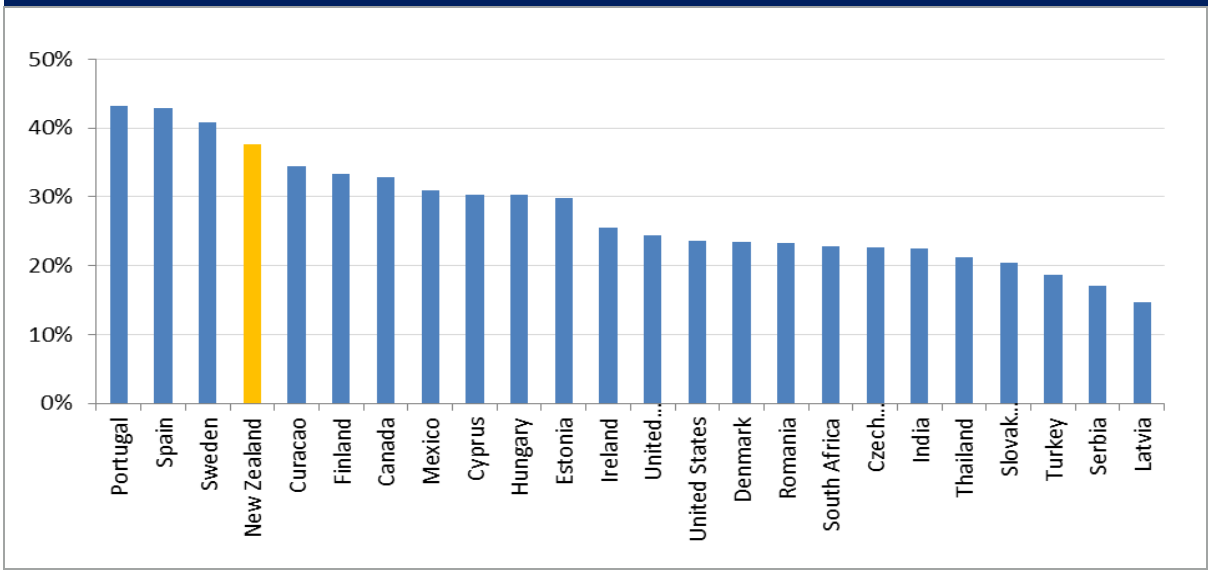
Airways' low overhead costs are reflected in figure 16. The figure measures direct air traffic controller employment costs as a proportion of total costs.

The higher the proportion of direct employment costs, the lower the proportion of overhead costs. Figure 15 shows Airways has the fourth highest proportion of direct costs and, therefore, the fourth lowest proportion of overhead costs. Airways' corporate costs are also low, making up only 14.3%[9] of total costs.

***International benchmarking shows that Airways is one of the world's most cost-effective ANS providers.***

[9] Corporate overheads include the standard corporate functions plus safety, audit and risk management.

**Figure 15: Proportion of direct costs**




## 2.3 Service and Pricing Frameworks – the benefits

Airways' Pricing Framework defines the pricing methodologies that Airways uses to price the services defined in the Service Framework. The Pricing Framework was released in July 2012 following a period of consultation.

The Frameworks were developed as part of Airways' commitment to transparent price setting and performance reporting. The Frameworks involved large-scale consultation and were developed and implemented in consultation with Airways' customers in 2012.

You can download the Frameworks from Airways' website, at:

http://www.airways.co.nz/airways_Services/service_and_pricing_review.asp

***The Pricing Framework provides a fair way of setting prices to reflect service costs.***

### Flexible and low cost price setting

***The Pricing Framework provides a flexible, low-cost mechanism for transparent price setting.***

Airways is the sole provider of ANS in New Zealand. Some other businesses with the characteristics of a sole provider, such as electricity and gas network companies, are subject to rigid price regulation. Airways is not regulated in this manner. Airways is, however, committed to transparent engagement with its customers in the setting of prices and in reporting on financial and service performance to customers and other stakeholders. Airways achieves this transparency through Service and Pricing Frameworks that were developed and implemented in consultation with its customers and stakeholders. This approach has much lower transaction costs and is more flexible and better able to respond directly to customer requirements

than the very complex and slow-moving regulatory mechanisms that apply to, for example, electricity and gas networks.

## Pricing Framework achieves fairness and transparency

The Pricing Framework sets out seven principles that Airways has used to guide the implementation of the Framework through this consultation process. The principles ensure Airways' prices are fair and transparent. The principles are:

1. Be predictable, consistent and durable.
2. Be transparent and practicable to implement.
3. Reflect costs.
4. Take account of differences in the value customers derive from Airways' services.
5. Be commercially sustainable.
6. Encourage Airways to innovate and operate efficiently.
7. Comply with relevant regulations.

***The Pricing Principles are at the core of our pricing method.***

## Prices set to earn a fair return on capital only

The Pricing Framework uses the Economic Value Added (EVA) framework to set overall revenue levels.

***Revenue is set to recover costs and to provide a fair return only.***

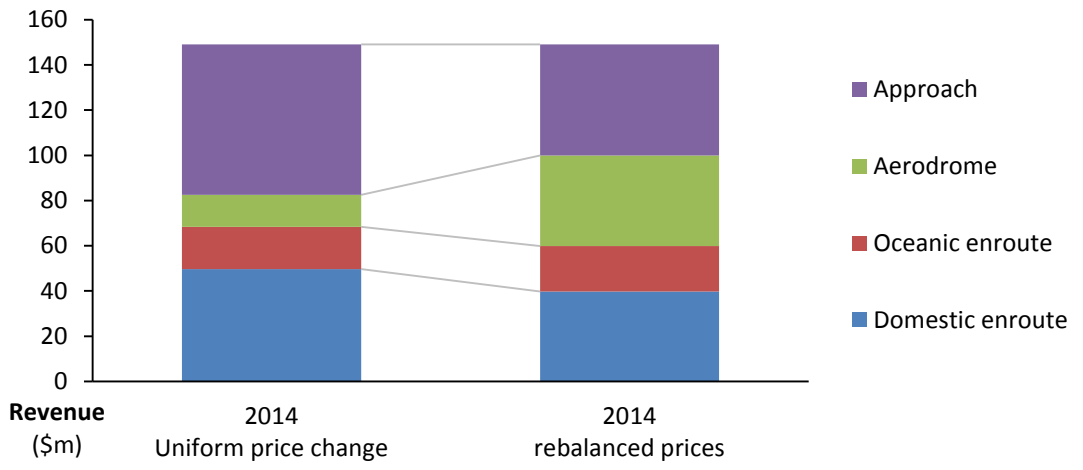
The EVA framework is a form of the cost building block method, commonly used to set prices in regulated industries. Airways' revenue is set at EVA = 0, meaning that revenue is set at a level that recovers the cost of delivering services (including operating costs, depreciation and tax), while providing a fair return to the shareholder. Airways did not re-value its assets for pricing purposes.

## Rebalancing prices to accurately reflect costs

Airways' prices are being rebalanced to align with the underlying cost of providing each service. Figure 16 illustrates the impact of rebalancing on revenue by service. Broadly the figure shows decreases in the revenue required for the Approach service is offset by an increase in Aerodrome revenue, while a decrease in revenue required for En-route Domestic service is offset by an increase in En-route Oceanic revenue.

The rebalancing impact for individual customers will vary depending on the proportion of each service used.

**Figure 16: Impact of rebalancing Airways' prices**




## Simplification and standard pricing for regional aerodrome services

To simplify prices and to smooth price fluctuations caused by large asset replacements, Airways is setting a standard price for similar services delivered at regional aerodromes. Aerodrome prices for regional attended aerodromes (other than Queenstown, Kapiti and Milford) are expected to be the prices most affected by this change. The Queenstown service has its own price because the unique terrain and operating conditions require a significantly different grade of aerodrome services. Kapiti and Milford services also have their own prices because these aerodromes receive a flight information service which differs significantly from other regional air traffic control services. These locations will be priced on a location-specific basis. Prices will reflect the underlying costs.

## Location specific pricing at unattended locations

Historically, Airways has priced unattended services as a single standard price (i.e., a network price). The Pricing Framework calculates unattended services on a location specific basis. At unattended locations, the level of service is determined collaboratively by Airways, the airport and users. At these locations it is important that the price provides efficient signals about the appropriate level of service and resourcing at that location. A location-specific price is the best means of achieving this.

The effects of changing to location specific prices are:

- Airways will only charge users directly where Airways provides unattended aerodromes with visual navigation aids or electronic navigation aids. This has reduced the number of unattended aerodromes where Airways will charge aircraft operators directly. The unattended price table in section 6 lists the locations where unattended prices will be applied.
- Where Airways provides services at unattended aerodromes other than visual navigation aids and electronic navigation aids, Airways will charge aerodrome operators directly because the relatively low cost of these other services makes applying an unattended location-specific price inefficient.

# 3 Consideration of airline and airport submissions

This section summarises airline and airport submissions and provides Airways' response to those submissions.

The submissions have been separated into two groups:

**Submissions on pricing inputs (see 3.1)** – this section recaps Airways' proposal, summarises the submissions received, outlines Airways' response and concludes with the final impact on price.

**Other airline and airport submissions (see 3.2)** – this is a summary of the submission topics that did not relate directly to pricing inputs. For each topic, Airways summarises the submission(s) received and outlines Airways' response.

The final prices for airlines are provided in section 6.

## 3.1 Submissions on pricing inputs

Airways have carefully considered all 12 submissions received from airlines and one received from the Airports Association and have revised several of Airways' proposed inputs. Customer feedback provided critical input into the price setting process, assisting Airways in the careful consideration of each pricing input. As a result of the consultation process, the total change in prices over the three year period has decreased from 23.0% to 15.7%.

***We listened to your submissions and have significantly revised our proposed prices.***

Figure 17 summarises the impact of the revisions of each pricing input in response to the consultation process. It also shows the final revenue and related change in prices for each of the next three years. Figure 17 only includes the pricing inputs that have changed from the proposed prices.

**Figure 17: Impact of the adjustments made to each pricing input after consultation[10]**

| | 2013 | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 | 3 Years |
|---|---|---|---|---|---|---|---|---|
| | Forecast Outturn | Revenue ($m) | | | Price Change (%) | | | |
| Consultation document proposal | 138.8 | 157.4 | 165.2 | 170.7 | 13.4% | 4.9% | 3.4% | 23.0% |
| Changes relative to proposal: | | Revenue Change | | | Price change | | | |
| Revised cost of capital | | -1.7 | -1.7 | -1.9 | -1.2% | 0.0% | -0.1% | -1.3% |
| Volume growth | | 0.0 | 0.0 | 0.0 | -1.0% | -1.4% | -1.7% | -4.0% |
| Revised capital programme | | -0.7 | -1.2 | -0.9 | -0.5% | -0.3% | 0.2% | -0.6% |
| Revised inflation forecast | | -0.6 | -1.2 | -1.9 | -0.4% | -0.4% | -0.4% | -1.2% |
| Updated opening position | 1.5 | 2.1 | 3.0 | 2.8 | 0.3% | 0.5% | -0.2% | 0.6% |
| Total change relative to proposal | 1.5 | -0.9 | -1.1 | -1.9 | -2.8% | -1.5% | -2.2% | -6.3% |
| Finalised revenue / price change | 140.3 | 156.5 | 164.1 | 168.8 | 10.6% | 3.5% | 1.2% | 15.7% |

The rest of this section addresses the key points raised in the submissions that relate to the pricing inputs, in more detail. The key submission points have been grouped by pricing input.

## Revised cost of capital

**Airways' proposal**

Airways' proposed cost of capital was 8.49%, an increase from the current 2010 to 2013 cost of capital of 7.4%. The cost of capital was calculated as part of Airways' EVA framework using the same model used by the Commerce Commission. This is a change to previous practice, bringing Airways' cost of capital into line with the Commerce Commission's Input Methodology framework and other entities with similar risk profiles. As an SOE, Airways is required to deliver a commercial return, with the shareholder having become more explicit in this expectation.

***Our return of 7.8% is within the range judged reasonable by the Commerce Commission.***

[10] The percentages in the figure 18 don't add horizontally due to the compounding effect of the changes.

Airways' proposed Weighted Average Cost of Capital (WACC) of 8.49% was developed using the Commerce Commission's Input Methodology framework and parameter estimates that were reflective of market data.

**Summary of submissions**

BARNZ commented on the level of the cost of capital in general terms in their submission and on most of the parameter estimates that formed part of the cost of capital calculation. A number of other submitters referred to the BARNZ submission on this issue.

Several submitters challenged the shareholder's requirement for a commercial return in any given year, emphasising that the commercial return is required over time. BARNZ also referred to an Ernst & Young report analysing economic profit from SOEs. This report, BARNZ noted, suggested Airways made a positive economic profit in most years of the period studied.

Several other submissions asked what had changed to Airways' risk profile and business structure to justify Airways increasing its cost of capital rate.

**Airways' response**

Setting the cost of capital is a technical area that also requires a degree of judgement. Airways calculated its reasonable and analytically supportable range for its cost of capital, made its final decision on the cost of capital rate and responded to customer submissions using expert advice and assistance from Sapere Research Group and Ireland, Wallace and Associates Limited. Airways calculated the upper band of the reasonable and analytically supportable range for its cost of capital at 8.9%. The upper range was calculated using the Commerce Commission's Input Methodology framework and using market data to derive parameter estimates. The lower end of the range was calculated at 7.8%, using the Commission's Input Methodology framework and parameter estimates where available. Where the Commerce Commission haven't provided parameter estimates that are appropriate to Airways (asset beta and leverage), Airways has followed the Commission's methodology as close as practicable. The parameter estimates used for the upper and lower bounds of the reasonable and analytically supportable range are set out in figure 18.

**Figure 18: Cost of capital components and their descriptions**

| Cost of capital components | Lower range (Commission's parameter estimates) | Upper range (market parameter estimates) | Description |
|---|---|---|---|
| Risk free rate | 2.68% | 3.60% | **Lower range:** The most recent data from the Commission, using a three year bond rate. The Commission recommends using a bond rate that matches the period of the pricing agreement.<br>**Upper range:** A 10-year government bond rate, reflects the long expected life of the assets being financed. |
| Asset beta | 0.6 | 0.6 | **Lower range:** Per the input methodologies for airports.<br>**Upper range:** Comparator entities provide a range of 0.55 to 0.75, with the Commission's estimate for airports being 0.6. This is a reasonable choice from within the range. |
| Tax adjusted market risk premium | 7.0% | 7.5% | **Lower range:** As per the input methodologies.<br>**Upper range:** Historic data supports this value, which has wide support among practitioners. |
| Debt premium | 1.86% | 2.05% | **Lower range:** The most recent data from the Commission, using a three-year bond rate.<br>**Upper range:** Most recent data from the Commission, using a five-year bond rate. |
| Debt issuance cost | 0.35% | 0.35% | **Lower and upper range:** As per the input methodologies. |
| Leverage | 44% | 44% | **Lower and upper range:** Target leverage for Airways, as reported in the Statement of Corporate Intent and is consistent with the leverage of other ANSPs. |
| Choice of point estimate | 75$^{th}$ percentile | 75$^{th}$ percentile | **Lower and upper range:** As per the input methodologies. |
| WACC estimate | 7.8% | 8.9% | **Lower range:** Using the Commission's parameter inputs.<br>**Upper range:** Using market parameter estimates. |

Airways' response to issues raised in submissions that relate to specific parameter estimate are provided in Appendix 1. As a result, Airways has decided to:

- use the Commission's Input Methodology framework and parameter estimates to set the lower bound of its range, rather than those proposed by submitters

***Cost of capital is in line with the Commerce Commission's methodology and inputs.***

- adopt a cost of capital of 7.8% for the 2013-2016 pricing period. This represents the lower end of the range. This decision moderates the price increases and recognises the relatively difficult trading conditions that continue to exist, following the global financial crisis.

In response to submissions asking what has changed to justify an increase in the cost of capital, Airways notes that it has not used the full Commerce Commission Inputs Methodology in the past and some of its parameter estimates have been significantly lower than comparative entities. The increase in the cost of capital rate is a direct result of using a more appropriate methodology and inputs.

Airways notes that the Ernst & Young report that has been referred to in some submissions is a historical report based on the 10-year period to 2011. The report uses a different measure of economic profit than that used by Airways, which produces a much larger positive economic profit ($35m compared with $17m). It is also important to note that nearly[11] all of this positive EVA was generated in the early to mid 2000s during a period of high volume growth when Airways was able to freeze prices and provide rebates back to customers of $26m. More importantly, the level of past economic profits is irrelevant to setting future prices. Airways uses the building blocks methodology to set prices at a level that will return zero economic profit – at a level that covers costs and provides a fair return to the shareholder.

Airways' shareholder expects prices to be set at a level to provide a commercial return every year of the pricing period and not just over time. The company-specific section of the shareholder's expectation letter states: "Shareholding ministers recognise the critical importance of Airways' role in the New Zealand aviation industry, both in terms of passenger safety and the economic benefits of having an efficient service. We expect the Crown to continue to receive an appropriate return on the value of its commercial investment and, to that end, the price of services should reflect their delivery costs, including the cost of capital. We understand that these considerations are currently being worked through during development of Airways' new pricing framework." The shareholder expects prices to include an appropriate return and prices should include the cost of capital.

**Figure 19: Impact of revised cost of capital on revenue and prices**

| | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 | 3 Years |
|---|---|---|---|---|---|---|---|
| | **Revenue ($m)** | | | **Price Change (%)** | | | |
| Consultation Document proposal | 157.4 | 165.2 | 170.7 | 13.4% | 4.9% | 3.4% | 23.0% |
| Changes relative to proposal: | **Revenue Change** | | | **Price change** | | | |
| Revised cost of capital | -1.7 | -1.7 | -1.9 | -1.2% | 0.0% | -0.1% | -1.3% |

[11] The 2011 financial year also shows positive economic profit. However, the majority of this was generated by Airways non-statutory business.

## Volume growth

**Airways' proposal**

Airways proposed zero volume growth, based on recent historical averages. This conservative position was supported by expectations of slow global economic growth with significant downside risk due to Europe's sovereign debt issues, China's slowing growth and political uncertainty in the Middle East. Airways did not have any firm information from airlines that aircraft capacity (number and weight of aircraft) was expected to grow over the next three years.

***We expect volume growth to return to the long term average of 1.7% p.a.***

**Summary of submissions**

The consistent message from submitters, who commented on this issue, including BARNZ and all the airlines, was that zero growth was inappropriate.

BARNZ and Air New Zealand suggested annual growth rates of 3%, 2.5% and 2% for the pricing period. BARNZ proposed that Airways should apply different growth rates for each service (e.g. Aerodrome, En-route and Approach) rather than a global growth assumption.

BARNZ and Air New Zealand provided fleet change information – changes in both volume and weight, and supported this with information on weight and movement growth forecasts prepared by Auckland, Wellington and Christchurch Airports.

- Air New Zealand fleet change information provides estimated revenue growth of 0.5%, 1.9% and 3%, assuming all capacity is deployed.
- Auckland, Wellington and Christchurch Airports provided Airways with updated volume forecasts. A weight average of the respective landing volume forecasts, estimates overall growth to be 1.1% to 1.2%. The Airports also provided updated tonnes landed forecasts estimating 2.5% to 3.2% growth. However, Airways was not able to sensibly use these forecasts due to the square root effect of its pricing formula.

IATA provided their passenger growth forecasts for New Zealand for 2013-2015. These were for annual growth figures of 4.8% to 5.4% for international passengers and 5.2% to 6.5% for domestic passengers.

QANTAS suggested some growth should be included to reflect increasing aircraft delivery figures, IATA's growth projections and New Zealand Tourism and New Zealand Government forecasts.

Other customers suggested a modest increase should be included.

**Airways' response**

Volume growth can be achieved through an increase in aircraft landings or by an increase in aircraft weight or some combination of these two factors. How volume forecast information is applied is determined by Airways' pricing formula and a number of other factors.

In particular, it is important to note:

- Because of the non-linear structure of Airways' prices, with a square root applied to the weight of aircraft over 30 tonnes, growth in aircraft movements or the weight of aircraft used on a particular route, do not necessarily lead to a proportionate growth in revenue. This means that a given increase in landed weights will typically result in a less than proportionate increase in revenue that can be attributed to that volume growth. For example, replacing the B737 fleet with 27% heavier A320 aircraft only results in a 13% increase in revenue.
- Growth in passenger numbers may not translate to a proportionate growth in landed aircraft. Passenger growth can increase significantly without any additional flights by adding additional seats or improvements in passenger loadings. In the last pricing round, IATA provided passenger volume forecasts of 2%, 6% and 6%. Airways' revenue growth was 1%, 2%, 0%. It would be difficult and imprudent for Airways to base forecast growth on passenger numbers.
- An increase in aircraft numbers is not necessarily correlated with growth in revenue, as lighter planes may be used in place of heavier ones. For example, Air New Zealand has replaced some jet services on main trunk routes with the lighter ATR aircraft in its latest schedule.
- While Airways has received detailed submissions on international inbound and main trunk traffic levels, Airways also has a high dependency on regional volumes. There has been useful data to suggest new capacity on main trunk and international routes will indeed be incremental, but with a higher likelihood of replacement or reduced capacity elsewhere in the network.

For 2013-14, Airways considers that the effects of volume growth on Airways' revenue will be to increase it by 1.0%. This expectation is based on the latest schedules provided by airlines in March this year. Airways has traditionally used these schedules for budgeting purposes and typically achieves an outcome within 0.5% of what is forecast. Airways has found that schedules are only accurate for one year out.

For 2014-15 and 2015-16, Airways considered all the forecasts provided by submitters. Airways considered that a reasonable projection is for the effect of volume growth on revenue to return to its 10-year average of 1.7% for 2015-16. For 2014-15, Airways has adopted the half-way point between the schedule forecast and the average projected growth. The final volume position is both pragmatic and realistic and will avoid any additional complexity of volume-related discounts or ratchet clauses. The volume growth also assumes the following points:

- The growth will be driven by Air New Zealand's fleet changes. The increase does not reflect the full increase in estimated revenue growth of 0.5%, 1.9% and 3% calculated from the fleet change information, which assumes all capacity is deployed. Airways has estimated volumes will be less due to changes in route and aircraft mix. Recent examples of this include lighter ATRs replacing jets on main trunk routes and Jetstar's recent announcement of significant reductions in schedules over the winter.
- The growth is higher than the latest airport landings forecast (1.1% to 1.2%). This reflects that there will also be some weight growth.

- There is still downside risk in this forecast given the continued economic uncertainty in Europe. This is highlighted by drastic measures being taken recently in Cyprus.

Airways also considered forecasting volume growth by service. However, the forecast information does not provide the level of detail to forecast volume growth at a service level. Inconsistencies between the domestic and international forecast information provided in submissions also means Airways cannot sensibly separate volume growth forecasts into domestic and international services. Therefore, it has continued to apply the same growth factor to all services.

**Figure 20: Impact of volume growth on revenue and prices**

| | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 | 3 Years |
|---|---|---|---|---|---|---|---|
| | **Revenue ($m)** | | | **Price Change (%)** | | | |
| Consultation Document proposal | 157.4 | 165.2 | 170.7 | 13.4% | 4.9% | 3.4% | 23.0% |
| Changes relative to proposal: | **Revenue Change** | | | **Price change** | | | |
| Volume growth | 0.0 | 0.0 | 0.0 | -1.0% | -1.4% | -1.7% | -4.0% |

## Revised capital programme

**Airways' proposal**

Airways' proposed total capital expenditure is outlined in the figure below.

**Figure 21: Proposed capital expenditure**

| NOPAT | 2014 | 2015 | 2016 |
|---|---|---|---|
| Lifecycle replacements | $33m | $24m | $19m |
| Value-adding assets | $10m | $8m | $4m |
| Total capital expenditure | $43m | $32m | $23m |

The proposal included a summary of Airways' 10-year capital expenditure plan. This indicated future investments in value protecting lifecycle replacements of core assets and new value-adding enhanced services.

Many of Airways' assets are ageing and need to be replaced within the next 10 years. Their replacement is required to maintain safe and reliable services and to meet Airways' regulatory maintenance obligations under Rule Parts 172 and 175. Some significant capital projects have already been delayed in response to customer requests to keep prices down during difficult economic conditions. Part of the proposed capital plan included a catch-up on these delayed projects.

The investment will enable a programme of essential seismic strengthening of operational and contingency facilities, a new Wellington control tower and navigational aid replacements during the upcoming pricing period.

To ensure the capital programme is delivered successfully and efficiently, Airways has also invested in delivery and support capability. This includes employing an additional nine full-time equivalents in the disciplines of project management, procurement and planning and logistics.

**Summary of submissions**

Air New Zealand acknowledged the need for an increase in capital expenditure and the need to catch-up on projects deferred in response to the global financial crisis. However, the proposed programme was considered too aggressive and needed to be modified to be affordable.

***Customer feedback on the capital programme was carefully actioned to ensure we can still deliver reliable and safe services.***

During the request for information period, BARNZ, alongside Air New Zealand, requested a meeting with Airways to review the proposed capital expenditure programme. The discussion at this meeting was reflected in their submissions.

The key points raised are summarised here.

- Projects related to night operations at Queenstown should be treated as a separate business case and be included only once that business case has been confirmed.
- Life-cycle replacement projects should be timed to occur over the entire pricing period, rather than clustered in the first two years.
- Airways should review whether any of the life-cycle replacements in 2015-16 could be deferred until the next pricing period.

Other airlines' submissions referred to the BARNZ submission on this point and supported their view.

New Zealand Airports Association submitted that it: "Strongly supports Airways adopting a programme of asset maintenance and replacement … welcomes Airways' commitment to protecting the value of its core assets". They also noted, in principle, support for technology investment that provides more accurate flight paths and time savings to airlines, noting that this may become useful for managing aircraft noise near airports.

QANTAS expressed concern that Airways would have an incentive to delay capital expenditure to increase the return in earlier years. QANTAS requested that Airways introduce a mechanism to rebate unspent capital to airlines. They suggested that Airways provide the history of actual capital spend compared to planned expenditure to give some indication of Airways' performance.

QANTAS supported projects that improve safety, reduce fuel burn, improve airspace availability or reduce delays. QANTAS suggested more open consultation is needed to ensure airlines can time their own investment to enable GBAS, UPR, RNP, Flex Trax etc. They would also like to see RNAV-RNP approaches flown more often and an investigation into the financial viability of extending hour of watch at Hamilton, Ohakea and Palmerston North as alternative destinations.

QANTAS expressed concern that a number of projects provide technology that caters for a small segment of the aviation sector, where newer technology is available. They also specifically commented on the financial system upgrade, believing that $5m was excessive.

**Airways' response**

Revised capital programme

In response to discussion with BARNZ and Air New Zealand, Airways has adjusted its capital expenditure programme to reflect the revised programme provided in the submission. This included treating several Queenstown projects as separate business cases to be addressed separately. The revised capital expenditure is provided in figure 22. The revised capital programme for both value protecting life-cycle replacements of core assets and new value-adding enhanced services is provided in Appendix 2. This appendix also includes a revised 10-year plan.

**Figure 22: Revised capital expenditure**

| NOPAT | 2014 | 2015 | 2016 |
|---|---|---|---|
| Total capital expenditure | $35m | $33m | $20m |

The adjustments to the capital programme were made carefully to ensure Airways can still deliver reliable and safe services and that it can still achieve the service improvements and value add enhancements to which it has committed.

***Additional planning, logistics and delivery resources will ensure the capital plan is delivered.***

Ensuring the capital programme is delivered

Airways notes submissions were silent on the need to invest in additional resources to deliver the capital programme. Airways has, therefore, made the assumption that customers agree with the need to invest in delivery and support capability to ensure the capital programme is delivered successfully and efficiently.

10-year capital plan

Airways notes that feedback on the 10-year capital plan was silent. It has been accepted that Airways will require capital in future pricing periods for investments like the ATM modernisation and ADS-B deployment.

Rebating unspent capital

One of the principles underlying the Pricing Framework is that prices should: "… encourage innovation and efficient operations – [that is] provide Airways with incentives to innovate in the supply of existing and new services, to operate efficiently and for customers to benefit over time from such innovation and efficient operation …" This provides Airways incentives to look for more efficient ways of providing safe and reliable services. Any benefits will pass quickly to customers as Airways has a relatively short pricing period. Progress will be monitored using the scorecard.

Airways considers a capital savings rebate is neither necessary, because the capital expenditure plan has been revised based on customer feedback, nor desirable, because it reduces the incentive to seek efficiencies in capital expenditure.

In response for the request for a historical comparison of planned capital spend compared to actual capital spend, Airways will be tracking actual spend against what is forecast as part of its new Scorecard measures. Historically, Airways has reported on its capital spend in the BARNZ annual report.

Value add opportunities

Airways is fully supportive of the idea of developing better customer relationships with all its customers to enhance the coordination of respective capital programmes. Airways will follow up on this opportunity.

Airways' performance-based navigation programme will be rolled out across the country by the end of 2016. RNAV-RNP procedures will then be in operation at all attended aerodromes for aircraft capable of using them.

Airways will also investigate the opportunity of extending the hours at the suggested aerodromes to provide alternate destinations.

Renewing obsolete technology

In response to QANTAS' concern that obsolete technology is being renewed primarily for the benefit of the GA sector, Airways can confirm that this is not the case. Internationally, ANS providers are moving to satellite-based navigation systems, with Airways taking part in this transition. The structure is already available to support operations to the primary airports and will be enhanced over the next few years. The domestic structure is also being transitioned to performance-based navigation-type operations and will be completed over the next three to four years. A backbone terrestrial navaid structure will be maintained primarily for contingency purposes with a number of navaids (particularly NDB) being withdrawn from service. This process has already commenced with four en-route VORs withdrawn at the end of 2012. Airways is managing the implementation of newer technologies to support its operations. Benefits already exist for more capable operators (e.g. RNP-AR at QN and AA) and these will be enhanced in the coming years at other locations. The system will evolve to have an increased reliance on satellite-based technologies and only a backbone of terrestrial systems will be retained.

Airways' also recognise that it has an obligation to maintain safe operations for all fleet types. Airways fully supports IATA's drive to achieve "most capable, best served", but recognises not all airlines move at equal speed to upgrade their fleets.

Replacement of Airways' financial systems

In 2012, Airways undertook a comprehensive procurement process to replace its aged financial system, which has passed the end of its technical support life. The procurement process included independent experts to assess Airways' requirements and ensure the product specifications were fit for purpose for a company of Airways' size. A tender process was used to ensure a cost effective solution was found and further expert advice was also used to assess which supplier provided the most economic solution.

**Figure 23: Impact of revised capital programme on revenue and prices**

| | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 | 3 Years |
|---|---|---|---|---|---|---|---|
| | Revenue ($m) | | | Price Change (%) | | | |
| Consultation Document proposal | 157.4 | 165.2 | 170.7 | 13.4% | 4.9% | 3.4% | 23.0% |
| Changes relative to proposal: | Revenue Change | | | Price change | | | |
| Revised capital programme | -0.7 | -1.2 | -0.9 | -0.5% | -0.3% | 0.2% | -0.6% |

## Revised inflation forecast

**Airways' proposal**

One of the factors underlying the increase in prices over the pricing period, is the forecast increase in inflation. This also includes unavoidable legislative changes such as the legislation for rest breaks. Airways proposed the following changes in input costs.

- Air traffic controller costs based on the collective settlement for 2013-14 and 2014-15 and The Treasury's labour inflation forecast for 2015-16.
- All other labour costs based on The Treasury's labour inflation forecast.
- All non-labour operating costs based on The Treasury's Consumer Price Index (CPI) forecast.

The rates proposed are outlined in figure 24.

**Figure 24: Inflation forecast rates, 2013 – 2016**

| Cost type | Inflation source | 2013/14 rates | 2014/15 rates | 2015/16 rates |
|---|---|---|---|---|
| Air traffic controller salaries | Collective settlement | 2.7% | 2.9% | |
| | Treasury labour forecast | | | 3.5% |
| Other labour costs | Treasury labour forecast | 3.9% | 3.7% | 3.5% |
| Other costs | Treasury CPI forecast | 2.5% | 2.4% | 2.4% |

**Summary of submissions**

Most submissions focused on the fact that the current forecasts from The Treasury were at the higher end of the range of forecasts available. QANTAS suggested using NZIER forecasts, while BARNZ suggested that the NZIER consensus forecasts should be used.

**Airways' response**

As the bulk of submissions disagreed with Airways' choice of forecast, Airways sought expert advice from Sapere Research Group.

***Airways evaluated customer suggestions to use NZIER inflation forecasts.***

Sapere found NZIER's consensus forecasts were not a viable option for Airways as the forecasting horizon was shorter than Airways' pricing cycle. The differences between the NZIER consensus forecasts and The Treasury forecasts were largely related to timing – The Treasury forecasts were prepared in April for the Budget and labour market conditions were generally softer by the end of the year than had been anticipated. The Treasury is a well-respected forecaster and in studies of the accuracy of New Zealand forecasters (regularly undertaken by both The Treasury itself and the Reserve Bank) they typically rank in the top two or three forecasters for accuracy for inflation and Gross Domestic Product. As Airways needs to be able to repeat this in future pricing cycles, it is this longer term performance that is important.

The following key questions provide a useful means to determine a suitable forecast.

- How well does the forecast measure relate to Airways' cost?
- Is it likely that the forecast will continue to be available for future price setting?
- Is the forecaster independent and reputable?
- How recently was the forecast prepared (or how often is it updated)?

Based on answering these key questions, Airways' expert advisors recommended using a forecast of the labour cost index, which differs to The Treasury forecast of wages (average hourly earnings). The Labour Cost Index (LCI) is considered the best measure of pure wage inflation, as it does not include changes in the composition of the workforce and it is designed to measure changes in the salary and wages that employers pay to have the same job done to the same standard.

For general inflation, Airways was advised to use the PPI for inputs. This is a closer measure of inflation for Airways' operating costs than the CPI, which measures changes in the price of a basket of goods purchased by a typical household.

NZIER prepares the only forecast with a sufficiently long time horizon for the LCI and the PPI for inputs. NZIER is a reputable forecaster with a long history of forecasting these variables, suggesting that use of these forecasts can be adopted as policy for future pricing cycles.

After considering the submissions and the expert advice, Airways has decided to adopt the following cost escalators.

- Air traffic controller costs – the collective settlement for 2013-14 and 2014-15 and NZIER's forecast of the LCI for 2015-16.

- All other labour costs – NZIER's forecast of the LCI.
- All non-labour operating costs – NZIER's forecast of the PPI (inputs).

The annual average percent change will be used in all cases, as this measures the year-on-year increase.

Airways has adopted the use of these forecasts as standard policy to provide a consistent long term measure. This should address arguments for and against specific forecasts at each pricing round just because they provide a favourable result for one party or the other.

The inflation assumptions used in the final calculation of prices are outlined in figure 25 below.

**Figure 25: Inflation sources, 2013 – 2016**

| Cost type | Inflation source | 2013/14 rates | 2014/15 rates | 2015/16 rates |
|---|---|---|---|---|
| ATC salaries | ATC collective settlement<br>NZIER LCI forecast | 2.7% | 2.9% | 2.5% |
| Other labour costs | NZIER LCI forecast | 1.5% | 2.0% | 2.5% |
| Other costs | NZIER PPI (inputs) forecast | 1.7% | 3.2% | 3.5% |

**Figure 26: Impact of revised inflation forecasts on proposed revenue**

| | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 | 3 Years |
|---|---|---|---|---|---|---|---|
| | **Revenue ($m)** | | | **Price Change (%)** | | | |
| Consultation Document proposal | 157.4 | 165.2 | 170.7 | 13.4% | 4.9% | 3.4% | 23.0% |
| Changes relative to proposal: | **Revenue Change** | | | **Price change** | | | |
| Revised inflation forecast | -0.6 | -1.2 | -1.9 | -0.4% | -0.4% | -0.4% | -1.2% |

## Business integrity

**Airways' proposal**

To ensure Airways remains a sustainable, resilient and secure provider of key infrastructure services, obsolete information systems need replacing and Airways' governance and customer management functions need to be enhanced. The changes are listed below.

- Upgrading obsolete software, increasing internet band width, head count for upgrading Airways' outdated information and business systems and providing effective support to ensure data security and internal processes.
- Strengthening Airways' governance of engineering and maintenance.

- Headcount to strengthen governance related to the technology and support functions.
- Increased insurance premiums resulting from recent natural disasters.
- Headcount to develop and strengthen Airways' customer management function.

**Summary of submissions**

QANTAS commented on the lack of transparency around business cases for increased headcount in business integrity and governance. No other submissions were received on this input.

***Ensuring reliable and resilient services by upgrading obsolete information systems.***

**Airways' response**

Airways is committed to continuing open and transparent consultation for strategic investments that are required to ensure Airways remains a sustainable, resilient and secure provider of key infrastructure services. This provides an efficient method of validating the strategic direction of support system and governance enhancements, while leaving the day-to-day resourcing decisions to Airways' management and Board who are responsible for providing safe, reliable and efficient services.

Airways notes that submissions were silent on the need for strengthening its support systems and governance and takes it as accepted that Airways needs to strengthen its business integrity as outlined in the pricing proposal.

**Impact on revenue and prices**

No changes have been made to the proposed pricing input.

## Cost efficiencies

**Airways' proposal**

Airways' proposal did not directly identify cost efficiencies that Airways has included in proposed revenue. These initiatives were not visible as they were offset by increases in operating costs such as insurance and occupancy costs that have been driven up by the Christchurch earthquake.

**Summary of submissions**

IATA noted its surprise that there were no productivity improvement targets in the proposal, suggesting that all cost increases were simply being passed on to users.

BARNZ provided considerable discussion on this matter, stating that it believes that Airways is not as strongly focused on efficiency as it once was. It considers that scrutiny of staff costs is required, including the savings relating to the new rostering system. BARNZ submitted that Airways should urgently review whether its current model of operations is sustainable. They commend the virtual tower trial planned for this pricing period, but suggest further innovation and efficiencies are required.

Air New Zealand expressed concern around the long term trend of above inflationary increases, in particular the increase in labour costs.

The apparent lack of operating efficiencies resulting from capital expenditure was commented on by some submitters.

**Airways' response**

Airways is proud to be one of the most cost-efficient ANSPs in the world (see section 2.2) and is committed to continuing its uptake and use of innovative cost savings initiatives such as electronic flight strips and maintenance optimisation systems. In the 2013-2016 pricing period, Airways is continuing to target cost efficiencies through the implementation of various initiatives and the continued development of long term strategic cost saving programmes.

Airways note submissions were silent on Airways' CANSO benchmarking performance and has assumed customers accepted that Airways is in the top quartile of the most efficient of CANSO ANSPs.

Cost efficiencies already included in the prices

Cost efficiencies planned by Airways were included in the revenue proposal, although these were not separately identified. These initiatives were not visible as they were offset by increases in operating costs such as insurance and the occupancy costs driven by the Christchurch earthquake and the GST impact on 2011 air traffic controller collective increases.

Airways is limited in what it can disclose about its initiatives, with most likely to require further development and consultation. The estimated savings from the initiatives over the pricing period is $3.8m. As indicated in the Pricing Consultation document, one of the initiatives is the centralisation of workforce rostering, expected to create labour efficiencies.

Airways will monitor the benefits of these initiatives using the Scorecard. It will provide comparative information on cost per IFR flight hour (such as that provided by CANSO). Airways will also be providing an IFR movement per Systems Operator headcount metric to show rostering efficiency savings.

Controlling air traffic controller labour costs – Airways' largest, single cost

Airways' largest, single cost is heavily influenced by the global demand for air traffic controllers. In the past, demand from the Middle East, in particular, has driven above inflationary increases in salaries.

Airways operates on the principle that wage settlements should stay within the bounds of productivity improvements and inflation. The current collective agreement for air traffic controllers has been settled for the next three years at 1.8% (2012-13), 2.7% (2013-14) and 2.9% (2014-15). Airways will continue to ensure collective cost efficiencies when addressing on-going union requests for roster cover, fatigue management and rest breaks. Airways has a strategy of achieving similar efficiencies for the upcoming engineering and technician negotiations.

Long term strategic cost saving initiatives

Airways is committed to continuing open and transparent consultation for long-term strategic investments that have the potential to benefit the entire industry.

Long term initiatives that have the potential to provide the industry with significant savings in future pricing periods include:

- Virtual towers – the virtual tower capital item is a trial facility that will be used to test the virtual towers concept and capability. The trial will provide the following potential operating expense savings[12].
    - Potential long term headcount reductions through the consolidation of low-volume regional towers. For example, a single roster could be used to provide an Aerodrome service for three locations.
    - Low-cost contingency facility savings. This could avoid having secondary tower setups.
- Full ADS-B deployment – migrating all operators to satellite navigation could enable significant future savings by allowing Airways to reduce its investment in expensive ground-based navigation and surveillance equipment. The development of this technology will also provide further fuel saving and performance benefits to our customers.
- Outsourcing services – taking advantage of global economies of scale. Airways is evaluating services that are provided in parallel with other ANSPs to see if these can be provided more efficiently through outsourced or shared arrangements. Currently Airways is investigating two opportunities.
- Low-cost delivery models at low-volume aerodromes – low cost equipment alternatives will help keep prices down at aerodromes where higher levels of reliability is not so important.

Airways is also in the early stages of investigating other alternative service delivery models. These will be discussed with customers if they are found to be viable.

**Impact on revenue and prices**

There is no additional impact from these cost efficiencies on final revenue or prices, as they were already included in Airways' base revenue proposal.

[12] Any potential savings will be subject to further investigation and trial of this initiative.

## Previous period volume under-recovery

**Airways' proposal**

Lower-than-expected volumes in the 2010-2013 pricing period mean that at the time the February consultation document was prepared, Airways 2012-13 revenue was expected to be $4.7m lower than what was required to cover the cost of providing Base Services. Airways proposed that prices would rise in 2013-14 so that the lower actual volume of traffic would yield sufficient revenue to cover the full cost of Base Services from 2013-14 (not to recover revenue foregone in previous years). Airways described this as "previous period volume under-recovery".

**Summary of submissions**

Some submitters disagreed with this adjustment, but they appeared to interpret it as a means of recovering revenue foregone in previous years. RNZAF commented that as their volumes had not decreased they should be exempt from the change in price. QANTAS submitted that it was inappropriate to increase prices to recover previous losses.

**Airways' response**

Airways would like to clarify that it is not seeking to recover the shortfall from the 2012-13 year in the 2013-2016 pricing period. The adjustment increases prices to a level that returns revenue to the level required to cover base costs in 2013-14.

In response to the RNZAF submission, it would be impractical to apply separate prices for each customer. Prices would become expensive to administer and breach the principles of transparency, practicality, predictability, consistency and durability.

Since the February consultation document was published, the forecasted volumes for the 2012-13 year have improved and Airways now expects the revenue shortfall to total $3.2m, not $4.7m as was included in the consultation document.

With the exception of the submissions that misunderstood the 'previous period volume under recovery adjustment', submissions were silent on the need for Airways revenue to return to the levels required to cover its current costs for the 13-14 year. It has been taken as accepted that the catch-up adjustment is required.

**Impact on revenue and prices**

The impact on final revenue and prices is included in the following section.

### Updated opening positions

Since producing February's pricing proposal, Airways has re-forecast the 2012-13 financial expectations, which included updated 30 June 2013 closing positions. The opening positions for the 2013-14 pricing model have been aligned. This has resulted in the following changes.

- An increase in volumes relative to that expected for 2012-13, which reflects that volumes grew more than Airways had previously forecast they would. This results in a decrease in price.
- A decrease in capital expenditure in 2012-13 relative to plan, which reduces the depreciation and capital charge results in the 2013-14 financial year.
- Updated EVA year-end tax on interest and payroll accruals. This results in an increase in prices.
- A number of other smaller adjustments to align the pricing model opening inputs to the re-forecast 2012-13 closing positions. The net adjustment results in an increase in prices.

**Figure 27: Impact of updated opening positions on revenue and prices**

| | 2013 | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 | 3 Years |
|---|---|---|---|---|---|---|---|---|
| | **Forecast Outturn** | **Revenue ($m)** | | | **Price Change (%)** | | | |
| Consultation Document proposal | 138.8 | 157.4 | 165.2 | 170.7 | 13.4% | 4.9% | 3.4% | 23.0% |
| Changes relative to proposal: | | **Revenue Change** | | | **Price change** | | | |
| Updated opening positions | 1.5 | 2.1 | 3.0 | 2.8 | 0.3% | 0.5% | -0.2% | 0.6% |

## 3.2 Other airline and airport submissions

Airlines and airports raised a number of other issues in submissions, which are summarised here, alongside Airways' response. Our consideration of these issues has not resulted in a change in prices.

### Independent testing of Airways' cost allocation

**Summary of submissions**

An independent review or audit of Airways' cost allocation process, and its outcomes, was seen as essential by BARNZ members and Airways was requested to commission this task and make the results available to airlines prior to charges being reset. Submitters wanted assurance that costs relating to Airways' non-statutory activities such as Global Services were not being included in the cost building blocks used to calculate the prices included in this document.

***We engaged PwC to do sample testing to provide some comfort that Global Services costs have not been included in the prices.***

BARNZ also questioned whether an incremental approach to allocating overheads is appropriate given Airways' aspirations for growing its Global Service business. One submitter asserted that Airways' growth activities should adequately account for intellectual property that has been developed by Airways' core ANS business.

New Zealand Airports Association requested more detail about the magnitude of the rebalancing, expressing concern that the magnitude of the change suggested an error had occurred.

**Airways' response**

Independent testing

It is important to Airways that the price setting process is transparent and robust and consistent with the Pricing Principle "Be Transparent and Practicable to implement".

Airways also understands customers concerns about Global Service costs being excluded from the pricing calculation and wanting some comfort that the cost allocations method have been applied correctly given the magnitude of the rebalancing change.

In response to these submissions, Airways has engaged PricewaterhouseCoopers (PwC) to conduct agreed-upon procedures[13] to do some sample testing to provide some comfort that; (1) the costs included in the calculation relate to the provision of Services described in the Services Framework; (2) that the allocation rules developed in the Pricing Framework have been applied. BARNZ confirmed that these were the areas of most concern at the submission follow up workshop.

Airways will also consider including independent testing as standard practice for future price calculations. The results would be included as part of proposed and final prices.

**The independent tests**

Airways made all aspects of the Airways financial systems and pricing models available to PwC in the interests of total transparency.

PwC performed several tests to provide some comfort that the prices calculated as part of this consultation process are not subsidising other areas of Airways' business, such as Global Services. This includes checking that the cost centres related to Airways Global Services have been excluded from the pricing model.

To check that the cost allocation policies, including the overhead allocation, have been applied, PwC performed tests which reviewed the pricing models, following the workings through to the final revenue targets.

[13] The objective of an agreed-upon procedures engagement is for the auditor to carry out specified procedures to which the auditor and the entity have agreed and to report on factual findings.

**Results of the independent tests**

The tests performed by PwC included confirming that all cost centres used within the pricing model relate to the provision of the services in the Service Framework, and a sample of 25 expenses to give comfort that Airways carefully separates its business to ensure there is no cross subsidisation.

The tests found one exception where an invoice had a small component that related to the Global Services business. Airways estimate the amount of the Global Services component to be less than $500 of the total invoice amount of $6,451.

The tests also found two minor instances where Airways have intentionally deviated from the Pricing Framework. These deviations are:

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

Separation of the Global Services business

Airways understands customers' concerns about cross-subsidising. However, Global Services is a stand-alone business model (intended to ensure there is no cross-subsiding from other services). At present, it is a minor part of the company, which is incremental to our core business. At this time, there is no clear material financial benefit to Global Services related to access to intellectual property from the core business. Airways may review its approach to this in the future, if this changes.

This approach is consistent with the Pricing Principles of being predictable and consistent, reflecting costs and being commercially sustainable, as well as being consistent with the incremental cost approach outlined in the Pricing Framework.

Magnitude of the rebalancing

The size of the rebalancing adjustment is consistent with cost calculations that have been performed over the last five years as part of the annual BARNZ disclosure. The reason for the large rebalancing adjustment is that prices have drifted away from costs while prices were frozen for a decade.

## Relevance of fuel savings to price setting

**Summary of submissions**

BARNZ submitted that Airways' prices are based on the underlying costs of the business and further argued that suppliers cannot increase prices because of customer benefits delivered in a competitive market. IATA submitted, along similar lines, that Airways is not in a position to discern the value of a service to an individual airline and furthermore that implementation of technology that is already used by other providers should not be rewarded. BARNZ added that the benefits have been delivered from investment funded by previous prices and that the analysis was misleading by comparing price increases

in one year against fuel savings in the same year, rather than presenting a cumulative comparison. Cathay Pacific sought greater detail on the fuel benefits that they would receive.

**Airways' response**

While the building block methodology uses costs to derive prices, the benefits customers receive from Airways' services are as fundamental to commercial success, as they are in a competitive market. Not only do these benefits demonstrate that Airways is delivering innovative and effective services, but the comparison shows that increases in price are offset by fuel savings made possible by Airways' innovations.

While past investment has provided initial impetus for some of the expected customer benefits, the on-going and improving delivery of the CAM benefits requires the continued refinement of the initiative. There are also initiatives delivering new benefits in the upcoming pricing period. This includes the roll out of the performance-based navigation programme and increasing Auckland's runway capacity.

Airways is not able to provide detailed analysis for each airline as this is beyond our resources. In the same way that Airways prices are based on the collective requirements of its customers, so the savings information is provided at this collective, or aggregate, level.

## Level of fuel savings

**Airways proposal**

Initiatives like Collaborative Arrival Manager (CAM) have delivered a total of $48m in fuel savings to the industry over the four years ending 2012. Airways estimates that these and additional initiatives like performance-based navigation and further flight optimisation tools will add a further $70m of savings over the next pricing period.

**Summary of submissions and Airways response**

With the exception of BARNZ who said that it is acknowledged that Airways projects have reduced delays and saved fuel, submissions were generally silent on the level of the fuel saving. Airways notes that it is accepted that Airways initiatives are generating substantial benefits for our airline customers, the level of these benefits being $48m over the last four years and a further $70m over the upcoming pricing period.

## The consultation process

**Summary of submissions**

QANTAS has asked Airways to consider more consultation time and a detailed review of all projects prior to the decision phase. QANTAS submitted that there has been little contact, provision of detail or sufficient time to digest detailed information. During the consultation process other customers also asked for changes to the consultation timeline.

**Airways' response**

The release of final prices marks the end of an extensive consultation process, which provided customers with considerable opportunity to provide input into the final prices.

To ensure a robust and transparent consultation process, Airways separated price setting into two stages. The first stage set the services Airways provides and the methodology for setting prices for those services. Airways implemented this consultation last year, with the final outcomes being the Service and Pricing Frameworks.

The second stage used these Frameworks to calculate proposed prices for the 2013-2016 pricing period. Airways' consultation asked for customer feedback on the pricing inputs into the price setting process and the resulting prices. The timetable and process for this consultation were sent to all customers in December 2012 and then provided again on 2 February 2013. The timeline is consistent with past consultations, providing customers with six weeks to consider proposed prices and to respond with a submission. The process also incorporated a number of public meetings which interested customers were able to attend and a formal period of four weeks in which to request any information considered useful in formulating submissions. All information requests made during this period were answered promptly to give customers time to address any relevant implications in their submissions. Airways also held follow up workshops on key topics.

The consultation process always contemplated a point when Airways would cease receiving input and make a decision. The point at which Airways would stop receiving submissions was published in the consultation timetable. The consultation process ultimately elicited detailed and useful feedback from many customers which has contributed to the decisions reflected in this document.

## Inappropriate for RPT operators to subsidise GA

**Summary of submissions**

QANTAS provided feedback that: "… it is no longer appropriate for RPT operators to subsidise GA ... At a minimum GA should increase by similar amounts as RPT operators. A more appropriate outcome would be for GA to pay an equitable share. There also needs to be incentives now for GA aircraft to evolve their technology and cost basis. It is highly inefficient and false economics (sic) to sustain old technology and infrastructure for a decreasing proportion of the aviation market."

AOPA contends the reverse, that is, that at some locations GA are subsidising RPT traffic. They give Kapiti aerodrome as the example, explaining that airlines drive the need for Airways to be at the location and GA are paying part of the associated cost.

A related topic was expressed in Airwork's and Express Couriers' submissions who said they supported the concept that GA prices should remain unchanged unless they are adding additional cost. Following this principle, RPT prices at various aerodrome locations should also remain unchanged as Airwork is not driving any additional cost.

**Airways' response**

One of the key notions in the discussion document that preceded the Pricing Framework in 2012 was that the proportion of revenue contributed by GA would not materially change, except where additional costs were being driven by GA. The Pricing Framework and the Proposed Pricing for 2013-2016 are consistent with this undertaking. The CAA mandates a presence at attended locations and the Service Framework specifies the service provided. GA use of Airways' services adds to the complexity and risk in the operational environment. This carries a cost.

One of the principles adopted by Airways in the Pricing Framework states that prices should reflect costs, so each customer segment should face at least the incremental cost of their demand. GA use of Airways' services is not costless, as it adds to the risk and complexity in the control zone. However, the incremental cost is low if there is spare capacity at a location. Where there is not spare capacity, and GA are driving increased costs, the Pricing Framework states that this cost shall be borne by GA. Airways estimated that the total additional costs being driven by GA comprised approximately $0.55m in Aerodrome costs and $0.75m in Flight Information Service in Uncontrolled Airspace. The Flight Information Service in Uncontrolled Airspace costs are included in the En-route and Approach charges. This approach was consulted on as part of the development of the Pricing Framework. The feedback was that, given the small size of this cost relative to the En-route and Approach charges and the potential safety implications of interruptions to this service, this was the most efficient option.

Pricing decisions are made based on given service levels as determined by the Service Framework. A minimum fee reflects the basic cost of providing a service to a GA user. This incremental cost is lower at regional airports and lower prices are proposed. The majority of the GA-driven cost is funded from the new circuit, vicinity landing and controlled VFR transit prices because these are the activities that are causing the increased costs. Airways has implemented a national price for each category of aerodrome in the Service Framework to keep transaction and administrative costs low and, therefore, GA prices as low as possible.

In response to Airwork's and Express Couriers' submission points, Airways contends that, over time, Airways prices have drifted away from the cost of providing the service. This has driven the need to rebalance prices across all of Airways services (as discussed in the rebalancing section, section 2). Aerodrome prices at Palmerston North, Woodbourne and Dunedin do not currently cover the cost of the service and so need to increase. Although Airwork and Express Couriers are not driving any additional cost to what they are currently, current prices at these locations are not high enough to cover current costs.

## Unattended aerodromes

**Summary of submissions**

New Zealand Airports Association submitted that they would encourage the development of standard service levels at unattended airports. They also requested further explanation of the unattended aerodrome charges. Aerodrome operators want assurance that prices do not include services that they are providing themselves.

**Airways' response**

The development of standard service levels for unattended aerodromes was proposed during the Service Framework development and did not receive any support. If unattended aerodrome operators and airline customers would like a standard service then Airways would welcome structured engagement on this topic using the Services Framework to guide this process.

Prices at unattended aerodromes are based on the services that Airways provides. Prices do not include services that aerodromes provide themselves.

Figure 29 below shows the main services provided by Airways at each location. The table also provides the total cost of the service and billable volumes. The total cost has changed from those in the proposed prices due to an updated capital programme, revised inflation rates and revised cost of capital rate.

As per the Pricing Framework, unit prices are set at a level to recover the cost of providing the service. Aerodromes with low costs and high volumes will have lower prices.

Furthermore, aerodromes that receive heavier aircraft will have lower prices, as heavier aircraft are charged more. The combination of cost, weight and movement volumes is reflected in the over 5 tonne weight rate in figure 28 (rates for under 5 tonne aircraft are generic across the country).

**Figure 28: Main services provided by Airways by location**

| Aerodrome | Lights | Slope guidance | Nav aids | Other | Procedures | Met data | Total cost (000) | Billable Volumes | Weight rate (over 5 tonne) |
|---|---|---|---|---|---|---|---|---|---|
| Taupo | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 100 | 2,140 | $ 10.20 |
| Timaru | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 65 | 1,206 | $ 13.35 |
| Wanganui | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 98 | 2,667 | $ 11.75 |
| Hokitika | | ✓ | ✓ | ✓ | ✓ | ✓ | 82 | 1,284 | $ 10.10 |
| Whangarei | | ✓ | ✓ | ✓ | ✓ | ✓ | 96 | 3,331 | $ 4.70 |
| Kerikeri | | | ✓ | ✓ | ✓ | ✓ | 50 | 1,819 | $ 1.90 |
| Kapiti | | | ✓ | ✓ | ✓ | ✓ | 72 | 1,602 | $ 8.05 |
| Whakatane | | | ✓ | ✓ | ✓ | ✓ | 37 | 1,588 | $ 2.90 |
| Westport | | | ✓ | ✓ | ✓ | ✓ | 32 | 744 | $ 10.45 |
| Kaitaia | | | ✓ | ✓ | ✓ | | 32 | 803 | $ 9.65 |
| Great Barrier | | | ✓ | | ✓ | | 17 | 455 | $ 14.20 |
| Oamaru | | | ✓ | | ✓ | ✓ | 21 | 18 | $ 14.20 |
| Wanaka | | | ✓ | ✓ | | ✓ | 27 | 470 | $ 14.20 |
| Wairoa | | | ✓ | ✓ | ✓ | | 33 | 675 | $ 14.20 |

The cost of the service depends on the following factors.

- Services provided - The table above shows the services provided at specific locations. These services drive the underlying cost.
- Asset age – The age of the assets will impact on the cost. Older assets with very little accounting value remaining will contribute little to the costs. Conversely, newer assets will have a higher impact on cost. This is because the capital charge is calculated from the remaining asset book values. This is driving the high cost of Whangarei and the comparatively low cost of Timaru.
- Proportion of overhead – As per the cost allocation policy (Pricing Framework) overheads are allocated by aircraft weight landed. Busier aerodromes with heavier aircraft will receive a larger share of the overhead.

## Disproportionate impact on heavy aircraft and price smoothing

**Summary of submissions**

Air Tahiti Nui, QANTAS and BARNZ raise the issue of the larger impact of rebalancing and the steepening of the slope of the price curve on carriers operating very large aircraft on international routes. These increases are higher than the average increase represented in the proposal and, for airlines with no domestic operations, are not offset by reductions in other prices.

QANTAS, Virgin Australia and IATA suggested price smoothing to reduce the first year's price shock. They did not elaborate on their preferred method for doing this. Air Freight suggested that where a single component increased by an amount exceeding 100%, that the increase should be phased in over a pricing period with the full charge being applicable from the start of the following cycle. They indicated that this decrease in Airways' revenue should not be offset by increases elsewhere.

**Airways' response**

Airways has considered different options and decided not to make any changes to the proposed Oceanic En-route price curve, nor introduce price smoothing. Airways rationale is as follows.

Airways prices, including Oceanic En-route prices, have been calculated using the Pricing Framework price curves and reflect the underlying cost of providing the service. As discussed in section 2, Oceanic En-route prices have increased as prices were rebalanced so that they reflect their underlying cost. Currently Oceanic prices do not cover the cost of the service.

A consistent and simplified price has been applied to all services. The simplified price curve is steeper than the current price curve to keep prices for lighter aircraft at an affordable level. This results in a greater price increase for heavier aircraft. This is the price curve that is in the Pricing Framework and is consistent with the pricing principles. As BARNZ notes, economies of scale still exist for heavier aircraft, with a lower per passenger cost than lighter aircraft.

The requirement to provide the shareholder with an appropriate return and the principle in the Pricing Framework that prices should reflect the cost of delivering services means that a concession given in one year would need to be offset with higher prices in subsequent years[14]. This would also result in a higher overall price increase over the three years as prices are compounded. This would be unfair to a new entrant or airline that was expanding its operations. Alternatively, higher prices would need to be set for other services (for example, domestic customers would be subsidising international customers). In either case, different users would be subsidising those who were actually causing the cost. This is not consistent with the pricing principles. It would also provide a skewed picture of Airways' profitability, suggesting it had a positive EVA in year three. This could affect consultation for the subsequent pricing period.

[14] This would also result in a higher overall price increase over the three years as prices would be compounded to recover the high year one increase driven by unavoidable capital expenditure.

The cost increase is borne by all operators at the same time, so does not create competitive disadvantage and is a small part of overall costs for users. BARNZ has confirmed that it does not support price smoothing.

## Detailed breakdown of the cost components

**Summary of submissions**

New Zealand Airports submitted that as the attribution of aerodrome service costs should accurately reflect the agreed level of service at airports, and the overall costs of using an airport are of keen interest to airports, they would appreciate a better explanation and breakdown of the cost components and allocation. Other submissions also requested more detailed cost information.

**Airways' response**

Airways is committed to open and transparent consultation that provides customers with a good understanding of the drivers of Airways costs and what the resulting impact the drivers have on service prices. However, Airways also has to be commercially prudent around the level of information that is provided for services that are open to competition. The level of information provided in the consultation document enabled customers to provide meaningful input into the consultation process.

Prices for Airways services reflect the cost of providing a service. The level of service provided is outlined in the Service Frameworks and Airport LOAs. Prices are calculated by allocating Airways cost to the services which are driving them using the costing policies provided in the Pricing Framework. For the Aerodrome services the Pricing Framework also outlines how locations that have similar levels are combined into a single standard price.

The overall cost of providing these services are provided in figure 41 and 42.

## Removal of growth incentives and the rebate scheme

**Summary of submissions**

QANTAS submitted that it was inappropriate to remove any of the growth incentives or rebates to RPT operations. This demonstrates a complete shift of risk to the airlines. Volume risk needs to be shared between both airlines and Airways.

**Airways' response**

Airways' rebate scheme was removed in 2009 because Airways bore all of the volume risk within a year. If volumes increased then Airways rebated revenue back to the Airlines. If volumes dropped then Airways had to wait until the next price reset to adjust prices.

During the Pricing Framework consultation last year, Airways explored various volume risk sharing mechanisms. After extensive consultation with our customers (including QANTAS), Airways settled on the current revenue band mechanism. The revenue band mechanisms automatically adjust prices when base revenue fluctuates significantly from the forecast.

The mechanism has the following features:

- Airways bears all of the risk and all the reward for differences of less than 2%
- For fluctuations greater than 2%, Airways bears 25% of the revenue difference and customers bear 75%.

This mechanism shares the risk between both airlines and Airways, will only be activated in extreme changes in volumes and still provides incentives for Airways to find cost savings during volume down turns. Last year's consultation documents provide further detail and explanation around the options investigated.

## Monitoring the effects of rebalancing

New Zealand Airports Association suggested it would be prudent for Airways to establish a range of qualitative benchmarks to measure the impact of re-balancing against the status quo. This could be reported alongside the Scorecard.

Airways does see the benefit of this type of monitoring and will consider it.

# 4 Consideration of GA submissions

***GA services have been streamlined and simplified to keep prices as low as possible.***

GA services and prices have been streamlined and simplified to keep prices as low as possible by implementing initiatives such as simplified credit terms, redistribution of discounts and a single national price.

The streamlined and simplified pricing structure is provided in the Pricing Framework. The Pricing Framework was finalised after an extensive consultation process in 2012 and can be downloaded from the Airways' website at:

http://www.airways.co.nz/airways_Services/service_and_pricing_review.asp

This section of the consultation document concentrates on GA prices. The following is an overview of this section.

**Summary of Pricing Framework changes (see 4.1)** – this is an overview of the Pricing Framework changes decided last year after extensive customer consultation. The overview provides a useful reminder of the GA pricing methodologies, which will assist in understanding Airways' responses to customer submissions.

**Submissions on pricing inputs (see 4.2)** – this summarises submissions on proposed pricing inputs, Airways' responses to those submissions and any changes to the proposed prices.

**Submissions on other topics (see 4.3)** – this section summarises submissions on topics other than the proposed pricing inputs.

Prices for GA customers' prices are provided in section 6. The prices are supported by price comparative tables and example price calculations that customers can use to calculate the impact of the changes on their own prices.

In addition to the final prices, Airways will be introducing changes to its payment terms. The changes will help ensure the administration of GA prices is simple and inexpensive, helping to keep GA prices low. The following changes will be introduced.

- An administration fee for sending out paper invoices. The processing of paper invoices is expensive and time consuming. A fixed administration fee will be applied for every paper invoice posted.
- An administration fee for payment by cheque. The processing of cheque payments is also expensive and time consuming. A fixed administration fee will be applied for every cheque processed. Alternatively, electronic payment methods are available, which have no administration fee. Alternative payment methods include direct debit, direct credit or automatic credit card payment.

To give customers time to move to the alternative invoicing and payment methods (if customers are not already using them), the application of the new administration fees will not come into effect until 1 January 2014. To move to electronic billing and payment methods, contact Airways' customer billing team on +64 4 471 4755 or email on custacct@airways.co.nz.

## 4.1 Summary of Pricing Framework changes

The following section provides a summary of the Pricing Framework changes, with a view to providing context for Airways' responses to customer submissions. The Pricing Framework was finalised after an extensive consultation process involving 4,500 customer letters, six roadshows attended by 100 people, and 32 customer submissions. The Framework sets out the methodologies to calculate prices for services provided to GA operators and can be found on Airways' website at: http://www.airways.co.nz/airways_Services/service_and_pricing_review.asp

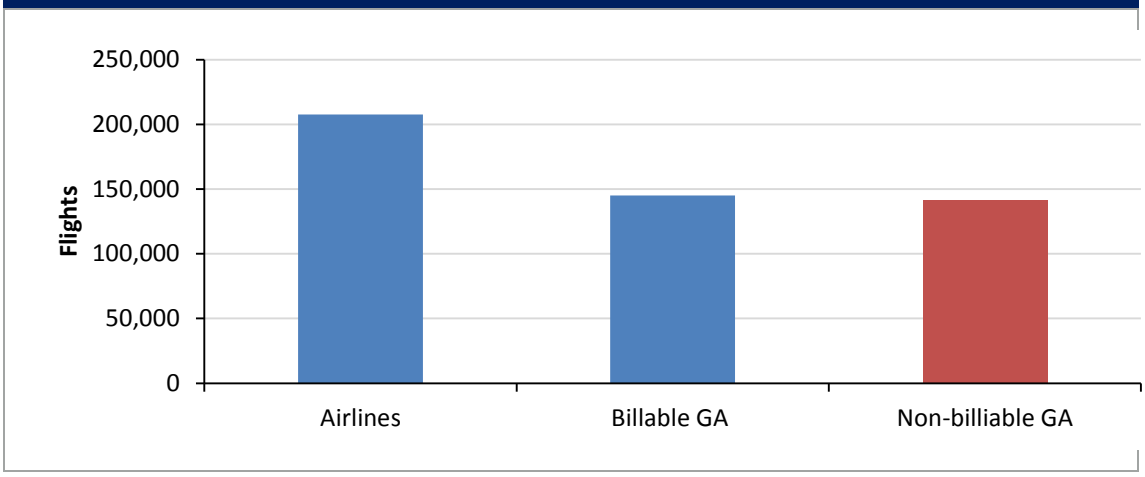
The 2012 Pricing Framework makes the following changes to GA prices.

**Simplified prices** – simplified prices are being introduced to ensure prices are less costly to administer, more transparent and easier to understand. The simplified prices include a revised price formula that reduces the number of weight categories and removes the current IFR factor. Details of the new price formula are provided in the Pricing Framework. Under five tonne customers will be encouraged to move to electronic billing. This will ensure transaction and administrative costs are kept low.

**Redistribution of discounts to the GA sector** – all discounts are being removed and redistributed to the whole GA sector to further simplify pricing and to remove their high administration cost.

**New circuit, vicinity landing and aerodrome control zone transit prices** – new national prices are being introduced for VFR activities that create complexity and add additional cost. The new prices reflect the large volume of GA activity that adds significantly to an air traffic controller's workload and is currently not billed. Figure 29 illustrates the size of the unbilled activity.

**Figure 29: Aerodrome volumes**



The new prices will be set to recover any incremental cost that results directly from GA activity. The additional cost of GA activity at the time of the Pricing Framework consultation was calculated at $0.5m. A price of $2.80 per circuit, vicinity landing, or control zone transit is required to recover this additional cost.

The new prices are national. Circuits, vicinity landings and transit activity within all aerodrome control zones will contribute towards recovering the above shortfall. If GA activity at an individual location creates further cost, then the national price will increase to recover that additional cost. The reason the new prices are national is to ensure they are simple and cost efficient to administer, helping to keep prices low.

***We heard customer concerns about affordability – as a result the new circuit, vicinity landing and transit prices will be phased in, allowing customers time to adjust.***

**Phased transition** – to allow customers time to adjust to the new prices and the removal of GA contract discounts, Airways is phasing-in the changes over a three-year period. The final prices will reflect this transition. Controlled VFR transits through terminal and en-route airspace have also been delayed for three years to allow for a review of controlled airspace size.

**Majority of GA customers not materially affected by new prices** – the majority of Airways' customers are not significantly affected by the implementation of the Pricing Framework and the 2013-16 pricing review. Airways estimates 75% of GA customers will see annual charges increase by less than $20. A small number of GA customers that have a high demand for complex services that are not currently charged for will be significantly affected by changes in the Pricing Framework (e.g. customers with training circuits where the plane lands and takes off without coming to halt).

***We estimate 75% of GA customers will see annual charges increase by less than $20.***

## 4.2 Submissions on pricing inputs

Customers were invited to provide feedback on the proposed pricing inputs that are used to calculate proposed GA prices. The following sections summarise the customer feedback, Airways' response to that feedback and any resulting changes to proposed prices, for each of the pricing inputs.

### Overall revenue

**Airways' proposal**

The overall revenue collected from the proposed prices has been set at a level that is approximately the same as what is collected currently, combined with any additional costs that have been driven by GA activity. The revenue amounts also have an annual inflation factor applied. Figure 30 summarises the overall revenue requirements.

**Figure 30: GA revenue levels**

| Revenue ($m) | Current | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|
| Inflation[15] | | 1.5% | 2.0% | 2.5% |
| Revenue for current services | 1.3 | 1.4 | 1.4 | 1.4 |
| GA driven costs (net of volume increase) | | 0.6 | 0.6 | 0.6 |
| **Total GA revenue** | **1.3** | **2.0** | **2.0** | **2.0** |

Note: the actual revenue collected for 2013-14 and 2014-15 will be less than the above levels because of the phased transition to the new circuit, vicinity landing and controlled VFR transit prices and the phased exit of GA contract discounts.

**Submissions**

There were no submissions that specifically addressed the proposed level of overall revenue collected. There was a general comment that revenue should be contained at CPI.

**Airways' response**

Consistent with the assumptions used during the Pricing Framework consultation, Airways is not looking to increase the revenue from GA customers except where GA activity is driving additional cost or complexity.

Other than to cover these additional costs, no change has been made to proposed revenue levels, except for the rate of annual inflation, which is addressed in section 3.

[15] The annual inflation uplifts are addressed in section 3.

## Level of GA-driven costs

**Airways' proposal**

During the Pricing Framework consultation process Airways measured the incremental cost of GA activity as $0.5m. This figure represents the cost of additional air traffic controllers at Hamilton, Tauranga and Christchurch. Since the Pricing Framework consultation, further resource has been added in Hamilton as a result of GA activity, driving a further $0.2m. The full impact of the additional resource has been partly offset by an increase in national GA volumes. The revised cost of GA activity net of the volume increases is $0.55m. The new circuit, vicinity landing and VFR transit price will be adjusted to recover the $0.55m.

**Submissions**

General aviation training demand at Tauranga has reduced significantly. It is assumed that this comment relates to whether the level of GA driven resource at Tauranga assumed for the proposed prices is still appropriate.

**Airways' response**

Volumes at Tauranga have decreased over the past few years, especially the number of training circuits. Figure 31 below illustrates the decrease.

**Figure 31: GA landings and circuits at Tauranga (000 movements)**

| (000) | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|
| Landings | 26 | 25 | 21 | 20 |
| Circuits | 20 | 17 | 13 | 11 |
| Total | 46 | 42 | 34 | 32 |

The cost inputs into incremental GA cost calculation have been re-examined and have been confirmed as still being appropriate. While Tauranga volumes have decreased, their GA volumes are still the second highest in the country after Hamilton and still require the same levels of additional resource.

## Inflation

**Airways' proposal**

Prices are increased by inflation to ensure Airways' prices reflect underlying costs. The Treasury's CPI forecast was proposed for the inflation rate as it provides a good measure of general cost inflation. Figure 32 below provides the inflation rates used.

**Figure 32: Proposed rates of inflation applied to GA prices**

| | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|
| The Treasury's forecast CPI | 2.5% | 2.4% | 2.4% |

**Submissions**

One GA submission supported using the proposed forecast from The Treasury. Other GA submissions were silent on the source of inflation forecasts. Airline submissions on the topic of inflationary forecast suggested using the NZIER consensus forecast.

Airways considered GA and airline submissions together on this pricing input to ensure a consistent approach.

**Airways' response**

To assist in the consideration of both GA and airline submissions on the most appropriate inflation forecast, Airways sought expert advice. The advice recommended using the NZIER labour index forecast for labour inflation. This provides the best measure of pure wage inflation and is a suitable estimate for the three years of the pricing period (see section 3).

Airways will adopt the NZIER labour index forecast as standard policy to provide a consistent long term measure. This should avoid arguments for and against specific forecasts at each pricing round because they provide a favourable result for one party or the other.

The NZIER labour index forecast rates are lower than the proposed forecast from The Treasury, reducing prices. Figure 33 below provides the revised inflation rates.

**Figure 33: NZIER labour index inflation forecast**

| | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|
| NZIER labour index | 1.5% | 2.0% | 2.5% |

## Transition to new GA prices and removal of GA contract discounts

**Airways' proposal**

To allow customers time to adjust to the new prices and the removal of GA contract discounts, Airways is phasing-in the changes over the next three years. Figure 34 illustrates the transition. Note, the phased exit of GA contracts is being settled individually and is not part of this consultation.

**Figure 34: Overview of Airways' proposed price increase for 2013-14 (year one)**

| | 2013-2014 | 2014-2015 | 2015-2016 |
|---|---|---|---|
| Circuit price | $1 | $2 | $3.55 |
| Vicinity landing price | $1 | $2 | $3.55 |
| Aerodrome control zone transit | $1 | $2 | $3.55 |
| Terminal and En-route transits | N/A | N/A | TBA |
| Removal of GA contract discounts | 65% | 30% | 0% |

**Submissions and Airways' response**

There were no submissions on this pricing input. Consistent with the Pricing Framework, there is no change to the proposed transition to the new GA prices and removal of GA contract discounts.

## Unit prices

**Airways' proposal**

As per the Pricing Framework, GA prices are national. Unit prices are calculated using the overall revenue targets, estimated customer volumes and the unit pricing formula. Airways' proposed unit prices draw on actual volumes in the 2011-2012 year for the volume forecast.

2011-12 actual volumes have been used because they are the most recent measure of GA activity.

**Submissions and Airways' response**

There were no submissions on this pricing input. There is no change to proposed prices (except for the inflationary uplift discussed in section 3.1).

## National circuit, vicinity landing and controlled VFR prices

**Airways' proposal**

The national circuit, vicinity landing and controlled VFR transit prices have been set at a level that recovers 80% of the $0.55m GA-driven cost, with the remaining 20% funded from the removal of discounts.

Figure 35 sets out the proposed new prices, which includes the reduced transition rates for 2013-14 and 2014-15.

**Figure 35: Proposed new prices**

| | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|
| Circuits, vicinity landing and VFR transit price | $1.00 | $2.00 | $3.55 |

The majority of the GA driven cost is funded from the new circuit, vicinity landing and controlled VFR transit prices because these are the activities that are driving additional costs. The price is lower than a landing fee reflecting the workload. This is consistent with the assumptions used in the Pricing Framework consultation.

**Submissions and Airways' response**

There were no submissions on the calculation and size of the proposed price[16]. There is no change to the proposed prices.

## Other GA prices

**Airways' proposal**

Prices for VFR flight plans, parachuting and overdue search and rescue time will not change in structure or implementation under the Pricing Framework.

The proposed prices have been calculated as current prices plus inflation. Prices are increased by inflation to ensure Airways' prices reflect underlying costs. The Treasury's CPI forecast was used.

**Submissions and Airways' response**

There were no submissions on other GA prices. There are no changes to proposed prices except for a forecasted inflation adjustment. Consistent with other prices, NZIER labour index forecast will be used.

Final prices are provided in section 6.

[16] There were many submissions on the appropriateness of charging for these activities (circuits, vicinity landings and controlled VFR transits). These submissions are addressed in the next section.

## 4.3 Submissions on other topics

The majority of GA submissions received related to topics other than the proposed pricing inputs. Most of these submissions addressed aspects of the Pricing Framework which was implemented in 2012 following extensive consultation.

This section of the document summarises and responds to submissions on topics that did not relate to the proposed pricing inputs.

### Airspace is too large and could be better managed with more transit lanes

The most common submission topic from GA customers was about the amount of airspace that has been designated as controlled airspace, claiming it is too large. It was suggested that the airspace requirements of modern commercial aircraft have changed and current airspace designations are no longer required to be so large. The size of controlled airspace is of particular concern where it is difficult to avoid entering it.

Related GA submissions suggested that increasing the number of transit lanes would allow GA customers to avoid entering controlled airspace. Suggestions include adding transit lanes over, or around, large terminal areas. Another submission suggested turning off controlled airspace on weekends when it is used less frequently.

This topic was raised by a number of submitters during the Pricing Framework consultation. Following this consultation, Airways:

- raised customer concerns on the size of controlled airspace with the CAA
- deferred the introduction of controlled VFR transit prices through terminal control areas and en-route airspace until July 2015.

Airways also noted that initiatives such as Airways' performance-based navigation programme include a review of airspace design as the procedures are implemented. To date, airspace reviews at international airports and Queenstown have been completed. Airspace below 10,000 feet at Queenstown has been reduced as a result of the review. A review of airspace around the regional aerodromes will be completed in the next three years.

Airways is committed to working with GA and the CAA to improve specific areas of concern. AOPA and the AIA have both asked to be involved with this process. This commitment includes investigating the airspace design alternatives provided in customer feedback such as additional transit lanes. Airways notes, however, the designation of airspace is a CAA responsibility.

## Access to controlled airspace is a right and services in controlled airspace are only for IFR customers

Many submitters from the GA sector commented that they believe Airways' services exist for IFR traffic only and that VFR aircraft should not, therefore, have to pay for any services they may be required to use. Submissions argued that GA customers receive no benefit from the service and are, in fact, often inconvenienced by the service. Most submissions on this topic echoed feedback received during the Pricing Framework consultation.

The director of CAA designates controlled airspace. Under the Civil Aviation rules, clearance is required for all aircraft to operate in controlled airspace. It has been established by the Courts that Airways has express statutory authority to charge for its services under section 4(1)(a) of the State Owned Enterprises Act 1986.[17] The Courts have also found that both VFR and IFR traffic receive a material benefit from the provision of services in controlled airspace.[18] The Pricing Framework reflects these findings. However, the level of pricing for GA has been set at a level to not increase the amount of revenue collected from GA (once adjusted for inflation) other than the additional costs that GA gives rise to. This approach results in unit prices considerably lower than those charged to airlines.

## General aviation is subsiding commercial operators at many aerodromes

A related submission suggests that GA traffic is subsidising commercial operators at many aerodromes. It is claimed that at locations like Kapiti, New Plymouth, Rotorua, Nelson, Dunedin and Invercargill, air traffic control is only in place for commercial operators – if there were no commercial operators then air traffic control would not be required. This is considered inconsistent with the statement from the Consultation Document that prices are set at a level to recover the additional cost that GA activity is driving. At these locations, GA is driving no additional cost, in fact, they are contributing towards the overall operating costs and are, therefore, subsidising commercial operators.

As addressed in the Pricing Framework consultations, an Aerodrome ATM Service is usually put in place because of high levels of airline traffic. Airline customers fund the majority of the cost and GA are charged a nominal fee. This recognises that GA are primarily using spare capacity in the Aerodrome ATM Service. The nominal fee captures the additional workload these activities create. While GA services may not always require additional resources to provide, they do create additional complexity and risk. The statement that GA prices are set at a level to recover the additional cost that GA activity is driving relates to additional costs that would not be incurred if GA traffic were non-existent. As a result, these costs are driven by GA activity and Airways considers it reasonable that such costs are recovered from GA.

[17] *Nicholls v Airways Corporation of New Zealand* HC TAU CIV-2010-470-586 [15 August 2011] at para 19.

[18] *Airways Corporation of New Zealand Ltd v Geyserland Airways Ltd; Airways Corporation of New Zealand Ltd v White Island Airways Ltd* [1996] 1 NZLR 116 at page 127, at paras 37-38.

## Differentiate between recreational and commercial GA users

Several submissions objected to the definition of GA including all operators of aircraft under five tonnes in weight. The submissions considered it more appropriate to split GA into recreational and commercial GA, with the rationale that commercial GA operators are causing the additional GA driven cost and are more able to fund the additional resource requirements.

More specific submissions objected to a circuit charge being applied to all GA users at an aerodrome when the majority of the additional workload is being generated by commercial GA operations.

This issue was addressed during the Pricing Framework consultation. A number of GA users asked whether Airways could distinguish between GA users based on the reason for their flight, for example, recreation or private use, commercial training, other commercial and not-for-profit. Airways considered this option in that consultation. However, it is not feasible to make these distinctions as aircraft are often used by a number of users and for different reasons such as training and recreational uses or aero club aircraft. Trying to distinguish the type of use on each flight would be impracticable and administratively costly for Airways. Airways considered that, looking at the submissions as a whole, customers support simpler, lower prices.

## A national circuit, vicinity landing and VFR transit price is unfair

Many submitters said that it was unfair for users at all locations to pay the new national GA prices to recover the cost of GA activity at a small number of locations. Specifically they contended if the additional cost has been generated by activity at Hamilton, Tauranga and Christchurch, why should other GA operators not operating at these locations have to pay to recover this cost to Airways?

Another submission expanded on this topic, saying it is inappropriate that a fee is applied to a private aircraft transiting airspace into, say, Nelson to pay for a controller at Hamilton Airport.

There are several reasons the Pricing Framework applies a national fee to the GA activities of circuits, vicinity landings and control zone transits. The following three paragraphs summarise the key aspects from the Pricing Framework consultation.

Firstly, and most importantly, the new circuit, vicinity landing and VFR control zone transit fees capture the additional workload these activities create. While these services may not always require additional resources to provide, they do create additional complexity and risk. It is important to signal in prices to customers the approximate cost to Airways of providing each service. In that way, customers can decide whether or not the service is warranted.

Secondly, a national fee is applied to keep administration costs low. It is administratively simple to apply a single fee to all instances of these activities, rather than calculating different pricing levels for different locations and activities. Separate prices would add complexity and cost to the billing system, pricing financial models and revenue collection. National prices also avoid price shocks (that would occur if, for example, some threshold was introduced for the charge).

Thirdly, a single national charge avoids distorting customer behaviour, which could arise if prices were differentiated across locations. For example, an operator requiring extensive training circuits may move to the aerodrome with the lowest prices, shifting the additional costs to that aerodrome and requiring those prices to be re-visited.

## New charges will lead to unsafe practices amongst the GA community

Many submissions expressed concerns that the new GA fees will create unsafe pilot behaviour. These views were also expressed during the Pricing Framework consultation and included the following key points.

- The new circuit fee could mean an instructor could train to a budget rather than to a standard. This view was also expressed by the CAA during the Pricing Framework consultation. The CAA subsequently acknowledged that Airways has given consideration to minimising the adverse safety effects of its prices.
- The controlled VFR transit fee could discourage VFR aircraft from entering controlled airspace, even when entering controlled airspace may be the safest route due to weather or terrain. There were also concerns that aircraft travelling or landing at/on the fringes of controlled airspace could be encouraged to switch their transponders off to avoid being charged.

Airways' response during the Pricing Framework consultation is summarised below.

**Application of the new circuit fee**

Safe and effective pilot training relies on the professionalism of instructors and their judgement around the number of circuits that a student requires. The proposed circuit fee of $3.55 is very low when considered against the cost of providing pilot training. Notably, training organisations charge trainees up to $110,000 to train for a commercial pilot license and $15,000 for a private pilot license. Airways does not believe that the circuit price will impact on the professionalism of a flight instructor.

The CAA has written to Airways confirming that the Proposed Pricing Framework and the subsequent consultation process has sufficiently addressed its concerns around safety. The letter follows CAA's earlier submission that Airways provide proper consideration to the potential behaviour of pilots to avoid the control zone and for trainers to train to a budget rather than to a standard, in an attempt to avoid proposed circuit, vicinity landing and transit charges.

**Controlled VFR transit fee**

Under Civil Aviation rules, it is the pilot's responsibility to operate their aircraft safely and Airways does not believe that the Controlled VFR Transit fees will compromise good airmanship. The materiality of the new fee is very low when compared against the operating costs of an aircraft (e.g. fuel).

## Training volumes are contracting

One submission showed that the volume of training activity in New Zealand is declining. The submission expressed concern that when the industry is contracting, Airways could under recover its costs and there may be no realignment of Airways' resources to reflect changed demand.

Airways re-examines its pricing levels every three years. Prices will be re-adjusted to any changes in the level of resourcing required and for any changes in volumes. The relatively short pricing period will mean any under recovery of costs will be addressed in a relatively short time.

## The new prices will make flight training in New Zealand uncompetitive

Several submissions suggested that the new circuit fee will make flight training in New Zealand uncompetitive when compared to training in other countries.

One of the pricing principles is that prices should reflect their underlying cost. If prices do not reflect their underlying cost then users of other service may be subsiding that service. At the moment the incremental cost driven by intensive flight training is being borne by airline customers.

## Airways' services are not required at some locations

Several submissions question whether Airways' services are required at some locations. Examples included Hamilton only requiring a Unicom service and that Gisborne is understood to not require air traffic control, but no action has been taken to conduct an aeronautical study to look at cost saving methodologies.

The level of service provided at a location is the decision of the airport and the CAA. The airport appoints Airways to provide Aerodrome services and the CAA may set the type of service as required (full air traffic control, flight information etc.) based on factors like traffic numbers and terrain. This issue, if submitters wish to take further, should be addressed to the CAA.

## GA should not have to pay for value-add services and assets from which they do not benefit

Several submissions commented that GA should not have to fund the value-add initiatives or assets from which they do not derive benefits. Another submission suggested that the VOR upgrade should be funded by IFR customers because only IFR customers receive benefits from these assets.

The value-add initiatives and specific asset items (including the VOR upgrades) provided in the consultation document relate to airline prices. GA prices are not impacted by these investments. GA prices are based on current revenue levels (except where GA activity is driving additional cost) with an inflationary uplift applied.

## GA prices will be uneconomic to administer

Some submissions suggest the cost of applying the charging regime will diminish the benefits. Additional costs will be added in response to arguments over whether or not a fee should have been charged, collection of small charges, refusal to pay, aircraft owners not being able to recover costs from pilots or not knowing if or when a charge has been incurred.

The application of the new GA prices has been designed to keep administrative costs to a minimum. The following aspects of the billing process will help ensure the concerns listed above are avoided.

- Prices for the new circuit, vicinity landing and VFR transit fees are set at a flat national rate. This makes the application of the fee a simple process of applying a single rate to every instance of the activity.
- Customer invoices will only be sent when the total billable amount is greater than $50 or an invoice has not been sent in the last four months. This will reduce the number of invoices sent for small amounts.
- Electronic invoicing and payment methods will be promoted to keep administration costs low and consequently GA prices low. An administration fee will be applied (after a transition period) to more expensive paper invoices and payments by cheques.
- Like Airways' other air traffic control services, a circuit, vicinity landing and controlled VFR transits are recorded on flight strips by the air traffic controller. This provides evidence that the activities have taken place in the event a customer queries an invoice. If further evidence is required, the recordings of the conversations between the air traffic controller and the pilots can be reviewed.
- Airways has several debt collection options available if a customer refuses to pay. It is in the interests of the GA community generally that its members meet their obligations.

## Airways should charge airfield operator, not GA directly

A submission suggested billing would be simplified if Airways were to charge airfield operators and that they, in turn, charge aircraft owners, consolidating airfield and air traffic control charges into a single bill.

This idea has some merit from Airways' perspective, in particular, a much smaller customer pool for Airways to interact with and, as a result, lower transaction costs for Airways. In practice, however, such an approach may simply shift costs from Airways to the airfield operators. Further, while such an approach may work for airfield-related services, it is less clear how it would work for Airways' services that do not relate to a particular aerodrome (e.g. enroute services). Airways settled with the existing approach of charging aircraft owners directly following the consultation on the Pricing Framework.

## Concern that Airways only consults with commercial customers

One submission referred to the use of the term 'industry' in the consultation process. The submission suggested that private and recreational flying is not part of the aviation industry. The submission is concerned that Airways does not recognise this and continues to only consult with industry and that the private aviation sector had never agreed to the Framework.

The consultation process for both 2013-2016 prices and the Pricing Framework included all of Airways' customers and stakeholders, including private and recreational aviators. Consultation material was sent to all customers billed by Airways in the last year and was provided to various GA associations, including those supporting recreational pilots. Submissions were received from both individual recreation flyers and GA associations.

## Prove that 75% of customers will see an annual increase of less than $20

Airways estimated the impact of the new prices on GA, using historical movement data and an estimate of the effect the new prices might have on customers where we don't currently collect the full billing information. Our volume information and the calculation showed that the majority of customers only occasionally use Airways services and that usage tends to be limited to aerodrome services where prices haven't significantly changed.

It is important to note that the majority of the changes will only affect a small number of customers – those who are driving additional complexity and cost. The main changes that will have significant impact on prices are:

1. Removal of GA contracts discounts. Currently there are 16 GA contract customers.
2. The introduction of the new GA prices. The new GA prices have been set at a level to recover the cost that intensive GA activity is driving and are based on current volumes. The majority (about 90%) of this cost is being recovered from training circuits and vicinity operations. Most of these volumes are being driven by commercial training schools and commercial operations in the vicinity of an aerodrome. These operators will pay the majority of the cost, not recreational flyers. There will be some increase for recreational fliers performing circuit training.

## An alternative GA revenue collection model might be better

A submission suggested alternative GA collection models might be better. The Pricing Framework consultation investigated several alternative collection models, including bulk funding. After consultation, it was decided the current collection model best fits the Pricing Principles that were used to assess different options.

## Milford prices

Milford Sound aerodrome is a small aerodrome owned and operated by the Ministry of Transport. It currently has around 14,500 aircraft movements a year, down from a peak of 22,289 in 2001. The aerodrome predominantly services tourist travellers from Queenstown and has one fixed based helicopter operator. The Ministry of Transport contracts Airways to provide a Flight Information Service at the aerodrome.

**Airways' proposal**

The proposed prices for Milford reflect the underlying cost of providing the service. It costs $378k per annum to operate the Milford Flight Information Service (Airways' least expensive location) and Airways collects revenue of $125k. A $250k or 200% price increase is required to recover the costs to provide the current service. This position was also reflected in the Pricing Framework consultation.

**Submissions**

Submissions from the Milford Users' Group indicated they could not afford to pay the 200% increase. They would be willing to pay a 100% increase phased in over three years. Airways has informally notified the CAA and the Ministry of Transport of the views of the customers.

**Airways' response**

Airways has noted the group's position and will start consultation with the aerodrome users and other organisations. As part of the consultation, Airways will work with customers and stakeholders (including the Ministry of Transport and the CAA) to investigate alternative service options or alternative funding options.

The final prices for the Milford Service are provided in section 6 of this document. However, current prices will apply pending the outcome of the consultation for Milford Service levels.

# 5 Scorecard

The Scorecard is an innovation designed to enhance Airways' accountability to its customers by providing transparent reporting on our financial and service performance. Airways received several submissions in the consultation process, suggesting alternative measures. These measures were considered in finalising the scorecard.

The following is an overview of this section.

**Consideration of submissions (see 5.1)** – this includes a recap of Airway's proposal, a summary of submissions received and an outline of Airways' response.

**Presentation of the final Scorecard measures (see 5.2)** – Airways will report against the Scorecard for the first time shortly after the 2013-14 year end.

***Customers supported Airways' proposal to transparently report financial and service performance.***

## 5.1 Consideration of submissions

### Airways' proposal

The proposed Scorecard provided a variety of measures that were grouped into four categories: operational performance, comparative performance, pricing performance and adding value performance.

Refer to February's consultation document for a full list of proposed measures.

### Summary of submissions

Customers who provided feedback on the Scorecard were supportive of the concept. Alternative measures are listed here.

**Cost and revenue performance** – historical time series comparisons were seen to be more useful than benchmarking against other ANSPs.

Another suggestion was to track capital and operation cost performance against forecast. Of particular focus was monitoring performance of the capital programme. The submission also suggested providing business cases for capital expenditure.

A suggested cost efficiency measure was costing maximum certificated takeoff weight (MCTOW) per tower or service.

**Include a record of new value-add initiatives and innovations** – examples included reporting where low cost technology is being adopted and new products and services are being made available.

**Develop a service monitoring framework, similar to Airservices** – Airservices are developing a comprehensive framework of various operational measures such as airspace availability, air and ground delays, fuel burn and service cost per maximum takeoff weight (MTOW).

**Reports should be tailored to a local operation** - this would allow more meaningful reporting for local users.

**Report delay and hold up times for intensive training** – delays and hold ups are one of the most significant costs borne by flight training organisations operating in busy aerodromes. Within operation performance, the total delay and hold up time born by all operators should be measured and reported.

## Airways' response

**Cost and Revenue performance** – a key purposes of the Scorecard is to monitor how well Airways is performing against the pricing assumptions. The Scorecard will track progress against forecast revenue, total cost and EVA.

Benchmarking against other ANSPs remains an important measure. Benchmarking allows customers to assess Airways' performance against providers of the same service. Remaining in the top providers for productivity and cost effectiveness will give customers confidence that Airways services are being delivered efficiently.

The scorecard metrics will provide a comparison over time. Changes in the measures from year to year will highlight where Airways performance is improving and where improvements could be made.

To track cost efficiency improvements additional measures have been added. These measures will be tracked against current levels, with improvements shown by a reduction in the measures. These measures are:

- *Movements per core (Systems Operator) FTE*. As discussed in section 3, Airways will be using technology to improve operational productivity. This measure will show how successful Airways has been at using these technologies.
- *Cost Per IFR Flight Hour*. Measures the average direct cost to Airways for manning a flight over an hour in USD. This measure is based on the CANSO benchmark. This measure will provide customers with an overall measure of efficiency of service delivery.
- *Proportion of shared services and governance costs.* It is important that Airways has robust governance and support functions to support the delivery of reliable and safe air traffic control services. However, Airways is committed to controlling its costs. Shared Service and Governance costs currently make up 14.3% of Airways total costs. Airways will monitor its overhead costs against this benchmark.

The above measures will be used instead of the suggested cost/MCTOW per tower. Airways does not believe that MCTOW provides an effective efficiency measure. Airways' services have no influence over the type of aircraft (and therefore weight) operators use – this is a function of market forces and airline operational decisions.

Rather than providing individual business cases for its core capital programme, Airways has shared its capital plan as part of the consultation process. Customers provided critical feedback that was used to refine this programme. This provides an efficient method of validating the strategic direction of capital planning, while leaving the day-to-day resourcing decisions to Airways' management and Board.

However, separate business cases will be provided and consulted on for new or enhanced services outside of the Pricing agreement. This includes those programmes in the original proposal that have been removed due to their uncertainty.

**Record of new value-add initiatives and innovations** – the Scorecard will include a narrative highlighting where new value add initiatives have been implemented or new services offered. This will enable customers to see the benefits of the enhancements delivered.

**Airservices' service monitoring framework** - Airways will investigate this framework. An initial look at the framework shows some very useful measures that could provide an effective way of monitoring operational performance.

**Reports should be tailored to a local operation** – the Scorecard is designed to be a simple, transparent and a high level measure of Airways' overall performance. Airways is also investigating aerodrome specific scorecards that may include key measures that relate to a specific location.

**Delay and hold up times for intensive training** – intensive training only occurs at a limited number of aerodromes. As discussed above, the Scorecard is designed to be a simple, transparent and high level measure of Airways' performance rather than location specific measures. Airways is also in the early stages of developing aerodrome specific scorecards and will consider this submission in the development of those scorecards.

**Other changes** - Airways has reduced the number of measures from what was proposed. Feedback from the roadshow suggested the staff engagement measure was not very useful so it has been removed. The reliability measures have also been simplified to a single overall reliability measure, which encompasses all services.

The proposed value add measures have been refined to focus on the outputs of specific key initiatives, rather than focusing on the overall benefits delivered. This provides transparency around the benefits delivered from initiatives implemented in the 2013-2016 pricing period.

**The next steps - keeping customers informed**

Airways will present progress against the scorecard metrics within four months of the end of the financial year. The presentation will include actions Airways is taking in response to the results, any learnings and insight and will discuss suggested refinements to the measures used. To maximise the use of this forum, Airways is considering also providing an industry update. In addition, Airways will use this forum to start early discussions on the 2016-2019 pricing period so there are no surprises when the proposed prices are presented in 2016.

## 5.2 The final Scorecard measures

For the Scorecard to be effective, it is important that it is simple, transparent and has the right balance of measures that are relevant to customers.

The scorecard categories have been simplified into three categories, the value add performance category being combined into the operational performance category, reflecting their close relationship.

- Operational performance – measures key aspects of Airways' operational performance against predetermined targets. This also includes measuring the outcomes of specific value add initiatives.
- Comparative performance – Airways' cost and productivity performance benchmarked against the cost and productivity of CANSO members worldwide.
- Pricing performance – Airways' performance against key pricing assumptions.

Table 36 below provides the final measures.

**Table 36: Final scorecard measures**

| Measurement | Target | Description |
|---|---|---|
| **Operational Performance** | | |
| Major Safety Incidents | Nil | Safety is at the heart of everything we do. |
| Inflight delays | Delays < 4250 minutes per month | For arriving flights into Auckland, Wellington, Christchurch and Queenstown. This includes all delays from take-off to landing (ideal projected flight time vs. actual). |
| IFR movements Per core FTE (Systems Operator total headcount) | Greater than 950 per annum | This will provide a measure of controller efficiency and reflect planned productivity improvements. |
| Cost Per IFR Flight Hour | $250 (USD) | Measures the average direct cost to Airways for manning a flight over an hour in USD. This measure is based on the CANSO benchmark. |
| Proportion of shared services and governance costs | <14.3% | Proportion of corporate overhead functions like finance, legal, safety, risk management etc. |
| New ASPIRE routes | Addition of Narita and SFO – Auckland routes | Two new ASPIRE routes will be added in 2013-14. Aspire routes fly the perfect flight profile, minimising delays and fuel burn. |
| RNP AR Arrivals flown into AA | >10 per day for northern arrivals | Currently the number of arrivals from the north is limited by noise. Most flights arriving from the south already operate on RNP AR procedures. |
| Auckland Runway Capacity increase | 2% increase in capacity | Increase in the number of flights that can be landed and take-off per hour. Actual flights landed will depend on aircraft demand/volumes. |
| Planned maintenance completion rate | >98.5% | An annual measure of the percentage of preventative (planned) maintenance work completed within the month scheduled. |
| Service Availability; People and Systems | > 99.95% | Measures total actual hours of availability on a 12-month rolling average. |
| Narrative highlighting any value add initiatives or new enhanced services | | |

| **KPIs (Compared to CANSO Top 5 ANSPs)** | | |
|---|---|---|
| Cost Per IFR Flight Hour | CANSO survey top 5 | Measures the average direct cost to Airways for manning a flight over an hour. |
| Revenue Per IFR Flight Hour | CANSO survey top 5 | A proxy measure for the average price paid per flight by Airways customers. |
| ATC Labour Cost Per IFR Flight Hour | CANSO survey top 5 | Measures the average hourly operational air traffic controller labour cost efficiency per flight. |
| Average ATC Labour Cost | CANSO survey top 5 | Measures average ATC employment cost to Airways. |
| **Performance against pricing inputs** | Target 13-14 | |
| Upper revenue band (+2%) | $159.6m | Measures actual overall revenue for the year and variance to the revenue band. |
| Annual revenue | $156.5m | |
| Lower revenue band (-2%) | $153.4m | |
| Annual total cost | $144.2m | Total cost before tax and capital charge. |
| Annual EVA | 0 EVA | Measures EVA as net profit for the year after capital charge deductions. |
| Annual total CAPEX | $38m | Measures actual CAPEX expenditure for the year. |

# 6 Prices for 2013 - 2016

This section provides the final prices for the 2013-2016 pricing period. The section also provides updated workings and financial information for each step in the price setting process used to calculate the airline unit prices.

This section is structured in two parts.

- **Part A: Final unit prices for the 2013 – 2016 pricing period (see 6.1)** – this includes price tables and supporting calculations that will assist customers to calculate their own prices.
- **Part B: Updated workings and financial information for each step in the airline price setting process (see 6.2)** – the financial information provided in the body of February's Consultation Document has been updated. This includes an updated pie chart showing the components of the overall increase.

## 6.1 Part A: Final prices

The formula and pricing tables to calculate Airways' final unit prices are provided in the following sections. Unit prices are calculated by applying aircraft weight, distance flown (if applicable) and pricing table inputs to the relevant pricing formula.

Appendix 3 provides some examples on how to use the price formula.

Alternatively, prices can be obtained without any calculation using:

- online price calculator to calculate the price of a journey using several of Airways' services. This can be downloaded from http://www.airways.co.nz/airways_Services/consult.asp
- price tables that provide prices for specific services for various aircraft weights. These are provided in Appendix 4.

## Aerodrome service prices

**Aerodrome pricing formula**

The greater of the minimum price or:

| | |
|---|---|
| aircraft under 5 tonnes MCTOW | = base rate x MCTOW / 5 |
| aircraft from 5 – 30 tonnes MCTOW | = base rate + weight rate x (MCTOW – 5) |
| aircraft over 30 tonnes MCTOW | = base rate + weight rate x 5 x sqrt of (MCTOW – 5) |

Where MCTOW is an aircraft's maximum certified take-off weight measured in tonnes.

The minimum price, base rate and weight rate are provided by the price table below.

**Aerodrome prices**

| | Minimum Price | | | Base Rate | | | Weight Rate >5 tonnes | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 |
| Auckland | $10.35 | $10.55 | $10.80 | $13.50 | $13.75 | $14.00 | $ 3.68 | $ 3.72 | $ 3.70 |
| Christchurch | $10.35 | $10.55 | $10.80 | $13.50 | $13.75 | $14.00 | $ 6.00 | $ 6.23 | $ 6.35 |
| Wellington | $10.35 | $10.55 | $10.80 | $13.50 | $13.75 | $14.00 | $ 4.99 | $ 5.72 | $ 6.19 |
| Queenstown | $ 7.25 | $ 7.40 | $ 7.55 | $13.50 | $13.75 | $14.00 | $15.64 | $16.12 | $16.35 |
| Regional Airport (Group 1) | $ 7.25 | $ 7.40 | $ 7.55 | $13.50 | $13.75 | $14.00 | $17.73 | $18.35 | $18.86 |
| Regional Airport (Group 2) | $ 7.25 | $ 7.40 | $ 7.55 | $13.50 | $13.75 | $14.00 | $15.98 | $16.57 | $17.05 |
| Milford | $46.00 | $46.90 | $48.05 | $126.50 | $129.00 | $132.25 | Not Applicable | | |
| Kapiti | $ 7.25 | $ 7.40 | $ 7.55 | $13.50 | $13.75 | $14.00 | $34.58 | $34.24 | 34.34 |
| 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. | | | | | | | | | |

## Circuit, Vicinity landing and Controlled VFR transit prices

| | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|
| Circuit charge | $ 1.00 | $ 2.00 | $ 3.55 |
| Vicinity landing charge | $ 1.00 | $ 2.00 | $ 3.55 |
| Controlled VFR transit charge | $ 1.00 | $ 2.00 | $.3.55 |

## Approach service prices

**Approach (including unattended) pricing formula**

The greater of the minimum price or:

| | |
|---|---|
| aircraft under 5 tonnes MCTOW | = base rate x MCTOW/ 5 |
| aircraft from 5 – 30 tonnes MCTOW | = base rate + weight rate x (MCTOW – 5) |
| aircraft over 30 tonnes MCTOW | = base rate + weight rate x 5 x sqrt of (MCTOW – 5) |

Where MCTOW is an aircraft's maximum certified take-off weight measured in tonnes.

The minimum price, base rate and weight rate are provided by the price table below.

**Approach Prices**

**i Attended Aerodromes**

| | Minimum Price | | | Base Rate | | | Weight Rate >5 tonnes | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 |
| International towers | $ 5.15 | $ 5.25 | $ 5.40 | $20.65 | $21.10 | $21.60 | $ 7.99 | $ 8.24 | $ 8.32 |
| Regional towers | $ 5.15 | $ 5.25 | $ 5.40 | $20.65 | $21.10 | $21.60 | $ 8.43 | $ 8.64 | $ 8.70 |
| Additional Auckland CAT III weight rate (added to the international tower price) | Not Applicable | | | | | | $ 0.40 | $ 0.41 | $ 0.42 |
| Additional Queenstown Multilat weight rate (added to the regional tower price) | Not Applicable | | | | | | $ 2.27 | $ 2.33 | $ 2.34 |
| International towers include Auckland, Wellington, and Christchurch. | | | | | | | | | |
| Regional towers includes Queenstown, Nelson, Palmerston North, Tauranga, Hamilton, Dunedin, Gisborne, New Plymouth, Napier, Invercargill, Rotorua and Woodbourne. | | | | | | | | | |

**ii Unattended Aerodromes**

| | Minimum Price | | | Base Rate | | | Weight Rate >5 tonnes | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 |
| Taupo | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 10.20 | 10.40 | 12.30 |
| Timaru | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 13.35 | 14.65 | 16.05 |
| Wanganui | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 11.75 | 12.00 | 13.65 |
| Hokitika | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 10.10 | 10.25 | 10.50 |
| Whangarei | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 4.70 | 5.35 | 3.75 |
| Kerikeri | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 1.90 | 1.95 | 2.05 |
| Kapiti | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 8.05 | 8.20 | 8.45 |
| Whakatane | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 2.90 | 3.05 | 3.25 |
| Westport | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 10.45 | 10.55 | 10.90 |
| Kaitaia | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 9.65 | 10.25 | 10.40 |
| Great Barrier | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 14.20 | 14.65 | 15.15 |
| Oamaru | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 14.20 | 14.65 | 15.15 |
| Wanaka | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 14.20 | 14.65 | 15.15 |
| Wairoa | $ 3.15 | $ 3.20 | $ 3.30 | $17.75 | $18.00 | $18.50 | 14.20 | 14.65 | 15.15 |
| Other unattended aerodromes | No charge | | | | | | | | |

## Enroute Service prices

**En-route pricing formula**

The greater of the minimum price or:

| | |
|---|---|
| aircraft under 5 tonnes | = base rate x chargeable distance / 100 |
| aircraft from 5 – 30 tonnes | = [base rate + weight rate x (MCTOW – 5)] x chargeable distance/100 |
| aircraft over 30 tonnes | = [base rate + weight rate x 5 x sqrt of (MCTOW – 5)] x chargeable distance/100 |

Where MCTOW is an aircraft's maximum certified take-off weight measured in tonnes.

The Minimum Price, Base Rate and Weight Rate are provided by the price table below

Chargeable distance for Domestic En-route means the distance in nautical miles between the origin and destination aerodromes minus the terminal navigation radius at both aerodromes.

Chargeable distance for Oceanic En-route means:

1. For international flights: Airways' reasonable estimate of the average distance flown in nautical miles (by aircraft on the relevant route) between the outer boundary of the NZZO and the

aerodrome of arrival or departure minus the total of 150 nautical miles plus the appropriate terminal navigation radius.

2. For international over flights: Airways' reasonable estimate of the average distance flown within the NZZO by aircraft on the relevant route in nautical miles.

Terminal navigation radius (or TNR) means the appropriate terminal distance as specified in Airways Standard Terms (which can be found at airways.co.nz)

**En-route prices**

| | Minimum Price | | | Base Rate | | | Weight Rate >5 tonnes | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 |
| Domestic | $ 6.00 | $ 6.15 | $ 6.30 | $ 6.00 | $ 6.15 | $ 6.30 | $ 2.64 | $ 2.76 | $ 2.76 |
| Oceanic | $18.00 | $18.45 | $18.90 | $ 6.00 | $ 6.15 | $ 6.30 | $ 0.80 | $ 0.82 | $ 0.83 |

## Other GA Service prices

**VFR flight planning and Overdue SARTIME prices**

| | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|
| VFR flight plans filed online | $ 4.55 | $ 4.65 | $ 4.80 |
| VFR flight plans filed by other means | $ 6.60 | $ 6.75 | $ 6.90 |
| Overdue SARTIME | $35.50 | $36.25 | $37.15 |

**Parachute prices**

| | Airspace Complexity | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Low | | | Medium | | | High | | |
| Aircraft Weight | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 | 2013/14 | 2014/15 | 2015/16 |
| Low (<1,700 kg) | $ 2.05 | $ 2.05 | $ 2.10 | $ 2.55 | $ 2.60 | $ 2.65 | $10.15 | $10.35 | $10.60 |
| Medium (1,700 - 2,500 kg) | $ 3.05 | $ 3.10 | $ 3.20 | $ 4.05 | $ 4.15 | $ 4.25 | $10.15 | $10.35 | $10.60 |
| Heavy (>2,500 kg) | $ 4.05 | $ 4.15 | $ 4.25 | $ 6.10 | $ 6.20 | $ 6.35 | $10.15 | $10.35 | $10.60 |

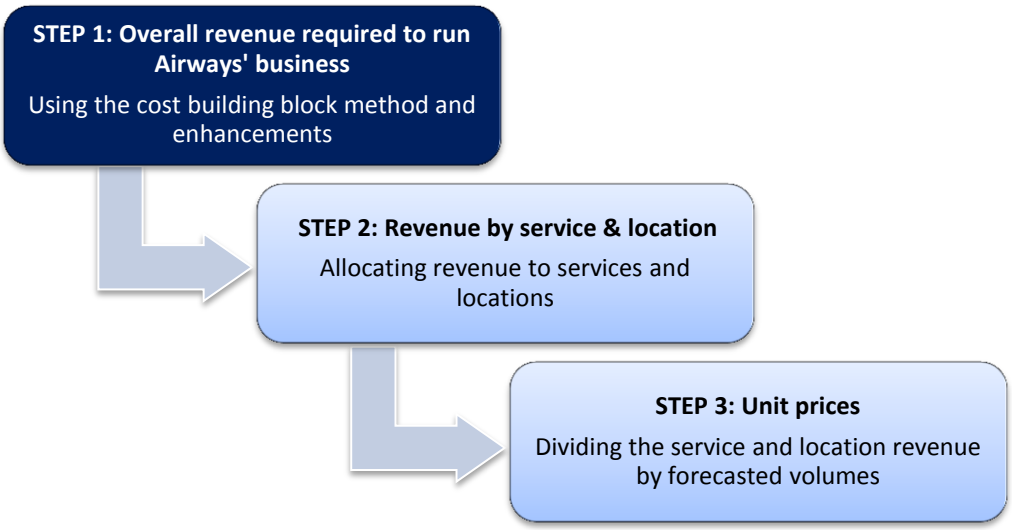
## 6.2 Part B: Updated workings into the price setting process

This section provides updated financial information for each step in the airline price setting process. The financial information has been updated from the pricing inputs originally proposed in the body of section 3 of the Consultation Document released in February 2013. This section will now progress through each of the steps in the price setting process.

### Overall revenue

Using the Pricing Framework, Airways sets prices by calculating the overall required revenue, then allocating the revenue to specific services and, finally, calculating unit prices based on forecast volumes. This process is summarised in figure 37 below.

**Figure 37: Airways' price setting process**




To continue to provide safe, high-quality, effective and efficient services, Airways requires an increase in revenue of $16.2m in 2013-14, $7.6m in 2014-15 and $4.7m in 2015/16. Section 3 showed that prices would need to increase by 10.6% in 2013-14, 3.5% in 2014/15 and 1.2% in 2015/16 to meet this requirement.

To illustrate the drivers of the proposed pricing increase, the February Consultation Document broke the increase down into key drivers, which were illustrated using a pie chart. Figure 38 provides this pie chart and compares it with an updated pie chart showing the final drivers of the price changes for the 2013-14 year relative to current prices.

Figure 39 provides an explanation of each component of the price increase shown by the pie chart. Refer to the February Consultation Document for a full description of the pricing inputs and section 3 of this document for any changes resulting from the consultation process.

**Figure 38: Drivers of changes in price (comparison of proposed and final prices)**

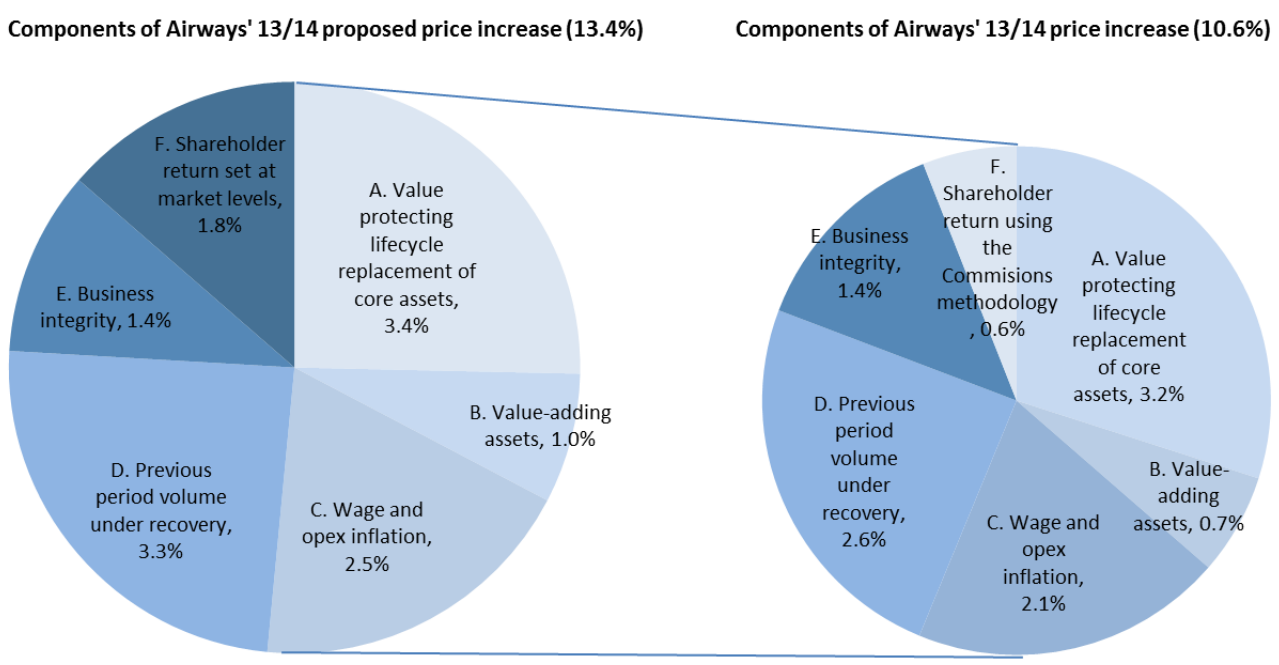



**Figure 39: Explanation of the key drivers of the price increase**

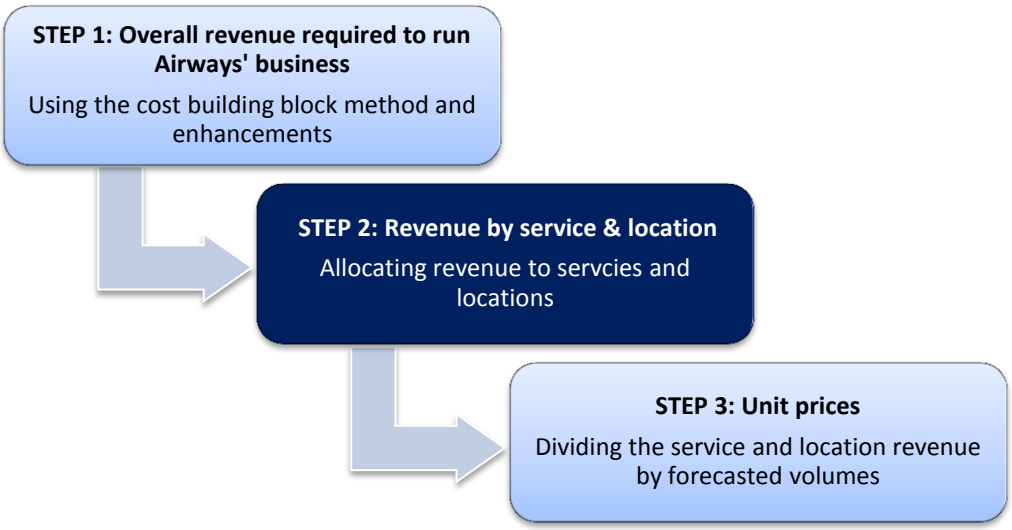
| Driver | Explanation |
|---|---|
| A: Value protecting lifecycle replacement of core assets. | This includes replacing assets coming to the end of their useful lives, seismic strengthening of operating and contingency facilities and a new Wellington control tower. While final prices have removed or delayed some asset replacement projects, the changes to the capital programme have been carefully made to ensure customers will keep receiving safe and reliable services. |
| B: Value-adding service enhancements. | This covers investment that improves services in a way that is valuable to customers. Examples of such investment include extending the successful performance-based navigation programme and taxiway efficiency improvements in Christchurch. Other value add initiatives include the full implementation of the arrivals manager technology. This is currently being trialled with the full roll out expected over the next year.<br><br>Queenstown non-day operations have been removed from the programme because of uncertainty around the implementation dates. As a result, this project will be treated as separate business case. It is important to note that customer feedback supported this enhancement. While it will be treated on a separate business case, Airways will be implementing the lighting upgrade. |
| C: Wage and operating expense inflation. | This includes the impact of the collective agreement and forecast price movements in other cost items. This also includes unavoidable legislative changes such as the legislation for rest breaks. |

| Driver | Explanation |
|---|---|
| D: Previous period volume under recovery. | Volumes in the 2012-13 period are tracking below those forecast when current prices were set in 2010. As Airways' costs are largely fixed, and generally do not vary with volume fluctuations, the volume short fall means current prices do not generate enough revenue to cover costs. As a result, prices need to increase to adjust revenue levels back to a level expected under the current pricing arrangement.<br><br>The volume growth included in the final prices has been included as a part of this pricing input in the pie chart. |
| E: Business integrity. | This includes replacement of Airways' financial system, which is obsolete and unsupported by the software provider. It also includes investing in upgrading Airways' information systems, cyber security and customer management systems. |
| F: Shareholder return using the Commerce Commission methodology | This is in response to the shareholders' more explicit requirement for a commercial return and recognition that Airways' ANS business has been under-performing on this measure. |

## Revenue by service and location

The second step in setting Airways' prices involves allocating revenue to specific services and locations by applying the methodologies and costing polices (set out in in section 6.1 of the Pricing Framework).

**Figure 40: Airways' price setting process**




Revenue for specific services and locations will be influenced by:

- the underlying cost of each service and location. Current prices have been rebalanced so prices reflect the underlying costs
- general price adjustments to reflect factors such as inflation, volume catch-ups and changes to Airways' cost structure
- location-specific capital expenditure.

Figure 41 shows the change in revenue levels for specific services and locations and the components that make up the final price change. The updated table includes the refined capital programme.

**Figure 41: Proposed price change for service by location ($m)**

| Service | 2013 Forecast Revenue | Specific Investment | General | Rebalancing | 2014 Proposed Revenue |
|---|---|---|---|---|---|
| **Domestic Enroute** | **44.4** | **1.7** | **3.9** | **-10.9** | **39.1** |
| **Oceanic Enroute** | **16.5** | **0.5** | **1.5** | **1.9** | **20.3** |
| **Aerodrome services** | | | | | |
| Auckland | 1.9 | 1.0 | 0.2 | 7.1 | 10.2 |
| Christchurch | 1.4 | 0.8 | 0.1 | 4.3 | 6.6 |
| Wellington | 1.3 | 0.6 | 0.1 | 3.2 | 5.2 |
| Queenstown | 0.9 | 0.2 | 0.1 | 2.1 | 3.3 |
| Nelson | 0.8 | 0.0 | 0.1 | 0.5 | 1.4 |
| Hamilton | 0.6 | 0.1 | 0.1 | 1.2 | 1.9 |
| Napier | 0.9 | 0.1 | 0.1 | 0.1 | 1.1 |
| Dunedin | 0.6 | 0.0 | 0.1 | 1.0 | 1.6 |
| Tauranga | 1.1 | 0.0 | 0.1 | 0.2 | 1.4 |
| Palmerston North | 0.4 | 0.0 | 0.0 | 1.2 | 1.7 |
| New Plymouth | 0.7 | 0.0 | 0.1 | 0.2 | 1.0 |
| Woodbourne | 0.6 | 0.1 | 0.1 | 0.6 | 1.3 |
| Invercargill | 0.6 | 0.0 | 0.1 | 0.1 | 0.8 |
| Gisborne | 0.7 | 0.0 | 0.1 | 0.0 | 0.8 |
| Rotorua | 0.3 | 0.0 | 0.0 | 0.7 | 1.0 |
| **Aerodrome services total** | **12.6** | **3.0** | **1.1** | **22.6** | **39.3** |
| **Flight information services** | | | | | |
| Milford | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 |
| Kapiti | 0.6 | 0.0 | 0.0 | -0.1 | 0.5 |
| **Flight information services total** | **0.7** | **0.0** | **0.0** | **0.1** | **0.9** |
| **Approach services** | | | | | |
| Auckland | 25.4 | 0.1 | 2.2 | -8.8 | 19.0 |
| Christchurch | 10.4 | 0.1 | 0.9 | -1.2 | 10.1 |
| Wellington | 9.9 | 0.1 | 0.9 | -1.3 | 9.6 |
| Queenstown | 2.7 | 0.1 | 0.2 | -1.7 | 1.3 |
| Nelson | 1.6 | 0.0 | 0.1 | -0.4 | 1.4 |
| Hamilton | 0.7 | 0.0 | 0.1 | 0.1 | 0.9 |
| Napier | 1.1 | 0.0 | 0.1 | -0.3 | 0.8 |
| Dunedin | 1.5 | 0.0 | 0.1 | -0.6 | 1.1 |
| Tauranga | 0.7 | 0.0 | 0.1 | 0.1 | 0.9 |
| Palmerston North | 1.1 | 0.0 | 0.1 | -0.4 | 0.8 |
| New Plymouth | 0.8 | 0.0 | 0.1 | -0.3 | 0.6 |
| Woodbourne | 0.5 | 0.0 | 0.0 | -0.3 | 0.3 |
| Invercargill | 0.6 | 0.0 | 0.0 | -0.1 | 0.6 |
| Gisborne | 0.3 | 0.0 | 0.0 | 0.3 | 0.6 |
| Rotorua | 0.5 | 0.0 | 0.0 | 0.3 | 0.8 |
| Unattended | 0.7 | 0.1 | -0.1 | 0.0 | 0.7 |
| **Approach services total** | **58.6** | **0.6** | **5.0** | **-14.6** | **49.5** |

Figure 42 provides a more detailed breakdown of the change in unattended revenue.

**Figure 42: Proposed price change for service by unattended location ($ 000s)**

| Unattended locations | Current revenue 2012/13 | Proposed revenue 2013/14 | Difference |
|---|---|---|---|
| Taupo | 86 | 100 | 14 |
| Timaru | 48 | 65 | 17 |
| Wanganui | 82 | 98 | 16 |
| Hokitika | 71 | 82 | 11 |
| Whangarei | 128 | 96 | -32 |
| Kerikeri | 116 | 50 | -66 |
| Kapiti | 71 | 72 | 1 |
| Whakatane | 61 | 37 | -24 |
| Westport | 28 | 32 | 4 |
| Kaitaia nav | 29 | 32 | 3 |
| Great Barrier | 3 | 17 | 14 |
| Oamaru | 0 | 21 | 21 |
| Wanaka | 19 | 27 | 8 |
| Wairoa | 5 | 33 | 28 |
| Other locations | 39 | 0 | -39 |
| **Total** | **786** | **762** | **-24** |

Figure 43 summarises the allocation of overhead to services using the costing policy. For services that have specific locations (Aerodrome and Approach) overheads are shared between locations using weight landed.

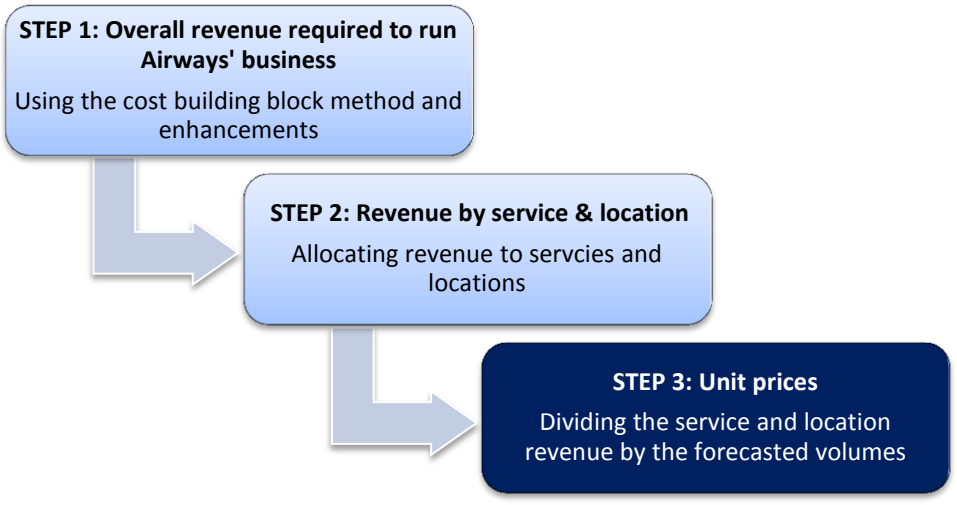
**Figure 43: Allocation of overhead costs to services**

| Overhead | Allocation of overhead to service |
|---|---|
| Companywide overheads | To services where Airways is the sole provider by statute (Approach, Domestic En-route and Oceanic En-route). |
| Towers overhead | Aerodrome. |
| Regional towers overhead | Aerodrome. |
| International towers overhead | Aerodrome. |
| Approach overhead | Approach. |
| Centre overhead | Approach. |

## Unit prices

Once the revenue requirements have been set for each service, unit prices are chosen that will return the required revenue. Unit prices are set using volume forecasts for the service.

**Figure 44: Airways' price setting process**




The unit price formula is provided by the Pricing Framework. The pricing formula charges customers based on the weight of their aircraft – the heavier the aircraft the higher the price.

Specific unit prices are set at a level that will collect the required revenue using the expected volume forecast. The volume forecast provides the expected number of flights at each weight and distance category. The proposed prices have used Airways latest volume forecast, which is based on schedules provided by the airlines. Final unit prices are provided in section 6, part A.

# 7 Appendices

## 7.1 Appendix 1: Response to submissions on the components of cost of capital

This appendix responds to the issues raised in submissions in relation to the estimate of the cost of capital used in the pricing proposal.

This method is used to estimate Airways' cost of capital. It has wide support in the New Zealand financial community and is the method used by the Commerce Commission in its Input Methodologies to estimate the cost of capital for regulated businesses. This 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 a the weighted average cost of capital (WACC). This method requires establishing values for various parameters and there is a degree of judgment required in establishing these values. Some submissions commented on these parameter values and we discuss each below, covering:

- Asset beta
- Market risk premium
- Risk free rate
- Debt premium
- Debt issuance costs
- Leverage
- Choice of point estimate.

For each parameter, Airways considers the material provided in submissions, the approach used in the Commission's Input Methodologies, other approaches used in the market and from that derive a range for WACC. In reaching the conclusions in this appendix, Airways drew on expert advice provided by Ireland & Associates and the Sapere Research Group.

Airways calculated the upper band of the reasonable and analytically supportable range for its cost of capital at 8.9%. The upper range was calculated using the Commerce Commission's Input Methodology framework and using market data to derive parameter estimates. The lower end of the range was calculated at 7.8%, using the Commission's Input Methodology framework and parameter estimates where available. Where the Commerce Commission haven't provided parameter estimates that are appropriate to Airways (asset beta and leverage), Airways has followed the Commissions methodology for calculating those parameters as close as practicable.

It is also worth noting that the building blocks methodology, as it's commonly implemented for regulated infrastructure businesses, is not an ideal fit for service business like Airways and it leads to the return to the shareholder being understated. The building blocks methodology calculates the commercial return as the asset base multiplied by the cost of capital rate. However, Airways' core asset used to provide services is its intellectual capital, which is not included in its asset base. This results in the absolute return being understated.

## Asset beta

**Airways' proposal**

Airways used an asset beta of 0.6 in the pricing proposal.

**Summary of submissions**

BARNZ was the primary submitter on cost of capital issues, including asset beta. A number of other submitters supported their view. BARNZ submitted that Airways has a lower risk than NATS and Airservices because these entities are price regulated for periods of four and five years respectively and that Airways has the ability under its Pricing Framework to adjust its prices within its three-year pricing period for defined events, inclusive of if revenues shift up or down by 2%. They also considered the case for change from previous Airways' pricing rounds had not been made (in 2009 0.3 was used, in 2010 0.5 was initially used which was adjusted down to 0.45). They drew comparisons with the asset betas used by the Commission for Transpower and electricity distribution networks (0.34) and gas distribution networks (0.44) and stated they consider that Airways bears less risk than these businesses.

**Airways' response**

Submitters did not suggest using an approach different to the comparator method for estimating asset beta but rather suggested different comparators should be used. Airways considers it is reasonable to compare Airways with NATS and AirServices as peers in the air navigation service industry, for the purpose of establishing asset beta. Airways also considers it reasonable to include airports as a comparator as they operate in the same market. The combination of both ANSPs and airports will provide a more robust data set.

NATS and Airservices are also traffic control businesses and, therefore, are expected to be exposed to a similar level of systematic risk (which beta aims to reflect) to Airways.

Airways' Pricing Framework provides for a three-year pricing period and it allows for prices to be reset within these three years if revenues move by more than 2% of forecasts (Airways bears 25% of difference, customers 75%) or if one of a small number of trigger events occur. NATS and Airservices have pricing periods of four and five years respectively. Both NATS and Airservices have volume risk sharing mechanisms. NATS' mechanism is similar to Airways' and Airservices has a larger neutral zone (5%) but passes 100% of the risk outside that band to customers (whereas Airways only passes 75%). In addition, NATS does not bear inflation risk, where Airservices and Airways do. Overall, Airways considers these businesses comparable for the purposes of estimating asset beta and the results from doing so are corroborated with comparisons with New Zealand airport betas.

The New Zealand airports operate in a similar economic environment to Airways in terms of fluctuations in demand from shifts in the domestic and external economies. In addition their costs tend to be fixed in the short to medium term (as are Airways) and, thereby, they are not able to shift costs up or down quickly in response to *changes* in demand (thus resulting in returns being very sensitive to volumes).

One reason why Airways' asset beta may be higher than that for an airport is the difference in costs structures between these two businesses. Airways' cost structure is dominated by labour, with a relatively small asset base from which the cost of capital, and profits to the shareholder, are derived. In contrast an airport cost structure is dominated by a large asset base. The implication of these differences in cost structures for volatility in profitability (and therefore asset beta) is that for a given shift in revenue Airways' profitability is much more volatile than for an airport.

The ability in the Pricing Framework for Airways to reset prices in future years if revenues move outside 2% of forecasts results in Airways remaining exposed to significant volatility in profitability from shifts in demand. A reduction of 2% in revenues (using 2013-14 amounts) would reduce Airways' profitability for the year by 18%. This degree of sensitivity in profitability from shifts in demand arises from Airways' costs being fixed in the short term, and as discussed above, its cost structure is dominated by labour costs (60%) with depreciation and the return to shareholders being a relatively small component of total costs (12% and 6% respectively).

The Commission's Input Methodologies set out a point estimate for asset beta for each of the sectors that are subject to price regulation or information disclosure. To arrive at these point estimates, the Commission used the comparator method where it identified businesses that operate in the same or similar industry sectors and which are also listed (the business needs to be listed in order to ensure the availability of the necessary market data on returns to estimate beta). The Commission then derived asset betas from this information and chose a point estimate from the distribution of beta estimates. For airports, which operate in a similar market environment as Airways, the Commission's asset beta is 0.6.

Each of the three large New Zealand airports is able to estimate its asset beta itself for price setting purposes and these estimates range from 0.65 to 0.75.

As a result, these comparators provide an asset beta range of 0.55 to 0.75. Airways considers choosing 0.6 from this range is reasonable. This is an increase in the estimate of asset beta from previous years. A number of submissions queried what has changed to justify this change in the asset beta. This change has arisen from better information on comparable businesses and recognition from the experience of the global financial crisis of the extent to which Airways' ANS business is exposed to fluctuations in the domestic and international economies.

## Market risk premium

**Airways' proposal**

Airways used 7.5% for the market risk premium in the pricing proposal.

**Submitters' comments**

BARNZ considered that Airways should use 7% as per the Commission's Input Methodologies but did not provide any other reason for doing so.

**Airways' response**

Airways' advisers have put forward historical financial data supporting a 7.5% market risk premium. Airways understands 7.5% is widely used by finance practitioners in New Zealand. In one of the conferences on the development of the input methodologies, the Commission conducted an informal poll of the market risk premium value used by the organisations represented by the attendees and all but one person nominated 7.5% or above.

The Commission's Input Methodologies currently use 7% for the market risk premium, but used 7.5% for the period to June 2011 to take account of the effects of the global financial crisis.

We have used a 7% market risk premium for our lower bound estimate of WACC and 7.5% for the upper bound.

## Risk free rate

**Airways' proposal**

Airways used a risk free rate of 3.2% in the pricing proposal. This was derived from a bank forecast of the rate on three-year government bonds as at the commencement of the pricing period (i.e. as at July 2013).

**Summary of submissions**

BARNZ submitted Airways should adopt a one-year rate due to its ability under the Pricing Framework to reset prices within the pricing period. They considered this would result in a risk free rate of 2.6%.

**Airways' response**

Airways considers the term of the risk free rate used to estimate WACC should approximate the expected life of the assets being financed and not be truncated to the length of the pricing (or regulatory) period. Any business needs to finance its operations over the long term and an estimate of its cost of capital needs to reflect this financing requirement and not be artificially truncated to the period over which it sets its prices. For example, consider an airline business; it is able to reset its prices on a regular basis but an estimate of its cost of capital would reflect the term over which it needs to finance its operations and fleet purchases, not its price reset periods. Airways is no different. Thus Airways considers the appropriate term for the risk free rate when estimating Airways' cost of capital is 10 years (the longest term available for which there is New Zealand data), which is the best match to the asset lives used in the ANS business. This approach, using data from December 2012, gives a result of 3.6%.

The Commission's Input Methodology approach for estimating the risk free rate is linked to the length of pricing period and takes the average yield (over a period of a month) for government bonds with a yield to maturity of five years. The five-year term was chosen to correspond with the regulatory pricing period of the regulated businesses and thus the analogous term for Airways is three years. Some submitters suggested this term for Airways should be one year due to the Pricing Framework allowing for resets within the three year period if revenue diverges more than 2% from forecast or if certain trigger events arise. However, these reset events are designed to be for exceptional circumstances only, and thus the norm for Airways under its Pricing Framework will be a three year pricing period. Using the most recent estimate by the Commission and adjusting it for a three-year term results in an estimate of 2.68%.

Airways has used the 2.68% estimate of the risk free rate for our lower bound estimate of WACC (consistent with the input methodologies approach) and the 3.6% estimate for the upper bound.

## Debt premium

**Airways' proposal**

Airways used 1.75% for the debt premium in the pricing proposal and this value was from an earlier Commission estimate of the debt premium using the input methodologies.

**Summary of submissions**

BARNZ submitted Airways should reference bonds with one year to maturity when estimating the debt premium, due to the ability for Airways under its Pricing Framework to reset it prices within the three year pricing period under certain conditions. They considered this approach would result in a debt premium of 1.4%.

**Airways' response**

Airways supports the input methodologies approach to estimating the debt premium, but that it should reference bonds with a term to maturity that approximates the life of the assets involved (for the same reasons provided above that the risk free rate should be referenced to a 10-year term, and not to a pricing period or to a one year term). In practice, in the New Zealand bond market, this is likely to involve terms somewhere between five and 10 years due to data availability reasons.

The input methodology approach estimates the debt premium above the risk free rate by applying a set of calculations to data on yields for publicly traded debt that has a BBB+ rating (or better) and has a remaining term to maturity of five years. The Commission's most recent application of this method (issued in January 2013) resulted in a debt premium of 2.05%. Given the lack of data on longer dated bonds, Airways considers a pragmatic approach is to adopt this estimate by the Commission. Thus Airways has used a debt premium of 2.05% in its estimate of the higher bound of WACC.

The lower bound of the range is set using a bond maturity that matches the length of the pricing period. The latest Commission data for a three year bond maturity is 1.86%.

## Debt issuance costs

**Airways' proposal**

Airways used 0.35% for debt issuance costs in the pricing proposal, which is consistent with the input methodologies value for this parameter.

**Summary of submissions**

Submissions did not comment on this parameter and the BARNZ submission used the 0.35% in its estimate of WACC.

**Airways' response**

Airways considers the 0.35% estimate for debt issuance costs reasonable and in the absence of any Airways-specific information to the contrary, Airways has used it in our estimate of WACC.

## Leverage

**Airways' proposal**

Airways used its target leverage of 44% in the pricing proposal.

**Summary of submissions**

BARNZ submitted that leverage of 17% should be used, to be consistent with the input methodologies for airports.

**Airways' response**

Airways considers its target leverage is the appropriate leverage to use for estimating WACC, as that will be the leverage that influences the cost of capital for the business. This leverage is 44%, as set out in Airways' Statement of Corporate Intent.

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 17%. The Commission have not calculated a leverage data set for the ANSP sector.

The leverage levels for two comparators that Airways used for determining its assets beta are 60% for NATS and 45% for AirServices Australia.

The leverage levels used by the New Zealand airports in their estimate of their WACC are 40% for Wellington, 30% for Auckland and 26% for Christchurch. In each case they used their own leverage levels rather than deriving a leverage level from an external dataset (as per the input methodologies approach).

Airways considers its target leverage level is the appropriate value to use when estimating its WACC and has therefore used 44% in its WACC estimate. This target leverage level lies below that of its industry peers NATS and AirServices and is above airports' leverage levels and thus falls within the range of the leverage levels of the comparators we use to establish the asset beta.

## Choosing a point estimate from a range

**Airways' proposal**

Airways adopted the 75th percentile estimate of WACC in the pricing proposal, which is consistent with the Commission's Input Methodologies.

**Summary of submissions**

BARNZ submitted the mid-point (or 50th percentile) estimate of WACC should be used for price setting purposes as Airways has a statutory duty to ensure the necessary investment is made to provide ANS services, implying incentives to invest are unnecessary.

**Airways' response**

The Commission's Input Methodologies use the 75th percentile of WACC as the point estimate for pricing setting purposes. The Commission's reasoning for using this point estimate rather than the mid-point is recognition of the potential of error in the WACC estimation method and the asymmetrical economic effects of such error; that is the economic effects of setting prices too low (and thereby dis-incentivising investment and eroding the quality of service) is perceived by the Commission to be greater than the effects of setting prices too high (and thereby having prices slightly higher than they should be).

Some submitters suggested that Airways' statutory obligation to provide some of the ANS services implies no need for incentives on Airways to invest and improve services. This view is inconsistent with Airways' statutory obligation under the State Owned Enterprise Act to operate as a successful business. Rather, Airways considers the Commission's reasoning for using the 75$^{th}$ percentile of its WACC estimate for pricing purposes are just as relevant to Airways as it is for regulated providers.

Airways agrees with the Commission's views on the potential for error in estimating WACC and the asymmetrical economic effects of such error. Airways has therefore adopted the 75th percentile of the WACC distribution for its estimate of WACC.

## Summary

Table 1 sets out Airways' lower and upper parameter estimates for WACC and the resulting WACC range, of 7.8% to 8.9%.

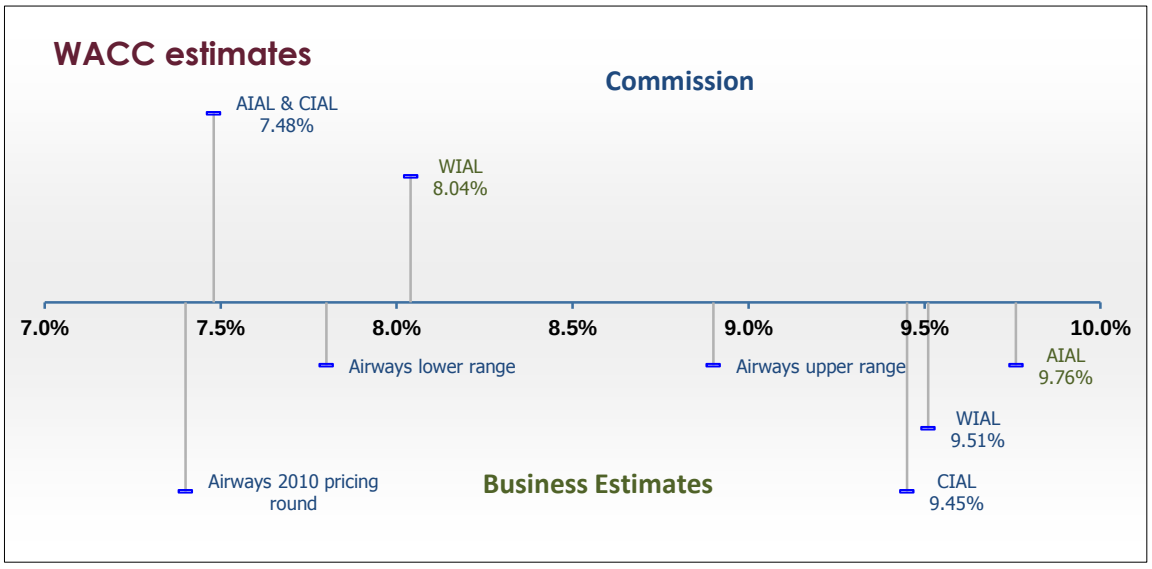
**Table 1: WACC estimates**

| Parameter | Lower bound | Upper bound |
|---|---|---|
| Asset beta | 0.6 | 0.6 |
| Market risk premium | 7% | 7.5% |
| Risk free rate | 2.68% | 3.6% |
| Debt premium | 1.86% | 2.05% |
| Debt issuance costs | 0.35% | 0.35% |
| Leverage | 44% | 44% |
| Choice of point estimate | 75$^{th}$ percentile | 75$^{th}$ percentile |
| **WACC estimate** | **7.8%** | **8.9%** |

## Reasonableness check

It is useful to compare Airways' estimated WACC range with other WACC estimates derived for airport businesses by the Commission using its Input Methodologies (using its 75th percentile estimate) and the WACC estimates used by the airports for pricing setting purposes. Table 2 sets out these comparisons and includes Airway's WACC range of 7.8% to 8.9%.

**Table 2: WACC estimates by the Commission and by businesses**




The differences in the WACC estimates for the airports reflect that they were undertaken at different points in time, not that the method or asset beta are different.

Differences in the WACC values for airports in the second row reflect differences in a number of the parameters in the WACC calculation, due to the various businesses taking slightly different positions on some parameters.

Airways considers this reasonableness check supports the WACC range Airways has adopted, as it places Airways' WACC range within the range of airport WACCs estimated by the Commission and by the airport businesses themselves. Airways operates in a similar market environment as airports and it would expect Airways' WACC to be similar to that of airports.

## 7.2 Appendix 2: Revised capital plans

### Value protecting lifecycle replacement of core assets

**Table 3: Major lifecycle replacements**

| Service | 13/14 | 14/15 | 15/16 | Total |
|---|---|---|---|---|
| **Aerodrome Services** | **9.6** | **9.0** | **3.8** | **22.4** |
| Control tower - Wellington | 5.1 | 5.1 | | 10.2 |
| AFL cable replacement - Woodbourne | 0.5 | | | 0.5 |
| Com cable network lifecycle - Wellington | | 0.5 | | 0.5 |
| Com cable network lifecycle - Christchurch | | 0.5 | | 0.5 |
| Other <$500k | 4.0 | 2.9 | 3.8 | 10.7 |
| **Approach Services** | **0.6** | **0.9** | **0.5** | **2.0** |
| Other <$500k | 0.6 | 0.9 | 0.5 | 2.0 |
| **En-route Service (Domestic)** | **4.0** | **3.7** | **2.9** | **10.6** |
| VOR/DME upgrade | 2.5 | 2.6 | 2.6 | 7.7 |
| Barigo secondary barometer replacement | 0.5 | | | 0.5 |
| Other <$500k | 1.0 | 1.1 | 0.3 | 2.4 |
| **En-route Service (Oceanic)** | **0.9** | **1.0** | **0.9** | **2.8** |
| Other <$500k | 0.9 | 1.0 | 0.9 | 2.8 |
| **Other** | **14.3** | **10.3** | **5.4** | **30.0** |
| MUX lifecycle refresh | 3.1 | 3.0 | 0.8 | 6.9 |
| Financial system upgrade | 1.9 | 1.1 | 1.2 | 4.2 |
| Earthquake structural repairs | 1.6 | 1.5 | | 3.1 |
| MIS infrastructure servers | 0.9 | 0.8 | 0.8 | 2.5 |
| AIS Replacement | 0.8 | 0.2 | 0.2 | 1.2 |
| Rostering solution | 0.9 | | | 0.9 |
| Other <$500k | 5.1 | 3.7 | 2.4 | 11.2 |
| **Total** | **29.4** | **24.9** | **13.5** | **67.8** |

## Value adding Service Enhancements

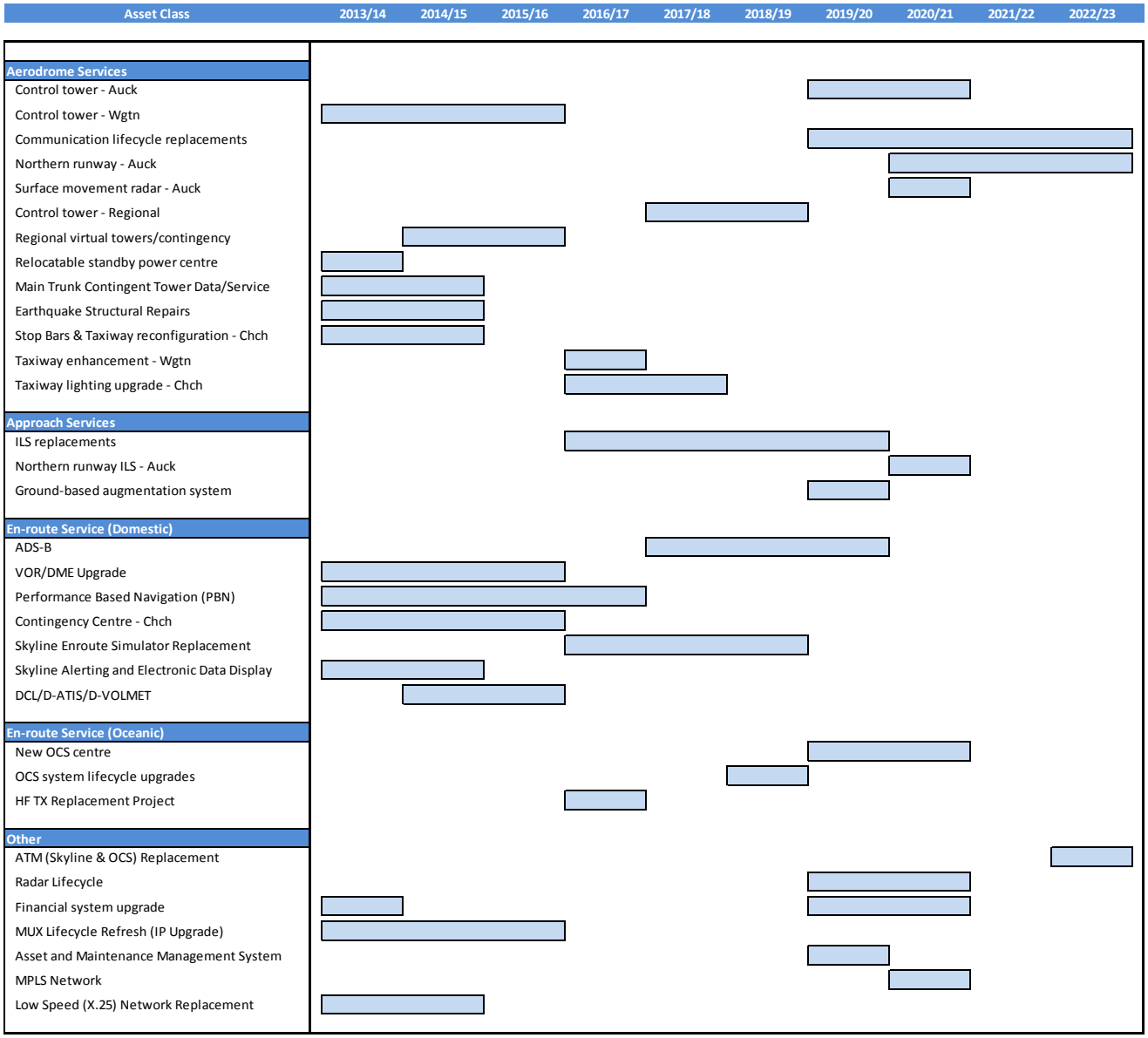
**Table 4: Value-adding asset investment programme initiatives**

| Asset class | 13/14 | 14/15 | 15/16 | Total | Value added |
|---|---|---|---|---|---|
| **Aerodrome services** | **3.2** | **2.9** | **1.7** | **7.8** | |
| Regional virtual towers/contingency | 0.7 | 2.1 | 1.0 | 3.8 | Low cost contingency tower alternative (in the event of a natural disaster) and a potential alternative to current tower operations. |
| Stop bars and taxiway reconfigure - Christchurch | 0.3 | 0.8 | 0.2 | 1.3 | Improved taxiway efficiency and further protection against runway incursions. |
| Relocatable standby power centre | 1.2 | | | 1.2 | Ensuring service continuity. |
| Runway Visual Range (RVR) equipment - Christchurch | 1.0 | | | 1.0 | Increase ability to operate in poor weather. |
| Runway Guard Lights - Wellington | | | 0.5 | 0.5 | Safety enhancement with increased runway protection. |
| **En-route Service (Domestic)** | **1.4** | **2.4** | **1.8** | **5.6** | |
| Performance Based Navigation (PBN) | 1.4 | 1.5 | 1.2 | 4.1 | Reduced track distances and/or segregation of traffic flows. Safety benefits from improved stability of flight operations. Delivering airlines reduced delays times and significant fuel savings. |
| DCL/D-ATIS/D-VOLMET | | 0.9 | 0.6 | 1.5 | Improving the delivery of information to the aircraft cockpit. |
| **Other** | **1.2** | **2.6** | **2.5** | **6.3** | |
| Christchurch contingency centre | 0.5 | 2.0 | 2.5 | 5.0 | Ensuring service continuity in the event of a natural disaster. |
| Skyline alerting and electronic data display (replacing paper files) | 0.7 | 0.6 | | 1.3 | Improving the delivery of information to air traffic controller, ensuring fast, consistent and up-to-date information. This will improve an air traffic controller's operational efficiency. |
| **Total** | **5.8** | **7.9** | **6.0** | **19.7** | |

### Table 5: Forecast capital expenditure

| | 13/14 | 14/15 | 15/16 | 16/17 | 17/18 | 18/19 | 19/20 | 20/21 | 21/22 | 22/23 |
|---|---|---|---|---|---|---|---|---|---|---|
| Lifecycle replacements | $29m | $25m | $14m | $27m | $26m | $34m | $29m | $27m | $9m | $0m |
| Value-adding assets | $6m | $8m | $6m | $1m | $0m | $6m | $14m | $5m | $2m | $6m |
| **Total capital expenditure** | **$35m** | **$33m** | **$20m** | **$28m** | **$26m** | **$40m** | **$43m** | **$32m** | **$11m** | **$6m** |

### Table 6: major capital programmes



## 7.3 Appendix 3: Example price calculations

This appendix provides price comparison tables for each service. The comparison tables compare current prices with the proposed prices for the 2013-2014 year.

**Example 1: Wellington to Auckland by Cessna 208**

| | |
|---|---|
| Domestic IFR Flight 2,000-5,000kgs Aircraft | |
| Route: Wellington (NZWN) to Auckland (NZAA) | |
| Aircraft type: C208 (Cessna 208) Weight (kgs): 3,628 | |
| Chargeable distance (CD): 208 | |
| Total charge: ANS charge + GST | |
| Charge type | Proposed Price |
| (a) Aerodrome service charge | MAX(10.35,13.50*(3.628/5) = $10.35 |
| (b) Approach service charge | MAX(5.15,20.65*(3.628/5)) = $14.98 |
| (c) En-route domestic charge | MAX(6.00,6.00*208/100) = $12.48 |
| **Total charge +GST** | **37.81 + 5.67 = $43.48** |

**Example 2: Auckland to Christchurch by ATR72**

| | |
|---|---|
| Domestic IFR Flight 5,000- 30,000kgs Aircraft | |
| Route: Auckland (NZAA) to Christchurch (NZCH) | |
| Aircraft type: AT72 (Aerospatiale ATR72) Weight (kgs): 22,800 | |
| Chargeable distance (CD): 350 | |
| Total charge: ANS charge + GST | |
| Charge type | Proposed Price |
| (a) Aerodrome service charge | 13.50+6.00*(22.8-5) = $120.30 |
| (b) Approach service charge | 20.65+7.99*(22.8-5) = $162.87 |
| (c) En-route domestic charge | (6.00+2.64*(22.8-5))*350/100 = $185.47 |
| **Total charge +GST** | **468.64 + 70.30 = $538.94** |

**Example 3: Christchurch to Wellington by Boeing 737-300**

| | |
|---|---|
| Domestic IFR Flight 30,000kgs+ Aircraft | |
| Route: Christchurch (NZCH) to Wellington (NZWN) | |
| Aircraft type: B733 (Boeing 737-300) Weight (kgs): 68,038 | |
| Chargeable distance (CD): 113 | |
| Total charge: ANS charge + GST | |
| Charge type | Proposed Price |
| (a) Aerodrome service charge | 13.50+4.99*5*SQRT(68.038-5) = $211.59 |
| (b) Approach service charge | 20.65+7.99*5*SQRT(68.038-5) = $337.84 |
| (c) En-route domestic charge | (6.00+2.64*5*SQRT(68.038-5))*1.13 = $125.21 |
| **Total charge +GST** | **674.64 + 101.20 = $775.84** |

**Example 4: Singapore to Auckland by Boeing 747-400**

| | |
|---|---|
| International flight landing at a New Zealand airport 30,000kgs+ Aircraft | |
| Route: Singapore (WSSS) to Auckland (NZAA) | |
| Aircraft type: B744 (Boeing 747-400) Weight (kgs): 396,893 | |
| Oceanic chargeable distance (OCD): 423 | |
| Total charge: ANS charge + GST | |
| Charge type | Proposed Price |
| (a) Aerodrome service charge | 13.50+3.68*5*SQRT(396.893-5) = $377.75 |
| (b) Approach service charge | 20.65+(7.99+0.40)*5*SQRT(396.893-5) = $851.10 |
| (c) En-route domestic charge - fixed | (6.00+2.64*5*SQRT(396.893-5)*1.5 = $400.97 |
| (d) En-route oceanic charge | (6.00+0.80*5*SQRT(396.893-5))*4.23 = $360.33 |
| **Total charge +GST** | **1,990.15 + 298.52 = $2,288.67** |

**Example 5: Los Angeles to Sydney by Boeing 747-400**

| | |
|---|---|
| International flight overflying New Zealand controlled airspace 30,000 kgs + Aircraft | |
| Route: Los Angeles (KLAX) to Sydney (YSSY) | |
| Aircraft type: B744 (Boeing 747-400) Weight (kgs): 396,893 | |
| Oceanic Chargeable Distance (OCD): 1037 | |
| Total charge: ANS charge | |
| Charge type | Proposed Price |
| (d) En-route oceanic charge | (6.00+0.80*5*SQRT(396.893-5))*1037/100 = $883.37 |
| **Total charge = (d)** | **$883.37** |

## 7.4 Appendix 4: Prices for selected weights

This appendix provides prices for a range of different weights. The tables provide a comparison between current prices (labelled 2012/13) and prices for the 13/14 year (labelled 2013/14).

### Aerodrome charges (part 1 of 3)

| | Auckland | | | Christchurch | | | Wellington | | | Queenstown | | | Dunedin | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aircraft Weight (kg) | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference |
| 1,000 | 10 | 10 | 0 | 10 | 10 | 0 | 10 | 10 | 0 | 8 | 7 | (0) | 8 | 7 | (0) |
| 2,000 | 7 | 10 | 3 | 9 | 10 | 1 | 9 | 10 | 1 | 7 | 7 | 1 | 7 | 7 | 1 |
| 3,000 | 8 | 10 | 2 | 10 | 10 | 0 | 10 | 10 | 0 | 9 | 8 | (1) | 9 | 8 | (1) |
| 4,000 | 9 | 11 | 2 | 11 | 11 | (1) | 11 | 11 | (1) | 11 | 11 | (0) | 11 | 11 | (0) |
| 5,000 | 10 | 14 | 4 | 12 | 14 | 1 | 12 | 14 | 1 | 14 | 14 | (0) | 14 | 14 | (0) |
| 6,000 | 7 | 17 | 10 | 12 | 20 | 8 | 11 | 18 | 7 | 23 | 29 | 6 | 21 | 29 | 9 |
| 7,000 | 8 | 21 | 13 | 13 | 26 | 13 | 12 | 23 | 12 | 27 | 45 | 18 | 24 | 45 | 21 |
| 8,000 | 8 | 25 | 16 | 14 | 32 | 18 | 13 | 28 | 16 | 30 | 60 | 30 | 27 | 61 | 34 |
| 9,000 | 9 | 28 | 19 | 15 | 38 | 23 | 14 | 33 | 20 | 33 | 76 | 43 | 30 | 77 | 47 |
| 10,000 | 9 | 32 | 22 | 16 | 44 | 28 | 15 | 38 | 24 | 37 | 92 | 55 | 33 | 93 | 60 |
| 12,000 | 11 | 39 | 29 | 18 | 56 | 38 | 16 | 48 | 32 | 44 | 123 | 79 | 40 | 125 | 86 |
| 14,000 | 12 | 47 | 35 | 20 | 68 | 48 | 18 | 58 | 40 | 51 | 154 | 104 | 46 | 157 | 111 |
| 16,000 | 13 | 54 | 41 | 21 | 80 | 58 | 20 | 68 | 48 | 57 | 186 | 128 | 52 | 189 | 137 |
| 18,000 | 14 | 61 | 47 | 23 | 92 | 68 | 22 | 78 | 57 | 64 | 217 | 153 | 58 | 221 | 163 |
| 20,000 | 15 | 69 | 53 | 25 | 104 | 78 | 24 | 88 | 65 | 71 | 248 | 177 | 65 | 253 | 189 |
| 22,000 | 16 | 76 | 60 | 27 | 116 | 88 | 25 | 98 | 73 | 78 | 279 | 201 | 71 | 285 | 214 |
| 24,000 | 18 | 83 | 66 | 29 | 128 | 98 | 27 | 108 | 81 | 85 | 311 | 226 | 77 | 317 | 240 |
| 26,000 | 19 | 91 | 72 | 31 | 140 | 108 | 29 | 118 | 89 | 92 | 342 | 250 | 83 | 349 | 266 |
| 28,000 | 20 | 98 | 78 | 33 | 152 | 119 | 31 | 128 | 97 | 99 | 373 | 275 | 89 | 381 | 292 |
| 30,000 | 21 | 106 | 84 | 35 | 164 | 129 | 33 | 138 | 106 | 105 | 405 | 299 | 96 | 413 | 317 |
| 40,000 | 24 | 122 | 99 | 39 | 191 | 152 | 36 | 161 | 125 | 121 | 476 | 355 | 110 | 486 | 377 |
| 50,000 | 26 | 137 | 111 | 43 | 215 | 172 | 40 | 181 | 141 | 135 | 538 | 403 | 122 | 549 | 427 |
| 60,000 | 28 | 150 | 122 | 47 | 236 | 189 | 43 | 199 | 155 | 148 | 593 | 446 | 133 | 606 | 473 |
| 70,000 | 30 | 162 | 132 | 50 | 255 | 206 | 46 | 215 | 169 | 159 | 644 | 485 | 144 | 658 | 514 |
| 80,000 | 32 | 173 | 141 | 53 | 273 | 221 | 49 | 230 | 181 | 170 | 691 | 521 | 153 | 705 | 552 |
| 90,000 | 33 | 183 | 150 | 56 | 290 | 235 | 51 | 244 | 192 | 180 | 734 | 555 | 162 | 750 | 588 |
| 100,000 | 35 | 193 | 158 | 58 | 306 | 248 | 54 | 257 | 203 | 189 | 776 | 587 | 171 | 792 | 621 |
| 110,000 | 36 | 202 | 166 | 61 | 321 | 260 | 56 | 269 | 213 | 198 | 815 | 617 | 179 | 832 | 653 |
| 120,000 | 38 | 211 | 173 | 63 | 335 | 272 | 58 | 281 | 223 | 207 | 852 | 646 | 187 | 870 | 684 |
| 130,000 | 39 | 219 | 180 | 65 | 349 | 284 | 61 | 292 | 232 | 215 | 888 | 673 | 194 | 907 | 713 |
| 140,000 | 41 | 227 | 187 | 68 | 362 | 295 | 63 | 303 | 241 | 223 | 922 | 700 | 201 | 942 | 741 |
| 150,000 | 42 | 235 | 193 | 70 | 375 | 305 | 64 | 314 | 249 | 230 | 955 | 725 | 208 | 976 | 768 |
| 160,000 | 43 | 243 | 200 | 72 | 387 | 315 | 66 | 324 | 258 | 237 | 987 | 750 | 215 | 1,008 | 794 |
| 170,000 | 44 | 250 | 206 | 74 | 399 | 325 | 68 | 334 | 266 | 245 | 1,018 | 773 | 221 | 1,040 | 819 |
| 180,000 | 45 | 257 | 212 | 76 | 410 | 335 | 70 | 344 | 274 | 251 | 1,048 | 797 | 227 | 1,070 | 843 |
| 190,000 | 46 | 264 | 217 | 77 | 422 | 344 | 72 | 353 | 281 | 258 | 1,077 | 819 | 233 | 1,100 | 867 |
| 200,000 | 48 | 270 | 223 | 79 | 432 | 353 | 73 | 362 | 288 | 265 | 1,106 | 841 | 239 | 1,129 | 890 |
| 250,000 | 53 | 302 | 249 | 88 | 483 | 395 | 81 | 404 | 323 | 295 | 1,238 | 942 | 267 | 1,264 | 997 |
| 300,000 | 57 | 330 | 272 | 95 | 529 | 433 | 88 | 442 | 354 | 323 | 1,357 | 1,034 | 292 | 1,386 | 1,094 |
| 350,000 | 61 | 355 | 294 | 102 | 571 | 468 | 95 | 477 | 382 | 348 | 1,466 | 1,118 | 314 | 1,498 | 1,183 |
| 400,000 | 65 | 379 | 314 | 109 | 610 | 501 | 101 | 509 | 408 | 371 | 1,568 | 1,196 | 336 | 1,601 | 1,266 |
| 450,000 | 69 | 402 | 333 | 115 | 646 | 531 | 107 | 540 | 433 | 393 | 1,663 | 1,270 | 356 | 1,699 | 1,343 |
| 500,000 | 73 | 423 | 350 | 121 | 681 | 560 | 112 | 569 | 457 | 414 | 1,753 | 1,339 | 374 | 1,791 | 1,417 |
| 550,000 | 76 | 443 | 367 | 127 | 714 | 587 | 117 | 596 | 479 | 434 | 1,839 | 1,405 | 392 | 1,879 | 1,486 |
| 600,000 | 79 | 462 | 383 | 132 | 745 | 613 | 122 | 622 | 500 | 453 | 1,921 | 1,468 | 409 | 1,962 | 1,553 |

## Aerodrome charges (part 2 of 3)

| | Gisborne | | | Hamilton | | | Invercargill | | | Napier | | | Nelson | | | New Plymouth | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aircraft Weight (kg) | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference |
| 1,000 | 8 | 7 | (0) | 8 | 7 | (0) | 8 | 7 | (0) | 8 | 7 | (0) | 8 | 7 | (0) | 8 | 7 | (0) |
| 2,000 | 7 | 7 | 1 | 7 | 7 | 1 | 7 | 7 | 1 | 7 | 7 | 1 | 7 | 7 | 1 | 7 | 7 | 1 |
| 3,000 | 9 | 8 | (1) | 9 | 8 | (1) | 9 | 8 | (1) | 9 | 8 | (1) | 9 | 8 | (1) | 9 | 8 | (1) |
| 4,000 | 11 | 11 | (0) | 11 | 11 | (0) | 11 | 11 | (0) | 11 | 11 | (0) | 11 | 11 | (0) | 11 | 11 | (0) |
| 5,000 | 14 | 14 | (0) | 14 | 14 | (0) | 14 | 14 | (0) | 14 | 14 | (0) | 14 | 14 | (0) | 14 | 14 | (0) |
| 6,000 | 116 | 29 | (87) | 38 | 31 | (7) | 64 | 29 | (35) | 43 | 29 | (14) | 26 | 31 | 5 | 45 | 29 | (15) |
| 7,000 | 134 | 45 | (88) | 44 | 49 | 5 | 73 | 45 | (28) | 50 | 45 | (4) | 30 | 49 | 19 | 51 | 45 | (6) |
| 8,000 | 151 | 61 | (89) | 50 | 67 | 17 | 83 | 61 | (22) | 56 | 61 | 5 | 34 | 67 | 32 | 58 | 61 | 3 |
| 9,000 | 168 | 77 | (91) | 55 | 84 | 29 | 92 | 77 | (15) | 63 | 77 | 15 | 38 | 84 | 46 | 65 | 77 | 13 |
| 10,000 | 185 | 93 | (92) | 61 | 102 | 41 | 102 | 93 | (9) | 69 | 93 | 24 | 42 | 102 | 60 | 71 | 93 | 22 |
| 12,000 | 220 | 125 | (94) | 72 | 138 | 65 | 121 | 125 | 4 | 82 | 125 | 43 | 50 | 138 | 88 | 85 | 125 | 41 |
| 14,000 | 254 | 157 | (97) | 84 | 173 | 89 | 140 | 157 | 17 | 95 | 157 | 62 | 58 | 173 | 115 | 98 | 157 | 59 |
| 16,000 | 289 | 189 | (99) | 95 | 209 | 114 | 159 | 189 | 30 | 108 | 189 | 81 | 66 | 209 | 143 | 111 | 189 | 78 |
| 18,000 | 323 | 221 | (102) | 106 | 244 | 138 | 178 | 221 | 43 | 121 | 221 | 101 | 73 | 244 | 171 | 125 | 221 | 97 |
| 20,000 | 358 | 253 | (104) | 118 | 279 | 162 | 197 | 253 | 56 | 134 | 253 | 120 | 81 | 279 | 198 | 138 | 253 | 115 |
| 22,000 | 392 | 285 | (107) | 129 | 315 | 186 | 216 | 285 | 69 | 146 | 285 | 139 | 89 | 315 | 226 | 151 | 285 | 134 |
| 24,000 | 426 | 317 | (109) | 140 | 350 | 210 | 235 | 317 | 82 | 159 | 317 | 158 | 97 | 350 | 253 | 164 | 317 | 153 |
| 26,000 | 461 | 349 | (112) | 152 | 386 | 234 | 254 | 349 | 95 | 172 | 349 | 177 | 105 | 386 | 281 | 178 | 349 | 171 |
| 28,000 | 495 | 381 | (114) | 163 | 421 | 258 | 273 | 381 | 108 | 185 | 381 | 196 | 113 | 421 | 309 | 191 | 381 | 190 |
| 30,000 | 530 | 413 | (117) | 174 | 457 | 282 | 292 | 413 | 121 | 198 | 413 | 215 | 121 | 457 | 336 | 204 | 413 | 209 |
| 40,000 | 608 | 486 | (122) | 200 | 538 | 338 | 335 | 486 | 151 | 227 | 486 | 259 | 138 | 538 | 400 | 235 | 486 | 252 |
| 50,000 | 678 | 549 | (128) | 223 | 608 | 385 | 373 | 549 | 176 | 253 | 549 | 296 | 154 | 608 | 454 | 261 | 549 | 288 |
| 60,000 | 740 | 606 | (134) | 243 | 671 | 428 | 408 | 606 | 198 | 276 | 606 | 330 | 168 | 671 | 503 | 286 | 606 | 321 |
| 70,000 | 798 | 658 | (140) | 262 | 728 | 466 | 439 | 658 | 218 | 298 | 658 | 360 | 181 | 728 | 547 | 308 | 658 | 350 |
| 80,000 | 851 | 705 | (146) | 280 | 781 | 501 | 469 | 705 | 237 | 318 | 705 | 388 | 194 | 781 | 588 | 328 | 705 | 377 |
| 90,000 | 901 | 750 | (151) | 296 | 831 | 535 | 496 | 750 | 254 | 336 | 750 | 414 | 205 | 831 | 626 | 347 | 750 | 403 |
| 100,000 | 948 | 792 | (156) | 312 | 878 | 566 | 522 | 792 | 270 | 354 | 792 | 438 | 216 | 878 | 662 | 366 | 792 | 427 |
| 110,000 | 993 | 832 | (161) | 327 | 922 | 595 | 547 | 832 | 285 | 371 | 832 | 461 | 226 | 922 | 696 | 383 | 832 | 449 |
| 120,000 | 1,036 | 870 | (166) | 341 | 964 | 624 | 571 | 870 | 300 | 387 | 870 | 484 | 236 | 964 | 729 | 399 | 870 | 471 |
| 130,000 | 1,077 | 907 | (170) | 354 | 1,005 | 651 | 593 | 907 | 314 | 402 | 907 | 505 | 245 | 1,005 | 760 | 415 | 907 | 491 |
| 140,000 | 1,117 | 942 | (175) | 367 | 1,044 | 676 | 615 | 942 | 327 | 417 | 942 | 525 | 254 | 1,044 | 790 | 431 | 942 | 511 |
| 150,000 | 1,155 | 976 | (179) | 380 | 1,081 | 701 | 636 | 976 | 340 | 431 | 976 | 545 | 263 | 1,081 | 818 | 445 | 976 | 530 |
| 160,000 | 1,191 | 1,008 | (183) | 392 | 1,117 | 726 | 656 | 1,008 | 352 | 445 | 1,008 | 564 | 271 | 1,117 | 846 | 459 | 1,008 | 549 |
| 170,000 | 1,227 | 1,040 | (187) | 403 | 1,152 | 749 | 676 | 1,040 | 364 | 458 | 1,040 | 582 | 279 | 1,152 | 873 | 473 | 1,040 | 567 |
| 180,000 | 1,262 | 1,070 | (191) | 415 | 1,186 | 771 | 695 | 1,070 | 376 | 471 | 1,070 | 600 | 287 | 1,186 | 899 | 486 | 1,070 | 584 |
| 190,000 | 1,295 | 1,100 | (195) | 426 | 1,219 | 793 | 713 | 1,100 | 387 | 483 | 1,100 | 617 | 295 | 1,219 | 925 | 499 | 1,100 | 601 |
| 200,000 | 1,328 | 1,129 | (199) | 437 | 1,251 | 815 | 731 | 1,129 | 398 | 496 | 1,129 | 634 | 302 | 1,251 | 949 | 512 | 1,129 | 617 |
| 250,000 | 1,481 | 1,264 | (216) | 487 | 1,401 | 914 | 815 | 1,264 | 449 | 553 | 1,264 | 711 | 337 | 1,401 | 1,064 | 571 | 1,264 | 693 |
| 300,000 | 1,618 | 1,386 | (233) | 532 | 1,536 | 1,004 | 891 | 1,386 | 495 | 604 | 1,386 | 782 | 368 | 1,536 | 1,168 | 624 | 1,386 | 762 |
| 350,000 | 1,745 | 1,498 | (248) | 574 | 1,660 | 1,086 | 961 | 1,498 | 537 | 651 | 1,498 | 846 | 397 | 1,660 | 1,263 | 673 | 1,498 | 825 |
| 400,000 | 1,863 | 1,601 | (262) | 613 | 1,775 | 1,163 | 1,026 | 1,601 | 576 | 695 | 1,601 | 906 | 424 | 1,775 | 1,352 | 718 | 1,601 | 883 |
| 450,000 | 1,974 | 1,699 | (275) | 649 | 1,884 | 1,235 | 1,087 | 1,699 | 612 | 737 | 1,699 | 962 | 449 | 1,884 | 1,435 | 761 | 1,699 | 938 |
| 500,000 | 2,078 | 1,791 | (287) | 683 | 1,986 | 1,303 | 1,145 | 1,791 | 647 | 776 | 1,791 | 1,015 | 473 | 1,986 | 1,513 | 801 | 1,791 | 990 |
| 550,000 | 2,178 | 1,879 | (299) | 716 | 2,083 | 1,367 | 1,199 | 1,879 | 679 | 813 | 1,879 | 1,066 | 495 | 2,083 | 1,588 | 840 | 1,879 | 1,039 |
| 600,000 | 2,273 | 1,962 | (310) | 747 | 2,176 | 1,429 | 1,252 | 1,962 | 711 | 848 | 1,962 | 1,114 | 517 | 2,176 | 1,659 | 876 | 1,962 | 1,086 |

## Aerodrome charges (part 3 of 3)

| | Palmerston Nth | | | Rotorua | | | Tauranga | | | Woodbourne | | | Kapiti | | | Milford | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aircraft Weight (kg) | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference |
| 1,000 | 8 | 7 | (0) | 8 | 7 | (0) | 8 | 7 | (0) | 8 | 7 | (0) | 8 | 7 | (0) | 22 | 46 | 24 |
| 2,000 | 7 | 7 | 1 | 7 | 7 | 1 | 7 | 7 | 1 | 7 | 7 | 1 | 7 | 7 | 1 | 19 | 51 | 32 |
| 3,000 | 9 | 8 | (1) | 9 | 8 | (1) | 9 | 8 | (1) | 9 | 8 | (1) | 9 | 8 | (1) | 24 | 76 | 52 |
| 4,000 | 11 | 11 | (0) | 11 | 11 | (0) | 11 | 11 | (0) | 11 | 11 | (0) | 11 | 11 | (0) | 29 | 101 | 72 |
| 5,000 | 14 | 14 | (0) | 14 | 14 | (0) | 14 | 14 | (0) | 14 | 14 | (0) | 14 | 14 | (0) | 35 | 127 | 92 |
| 6,000 | 27 | 31 | 4 | 31 | 29 | (2) | 75 | 31 | (44) | 57 | 29 | (27) | 116 | 48 | (68) | | | |
| 7,000 | 31 | 49 | 18 | 36 | 45 | 9 | 87 | 49 | (38) | 65 | 45 | (19) | 134 | 83 | (51) | | | |
| 8,000 | 35 | 67 | 32 | 41 | 61 | 21 | 98 | 67 | (31) | 73 | 61 | (12) | 151 | 117 | (34) | | | |
| 9,000 | 39 | 84 | 46 | 45 | 77 | 32 | 109 | 84 | (24) | 82 | 77 | (4) | 168 | 152 | (16) | | | |
| 10,000 | 43 | 102 | 59 | 50 | 93 | 43 | 120 | 102 | (18) | 90 | 93 | 3 | 185 | 186 | 1 | | | |
| 12,000 | 51 | 138 | 87 | 59 | 125 | 66 | 142 | 138 | (5) | 107 | 125 | 19 | 220 | 256 | 36 | | | |
| 14,000 | 59 | 173 | 114 | 69 | 157 | 89 | 165 | 173 | 8 | 123 | 157 | 34 | 254 | 325 | 71 | | | |
| 16,000 | 67 | 209 | 142 | 78 | 189 | 111 | 187 | 209 | 22 | 140 | 189 | 49 | 289 | 394 | 105 | | | |
| 18,000 | 74 | 244 | 170 | 87 | 221 | 134 | 209 | 244 | 35 | 157 | 221 | 64 | 323 | 463 | 140 | | | |
| 20,000 | 82 | 279 | 197 | 97 | 253 | 157 | 232 | 279 | 48 | 174 | 253 | 80 | 358 | 532 | 175 | | | |
| 22,000 | 90 | 315 | 225 | 106 | 285 | 179 | 254 | 315 | 61 | 190 | 285 | 95 | 392 | 601 | 209 | | | |
| 24,000 | 98 | 350 | 252 | 115 | 317 | 202 | 276 | 350 | 74 | 207 | 317 | 110 | 426 | 671 | 244 | | | |
| 26,000 | 106 | 386 | 280 | 124 | 349 | 225 | 299 | 386 | 87 | 224 | 349 | 125 | 461 | 740 | 279 | | | |
| 28,000 | 114 | 421 | 307 | 134 | 381 | 247 | 321 | 421 | 100 | 241 | 381 | 140 | 495 | 809 | 313 | | | |
| 30,000 | 122 | 457 | 335 | 143 | 413 | 270 | 343 | 457 | 114 | 257 | 413 | 156 | 530 | 878 | 348 | | | |
| 40,000 | 140 | 538 | 398 | 165 | 486 | 322 | 394 | 538 | 144 | 296 | 486 | 190 | 608 | 1,036 | 428 | | | |
| 50,000 | 156 | 608 | 452 | 183 | 549 | 366 | 439 | 608 | 169 | 330 | 549 | 220 | 678 | 1,173 | 495 | | | |
| 60,000 | 171 | 671 | 500 | 200 | 606 | 406 | 480 | 671 | 191 | 360 | 606 | 246 | 740 | 1,296 | 555 | | | |
| 70,000 | 184 | 728 | 544 | 216 | 658 | 442 | 517 | 728 | 211 | 388 | 658 | 270 | 798 | 1,407 | 610 | | | |
| 80,000 | 196 | 781 | 585 | 230 | 705 | 475 | 552 | 781 | 230 | 414 | 705 | 292 | 851 | 1,511 | 660 | | | |
| 90,000 | 208 | 831 | 623 | 244 | 750 | 506 | 584 | 831 | 247 | 438 | 750 | 312 | 901 | 1,608 | 706 | | | |
| 100,000 | 219 | 878 | 659 | 257 | 792 | 536 | 614 | 878 | 263 | 461 | 792 | 331 | 948 | 1,699 | 750 | | | |
| 110,000 | 229 | 922 | 693 | 269 | 832 | 564 | 644 | 922 | 278 | 483 | 832 | 349 | 993 | 1,785 | 792 | | | |
| 120,000 | 239 | 964 | 725 | 280 | 870 | 590 | 671 | 964 | 293 | 504 | 870 | 367 | 1,036 | 1,868 | 832 | | | |
| 130,000 | 249 | 1,005 | 756 | 291 | 907 | 615 | 698 | 1,005 | 307 | 524 | 907 | 383 | 1,077 | 1,947 | 870 | | | |
| 140,000 | 258 | 1,044 | 786 | 302 | 942 | 640 | 723 | 1,044 | 320 | 543 | 942 | 399 | 1,117 | 2,022 | 906 | | | |
| 150,000 | 266 | 1,081 | 814 | 312 | 976 | 663 | 748 | 1,081 | 333 | 561 | 976 | 414 | 1,155 | 2,095 | 941 | | | |
| 160,000 | 275 | 1,117 | 842 | 322 | 1,008 | 686 | 772 | 1,117 | 345 | 579 | 1,008 | 429 | 1,191 | 2,166 | 975 | | | |
| 170,000 | 283 | 1,152 | 869 | 332 | 1,040 | 708 | 795 | 1,152 | 357 | 597 | 1,040 | 443 | 1,227 | 2,234 | 1,007 | | | |
| 180,000 | 291 | 1,186 | 895 | 341 | 1,070 | 729 | 817 | 1,186 | 369 | 614 | 1,070 | 457 | 1,262 | 2,301 | 1,039 | | | |
| 190,000 | 299 | 1,219 | 920 | 350 | 1,100 | 750 | 839 | 1,219 | 380 | 630 | 1,100 | 470 | 1,295 | 2,365 | 1,070 | | | |
| 200,000 | 307 | 1,251 | 945 | 359 | 1,129 | 770 | 860 | 1,251 | 391 | 646 | 1,129 | 483 | 1,328 | 2,428 | 1,100 | | | |
| 250,000 | 342 | 1,401 | 1,059 | 401 | 1,264 | 864 | 959 | 1,401 | 442 | 720 | 1,264 | 544 | 1,481 | 2,720 | 1,239 | | | |
| 300,000 | 374 | 1,536 | 1,163 | 438 | 1,386 | 948 | 1,049 | 1,536 | 487 | 787 | 1,386 | 599 | 1,618 | 2,983 | 1,365 | | | |
| 350,000 | 403 | 1,660 | 1,257 | 472 | 1,498 | 1,025 | 1,131 | 1,660 | 529 | 849 | 1,498 | 649 | 1,745 | 3,225 | 1,480 | | | |
| 400,000 | 430 | 1,775 | 1,345 | 504 | 1,601 | 1,097 | 1,207 | 1,775 | 568 | 906 | 1,601 | 695 | 1,863 | 3,450 | 1,587 | | | |
| 450,000 | 456 | 1,884 | 1,428 | 534 | 1,699 | 1,165 | 1,279 | 1,884 | 605 | 960 | 1,699 | 739 | 1,974 | 3,661 | 1,687 | | | |
| 500,000 | 480 | 1,986 | 1,506 | 562 | 1,791 | 1,229 | 1,347 | 1,986 | 639 | 1,011 | 1,791 | 780 | 2,078 | 3,860 | 1,782 | | | |
| 550,000 | 503 | 2,083 | 1,580 | 589 | 1,879 | 1,290 | 1,411 | 2,083 | 672 | 1,059 | 1,879 | 820 | 2,178 | 4,050 | 1,872 | | | |
| 600,000 | 525 | 2,176 | 1,651 | 615 | 1,962 | 1,348 | 1,473 | 2,176 | 703 | 1,105 | 1,962 | 857 | 2,273 | 4,231 | 1,958 | | | |

## Approach charges

| | Auckland | | | Wgtn & Chch | | | Queenstown | | | Regional attended | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aircraft Weight (kg) | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference |
| 1,000 | 6 | 5 | (1) | 6 | 5 | (1) | 6 | 5 | (1) | 5 | 5 | 1 |
| 2,000 | 12 | 8 | (4) | 12 | 8 | (4) | 13 | 8 | (5) | 10 | 8 | (2) |
| 3,000 | 17 | 12 | (5) | 17 | 12 | (5) | 20 | 12 | (7) | 15 | 12 | (2) |
| 4,000 | 23 | 17 | (7) | 23 | 17 | (7) | 27 | 17 | (11) | 20 | 17 | (4) |
| 5,000 | 34 | 21 | (13) | 34 | 21 | (13) | 40 | 21 | (19) | 29 | 21 | (9) |
| 6,000 | 43 | 29 | (14) | 43 | 29 | (14) | 52 | 31 | (21) | 39 | 29 | (10) |
| 7,000 | 56 | 37 | (18) | 56 | 37 | (19) | 69 | 42 | (27) | 51 | 38 | (14) |
| 8,000 | 88 | 46 | (42) | 88 | 45 | (43) | 109 | 53 | (56) | 81 | 46 | (35) |
| 9,000 | 96 | 54 | (42) | 96 | 53 | (43) | 120 | 63 | (57) | 89 | 54 | (35) |
| 10,000 | 104 | 63 | (42) | 104 | 61 | (44) | 131 | 74 | (57) | 98 | 63 | (35) |
| 12,000 | 121 | 79 | (41) | 121 | 77 | (44) | 153 | 96 | (58) | 114 | 80 | (34) |
| 14,000 | 137 | 96 | (41) | 137 | 93 | (44) | 175 | 117 | (58) | 130 | 97 | (34) |
| 16,000 | 153 | 113 | (40) | 153 | 109 | (45) | 197 | 138 | (59) | 147 | 113 | (33) |
| 18,000 | 170 | 130 | (40) | 170 | 125 | (45) | 219 | 160 | (59) | 163 | 130 | (33) |
| 20,000 | 186 | 147 | (39) | 186 | 141 | (45) | 241 | 181 | (60) | 180 | 147 | (32) |
| 22,000 | 202 | 163 | (39) | 202 | 156 | (46) | 263 | 203 | (61) | 196 | 164 | (32) |
| 24,000 | 219 | 180 | (39) | 219 | 172 | (46) | 285 | 224 | (61) | 212 | 181 | (32) |
| 26,000 | 235 | 197 | (38) | 235 | 188 | (47) | 307 | 245 | (62) | 229 | 198 | (31) |
| 28,000 | 251 | 214 | (38) | 251 | 204 | (47) | 329 | 267 | (63) | 245 | 215 | (31) |
| 30,000 | 268 | 230 | (37) | 268 | 220 | (47) | 351 | 288 | (63) | 262 | 231 | (30) |
| 40,000 | 320 | 269 | (52) | 305 | 257 | (48) | 402 | 337 | (65) | 299 | 270 | (29) |
| 50,000 | 355 | 302 | (53) | 338 | 289 | (49) | 447 | 380 | (67) | 332 | 303 | (29) |
| 60,000 | 386 | 332 | (54) | 368 | 317 | (51) | 487 | 417 | (69) | 362 | 333 | (29) |
| 70,000 | 415 | 359 | (56) | 395 | 343 | (52) | 523 | 452 | (71) | 389 | 360 | (29) |
| 80,000 | 441 | 384 | (57) | 420 | 367 | (54) | 558 | 484 | (74) | 415 | 386 | (29) |
| 90,000 | 466 | 407 | (59) | 444 | 389 | (55) | 590 | 514 | (76) | 439 | 409 | (29) |
| 100,000 | 490 | 430 | (60) | 466 | 410 | (56) | 620 | 542 | (78) | 461 | 431 | (30) |
| 110,000 | 512 | 451 | (62) | 488 | 430 | (58) | 649 | 569 | (80) | 483 | 453 | (30) |
| 120,000 | 534 | 471 | (63) | 508 | 449 | (59) | 676 | 594 | (82) | 503 | 473 | (30) |
| 130,000 | 554 | 490 | (64) | 528 | 467 | (60) | 702 | 619 | (83) | 522 | 492 | (31) |
| 140,000 | 574 | 508 | (66) | 546 | 485 | (62) | 727 | 642 | (85) | 541 | 510 | (31) |
| 150,000 | 593 | 526 | (67) | 564 | 502 | (63) | 752 | 665 | (87) | 559 | 528 | (31) |
| 160,000 | 611 | 543 | (68) | 582 | 518 | (64) | 775 | 687 | (89) | 577 | 545 | (32) |
| 170,000 | 629 | 560 | (69) | 599 | 534 | (65) | 798 | 708 | (90) | 594 | 562 | (32) |
| 180,000 | 646 | 576 | (70) | 615 | 549 | (66) | 820 | 728 | (92) | 610 | 578 | (32) |
| 190,000 | 663 | 591 | (72) | 631 | 564 | (67) | 842 | 748 | (94) | 626 | 594 | (32) |
| 200,000 | 679 | 606 | (73) | 647 | 579 | (68) | 863 | 768 | (95) | 642 | 609 | (33) |
| 250,000 | 755 | 677 | (78) | 719 | 646 | (73) | 961 | 858 | (103) | 715 | 680 | (34) |
| 300,000 | 824 | 741 | (83) | 785 | 707 | (78) | 1,049 | 940 | (109) | 780 | 745 | (36) |
| 350,000 | 887 | 800 | (87) | 845 | 763 | (82) | 1,130 | 1,014 | (116) | 841 | 804 | (37) |
| 400,000 | 946 | 854 | (91) | 901 | 815 | (86) | 1,205 | 1,084 | (122) | 897 | 858 | (39) |
| 450,000 | 1,001 | 906 | (95) | 953 | 863 | (90) | 1,276 | 1,149 | (127) | 950 | 910 | (40) |
| 500,000 | 1,053 | 954 | (99) | 1,003 | 909 | (94) | 1,343 | 1,211 | (132) | 1,000 | 958 | (41) |
| 550,000 | 1,103 | 1,000 | (103) | 1,050 | 953 | (97) | 1,407 | 1,270 | (137) | 1,047 | 1,005 | (42) |
| 600,000 | 1,150 | 1,044 | (106) | 1,095 | 995 | (100) | 1,468 | 1,326 | (142) | 1,092 | 1,049 | (43) |

## Unattended charges (part 1 of 2)

| | Great Barrier | | | Hokitika | | | Kaitaia | | | Kerikeri | | | Oamaru | | | Kapiti | | | Taupo | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aircraft Weight (kg) | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference |
| 1,000 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 |
| 2,000 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 |
| 3,000 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 |
| 4,000 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 |
| 5,000 | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) |
| 6,000 | 28 | 32 | 4 | 28 | 28 | (1) | 28 | 27 | (1) | 28 | 20 | (9) | 28 | 32 | 4 | 28 | 26 | (3) | 28 | 28 | (0) |
| 7,000 | 38 | 46 | 8 | 38 | 38 | (0) | 38 | 37 | (1) | 38 | 22 | (17) | 38 | 46 | 8 | 38 | 34 | (4) | 38 | 38 | 0 |
| 8,000 | 61 | 60 | (1) | 61 | 48 | (13) | 61 | 47 | (15) | 61 | 23 | (38) | 61 | 60 | (1) | 61 | 42 | (20) | 61 | 48 | (13) |
| 9,000 | 69 | 75 | 6 | 69 | 58 | (10) | 69 | 56 | (12) | 69 | 25 | (43) | 69 | 75 | 6 | 69 | 50 | (19) | 69 | 59 | (10) |
| 10,000 | 76 | 89 | 13 | 76 | 68 | (7) | 76 | 66 | (10) | 76 | 27 | (48) | 76 | 89 | 13 | 76 | 58 | (18) | 76 | 69 | (7) |
| 11,000 | 83 | 103 | 20 | 83 | 78 | (4) | 83 | 76 | (7) | 83 | 29 | (53) | 83 | 103 | 20 | 83 | 66 | (17) | 83 | 79 | (4) |
| 12,000 | 90 | 117 | 28 | 90 | 88 | (1) | 90 | 85 | (4) | 90 | 31 | (59) | 90 | 117 | 28 | 90 | 74 | (16) | 90 | 89 | (0) |
| 13,000 | 97 | 131 | 35 | 97 | 99 | 2 | 97 | 95 | (2) | 97 | 33 | (64) | 97 | 131 | 35 | 97 | 82 | (15) | 97 | 99 | 3 |
| 14,000 | 104 | 146 | 42 | 104 | 109 | 5 | 104 | 105 | 1 | 104 | 35 | (69) | 104 | 146 | 42 | 104 | 90 | (14) | 104 | 110 | 6 |
| 15,000 | 111 | 160 | 49 | 111 | 119 | 8 | 111 | 114 | 4 | 111 | 37 | (74) | 111 | 160 | 49 | 111 | 98 | (12) | 111 | 120 | 9 |
| 16,000 | 118 | 174 | 56 | 118 | 129 | 11 | 118 | 124 | 6 | 118 | 39 | (79) | 118 | 174 | 56 | 118 | 106 | (11) | 118 | 130 | 12 |
| 17,000 | 125 | 188 | 63 | 125 | 139 | 14 | 125 | 134 | 9 | 125 | 41 | (84) | 125 | 188 | 63 | 125 | 114 | (10) | 125 | 140 | 15 |
| 18,000 | 132 | 202 | 70 | 132 | 149 | 17 | 132 | 143 | 11 | 132 | 42 | (89) | 132 | 202 | 70 | 132 | 122 | (9) | 132 | 150 | 18 |
| 19,000 | 139 | 217 | 78 | 139 | 159 | 20 | 139 | 153 | 14 | 139 | 44 | (95) | 139 | 217 | 78 | 139 | 130 | (8) | 139 | 161 | 22 |
| 20,000 | 146 | 231 | 85 | 146 | 169 | 23 | 146 | 163 | 17 | 146 | 46 | (100) | 146 | 231 | 85 | 146 | 139 | (7) | 146 | 171 | 25 |
| 21,000 | 153 | 245 | 92 | 153 | 179 | 26 | 153 | 172 | 19 | 153 | 48 | (105) | 153 | 245 | 92 | 153 | 147 | (6) | 153 | 181 | 28 |
| 22,000 | 160 | 259 | 99 | 160 | 189 | 29 | 160 | 182 | 22 | 160 | 50 | (110) | 160 | 259 | 99 | 160 | 155 | (5) | 160 | 191 | 31 |
| 23,000 | 167 | 273 | 106 | 167 | 200 | 32 | 167 | 191 | 24 | 167 | 52 | (115) | 167 | 273 | 106 | 167 | 163 | (4) | 167 | 201 | 34 |
| 24,000 | 174 | 288 | 113 | 174 | 210 | 36 | 174 | 201 | 27 | 174 | 54 | (120) | 174 | 288 | 113 | 174 | 171 | (3) | 174 | 212 | 37 |
| 25,000 | 181 | 302 | 121 | 181 | 220 | 39 | 181 | 211 | 30 | 181 | 56 | (125) | 181 | 302 | 121 | 181 | 179 | (2) | 181 | 222 | 41 |
| 26,000 | 188 | 316 | 128 | 188 | 230 | 42 | 188 | 220 | 32 | 188 | 58 | (131) | 188 | 316 | 128 | 188 | 187 | (1) | 188 | 232 | 44 |
| 27,000 | 195 | 330 | 135 | 195 | 240 | 45 | 195 | 230 | 35 | 195 | 60 | (136) | 195 | 330 | 135 | 195 | 195 | (0) | 195 | 242 | 47 |
| 28,000 | 202 | 344 | 142 | 202 | 250 | 48 | 202 | 240 | 37 | 202 | 61 | (141) | 202 | 344 | 142 | 202 | 203 | 1 | 202 | 252 | 50 |
| 29,000 | 209 | 359 | 149 | 209 | 260 | 51 | 209 | 249 | 40 | 209 | 63 | (146) | 209 | 359 | 149 | 209 | 211 | 2 | 209 | 263 | 53 |
| 30,000 | 216 | 373 | 156 | 216 | 270 | 54 | 216 | 259 | 43 | 216 | 65 | (151) | 216 | 373 | 156 | 216 | 219 | 3 | 216 | 273 | 56 |

## Unattended charges (part 2 of 2)

| | Timaru | | | Wairoa | | | Wanaka | | | Wanganui | | | Westport | | | Whakatane | | | Whangerei | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aircraft Weight (kg) | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference |
| 1,000 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 | 3 | 4 | 1 |
| 2,000 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 | 6 | 7 | 1 |
| 3,000 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 | 10 | 11 | 1 |
| 4,000 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 | 14 | 14 | 0 |
| 5,000 | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) | 21 | 18 | (3) |
| 6,000 | 28 | 31 | 3 | 28 | 32 | 4 | 28 | 32 | 4 | 28 | 30 | 1 | 28 | 28 | (0) | 28 | 21 | (8) | 28 | 22 | (6) |
| 7,000 | 38 | 44 | 6 | 38 | 46 | 8 | 38 | 46 | 8 | 38 | 41 | 3 | 38 | 39 | 1 | 38 | 24 | (15) | 38 | 27 | (11) |
| 8,000 | 61 | 58 | (4) | 61 | 60 | (1) | 61 | 60 | (1) | 61 | 53 | (8) | 61 | 49 | (12) | 61 | 26 | (35) | 61 | 32 | (30) |
| 9,000 | 69 | 71 | 3 | 69 | 75 | 6 | 69 | 75 | 6 | 69 | 65 | (4) | 69 | 60 | (9) | 69 | 29 | (39) | 69 | 37 | (32) |
| 10,000 | 76 | 85 | 9 | 76 | 89 | 13 | 76 | 89 | 13 | 76 | 77 | 1 | 76 | 70 | (6) | 76 | 32 | (43) | 76 | 41 | (34) |
| 11,000 | 83 | 98 | 15 | 83 | 103 | 20 | 83 | 103 | 20 | 83 | 88 | 6 | 83 | 80 | (2) | 83 | 35 | (47) | 83 | 46 | (37) |
| 12,000 | 90 | 111 | 22 | 90 | 117 | 28 | 90 | 117 | 28 | 90 | 100 | 10 | 90 | 91 | 1 | 90 | 38 | (52) | 90 | 51 | (39) |
| 13,000 | 97 | 125 | 28 | 97 | 131 | 35 | 97 | 131 | 35 | 97 | 112 | 15 | 97 | 101 | 5 | 97 | 41 | (56) | 97 | 55 | (41) |
| 14,000 | 104 | 138 | 34 | 104 | 146 | 42 | 104 | 146 | 42 | 104 | 124 | 20 | 104 | 112 | 8 | 104 | 44 | (60) | 104 | 60 | (44) |
| 15,000 | 111 | 151 | 41 | 111 | 160 | 49 | 111 | 160 | 49 | 111 | 135 | 25 | 111 | 122 | 12 | 111 | 47 | (64) | 111 | 65 | (46) |
| 16,000 | 118 | 165 | 47 | 118 | 174 | 56 | 118 | 174 | 56 | 118 | 147 | 29 | 118 | 133 | 15 | 118 | 50 | (68) | 118 | 69 | (48) |
| 17,000 | 125 | 178 | 53 | 125 | 188 | 63 | 125 | 188 | 63 | 125 | 159 | 34 | 125 | 143 | 18 | 125 | 53 | (72) | 125 | 74 | (51) |
| 18,000 | 132 | 191 | 59 | 132 | 202 | 70 | 132 | 202 | 70 | 132 | 171 | 39 | 132 | 154 | 22 | 132 | 55 | (76) | 132 | 79 | (53) |
| 19,000 | 139 | 205 | 66 | 139 | 217 | 78 | 139 | 217 | 78 | 139 | 182 | 43 | 139 | 164 | 25 | 139 | 58 | (81) | 139 | 84 | (55) |
| 20,000 | 146 | 218 | 72 | 146 | 231 | 85 | 146 | 231 | 85 | 146 | 194 | 48 | 146 | 175 | 29 | 146 | 61 | (85) | 146 | 88 | (58) |
| 21,000 | 153 | 231 | 78 | 153 | 245 | 92 | 153 | 245 | 92 | 153 | 206 | 53 | 153 | 185 | 32 | 153 | 64 | (89) | 153 | 93 | (60) |
| 22,000 | 160 | 245 | 85 | 160 | 259 | 99 | 160 | 259 | 99 | 160 | 218 | 57 | 160 | 195 | 35 | 160 | 67 | (93) | 160 | 98 | (62) |
| 23,000 | 167 | 258 | 91 | 167 | 273 | 106 | 167 | 273 | 106 | 167 | 229 | 62 | 167 | 206 | 39 | 167 | 70 | (97) | 167 | 102 | (65) |
| 24,000 | 174 | 271 | 97 | 174 | 288 | 113 | 174 | 288 | 113 | 174 | 241 | 67 | 174 | 216 | 42 | 174 | 73 | (101) | 174 | 107 | (67) |
| 25,000 | 181 | 285 | 104 | 181 | 302 | 121 | 181 | 302 | 121 | 181 | 253 | 72 | 181 | 227 | 46 | 181 | 76 | (105) | 181 | 112 | (69) |
| 26,000 | 188 | 298 | 110 | 188 | 316 | 128 | 188 | 316 | 128 | 188 | 265 | 76 | 188 | 237 | 49 | 188 | 79 | (110) | 188 | 116 | (72) |
| 27,000 | 195 | 311 | 116 | 195 | 330 | 135 | 195 | 330 | 135 | 195 | 276 | 81 | 195 | 248 | 52 | 195 | 82 | (114) | 195 | 121 | (74) |
| 28,000 | 202 | 325 | 123 | 202 | 344 | 142 | 202 | 344 | 142 | 202 | 288 | 86 | 202 | 258 | 56 | 202 | 84 | (118) | 202 | 126 | (76) |
| 29,000 | 209 | 338 | 129 | 209 | 359 | 149 | 209 | 359 | 149 | 209 | 300 | 90 | 209 | 269 | 59 | 209 | 87 | (122) | 209 | 131 | (79) |
| 30,000 | 216 | 352 | 135 | 216 | 373 | 156 | 216 | 373 | 156 | 216 | 312 | 95 | 216 | 279 | 63 | 216 | 90 | (126) | 216 | 135 | (81) |

## En-route charges (per 100 NM)

| | Domestic En-route | | | Oceanic En-route | | |
|---|---|---|---|---|---|---|
| Aircraft Weight (kg) | Current 2012/13 | Final 2013/14 | Difference | Current 2012/13 | Final 2013/14 | Difference |
| 1,000 | 3 | 6 | 3 | 15 | 18 | 3 |
| 2,000 | 4 | 6 | 2 | 16 | 18 | 2 |
| 3,000 | 6 | 6 | 0 | 17 | 18 | 1 |
| 4,000 | 7 | 6 | (1) | 17 | 18 | 1 |
| 5,000 | 11 | 6 | (5) | 18 | 18 | 0 |
| 6,000 | 14 | 9 | (6) | 18 | 18 | 0 |
| 7,000 | 18 | 11 | (7) | 18 | 18 | (0) |
| 8,000 | 29 | 14 | (15) | 19 | 18 | (1) |
| 9,000 | 32 | 17 | (15) | 19 | 18 | (1) |
| 10,000 | 34 | 19 | (15) | 20 | 18 | (2) |
| 12,000 | 39 | 24 | (15) | 21 | 18 | (3) |
| 14,000 | 45 | 30 | (15) | 22 | 18 | (4) |
| 16,000 | 50 | 35 | (15) | 23 | 18 | (5) |
| 18,000 | 55 | 40 | (15) | 24 | 18 | (6) |
| 20,000 | 60 | 46 | (15) | 25 | 18 | (7) |
| 22,000 | 66 | 51 | (15) | 26 | 20 | (6) |
| 24,000 | 71 | 56 | (15) | 26 | 21 | (5) |
| 26,000 | 76 | 61 | (15) | 27 | 23 | (5) |
| 28,000 | 81 | 67 | (15) | 28 | 24 | (4) |
| 30,000 | 87 | 72 | (15) | 29 | 26 | (3) |
| 40,000 | 99 | 84 | (15) | 31 | 30 | (1) |
| 50,000 | 110 | 95 | (15) | 33 | 33 | 0 |
| 60,000 | 119 | 104 | (15) | 34 | 36 | 1 |
| 70,000 | 128 | 112 | (16) | 36 | 38 | 2 |
| 80,000 | 136 | 120 | (16) | 37 | 41 | 3 |
| 90,000 | 144 | 128 | (16) | 39 | 43 | 4 |
| 100,000 | 151 | 135 | (16) | 40 | 45 | 5 |
| 110,000 | 158 | 141 | (17) | 41 | 47 | 6 |
| 120,000 | 164 | 148 | (17) | 42 | 49 | 7 |
| 130,000 | 171 | 154 | (17) | 43 | 51 | 7 |
| 140,000 | 177 | 159 | (17) | 44 | 52 | 8 |
| 150,000 | 182 | 165 | (18) | 45 | 54 | 9 |
| 160,000 | 188 | 170 | (18) | 46 | 56 | 10 |
| 170,000 | 194 | 176 | (18) | 47 | 57 | 10 |
| 180,000 | 199 | 181 | (18) | 48 | 59 | 11 |
| 190,000 | 204 | 186 | (18) | 49 | 60 | 11 |
| 200,000 | 209 | 190 | (19) | 50 | 62 | 12 |
| 250,000 | 232 | 213 | (20) | 54 | 69 | 15 |
| 300,000 | 253 | 233 | (21) | 57 | 75 | 17 |
| 350,000 | 273 | 251 | (22) | 61 | 80 | 19 |
| 400,000 | 291 | 268 | (22) | 64 | 85 | 22 |
| 450,000 | 308 | 284 | (23) | 67 | 90 | 24 |
| 500,000 | 324 | 300 | (24) | 70 | 95 | 25 |
| 550,000 | 339 | 314 | (25) | 72 | 99 | 27 |
| 600,000 | 353 | 328 | (25) | 75 | 104 | 29 |