



AIRWAYS' PROPOSED PRICING FOR THE 2016-2019 PERIOD

Executive Summary

AIRWAYS
making your world possible

DEADLINE FOR SUBMISSIONS: 11 MARCH 2016

Send submissions to:

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Executive summary

This document outlines Airways New Zealand's (Airways') proposed prices for the three-year period from 1 July 2016 to 30 June 2019¹. Airways is proposing a **3.6%** price increase over the three years to continue to provide air traffic control services that are safe, reliable, predictable, innovative and cost-effective. This is an average of **1.2%** per year. The proposal holds prices for Airways' current services at around inflation and leverages anticipated volume growth to fund service enhancements and a series of strategic initiatives.

An average price increase of 1.2% per annum

We are committed to providing safe, reliable, predictable, innovative and cost-effective services

The service enhancements and strategic initiatives are expected to provide customers with an estimated \$84m of new benefits. This is in addition to the \$82m of benefits from projects completed in the current pricing period. The proposed strategic initiatives are in preparation for the future, ensuring you receive safe services that are more resilient, more predictable and more cost-effective. Recent technology advances and volume growth provide a unique opportunity to invest in the New Zealand aviation network at a time that is affordable. Figure 1 illustrates the proposed price change, highlighting both that prices are held around inflation for current services and that service enhancements and strategic initiatives will be funded by volume growth.

Figure 1: Proposed price change

	FY17	FY18	FY19	Total ²	Average
Current services	2.2%	3.2%	1.9%	7.8%	2.6%
Service enhancements	1.5%	0.4%	0.3%	2.2%	0.7%
Strategic initiatives	2.5%	(1.1%)	1.8%	3.2%	1.1%
Total revenue	6.2%	2.5%	4.0%	13.2%	4.4%
Volume growth	(7.1%)	(1.3%)	(1.0%)	(9.6%)	(3.2)%
Total price change	(0.9%)	1.2%	3.0%	3.6%	1.2%

¹ Please note that this *Executive Summary* has been designed to accompany the more substantial pricing consultation document *Airways' Proposed Pricing for the 2016-2019 period*. Its shorter form is designed to provide a broader description of the key aspects of the pricing proposal amongst Airways' customers.

² The percentages in the 'Total' column do not add horizontally owing to the compounding effect of the changes.

Consultation process

Over the last three years Airways has significantly benefited from close collaboration with customers about your businesses and commercial drivers. The pricing proposal reflects the insights gained and Airways' determination to present a proposal that provides relevant services at a sustainable, cost-effective price. The pricing proposal document sets out Airways' proposed prices, the inputs Airways has used to calculate the prices and the assumptions and rationale behind the choice of those inputs.

The eight-week consultation period starts on 18 January 2016 and the final day for submissions is 11 March 2016. Airways will be hosting public roadshows in the last week of January 2016 in Auckland, Hamilton, Wellington, Christchurch and Queenstown. Within the overall consultation process, there will also be a five-week period for further information requests, finishing on 19 February 2016. The roadshows and period for further information provide you with the opportunity to clarify your understanding of the pricing proposal, assisting in the development of submissions. Figure 2 provides the consultation timetable.

Figure 2: Airways' pricing consultation timeline

Date	Consultation activity
18 Jan 2016	Consultation on Airways' proposed prices for the 2016-2019 period begins. Period to request further information starts.
27 Jan 2016	Public meeting in Wellington, 9.00am – 10.30am (coffee at 8.30am). Amora Hotel, 170 Wakefield Street.
28 Jan 2016	Public meeting in Hamilton, 10.00am – 11.30am (coffee at 9.30am). Hamilton Airport Hotel, Airport Road. Public meeting in Auckland, 3:30pm – 5:00pm (coffee at 3:00pm). Sudima Hotel, 18 Airpark Drive, Airport Oaks.
29 Jan 2016	Public meeting in Christchurch, 8:45am – 10:15am (coffee at 8.15am). Commodore Hotel, 449 Memorial Avenue. Public meeting in Queenstown, 2:30pm – 4:00pm (coffee at 2:00pm). Copthorne Queenstown Lakefront, corner Frankton Road and Adelaide Street.
19 Feb 2016	Period to request further information ends.
11 Mar 2016	Deadline for submissions on the consultation document.
16 Mar 2016	Submissions published on Airways' website.
Mar to May	Submissions considered and prices finalised.
27 May 2016	Final prices and Airways' response to the submissions published.
1 Jul 2016	Airways' new prices for the 2016-2019 period take effect.

Airways will then analyse the feedback and make a final pricing decision, releasing final prices and responses to customer feedback in May 2016. Airways encourages your feedback on the pricing proposal. Feedback provides essential input into the final pricing decision, ensuring that Airways' services continue to generate significant value for the aviation system in New Zealand.

Your feedback provides essential input into the price setting process

Airways' performance over the last pricing round

Airways is focused on providing air traffic management services that are safe, reliable, predictable, innovative and cost-effective. Airways tracks performance against these objectives using the customer scorecard³. The scorecard is an essential part of Airways' Service and Pricing Frameworks, ensuring Airways remains accountable to its customers. An updated scorecard is being proposed for the upcoming pricing period that includes new targets and measures to track the strategic initiatives. The following sections provide the performance highlights.



Safe

Safety is Airways' top priority. A continued focus on improving its safety performance has resulted in:

- A 40% reduction in the number of loss of separation incidents.
- Zero high-severity safety incidents for commercial passenger flights during the current pricing period.
- Airways retaining its Civil Air Navigation Services Organisation (CANSO) international top decile safety performance rating.

Top decile safety record worldwide

³ The scorecard summarising Airways' performance in the current pricing round is included in the full consultation document, along with proposed changes to the measurement metrics.

Reliable

Airways is on track to meet or exceed its service availability target this pricing period, including:

- Meeting its overall 99.95% service availability targets for the first two years of the pricing round and is on track to meet this year's target.
- Exceeding the preventive maintenance completion target of 98.5% of the programme.
- Delivering the lifecycle capital replacement programme, ensuring the assets supporting Airways services continue to deliver the expected service levels.

99.95%
service
availability

Predictable

Ensuring predictable services that help aircraft get to their destinations on time.

Flow management and procedure improvements have:

- Reduced inflight delays by 26% this pricing period – domestic inflight delays are down to an average of 14 seconds per flight⁴ and 2 seconds a flight for international arrivals into Auckland. Delays are mostly weather related.
- Increased fuel savings to airlines by 34% through the introduction of new PBN procedures.
- Introduced eight new ASPIRE routes, adding further 'perfect flights' to Japan and the United States.

26%
reduction
in inflight
delays

Innovative

Airways has successfully delivered the majority of the planned service enhancements, providing \$82m of new benefits from investments like:

- The introduction of RNP-AR procedures at all of the main centres by June 2016, meaning additional fuel savings.
- Increased capacity at Queenstown with the facilitation of night operations.
- The introduction of digital clearances, avoiding the misinterpretation of clearance messages, meaning improved safety.

\$82m of new
benefits from
the current
pricing
programme

⁴ Based on average delays at Auckland, Christchurch, Wellington, and Queenstown.

Cost-effective

Productivity initiatives achieved in this current pricing round have allowed cost savings to be passed to customers. The productivity initiatives have resulted in:

- \$4m of cost savings, which are being passed on to customers in the proposed 2016-2019 prices.
- Airways reducing its corporate costs from 14.8% to 13.6% of total costs.
- Airways being ranked seventh in the costs per flight hour CANSO reporting.

Refinements to Airways' Service and Pricing Frameworks

Airways' Service and Pricing Frameworks define the services Airways delivers, and provides the methodology used to calculate prices for those services. Since the last pricing round, customer feedback has suggested refinements that could improve the effectiveness of the Frameworks.

A price premium for users of legacy services

Legacy services will cost ~\$8.2m p.a.

As the aviation industry is transitioning from traditional ground-based equipment to new technology (generally satellite-based), Airways often provides both the legacy equipment and the new equipment. Both services are provided because the new technology is sometimes not reliable enough to depend on without a backup system. Airways estimates that by 2019 it will spend \$8.2m per year on legacy services. However, there are some services where reliability of the new service is not a concern and it is only the level of aircraft equipage prohibiting the move from legacy services.

Airways would like to hear what you think about applying a price premium to customers who use legacy services that are not required for service reliability reasons. The revenue collected from the premium applied to legacy services would be used to fund the legacy equipment. Customers who have moved to new services would pay a lower price because they no longer fund all of the legacy equipment. The lower prices would encourage users to move from legacy services, reducing Airways' overall infrastructure costs.

A legacy price would mean customers who use new services would pay less

Airways' service availability levels:

The current levels of service availability are published in Airways' Service Framework, and were set as part of the Service Framework consultation process in 2012. Airways sets its staffing and the number of backup systems to deliver the service levels in the Service Framework. Service availability targets can be increased but often require extra staff and/or equipment redundancy, which adds cost to the service. Airways would like to check whether the current service levels offered meet the industry's requirements.

Strategic initiatives

An opportunity to deliver \$84m of new customer benefits

Over the last two years Airways has developed a set of strategic initiatives designed to take advantage of technological developments and changes in the industry to provide customers with significant service improvements and cost savings. The strategies propose making some bold and often world-leading changes that will require investment in this pricing round. Customers will benefit from the provision of safe, less expensive and more reliable services for the next 15 years once the strategies are successfully implemented. The expected customer benefits from the strategies are outlined in Figure 3.

Figure 3: Expected customer benefits from Airways' strategic initiatives

Benefits		Annual benefits (\$)	Total benefits (\$)
Safety	A 50% reduction in operational safety events by using technology to minimise the chance of human error.	Not quantified	
Resilience	Return to full services for the majority of traffic within an hour and for all traffic in less than six hours.	\$3m	\$20m
Predictability	Further fuel savings by introducing flow management tools to all stages of a flight.	\$1m	\$5m
Cost-effective	Operational cost savings by using new air traffic management tools and standardising services.	\$18m	\$59m
Total		\$22m	\$84m

Benefits from each strategic initiative	Annual benefits (\$)	Total benefits (\$)
Operational Strategy	\$15m	\$53m
ATM replacement	\$7m	\$31m
Total	\$22m	\$84m

To deliver these customer benefits, a very different delivery model is needed.

Operational Strategy – A new operating model

The Operational Strategy combines an alternative operating model and advances in Air Traffic Management (ATM) tools to optimise the air traffic system and staff structure.

The concept of operations is:

1. Airways' air traffic control centre will be split between two locations. Enough staff will be based at each location to allow one location to cover the other in an emergency.
2. Standardised Airways air traffic control functions, providing operational flexibility so a single controller is not restricted to a single area of controlled airspace.
3. New ATM tools to monitor aircraft separation, allowing a single controller to look after more aircraft and reducing the chance of human judgement error.
4. Different service levels will be offered at regional aerodromes.

The Operational Strategy is expected to cost \$11.7m in this pricing period and \$12.6m in total. While the benefits of the investment won't be delivered until future pricing periods, the new operating model is expected to provide benefits worth four times more than the initial investment and has an expected payback period of four years⁵.

ATM system – providing the tools to enable the new operating model

To support the delivery of the Operational Strategy, new ATM tools are needed. Airways currently runs two different air traffic management tools, both of which are nearing the end of their economic lives. A combination of access to the system source code and an in-house software capability has allowed Airways to continuously develop both systems. It is estimated that developing the systems in-house has saved customers \$2.6m p.a.⁶ or \$39m across the assets' lives, compared to the cost if Airways had outsourced the development and maintenance.

Airways'
in-house
software team
has saved
customers
~\$2.6m p.a.

An initial research project explored which potential ATM system options might best deliver the operational requirements. The results from this research project provided the capital estimates that have been included in this pricing proposal. The initial research suggested that developing the system in-house may halve costs while providing similar capability and better flexibility and resilience. The findings will now be tested by a robust procurement process.

It is estimated that the total ATM system will cost \$44m, of which \$32m is expected to be incurred in this pricing round. The remaining \$12m is expected in the next pricing round. By way of comparison, a capital cost of \$44m would compare favourably⁷ to other recent ATM platform purchases (where costs were made public) which ranged from 2 to 10 times this cost.

⁵ The net present value of the investment over the investment's life (until 2032) is \$25.9m.

⁶ Calculated by comparing Airways' current costs to information obtained from the market through a research information request.

⁷ Assuming the ATM procurement process confirms the research phase price.

While the investment in the ATM platform is a lifecycle asset replacement, it also provides significant new benefits. The new system is estimated to cost \$44m and estimated to provide \$31m of new customer benefits and avoid \$21m of costs to maintain the current system, thereby providing net benefits of \$8m.

Surveillance and Navigation strategies

The Surveillance and Navigation strategies are influenced by the Operational Strategy and the New Southern Sky programme.

Surveillance Strategy

Airways has been working closely with the CAA to analyse options for a future air traffic surveillance system in New Zealand domestic airspace. ADS-B will be the primary tool for providing surveillance in the future. A terrestrial backup of either radar or multilateration is also expected. The start of the ADS-B programme and one replacement radar site are expected costs in this pricing round.

Both ADS-B and PBN will require ground-based backups until satellite coverage is improved

Navigation Strategy

Airways presented its Navigation Strategy to industry in 2012, this strategy played a significant part in the formulation of the New Southern Sky programme. The general approach of the strategy is to introduce Performance Based Navigation (PBN) as the primary method of navigation for IFR operations in New Zealand. A limited ground-based navigation aid network will be retained as a backup. The lifecycle replacement of the ground-based navigation aids retained as a backup is nearly complete and the PBN programme has been started. The completion of the PBN programme is contemplated during this pricing round, with a focus in the regions.

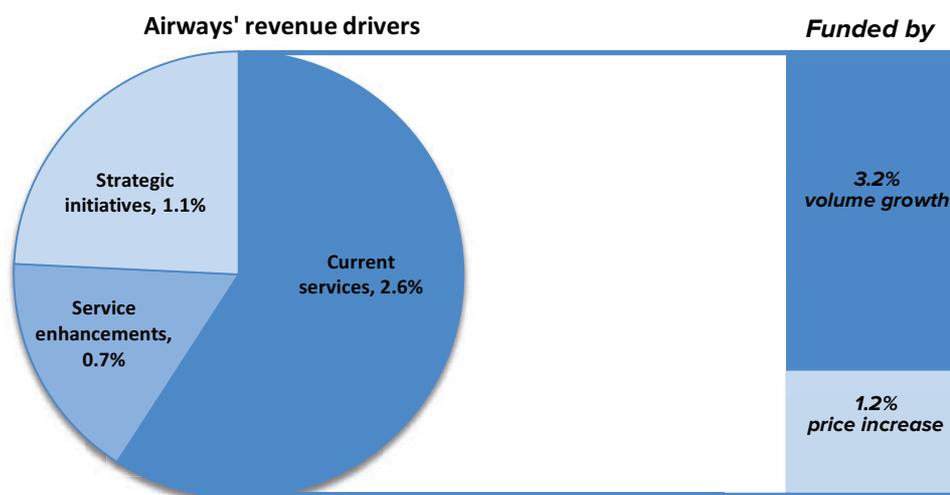
Airline prices

To continue to deliver safe, high-quality services now and in the future, Airways is proposing a revenue increase of \$22.2m over the next three-year pricing period, an average increase of 4.4% per year. An average annual price increase of 1.2% per year is required to fund this (once volume growth has been included).

Figure 4 illustrates the proportion of the 4.4% change in overall revenue that each of the cost groups are driving, with 2.6% of the average revenue increase relating to maintaining current levels of service, essential to ensuring that air traffic management services remain safe and reliable. This is the majority (59%) of the revenue increase. The remaining 1.8% of the average revenue increase relates to service enhancement and strategic initiatives, which are expected to provide customers with new benefits worth \$84m⁸ or four times the amount invested.

Figure 4 also illustrates how the 4.4% change in overall revenue is proposed to be funded, with 3.2% of the average overall revenue increase being funded by volume growth, leaving only 1.2% to be funded by a price increase. Expressed as a proportion of the overall increase, 73% of the proposed increase in revenue would be funded by volume growth and 27% by a price increase.

Figure 4: Proposed price change and funding (annual average of the pricing period)



Airways' Pricing Framework provides the methodology used to calculate overall revenue. The underlying inputs into the revenue calculation are called the price drivers. The proposed price changes associated with each of the price drivers are summarised in Figure 5.

⁸ The \$84m of new benefits includes new benefits from the ATM platform, which is contemplated as a lifecycle asset replacement.

Figure 5 highlights three key points:

1. The change in revenue required to maintain current service levels is around long-term inflation.
2. The above inflationary increases are to fund service enhancements and strategic initiatives that will provide new benefits.
3. Anticipated volume growth is expected to help fund the service enhancements and strategic initiatives, minimising the financial impact to customers.

Figure 5 – Proposed price change by price driver

	\$m change				% change				
	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>Total</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>Total⁹</u>	<u>Avg.</u>
Costs to maintain current service:									
A. Operating costs – base	(2.2)	1.3	(0.3)	(1.2)	(1.3%)	0.7%	(0.2%)	(0.7%)	(0.2%)
B. Operating costs – Inflation	2.0	3.0	2.6	7.6	1.1%	1.6%	1.4%	4.4%	1.5%
C. Lifecycle capital costs	4.5	2.1	1.8	8.4	2.7%	1.2%	1.0%	5.1%	1.7%
D. Capital charge rate movement	(0.5)	(0.6)	(0.6)	(1.7)	(0.3%)	(0.3%)	(0.3%)	(1.0%)	(0.3%)
Total to maintain current service	3.8	5.8	3.5	13.1	2.2%	3.2%	1.9%	7.8%	2.6%
Investment in value add initiatives									
E. Service enhancements	2.5	0.7	0.5	3.7	1.5%	0.4%	0.3%	2.2%	0.7%
F. Strategic initiatives	4.2	(2.1)	3.3	5.4	2.5%	(1.1%)	1.8%	3.2%	1.1%
Total revenue increase	10.5	4.4	7.3	22.2	6.2%	2.5%	4.0%	13.2%	4.4%
Volume growth									
G. Opening volume adjustment					(4.6%)	-	-	(4.6%)	1.5%
H. Volume growth					(2.5%)	(1.3%)	(1.0%)	(5.0%)	1.7%
Total price change					(0.9%)	1.2%	3.0%	3.6%	1.2%

⁹ The percentages in the 'Total' column do not add horizontally owing to the compounding effect of the changes.

The supporting assumptions and rationale behind the selection of each of the price drivers are summarised in Figure 6. You are invited to provide feedback on whether you think the selection of the pricing inputs is appropriate.

Figure 6: Inputs into the pricing calculation

Price driver	Proposed pricing input	Rationale												
A. Operating costs – base	The costs are based on Airways’ budgets for the 2016/17 financial year for its air traffic control business.	Operating costs include all costs except asset costs and inflationary adjustments. Operating costs decrease overall owing to the successful delivery of cost saving initiatives implemented in the current pricing period. The decrease in operating costs reflect \$4.3m of productivity improvements.												
B. Operating costs –inflation	Inflation rates are: ATC salaries: avg 1.6% p.a. Other labour: avg 1.7% p.a. Other costs: avg 2.2% p.a.	Based on the ATC collective settlement and New Zealand Institute of Economic Research forecasts. This is a predetermined methodology and is consistent with the previous consultation.												
C. Lifecycle capital spend	\$101m of lifecycle capital projects over the price period (compared to \$68m in the current period).	During this pricing round Airways is expected to replace its two largest assets; Air Traffic Management (ATM) system and the surveillance system, as well as the Wellington and Nelson towers.												
D. Capital charge rate movement	WACC rate of 7.6%. This is a decrease from the current capital charge rate of 7.8%.	Based on the Commerce Commission’s input methodologies used in previous consultations. The difference to the current rate is owing to an expected change in the Commerce Commission’s methodology and updated market figures.												
E. Service enhancements	\$28m of capital projects for new services and enhancements.	The pricing proposal anticipates funding required for ADS-B and a continuation of the PBN programme.												
F. Strategic initiatives	\$11m to implement the Operational Strategy.	Costs to implement Airways’ strategic initiatives that are expected to provide \$84m ¹⁰ of new benefits (net of costs).												
G. Opening volume adjustment	4.6% adjustment to reflect extra growth in the 2013-2016 price period.	At the start of each pricing round, a one-off adjustment is made to volumes to reflect unexpected volume movements in the previous pricing period.												
H. Annual volume growth	Volume growth rates of: <table border="1"> <thead> <tr> <th></th> <th>16/17</th> <th>17/18</th> <th>18/19</th> </tr> </thead> <tbody> <tr> <td>Dom</td> <td>1.8%</td> <td>0.1%</td> <td>(0.2%)</td> </tr> <tr> <td>Int</td> <td>3.6%</td> <td>3.1%</td> <td>2.8%</td> </tr> </tbody> </table>		16/17	17/18	18/19	Dom	1.8%	0.1%	(0.2%)	Int	3.6%	3.1%	2.8%	Based on a new forecast model that separates domestic and international volume growth. The forecast combines the latest airline schedules, known fleet changes, historical averages and economic forecasts.
	16/17	17/18	18/19											
Dom	1.8%	0.1%	(0.2%)											
Int	3.6%	3.1%	2.8%											

¹⁰ The \$84m of new benefits includes the benefits expected from the new air traffic management platform, which is contemplated as a lifecycle asset replacement.

Revenue by service and location

The previous section sets the overall revenue required to deliver Airways' services. Revenue is then allocated to specific services and locations so that prices reflect the underlying costs of providing the services. This means that while overall prices will change by an average 1.2% per year, the actual price change at each location will vary.

For example, Wellington will have a higher price increase to reflect the investment in a new control tower and Queenstown will have a higher price increase to fund the investment in night operations. Other locations such as Dunedin, Gisborne, New Plymouth, Napier, Invercargill, Rotorua, and Woodbourne will see a price decrease, as the level of new investment at those locations is relatively minor.

General Aviation prices

Airways helps General Aviation (GA) customers operate safely within controlled airspace by separating VFR users from IFR traffic¹¹ and providing flight information. Overall, GA activity makes up approximately 50% of movements at aerodromes and contributes 5% of the revenue required to run the services.

GA price changes limited to inflation

In 2012, air traffic services to GA were streamlined and simplified to keep prices as low as possible. The changes included the removal of discounts and the introduction of a national price to ensure prices are simple and inexpensive to administer. The changes also included the introduction of new Circuit, Vicinity Landing, and Transit prices to reflect the workload those activities drive.

After the changes made in the last pricing round, Airways now believes that costs are allocated more equitably to the services provided. Airways is therefore proposing that GA prices are simply increased by inflation so they remain in line with underlying costs.

Conclusion

Airways' commercial framework (the combination of the Service and Pricing Frameworks, consultation process and scorecard reporting) provides a robust and transparent way for Airways and its customers to set prices for its services.

The prices proposed in the supporting consultation document enable Airways to continue to provide safe, reliable, predictable, innovative and cost-effective services. The proposal also invests in the aviation industry's future, providing our customers with significant new benefits.

We now invite feedback on this proposal from all our partners in the aviation industry. Your feedback provides essential input into the price setting process.

¹¹ In class C airspace.



AIRWAYS
making your world possible

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