

AIRSERVICES AUSTRALIA

Long Term Pricing Agreement

July 2016 - June 2021

Discussion paper

March 2015

Foreword

Airservices Australia's current pricing arrangements were established during 2011, setting the level of prices for each service through to the end of June 2016. Under the current Long Term Pricing Agreement (LTPA) the last price change is due on 1 July 2015.

The current prices and price path were established after ongoing industry consultation and review by the Australian Competition and Consumer Commission (ACCC).

In the lead-up to the development of a new LTPA that extends beyond 2016, Airservices is seeking feedback on the structure and mechanism for future pricing arrangements. This discussion paper outlines some of these issues, though not exhaustive, and responses received on matters raised will assist Airservices in formulating a draft pricing proposal that will be released for industry consultation in the middle of this year.

The draft pricing proposal at that point will provide indicative charges beyond 2016; using current parameters and applying the ACCC 'building block' methodology.

The outcomes of consultation on the issues identified in this paper will assist in the development of the draft pricing proposal that will be based on five year forecasts of activity levels, operating costs and capital investment.

Public consultation sessions on this discussion paper are planned for Sydney, Melbourne and Brisbane and the dates, times and locations are set out on page 16.

Please send your response by close of business on 20 April 2015 to:

Email: pricing@airservicesaustralia.com

Mail: Airservices Australia Pricing Discussion Paper
GPO Box 367
Canberra ACT 2601

Please note all responses to this discussion paper will be made publicly available through the Airservices website. Those not wishing to make their comments public should mark the submission or parts of the submission commercial in confidence.

If you have questions on the paper or the process, please do not hesitate to contact myself on 02 6268 4850 (email andrew.clark@airservicesaustralia.com) or Paul Logan, General Manager Accounting Services, on 02 6268 4241 (email paul.logan@airservicesaustralia.com).

Yours sincerely



Andrew Clark
Chief Financial Officer
19 March 2015

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Introduction

Airservices current pricing arrangements were established in October 2011 and set the individual prices by service line and location for each year through to the end of June 2016. The five year pricing tables under the current LTPA are set out in **Appendix 1**. The current agreement is the second five year pricing agreement and along with the risk sharing parameters established has created price certainty for the industry to enable better long term planning.

Airservices has three service lines: enroute, terminal navigation (TN) and aviation rescue and fire fighting (ARFF). Enroute covers ATM services outside of tower and approach airspace and is charged on a network basis. Terminal Navigation covers tower and approach services and is predominantly charged on a location specific basis with a cross subsidy existing between towers in a basin location and an enroute subsidy for regional towers. ARFF covers rescue and fire fighting services and is charged under a hybrid arrangement that includes a base level network charge with location specific category charges for large aircraft. The basis of charges is a combination of weight or weight/distance for each flight. Details on each service line are set out in **Appendix 2**.

The current mechanisms are in line with the ICAO guidance on pricing for air navigation services (ANS) and a 'dual till' has been established such that regulated service costs are funded by regulated revenues and other business is funded by other business revenues (OBR). Airservices pricing model and approach is similar to other ANS providers throughout the world.

Set out through this discussion paper are a number of questions that Airservices would like you to consider and provide feedback on in order that we are able to develop a draft pricing proposal as part of the process of establishing a new LTPA:

Question 1: Pricing Principles

Do Airservices pricing principles sufficiently capture the interests of industry in targeting an equitable and efficient pricing outcome?

Question 2: Rate of price increase

At what rate should prices increase to remove inherent cross subsidies between services and locations?

Question 3: Measuring Performance Outcomes

Does Airservices Services Charter adequately cover the key service performance outcomes that are of the highest priority to the industry?

Question 4: Graduated services

Is it appropriate to commence charging for services such as the Aeronautical Flight Information Service (AFIS) being provided at Port Hedland?

As other graduated services are developed over the course of the next pricing period, how should Airservices introduce a price for these services?

Question 5: Premium or Value Add services

Should Airservices separately charge for more customised services?

Question 6: New technology incentives

Should Airservices use its charges to encourage the adoption of new technologies to improve overall air traffic management performance and/or enable the decommissioning of legacy systems? If so, what form could the incentives take?

Question 7: Deemed weight

Should Airservices continue to reduce the number of weight categories by assigning deemed weights to series of aircraft rather than individual models of aircraft?

Question 8: Weight Cap

Is the current weight cap of 500 tonnes appropriate or should it be changed?

Question 9: Deemed Distances

How should distance be applied for international operations and would an international route/sector based fixed distance minimise complexity and competitive advantage that may exist for aircraft that fly, what is ostensibly the same route? How often should these distances be reviewed?

Question 10: Ultralights, Gliders and Balloons

Should Airservices commence charging for sport aviation aircraft undertaking commercial operations?

Question 11: Alternative mechanisms

What alternatives to the current basis of charging, should Airservices consider including as part of its pricing framework?

Question 12: General Aviation

How can the process for charging General Aviation (GA) aircraft be improved? Should the \$500 threshold be reviewed?

Question 13: Risk Sharing

Are current LTPA risk sharing arrangements still appropriate?

Question 14: Stranded Assets

What is the most appropriate mechanism for Airservices to recover regulated mandated investments that become stranded?

What are the efficiency and equity implications of the four presented charging options, having regard to users' sensitivity to price changes and the need to avoid unwanted market distortions as a consequence of assets becoming stranded?

What is your view on the appropriate timeframe for cost recovery under the four options presented in relation to stranded assets?

Are there any other alternate charging arrangements which would deliver a preferable pricing outcome when assets become stranded?

Pricing Challenge

Airservices pricing objectives

Airservices costs are significantly influenced by the highly regulated environment within which it operates.

In this operating environment the Civil Aviation Safety Authority (CASA) sets the criteria for the establishment and operation of services through a combination of hard quantitative triggers, qualitative risk assessments and standards to be adopted in the ongoing provision of services. These regulatory criteria are applied nationally and determine service offerings across metropolitan, regional and remote locations.

Airservices delivers these services to a broad customer base, ranging from large international airlines operating large aircraft over long distances, to domestic and regional airlines operating a diverse fleet on diverse city pair routes, and through to small aircraft undertaking general aviation training and recreational flying.

The challenge for Airservices in a price setting context is to meet its service obligations through a charging arrangement that encourages economically efficient resource decisions whilst mitigating against localised economic distortions that may result where prices for particular services or segments of the industry become unaffordable.

To establish a new Long Term Pricing Agreement (LTPA) consideration needs to be given to the principles on which charges are to be based and the determination of charging structures and mechanisms which best align to those pricing principles.

Airservices pricing principles which have underpinned the previous two LTPAs are that:

- Prices should have a relationship to the cost of providing services.
- Prices should encourage economically efficient resource use and allocation.
- The charging basis should recognise the key drivers giving rise to the need, or trigger, for investment in new services.
- Prices should be equitable.
- Prices should be simple and transparent and facilitate planning by end users.

Question 1: Pricing Principles

Do Airservices pricing principles sufficiently capture the interests of industry in targeting an equitable and efficient pricing outcome?

Pricing efficiency

In addition to these principles Airservices charges are subject to review by the Australian Competition and Consumer Commission (ACCC) as the economic regulator. Under this regulation, Airservices must also satisfy the ACCC's economic assessment criteria relating to:

- productive efficiency, which occurs when firms produce goods or services at least cost;
- allocative efficiency, which occurs when resources are used in areas where they provide the greatest value to society/industry as a whole; and

- dynamic efficiency, which occurs when firms have appropriate incentives to invest, innovate and improve quality or reduce costs over time.

Importantly the ACCC has acknowledged in previous Airservices pricing reviews that these criteria need to be balanced such that cost recovery is achieved while minimising the potential 'distortion to allocative efficiency'. This means the impact of prices on individual customers needs to be in proportion to the impact of their operations on Airservices cost base. To minimise this potential distortion, the current arrangements incorporate both elements of network charges and a degree of cross-subsidy between service lines and locations to allow a transition from current pricing levels to levels that fully recover costs for that service line or location over a reasonable period of time. In the current arrangement charges for price sensitive locations and services were targeted to increase by no more than an approximation of the rate of annual inflation.

Question 2: Rate of price increase

At what rate should prices increase to remove inherent cross subsidies between services and locations?

In considering economic efficiency, it is important to measure and balance overall cost efficiency and service performance outcomes more objectively. Along with the relative efficiency of how costs are connected with price signals with respect to price structure, Airservices will need to demonstrate whether the performance outcome is achieved at the lowest possible cost.

In a complex operating environment the identification of the highest priority performance outcomes can be challenging. For example, is it more important to achieve an outcome at a whole of industry level (e.g. the trend in average delay across all locations) or at a specific location in a particular time period (e.g. peak period delay trends).

Airservices has been developing a Services Charter over a number of years to strike a balance across five key outcome areas: safety, capacity, cost-effectiveness, efficiency and the environment. The current Services Charter is available at www.airservicesaustralia.com.

In developing the next LTPA the Services Charter will need to be updated to reflect those factors that are the most important to industry.

Question 3: Measuring Performance Outcomes

Does Airservices Services Charter adequately cover the key service performance outcomes that are of the highest priority to the industry?

Price Structure Considerations

Evolution of Airservices LTPA

The Long Term Pricing Agreement (LTPA) in its current form has been derived through extensive industry consultation and feedback that has been received over a number of years.

Discussion Papers, Review Papers and Pricing Notifications have all prompted discussion and debate on how to balance the impact of a range of potential pricing outcomes that could be applied within a heavily regulated aviation safety focussed operating environment. Typically these issues seek to balance network pricing arrangements at one end of the pricing spectrum, through to Location Specific Pricing (LSP) at the other end. There are obviously proponents at both extremes and Airservices challenge continues to be a need to determine the most efficient balance of the various competing factors and industry impacts as these vary over time.

The current LTPA has seen the implementation of a pricing framework that promotes productive and dynamic efficiency through a fixed price path with risk review triggers while minimising the potential distortion of allocative efficiency through the application of targeted network and LSP components.

Reflecting on the evolution over time, Terminal Navigation charges are predominantly based on location specific prices, with a capital city basin network subsidy between the large international airports and their secondary Metro D airports to recognise the service symbiotic relationship. These charges are based on full stop landings (i.e. the charge is the same for a single full stop landing as it is for a session of touch and go circuit training).

ARFF charges now target commercial passenger operations between 5.7 and 15.1 tonnes and all aircraft over 15.1 tonnes. Following ACCC concerns regarding the application of LSP for ARFF services at some regional locations these charges are now comprised of two components, a base level service network charge (the same charge for all category 6 aircraft and below at all locations) and a higher level location and category specific charge to reflect the additional investment and operating cost driven by higher category aircraft.

Enroute charges are network based for IFR operations.

General aviation operators with less than \$500 in chargeable activity in the previous year are not charged and if they are above this level they have the option to pay a fixed volume based charge for the year to minimise administration and provide certainty.

Ultralights, gliders and balloons are not charged.

To simplify the administration of charging and to move away from a pure weight based charge, prices across Airservices three main service lines have moved from aircraft specific weight based charges to the application of a deemed maximum take-off weight (MTOW) for each aircraft type and series up to a maximum deemed MTOW of 500 tonnes.

The aviation industry is ever evolving and Airservices needs to ensure that its pricing agreement remains appropriate. In the development of the next LTPA it is important to consider whether there have been any significant changes in the demographics of the industry or its

operating environment that warrant changes to the current pricing structure and charging mechanisms.

In this context Airservices is now seeking industry feedback on a range of these issues.

What we charge for

Graduated Services

Only full, regulated tower and ARFF services are charged under the current LTPA arrangements. In seeking to mitigate potential safety risks in a cost effective manner, Airservices has worked with the Civil Aviation Safety Authority (CASA) to implement a more graduated approach to service delivery. In some cases it has been possible to introduce a targeted service such as an Aeronautical Flight Information Service (AFIS) to meet the safety needs. These services avoid a potentially large step change in both service delivery and cost associated with moving from a non-controlled environment to a fully controlled environment.

Airservices has introduced one such alternative service delivery option at Port Hedland and with the likelihood that the AFIS will continue indefinitely, it would now be appropriate to consider commencing charging for this service.

A similar approach could be adopted for other services over the course of the next pricing period and, if so, Airservices would need an appropriate mechanism to recover the cost of such a service.

Question 4: Graduated services

Is it appropriate to commence charging for services such as the Aeronautical Flight Information Service (AFIS) being provided at Port Hedland?

As other graduated services are developed over the course of the next pricing period, how should Airservices introduce a price for these services?

Premium or Value Add services

As Airservices service offerings change over the long term and more customised services are being sought by particular aircraft types or airlines (e.g. Special Required Navigation Performance (RNP) or other procedures, User Preferred Routes (UPRs)) the current "one-size-fits-all" approach to the service offering and charge will be challenged.

Question 5: Premium or Value Add services

Should Airservices separately charge for more customised services?

Incentivising new technology take-up

As new technologies are introduced (ADSB, RNP, GNSS/GBAS) there may be opportunities to provide incentives through the pricing arrangement to encourage the adoption of the new technology to improve overall air traffic management performance (e.g. improve on-time-performance or minimising fuel and noise emissions) and/or enable the decommissioning of legacy systems.

Question 6: New technology incentives

Should Airservices use its charges to encourage the adoption of new technologies to improve overall air traffic management performance and/or enable the decommissioning of legacy systems? If so, what form could the incentives take?

Basis of charge:**Deemed Weight Charging**

Maximum-Take-Off-Weight (MTOW), measured in tonnes, is generally accepted internationally and is an objective basis of charging for air navigation services. This has traditionally been due to the correlation between weight and passenger numbers, and the publication of the weight in the aircraft's flight manual.

Airservices has previously experienced difficulty in managing MTOW by individual aircraft as some operators have sought to dynamically change their MTOW according to the routes they were flying and, as a result, the current LTPA stopped this practice for large aircraft. The current LTPA has adopted the use of deemed MTOWs that are applied to an aircraft based on its type and series.

In setting the new LTPA there is an opportunity to further simplify the deemed MTOW classifications into aircraft series, rather than aircraft types. For example, the existing arrangement contains 4 separate deemed MTOWs for each of the Airbus A340 and Boeing 777 series of aircraft, ie 8 separate MTOWs. This could reduce to a single MTOW for each series.

This type of arrangement would further serve to continue the transition away from a pure direct correlation with the weight of a particular aircraft toward the same charge for similar aircraft.

Question 7: Deemed weight

Should Airservices continue to reduce the number of weight categories by assigning deemed weights to series of aircraft rather than individual models of aircraft?

Weight Cap

In addition to the application of deemed MTOW, the last LTPA introduced a weight cap where the maximum weight for charging purposes was set at 500 tonnes.

The introduction of the weight cap signified the commencement of a move away from charges on a linear weight basis which aligns with ICAO guidelines (i.e. charges should be set on a less than proportional basis) and also recognises that there is no material difference in the cost of providing services to aircraft that weigh more. An A380 is the only aircraft to benefit as their MTOW is typically around 550 tonnes. In contrast, an A340 or B747 is typically around 400 tonnes.

In the development of the next LTPA, Airservices intends to consider whether this cap of 500 tonnes should be changed to potentially further reduce the price differentiation between large aircraft with a similar operating profile.

Question 8: Weight Cap

Is the current weight cap of 500 tonnes appropriate or should it be changed?

Deemed Distance

The current LTPA introduced the use of deemed distances for international city pair routes for price derivation purposes. This provided Airservices with an administratively simple arrangement and at the same time provided price certainty for customers. In the main this change in pricing approach has worked well, however there is now an opportunity to examine some of the complexities that have emerged on international routes.

Deemed distances on the domestic front are determined on a great circle distance (gcd) "straight" line (shortest distance) basis, from origin to destination (noting that flex-tracks fly a longer distance).

Distances for international city-pair routes have been deemed with reference to either the 'straight line' route through Australian airspace from the point of origin or the average distance typically flown in Australian airspace on the route where the usual entry/exit points on the FIR vary substantially from the straight line route.

As route planning continues to become more sophisticated, an administratively efficient arrangement needs to be arrived at and adopted. Given the variability in distances on city pair routes being flown (particularly Middle Eastern routes), consideration of a route sector based distance could be considered to minimise complexity and reduce relative competitive advantage that may exist for aircraft that fly, what is ostensibly the same route e.g. a set distance for all operators flying out of the Middle Eastern region regardless of their point of departure (e.g. Dubai, Abu Dhabi, Oman etc.).

Irrespective of what form any proposed solution takes, it must remain administratively efficient i.e. be a method that contains the same distance factor for both arrivals and departures for a designated city-pair.

Question 9: Deemed Distances

How should distance be applied for international operations and would an international route/sector based fixed distance minimise complexity and competitive advantage that may exist for aircraft that fly, what is ostensibly the same route? How often should these distances be reviewed?

Who we charge:**Ultralights, Gliders and Balloons**

The growth in sport aviation aircraft operating out of Flight Training Facilities at Metro D locations has been substantial over the last 1-2 years. Generically classified as "Ultralights" these aircraft have not been charged previously due to very few of these aircraft being allowed to operate in any great numbers in controlled airspace and the charges would have been less than the cost to bill and recover.

The sport aviation Flight Training Facilities are now sizable commercial enterprises at some Metro D locations. In some locations, these operations are directly competing with General Aviation (GA) training aircraft operations. At these locations they consume controller resources, and are provided services in much the same way they are to other General Aviation operators.

Whilst General Aviation operations are already subsidised through Airservices charges at other locations, it is now appropriate to consider whether Airservices should begin charging and recovering service costs from these commercial operations.

It is important to note that under Airservices current LTPA General Aviation aircraft are not charged if they would have incurred less than \$500 in charges in the previous year. This could also apply to this sector of the industry removing all but a few commercially run organisations.

Question 10: Ultralights, Gliders and Balloons

Should Airservices commence charging for sport aviation aircraft undertaking commercial operations?

How we charge:

Alternative Mechanisms

In past consultation, consideration has been given to alternatives to the current basis of charging, including movement based charging (e.g. for each touch and go) and the adoption of fixed price annual arrangements with individual airlines.

While there is a significant divergence of opinion on the merits of these approaches, Airservices is interested in current Industry views on these issues.

Question 11: Alternative mechanisms

What alternatives to the current basis of charging, should Airservices consider including as part of its pricing framework?

General Aviation Option

Where it is estimated by Airservices that light aircraft will incur less than \$500 worth of charges in a financial year (based on prior year activity), they are notified that no charges will be payable in the forthcoming financial year. Based on the same methodology, owners of light aircraft that are estimated to incur charges greater than \$500 will receive an annual General Aviation Offer (GAO) which they can choose to accept or reject.

The GAO process potentially offers administrative simplicity to both Airservices and customers as charges for flights are pre-determined and are able to be paid in quarterly or annual instalments.

Take up rates by customers of GAOs have not been high. Aircraft owners are seemingly, preferring to pay for flights on the traditional basis of actual monthly usage. Airservices is now essentially running the same billing process we ran prior to the GAO being implemented and in addition, running the GAO process. This situation is not ideal as the GAO was originally brought in to achieve the opposite outcome.

Airservices is interested in views from customers on how to improve charging arrangements for General Aviation customers, whilst maintaining administrative simplicity.

Question 12: General Aviation

How can the process for charging General Aviation (GA) aircraft be improved? Should the \$500 threshold be reviewed?

How we share risks:

Current Risk Sharing arrangements

The current LTPA incorporates risk sharing arrangements to allow for a review of prices or a rebate of excess revenues where capital expenditure, the cost impact of new regulations or traffic volumes move outside agreed upper and lower limits.

Under the current agreement prices can be reviewed and adjusted if:

- aggregate activity levels deviate above or below LTPA forecast levels by 5% or more in a financial year;
- actual capex as a result of revised priorities and/or timing differs from the LTPA forecast level by 20% or more within a single year, or by 10% cumulatively (i.e. less than a 90% performance against program); and
- new regulatory requirements call for a change in service levels that result in a net change in costs.

Risk is not shared for cost and subsequently this incentivises Airservices to contain cost growth in order to maintain cost recovery and the retention of funds to invest in new capital assets.

When sharing activity risk, it is important to understand that the arrangements do not provide for an automatic adjustment to prices and is not carried out by adjusting prices at each airport to reflect variations from forecast volumes at that airport. Rather, any adjustment would only be triggered by the percentage change in aggregate volumes at all airports. In effect, the adjustment ensures that Airservices Australia's total revenues do not vary materially from estimates of its total costs as a result of volume forecasting errors. The adjustment does not ensure that revenues at each airport do not vary significantly from estimates of costs at that airport.

A consequence of the current arrangements is that (airlines landing at) individual airports face the risk that errors in the volume forecast for the location will not be reflected in price changes until the beginning of the next regulatory price review.

The development of a new LTPA will need to consider whether these risk sharing parameters remain appropriate.

Question 13: Risk Sharing

Are current LTPA risk sharing arrangements still appropriate?

Asset Stranding

In addition to these factors, the recent rise in traffic growth at remote and regional locations off the back of the mining boom has raised the risk of assets being implemented to meet prescriptive regulatory requirements in the short term only to find the need is not required in the long term if traffic volumes fall away.

In a competitive market, businesses commonly face the risk that they will not be able to recover the full cost of long-lived investment. This risk exists because, at the time of investment, there is uncertainty about the future level of demand from customers for the services provided by that asset.

Competitive markets deal with this risk in a number of ways. One way is to sign long term contracts – such that if a customer wants a third party to invest in long lived infrastructure the customer must sign a ‘take or pay’ contract – effectively committing the customer to pay for the asset over its life. Alternatively, if long term contracts are not written, then market forces will deal with “stranding” by allowing investors to earn above cost returns on the projects that are not stranded. Investors will only invest if the expected return on an asset is equal to their cost of capital (WACC). The expected return on an investment is equal to

- the return on the asset if it is not stranded weighted by the probability that the asset will not be stranded; plus
- the return on the asset if it is stranded weighted by the probability that the asset will be stranded.

This means that the return on the asset if it is not stranded must be above the WACC; otherwise the probability weighted (expected) return will be below this level.

For regulated businesses the same logic applies. If there is a risk at the time of investment that an asset will be stranded before it has been fully recovered (and the residual is not able to be recovered from other customers) then, in order to have an expectation of earning its WACC, the regulated business must be allowed to earn above its WACC in the scenario where the asset is not stranded.

It is reasonably common for regulated businesses to make investments required to serve one set of customers, where the long run demand from those customers turns out to be insufficient to justify the investment (with 20/20 hindsight). That is, even if the investment is accepted as being efficient in an ex ante sense, it may still turn out to be inefficient in an ex post sense. In this, and similar contexts a regulatory regime effectively has two options¹:

- it can allow the costs of those assets to be recovered from other customers (even though serving those customers does not require those assets); or
- it can ‘strand’ the assets in the sense that it no longer allows the business to earn a return on the unrecovered value of these assets.

There is regulatory precedent for both approaches. However, it is generally recognised that if the second “stranding” approach is “on the table” the regulator must provide additional “stranding risk” compensation to the regulated business.

In practice, this creates a very difficult set of circumstances because in order to provide the correct level of stranding risk compensation the regulator must effectively forecast the amount of stranding that will occur in any given regulatory period – and any errors in that forecast will be a windfall gain/loss to investors.

¹ A third option of a Community Service Obligation funded by the Government may be possible, however this is considered to be beyond the scope of the current regulatory regime.

The case for exposing a business to stranding risk is strongest where a business can control the level of risk that they face. In these circumstances, exposing the business to stranding risk can promote efficient decisions. However, in the case of investments in TN and ARFF Services at mining locations in particular:

- Airservices has no discretion over whether to build the assets; and
- Airservices has relatively little influence over the future level of demand for its services at those locations.

For those reasons, economic principle would appear to strongly suggest that Airservices should not be subject to stranding risk.

Stranded Assets is an area of concern that has not been explored in previous consultation. As such, an annex which covers this topic in greater detail is available at **Appendix 3** and four options have been identified for industry feedback:

1. *Recover service asset costs under a network price and accelerate the cost recovery period to align with its expected economic life.*
2. *Recover service asset costs at the location where they are incurred and accelerate the cost recovery period to align with its expected economic life.*
3. *Recover write-off costs on an "ex-post" basis under a network pricing arrangement*
4. *Recover service asset costs over its expected economic life and, if the asset is stranded within that timeframe, recover the write-off costs under a network pricing arrangement.*

Question 14: Stranded Assets

What is the most appropriate mechanism for Airservices to recover regulated mandated investments that become stranded?

What are the efficiency and equity implications of the presented charging options, having regard to users' sensitivity to price changes and the need to avoid unwanted market distortions?

What is your view on the appropriate timeframe for cost recovery under the various options described above?

Are there any other alternate charging arrangements which would deliver a preferable pricing outcome?

LTPA Process

The development of a new LTPA will require extensive consultation to ensure Airservices is fully informed on key issues of concern to our customers and stakeholders before we enter an ACCC process.

The implementation schedule has essentially commenced with the release of this discussion paper which is centred on gaining Industry views on what Airservices pricing proposal should address.

In addition to receiving written feedback, Airservices representatives will be available for in person consultation at the following locations and times:

Melbourne

9 April 2015

9:30am – 10:30am

Holiday Inn Melbourne Airport

10 – 14 Centre Road,

Melbourne Airport, VIC 3045

Sydney

9 April 2015

4:00pm – 5:00pm

Holiday Inn Sydney Airport

Cnr Bourke Rd & O’Riordan Street

Mascott, NSW 2020

Brisbane

10 April 2015

10:00am – 11:00am

Suite 3A, 54 Vernon Terrace

Tenerife, QLD, 4005

The next phase of the process will be the development of a draft pricing proposal for further industry consultation in May 2015 and ultimately a draft price notification to commence the ACCC review process in September 2015. This will allow approximately 9 months for the ACCC review in accordance with their guidance on regulatory reviews.

The key milestones in the schedule are detailed in the following table:

	Airservices	Aviation Industry	ACCC
Feb 15			
Mar 15	Industry Pricing Discussion Paper	Airservices Industry Consultation Program	Industry Submission to Discussion Paper
Apr 15			Airservices Discusses proposed pricing model
May 15	Industry Draft Pricing Proposal		
Jun 15		Airservices Industry Consultation Program	
Jul 15			Industry Submission to Draft Pricing Proposal
Aug 15			
Sep 15	Lodge ACCC Draft Price Notification		
Oct 15			ACCC Issues Paper Released
Nov 15			Industry Submissions to ACCC Issues Paper
Dec 15			
Jan 16			ACCC issues Preliminary View
Feb 16	Airservices Submission to ACCC Preliminary View		Industry Submissions to ACCC Preliminary View
Mar 16	Lodge Formal Price Notification		
Apr 16			ACCC issues final decision
May 16			
Jun 16			

NEW LTPA PRICES COMMENCE 1 JULY 2016

APPENDICES

Appendix 1

Price Tables

Current	Service Price (inc GST)	1 Oct 2011	1 Jul 2012	1 Jul 2013	1 Jul 2014	1 Jul 2015
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Enroute

\$4.18	20 tonnes or more	\$4.10	\$4.07	\$4.04	\$4.03	\$4.03
\$0.93	Up to 20 tonnes	\$0.92	\$0.91	\$0.90	\$0.90	\$0.90

Current	Service Price (inc GST)	1 Oct 2011	1 Jul 2012	1 Jul 2013	1 Jul 2014	1 Jul 2015
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Terminal Navigation

\$11.43	Adelaide	\$11.66	\$11.72	\$11.78	\$11.83	\$11.89
\$5.83	Brisbane	\$6.09	\$6.15	\$6.18	\$6.18	\$6.18
\$10.95	Cairns	\$11.44	\$11.84	\$12.20	\$12.20	\$12.20
\$12.66	Canberra	\$12.28	\$12.03	\$11.91	\$11.80	\$11.68
\$10.82	Gold Coast	\$10.28	\$9.77	\$9.28	\$8.81	\$8.50
\$5.06	Melbourne	\$5.29	\$5.47	\$5.49	\$5.50	\$5.52
\$8.63	Perth	\$8.20	\$8.03	\$7.87	\$7.72	\$7.56
\$5.57	Sydney	\$5.58	\$5.59	\$5.60	\$5.61	\$5.62
\$12.69	Albury	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Alice springs	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$4.70	Avalon	\$4.70	\$4.86	\$5.03	\$5.21	\$5.39
\$5.06	Broome	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Coffs Harbour	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$9.20	Hamilton Island	\$9.61	\$9.95	\$10.30	\$10.66	\$11.03
\$9.54	Hobart	\$9.64	\$9.68	\$9.68	\$9.68	\$9.68
\$5.06	Karratha	\$13.26	\$13.73	\$14.21	\$14.56	\$14.71
\$12.22	Launceston	\$12.77	\$13.22	\$13.68	\$14.16	\$14.65
\$12.69	Mackay	\$12.44	\$12.31	\$12.19	\$12.07	\$11.95
\$12.69	Rockhampton	\$12.94	\$13.20	\$13.33	\$13.47	\$13.47
\$12.69	Sunshine Coast	\$13.26	\$13.73	\$14.07	\$14.21	\$14.21
\$12.69	Tamworth	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Archerfield	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Bankstown	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Camden	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Essendon	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Jandakot	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Moorabbin	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$12.69	Parafield	\$13.26	\$13.73	\$14.21	\$14.70	\$15.22
\$2.26	Darwin	\$2.15	\$2.04	\$1.94	\$1.84	\$1.75
\$2.94	Townsville	\$2.79	\$2.65	\$2.52	\$2.39	\$2.27

Current	Service Price (inc GST)	2011-12	2012-13	2013-14	2014-15	2015-16
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Aviation Rescue & Fire Fighting

Category 6 Aircraft & below

\$1.81	Brisbane	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Melbourne	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Sydney	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Perth	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Adelaide	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Cairns	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Darwin	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Gold Coast	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Canberra	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Hobart	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Karratha	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Townsville	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Alice Springs	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Avalon	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Ayers Rock	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Broome	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Hamilton Island	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Launceston	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Mackay	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Rockhampton	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32
\$1.81	Sunshine Coast	\$1.99	\$2.14	\$2.25	\$2.29	\$2.32

Current	Service Price (inc GST)	2012	2013	2014	2015	2016
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Category 7 Aircraft

\$1.93	Brisbane	\$2.12	\$2.34	\$2.45	\$2.57	\$2.57
\$1.89	Melbourne	\$2.08	\$2.29	\$2.40	\$2.52	\$2.52
\$1.86	Sydney	\$2.05	\$2.25	\$2.36	\$2.48	\$2.48
\$2.01	Perth	\$2.21	\$2.43	\$2.61	\$2.75	\$2.81
\$2.33	Adelaide	\$2.56	\$2.82	\$2.96	\$3.11	\$3.26
\$2.29	Cairns	\$2.52	\$2.77	\$3.05	\$3.35	\$3.69
\$3.39	Darwin	\$3.73	\$4.10	\$4.51	\$4.96	\$5.46
\$4.01	Gold Coast	\$3.97	\$3.93	\$3.89	\$3.85	\$3.79
\$7.91	Canberra	\$8.31	\$8.51	\$8.73	\$8.94	\$9.08
\$6.73	Hobart	\$7.40	\$8.14	\$8.96	\$9.85	\$10.00
\$7.40	Karratha	\$7.77	\$7.96	\$8.16	\$8.37	\$8.37
\$8.47	Townsville	\$9.32	\$10.25	\$11.27	\$12.40	\$13.64

Current	Service Price (inc GST)	2012	2013	2014	2015	2016
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Category 8 Aircraft

\$2.62	Brisbane	\$2.88	\$3.17	\$3.33	\$3.41	\$3.41
\$2.29	Melbourne	\$2.52	\$2.77	\$2.91	\$2.98	\$3.01
\$2.08	Sydney	\$2.29	\$2.52	\$2.64	\$2.64	\$2.64
\$3.01	Perth	\$3.31	\$3.64	\$4.01	\$4.41	\$4.85
\$9.12	Adelaide	\$8.12	\$7.22	\$6.50	\$5.85	\$5.27
\$4.76	Cairns	\$5.24	\$5.76	\$6.34	\$6.97	\$7.67
\$16.06	Darwin	\$17.67	\$19.43	\$20.40	\$21.42	\$21.75
\$4.01	Gold Coast	\$4.41	\$4.85	\$5.34	\$5.87	\$6.46

Current	Service Price (inc GST)	2012	2013	2014	2015	2016
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Category 9 & 10 Aircraft

\$3.70	Brisbane	\$4.16	\$4.58	\$5.04	\$5.54	\$6.09
\$3.03	Melbourne	\$3.41	\$3.75	\$4.12	\$4.54	\$4.99
\$2.45	Sydney	\$2.76	\$3.03	\$3.34	\$3.67	\$3.67
\$5.08	Perth	\$5.72	\$6.29	\$6.92	\$7.61	\$8.37

Airservices Service Lines *Enroute*

Enroute services primarily cover the separation of aircraft and traffic information services outside tower and approach airspace. The services include:

- aircraft separation in controlled airspace using VHF and HF communications
 - under radar surveillance
 - under ADS-B
 - where no surveillance technologies are available (procedural)
- traffic information in uncontrolled airspace using VHF and HF communications
 - under radar surveillance
 - under ADS-B
 - where no surveillance technologies are available
- a network of ground-based navigation aids at locations where no terminal navigation services are provided, including VORs, DMEs and NDBs
- search and rescue times
- alerting
- flight planning
- flight briefing
- flextracks
- aeronautical information services
 - procedure design
 - authorship of written publications (e.g. aeronautical information publications)
 - cartography for maps and charts.

Our enroute services are carried out from our Melbourne and Brisbane operational centres.

The Brisbane centre manages airspace over the northern part of Australia, representing around 5 per cent of the world's total airspace. Airspace managed from Brisbane includes from 45 nm (83km) north of Sydney, up to the airspace boundaries with Indonesia and Papua New Guinea in the north, and east to the airspace boundaries with New Zealand and Fiji.

Brisbane Centre also manages the upper level airspace for the Pacific Island nations of the Solomon Islands and Nauru under contracts with the governments of both nations.

Brisbane Centre has a strong focus on international air traffic, since all international flights to Australia from North or South America travel through Brisbane airspace, as do a significant share of flights to Australia from Asia.

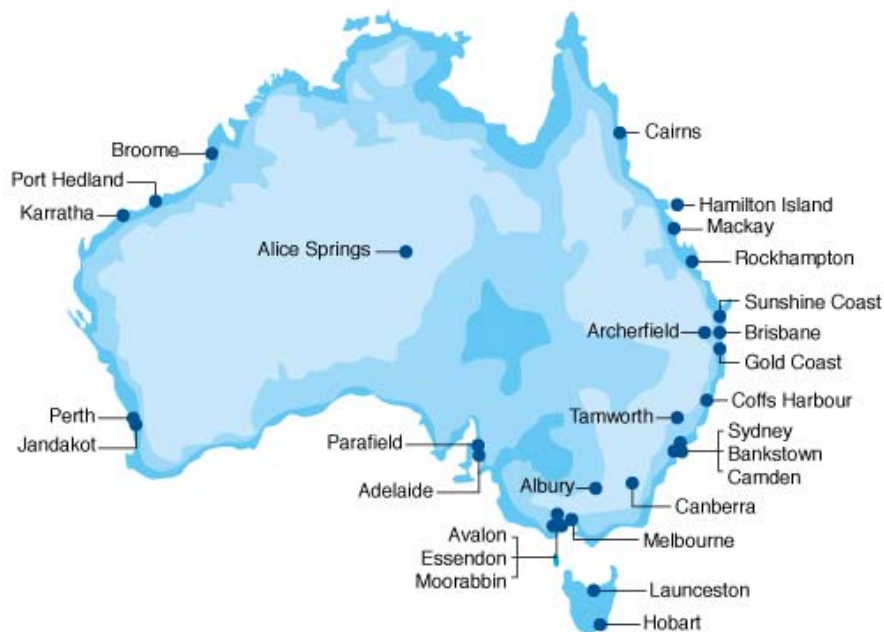
The Melbourne flight information region (FIR) includes the southern half of Australia and the Southern and Indian oceans. Representing around six per cent of the world's surface, our service delivery extends from Indonesia to the South Pole and from halfway to New Zealand to halfway to Africa. The centre is directly responsible for en route services throughout the FIR.

Terminal Navigation (TN)

Terminal navigation services primarily cover services in tower and approach airspace to aircraft arriving at a location where a tower service is in operation. The services include:

- separation services in:
 - tower airspace
 - under radar surveillance
 - under visual surveillance
 - approach airspace
 - under radar surveillance
 - under procedural rules where there are no surveillance technologies
- surface movement
 - separation in runway, taxiway and manoeuvring area
 - traffic information in apron areas
- navigation aids at the airport, including GBAS, ILS, VOR, DME, NDB
- traffic information
- automatic terminal information service
- briefing services
- aeronautical information services
 - NOTAM
 - procedures design
 - document authorship
 - cartography for maps and charts.

Terminal Navigation Locations



Aviation Rescue and Fire Fighting (ARFF)

Airservices provide aviation rescue fire fighting (ARFF) services at 26 of Australia's busiest airports.

Responding annually to over 8,000 aircraft and airport emergency assistance requests nationally, our primary function is to rescue people and property from an aircraft crash or fire and from other fires on the airport.

Our ARFF service is one of the world's largest providers of aviation rescue and fire fighting services with more than 900 operational and support personnel based around Australia.

We provide services ranging from International Civil Aviation Organisation (ICAO) Category 6 to 10 service, consistent with ICAO Annex 14 Recommended Standards and Practice.

Each of our highly trained and experienced fire fighting and technical employees are experts in their field with unique skills and knowledge. We recruit and train fire fighters to ICAO standards.

We must be able to respond to an aircraft incident at either end of a runway within three minutes from the initial call, and be able to apply fire fighting agent at 50 per cent of the maximum discharge rate. Additionally, we must be able to respond to any part of the airport movement area within three minutes.

We own, operate and maintain a fleet of over 100 specialised, high performance aviation fire fighting vehicles, aerial rescue vehicles, water rescue boats, difficult terrain vehicles and domestic response vehicles. This allows us to respond to a broad range of aviation and airport emergencies, including aircraft incidents, structural fires, medical assistance requests, water rescues and fire alarms.

Fire stations at our busiest airports provide a 24-hour service. Hours of operation at smaller airports are determined by commercial passenger aircraft flight schedules. Our largest ARFF stations are located at Melbourne, Sydney, Brisbane and Perth airports. The scheduling and frequency of airline operations determines the hours of operation of each ARFF location.



Stranded Assets

Allocation of Stranding Risk

In a competitive market, businesses commonly face the risk that they will not be able to recover the full cost of long-lived investment. This risk exists because, at the time of investment, there is uncertainty about the future level of demand from customers for the services provided by that asset. Competitive markets deal with this risk in a number of ways. One way is to sign long term contracts – such that if a customer wants a third party to invest in long lived infrastructure the customer must sign a ‘take or pay’ contract – effectively committing the customer to pay for the asset over its life. Alternatively, if long term contracts are not written, then market forces will deal with “stranding” by allowing investors to earn above cost returns on the projects that are not stranded. Investors will only invest if the expected return on an asset is equal to their cost of capital (WACC). The expected return on an investment is equal to

- the return on the asset if it is not stranded weighted by the probability that the asset will not be stranded; plus
- the return on the asset if it is stranded weighted by the probability that the asset will be stranded.

This means that the return on the asset if it is not stranded must be above the WACC; otherwise the probability weighted (expected) return will be below this level.

For regulated businesses the same logic applies. If there is a risk at the time of investment that an asset will be stranded before it has been fully recovered (and the residual is not able to be recovered from other customers) then, in order to have an expectation of earning its WACC, the regulated business must be allowed to earn above its WACC in the scenario where the asset is not stranded.

It is reasonably common for regulated businesses to make investments required to serve one set of customers, where the long run demand from those customers turns out to be insufficient to justify the investment (with 20/20 hindsight). That is, even if the investment is accepted as being efficient in an ex ante sense, it may still turn out to be inefficient in an ex post sense. In this, and similar contexts a regulatory regime effectively has two options²:

- it can allow the costs of those assets to be recovered from other customers (even though serving those customers does not require those assets); or
- it can ‘strand’ the assets in the sense that it no longer allows the business to earn a return on the unrecovered value of these assets.

There is regulatory precedent for both approaches. However, it is generally recognised that if the second “stranding” approach is “on the table” the regulator must provide additional “stranding risk” compensation to the regulated business.

In practice, this creates a very difficult set of circumstances because in order to provide the correct level of stranding risk compensation the regulator must effectively forecast the amount

² A third option of a Community Service Obligation funded by the Government may be possible, however this is considered to be beyond the scope of the current regulatory regime.

of stranding that will occur in any given regulatory period – and any errors in that forecast will be a windfall gain/loss to investors.

The case for exposing a business to stranding risk is strongest where a business can control the level of risk that they face. In these circumstances, exposing the business to stranding risk can promote efficient decisions. However, in the case of investments in TN and ARFF Services at the mining locations in question:

- Airservices has no discretion over whether to build the assets; and
- Airservices has relatively little influence over the future level of demand for its services at those locations.

For those reasons, economic principle would appear to strongly suggest that Airservices should not be subject to stranding risk. The question therefore becomes: what does economic theory suggest is the most efficient means of addressing the stranding risks that Airservices is likely to face?

Recovery of Stranding Costs

Economic efficiency requires Airservices to both:

1. Signal to customers the cost that their activity imposes on Airservices. The cost that their activity imposes on Airservices will be equal to either:
 - incremental costs - the new costs that Airservices will incur if customers increase their activity; or
 - avoidable costs - the existing costs that Airservices will avoid if customers reduce their activity.
2. Recover fixed costs (i.e. non-incremental/non-avoidable costs) in the least distortionary manner.

Pricing on the basis of incremental/avoidable costs sends the signal to users that they should only undertake (or continue to undertake) a certain activity if they value that activity at more than the costs that it imposes on Airservices. When passenger numbers are growing, incremental costs are highest immediately before they cross the threshold for a new service to be provided at a location – causing Airservices to incur substantial fixed and sunk costs.

Economic theory might therefore suggest signalling the incremental investment costs to users through prices before they are actually incurred. Any such signal would necessarily incorporate the potential costs of the asset subsequently being stranded once it had been built. If the probability and cost of stranding was very significant, so too would be the ex-ante price signal. Foreshadowing the costs of an investment in prices can have two outcomes:

- It may cause many to reduce their demand and, if that reduction in demand is sufficiently large there may no longer be a need to invest in the new asset; or
- It may have little effect on demand, or an insufficient effect to obviate the need to invest in new capacity.

Either outcome is efficient. In the first scenario, providing the signal reveals that not enough

users value the service sufficiently to pay the additional cost – including the potential cost of stranding the asset. This has enabled those users to alter their behaviour so as to allow the investment costs to be avoided. In the second scenario, the reaction of users has confirmed the need for the new investment and, coincidentally, contributed to the cost of the new assets.

However, the current pricing of TN and ARFF services is not structured in this way. The prices for TN and ARFF services at regional locations do not increase materially as the passenger numbers approach the various establishment thresholds. In addition, when the CASR requires Airservices to commence a new service, it does not take into account the willingness of users to pay for it, the sustainability of the demand in growth or the attendant stranding risk.

Once the fixed costs of installing TN and/or ARFF services have been incurred, they are no longer avoidable. For example, once an ATC has been built at a location, the associated capital costs are “sunk” and will not be avoided even if activity at that location fell to zero. There is therefore no longer any point in signalling to users to avoidable costs of new TN and ARFF facilities. The question becomes how best to recover the now unavoidable costs of the newly sunk assets.

The only way to achieve this is by setting a price that exceeds incremental/avoidable cost for some users at a location, or by recovering the costs from users in other locations. Economic efficiency requires that the distortions to activity associated with pricing above incremental/avoidable cost be minimised. This is usually achieved by charging users a “mark-up” over the incremental cost of serving them that reflects the elasticity of their demand.

This means that if demand for all services has the same price sensitivity, then all costs that are not recovered from incremental/avoidable cost based pricing are most efficiently recovered through a constant absolute mark-up over incremental/avoidable cost. However, if some users have “less elastic” demand and are willing and able to pay higher prices, it is generally considered to be more efficient for those parties to pay more.

If there is a material risk that the TN and/or ARFF assets in question may be stranded, this is a highly relevant consideration for this assessment. For example, seeking to charge customers at mining ports a certain mark-up on incremental costs over a 35-year period may risk stranding the assets if the resources boom ends within that window. It may therefore be preferable to explore alternative pricing options that may reduce the risk of asset stranding, and the attendant costs.

Pricing Options for Stranded Assets

The following section outlines a number of different options that could be implemented to address the asset stranding risks. The prices quoted are indicative and are based on estimated pricing variables, as shown in the below table, which may be subject to change at the time the actual service is implemented – in this sense they are being used here purely for the purposes of modelling the impact of either tower or fire services.

By way of broad indication, based on the aircraft traffic volumes that are typically observed at a newly established regional location of, say, 240,000 tonnes per annum, an average location specific charge of \$20.68 per landed tonne would be required to recover total service costs. \$5.25 of this would recover assets costs over a 35 year period and \$15.42 would contribute to the recovery of annual service operating expenses including staff and supplier costs.

Indicative ARFF new services pricing elements

Service Costs / Pricing Element	Total Service Cost	Operating Costs	Asset Costs Only
Service Costs			
Service Operating Costs (excluding asset costs)	3.4m	3.4m	n/a
Asset Depreciation & Cost of Capital @ 8.60%	1.1m	n/a	1.1m
Total Service Costs	4.5m	3.4m	1.1m
Network aircraft traffic volumes (MTOW)	55,000,000	55,000,000	55,000,000
Air Traffic Volumes & Pricing			
Network price impact/per location	\$0.09	\$0.07	\$0.02
New category 6 network charge (currently \$2.25)	\$2.34	n/a	n/a
Location Air Traffic Volumes (MTOW)	240,000	240,000	240,000
Estimated revenue recovered at location	0.5m	n/a	n/a
Service costs recovered at other locations	4.0m	n/a	n/a
Location Specific Price	\$20.68	\$15.42	\$5.25

However, it may simply not be possible to spread the recovery of those costs evenly over the 35 year asset life, because the resources boom may not last that long. The options described below represent potential ways of addressing that problem and allowing Airservices to recover its costs.

Option 1

Recover service asset costs under a network price and accelerate the cost recovery period to align with its expected economic life.

Accelerated asset cost recovery window - network pricing arrangements (Asset Costs only)

Year	Average Depreciation / Return on Assets (\$000's) Asset Life			Implied Price Asset Life (inc GST) per tonne		
	15yrs	10yrs	7yrs	15yrs	10yrs	7yrs
Price across the network	1,718	2,210	2,861	\$0.04	\$0.05	\$0.06

Under this option, the profile of cost recovery at mining ports could be shortened to reflect the

fact that the demand that has given rise to the need for new investment at mining ports is likely to be temporary. For example, if the factors underpinning the growth in passenger numbers are likely to persist for only the next 7, 10 or 15 years, the recovery profile could be changed accordingly.

Specifically, the recovery profile could be shortened so that the relevant costs are recovered over lives of between 7, 10 and 15 years rather than the full 35 year life. If the economic life of the asset is truncated in this way, charges would need to escalate by between 50% and 150%. A similar pricing outcome could also be achieved if a diminishing value depreciation method was applied.

Taking into account both variable and infrastructure costs the below table shows the full pricing impact of between 15% to 17% if three new services were priced under network arrangements.

Accelerated asset cost recovery window - network pricing arrangements (Full Service Costs)

Pricing Element / Depreciation Rate	15yrs	10yrs	7yrs
Variable Costs Network Price	\$0.07	\$0.07	\$0.07
Infrastructure Costs Network Price	\$0.04	\$0.05	\$0.06
Total Network Price Impact per service	\$0.11	\$0.12	\$0.13
No of Services	3		
Total Network Price Impact	\$0.33	\$0.36	\$0.39

The principal advantage of this option is that it minimises any potential under recoveries that Airservices might otherwise incur if a normal asset life of 35 years was applied, and the assets became stranded. Recovering the costs over the period in which the assets are being used also better connects the usage of the services with their payment.

The principal potential disadvantage of a network charge is that the users at mining ports would be required to pay only around 20% to 30% of the additional costs at each location. This is despite the fact that the demand by those users might be expected to be relatively insensitive to price increases – at least over the shorter periods in question. This would tend to suggest assigning a greater proportion of those costs to those users while they are in a position to pay.

It is also important to note, that where the option to recover costs under a network pricing structure is applied, an equivalent increase for all location specific category charges will also occur as a consequence of the higher category (7/8/9/10) including their portion of category 6 and above respectively. For example, if it is determined that costs are to be recovered through a \$0.04 increase in the network charge (i.e. through recovery over 15 years) this would increase the category 7/8/9/10 charges at Sydney for all customers accordingly:

Accelerated asset cost recovery – other services pricing impacts (Asset Costs only)

Sydney Category Charge (per landed tonne) (2013-14)	Category 7 Price	Category 8 Price	Category 9/10 Price
Current Charge	\$2.36	\$2.64	\$3.34
New Charge	\$2.40	\$2.68	\$3.38

Option 2

Recover service asset costs at the location where they are incurred and accelerate the cost recovery period to align with its expected economic life.

Like the previous option, the profile of cost recovery would again be shortened to reflect the fact that the underlying demand growth at the mining ports in question is likely to be temporary. The option would also again minimise any potential under recoveries that Airservices might otherwise incur if a normal asset life of 35 years was applied, and assets became stranded. The option also again strongly connects the timing of payments and the usage of the services.

Accelerated asset cost recovery window – price at location (Asset Costs only)

Year	Average Depreciation / Return on Assets (\$000's) Asset Life			Implied Price Asset Life per landed tonne (inc GST)		
	15yrs	10yrs	7yrs	15yrs	10yrs	7yrs
Price at location	1,718	2,210	2,861	\$7.87	\$10.13	\$13.11

However, unlike the previous option, the costs in question are recovered from the users in the locations in question. As mentioned above, the demand by users might be expected to be relatively insensitive to price increases over the truncated asset life (the shortened 7, 10 or 15 year period). This would ordinarily suggest that it is efficient to recover those costs from those users while the mining boom persists and they are in a position to pay.

This also means that customers in other locations that do not use the services in question are not required to contribute to their costs, which they would under a network charge. However, there may still be a need to test whether “pure” location charges might impact the near term viability of some customers at mining ports. If they would, it may be necessary to retain at least some element of network charging.

Taking into account both variable and infrastructure costs the below table shows the combined location specific and network pricing impact if three new services were priced under these arrangements.

Accelerated asset cost recovery window (location specific infrastructure / network variable cost pricing arrangements)

Pricing Element / Depreciation Rate	15yrs	10yrs	7yrs
Variable Costs Network Price	\$0.07	\$0.07	\$0.07
Infrastructure Costs Network Price	\$ -	\$ -	\$ -
Total Network Price Impact per service	\$0.07	\$0.07	\$0.07
No of Services	3		
Total Price Impact on Network	\$0.21	\$0.21	\$0.21

Mining Location Pricing Element / Depn Rate	15yrs	10yrs	7yrs
Variable Costs Network Price	\$0.07	\$0.07	\$0.07
Location Infrastructure Price	\$7.87	\$10.13	\$13.11
Total Location Service Price	\$7.94	\$10.20	\$13.18

Option 3

Recover write-off costs on an "ex-post" basis under a network pricing arrangement

Under this option, the asset costs would be recovered under a network charge over a normal 35 year life. If the asset becomes stranded within that timeframe, the charge could either be increased to recover any residual asset costs in a single year, or the costs could continue to be recovered over the remaining life, as if it were still in situ.

Single Year price impact of asset write-off – network pricing arrangements (Asset Costs only)

Year	Write-off Cost (\$000's)			Implied Price Asset Life per landed tonne (inc GST)		
	15yrs	10yrs	7yrs	15yrs	10yrs	7yrs
Price across the network	9,375	11,250	12,375	\$0.19	\$0.23	\$0.25

The potential drawback of this approach is that there will be fewer users of the service at the time of its disestablishment than while it is in operation – so prices per customer would need to be higher. They may also be price sensitive customers so higher prices may artificially discourage demand. They may also be different users. Spreading this cost to users at different locations under a network pricing approach might be efficient but, there is nonetheless a question of whether that is equitable.

The table below shows the full pricing impact if three new services were priced under these arrangements. Indicatively, this would give rise to an increase in the network charge of between 25% and 33%.

Single Year price impact of asset write-off – network pricing arrangements

Pricing Element / Asset Life	15yrs	10yrs	7yrs
Variable Costs Network Price	\$ -	\$ -	\$ -
Infrastructure Costs Network Price	\$0.19	\$0.23	\$0.25
Total Network Price Impact per service	\$0.19	\$0.23	\$0.25
No of Services	3		
Total Network Price Impact	\$0.56	\$0.68	\$0.74

Option 4

Recover service asset costs over its expected economic life and, if the asset is stranded within that timeframe, recover the write-off costs under a network pricing arrangement.

This option is a “hybrid” of the second and third options. The basic objective would be to try and recover the costs of the assets in question within a shortened economic life that reflects the duration of the resources boom. The accelerated cost recovery would be recovered on a location-specific basis (as per option 2).

Conceivably, there could also be provision to reduce the rate of accelerated cost recovery at a location if it was believed that doing so would prevent a reduction in demand and thereby preserve the continued viability of Airservices operations at that port for a longer period.

The advantages and disadvantages of each would be as described above.

However, if the assets in question were nonetheless stranded, despite the truncated returns windows, Airservices would then have the option of recouping the unrecovered portion through a network charge (as per option 3). That charge could either be increased to recover the residual costs in a single year, over the remaining truncated asset life, or some longer window.

Other Options

As noted in Section 3 of this Discussion Paper, over the years Airservices has discussed a range of issues and approaches to the pricing of its services through various Discussion Papers and Price Notifications that will also be relevant in these circumstances, but have not been restated here.

The four options presented above have been designed to address the stranding risk faced by Airservices and highlight the potential quantum of price change for different users under each option.

Whilst this paper has limited the scope of the options presented to just four, in considering each of them Airservices is also interested in your feedback on any other alternate charging arrangements that have not been discussed that you believe would deliver an efficient pricing outcome.