

Mr Anthony Wing  
General Manager  
Transport and General Prices Oversight Branch  
Australian Competition and Consumer Commission  
GPO Box 520  
MELBOURNE VIC 3001

Dear Mr Wing

### Notification of price changes for Airservices' Enroute, Terminal Navigation and Aviation Rescue & Fire Fighting Services: effective 1 October 2011

I am writing to formally notify the Australian Competition and Consumer Commission (ACCC), in accordance with Part VIIA of the Competition and Consumer Act, 2010 of price changes for Airservices Enroute, Terminal Navigation and Aviation Rescue & Fire Fighting (ARFF) services effective 1 October 2011.

The locality notice for these services is set out in Attachment 1.

The price changes that are the subject of this notification are an outcome of consultation with industry and the ACCC's price notification review process and will replace those existing under the current long term pricing agreement which have been maintained under a price freeze since 1 July 2008.

The prices are based on Airservices Draft Price Notification, as submitted to the ACCC in March 2011, with changes made to address the concerns raised in the ACCC's preliminary view.

Noting that in its Preliminary View the ACCC considered that "if Airservices can address these matters prior to submitting its formal price notification, then the ACCC would be minded to not object" to the price notification. Airservices has addressed these concerns in this formal notification as follows:

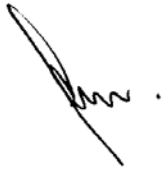
- The calculation of Airservices rate of return on assets: This rate of return has now been revised downwards in line with reductions in the risk free rate and the cost of debt margin. The reduction in estimated allowable revenues has resulted in a reduction in the Enroute services price.
- Industry consultation on Capital Expenditure: Airservices has agreed with industry representatives on range of measures to improve the robustness of consultation on capital expenditure through both the project development phase and ongoing monitoring.

- Drivers of Efficiency: Airservices has agreed with industry representatives on improvements to its Services Charter through the incorporation of new cost efficiency performance indicators.

Further details on how these concerns are being met are contained at Attachment 2.

A full schedule of prices supporting this notification for Enroute, Terminal Navigation and ARFF services from 1 October 2011 to 30 June 2016, is contained in Attachment 1. Other changes in charging arrangements that accompany this price notification, as outlined in the Draft Price Notification, are contained at Attachment 1.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Andrew Clark', with a small dot at the end.

Andrew Clark  
Chief Financial Officer  
22 August 2011

## ATTACHMENT 1

### Notification and Details of Prices Proposed by Airservices Australia for Enroute, Terminal Navigation and Aviation Rescue & Fire Fighting Services

Notification of prices pursuant to section 95Z of the Competition and Consumer Act, 2010.

Name of the Declared Person:        Airservices Australia  
   25 Constitution Avenue  
   CANBERRA ACT, 2600

Hereby gives notice that it proposes to supply the goods or services below at the prices detailed below, effective from 1 October 2011.

The services, which are the subject of this notification, provide for enroute air navigation services in Australia's flight information region, terminal navigation services at 30 Australian airports and rescue and fire fighting services at 21 Australian airports.

Airservices Australia considers that the proposed price changes do not result in revenues in excess of revenues based on efficient costs and a reasonable rate of return and are consistent with the requirements of section 95G(7) of the Competition and Consumer Act, 2010.

## New Prices for Services: 1 Oct 2011 to 30 Jun 2016

Current	Service Price (inc GST)	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Enroute</b>						
\$4.18	20 tonnes or more	\$4.14	\$4.12	\$4.10	\$4.09	\$4.08
\$0.93	Up to 20 tonnes	\$0.93	\$0.92	\$0.92	\$0.91	\$0.91

Current	Service Price (inc GST)	2011-12	2012-13	2013-14	2014-15	2015-16
<b>Terminal Navigation</b>						
\$11.43	Adelaide	\$11.66	\$11.83	\$11.89	\$11.95	\$12.01
\$5.83	Brisbane	\$6.12	\$6.18	\$6.21	\$6.21	\$6.21
\$10.95	Cairns	\$11.50	\$11.90	\$12.32	\$12.32	\$12.32
\$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	\$5.31	\$5.50	\$5.51	\$5.53	\$5.54
\$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	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Alice springs	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$4.70	Avalon	\$4.70	\$4.86	\$5.03	\$5.21	\$5.39
-	Broome	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Coffs Harbour	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$9.20	Hamilton Island	\$9.66	\$10.00	\$10.35	\$10.71	\$11.09
\$9.54	Hobart	\$9.64	\$9.73	\$9.78	\$9.78	\$9.78
-	Karratha	\$13.32	\$13.79	\$14.27	\$14.77	\$14.92
\$12.22	Launceston	\$12.83	\$13.28	\$13.74	\$14.23	\$14.72
\$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	\$13.32	\$13.79	\$14.14	\$14.28	\$14.28
\$12.69	Tamworth	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Archerfield	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Bankstown	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Camden	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Essendon	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Jandakot	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Moorabbin	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$12.69	Parafield	\$13.32	\$13.79	\$14.27	\$14.77	\$15.29
\$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

## Summary of Significant Changes to Existing Charging Arrangements

Service	Current Charges	New Charges
Enroute Services	<ul style="list-style-type: none"> <li>Levied on IFR flights only</li> <li>Based on aircraft weight (MTOW) and distance flown</li> </ul>	<p><i>As per current charging arrangements</i></p> <ul style="list-style-type: none"> <li>Weight capping for large aircraft</li> <li>Average MTOW of aircraft if &gt;15.1t</li> </ul>
Terminal Navigation Services	<ul style="list-style-type: none"> <li>Levied on IFR and VFR full stop landings and practice instrument approaches</li> <li>Based on aircraft weight (MTOW)</li> <li>Capital city basin pricing</li> <li>Price capping at GA and regional locations</li> </ul>	<p><i>As per current charging arrangements</i></p> <ul style="list-style-type: none"> <li>Weight capping for large aircraft</li> <li>Average MTOW of aircraft if &gt;15.1t</li> <li>Price capping across ALL locations</li> </ul>
Aviation Rescue & Fire Fighting Services	<ul style="list-style-type: none"> <li>Applies to aircraft with MTOW &gt;15.1t, or "target" aircraft with MTOW between 5.7t and 15.1t</li> <li>Levied on full stop landings and practice instrument approaches</li> <li>Based on aircraft weight (MTOW) and aircraft ARFF category</li> </ul>	<p><i>As per current charging arrangements</i></p> <ul style="list-style-type: none"> <li>Weight capping for large aircraft</li> <li>Average MTOW of aircraft if &gt;15.1t</li> <li>Call-out charge for non-aviation alarms and incidents.</li> </ul>
General Aviation	<ul style="list-style-type: none"> <li>Charges under standard contract or light aircraft option (LAO)</li> </ul>	<ul style="list-style-type: none"> <li>Cessation of LAO</li> <li>Simplification of charging</li> <li>Free access for low volume general aviation users</li> <li>Fixed price option available</li> </ul>
Risk Sharing	<ul style="list-style-type: none"> <li>Flight Activity Volumes +/- 5% of agreed revenue levels</li> <li>Regulation Changes leading to changes in operating costs or investment</li> <li>Capital Expenditure 50% of agreed single year expenditure, or 25% agreed expenditure on a cumulative basis</li> </ul>	<p><i>As per current charging arrangements</i></p> <ul style="list-style-type: none"> <li>Capital Expenditure 20% of agreed single year expenditure, or 10% agreed expenditure on a cumulative basis</li> </ul>

## Airservices Response to the Commission's Preliminary View

The Australian Competition and Consumer Commission (ACCC) issued its Preliminary View on Airservices Draft Price Notification for 2011/12 – 2015/16 on 7 July 2011.

Airservices notes that the ACCC is of a mind to “not object” to the proposal set out in the Draft Price Notification provided Airservices addresses the following three concerns identified by the ACCC:

1. Capital Expenditure Consultation – consultation has not been adequate to ensure the proposed program is prudent and efficient;
2. Drivers of Efficiency – there is scope to improve these drivers through internal benchmarking and setting explicit efficiency targets;
3. Rate of Return – the methodology applied in estimating the risk-free rate and cost of debt margin has resulted in a rate of return that is currently too high, leading to an over-recovery of required revenues.

Airservices has long considered its consultation processes to be central to business planning. This has been recognised by International Air Transport Association's (IATA) awarding of its prestigious *Eagle Award* to Airservices in 2005 for recognition of outstanding performance in customer satisfaction, cost efficiency and continuous improvement.

In relation to the Long Term Pricing Agreement Airservices remains firmly of the belief that it has consulted in detail and at length, both publicly and privately and with a range of industry representative groups on the pricing proposal. This included the provision of, and discussion on, a range of information on our Capital Works program. Airservices is satisfied that it has met the consultation standards required by the Commonwealth of its own organisation and of privatised airports when dealing with the same customer group as Airservices.

Nonetheless, Airservices recognises that given the complexity of the capital program and limitations on available information for projects planned for later years in the program there is the potential to improve the consultation process. To this end Airservices has proposed and now commenced implementing an additional range of engagement mechanisms and reporting measures covering planned capital investment. This includes, prior to Board consideration, discussing with the Pricing Consultative Committee (PCC) business cases for all projects greater than \$10m, providing the PCC the same benefits realisation reports for completed projects as provided to the Airservices Board and continuing to report performance through the industry quarterly report.

It is worth noting that this additional level of disclosure and scrutiny operates over and above Airservices current statutory reporting requirements. As a statutory authority Airservices has additional disclosure and reporting requirements to a Government Business Enterprise (GBE). Specific governance arrangements require not only publicly produced annual reports, but a higher level of public disclosure, scrutiny and review with a requirement to have our corporate plan publicly tabled. Performance against this plan is then monitored through formal quarterly reporting to the Department of Infrastructure and the Minister.

Airservices recognised twelve months ago that its performance could be more closely aligned with customer expectations and consequently introduced a Services Charter which was developed and constructed through a series of workshops with industry. Following ongoing quarterly reporting over the last year it is being updated and improved for 2011/12. Progress on the current performance measures and the capital works program is provided, as noted above, to whole of industry on a quarterly basis. For major domestic customers, it is supported by a monthly performance discussion with a focus on service needs, project performance and service quality.

This approach to customer focussed performance management, supported by the Service Charter, is world leading for an air navigation service provider (ANSP). Airservices has always indicated to industry that the charter and the associated metrics would be refined and improved over time and have now proposed a set of efficiency metrics to be included. Some of these metrics are also reported on by the Civil Air Navigation Service Organisation (CANSO) allowing external and public benchmarking of efficiency.

The ACCC has not identified any area of Airservices' operations that involves inefficiency nor has it gathered any evidence of inefficiency. Rather, Airservices understands the ACCC has attempted to identify processes that will help to ensure that, on an ongoing basis, Airservices will continue to strive for efficiency. Airservices considered the amendments to its consultation process will help achieve this goal.

Having reviewed the submissions to the ACCC in response to the Preliminary View, Airservices believes that these proposed changes to consultation and reporting on drivers of efficiency broadly align with the industry views on these issues. More recent discussions and the circulation of further information to interested stakeholders and to the PCC indicate that there is general agreement with the proposed improved transparency over business cases and the key performance indicators.

However, there is an expectation that further work is required to refine the indicators and identify appropriate targets over coming months.

In relation to the weighted average cost of capital (WACC), Airservices notes the concerns regarding the estimation of the risk free rate and cost of debt margin. The draft notification had been based on an understanding of regulatory decisions made in particular by the ACCC and its related organisation, the AER, over the last couple of years.

Airservices understands the ACCC's preference to adopt a 20 day timeframe close to its decision making and that this has resulted in a reduction in WACC as interest rates fell significantly between the time the draft notification was developed in February and the time the ACCC made its estimations in late June.

However, on further review of the elements of the risk free rate and the benchmarking of the cost of debt margin, Airservices remains concerned that while there may be some alignment with the decision on Airservices pricing in 2004, they appear out of step with current regulatory decision making. Airservices is also concerned that the ACCC's approach is not consistent with the obligations of Commonwealth agencies under the Competitive Neutrality Principles.

Based on further analysis, Airservices believes that the use of the 10 year risk free rate remains appropriate as it is consistent with a long term market risk premium of 6%. The combination of Airservices stand-alone credit rating of AA along with the absence of an appropriate AAA benchmark in the market suggests that the only objective market based benchmark could be based on AA.



Based on these benchmarks, re-estimating the WACC in current market conditions with lower long term interest rates will lead to a reduction in the WACC from that proposed in the Draft Notification of 9.95% to 9.12%. This leads to an overall reduction in maximum allowable revenue of \$52m. The changes in prices as a consequence of this reduction have been built into the final Price Notification.

Service (\$mil)	2011-12	2012-13	2013-14	2014-15	2015-16	Total
As per Draft Price Notification	861.6	916.7	970.4	1,013.1	1,059.6	4,821.4
Update for WACC revision	852.7	906.9	959.8	1,001.8	1,047.8	4,769.1
Increase/(Decrease)	(8.9)	(9.8)	(10.6)	(11.2)	(11.8)	(52.3)

For Terminal Navigation services, prices were only amended where the over-recovery was significant. Affected locations where prices were adjusted include Adelaide, Cairns, Canberra, Karratha, Maroochydore and Rockhampton.

No revisions were made to ARFF prices with the reduction to the rate of return not providing any significant areas of service price over recovery. This also recognises the need to continue to transition ARFF services prices toward full cost recovery.

The remaining reduction to bring prices in line with allowable revenues has been carried through to Enroute service prices to help further minimise the over-recovery in that service.

Service (\$mil)	2011-12	2012-13	2013-14	2014-15	2015-16
Proposed revenues by service					
Enroute	412.4	424.4	438.7	457.1	472.1
Terminal Navigation	333.1	344.8	358.7	373.0	386.1
ARFF	126.4	140.0	154.3	168.6	179.0
Building block costs by service					
Enroute	380.4	403.3	428.3	448.4	470.6
Terminal Navigation	324.5	344.4	363.5	377.7	391.6
ARFF	147.8	159.3	168.0	175.7	185.6
Service surplus/(shortfall)					
Enroute	32.0	21.1	10.4	8.7	1.5
Terminal Navigation	8.7	0.4	(4.8)	(4.7)	(5.5)
ARFF	(21.4)	(19.3)	(13.7)	(7.1)	(6.6)
Effective contribution to overheads					
Enroute	99.0	92.8	85.9	87.4	83.3
Terminal Navigation	65.4	61.0	59.1	61.9	63.7
ARFF	(1.0)	2.6	9.3	17.1	18.7

Further detail on each of the elements of concern raised by the ACCC is set out below.

## 1. Capital Expenditure Consultation

The ACCC has expressed concern that Airservices has not undertaken adequate consultation with stakeholders to ensure that its capital expenditure program is undertaken prudently and efficiently. Airservices notes this concern and whilst not agreeing with it, proposes to take further action to address it.

Airservices recognises stakeholders concerns relating to the information provided, the effectiveness of the consultation, and the need to improve mechanisms for taking into account or addressing stakeholders' views. Airservices has also noted the specific concerns regarding the ATM Future System project.

In particular, the ACCC is seeking an improvement in consultation processes that allow stakeholders to provide more informed input on the benefits and costs of specific projects, as well as activity forecasts and service quality preferences.

Since lodging its Draft Notification in March 2011, Airservices has continued to work with stakeholders to improve the information on both the current financial year capital expenditure and the forecast expenditure over the next five years.

In the Airservices Pricing Consultative Committee (PCC) meeting on 27 May 2011, the PCC discussed how improvements could be made in the consultation process and identified and agreed the following core elements that will provide greater transparency over, and informed input to, capital project decision making as well as improving the ongoing monitoring of program delivery performance:

i) Program Baseline

A more detailed program baseline will be provided to establish major delivery milestones to enable improved program performance monitoring. The baseline will detail planned project benefits, project costs and project milestones as they were incorporated into the Draft Price Notification. It will be the original record against which delivery will be measured and risk sharing triggers monitored.

ii) Major Project Business Case Options

Project business case information will be presented to the PCC for all projects greater than \$10m. This information will be provided prior to Airservices Board endorsement to improve transparency over, and industry input to, the determination of a preferred option. At this time, the business case information will be more mature, with refined information on project objectives, scope, benefits, costs and schedules. The final format of this business case information was agreed at the PCC meeting on 16 August 2011 and formal reporting will commence from the PCC meeting scheduled for 16 November 2011.

iii) Project Baseline

Following the approval of the preferred option, a final project baseline will be provided to the PCC. This baseline will include a final scope, cost/benefit analysis and schedule that will form the basis against which project delivery performance will be measured. Formal reporting will commence at the PCC meeting scheduled for 16 November 2011.

iv) Quarterly Reporting

As part of the quarterly service charter performance reports to the broader industry, high level capital program performance will continue to be reported. These reports will provide indicators on program health against annual targets. More detailed information will be

provided to the PCC including a financial analysis and delivery schedule management, as well as information on deviations from the LTPA program baseline. This reporting commenced at the PCC meeting on 27 May 2011, with enhanced reporting scheduled to commence at the PCC meeting on 16 November 2011 following agreement to the elements above.

v) Benefits Realisation

Airservices will report on the benefits realised from capital works projects. The benefits identified will be reported annually and measured against original project baseline benefits realisation plans. Measurement of the benefits will be monitored on an ongoing basis to provide a cumulative picture of the benefits yielded.

## 2. Drivers of Efficiency

### Advantages of Cost Efficiency Measures

The ACCC's Preliminary View concluded that:

*there is scope for Airservices to improve its drivers of efficiency through internal benchmarking and setting of explicit efficiency targets.*

Airservices has considered this assessment and agrees with the ACCC that it would be advantageous for Airservices to report against various measures of cost efficiency. The potential advantages of adopting such an approach include:

- Providing greater transparency to customers and other stakeholders on how Airservices' unit costs have varied in the past and will vary in the future;
- Providing a concrete basis for Airservices and/or customers to set targets (aspirations) for movements in Airservices' unit costs in the future;
- Providing an impetus for Airservices to itself better understand the drivers of unit costs and the trade-offs between different measures of cost efficiency; and
- Creating a dataset and knowledge within Airservices that may assist Airservices in better benchmarking its cost efficiency against other ANSP's internationally.

Airservices believes developing and publishing cost efficiency measures has the potential to heighten both internal and external pressures for cost efficiency.

Providing customers with this information is likely to enhance their ability to hold Airservices to account on matters of cost efficiency. This can be expected to add to pre-existing internal pressures for cost efficiency. Moreover, devoting resources to measuring cost efficiency has the potential to enhance internal pressures for efficiencies above and beyond the impact that comes from having better informed customers.

### Development of Efficiency Measures

Airservices proposes to develop the relevant measures of unit cost efficiency with customers through the Pricing Consultation Committee (PCC). Airservices preliminary analysis has identified the following indicators for measurement of past movements in cost efficiency and for ongoing performance reporting.

Cost Effectiveness	Methodology
Total Tower cost per movement: General Aviation	Total GA Tower Costs divided by Number of Movements
Total Tower cost per movement: Regional	Total Regional Towers Costs divided by Number of Movements
Total Tower cost per movement: Capital City	Total Capital City Towers Costs divided by Number of Movements
Total Cost per IFR flight hour	Total ANSP cost per IFR flight hour
IFR Flight Hours per ATCO in Operations	Number of IFR flight Hours per ATCO in Operations
Employment Cost of ATCO's in Operations as a Percent of Total Costs	Employment Cost of ATCO's in Operations as a Percent of Total ANSP Costs
ARFF Cost per Operational Station Hour	ARFF Costs by category (6,7,8,9,10) divided by all Station's hours of coverage
ARFF Cost per Movement	ARFF Costs divided by Number of movements at ARFF Locations
ARFF: Number of People Assisted per Staff Member	ARFF Responses divided by Number of ARFF Operational Staff

Airservices has circulated these metrics to the PCC for their feedback and will include them in a revised Services Charter that is being worked on with industry currently with reporting to commence this financial year.

Generally, at this early stage of development of the Services Charter, Airservices considers that it would be inappropriate to be overly prescriptive about precisely what information should be gathered and what targets should be set for each indicator. In this regard, Airservices is mindful of the long running debate about the usefulness or otherwise of performance indicators (quality and otherwise) produced by major airports. This is properly a matter to be discussed in the PCC process which will be informed by research and importantly shared analysis of the reported outcomes.

In this regard Airservices considers that it is useful to note some of the complications and potential risks associated with a hurried or impulsive process for development of cost efficiency measures and any associated targets. This is mainly because any cost efficiency indicators used are likely to be partial in nature.

Airservices has a large number of outputs which extend beyond simply the three major services (TN, En Route and ARFF) including the delivery of these services in different geographies and at different levels of quality. It is unlikely that any single or even small number of cost efficiency measures will be capable of perfectly measuring the overall efficiency with which Airservices provides its services. This means that there will be risks associated with placing too much emphasis on Airservices improving a small number of cost efficiency measures at the potential cost of reducing the other cost and quality performance measures.

For example, if the organisational focus is on reducing efficiency indicators that primarily measure employment costs per unit of output then management may be given an artificial incentive to overspend on capital projects that reduce employment but which cause total costs (labour and capital) to increase.

This was noted by the NSW Treasury in the context of assessing performance of its government owned businesses:

*The weaknesses of judging performance using partial measures are well understood. Partial indicators can vary for reasons other than inefficiency; for example, agencies may deliver services in different environments, have a different mix of clients or use different input mixes. Focussing on partial measures such as output per employee can be misleading because it only tells part of the story - how production is moving with labour. It says nothing about capital.<sup>1</sup>*

### Longer Term Performance Incentives

For this reason Airservices considers that it is too early to consider attaching financial incentives to performance against certain efficiency indicators. This possibility was raised by the ACCC on page 19 of its Preliminary Views paper.

*The ACCC notes that the Charter is still in development and considers that there is still scope to strengthen the accountability for Airservices' to meet the KPIs included in the Charter. In particular, where KPIs are not met, there needs to be clear guidelines as to what Airservices' resulting response should be. Such a response could include any financial consequences for Airservices not meeting an agreed number of KPIs within a period.*

*The ACCC also notes stakeholders' comments regarding the lack of KPIs relating to the efficiency or productivity of Airservices' operations. The ACCC would encourage Airservices to further develop these KPIs in its Charter in consultation with its users.*

Airservices considers that it has strong incentives to minimise costs over the five year LTPA (with cost reduction/overruns relative to forecast being borne by Airservices). Airservices does not believe that adding rewards/penalties associated with particular partial measures of cost efficiency, at this stage, will improve these incentives and is concerned that there is a material risk that doing so may give rise to perverse results for the reasons described above. Importantly, this further work is required to ensure the efficiency drivers do not compromise Airservices need to maintain safety as its highest priority.

That said, Airservices intends to explore with industry how it might move to a more sophisticated form of cost benchmarking in the longer term, including how specific financial rewards/penalties for performance against a broad suite of KPIs might be implemented.

Over the course of the next twelve months Airservices expects to further refine these explicit efficiency targets based on analysis of the historical trends, forecast outcomes and international benchmarking. In doing this, Airservices must ensure that it does not create an incentive framework that might in anyway provide incentives that run contrary to its primary statutory duty of safety.

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<sup>1</sup> NSW Treasury, 1997, Efficiency Progress In The New South Wales Government. Available at [http://www.treasury.nsw.gov.au/\\_data/assets/pdf\\_file/0003/6645/trp97\\_8.pdf](http://www.treasury.nsw.gov.au/_data/assets/pdf_file/0003/6645/trp97_8.pdf)

### 3. Rate of Return

Airservices notes that the ACCC does not accept the proposed rate of return on capital on the basis that it does not accept the methodology applied in estimating the nominal risk-free rate and cost of debt margin.

Airservices recognises that any adjustment to the rate of return on capital needs to be reflected by an associated adjustment to the required revenue and prices.

Airservices has now re-assessed these elements in particular and believes that some changes to the ACCC Preliminary View would be appropriate.

For long term assets, applying a 10 year risk free rate to estimate the cost of equity is more consistent with the practice of economists, businesses and corporate valuers. In addition:

- When estimating the cost of equity, consistency is required between the term of the risk free rate used in estimating the market risk premium (MRP). The AER has recognised that the MRP of 6% that the ACCC has applied has been derived with reference to a 10 year risk free rate.
- Having a 5 year risk free rate in conjunction with a stable long term MRP estimate of 6 percent is liable to create increased (and spurious) volatility in the estimate of the cost of equity.

In relation to the cost of debt margin, the non-government treasury entities in the AAA credit rating band (as well as the AA credit rating band) is dominated by banks and other financial institutions, rather than non-financial corporates, and is not a natural benchmark credit rating for a non-financial corporate like an entity in the position of Airservices.

Recognising the difficulties in finding an appropriate benchmark rate for an entity such as Airservices, a further deeper analysis of regulatory precedents and market based evidence was undertaken. This included observable benchmark rates, extrapolations of fair value curves and hybrid approaches that averaged some of these outcomes and these are included in the detailed analysis below.

On balance, Airservices believes that with a gearing level of 45 percent, a business with the characteristics of Airservices is likely to have a benchmark cost of debt margin with a link to the AA fair value curve. This is based on the fact that Airservices' stand-alone credit rating is AA, its 2.8 years to maturity bond is currently observed as trading within 4 points of the AA fair value curve and at a (benchmark and actual) gearing level of 60 percent an A- rating has recently been applied to NATS by Standard & Poor's and the UK regulator (the Civil Aviation Authority).

While applying a AA or A rating 10 year benchmark debt risk premium to Airservices is justified by the term of debt issuance in the airports and air traffic control industries, Bloomberg currently produces only a 5 year AA fair value curve, and a 7 year A fair value curve, which would necessitate extrapolation to 10 years on the basis of very few observations for bonds with 7 to 10 year terms to maturity. For ease of comparison, we have assessed the benchmark cost of debt for both AA and A rated debt for a five year term and separately assess how best to adjust that premium to be consistent with a 10 year term.

- The most conservative assumption when converting the premium for a 5 year term to a 10 year term is to assume that the debt risk premium is constant

between 5 and 10 – hence, this sets the lower bound for both the AA and A debt risk premium at 10 years. This lower bound is 195 and 224 basis points for AA and A rated debt, respectively.

- Analysis that we have undertaken for paired BBB+ curve bonds indicates that the premium increases by approximately 16 basis points for each year of term. If we halve this to reflect the fact the higher rating of the debt, a 10 year debt risk premiums in the range of 235 basis points to 264 basis points is derived. For the A rating, a slightly lower figure (256 basis points) is derived if Bloomberg's estimated debt risk premium for 7 years is used as the starting point.

The 34 basis points AAA debt risk premium estimated by the ACCC is based on a sample predominantly comprised of AAA rated state treasuries, which are able to issue bonds at a lower margin than AAA rated banks and financial institutions, with a current yield differential of approximately 30 basis points.

Accordingly, Airservices debt risk premium should be based on a AA credit rating, which Airservices has assessed at 195 basis points. Additionally, an adjustment to the timing of the estimation of the risk free rate is proposed and Airservices has re-assessed the risk free rate based on the 20 day average of the 10 year bond yields to the end of 5 August 2011 which has resulted in an estimate of the risk free rate of 4.96%.

As a result of these changes, the adjusted WACC is estimated as follows:

#### WACC Calculation

WACC Element	AsA 2011 Draft Notification	ACCC Jul Prelim View	AsA Revised Estimate
Nominal Risk Free Rate	5.58%	4.92%	4.96%
Cost of Debt Margin over rf	2.37%	0.34%	1.95%
Market Risk Premium	6.00%	6.00%	6.00%
Effective Tax Rate for Equity (from	30.00%	30.00%	30.00%
Proportion of Franking Credits attrit	50.00%	50.00%	50.00%
LT Proportion of Debt Funding	45.00%	45.00%	45.00%
Debt Beta	0.000	0.000	0.000
Asset Beta	0.55	0.55	0.55
Equity Beta (uses Te)	1.00	1.00	1.00
<b>WACC Analysis</b>			
Cost of Debt	7.95%	5.26%	6.91%
Cost of Equity	11.58%	10.90%	10.93%
<b>Nominal Vanilla WACC</b>	<b>9.95%</b>	<b>8.37%</b>	<b>9.12%</b>

The impact on Maximum Allowable Revenues (MAR) as a consequence of this reduction from the WACC proposed in the Draft Notification is estimated as a reduction of \$47m across the five years.

A more detailed exploration of these issues, and substantiation of the estimates, is set out in the following analysis.



## Detailed Rate of Return Analysis

### Term of the risk free rate

When discussing the term of the risk free rate, it is useful to separate and distinguish between the term applied to estimate the cost of equity, and the term applied to estimate the cost of debt.

#### *Term of the risk free rate - equity*

A point of common ground amongst most finance practitioners is that the term of the risk free rate (including in a regulated context) should be consistent with the term of the risk free rate that is applied in the estimation of the market risk premium. This point was made by the Australian Competition Tribunal (ACT) in 2003, when it rejected the ACCC's proposal to apply a 5 year term for the risk free rate in the GasNet case.<sup>2</sup> In that case, the ACT decided that consistency required use of the same assumption with respect to the risk free rate that appears as part of the cost of equity as had been applied in estimating the market risk premium (MRP).

This principle was accepted by the AER when it subjected this issue of the term of the risk free rate to a comprehensive analysis during the review of WACC parameters for electricity transmission and distribution businesses. It concluded that:<sup>3</sup>

*Consistent with the explanatory statement, the AER considers that the issue of consistency between the term of the risk-free rate and the estimate of the MRP is an important consideration as part of this review.*

And, most relevantly:

*... the AER considers that its forward-looking estimate of the MRP is consistent with a 10-year term assumption for the risk free rate.*

Accordingly, if the ACCC was to use the MRP of 6%, consistency requires the use of a risk free rate term of 10 years.<sup>4</sup>

A further benefit of using a 10 year risk free rate is the additional stability in the estimated cost of equity that results. In principle, the cost of equity should be estimated using a forward looking risk free rate and a forward looking MRP. However, in practice the MRP reflects a long term average (being the only practicable means of estimating the premium) and is paired with a 'spot' estimate of the risk free rate. However, in practice, the risk free rate and MRP tend to move in opposite directions so that the true cost of equity varies by less than the risk free rate. In this context, the use of a more stable estimate of the risk free rate can reduce the spurious volatility in cost of equity estimates.

Relevantly, estimates of the 10 year risk free rate are more stable than estimates of the 5 year risk free rate, as demonstrated in Figure 1 below. This figure compares the deviations of

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<sup>2</sup> Australian Competition Tribunal (23 December 2003) Re GasNet Australia (Operations) Pty Ltd [2003] ACompT 6

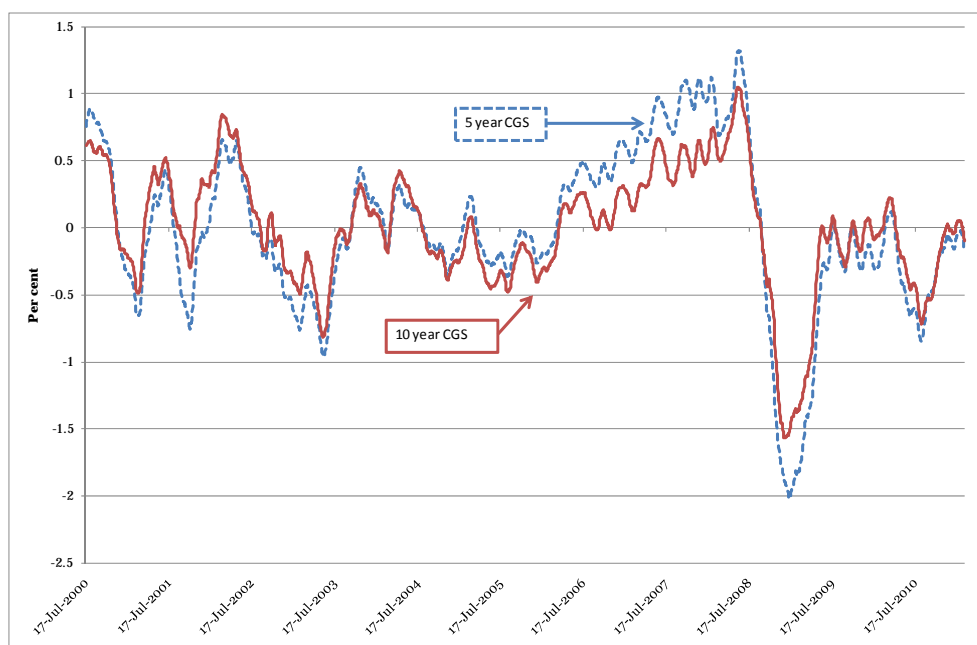
<sup>3</sup> AER (May, 2009), *Electricity transmission and distribution network service providers – Review of the weighted cost of capital (WACC) parameters*, pp.172-173.

<sup>4</sup> Alternatively, if the five year risk free rate is used, a higher MRP is required. The AER's adviser, Associate Professor John C. Handley, estimated that the annualised mean historical excess return of 10 year Commonwealth Government Securities (CGS) above the 5 year CGS over the period from 1971 to 2008, was 15 basis points: John C. Handley (14 April, 2009), *Further Comments on the Historical Equity Risk Premium*, pp.13-14.



the 5 year risk free rate and the 10 year risk free rate around their respective long-term averages over the period from 2000 to 2011. The respective standard deviations were found to be 0.60 percent for the 5 year risk free rate, and 0.45 percent for the 10 year risk free rate.

**Figure 1** Relative difference from the long term average yield of 5 and 10 year Commonwealth Government Security yields (2000 – 2011)



Source: Bloomberg

### *Term of the risk free rate - debt*

In its 2009 review of the WACC for electricity transmission and distribution businesses, a reason that the AER reaffirmed the use of a 10 year term assumption for the risk free rate with respect to the cost of debt was its finding that, on average, these businesses seek to issue debt with a term of 10 years in order to reduce refinancing risk. In assessing the term of debt issuance, the AER did not consider the practice of state-owned electricity transmission and distribution businesses, because these firms (being backed by state treasuries) face lower re-financing risk than stand-alone businesses, and hence their borrowing practices are unlikely to reflect the market norm.<sup>5</sup>

Since the appropriate regulatory benchmark debt term is that adopted by the benchmark stand-alone privately owned business, it is necessary to estimate the average term of debt, at issue, for a sample of comparator firms for Airservices. In Australia, the closest comparator group of firms is the airports, which are subject to the same broad influences (especially domestic and international passenger traffic) as Airservices. Table 1 below shows that Airservices has issued bonds at an average term of 4.9 years, however this is significantly less than the 22.6 year term bond issued by NATS in the UK. Over the last 15 years, the Australian airports have issued bonds with an average term of approximately 10 years. While this evidence does not include the entire portfolio of debt that finances these comparator businesses, it does suggest that a 5 year term assumption is not likely to be appropriate for such businesses, and that a 10 year assumption (in line with that made for

<sup>5</sup> AER (9 May, 2009), pp.140-170, p. 370.

electricity utilities by the AER) is more likely to be an appropriate reflection of benchmark stand-alone private financing behaviour.

**Table 1      Aircservices: term of bond issues made by comparator businesses (1996 – 2011)**

Name	Activity	Average rating	Number of bonds	Average term of issue (years)	Average amount issued (\$m)
Aircservices Australia	Air traffic control	AAA	4	4.9	112.5
NATS (En Route) plc	UK Air traffic control	AA-*	1	22.6	600**
Sydney Airport	Airport	BBB	22	10.0	387.8
Brisbane Airport	Airport	BBB	6	9.6	216.7
Melbourne Airport	Airport	A-	8	10.5	340.0
Adelaide Airport	Airport	BBB	3	8.5	183.3

Source: Bloomberg    Notes: \* A- on stand-alone basis \*\* GBP

## Credit rating and debt risk premium

### *ACCC's Preliminary View*

With respect to a benchmark credit rating to apply to Aircservices, the ACCC noted that in stakeholder submissions the reasonableness of the use of a AAA rating is supported by the fact that Aircservices' current bond issues are AAA rated, and it has previously accepted this credit rating, which was used in the 2004-05 decision. Now that Aircservices has proposed that its actual stand-alone credit rating of AA should be applied, the ACCC believes that Aircservices has not sufficiently substantiated why a AA rating should be applied.

Since the Bloomberg 5 year term corporate AAA bond fair value curve was discontinued from 25 May, 2011, the ACCC derived its estimate of the debt risk premium for a AAA rated entity by identifying a sample of 9 mainly government treasury or semi-government financial corporate AAA-rate bonds with terms to maturity between 4 and 6 years. These bonds were issued by:

- NSW Treasury
- Queensland Treasury
- SA Treasury
- Victorian Treasury
- Export Financial and Insurance Corporation (EFIC)

Over the 20 business day period ending 27 June, 2011, the ACCC calculated the average debt risk premium over the relevant Commonwealth Government Security (CGS) to obtain an estimate of the benchmark debt risk premium of 34 basis points for a AAA corporate bond.

### *Regulatory precedent on the credit rating*

With respect to the benchmark credit rating, the standard practice of Australian regulators has been to establish the characteristics of a benchmark geared firm by observing the characteristics and practices of stand-alone and privately owned entities, ignoring the

benefits of a supportive parent (whether private or government).<sup>6</sup> While in its 2009 WACC review the AER observed the credit ratings of firms with supportive parents, it was mindful of the distortions that this introduces with respect to the credit rating of the benchmark firm:<sup>7</sup>

*In relation to the sample that has been selected, the AER observes that (section 9.5.2):*

- *A financially supportive parent will have a positive impact on credit ratings (both for private and government owned businesses)*
- *The publicly listed credit ratings of government owned businesses imply government support*

The viewpoint of Australian regulators is consistent with the 'Commonwealth Competitive Neutrality Policy Statement' of June 1996, which lies at the heart of market and regulatory reform in Australia. The Commonwealth's Statement said that:<sup>8</sup>

*All Commonwealth organisations identified as engaging in significant business activities will be required to earn commercial returns at least sufficient to justify the long-term retention of assets in the business, and to pay commercial dividends (i.e. equivalent to the average for their industry) to the Budget from those returns.*

And,

*Regulatory neutrality will be achieved by subjecting, where appropriate, all identified organisations to the same regulatory environment as private sector businesses.*

These principles have been applied by Australian regulators in numerous industries where government owned businesses operate. As an example, the AER applies an industry benchmark gearing of 60 percent and a consistent benchmark credit rating of BBB+ to government owned electricity distribution and transmission businesses in Queensland and New South Wales, even though these businesses may be rated AA based on State Government support.

The same competitive neutrality principles have also been applied by UK regulators, as was recognised by Europe Economics, advisers to the UK CAA when assessing NATS:<sup>9</sup>

*Note that we assume a lower bond rating (A-) than that which NATS is able to achieve as a result of the uplift awarded to its debt issuance to reflect the possibility of extraordinary government support by rating agencies (3 notch uplift by S&P and 1 notch uplift by Moody's).*

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<sup>6</sup> The main reason for ignoring the effects of explicit or implicit guarantees from other entities is to ensure that the full cost of providing the service is captured. Where a guarantee is in place, the full cost of providing the service comprises the cost incurred directly by the regulated entity plus the liability that is accepted by the guarantor.

<sup>7</sup> AER (9 May, 2009), p.390.

<sup>8</sup> Commonwealth of Australia (June, 1996), *Commonwealth Competitive Neutrality Policy Statement*, pp. 17-18.

<sup>9</sup> Europe Economics, (20 May, 2010). *Cost of Capital for NATS (En Route) plc for CP3*, Report for the CAA, p.17, fn. 22. Also see Standard & poor's (17 February, 2010) *NATS (En Route) PLC – Corporate Credit Rating*, p.2. We note that in the case of NATS, Europe Economics applied a benchmark credit rating of A- (the same as the 'stand alone' rating), as the actual gearing of NATS was close to the benchmark gearing of 60 percent.

### *Evidence on a benchmark credit rating for Airservices*

Standard & Poor's has stated that Airservices' AAA rating is based on its '100% ownership by the AAA rated Commonwealth of Australia and 'Almost Certain' likelihood of extraordinary government support.<sup>10</sup> On a stand-alone basis, Standard & Poor's has rated Airservices at AA.<sup>11</sup>

*The ratings on AsA are based on the company's stand-alone credit profile, which we assess as 'AA', plus a two-notch uplift to reflect our view of an 'Almost Certain' likelihood that the government would provide timely and sufficient extraordinary support to AsA in the event of financial distress... In accordance with our criteria for GREs, our view is based on AsA's: "Critical" and "Integral" link with the government.*

This stand-alone credit rating has been provided by Standard & Poor's on the basis of Airservices' existing gearing. The fact that Airservices has a AAA credit rating from Standard & Poor's based on its Commonwealth Government ownership should be of no relevance in a regulatory setting. As discussed above, in the UK the CAA's adviser, Europe has attributed an A- rating to NATS based on a notional 60 percent gearing.

### *Estimating a benchmark debt risk premium for Airservices*

In this section we assess the data available to estimate a benchmark debt risk premium for the corporate AA and A credit rating bands, which we consider to be more relevant benchmarks for Airservices, geared at 45 percent, than the AAA credit rating band. Our approach has been first to derive the best estimate of the debt risk premium for 5 year AA and A rated debt, and separately to assess how those estimates should be adjusted to reflect a 10 year term. This reflects the fact that the fair value curves provided by Bloomberg for AA debt only extends to 5 years at present (although we note that the A-curve extends to 7 at present).

Turning to the first of these steps, we assess the reasonableness of the 5 year fair value curve benchmark for the AA and A credit rating bands that are provided by Bloomberg against actual fixed and floating rate bond yields (and debt risk premiums) supplied by Bloomberg and another major provider in the Australian market, UBS.<sup>12</sup> This approach corresponds to the review of the Bloomberg fair value curve (and previously also the CBA Spectrum fair value curve), which has been undertaken by the AER and ACCC. It also responds to the Australian Competition Tribunal's (ACT) preference to examine multiple sources of data as well as data for fixed and floating rate bonds.<sup>13</sup>

Airservices has chosen, consistent with its understanding of ACCC regulatory process, to estimate the debt risk premium over a reference period of 20 business days up to and including 5 August, 2011. Where a bond has two yield observations provided by the suppliers, we have averaged the yields for bonds with terms to maturity in a range of 4 to 6 years, and for bonds where only one service provider supplies an observation in this range of terms to maturity, we have included the single observation.

In Figure 2 below we show the results of our analysis for the AA credit rating band. The Bloomberg AA fair value curve provides a debt premium estimate of 195 basis points for a

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10 Standard & Poor's, (21 March, 2011), *Airservices Australia, Global Credit Portal – Ratings Direct*, p. 2.

11 Standard & Poor's, (21 March, 2011), p.4.

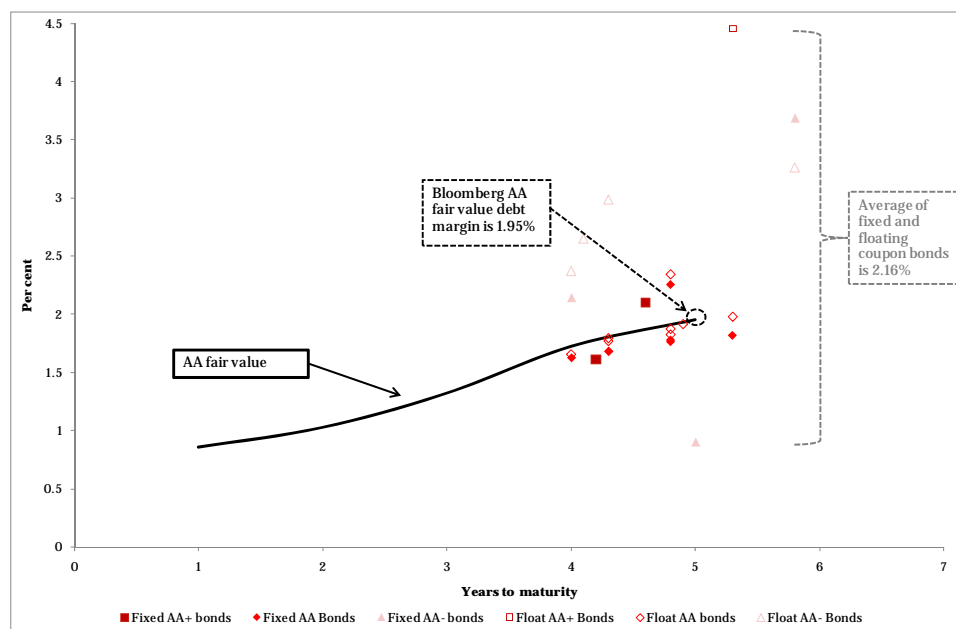
12 We have adjusted the yields of UBS sourced floating rate bonds to be assessable on a consistent basis with fixed rate bonds.

13 Australian Competition Tribunal (17 September, 2010), Application by ActewAGL Distribution [2010] ACompT 4.

term of 5 years, which is the longest term for fair value curve estimates currently provided by Bloomberg for the AA rating band. Within the Bloomberg and UBS databases we have identified a total of 12 fixed coupon and 13 floating coupon bonds with terms to maturity in the range of 4 to 6 years, and the average debt risk premium of this group was found to be 216 basis points.<sup>14</sup> We consider that this evidence validates the Bloomberg 5 year AA benchmark debt risk premium given that:

- The average term to maturity of the bonds in the range was 4.66 years rather than 5 years; and
- The sample of AA corporate bonds is dominated by banks and financial institutions, which may have a sectoral downward yield bias compared with non-financial corporates.

**Figure 2** 'AA' credit rating band – Bloomberg debt risk premium vs Bloomberg and UBS bond observations for the 20 day reference period to 5 August, 2011

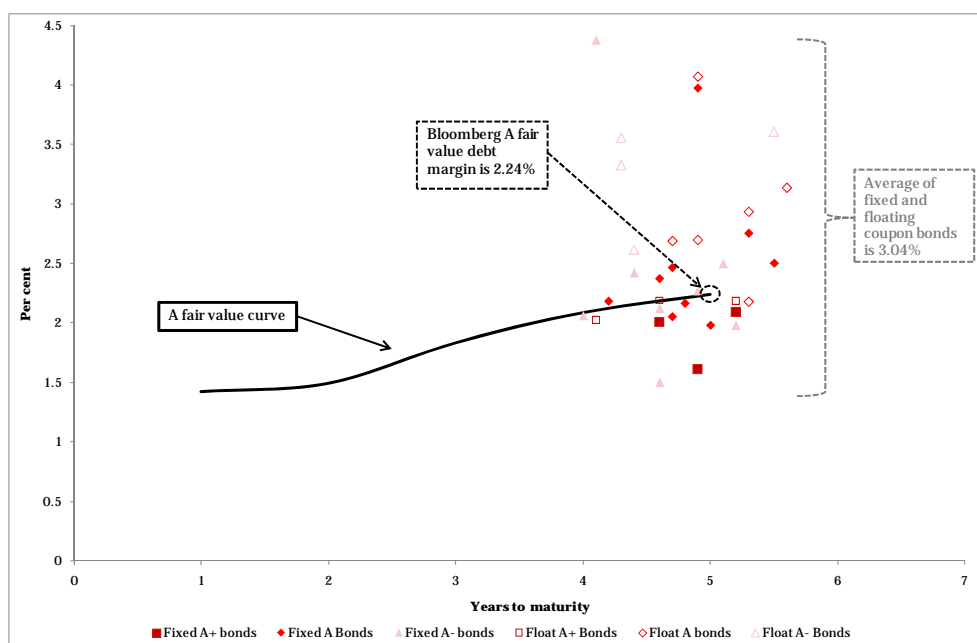


Source: Bloomberg

The analysis is repeated for the A credit rating band in Figure 3 below. Here we find that the Bloomberg fair value curve for a term of 5 years provides a debt premium estimate of 224 basis points, which is significantly lower than the 304 basis point estimate obtained from averaging the debt risk premiums of all (22 fixed coupon and 15 floating coupon) A rated bonds with a term to maturity from 4 to 6 years. Inspection of the composition of A rated bonds in the tables shown in the Appendix indicates that the A rating band is not dominated by banks and financial institutions in the way that the AAA and AA rating bands are.

<sup>14</sup> See the tables in the Appendix for details of these bonds.

**Figure 3 'A' credit rating band – Bloomberg debt risk premium vs Bloomberg and UBS bond observations for the 20 day reference period to 5 August, 2011**



Source: Bloomberg

In the current Australian bond market it is not straightforward to extrapolate these values to a term of 10 years. A lower bound estimate is obtained by assuming that the premium is constant beyond five years, and based on the Bloomberg fair value curve estimates, these lower bounds are:

- 195 basis points for a AA credit rating; and
- 224 basis points for an A credit rating.

Beyond this, analysis that we have undertaken for paired BBB+ rated bonds indicates an increase in the premium of 16 basis points for each year of term<sup>15</sup>. If we assume half those levels for the higher AA and A credit rating bands, this would indicate respective 10 year debt risk premiums in the range of:16

- 235 basis points for a AA credit rating; and
- 264 basis points for an A credit rating.

*The ACCC's Final decision on Airservices Australia's Price notification in 2004.*

In its Final decision on Airservices in November 2004, the ACCC adopted a WACC that included an assumption of 55 basis points for the debt risk premium. While Airservices, based on an external PwC report, had submitted a debt premium range of 60 to 80 basis points, the ACCC's draft decision proposed that the 55 basis points:<sup>17</sup>

<sup>15</sup> PricewaterhouseCoopers (April 2011), *Powerlink – Methodology to estimate the debt risk premium*, p.34.

<sup>16</sup> We note that Bloomberg does produce a debt risk premium curve for 7 years, which is 232 basis points, implying a lesser increase in the premium with term than we assumed above (4.2 basis points per annum rather than 8). Commencing with the 7 year A rating debt risk premium and increasing it by 8 basis points per annum implies a proxy for the 10 year debt risk premium of 256 basis points.

<sup>17</sup> ACCC (November, 2004), *Preliminary view – Airservices Australia: Draft price notification*, p. 58.

*... was more appropriate, given the market conditions at the time of Airservices submitting its draft notification, and therefore [the ACCC] is of the view that Airservices' proposed range of the debt margin of 0.60 to 0.80 is high.*

The ACCC noted that it reduced the debt risk premium for estimates of \$200,000 of actual debt raising costs in 2004-5, which it felt were better considered as part of the operating expenditure allowance.

In 2004 the ACCC was not referencing its debt risk premium decisions against the Bloomberg fair value curve service. Since then, the Bloomberg service has become the dominant, and more recently the only widely published, fair value curve service. In order to reference the ACCC's 2004 decision of 55 basis points, in Table 2 below we have compared it against the Bloomberg 5 year AAA fair value curve and Airservices' own bond yield in the market at that time. We find that the ACCC's decision of 55 basis points at the time that Airservices submitted its draft notification (12 August, 2004) was 13 basis points below the matching 5 year AAA debt risk premium benchmark presented in Bloomberg's fair value curve (68 basis points). In addition, it is important to note that the Airservices bond at this time had only 2.3 years to maturity, but its premium above the matching CGS bond was higher than the 55 basis points benchmark adopted by the ACCC. Hence, it is not clear from the decision what methodology had been applied by the ACCC to determine a 55 basis point debt risk premium.

**Table 2** ACCC's 2004 debt risk premium decision vs market indicators (20 days to 12 August, 2004)

Decision / bond / fair value curve	Credit rating	Term to maturity	Matching term of CGS	Debt risk premium (basis points)
Bloomberg AAA fair value curve	AAA	5 years	5 years	68
Airservices bond	AAA	2.3	2.3 years	61
ACCC's Airservices decision	AAA	5 years	5 years	55

Source: Bloomberg, ACCC (November, 2004), p. 58.

*The debt risk premium for a AAA rated corporate bond for a 5 year term*

Since the global financial crisis there has been a reduction in the number and term to maturity of AAA rated bonds. In the space of the last year, Bloomberg has reduced its fair value curve coverage from 10 years to 4 years, with the 5 year corporate AAA fair value curve being discontinued from 25 May, 2011.

Table 3 below displays the 21 bonds that were used by Bloomberg on 9 August 2011 to estimate its AAA corporate fair value curve that day. It is apparent that the two Airservices bonds have not been included by Bloomberg in its estimation of the Bloomberg AAA fair value curve. Bloomberg does not provide specific reasons for excluding bonds from its sample, however it is noticeable that it has excluded from its sample all of the longer term to maturity bonds that were used in the ACCC's sample. The characteristics of the 9 bonds used in the sample are that 8 are in fact bonds where the issuer is the finance raising arm of the state-based treasury (such as NSW TCorp and Treasury Corporation of Victoria). The only issuer common to the two groups is the Export Finance Insurance Corporation (EFIC). From Table 3 we find that:

- All of the bonds that Bloomberg includes in its sample to estimate the corporate AAA corporate bond fair value curve have terms to maturity of 4 years or less, which is why it limits its AAA fair value curve to 4 years;
- All the bonds included in Bloomberg's AAA fair value curve sample are banks and financial institutions;

- Bloomberg includes none of the longer (or shorter) term to maturity state treasury corporation bonds in its sample to estimate the AAA corporate bond fair value curve; and
- Most of the state treasury bonds either have a non-standard feature (like callability) or are issued in foreign markets (in the domestic AUD currency), further reducing the comparability of their yields with the group of bonds that Bloomberg includes in its estimate of the AAA corporate fair value curve.<sup>18</sup>

From these observations it could be concluded that Bloomberg either does not consider the bonds of state treasuries to be true corporate bonds, or does not consider their yields to be representative of a domestic bullet bond issued by a (mainly banking) corporate.

**Table 3 Fixed rate bond issues: Bloomberg 'corporate AAA' sample vs. ACCC 'AAA' sample 9 August, 2011**

Bloomberg's AUD Corporate AAA sample				ACCC's AAA bonds sample			
	Maturity	Bond type	Issuing market		Maturity	Bond type	Issuing market
Investec	9/2/12	Bullet	Australia	SA Treasury	20/8/15	Bullet	Australia
Westpac	19/3/12	Bullet	Australia	Qld Treasury	14/10/15	Bullet	Australia
NAB	26/3/12	Bullet	Australia	Qld Treasury	14/10/15	Bullet	Global
Suncorp Bank	15/4/12	Bullet	Australia	SA Treasury	21/12/15	Bullet	Europe
Citibank	18/6/12	Bullet	Australia	NSW Treasury	1/4/16	Bullet	Australia
EFIC	7/8/12	Bullet	Australia	Vic Treasury	15/11/16	Callable	Australia
Citibank	20/8/12	Bullet	Australia	EFIC	15/11/16	Bullet	Europe
ING Bank	8/10/12	Bullet	Australia	NSW Treasury	1/3/17	Bullet	Australia
Bank of Queensland	22/10/12	Bullet	Australia	NSW Treasury	1/3/17	Bullet	Global
ING Bank	28/8/13	Bullet	Australia				
Suncorp Bank	11/9/13	Bullet	Australia				
CBA	17/12/13	Bullet	Australia				
NAB	19/12/13	Bullet	Australia				
ANZ	16/1/14	Bullet	Australia				
CBA	20/2/14	Bullet	Australia				
Westpac	5/3/14	Bullet	Australia				
ING bank	24/6/14	Bullet	Australia				
ING bank	16/10/14	Bullet	Australia				
Westpac	18/11/14	Bullet	Australia				
ING Bank	3/3/15	Bullet	Australia				
Bank of Queensland	10/3/15	Bullet	Australia				

Source: Bloomberg

In Figure 4 we see that the Bloomberg corporate AAA 4 year debt risk premium has ranged between 50 basis points and 80 basis points over the past year and a half, which on average has been 30 basis points higher than the debt risk premium for the ACCC sample.<sup>19</sup> Thus, the sample used by the ACCC to estimate a 5 year debt risk premium for the AAA corporate bond falls significantly short of the level that would be indicated by a bank and finance company dominated 'corporate' AAA curve.<sup>20</sup> We conclude that the AAA rated state governments can issue debt at significantly lower yields than AAA rated (bank and finance company dominated) corporates, which in turn may be able to issue debt at lower yields than non-bank and finance company corporates.

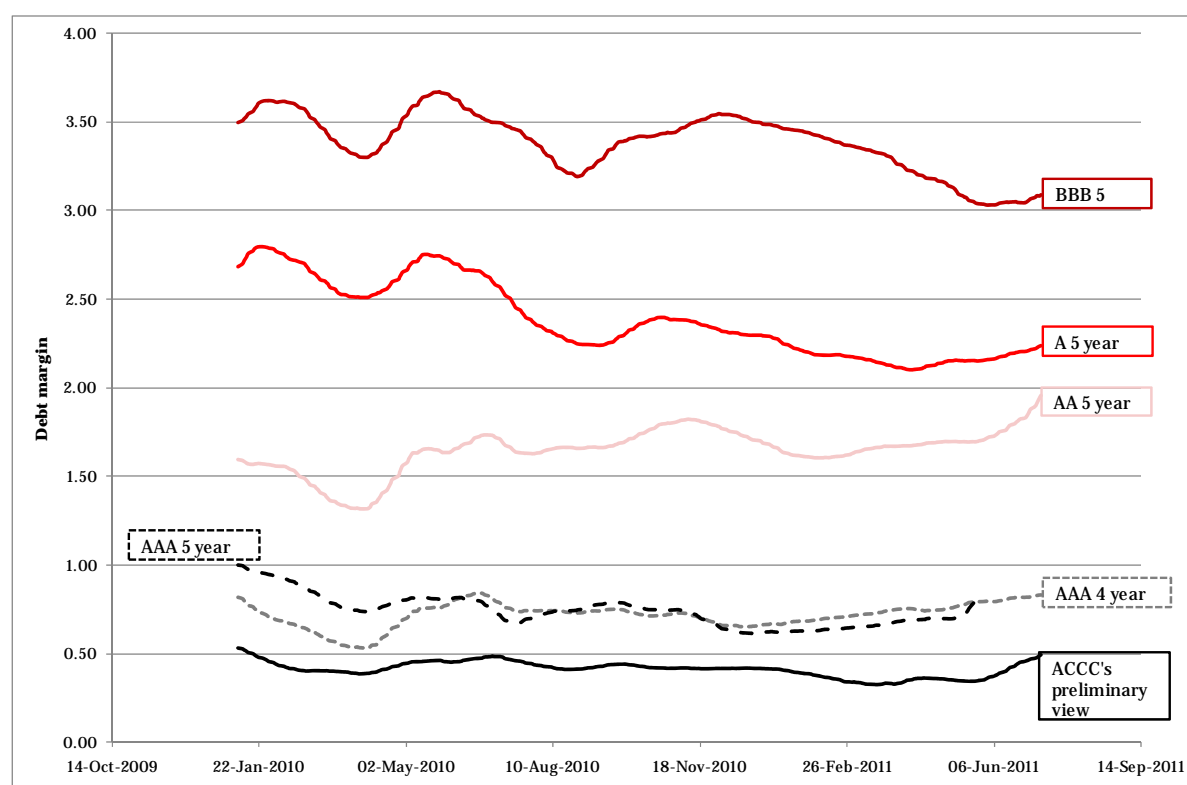
<sup>18</sup> The SA Treasury bond (maturing 20/8/15) has such a low yield, that its premium to CGS is negative.

<sup>19</sup> Note, that this sample average does not include the SA Treasury bond referred to above, which has been found to have a negative premium to the CGS curve.

<sup>20</sup> We note that we have been unable to exactly replicate the ACCC's 34 basis point debt risk premium estimate using the sample of 9 bonds provided to us by the ACCC. By excluding the SA Treasury bond, which has a very low yield, we obtain an estimate of 35.6 basis points for the ACCC's reference period.



**Figure 4 Bloomberg fair debt risk premiums – rolling 20 day period to 5 August, 2011**



Source: Bloomberg

The mere fact that the AAA ratings band is dominated by state government agencies and banks is an indicator that this is not a natural ratings position for non-bank corporates. Non-bank corporates that carry debt and are subject to variable revenue and cost factors are highly unlikely to achieve a AAA credit rating, and if they did they would be vulnerable to take-over, since such a high rating is unlikely to be commercial. That is, such a credit rating would indicate that the business is under-gearred, and therefore unlikely to be maximising shareholder value.

#### *Alternative hybrid averaging options for estimating a debt risk premium*

Alternative options may exist for estimating a debt risk premium for Airservices based on data obtained from Bloomberg and UBS that focuses on applying observed data for the Airservices bond and/or the debt risk premium for the AAA and AA credit ratings and then either trying to extrapolate a rate or determine an average rate.

In summary, under an extrapolation approach the average debt risk premium would be 165 basis points, and under the averaging approach it is 152 basis points. Taking into account all 9 options produces a grand average debt risk premium of 159 basis points. When compared to the approach taken above to fairly estimate the debt risk premium on a stand alone basis there appears comparatively little difference.

Table 4 below displays the data for the Airservices bond with 2.8 years to maturity (sourced from UBS), and the debt risk premiums for the AAA, AA and A credit ratings sourced from Bloomberg. The AAA, AA and A debt risk premiums for a maturity of 2.8 years were interpolated using the values for terms to maturity of 2 and 3 years.

**Table 4 – Debt risk premiums estimated from 8 July 2011 to 5 August 2011 inclusive (basis points)**

Term to maturity (years)	AAA fair value curve	Air services bond <sup>^</sup>	AA fair value curve	A fair value curve
2	52		103	150
2.8	65*	122	126*	177*
3	68		132	183
4	83		172	209
5	n/a		195	224
7	n/a		n/a	232

Source: Bloomberg and UBS

In Table 5 below we show the results of applying a number of alternative approaches to estimating the benchmark debt risk premium to apply to Airservices for a 10 year term to maturity. We have applied two fundamental approaches:

- *Extrapolation* – where the debt risk premium of the Airservices bond, with 2.8 years to maturity, is extrapolated to obtain values at longer terms to maturity spanning 4 to 10 years.
- *Averaging* – where weights are given to the debt risk premium of the Airservices bond and the values of AAA and AA curves at various terms to maturity up to 5 years (the limit of the Bloomberg data).

**Table 5 – Airservices debt risk premium - Options**

No.	Optional benchmarks	Debt Risk Premium
	Airservices bond at 2.8 years	122
<b>Extrapolation:</b>		
1	Airservices bond at 2.8 years plus the rise in the AAA curve to 4 years	140
2	Airservices bond margin to AAA extrapolated to 10 years with 2 bp rise pa	152
3	Airservices bond margin to AAA extrapolated to 10 years with 4 bp rise pa	164
4	Airservices bond margin to A curve at 7 years	177
5	Airservices gap from AA curve at 5 years	191
	<b>Average</b>	<b>165</b>
<b>Averaging:</b>		
6	50% weight to AAA and AA curves at 4 years	127.5
7	50% weight to flat AAA curve (i.e. at 4 years) and AA curve at 5 years	139
8	50% weighting to Airservices bond and AA curve at 5 years	158.5
9	Airservices at 2.8 years plus (AAA to AA) credit rating uplift at 2.8 years	183
	<b>Average</b>	<b>152</b>
	<b>Grand Average</b>	<b>159</b>

Source: Bloomberg

The most conservative approach would be to apply the 122 basis points observed debt risk premium (in the UBS data base) for Airservices' own bond, which has 2.8 years to maturity. However, this is a conservative approach due to an expectation that, along with all other debt risk premium curves, there would be a rise in the debt risk premium for the Airservices bond with greater term to maturity (as seen in Table 6).

### *Extrapolation*

Option 1 estimates the debt risk premium at 140 basis points based on the Airservices bond debt risk premium of 122 basis points, plus the observed rise in the AAA debt risk premium between 2.8 years and 4 years. Options 2 and 3 obtain estimates of 152 basis points and 164 basis points respectively based on the Airservices bond debt risk premium plus a

premium of 2 and 4 basis points per annum for term. The choice of these numbers is based on the smallest observed rise shown in Table 6 for A rated bonds between 5 and 7 year terms to maturity (4 basis points), and halving this rate for conservatism. Option 4 estimates a debt risk premium of 177 basis points based on subtracting the margin between the A curve and the Airtservices bond at a 2.8 year term to maturity (55 basis points) from the 7 year debt risk premium for the A curve.

**Table 6 – Rise in debt risk premium per annum (basis points) estimated from 8 July 2011 to 5 August 2011 inclusive**

<b>Term to maturity (years)</b>	<b>AAA</b>	<b>AA</b>	<b>A</b>
2 to 3 years	16	29	33
3 to 4 years	15	40	26
4 to 5 years		23	15
5 to 7 years			4

Source: Bloomberg

Under Option 5 the debt risk premium of 191 basis points is obtained by subtracting the gap of 4 basis points observed between the Airtservices bond and the AA credit rating debt risk premium at 2.8 years to maturity from the AA debt rating at 5 years to maturity. On the one hand this might be considered an over-estimate due to an expectation that the rise in the debt risk premium with term would be higher for a benchmark AA rated bond. On the other hand, it could be considered an underestimate given that the debt risk premium is being estimated at a term of 5 years, and an Airtservices bond with a term of 10 years could be expected to be higher than the same bond for a term of 5 years.

#### *Averaging*

Options 6 and 7 provide estimates of 127.5 basis points and 139 basis points based on equal weighting being given to the 4 and 5 year AA and AAA debt risk premium (where the 5 year AAA curve is conservatively estimated by assuming it is equal to the 4 year AAA debt risk premium).

Option 8 gives 50 percent weighting to the Airtservices bond of 2.8 years term to maturity and the AA debt risk premium at 5 years, and results in a debt risk premium estimate of 158.8 basis points. The 183 basis points debt risk premium under Option 9 is based on the Airtservices bond debt risk premium of 122 basis points, plus 61 basis points for the uplift in credit rating (from a stand-alone credit rating of AA to the AAA credit rating that is obtained due to Commonwealth Government ownership) between the AA and AAA debt risk premiums observed at a term of 2.8 years.

**Appendix Table 1 – Bonds used to validate AA curve – 20 business day average yield to 5 August 2011**

<b>Bond</b>	<b>Credit rating</b>	<b>Term to maturity</b>	<b>Debt margin</b>
<b>Fixed coupon bonds</b>			
GE Capital	AA+	4.2	1.61
HYPOPFAND	AA+	4.6	2.10
CBA	AA	4.0	1.62
NAB	AA	4.3	1.68
Westpac	AA	4.3	1.68
ANZ	AA	4.8	1.76
Westpac	AA	4.8	1.78
BNP Paribas	AA	4.8	2.26
Westpac	AA	5.3	1.82
Barclays	AA-	4.0	2.15
ANZ	AA-	5.0	0.90
Wachovia Sub	AA-	5.8	3.69
<i>Average of fixed coupon bonds</i>		<i>4.66</i>	<i>1.92</i>
<b>Floating coupon bonds</b>			
WSTRALIA-W	AA+	5.3	4.46
CBA#	AA	4.0	1.66
NAB	AA	4.3	1.77
Westpac	AA	4.3	1.79
ANZ	AA	4.8	1.83
Westpac	AA	4.8	1.87
BNP Paribas	AA	4.8	2.34
NAB	AA	4.9	1.91
Westpac	AA	5.3	1.98
Barclays Australia	AA-	4.0	2.37
NWMH	AA-	4.1	2.65
HSBC	AA-	4.3	2.99
Wachovia sub	AA-	5.8	3.26
<i>Average of floating coupon bonds</i>		<i>4.67</i>	<i>2.38</i>
<b>Average of fixed and floating coupon bonds</b>		<b>4.66</b>	<b>2.16</b>

**Appendix Table 2 – Bonds used to validate A curve – 20 business day average yield to 5 August 2011**

<b>Bond</b>	<b>Credit rating</b>	<b>Term to maturity</b>	<b>Debt margin</b>
<b>Fixed coupon bonds</b>			
JP Morgan	A+	4.6	2.01
Fonterra	A+	4.9	1.61
Westfield Retail trust	A+	5.2	2.09
Dexus wholesale	A	4.2	2.18
Citigroup	A	4.6	2.37
Goldman Sachs	A	4.7	2.47
CFS Retail property fund	A	4.7	2.05
ICPF Finance pty	A	4.8	2.17
NWMH SUB	A	4.9	3.97
Telstra	A	5	1.98
Goldman Sachs	A	5.3	2.76
Citigroup	A	5.5	2.50
SP Ausnet	A-	4	2.06
Promina	A-	4.1	4.38
Melbourne Airport	A-	4.4	2.42
CBA office property fund	A-	4.6	2.13
Woolworths	A-	4.6	1.50
Stockland	A-	4.9	2.27
Melbourne Airport	A-	5.1	2.50
ETSA Utilities	A-	5.2	1.98
Sun insurance	A-	5.2	5.83
Swiss RE	A-	5.8	8.94
<i>Average of fixed coupon bonds</i>		4.83	2.83
<b>Floating coupon bonds</b>			
Credit Suisse	A+	4.1	2.03
JP Morgan	A+	4.6	2.19
Westfield REIT	A+	5.2	2.18
Goldman Sachs	A	4.7	2.69
Bank of America	A	4.9	2.70
NWMH Sub	A	4.9	4.07
Goldman Sachs	A	5.3	2.94
Telstra	A	5.3	2.18
MSDW	A	5.6	3.14
Promina	A-	4.1	4.76
TRANSB (W)	A-	4.3	3.56
Powercor	A-	4.3	3.33
Melbourne Airport	A-	4.4	2.62
Bank of America	A-	5.5	3.61
Swiss RE	A-	5.8	8.39
<i>Average of floating coupon bonds</i>		4.87	3.36
<b>Average of fixed and floating coupon bonds</b>		<b>4.85</b>	<b>3.04</b>