

## ***Airlines, Airports, Airservices – Australia’s Aviation Ecosystem***

**Address by Jason Harfield**

**CEO Airservices Australia**

The core business of Airservices Australia might once have been summed up as ‘air traffic control’. With ‘control’ being the key word.

The iconic air traffic control tower symbolised that mission. Aircraft arrivals and departures, managed in a safe and orderly way, by well-trained controllers, using their vantage point at slightly above ground level. The process managed aircraft by aircraft, at airport by airport.

Today I want to lay out for you a new reality, because this longstanding paradigm of air traffic management in Australia is on the way out. We are moving into a new era of shared information and distributed leadership. To make it work to its maximum potential, new ways of thinking and working together will be needed by all of us.

Earlier this year ADS-B equipment received its final mandate and all aircraft operating under instrument flight rules are now required to be ADS-B equipped. ADS-B is a transformative satellite-based technology. Aircraft automatically self-report their GPS position in a networked environment, so that controllers, and now pilots, can see the entire air traffic picture around them. Information is shared with stakeholders in real-time, which strengthens both safety and efficiency. It means that more aircraft can operate safely in the same

airspace – good news for all our airline customers, our busy airports, and for the future of the Australian economy.

Right now across Australia we have 29 air traffic towers but 240 aerodromes. Because of ADS-B technology we can now provide enhanced surveillance at many of these uncontrolled aerodromes, which means greater capacity to manage the airspace in and around those sites in a safe, efficient and structured way.

Even the iconic air traffic control tower is being virtualised and digitised. Indeed, by combining ADS-B with other new technologies like ultra-high definition digital video, some airports in northern Europe are already pulling down their control towers altogether and replacing them with virtual towers housed in ordinary office buildings.

So it won't be too long before the concept of air traffic 'control' will be part of a bygone vocabulary of aviation, a matter for history and nostalgia, much like the on-board navigator and flight engineer.

Now a new era is emerging and Airservices will continue to play a mobilising and leading role. But this new aviation ecosystem won't be characterised by that old concept of control. Instead it will be marked by a high degree of interdependence, new and shared responsibilities, and shared risks and benefits.

Airservices will be working with all our customers, partners and stakeholders, devising and deploying new technologies, new platforms and new processes. Australia's airports are among the world's best and they will need to play a critical role in this future. Together we will create an integrated and harmonised national aviation ecosystem. The benefits will be there for our airline customers, and for the nation.

To make ourselves ready to lead this wave of change, at Airservices we have had to revolutionise our own processes.

For the past 18 months, Airservices has been on a mission to become 'match-fit' to serve the needs of the entire Australian aviation industry.

Over an 18 month period, via our Accelerate program, we have moved from an out-dated operating model to become a profitable, sustainable, more customer-focused organisation. That means an Airservices that works better for all of us and, more importantly, works better for all our stakeholders.

We have put ourselves on a strong and sustainable financial footing. We had a 4.5% growth in annual income last year and achieved a 15.2% cut in expenses compared to the prior year. We reported annualised savings of \$177 million, a major turnaround in our cost base. And we delivered an underlying net profit after tax of \$59 million.

We increased our productivity significantly, cutting our total cost per flight hour by nine per cent on the previous year. And with a more efficient operating cost-base, we confidently expect our productivity to increase still further.

The key to achieving these results was a dramatic reorientation of our organisation. We got rid of layers of bureaucracy. We focused on supporting and equipping the front line: our 1,000-strong cohort of air traffic controllers (yes, still called controllers!); and nearly 900 aviation rescue firefighters.

Where we had a ratio of five support staff for every four operational workers, we've turned that around too: now there are four support staff for every five operational workers. Last year there were zero significant safety occurrences, while our firefighters responded to 430 aircraft incidents.

We did not raise our service prices last year and we will hold 2015 price levels right through to 2019. If we have, as we expect, continuing growth, we will be well-positioned to consider a price reduction, while still delivering on all our service commitments. That means, as a minimum, a real price reduction of around ten per cent over the next five years.

This major turnaround means that we are now securely placed to focus and invest across our priority areas on behalf of our customers. These are: excellence in asset investment and management; excellence in project management; and first rate technology leadership. To equip us for the incoming future we have brought into our enterprise more than 300 people with the capabilities to help us assess, acquire and manage the latest technologies more effectively. And in 2016-2017, we invested \$151 million through our capital programme to make the aviation industry ready for the future.

This emerging aviation ecosystem can only work to its full potential with the support and input of many players, and particularly our airports. In some respects airports may need to make the biggest mindset switch of all the aviation players.

Airports are accustomed to thinking of themselves as sole operators, fiercely competing for business against the competition in other locations. My airport must be better than yours, goes the thinking. But even our largest airports can no longer regard themselves as stand-alone operations; islands of competitive advantage within the national and global framework.

All Australian airports, from the largest to the smallest, are part of the same aviation ecosystem, and a choke point at any one airport has a flow-on effect across the entire network. Airports are increasingly dependent upon each other's performance for ultimate success; indeed, relying upon each other's success if they are to meet their own performance targets. And when our ecosystem is working

well, that's a big plus for airlines, for travellers, for the entire aviation industry and everyone who relies upon it.

The project that is directly relevant to airports right now is Airport Collaborative Decision Making (A-CDM). A-CDM is about working with partners at airports and across the airport ecosystem sharing information to boost operational performance. Sharing information and synchronising operations— whether its flight plans or schedule changes or gate availability or the moment of aircraft pushing back – all these measures can lead to operational decisions that maximise efficiency and minimise inconvenience to customers. Some of these efficiency gains may seem very small – matters of minutes and seconds – but that's how they add to up to superior performance.

One example is the management of air traffic flows. By holding delayed domestic aircraft on the ground rather than in the air we help our airline customers save fuel; reduce stress for passengers who can relax in lounges; and reduce the volume of traffic in the sky.

The next step will be to incorporate international flights into this flow management program, and once again ADS-B technology will be central to the task. We will be able to access data on international flights at far greater distances from their Australian destinations. We will then be able to ensure that these longer haul flights are managed so that they arrive and land at the appropriate time and integrate better into the traffic flow. Right now a single out-of-schedule arrival in Melbourne of an international aircraft can cut landings from 34 an

hour to 24 an hour. So there is potentially a significant productivity boost awaiting us when the next step is introduced.

Overall, we are building towards a future in which shared data and synchronised activities lead to better decision-making in real time. And airports will be critical to the success of this vision.

This matters enormously because the Australian skies are becoming ever more crowded – and because all of us want to embrace and facilitate that increased traffic. Last year Airservices facilitated over four million aircraft movements (up three per cent on the prior year), and an astonishing 156 million passengers. That’s equivalent to the entire Australian population nearly seven times over, moving into, out of, or around our country by air. Amazingly for a nation our size, Australia has not one but two of the world's fifteen busiest air routes, in Sydney-Melbourne and Brisbane-Sydney, and that means together we must skilfully manage some of the most crowded airspace on the planet. And it is an extraordinary fact that we Australians are custodians of 11% of the world’s airspace.

That’s why our biggest project – the main long-term game - is OneSKY. This represents a once in a lifetime transformation for Australian aviation management. OneSKY means Australia’s vast air space will be managed as one single flight arena combining civilian and defence, with common information, data sharing, greater airspace flexibility, greater resilience, and common tools to manage air traffic more effectively while enhancing safety.

Combined with our other reforms and technologies, OneSky will enable us to smoothly handle all anticipated growth in traffic in all of our airports – not just those in the major cities. Which means service improvements and efficiency gains across the network, and for all our customers.

It is undoubtedly an ambitious and challenging project. This is not only a historic shift for Australia, it will provide a model for other countries to follow. It needs to be done right and it will be.

During this conference a wide range of issues faced by airports and their stakeholders have been addressed. One issue that has attracted broader attention in recent times relates to the contamination around airports caused by PFAS chemicals.

Airservices led the way in stopping the use of PFAS foam at civilian airports in 2010. But the issue is complex and full resolution remains problematic because there is not yet a clear understanding of the health or environmental risks these chemicals present. There are also, as yet, no nationally agreed remediation guidelines. Fire fighting foam is estimated to be only 4% of the total use of these chemicals in this country – they are everywhere, on airport and off.

At Airservices we fully accept our own obligations. We are working hard to influence sensible risk-based outcomes, and a collaborative and flexible approach is required from all stakeholders to achieve this. That is how we will develop acceptable, permanent and holistic solutions.

Let me conclude.

Our fundamental mission at Airservices is the same as ever: to provide safe, secure, efficient and environmentally responsible air-navigation and aviation rescue fire fighting services for the whole of Australia. But the environment in which we operate is changing substantially.

Airservices Australia is making a rapid transition to become a leader in 21<sup>st</sup> century airspace services. This has major implications for our partners and stakeholders, especially airports. We need our airports to embrace the benefits of an ecosystem mentality, rather than a localised mentality. So we will continue to invest and evolve – and work with you to do so – to ensure our national aviation ecosystem remains effective and globally competitive over the coming years, and that we, together, play a leading role in a vibrant, successful and safe Australia.