SUBMISSION
TO THE PRODUCTIVITY COMMISSION INQUIRY INTO PUBLIC INFRASTRUCTURE

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AUSTRALIAN
AIRPORTS
ASSOCIATION

CONTENTS

If you have any questions regarding this document please contact the AAA National Office.

Australian Airports Association
9/23 Brindabella Circuit
Brindabella Park ACT 2609
T: 02 6230 1110
F: 02 6230 1367
E: info@airports.asn.au

INTRODUCTION

The Australian Airports Association (AAA) is the national industry voice for airports in Australia. The AAA represents the interests of more than 260 airports and aerodromes Australia wide – from local country community landing strips to major international gateway airports. The AAA's members include Adelaide, Brisbane, Cairns, Canberra, Darwin, Gold Coast, Hobart, Perth, Melbourne and Sydney airports. There are a further 100 corporate members who provide goods and services to airports. The Charter of the AAA is to facilitate co-operation among all member airports and their many and varied partners in Australian aviation, whilst maintaining an air transport system that is safe, secure, environmentally responsible and efficient for the benefit of all Australians.

Australia's airport network represents key infrastructure essential to the country's economic and social advancement. The AAA accordingly welcomes the opportunity to participate in, and comment on, this important and significant inquiry being undertaken by the Productivity Commission in relation to the costs and financing of public infrastructure.

This submission does not seek to respond to all the many and varied issues raised by the Commission in its November 2013 Issues Paper. Rather it focuses only on those issues that are of the greatest relevance and importance to airports. In so doing it seeks to highlight the history of highly successful airport development that has followed on from the "privatisation" of the former Federal Airports Commission airports in the 1990s, and the factors that have been key to that success.

In addition to this Association submission, some airports may lodge their own individual submissions. At the very least those submissions would be expected to complement this submission by elaborating on the operating environment of the particular airport. However, it may also be that some individual member airports could have a different view on some matters canvassed in this submission. Should that be the case, we would expect that particular airport to raise those issues in their own individual submission, and we ask that those submissions be given full consideration in their own right.

EXECUTIVE SUMMARY

Australia's airports make a unique contribution to the economic and social well-being of Australia and its people. Not only do they generate employment for those who directly work for or at the airport itself, but through facilitating the movement of people and goods they allow the entire economy and community to function more effectively.

Categorisation of airports as "nationally significant infrastructure"

It would be wrong to categorise as "major infrastructure" only Australia's key capital city and other gateway airports. No airport exists in a vacuum, solely for the departure and arrival of aircraft resident at it. All airports are "waypoints", facilitating transport of passengers and cargo and essential community services across the entire network of airports - large, small, capital city, regional, rural and remote. It is this national network that needs to be viewed collectively as "major infrastructure".

The far-reaching economic and social value of Australia's airport network is readily demonstrated by two recent publications of the AAA:

• Connecting Australia – the economic and social contribution of Australia's airports - a study conducted for the AAA by Deloitte Access Economics which showed that, in 2011, Australia's airports generated a total economic contribution of around $17.3 billion – equivalent to around 1.2% of Gross Domestic Product – and estimated that national employment at airports was approximately 115,200 full-time equivalent workers – this study is available on line at www.airports.asn.au; and

• Australia's Regional Airports – Facts, Myths and Challenges - a major research paper that identified the most important of these Australian airports, brought together little known and seldom recognised facts about Australia's regional airports, sought to dispel various myths that circulate about them, and catalogued the serious challenges they face in meeting the future needs of the communities they serve – this paper is available online at www.airports.asn.au.

The capacity of Australia's airports to continue to meet the increasing public transport demands placed upon them by the economies and communities they serve is fundamentally dependent upon their ability to appropriately maintain, operate, expand and enhance their infrastructure.

Categorisation of airports as "public infrastructure"

Australia's airports are fundamentally a community asset:

- Our biggest airports, while leased to and operated by the private sector, remain owned by the Commonwealth Government;
- The overwhelming majority of all other Australian airports are owned and operated by the local government authority for the community they serve;
- Of those airports that are not government owned, the majority are owned by, and operated predominantly for the purposes of, resource extraction corporations; and
- While some airports owned by a local government authority may be operated by the private sector on the authority's behalf, only a handful of Australia's regional airports are both owned and operated by the private sector for general public use.

Because of this, and because of the vital role they play in the provision of public transport, the AAA believes that all Australian airports should be regarded as "public infrastructure" for the purposes of the Commission's present inquiry - whether owned and operated by governments, owned by governments and leased to and operated by private interests, or entirely privately owned and operated.

Key drivers for airport infrastructure development

The capacity of Australia's airports to continue to meet the increasing public transport demands placed upon them by the economies and communities they serve is fundamentally dependent upon the preparedness of owners, investors and financiers to make the necessary funding available. This, in turn, is demonstrably advanced by a number of key factors, including:

- The minimisation of sovereign risk arising from unnecessary regulatory intervention;
- Timely, efficient and sensitive governmental approval for major development projects;
- Ensuring the ongoing operational integrity of airport infrastructure once built; and
- The maintenance of essential infrastructure development and operational skills and expertise in Australia.

Regulatory intervention

Australia's major capital city and gateway airports, formerly operated by the Federal Airports Corporation, were "privatised" in the 1990s – while underlying reversionary ownership remained with the Commonwealth, head leases conferred direct long-term rights of operation (and associated obligations) on the private sector.

The transition from public to private ownership was initially accompanied by a regulatory regime that is now universally accepted as having been too "heavy-handed". This regime acted as a strong retardant, and often as a complete disincentive, to efficient investment in the expansion and enhancement of the often inadequate infrastructure stock as it then stood.

It was only when this regulatory environment was replaced by what is, comparatively speaking, a "light-handed" regime that the pace of new infrastructure investment stepped up and showed a real prospect of meeting the nation's needs on a timely and efficient basis. The previous government estimated that in the order of $13 billion will need to be invested by airports in the next 10 years alone to keep pace with aviation demand, particularly from Asian nations.

The airport privatisation experience provides a clear case-study demonstrating that, to ensure efficient infrastructure development in Australia, it is essential that regulatory intervention be reduced to the minimum possible consistent with the overall public interest. Infrastructure development at Australian airports over the last decade or so provides a benchmark study to demonstrate the close correlation between regulatory burden and risk, on the one hand, and investment incentive on the other hand.

Nevertheless, while it is the clear policy of the Commonwealth Government to encourage private investment in aeronautical assets, the legislative settings are not yet optimal and continue to impede investment in future aviation operations to an undesirable extent. There are a number of amendments that could and should be made to present airport regulation to enable it to deliver on that Government policy and to meet best practice. These include measures designed not only to remove unnecessary regulatory burdens, but also the imposition of controls on off-airport development to preserve the aeronautical utility of existing and new airport infrastructure.

Comparative costs of Australian airport renewal and development

Proper analysis of data concerning the costs of airport development in Australia shows that Australian airport operators are generating airport assets at a cost that is comparable to world standards. At the same time, it is clear that there is scope for Australia to improve its performance in this area, in particular through regulatory simplification. This provides a challenge not just for airport operators but also for governments, given the cost impacts that their regulatory imposts can have on financing, construction and operation.

Within Australia, costs of development and periodical renewal of the airport network can differ dramatically as the distance from major urban centres increases. It appears, however, that geography is the major distorting factor here. For example, infrastructure renewal and development costs at Ceduna airport in South Australia are around 1.5 times higher than those in Adelaide, while at Derby-West Kimberley Airport they can readily be 3 time higher, or even greater, than in Perth. Other factors that may be significant in other industries (such as labour practices or in-house versus outsourcing considerations) appear to be of no material impact.

Development approval processes

The "heavy engineering" nature of airport infrastructure development means that the design and construction of new aeronautical assets is necessarily not a short-term exercise. It is nevertheless time-critical.

While the former Federal Airports Corporation airports are subject to an airport-specific planning regime that operates to the exclusion of State and Territory regimes otherwise governing the same issues, this does not cover all aspects of airport developments and operators of these airports must still engage with other State and Territory development authorities on some issues. And at all other airports, there is generally no airport specific development approval process.

Thus, while not as serious an issue as it might otherwise be, a major issue in airport planning revolves around the need to obtain numerous Commonwealth, State/Territory and Local Government approvals, often from numerous agencies at each governmental level. Any unnecessary delay at any of these stages by any of these agencies can fundamentally and detrimentally defer entire development projects and thereby deprive the economy and community of major benefit.

The Association has been heartened by initiatives taken by the present Commonwealth Government with some States to commit to develop "one-stop-shops" for major development approvals across Governments and agencies. Turning these commitments into reality would offer a real prospect for unlocking significant productivity enhancements across the entire economy.

Protecting the operational integrity of airports

Airport assets, once built, are "sunk" for the long term - they cannot be diverted to any economically efficient alternative use. Promoting investor confidence to finance such assets and ensuring the efficient use of them once built necessitates that airport assets continue to be able to operate as airport assets for the long term.

Off-airport development can pose a major threat to such use – whether through the construction of surrounding structures that intrude into the airspace envelope necessary to be preserved for safe air operations, or through allowing use of neighbouring land for residential or other purposes incompatible with the most efficient aviation use of an airport.

Australia's Commonwealth, State, Territory and local government laws are currently inadequate to securely protect Australia's airport assets. While the Commonwealth Government has in recent years promoted a greater understanding of these issues across other levels of government, there is still much to be done to ensure that vital airport assets and the public services they provide cannot be thoughtlessly emasculated.

Infrastructure development and operational skills and expertise

Airport infrastructure is not just ordinary "bricks and mortar". Seemingly basic structures such as taxiways and runways are in fact highly complex assets, dictated through complicated algorithms not only by local climatic conditions but also by the size, weight and frequency of the aircraft that will use them. Terminal and similar structures incorporate multiple and highly sophisticated electronic and mechanical systems that must allow flexibility for use by multiple airlines and for changing demands as travel needs vary seasonally and grow over time.

Not only developing such assets but also operating them once built require highly-skilled, industry specific workers.

At the development stage, these skills are generally "bought in". No airport is of sufficient size to maintain all the necessary design and construction skills in-house, and competition for the time of these external skills is often international. What the airport's own staff must bring to the development process is an expert knowledge of local needs and a high level of project management, legal and budgetary expertise.

Once built, airport management must attract and retain the required and specialist airport specific technical professionals such as Work Safety Officers and Aerodrome Reporting Officers. The development of a sufficient number of skilled workers is critical to ensuring the industry's continued strategic role in the Australian economy.

The training arrangements are sometimes complex as aviation skills development is pursued at a number of levels by industry, through higher education, and through vocational education and training. In the past, the aviation industry has seen poor recruitment numbers, barriers associated with education funding and limited access to practical training facilities. In addition, the civilian and military components of the aviation industry have operated largely independently, with the transfer of skills and personnel between these groups hindered by the absence of an integrated training system.

A constant challenge is an ageing workforce and labour shortages in key skill areas and locations.

To meet training challenges in the airport industry, the AAA and the Transport Logistics Industry Skills Council are coordinating the roll out a national training plan aimed at training Work Safety Officers and Aerodrome Reporting Officers.

AUSTRALIA'S AIRPORTS - "NATIONALLY SIGNIFICANT INFRASTRUCTURE"

There are, according to Airservices Australia, over 2000 airports and airfields in Australia.

The AAA recently published a major research paper that identified the most important of these Australian airports. In particular it brought together little known and seldom recognised facts about Australia's regional airports, it sought to dispel various myths that circulate about them, and it catalogued the serious challenges they face in meeting the future needs of the communities they serve. A copy of that paper, *Australia's Regional Airports – Facts, Myths and Challenges,* is available online at www.airports.asn.au.

The AAA also recently published a study conducted for it by Deloitte Access Economics which showed that, in 2011, Australia's airports generated a total economic contribution of around $17.3 billion – equivalent to around 1.2% of Gross Domestic Product – and estimated that national employment at airports was approximately 115,200 full-time equivalent workers. A copy of that study, Connecting Australia – the economic and social contribution of Australia's airports, is available online at www.airports.asn.au.

These documents together readily demonstrate the importance of all Australian airports – both for the vital contributions they individually make to their local communities, and for the contributions they collectively make to Australia's overall economic and social welfare.

The Deloitte Access Economics study referred to above clearly shows that the preponderance of the economic benefit generated by airports derives from only a handful of airports in the capital cities and major tourist destinations - the 11 largest airports in Australia (all capital city airports, plus Gold Coast, Cairns and Alice Springs airports) account for about 87% of overall passenger traffic and make the greatest economic contribution in terms of direct and indirect employment. Nevertheless the balance attributable to regional airports is still economically significant and, perhaps more importantly, vital to the social and economic life of Australia's regional communities.

The Regional Airports research paper referred to above identifies the range of aviation and non-aviation activity that occurs at Australia's regional airports, and this alone emphasises how vitally important regional airports are to the communities they serve.

As the paper noted:

- RPT, charter and private flights from Australia's regional, rural and remote airports allow those who work and live outside the major cities to access the specialist health, education, commercial and recreational facilities that are not economically available where they normally reside, allow travel by health professionals to the regional community, and enable regional residents to maintain and enjoy the pleasure of their relationships with distant families and friends;

- RPT and charter flights allow the more efficient development of Australia's natural resources, weekly bringing many thousands of "fly-in, fly-out" (FIFO) workers to distant mines and development sites from both capital cities and other regional centres. In 2011, approximately half of the 90,000 people employed in the Western Australian mining industry participated in FIFO arrangements, where they live in a city and fly in to a remote workplace during their work roster. It is not only the airports owned and operated by resources companies that facilitate Australia's participation in the world trade in minerals, but also general purpose airports such as those at Karratha in Western Australia and Emerald in Queensland;

- Regional air services support the attraction of staff to, and their retention in, regional and remote communities by minimising the isolation that can be involved in working away from family and friends;

- Charter flights by large long-distance aircraft bring significant numbers of overseas visitors to Australia's major leisure destinations, adding to the growth of a tourism industry already supported through domestic and international RPT flights;

- Charter and private flights on smaller aircraft allow the business and leisure travel of Australians to and from smaller airports where it is not economical for commercial airlines to operate RPT services;

- Air services keep Australians in touch with one another and the world, because they are frequently used to deliver the mail and our daily newspapers;

- While they may no longer be defence bases, very many regional airports support Australia's defence force activity – in the 12 month period June 2011 to May 2012 there were at least 7000 arrivals or departures by Australian Defence Force aircraft at at least 103 civilian Australian airports;

- Particularly in regional Australia, airports play an essential role in saving lives by facilitating medical evacuations, collection and delivery of organ donations and search and rescue.

  - For example the Royal Flying Doctor Service (RFDS) is a non-for-profit organisation which offers health care to those people who are unable to access a hospital or basic general practices due to their extreme geographic isolation. Currently, the RFDS has over 60 aircraft, operating out of 23 bases in all States and the Northern Territory. The RFDS predicates its operations on the availability of airport or airstrip networks in outback locations throughout Australia. In 2011, the RFDS undertook nearly 76,000 flights, taking over 80,000 hours and spanning a distance of close to 27 million kilometres. These services have become of even higher importance in light of the growing number of mining workers residing in rural parts of Queensland and Western Australia;

- Law enforcement bodies, such as the Western Australia Police Air Support, and border protection agencies operate out of Australia's regional airports, particularly in northern and western Australia;

- Australia's regional airports also play a vital role in protecting Australia's physical assets – enabling fire-fighting in areas where road transport is impossible or would be too late;

- Australia's vegetable and animal produce is significantly enhanced by aerial agriculture services like crop dusting and mustering operated from regional airports;

- Freight services to and from airports allow many businesses to operate "just-in-time" inventories and access markets for often high-value or time-sensitive products;

- Australia's regional airports offer facilities for pilot training both for those who wish to fly privately and for those who wish to earn their living flying commercially in Australia or overseas. A number of regional airports provide flexible training facilities that do not conflict with the flight paths of capital city airports, while minimising the noise impacts in densely populated areas. For example:

  - Tamworth Regional Airport is host to BAE Systems Flight Training Australia, which conducts flight screening and the first stage of flight training for all Australian Defence Force pilots. It also has flight screening contracts with the Republic of Singapore Airforce and the Royal Brunei Airports, under which it provides facilities and aircraft, and it hosts training courses in aircraft mechanics and engineering through the Australasian Pacific Aeronautical College.

  - The Australian Airline Pilot Academy at Wagga Wagga Airport provides a 32 week full-time course for ab-initio trainee pilots to meet the current and future demand for Regional Express pilots, as well as development courses for current Rex pilots, and in 2011 AAPA commenced training international students, offering Multi Crew Pilot Licence (MCPL) training for UAE trainee pilots. AAPA's training programme is residential, with world class equipment and facilities, and boasts a fleet of 20 new Piper aircraft and 3 flight simulators. The total capital outlay on these facilities over 2009-2014 is expected to exceed $25 million, representing a significant investment in the regional economy.

  - Jandakot Airport, where almost 70% of total aircraft movements are flying training, is the training base for pilots for a number of international airlines and training schools including the Royal Aero Club (Inc), China Southern West Australian Flying College and Singapore Flying College.

- Regional airports may be designated for diversion of domestic or international flights when their capital city destination becomes unavailable for reasons such as the onset of severe weather – for example Rockhampton Airport in Central Queensland has the capacity to handle international passenger and airfreight operations by Boeing 747 aircraft;

- Regional airports may also provide a resource to enable airlines to support their national route operations – for example, Tamworth Regional Airport is home to QantasLink's heavy maintenance base for Dash-8 aircraft;

- Aerial survey and aerial photography activity often requires access to regional airports; and

- Australian airports generally, and not just those owned or operated by aero clubs, allow many thousands of Australians to enjoy the pleasures of sport and recreational flying.

AUSTRALIA'S AIRPORTS - "PUBLIC INFRASTRUCTURE"

The Commission's Issues Paper states that:

Defining 'public' infrastructure is challenging, but the essential elements are that it encompasses infrastructure where government has a primary role and responsibility for deciding on whether infrastructure is provided, and/or the source of the revenue streams to pay for the infrastructure.

By reference to this definition, Australia's major privatised airports would likely not be viewed as "public" infrastructure during the period of their long term leases, while hundreds of small local government owned airports would. Given the vital role that all airports play in the Australian public transport network, the AAA suggests that this would be an anomalous result.

As the Commission's Issues Paper also notes:

Historically, governments have played a dominant role in the provision, ownership and operation of major economic infrastructure such as roads, bridges, railways, airports, ports, telecommunication networks and electricity and water utilities. However, the models used or implemented for the delivery of public infrastructure assets and services have changed in recent decades.

Australia's airports are fundamentally a community asset:

- Our biggest airports, while leased to and operated by the private sector, remain owned by the Commonwealth Government;
- The overwhelming majority of all other Australian airports are owned and operated by the local government authority for the community they serve;
- Of those airports that are not government owned, the majority are owned by, and operated predominantly for the purposes of, resource extraction corporations; and
- While some airports owned by a local government authority may be operated by the private sector on the authority's behalf, only a handful of Australia's regional airports are both owned and operated by the private sector for general public use.

Because of this, and because of the vital role they play in the provision of public transport, the AAA believes that all Australian airports should be regarded as "public infrastructure" for the purposes of the Commission's present inquiry.

THE RECENT HISTORY OF INFRASTRUCTURE DEVELOPMENT AT AUSTRALIAN AIRPORTS

Airports are capital intensive businesses. Large investments must be made in assets that have no alternative purposes, exhibit decreasing costs over their useful lives and may be in service for up to one hundred years. Recognising and minimising inefficiencies in relation to these long-term investments is crucial to ensuring the long-term dynamic efficiency of the industry.

At the time the former Federal Airports Corporation airports were privatised in the 1990s, most infrastructure at them was either quite old and dated or, while perhaps newer, was recognised as being in imminent need of replacement, upgrading or expansion to cope with likely traffic trends.

At the same time, the transition from public to private operation of these airports was accompanied by the imposition of a new and untested regulatory regime which required the obtaining of complicated and time-consuming approvals not only for the construction of new assets but also for the recovery of their costs from airport users. This regime is now almost universally recognised to have been "heavy handed". It provided impediments and disincentives to infrastructure development that might otherwise have occurred.

The Commission report into the price regulation of airport services in 2002 notes in Finding 8.2 that "heavy handed" regulations had not promoted the commercially-negotiated outcomes that were envisaged by the architects of the regime. The Commission identified:

- the effect on investment incentives of the lack of transparency
- the incentives for some participants to approach the regulator rather than achieve regulatory outcomes
- the high costs of complying with the regime,
- the investment delays introduced by the need to have every investment-related price increase vetted by the regulator

Over time, and importantly with the benefit of multiple Productivity Commission inquiries, this regulatory regime has been transformed into one that is now referred to as "light handed".

The significance of this transformation cannot be underestimated. The resultant reduction in sovereign risk has meant that airport owners, investors and financiers have become far less reticent to fund major infrastructure development at these airports.

In this regard, the findings of the most recent Commission report on price regulation of airports in 2012 relevantly included the following:

FINDING 6.1

The Australian Government has a number of regulatory and other levers to influence the timing and nature of investment at Australian airports, including lease provisions and requirements under the Airports Act 1996. To date, these levers have not been triggered, as investment has exceeded requirements established at the time airports were sold.

FINDING 6.2

There is evidence of significant investment in aeronautical infrastructure at Australian airports in the period since light-handed monitoring was introduced in 2002, with significant future investment planned. Compared to other Australian infrastructure, airport investment outcomes rate favourably.

Since 2002, major Australian airports have continued to invest to cater for growing passenger numbers, to improve the quality of the services offered to customers – passengers and airlines alike – and to enhance the efficiency of their operations. In total, airports invested more than $3.5 billion in aeronautical services over nine years, growth of almost 50 per cent per annum on average.

Many of the investments undertaken have been of an 'airport changing' nature, and have improved markedly the quality of service offered to customers. Some of the more notable examples include:

- the opening of the new airport multi-user terminal at Adelaide Airport, with substantially improved facilities, services and business opportunities;
- the expansion of the international terminal at Brisbane Airport, which also offered significant improvements, and the commencement of new runway works;
- the complete redevelopment of the Canberra Airport terminal building;
- the extension of the main runway at Gold Coast Airport, which allowed the direct introduction of long haul international flights which was originally not possible, and the complete redevelopment and expansion of the main terminal building to accommodate a common user international and domestic terminal;
- the terminal expansion programme and expansion of aero-bridge gate capacity at Melbourne Airport;
- the redevelopment and upgrade of the international terminal at Sydney Airport, and the transformation of T2 from a single-airline facility to a common-use terminal;
- the T2 (Domestic Terminal) Redevelopment followed by upgrade works for T1 (International Terminal) at Cairns Airport;
- enhancements to runway, taxiway, apron and terminal capacities to allow services by A380 Airbus aircraft at a number of airports; and
- most recently, commencement of construction of a new multi-billion parallel runway at Brisbane Airport.

However, it is also obvious that substantially more investment is going to be needed over the next ten to twenty years to meet the projected growth in passenger numbers. Indeed, by 2029-30, annual passenger numbers are forecast to exceed 230 million – a 250 per cent increase on current levels. The previous government estimated that in the order of $13 billion will need to be invested by airports in the next 10 years alone to keep pace with aviation demand, particularly from Asian nations.

So far as other airports are concerned, the situation with respect to infrastructure development has generally not been anywhere near as good.

Some hundreds of Australia's regional, rural and remote airports were originally established by the Commonwealth for its armed forces. When no longer required for those purposes, these airports were gradually transferred to the ownership of the relevant local government authority under Aerodrome Local Ownership Plans (ALOP) or sold to private interests. The ALOP agreements under which these transfers took place impose obligations on the recipient local government to maintain and operate the airport as an airport, but provided no funding for either that purpose or future infrastructure needs.

As many as 50% of these airports may be operating at a loss each year and are heavily dependent upon cross-subsidisation by their local government owners who face multiple and competing demands on their limited finances.

This has necessarily meant that otherwise desirable infrastructure development has often simply not been possible. This may be the case even though even small rural and remote airports can be under comparatively sudden and urgent pressure to commit to such major developments to support their local economy and community where, for example:

- Local economic development, such as the opening of a new mine, requires that the airport have the capacity to accommodate new traffic comprising larger aircraft regularly carrying a "fly-in/fly-out" workforce; or
- The trend amongst airlines towards the use of larger and heavier aircraft on regional routes requires a regional airport operator to substantially upgrade its infrastructure just to maintain existing levels of passenger and freight traffic.

It is pleasing to note however that a number of State Governments, and notably those in Victoria and Queensland, are now recognising the economic significance of regional airports in their jurisdictions and providing some developmental finance.

In contrast, at the remaining (privately owned) airports there has been some very significant infrastructure development in recent years. Around 44 of these airports are operated by resource companies and exist predominantly to allow them to meet their need for "fly-in/fly-out" workforces. As such, their mineral sales have been able to fund the necessary development costs.

Brisbane Airport Corporation (BAC) Case Study

Brisbane Airport is one of Australia's fastest growing and has demonstrated an ability to successfully bring on multiple developments through a mature project management systems.

With an enviable record of no material cost over runs, no major environmental issues, excellent outcomes with respect to safety and security management and no court activity arising from project disputes, Brisbane Airport Corporation's project management systems have proven to be highly successful.

Features of BAC's project management systems include:

- The use of a documented Project Management System (PMS), benchmarked against industry best practice and regularly audited by external auditors.
- The utilisation of a Project Management Office (PMO), overviewing project performance metrics and enabling cost-effective outcomes across multiple concurrent projects.
- The use of a project control group, which for the more significant developments, is chaired by an external representative.
- Well established control meetings with various airport stakeholders including tenants, airlines, government agencies and local community.
- Well documented consultation and approval steps including financial, board, government, stakeholder and community.
- Mandated third party verification steps, in addition to targeted peer review.
- Dedicated in-house environmental, risk, safety, legal and communications teams supporting each project.

In the last 10 years, BAC has used this project management system to deliver more than $1 billion worth of new infrastructure, including:

- The $340m International Terminal Expansion (completed 2008).
- The $240m new major access road - Moreton Drive (completed 2009).
- The $42m Domestic terminal Common User Expansion (completed 2011).
- The $260m Domestic Terminal access upgrade, which included an upgrade of access roads, an elevated walkway and a multi-level parking facility (all completed by 2012).
- Over $100m of apron and taxiway upgrades at the domestic and international terminals (all completed by 2012).
- The $60m early civil works for the New Parallel Runway (completed 2013).
- The $15m and highly critical Runway Overlay (completed 2013).
- Multiple energy efficiency upgrades.
- Multiple active transport (public transport plus cycling and walking) upgrades.

Brisbane Airport also invests significantly in research and development programs and has taken the opportunity on some major projects to trial new development methodologies. This includes the use of a 'rolling surcharge' ground improvement methodology for the Moreton Drive project. It also includes the re-use of vegetation from the NPR site mixed with soil, for the manufacture and establishment of a topsoil mulch product to be used for the project landscaping. This initiative has removed the need for thousands of truck movements on and off the site.

THE IMPACT OF REGULATORY SETTINGS ON INFRASTRUCTURE DEVELOPMENT AND FINANCING

Airports can never be insulated from external economic impacts - these are an unfortunate fact of life which affect not only short-term patronage but also financial risk profiles to which airport operators must adapt. But regulatory settings and regulatory uncertainty are within the capacity of Governments to control, and it is important that they should be controlled.

It is essential that the regulatory settings, especially those related to major development project assessment processes, should not jeopardise the capacity of airport operators to raise the necessary funds or their preparedness to undertake the risks inherent in expending such funds.

The potential costs of getting this wrong in an industry of national importance can be enormous. The long vessel queues that formed off the Port of Newcastle in 2003/04 – due largely to a chronic shortage of port and transport infrastructure – is an obvious illustration of the potential costs of under-investment. The negative impacts upon the Australian economy if similar bottlenecks emerged in the aviation sector would be equally, if not more wide-reaching.

Australian and foreign banks and other funding providers in recent years have increasingly imposed heightened demands before they will lend. Increasingly banks seek greater certainty about the underlying business and any suggestion of regulatory uncertainty, previously not welcomed but tolerated, can potentially impact the availability or terms of funding. And ratings agencies now cite regulatory uncertainty as a factor impinging on the credit quality of rated airports. So marked is this change that some airports found that even the previous Government's Green Paper's discussions of a 'show cause' mechanism and a Major Development Plan 'call-in' power, and the announcement that an already scheduled Productivity Commission review of airport regulation review would be brought forward, were a distinct negative in funding discussions.

So setting regulatory intervention at the minimum level dictated by the public interest and avoiding unwarranted suggestions that intervention might be increased are key elements in promoting airport development in Australia. Recent history clearly demonstrates the correlation.

The transition from public to private ownership of Australia's major gateway airports was initially accompanied by a regulatory regime that is now universally accepted as having been too "heavy-handed". This regime acted as a strong retardant, and often as a complete disincentive, to efficient investment in the expansion and enhancement of the often inadequate infrastructure stock as it then stood.

It was only when this regulatory environment was replaced by what is, comparatively speaking, a "light-handed" regime that the pace of new infrastructure investment stepped up and showed a real prospect of meeting the nation's needs on a timely and efficient basis.

Almost all of the significant infrastructure expansion that has occurred at Australian airports since privatisation occurred after the heavy-handed regulatory regime was replaced.

The airport privatisation experience thus provides a clear case-study demonstrating that, to ensure efficient infrastructure development in Australia, it is essential that regulatory intervention be contained to the minimum possible consistent with the overall public interest. Infrastructure development at Australian airports over the last decade or so provides a benchmark study to demonstrate the close correlation between regulatory burden and risk, on the one hand, and investment incentive on the other hand.

Nevertheless, while it is the clear policy of the Commonwealth Government to encourage private investment in aeronautical assets, the legislative settings are not yet optimal and continue to impede investment in future aviation operations to an undesirable extent. There are a number of amendments that could and should be made to present airport regulation to enable it to deliver on that Government policy and to meet best practice. These include measures designed not only to remove unnecessary regulatory burdens, but also the imposition of controls on off-airport development to preserve the aeronautical utility of existing and new airport infrastructure.

COMPARATIVE COSTS OF AUSTRALIAN AIRPORT RENEWAL AND DEVELOPMENT

It is pertinent to consider costs of Australian airport renewal and development from two perspectives:

- by comparison to international benchmarks; and
- by different locations within Australia.

Following the Business Council of Australia survey in 2012 undertaken by Turner and Townsend (T&T), Brisbane Airport engaged T&T to undertake some further work.

T&T found that when recent Australian projects were compared to like builds elsewhere, Australia compared well to UK projects and to USA projects in cities where construction is unionised, such as New York. The original BCA survey was found to have included comparisons of greenfield low cost terminals overseas with brownfield full service terminals in Australia.

This is not to say that Australia could not do better and there are several aspects of any infrastructure build that should be considered to find efficiencies. This provides a challenge not just for airport operators but also for governments, given the cost impacts that their regulatory imposts can have on financing, construction and operation.

Within Australia, costs of development and periodical renewal of the airport network can differ dramatically as the distance from major urban centres increases. It appears, however, that geography is the major distorting factor here. For example, infrastructure renewal and development costs at Ceduna airport in South Australia are around 1.5 times higher than those in Adelaide, while at Derby-West Kimberley Airport they can readily be 3 times higher, or even greater, than in Perth.

Indeed, for regional airports, the tyranny of distance compounds not only costs but also the complexity of project implementation. Needing to undertake engineering works at an airport is one thing, but finding a company with the requisite capability is another. For example:

- there are no asphalt batching plants available outside Perth, so the cost of mobilising a skilled workforce could be in excess of $100k before works commence
- bitumen crews are often only available as they pass through a series of regional towns and thus co-ordination between those crews and other local companies involved in the works is critical and does not always align
- moreover a premium is always paid - conducting any works above the 26th Parallel comes with a significant increase in costs. In the Pilbara this can be in the order of up to 50% and in the Kimberley 30%+
- staffing is also a key issue. Overlays and works on runways do not happen often at regional airports compared to capital city airport. In the local government environment the local engineer is often assigned this function but is unlikely to have exposure to airfield operations and the differences in such things as spray rates. A runway is not a road. It has specific needs and outcomes related to aircraft safety that may not be understood
- and finally, the risk of bitumen being transported 2,500km is also problematic in that it can deteriorate over these distances.

Other factors that may be significant in other industries (such as labour practices) appear to have been of no material impact in the airport development experience.

DEVELOPMENT APPROVAL PROCESS

The "heavy engineering" nature of airport infrastructure development means that the design and construction of new aeronautical assets is necessarily not a short-term exercise. It is nevertheless time-critical.

While the former Federal Airports Corporation airports are subject to an airport-specific planning regime that operates to the exclusion of State and Territory regimes otherwise governing the same issues, this does not cover all aspects of airport developments and operators of these airports must still engages with other State and Territory development authorities on some issues. And at all other airports, there is generally no airport specific development approval process.

Thus, while not as serious an issue as it might otherwise be, a major issue in airport planning revolves around the need to obtain numerous Commonwealth, State/Territory and Local Government approvals, often from numerous agencies at each governmental level. Any unnecessary delay at any of these stages by any of these agencies can fundamentally and detrimentally defer entire development projects and thereby deprive the economy and community of major benefit.

The Association has been heartened by initiatives taken by the present Commonwealth Government with some States to commit to develop "one-stop-shops" for major development approvals across Governments and agencies. Turning these commitments into reality would offer a real prospect for unlocking significant productivity enhancements cross the entire economy.

PROTECTING THE OPERATIONAL INTEGRITY OF AIRPORTS

The capacity of an airport to operate as an airport is fundamentally dependent on what occurs on the land surrounding it. The erection of structures that physically intrude into the flight paths of arriving and departing aircraft can limit or prevent use of the airport.

But so too can other developments that are less obvious. For example:

- Insensitive residential developments under flight paths may lead to complaints about aircraft noise and eventually lead to the introduction of curfews or even the closure of an airport;
- Industrial activities that generate smoke or similar hazards may constrain use of an airport; and
- Other activities such as agriculture, animal husbandry or wetland developments may attract birds and pose a distinct hazard to aviation.

There is no uniform regime that requires developments around airports to be subjected to scrutiny to assess their potential impact upon an airport.

The Civil Aviation Safety Authority (CASA) has some limited capacity under Regulations made under the Civil Aviation Act 1988 to approve or not approve buildings or structures in limited areas around airports, but only in respect of Sydney, Bankstown, Moorabbin, Adelaide, Melbourne and Essendon airports. And the Secretary of the Commonwealth Department of Infrastructure and Transport has some capacity to act to protect airspace around airports under the Airports (Protection of Airspace) Regulations 1996.

But none of this legislation provides any comprehensive protection for Australia's airports.

In its 2009 Aviation White Paper the Commonwealth Government proposed the development of a national land use planning framework that would:

- Improve community amenity by minimising noise-sensitive developments near airports including through the use if additional noise metrics and improved noise-disclosure mechanisms; and
- Improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions through guidelines being adopted by jurisdictions on various safety-related issues.

The subsequently established National Airports Safeguarding Advisory Group (NASAG) comprising of Commonwealth, State and Territory Government planning and transport officials, the Department of Defence, CASA, Airservices Australia and the Australian Local Government Association (ALGA) has made significant progress in developing a National Airports Safeguarding Framework but this is not yet comprehensive or certain in the protection it affords. There is still much to be done to ensure that vital airport assets and the public services they provide cannot be thoughtlessly emasculated.

INFRASTRUCTURE DEVELOPMENT SKILLS AND EXPERTISE

Airport infrastructure is not just ordinary "bricks and mortar". Seemingly basic structures such as taxiways and runways are in fact highly complex assets, dictated through complicated algorithms not only by local climatic conditions but also by the size, weight and frequency of the aircraft that will use them. Terminal and similar structures incorporate multiple and highly sophisticated electronic and mechanical systems that must allow flexibility for use by multiple airlines and for changing demands as travel needs vary both seasonally and with growth over time.

Not only developing such assets but also operating them once built requires highly-skilled, industry specific workers.

At the development stage, these skills are generally "bought in". No Australian airport is of sufficient size to maintain all the necessary design and construction skills in-house, and competition for the time of these external skills is often international. What the airport's own staff must bring to the development process is an expert knowledge of local needs and a high level of project management, legal and budgetary expertise.

Once built¸ airport management must attract and retain the required and specialist airport specific technical professionals such as Work Safety Officers and Aerodrome Reporting Officers. The development of a sufficient number of skilled workers is critical to ensuring the industry's continued strategic role in the Australian economy.

The training arrangements are sometimes complex as aviation skills development is pursued at a number of levels by industry, through higher education, and through vocational education and training. In the past, the aviation industry has seen poor recruitment numbers, barriers associated with education funding and limited access to practical training facilities. In addition, the civilian and military components of the aviation industry have operated largely independently, with the transfer of skills and personnel between these groups hindered by the absence of an integrated training system.

A constant challenge is an ageing workforce and labour shortages in key skill areas and locations.

To meet training challenges in the airport industry, the AAA and the Transport Logistics Industry Skills Council are coordinating the roll out a national training plan aimed at training Work Safety Officers and Aerodrome Reporting Officers.

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