

Review of the Sydney Airport Demand Management Scheme

Peter Harris AO

February 2021

Table of Contents

Section 1 - History of Demand Management at Sydney Airport.....	4
Introduction.....	4
Context for introducing demand management	4
Scope of the Review	5
Review Process	6
Public Consultation.....	7
Section 2 - Objectives of Demand Management at Sydney Airport.....	8
2.1: Noise Management	8
2.2: 80 movements per hour	9
2.3 Why Regulate at all?.....	10
2.4 Should the objectives of the Scheme be clarified?	12
2.5 An important conclusion	13
Section 3: Competition and choice - consequential impacts of a regulated Act and Scheme.....	14
3.1 Western Sydney International (Nancy-Bird Walton) Airport	14
3.2 Competition.....	15
3.3: Allocation of slots amongst competitors.....	16
3.4: Competition – Ministerial Waivers can create further impediment to competition.....	17
Section 4: Regional Access	18
4.1: Definition of a regional carrier	18
4.2: Why retain a Ring Fence?	20
4.3: The future of the Ring Fence.....	21
4.4: Movement within the Ring Fence	21
Flexibility in the first two reform seasons	23
4.5: Peak period definition	24
4.6 The Government always retains the ability, under a regulated system, to intervene.....	27
Section 5: Consistency of practice with international standards.....	28
5.1: Applying the WASG	28
5.2: Setting priorities amongst competing claims for slots.....	30
5.3: Slot trading	32
5.4 WASG and compliance – the source of slot allocation credibility.....	33
5.5: The 80:20 standard.....	36
Section 6. Improved flexibility in delivering the cap	38
6.1 The 15-minute rolling cap is a planning tool	38
6.2: The rolling 15-minute window as an operating cap.....	40

6.3 Recovery from incidents.....	42
6.4 Quieter aircraft technology and the scope to exclude aircraft from the cap	45
6.5: Other Technology Improvements	48
Section 7. Governance.....	49
7.1: Financial Independence.....	49
7.2 Transparency – release information on which carriers hold which slots.....	50
7.3 – Ability to recommend changes to the Scheme	50
8. The Impact of COVID-19 on Proposed Reforms	52
Appendix A: Government’s 2019 response to the Productivity Commission Inquiry into the Economic Regulation of Airports	55
Appendix B: Consultation participants.....	58
APPENDIX C: Event Snapshots - 2019.....	60

Section 1 - History of Demand Management at Sydney Airport

Introduction

Sydney (Kingsford Smith) Airport (Sydney Airport), Australia's largest and busiest airport, operates under a unique framework of operational restrictions and regulations which are more stringent than those applying to other Australian airports or to other airports globally. The framework was introduced largely to address community concerns about aircraft noise and manage capacity of the airport.

A fundamental feature of the framework is managing the demand for airport infrastructure to mitigate congestion and facilitate the efficient operation of the airport. Effective implementation of the framework is essential to maximise efficiency at one of Australia's most critical infrastructure assets, while continuing to maintain fundamental access and noise impact protections for the community.

Following the Productivity Commission's 2019 Inquiry into the Economic Regulation of Airports¹ (PC Inquiry), the Australian Government (the Government) committed to conducting a comprehensive review of Sydney Airport demand management. The relevant PC Inquiry recommendations and the Government's response are at **Appendix A**.

In October 2020, the Department of Infrastructure, Transport, Regional Development and Communications (the Department) commissioned an independent review (the Review) into demand management at Sydney Airport.

Context for introducing demand management

On 4 November 1994, the Government opened the third (new parallel) runway at Sydney Airport to increase the airport's runway capacity and meet growing demand for flights in and out of Sydney. At the same time, there was restricted use of the cross (East-West) runway. The resulting increase and shift in air traffic triggered significant community concerns about aircraft noise and its impact on Sydney residents.

In response, the Senate established the Senate Select Committee on Aircraft Noise in Sydney to examine the noise impacts and measures – both in place and planned - to mitigate such impacts. The Committee reported its findings in November 1995.²

The Coalition's 1996 Election policy "Putting people first: the Coalition's policy on Sydney Airport and Sydney West Airport" announced the re-opening of the cross runway, which would allow for increased noise sharing, and a range of other noise mitigation measures for residents living around Sydney Airport. Further, the *Airports Act 1996* took effect on 9 October 1996 which enabled the Minister responsible for airports to declare the capacity at a leased federal airport and establish a demand (slot) management regime.

In November 1996, the Government announced the introduction of legislation to deliver upon the election commitment to legislate an 80 movements per hour cap and provide for an effective tool to support administration of the cap through a Slot Management Scheme and Compliance Scheme. The *Sydney Airport Demand Management Act 1997* (the Demand Management Act), and its

¹ Productivity Commission 2019, *Economic Regulation of Airports*, Report no. 92, Canberra.

² [Senate Select Committee on Aircraft Noise in Sydney. Falling on deaf ears?](#) November 1995. Canberra.

subordinate Regulations and two Schemes, gave effect to these commitments, establishing a regime intended to control the scheduled movement times of airlines to prevent more than 80 movements occurring on the runway in any hour, counted on a continuing 15-minute rolling hour (regulated hour).



The Sydney Airport Demand Management Scheme (the Scheme) was pioneering for its time. It gave the airport a clear role in governance, at a time when that was considered novel. It gave legislated teeth to the Compliance Committee, designed to enforce better practice and observe the spirit of this Scheme. It ensured an independent co-ordinator (known in legislated terms at Sydney as the Slot Manager) undertook the allocation of slots at a time when this was much more an ad hoc choice amongst capacity-constrained airports globally.

Today, the following three measures collectively manage aircraft movements and aviation-related noise impacts at Sydney Airport:

1. the Sydney Airport movement cap, implemented through the Demand Management Act and its associated legislative instruments;
2. the night curfew, implemented through the *Sydney Airport Curfew Act 1995*; and
3. aircraft noise sharing arrangements implemented through the Long Term Operating Plan (LTOP).

These measures balance the competing economic, social and environmental interests of stakeholders, and aim to strike a balance between the interests of business, the aviation industry, the travelling public and the protection of the surrounding communities.

Scope of the Review

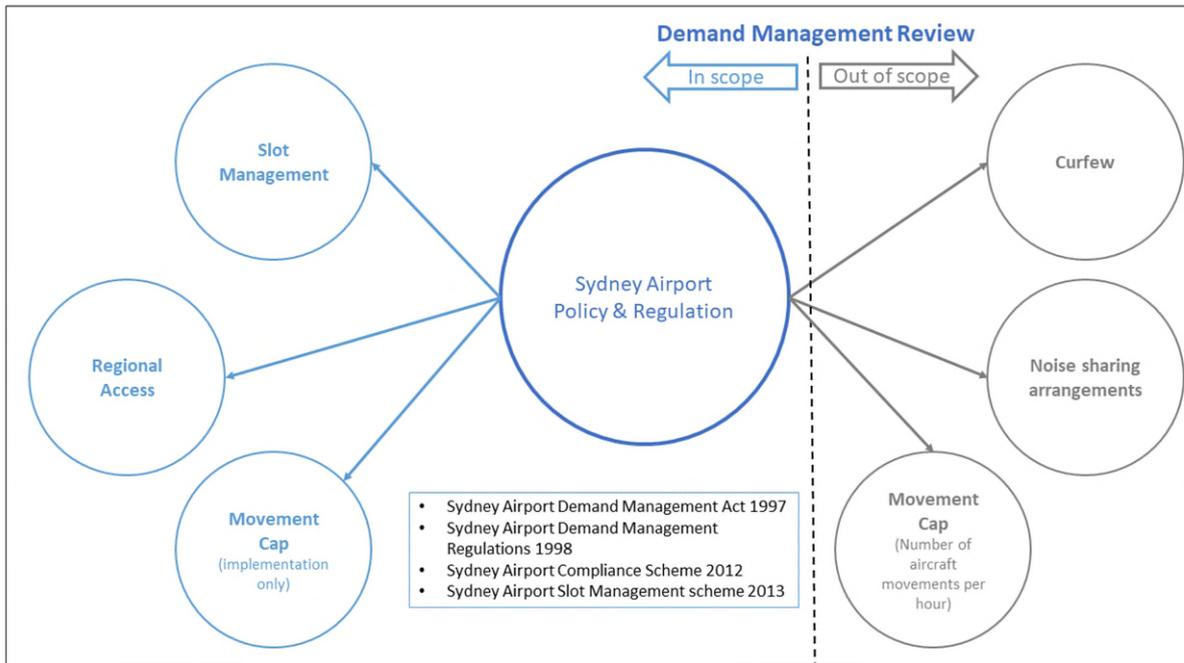
The Demand Management Act and associated legislative instruments establish the framework for the long-term management of air traffic demand at Sydney Airport. The Demand Management Act, along with the Sydney Airport Slot Management Scheme 2013, Sydney Airport Compliance Scheme 2012 and Sydney Airport Demand Management Regulations 1998 (together, the Legislation), establish a limit of 80 aircraft movements an hour, provide for a slot management scheme, and guarantee access for New South Wales (NSW) regional services.

The objectives of the Review are to determine whether after more than twenty years of operation the Scheme remains fit-for-purpose, including through:

- balancing the impact on the efficient use of airport infrastructure with noise management to maintain quality of life for the Sydney flight path residents
- mitigating the restrictions on competition and improving resilience within the industry.

Changing the number of aircraft movements permitted each hour at Sydney Airport and other policies governing Sydney Airport (such as the Long Term Operating Plan and *Sydney Airport Curfew*

Act 1995) are outside the scope of the Review. Matters relating to the development and operation of Western Sydney International (Nancy-Bird Walton) Airport (Western Sydney International Airport) and other airports in the Sydney Basin were also outside the scope of the Review. However, they are important contextual elements of any review of the Scheme and are taken into account where relevant.



The Review also aims to inform the remaking of parts of the Legislation that are due to [sunset](#) on 1 April 2024. On 24 August 2018, the Attorney-General made a [declaration](#) to align the sunset date for a range of aviation-related legislative instruments—including legislative instruments relating to demand management at Sydney Airport. The instruments are now due to sunset on 1 April 2024. Unless this Legislation is reviewed and remade, it will cease to have effect.

The timing of the Review was designed to ensure it could take into account current and emerging factors influencing Sydney Airport demand management, including:

- changes to the aviation industry and demand since the Legislation was introduced – both resulting from the COVID-19 pandemic, and other changes to market dynamics;
- rapid advancements in emerging aviation and air traffic technologies;
- any changes to community views since the Legislation was introduced; and
- the anticipated opening of the Western Sydney International Airport in 2026.

Review Process

The Review was undertaken by Mr Peter Harris AO. Mr Harris has extensive public policy and aviation sector experience as a senior public servant, a former Chairman of the Productivity Commission and a former senior executive in the aviation sector.

In undertaking the Review, Mr Harris was supported by the Department which provided secretariat services and material and analysis relating to the policy and legislative frameworks governing demand management at Sydney Airport. Aviation data and analysis were provided by the Bureau of Infrastructure and Transport Research Economics (BITRE) and the Sydney Airport Slot Manager. The

Review also considered publicly available information and data and information provided by stakeholders through a public consultation process.

Public Consultation

On 5 November 2020, the Department released a Discussion Paper and called for public submissions on its website. Interested parties were invited to register for targeted consultation meetings and to provide written submissions on the Discussion Paper by 11 December 2020.

The purpose of the Discussion Paper was to stimulate discussion about the Review. It outlined the scope of the Review and set a framework for public input by addressing a number of the issues investigated in the PC Inquiry and posing a series of focus questions to further this work and prompt deliberation of specific issues.

The issues canvassed in the Discussion Paper were both broad and technical. They considered the key policies underlying Sydney Airport demand management and their implementation and the impact of COVID-19 on slot management at Sydney Airport.

The Discussion Paper can be viewed on the Review website at:

www.infrastructure.gov.au/aviation/airport/review-sydney-airport-demand-management/index.aspx

Stakeholder engagement

In addition to the Discussion Paper being published on the Department's website, over 100 stakeholders were directly informed (via email) of the Review and invited to register their interest for targeted one-on-one stakeholder meetings and provide written submissions. Key stakeholders contacted included airlines, New South Wales regional airports, regional and Sydney community representatives, business and tourism groups, airport and airline peak bodies, Australian, local and State governments and parties involved in the implementation of the Scheme such as the Slot Manager, Airservices Australia and Sydney Airport.

Between 16 November and 8 December 2020, 22 one-on-one consultation meetings were held with 21 stakeholders, including with representatives from the key stakeholders noted above.

Stakeholders offered varied views and raised a wide range of issues about the Scheme and operations at Sydney Airport more generally. Some stakeholders also provided data to inform detailed examination of particular issues.

Submissions

A total of 41 submissions to the Review were received from a range of stakeholders, covering the spectrum of community, industry, business and government interests. A small number of submissions were provided on an in-confidence basis.

All material provided by participants, even if not referenced directly, provided useful perspectives.

Appendix B to this Report provides a list of submissions and meeting participants (excluding where confidentiality was requested). Copies of the submissions, unless confidential, are available at:

www.infrastructure.gov.au/aviation/airport/review-sydney-airport-demand-management/index.aspx

Section 2 - Objectives of Demand Management at Sydney Airport

The legislation underpinning the creation of demand management at Sydney Airport does not explicitly state the objectives of the legislation.

However, the introduction of the legislation into the Parliament in 1997 offered a set of intentions which indicate the Scheme is meant to:

- provide a means of establishing in law a maximum limit on aircraft operations at Sydney Airport, to reduce the potential impacts of the noise of otherwise unconstrained operations on Sydney residents under flight paths
- reduce the potential for congestion in peak periods, and the associated cost to aircraft operators, air traffic control and consumers
- protect access for regional consumers and operators in the course of limiting movements
- ensure specific opportunity for new competition.

The ANAO in its review of the Scheme in 2007³ used a similar set of objectives for its analysis.

These objectives remain valid, in the view of the Review. They will consequently form the standard against which it will consider proposals from all parties to improve the Scheme.

2.1: Noise Management

To illustrate the importance of starting with the objectives, we briefly examine one of the most important aspects of aviation policy in the Sydney Basin - noise management.

The Demand Management Act and arrangements under it assist with delivering a balance between access and service quality in an essential transport service and mitigating a serious consequence of those services viz. aircraft noise management in Sydney.

The application of multiple objectives (e.g. as listed above) are a common feature of government policy and legislation. Complete alignment between them is a constant challenge, in many different policy fields. In the absence of complete alignment, judgment and a balance of shared impact is often applied. So it is with Sydney Airport and its benefits and cost to the community in which it is sited.

The Review has found in submissions and interviews that there is however general respect by all parties - including community representatives, Sydney Airport and airline representatives - for the Scheme and its implementation, although few are fully satisfied with it.

The scope to address improvements via the Review was thus generally welcomed.

Community representatives remain concerned that noise impacts from aircraft operations are not being fully managed in the terms expected when the LTOP was put in place to share aircraft noise, more than twenty years ago. A number of community representatives put forward ways to

³ <https://www.anao.gov.au/work/performance-audit/implementation-sydney-airport-demand-management-act-1997>

improve noise-sharing. Many of these are outside the scope of the Review, but at some points the Review will make observations that reference them.

The Demand Management Act primarily contributes to noise management by restricting movements to a maximum of 80 per hour, versus an unconstrained maximum use of the parallel runway system that different parties estimate to be upwards of 90 movements per hour.

It also, to a degree, assists air traffic control by limiting airlines from scheduling an excessive number of movements at a particular preferred time of day, for example 8am arrivals. By spreading out the number of departures and arrivals to roughly equal 15-minute windows across peak hours, this has meant less congestion to clear at later points during the day when the primary tool for noise sharing in Sydney – the LTOP – may be able to switch operations from parallel runways to the East-West runway.

Both these benefits of the Scheme are most evident when viewed against unconstrained operations at Sydney Airport - whereas when compared against the lived experience of recent years, they may now appear less significant. And future expected increases in passenger demand at Sydney Airport will – once the COVID-19 pandemic effect has passed – make it even less obvious that the Scheme is delivering support for shared objectives. As allocation and operation of slots pass about 55 movements in any hour, the ability of noise sharing through use of the East-West runway to offer relief to residents under the higher-throughput parallel runway system falls. Most peak period hours at Sydney Airport exceed this level (pre-COVID-19).

In considering any proposed improvements, the Review will need to examine whether structural forces that drive aviation service delivery have changed, such that the regulatory burden can be reduced and efficiency improved without undermining delivery of the objectives.

The Review will also seek consistency with international better practice in managing demand-constrained airports, where consistent with the objectives.

2.2: 80 movements per hour

The guidance from the Government to the Review makes it clear that its intent is to retain a cap of 80 movements per hour.

Later discussion will take this into account when this Report considers proposals which seek to treat some movements as not being required to obtain a slot; or in some way not being counted by Airservices Australia in its obligation to limit movements for the purpose of the cap.

The slot allocation system established by the Scheme is in effect the primary planning tool for operations at Sydney Airport – for the airport, airlines and air traffic control. Like any planning tool, it is only effective if all parties are required to use it.

This emphasis on the slot allocation cap as a planning tool nevertheless requires an important distinction to be made. There are in effect **two cap arrangements** at Sydney Airport:

- the Scheme, which can allocate no more than 80 movements per hour, for aircraft operators to *plan* and market their operations; and

- the Airservices Australia *actual operations* cap, a day to day monitoring and reporting arrangement required of it under the Demand Management Act.

This latter tool ensures that, even with the unavoidable uncertainties of aircraft operation (due to weather or mechanical or human failure), *actual* movements are almost invariably restricted to 80 per hour throughout the day. It is much less about planning and much more about delivery.

The planning cap is administered by the Slot Manager and directly serves two objectives – to set a maximum number of hourly movements; and to ensure more efficient scheduling by airlines of arrivals and departures to minimise congestion. The 80 movements per hour planning limit meets the former objective; and the latter is met by dividing hours into 5 and 15-minute periods, with limits on each such that slots allocated require airlines to plan schedules that flatten out spikes that can otherwise prove disruptive at the most attractive times of the day for landings and departures.

The actual operations cap, delivered by Airservices Australia, backs up these planning permissions by managing operations such that the 80 movements cap is more than just a planning device. It does so by monitoring service provision at rolling 15-minute intervals, to deliver an actual operational outcome that matches the intent of the 80 movements per hour cap.

The efficiency cost, noise management benefits and congestion management aspects of creating limits to the fine-grained level of 5 and 15 minutes has been questioned by a number of submitters. The Productivity Commission, in recommending the Review, also drew attention to the 15-minute rolling cap. The Review will apply the objectives, and the balance of judgment between them, in considering these matters.

2.3 Why Regulate at all?

The approach adopted in the Review is to

- establish the objectives which explain why we have a Demand Management Scheme at Sydney Airport;
- give each of the objectives due weight in considering the case for efficiency improvements to the system;
- consider how world better practice for demand management has developed since the Scheme and Demand Management Act were first developed in Australia more than twenty years ago; and to
- ensure the Scheme, its compliance arrangements and enforcement is fit-for-purpose in the likely future environment for Sydney Airport operations.

The case for persisting with individual aspects of the regulatory apparatus will be considered, both where stakeholder have proposed alternatives; or where it is evident that structural (rather than temporary) factors in air services have changed such that the Scheme is no longer consistent with current and likely future industry and community needs.

In addition, the Review considers here whether there is a clear case for persisting with regulation *at all*.

After all, as the International Air Transport Association (IATA) and the Airport Council International (ACI) demonstrate with their submissions, standards can be developed between airports and

airlines that do much of the job of managing demand at congested airports on a co-operative rather than regulatory basis. The World Airport Slot Guidelines (WASG) represent this mechanism.

In principle, a co-operative scheme offers a number of advantages over a regulatory scheme. It is inherently more readily adaptable in the light of changing circumstances. And it offers a consistency of policy across a range of demand-managed airports globally that settles at least some of the major points of difference between airports and airlines that otherwise can make the complex task of aviation – particularly international aviation – even more complicated.

Against this, there appear to be two good historical reasons why the demand management system at Sydney Airport is legislated rather than co-operative.

First, the system at Sydney Airport pre-dates (as noted in the Introduction) some important elements of demand management that are now covered fully in the WASG, but were not in 1997. IATA's preferred practice of the time was used in developing the Scheme at Sydney Airport, but it did not offer strong compliance incentives to ensure that a future privatised airport (Sydney Airport was on the path to eventual privatisation in 1997) and also airlines with substantial market power could not take advantage of limits on capacity. In particular, guaranteeing regional passenger access; and contributing to competitive growth in international services, in support of international tourism as a source of export and employment were not deliverable under the IATA standards of the day.

Second, it forms the primary mechanism to assure the community that the limit on the hourly number of aircraft noise events over Sydney is fixed, as part of the solution to serious community concern over aircraft noise with the opening of the second parallel runway in 1996. Community pressure sought a legislated limit on operations at the upgraded airport.

Regulation can also benefit air traffic management. A strong planning framework for managing the schedules used by aircraft operators at an airport can make the task of sequencing movements more predictable. Delay during congested periods of operation otherwise becomes a normalised cost for airlines and passengers alike. Co-operative management schemes can set limits but congestion can still arise if too many airlines choose to schedule and operate movements to occur at the same time.

Finally, regulated certainty about movement limits can assist by setting an important parameter for infrastructure planning on-airport. Inner city airports like Sydney Airport have fewer options to expand runways or taxiways to allow all the demand that seeks to arrive or depart at peak times to do so. As with most large transport infrastructure, under pressure from expected growth in demand, rationing or increased delay are the only options. Generally, rationing has the benefit of predictability, which makes it preferred where consumers are being promised a service with a scheduled time of operation. Co-operative schemes may offer less certainty to airports about how much additional infrastructure should be planned.

While that may explain why legislation was preferred at the time, it is reasonable to ask whether the situation has improved since the 1990s, sufficient to suggest that regulation is no longer required.

There is little doubt that the situation has improved in terms of community relations. Although LTOP has not delivered on all its targets, the confidence of the community in airport operations being a balance between efficiency and community impacts was observed by the Review in interviews; and referred to positively by both airport and community representatives.

At the same time, numbers of movements have significantly increased. This has seen noise events increase too, albeit many are less noisy than in the 1990s. Passenger numbers (pre-COVID-19) have doubled at Sydney Airport over the period since the Scheme was introduced. Most slots are now fully allocated across peak hours. In addition, pressure on terminal capacity and taxiways has increased. The risk of increased impact on the community by future growth has been delayed by COVID-19, but will return.

This Review judges that community confidence has only improved because all parties understand there *is* a cap on hourly operations; one which is monitored and supported by obligations established in regulation; and one which could only alter by democratic means, rather than standards settled solely between industry parties.

The WASG is certainly a useful guide to evolving better practice at demand-managed airports. But its sanctions aimed at compliance are about ensuring airline operations meet the slot requirements, whereas the multiple objectives of the Scheme demonstrate that another matter - community confidence – is equally important. The procedures that underpin the cap itself, and variations to practice at Sydney Airport that may affect the community would potentially be able to change by agreement at the WASG’s international conference. They would not be subject to community scrutiny.

Parties consulted in the course of the Review generally accepted that in broad terms the present Scheme is doing an important job. None call for full deregulation.

The Review itself is accordingly of the view that it would be unjustifiable to risk the general sense of calm and respect which – in comparison to the situation of the 1990s – characterises airport and community interaction by replacing the regulated Scheme with a co-operative arrangement. And it is worth noting that in its Inquiry, the Productivity Commission also did not take the path of recommending that the Scheme sunset.

RECOMMENDATION 2.3

The Sydney Airport Demand Management Scheme and related regulatory arrangements should not sunset in 2024.

2.4 Should the objectives of the Scheme be clarified?

If we are to use regulation as the on-going basis to deliver the co-ordination of demand and noise management, as recommended above, good practice in public policy would suggest that the Government should embed these objectives clearly in the legislation, rather than expect that they will be recalled readily whenever any specific aspect of the cost to airport efficiency or community impact causes queries to be raised.

This Review has referred back to the statements made in Parliament in the course of the legislation's original passage, and to the Auditor General's description of the Scheme's objectives when undertaking its 2007 review, in order to confirm its objectives. However, there are (as is often the case with government policy) many ways of emphasising other comments or statements made at the time – a number of submissions highlight Coalition election commitments or Parliamentary Committee reports from the time (1996) as being also relevant to the intent of the policy.

Clarity of purpose, by being explicit in the Demand Management Act, is often helpful when considering whether a set of policies is achieving what it set out to do. Evaluation, an essential element of maintaining good public policy, can be greatly assisted by that.

However, the Review does not favour that. The gains from doing so would be modest, and the controversy created over how best to weight language that must balance so carefully social licence and efficiency would put at risk what is essentially a reasonably settled environment.

It was a choice that might have been made in the past, but the on-balance judgment of the Review is that the gain is not worth the likely pain.

2.5 An important conclusion

The present community relationship in which the airport and its customers find themselves is a clear improvement over the circumstances of twenty years ago, notwithstanding a more than doubling of passenger throughput.

The Scheme and those handling it throughout that time on all sides should be commended; and not fail to bear in mind that it is an outcome that other demand-constrained airports have not all managed to deliver over the same period.

Accordingly change is not to be treated lightly.

Section 3: Competition and choice - consequential impacts of a regulated Act and Scheme

By imposing demand management at Sydney Airport in 1997, the Government delivered impacts which extended beyond capping movements at the airport and creating community confidence in future noise management.

By limiting the theoretical capacity of the airport, future demand for services to and from Sydney by air were funnelled into one of three choices for competing airlines:

- take up additional slots until the hourly limit is reached
- combine services into fewer, larger aircraft
- consider alternatives to Sydney Airport, within the Sydney Basin area.

Over the past twenty years, only the first of these three options appears to have seriously applied to Sydney Airport.

The future context in which the Scheme will operate is likely to be significantly different. This Section first considers some factors in that future context.

3.1 Western Sydney International (Nancy-Bird Walton) Airport

The development of Western Sydney International Airport is now underway and will offer the opportunity for the third choice above to take on a more realistic form for mainstream aviation than the alternatives on offer previously – Newcastle, Canberra or Bankstown being commonly cited alternatives to Sydney Airport in the past, but rarely treated seriously. This alters the competition balance in the Sydney Basin to a degree, depending on future regulation including the Scheme being considered in this Review.

However, the nature of the new airport's offering to the freight and passenger market is a work in progress, other than that it will take over Sydney Airport's in-curfew traffic once it opens. This will offer a small but material improvement to noise impacts surrounding Sydney Airport, and may encourage early development of air freight facilities at the new airport. Growth in air freight has been one of the more significant features of air services in recent years; and the COVID-19 crisis has done nothing to diminish that.

The Review observes that pressure on the Scheme and the operational movement cap at Sydney Airport is likely to be reduced by opening Western Sydney International Airport, but only marginally given the likely commercial preference of most airlines to use an inner city gateway.

Only if change is delivered by policy means (e.g. a reduction in the slot capacity at Sydney Airport towards the 55 movements per hour in the off-peak period that would be more consistent with LTOP) is Western Sydney International Airport likely to be directly affected by the Scheme. This is not a matter for this Review.

3.2 Competition

As their objectives indicate, one intention of the Scheme was to offset the restriction to competition that is the natural consequence of limiting capacity at Sydney Airport.

The Sydney Airport Slot Management Scheme 2013 contains specific measures to ensure new entrants gain an opportunity to access unallocated slots. A Slot Manager operates the Scheme independent of control by the major airlines or airport operator; there is a degree of transparency about the process for allocating slots; and new entrant airlines are defined in the regulation and can obtain a level of equality in access to slots, after historical rights to incumbent operators are confirmed.

These measures are similar to those offered at other capacity-constrained airports around the world, and which feature in IATA's WASG.

The WASG is determined by negotiation between airlines (particularly international airlines), airports (with Airport Council International (ACI) as a lead agent), and the Worldwide Airport Coordinators Group. As such, it represents common practice across demand-managed airports globally. Since aviation involves the use of multiple airports in order to complete a journey, it is a desirable that our Demand Management Scheme adopt the same approach, where consistent with the Scheme's objectives. This is substantially reviewed in **Section 5** of this Report.

Under both the current Scheme and the WASG standards, incumbent airlines have an advantage over potential competitors that have no or only a limited presence at a demand-managed airport: incumbents which use their slots in accordance with the rules are guaranteed the same slot for the same season next year, rather than re-opening all slots for reallocation according to possible merit criteria. These are 'historic' rights, in the parlance.

Viewed from one perspective, the practice of awarding historic rights at a capacity-constrained airport presents a barrier to new services commencing, if no unallocated slots are available at a new operator's preferred times. Viewed from the alternative perspective, the use of historic rights offers a degree of certainty in a high-risk investment such as international services. And even for domestic services, it ensures that carriers have a means of building up a regular schedule, such that consumers and businesses such as in tourism can have some reasonable expectation of continuity of service and build relationships, year in year out.

A strong offset to the negative impact on potential competition is nevertheless desirable. In the Scheme (and the WASG) an offset in the form of a preference for new entrants to access a proportion of unallocated slots was included.

However, the WASG has been updated over time, whereas the Scheme at Sydney Airport has remained unaltered in its definition of which carrier is a new entrant.

The WASG definition is now in principle more progressive than the Scheme in its definition of new entrants. However, in practice it will depend on the mix of current competitors. The current Scheme defines a new entrant competitor at Sydney Airport in complicated language. It requires a new entrant to be a carrier that identifies itself as such to the Slot Manager and has, on the day

which is the subject of an application for a new slot or slot series, less than five historic slots. A small carrier with broken series may thus be a new entrant on one day but not on another.

The WASG defines a new entrant as having less than seven slots on a particular day.

It is not fully clear whether the WASG definition would, if applied at Sydney, always result in a more pro-competitive outcome, due to the wording of the Scheme definition and the relatively large number of international services at Sydney Airport that would qualify as new entrants under either definition.

However, the principle of allowing more carriers to qualify for opportunities to compete is desirable. The IATA submission suggests 72% of carriers at Sydney Airport (pre-COVID-19) would acquire new entrant status, versus 55% under the current standard.

The Review understands that the new entrant numbers are likely higher than that, and the difference is most likely explained by the fact that some carriers would be classified as a new entrant on one day of the week but not on another, plus the inclusion of some smaller domestic services.

Overall, the outcome of the change is likely to be that around 10% of carriers at Sydney Airport will benefit from this change.

Adopting this and other updates in **Section 5** will, at the margin, potentially influence international carriers choosing which services to re-start after the COVID-19 disruption to view Sydney (and Australia, where it is their only gateway) more positively.

RECOMMENDATION 3.2

The Review recommends that the Scheme adopt the definition of new entrant as now included in the Worldwide Airport Slot Guidelines 2020.

3.3: Allocation of slots amongst competitors

The key duty of the Slot Manager under the Scheme is to allocate slots amongst competing carriers.

The regulated structure of the Scheme provides requirements for the Slot Manager to follow, which broadly adopts the practices of past IATA guidance, but adds obligations for dealing with the special characteristics at Sydney Airport, particularly regional services.

As noted above and consistent with international practice, carriers that operate in accordance with standards attached to slots in past seasons and meet compliance requirements retain access to those slots in the same season next year – known as *unchanged* historic slots. These are the first slots allocated.

Where an incumbent carrier seeks to move its historic slot or slots, regulation at Sydney Airport requires that such changes are given next priority, before ultimately new entrant carriers are given access to a pool.

This is not consistent with the WASG. And it is clearly a factor that may limit competitive entry.

WASG practice sees changes to historic slots treated as of no greater priority than new entrant or other slot requests, with 50% of the remaining pool of slots after *unchanged* historic slots available to new entrants and 50% available to incumbents, including changes to historic slots.

The Review supports such a shift.

RECOMMENDATION 3.3

The Sydney Airport Slot Management Scheme 2013 (S 19 (2) c (i)) be amended to remove the preference for changes to historic slots to rank ahead of new entrant slot allocation requests.

[3.4: Competition – Ministerial Waivers can create further impediment to competition](#)

The Review draws the attention of policy-makers to **Section 8**, where the potential anti-competitive effects of waivers being applied to the use-it-or-lose-it test are outlined.

Section 4: Regional Access

A major consequence of implementing demand management at Sydney Airport was the need to consider and manage the potential impact on regional access.

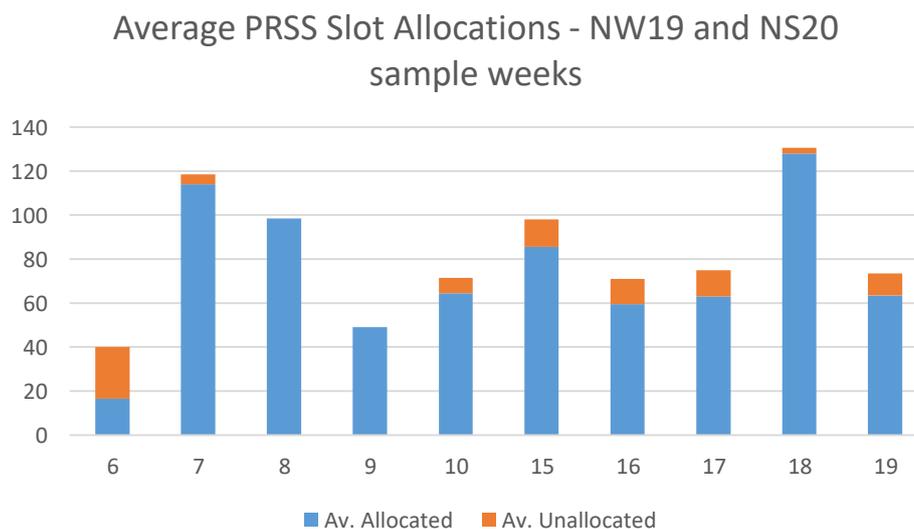
The design of the Scheme gives special preference to NSW regional services, via Permanent Regional Service Series (PRSS) slots, or 'regional ring fence'.

4.1: Definition of a regional carrier

Regional services that can take advantage of PRSS slots in peak periods are defined in the Legislation as being NSW services. The logic for this is clear in the Discussion Paper (referenced in the Introduction to this Report): i.e. that this ensures regional centres in NSW retain access to their primary State regular passenger transport airport.

However, not all PRSS slots are currently used. Overall the number of regional carriers and the number of regional ports served by access to Sydney has fallen over the last 20 years, with both the number of centres and the number of services declining.

The Discussion Paper notes that historically, intrastate services made up more than a quarter of Sydney Airport movements. But this has fallen over the years such that (pre-COVID-19) it makes up less than 20%. Yet PRSS slots were set at the time of that much higher utilisation. The Slot Manager advises that about 10% of PRSS in both morning and evening peaks are unused, equivalent to 17 per weekday. The 6am hour is particularly poorly used today, with 59% of its PRSS unallocated.



Sydney Airport has a similar perspective: approximately 50 centres in regional NSW had direct access to Sydney Airport when the Scheme commenced, but commercial pressures on routes and improved road systems mean that number is now down to 28. In the absence of new regional

services, dedicated peak period capacity at the nation's key demand-managed airport is in danger of being wasted.

There are opportunities to use unallocated PRSS slots to increase service to *Australian* regions. Regional centres outside NSW have in the past operated into Sydney Airport – e.g. from Mildura and Toowoomba Wellcamp, but not as PRSS services. Defining what is a regional service is relatively easy within a single State, but Sydney Airport also services some *Australian* regional locations that would currently be considered to be trunk services e.g. major towns and cities such as Townsville or Launceston. These too could not use PRSS slots under the current policy definition.

Improved nation-wide regional access to Sydney could be achieved by one of two options:

1. revising the definition of regional service to cover services from all airports which are not core regulated airports under the *Airports Act 1996*. This would ensure that regular trunk services to the Gold Coast, Launceston or Alice Springs did not become designated as regional services, while improving at the margin flexibility for additional smaller regional centres outside NSW to access Sydney.
2. allowing *any* service other than a capital city to/from Sydney Airport to qualify as a user of PRSS slots. Most of the locations that would benefit from this shift would be considered 'regional' under other Australian Government policies.

The first option should be uncontroversial, and is desirable. Australian Government aviation policy should favour national objectives rather than parochial State-based preferences. Sydney Airport is a national facility, as constantly emphasised by the airport, airlines and major users such as the tourism industry. This Review can find no reason to deny services from genuine regional centres outside the State to access PRSS slots.

The second option is more controversial. But the benefits are potentially much greater. It would lift productivity, as unused PRSS slots would very likely be quickly taken up. It would potentially benefit regional consumers and the national tourism industry, to the extent that current regional services to the likes of Maroochydore or Launceston or Townsville operate at less consumer-friendly times of the day.

And it would not alter the cap of 80, nor add materially to aircraft noise in order to make this change at the airport.

Further work would need to be done on defining a regional service if there was a desire to find a mid-way point between options 1 and 2. The Review is loathe simply to recommend another review, as an outcome to this consideration.

On balance, it is in favour of option 1 but strongly advises that the Minister consider authorising further work on a national approach to regional access to Sydney Airport.

The Review has noted no strong support for **other options to change the regional service definition** e.g. limiting the definition of regional services to a particular (smaller) size of aircraft, or eliminating certain larger centres in NSW from being classified as regional.

Whilst ever PRSS slots remain a material use of scarce capacity at Sydney Airport, changes like these reduce rather than improve efficiency.

And to the extent that they are intended to reduce the PRSS slot numbers to match current small or remote users only, they have a negative consumer impact on other regional residents that does not respect the community interest inherent in having a preferential Scheme. Whereas the options above take a positive approach, attempting to apply national regional policy to what is at present a single-State focus. With no reduction in PRSS slots.

Likewise, no strong support for **equalising the seasonal number of PRSS slots** emerged from comments and interviews. Seeking to equalize seasonal numbers is a second-rate solution to stranded PRSS slots and growth within the peak for regional carriers. It implies but does not deliver an answer to the question of which other user should lose their current access. And to the extent it is simply a question of having equal numbers by using presently unallocated slots in the peaks, it conflicts with reforms proposed below which would allow commercial and efficiency factors more role than additional regulatory action in addressing the current problems with frozen or stranded PRSS slots (covered later in this section).

RECOMMENDATION 4.1

The Slot Manager should be given the ability to allocate PRSS slots to regional carriers directly serving Sydney Airport from regional ports outside NSW.

4.2: Why retain a Ring Fence?

As operators of incumbent services at the time the Scheme commenced, all carriers undertaking regional services would have been awarded historic rights to retain those slots as long as they operated them, therefore guaranteeing their protection.

However, under an expectation at the time of significant pressure being put on regional carriers to sacrifice their peak period slots to larger affiliate airlines, the Government of the day legislatively locked in the protection of those specific peak period service times and made them near-to-permanently set aside for regional services.

It was known at the time that this inflexibility was probably undesirable in a good public policy sense. Community preferences (i.e. need to travel to Sydney for services such as health), commercial factors (i.e. services that can operate at a profit) and consumer demand (the choice to travel by road, because of convenience) all change over time and slot times should change to reflect them. However, the need to ensure regional centres retained access in a new slot-managed environment was considered paramount. An inelegant but effective solution, the PRSS, resulted.

At the same time as locking protection for a specific set of peak period regional services, the new Scheme restricted the potential of regional carriers to grow in peak periods beyond PRSS slots. Peak periods were defined very expansively (6am-11am; 3pm-8pm). No non-PRSS slots in the peaks could be used for regional services.

The application of a price cap for Sydney Airport aero charges on regional services may have also contributed to a view at the time that regional service growth in peaks should be limited. Fences are restrictive as well as protective.

4.3: The future of the Ring Fence

The Regional Ring Fence itself is a concept, created by PRSS allocations.

As such, it primarily serves the purpose of assuring regional communities that their access to Sydney Airport is protected beyond the simple guarantee of historic slot retention offered to other airlines using the airport.

It is evident, based on both submissions and interviews in the course of the Review, that the purpose of the Ring Fence is understood and well-accepted by Australian domestic carriers; mostly too by international carriers; and certainly today by the airport itself.

The general feeling across consultation conducted by the Review is in support of retention of the Ring Fence concept, but with recognition of shifts in the community needs noted above – allowing smaller peak periods and greater capacity to move within them while retaining protection for regional services.

Today's consensus in favour of lowering restrictions while ensuring regional access via the slot system is a notable improvement achieved over the period since 1997. This could theoretically suggest there is no need for the retention of special protection for regional slots in peak hours. However, the Review would not agree.

Despite the fact some fears twenty years ago may have been disproved by events (see below), there is no guarantee that bad practice could not emerge, affecting smaller regional affiliates of larger airlines in the future; and, like the 80 movements cap, the concept itself adds confidence in the airport's own role as part of a wider community.

The question is therefore whether there are better ways of offsetting genuine potential risks of regional ports losing preferred access times, while offering higher efficiency for the carriers who service those communities; and the airport.

The Review believes there are.

4.4: Movement within the Ring Fence

Movement of slots between carriers was *generally* available to all carriers under the new Scheme. But PRSS slots were restricted (whether swapping with another airline or re-timing by moving to a vacant slot) to moving no further than 30 minutes away from the original PRSS schedule times.

This limitation on swaps can have important consequences. If PRSS slots cannot be swapped in the peak beyond 30 minutes in either direction, it can lock in place ad hoc timings e.g. a 7.30am arrival on Tuesdays, but other arrival times scattered across the morning on other days. This is not desirable, from a consumer or operator perspective. Yet the task of aligning them all to become say 8.30am arrivals each weekday can be effectively barred by the half hour rule.

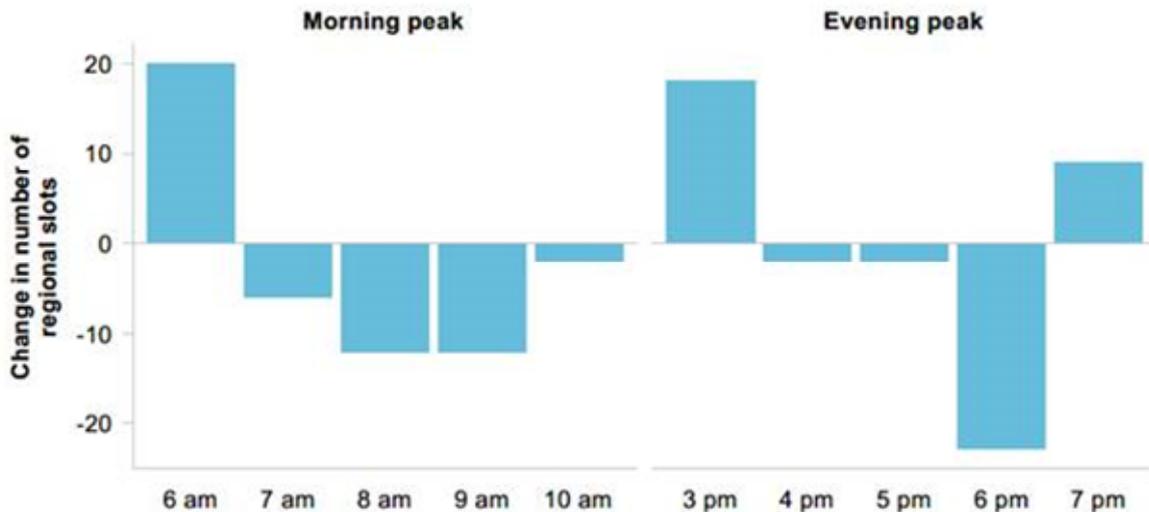
These seemingly inconsistent outcomes – strongly protected access, but an inability to grow or flex in response to market conditions – are explicable only in the light of the conflicting concerns about regional access at the time.

One concern was to guarantee regional access at peak hours, noted above. Another was that growth in regional carriers or services could absorb a disproportionate amount of the newly-constrained total passenger capacity at Sydney Airport, since (generally speaking) larger aircraft are a more efficient use of demand-constrained infrastructure than smaller (regional) aircraft.

With the experience of the last twenty years of operation, these concerns have been reduced. Regional carriers have not taken up Sydney Airport capacity in a manner that has prevented new, larger aircraft and general efficiency in the use of limited airport capacity. Some new jet services to NSW coastal tourism hotspots did emerge, although not all were sustained. And some efficient aggregation into larger aircraft and fewer local airport hubs occurred, in order to develop more regular business week-day services, and to link with altered interstate and international schedules of affiliated and non-affiliated carriers over the years.

Overall, capacity use by regional carriers has fallen, not risen, making concerns about inefficient use of scarce airport capacity as raised years ago self-evidently overblown.

Change in NSW regional slots within legislated peak hours^{a,b}—Northern summer scheduling season slots from 2001 to 2018



^a Legislated peak hours are 6 am to 11 am, and 3 pm to 8 pm, on weekdays.

^b Data based on two sample weeks. Numbers could differ when comparing different sample weeks.

Source: Productivity Commission estimates based on DITCRD (unpublished).

Moreover, the Slot Manager's experience is that smaller affiliated carriers or services are not being pressured to give up their slot for a larger affiliate. The experience is that even within major carrier groups, slots for domestic services are not readily given over to international services; or vice versa.

As noted earlier, 10% of PRSS go unused, an average of 17 per day, with the 6am hour a notable period of underuse at 59% (approximately 5 per day in that hour). These slots can be used temporarily by other non-regional carriers but the process by which they can be made more permanently into interstate or international services makes that a slow journey, exposed to risk and generally not attractive.

The community and economic forces that have combined to reduce regional services into Sydney Airport, combined with the 30 minute rule, have resulted in stranded slots in peak hours. These are slots that experience over the years have shown no regional carrier is readily able to link into a series, and so remain unallocated despite being present in peak periods. Unused stranded slots are likely to become a greater cost to efficient use of the peak periods as demand grows at Sydney Airport.

The PRSS arrangements can and should be improved to allow regional carriers to re-set schedules in the peaks. The likely withdrawal of international services due to on-going issues with a slow recovery from COVID-19 will open up additional flexibility for this to occur, as slots are surrendered (the impact of COVID-19, which is more likely than not to be still with us as these reforms are introduced, is elaborated on at greater length in **Section 8**).

But without judgment being applied to structure the rate of change, this may come at a net cost to the airport and the nation, through no fault of any party. Passenger and freight capacity of a large international aircraft generally provides many times the economic benefit of a smaller regional or domestic aircraft occupying the same slot – or going unused, in the case of some PRSS slots. It is thus strongly desirable to see reforms made as a consequence of the Review *both* allow regional services an opportunity to re-set and align mismatched or out of date service times after twenty years of frozen slots, *and* yet not skew reallocation such that international services are at a disadvantage in the longer term. The risk of this occurring particularly might arise in the morning peak.

The Review accordingly judges that desirable opportunities for regional slots to adjust in the peaks (with or without swaps) should preserve as far as possible the ability for international traffic to also resume and grow in the longer term. This suggests placing time limits for stepping through change; and a sequencing of reforms covered in the Review.

Flexibility in the first two reform seasons

It is very likely that regional services will seek to expand this year and possibly next year.

Some larger carriers have already stated intentions to develop such services in response to the effects of border closures and higher demand for regional tourism. The timing of these new services seems to be a little uncertain, but still appears likely.

In addition, to the extent that Ministerial waivers of slot obligations (use it or lose it) cease, some interstate and international services appear likely to be reduced, and new slots might become available by the end of this year. As this happens, it will allow scope for services to be tested to formerly marginal regional locations if these shifts are given priority, for a time.

The recommended size of aircraft rule change (see **Section 5**) will offer additional flexibility that may assist trialling such services.

The Review is attracted to an option put forward by Airport Co-ordination Australia (ACA), the Slot Manager at Sydney Airport (see ACA Sub, response to Question (i) of the Discussion Paper), to allow regionals to move their PRSS slots within peak periods without restriction within their clock hour, rather than as at present by no more than 30 minutes.

If the period of the peaks are changed (as proposed below), the movement proposed by ACA might well become 60 minutes, rather than within the clock hour.

This should allow regional services to better line up their weekly schedules, aiming at a constant arrival/departure time each week-day rather than some current mismatched days and times.

The Review is also recommending in **Section 5** that regional PRSS slots seeking to realign in the manner described here should, for a period of two seasons, obtain first priority slot allocation (from whichever 50% slice of unallocated slots they so qualify) after allocation of unchanged historic. It will, the Review hopes, become obvious as Sections of this Report are read, why the reform process should start with an opportunity for regional carriers to flex their schedules and better use the available PRSS slots. An incentive like this will encourage early and active consideration of schedules by all regional carriers.

The recovery process from COVID-19 will surely throw up many further policy options and intense lobbying by interested parties over the coming period of adjustment. Being clear at the outset of reform of the Scheme that first priority is being given to putting regional services on a sound footing after years of being 'frozen', as these reforms collectively seek to do, is desirable but cannot persist for an unlimited time into the future without adding to complexity in slot management.

A later discussion, in **Section 6**, related to discretion for the Slot Manager to average out slot use where stranded peak period slots are evident to the Slot Manager, may complement the implementation of the recommendation made here.

RECOMMENDATION 4.4

For the first Northern Summer and Northern Winter seasons after the reforms recommended in this Review commence being implemented, regional carriers should be given the highest priority after unchanged historic to move their PRSS services by up to 60 minutes, by either slot swap or simply by application for re-timing.

4.5: Peak period definition

The regional services peak period currently defined in regulation as 6am to 11am and 3pm to 8pm (Monday to Friday).

This is a very broad peak. It forms the outer border of the ring fence, and like all fences primarily *restricts* those within it.

It reflects multiple factors from 1997, including some regional ports only having a late morning service as ‘first of the day’, thus pushing the peak into the late morning if they were to be ring-fenced; and the compromise, noted above, that restricted regionals from using any peak period slots other than those protected under the PRSS i.e. a wide peak effectively stymies regional growth.

Neither larger carriers nor regionals benefit any more from this outdated compromise.

Accordingly, consumers carry an unnecessary burden from less flexibility in new service offerings. The airport’s resources are also clearly underutilised. The tourism sector may be denied additional tourist spending, to the extent that international carriers cannot find slots to align with restricted overseas departure times.

A peak period more reflective of reality and a removal of the bar on regional carriers applying for non-PRSS slots in the new peak (and of course retaining the ability to do so outside it) are both desirable reforms. They should proceed in tandem. Overall, this should see scope for regional services to grow, particularly amongst operators which qualify as new entrants under the proposed reform in that definition (see **Section 3.2**).

The removal of the 6am hour from the peak period is potentially of greatest benefit. Very few regional services have departure times that would involve arrival at Sydney in that hour; and departures to regional ports at that hour are the same. As shown earlier (**Section 4.1**), 59% of PRSS in that hour are now unallocated and thus underused. Airline and consumer preferences make this no longer a desirable schedule time for many regional services. But it is highly desirable for international services. This is an important efficiency gain which merely recognises today’s commercial realities.

Overall, of 80 PRSS slots in the 6-7am hour per week, 47 were unallocated as the nation entered the disruption of COVID-19.

In the 3-4pm hour, 25 of 196 were currently not allocated.

In the 4-5pm hour, 23 of 142 were similarly unused.

Collectively, the reforms put forward by the Review mean that 95 slots per day *may* be made available for either better regional services or alternative uses, with no diminishment in current regional services; with priority going first to regionals to remake their schedules to shift and better utilise these unused slots; and a subsequent material improvement to opportunities for new or improved domestic and international services by the third season of a reform sequence which commences with the recommendation at 4.4 above.

This is a significant gain to efficiency, at no cost to regions.

To achieve this **sequencing of opportunity**, the Review proposes that the new peak be announced but not come into effect until the third season after this reform process is commenced.

Under this sequencing, regional carriers would have two consecutive seasons, based on Recommendation 4.4 and the complementary Recommendation 5. 2, to update their schedules in the current peaks with the assistance of the Slot Manager and potentially improve utilisation of

these valuable but currently wasted slots. This offers clear benefit to the communities they serve, with local carriers freed from the constraints that accompanied the Ring Fence when first constructed in the late 1990s.

All PRSS slots effectively will be given a new opportunity to be utilised for regional services, *before* the new peaks are implemented.

The new peaks would not include the 6-7 am hour, based on the evidence above that it is no longer a crucial time for regional services at Sydney Airport. Regionals could still operate all the services in that hour they presently do, and will always have the protection of their slots being historic slots, but they would no longer be PRSS slots at 6-7 am.

The same would apply to the 3-5pm period, where the Review's examination suggests that general slot availability is reasonable, indicating it is not really a peak period; plus there is clear underutilisation of PRSS slots; and the Review emphasises again that no regional service would cease as a consequence of this period no longer being defined as part of the peak.

As such, no diminishment in regional access is likely as a consequence of applying a new peak that reflects actual needs of passengers and carriers, by commencing at 5pm. But significant flexibility would be added to future allocation of slots by allowing all unused PRSS slots in the 6-7am and 3-5pm period after the completion of the first two reform seasons to be available for reallocation by the Slot Manager under the WASG standards as covered in **Section 5** of this Report.

And the new peak offers the virtue of reflecting the reality of consumer needs today, not those of 1997.

RECOMMENDATIONS 4.5

1. Regional Growth

The morning and evening peak periods specified in the *Sydney Airport Demand Management Act 1997* should be redefined, commencing in the third season after these reforms are implemented, to cover only the periods 7am to 10.59am; and 5pm to 7.59pm.

From that time, regional carriers should be freed from the current Ring Fence restriction that presently prevents their growth in peak periods, and have the ability to apply for slots within those revised peak periods without restriction. Any additional slots so obtained within the peak would not be PRSS, but would come with the ability to remain protected as all other historic slots are.

2. Greater Efficiency

PRSS slots outside the new peak (that is, those in the hours of 6-7am and 3-5pm) would from the third season after the reforms commence revert to being normal slots, but with regional carriers retaining historical precedence in the allocation process whilst ever they meet normal slot performance obligations.

4.6 The Government always retains the ability, under a regulated system, to intervene

Under these changes, the total number of PRSS slots within the revised peaks (which is the majority of PRSS slots) would remain unchanged.

If all presently unallocated PRSS slots in the hours 6-7am and 3-5pm remained unused after the first two seasons of the reforms (which seems unlikely, but is the best yardstick for the possible scope), 95 new slots would be 'created' in these hours at Sydney Airport without diminishing regional services.

Moreover, a clear new opportunity for regionals to grow would be created. The Ring Fence will no longer impede that growth - both inside the peaks or outside - should demand from regions emerge as some larger carriers are proposing.

The Government, in considering these new flexibilities, should recognise that it has the ability to safely take these carefully sequenced steps because it retains the ability under legislation to monitor closely these changes to see that their intent is observed by all parties.

The ultimate sanction – to revert to a cruder form of protection for regional services by direction to the Slot Manager if regional services appear to be at risk of being diminished - is no longer just a theoretical regulatory option, given its recent use to create waivers of obligations during the COVID-19 period.

This Review is nevertheless confident that there is no likelihood that regulatory changes here will create a diminishment in regional services. Carriers have advised both the 2019 PC Inquiry and this Review that they are strong supporters of regulatory efforts to protect regional carriers, and are deeply conscious of the sensitivity of this matter. It would be counter-productive to the greater efficiency for all carriers that comes with a revised peak for major carriers to disadvantage their regional affiliates.

Nevertheless, as an incentive to continuing recognition of the place of regional services, the Government should put in place scrutiny of the performance improvement of regional slots in the course of applying this reform.

RECOMMENDATION 4.6

The Slot Manager should formally report to the Minister and publish in accessible terms for the regional community the aggregate number of regional services at Sydney Airport – both PRSS and non-PRSS – in the revised peaks once each season's allocation is complete.

Improvement in published data in a form that is readily absorbed by communities and not just airlines is dealt with later in this Report. That will be essential to allow close tracking of the progress of reforms.

Section 5: Consistency of practice with international standards

Special arrangements for regional access described in the previous Section are a clear departure from WASG guidance for demand-constrained airports around the world.

But it is not uncommon for airports around the world to have both local rules and international better practice. The crucial thing is to have clarity about any special arrangements, with independent and objective standards for the administration of them and as much consistency as is otherwise possible. This Section addresses that.

5.1: Applying the WASG

It is desirable that the Scheme aligns as far as possible, consistent with its objectives, with the WASG. For international carriers in particular, unique local arrangements are an undesirable cost. In supporting international tourism, and trade more generally, it is in Australia's interest to minimise unnecessary regulatory differences to both doing business and human exchanges more broadly.

The Scheme is not consistent with the WASG in a number of respects, beyond those already addressed:

1. the WASG does not require carriers to observe a 'size of aircraft' obligation in determining whether slots meet the use-it-or-lose-it test
2. the definition of a slot in our legislation does not create certainty for carriers over the right of an operator to use the full range of airport infrastructure necessary to perform a movement
3. the creation of a Co-ordination Committee for the airport, open to all carriers and other parties, which might provide assistance or guidance to the Slot Manager in the performance of its functions
4. financial as well as operational independence of the Slot Manager
5. improvements to compliance standards in slot utilisation, including the ability for the legislated Compliance Committee at Sydney Airport to examine and determine responses to a wider range of potential compliance issues defined as 'slot misuse'.

The first three of these matters are dealt with here. Compliance is dealt with later in the Section. Financial independence of the Sydney Airport Slot Manager is dealt with under **Section 7**, on Governance.

The major carriers at the airport and ACA generally support application of the WASG to the Scheme. Sydney Airport also supports the majority of them.

The Review, as noted above, is persuaded that consistency with WASG is desirable unless in conflict with the objectives.

However, some caution should be applied to avoid unintended consequences in making such changes.

The Review agrees that a **size-of-aircraft-rule** should for the most part be removed from an assessment of slot performance. Carriers should generally have the flexibility to substitute aircraft as needed.

However, if the commitment to use a particular size of aircraft was the determining factor used by the Slot Manager to allocate a slot to a particular carrier, failure to observe that during a season should be the subject of review by the Compliance Committee. In this sense, it should be left in regulation to the Slot Manager both to impose any specific obligation to use a particular aircraft; and to follow through on that obligation, via compliance checking.

The Slot Manager should clearly specify if size of aircraft was the determining factor when allocating a slot to a carrier. If no such record is created, there would be no subsequent need for Compliance Committee review notwithstanding what was submitted in the carrier's slot application.

This compliance obligation being created in this limited fashion is, in the view of the Review, necessary to prevent carriers misleading the Slot Manager (or indeed the airport or Airservices Australia, to the extent that the operational and revenue interests of these parties lead them to advocate for a particular carrier) in head-to-head contests for contested slots.

The Review also agrees that the **definition of a slot**, and so the clarity about what rights a carrier has to access all the infrastructure necessary to complete a movement, should be consistent with the WASG. The uncertainty that may exist over the present definition relates in substantial part to terminal access. Some airports in North America are seeking to control terminal access in a manner that some airlines (and IATA) believe may constrain their ability to access terminal services, despite the allocation of a slot by a Slot Co-ordinator/Manager. The Review has been informed that Airport Co-ordinators (the WASG term for our Slot Manager) too would generally prefer certainty regarding a movement.

The Review is not convinced that there is (yet) a genuine issue in Australia. It would be unthinkable for an airport to affect its customer relationships by attempting to allocate terminal capacity in a manner that actually interferes with the planning and operational implementation of regulated slots and the cap it delivers.

However, there are always on-going commercial debates between users of the airport and the operator over terminal access, investment and charging. It is easy for this to spill over at times into a debate about who controls terminal access.

In the context of slot allocation, that would be unhelpful for all concerned. An airline should know that if it obtains a slot and presents in the time period allocated, it will receive access to all the necessary infrastructure. At the same time, it should engage reasonably with the airport operator in order to ensure the commercial aspects of terminal access are also met.

The Review supports use of the **WASG definition of a slot**.

The WASG also considers a **Co-ordination Committee** to be an important addition to the process of managing a demand-constrained airport.

The concept of such a committee is hard to reject. A Co-ordination Committee, when acting as a consultative forum, is a desirable feature of any complex service delivery arrangement. And where private profit motives (the asset owner's or the asset users') meet public interest restrictions, as in the case of demand management, being able to explain why the one may have to be subordinate to the other is all the more in need of open discussion.

The functions of a Co-ordination Committee however extend in the WASG to mediation in the event of disagreements. The Review noted earlier that it was a conscious and important aspect of establishing the caps and allocation processes at Sydney Airport to put the structure into legislation. If mediation is authorised, there is a risk of making the compliance legal process a jumble. That is undesirable, noting the importance of compliance to future flexibility recommended in **Section 6**.

The Review accepts that a Co-ordination Committee may be a useful consultation forum for the Slot Manager and slot holders, current and aspirant. However, the Review supports that consultative objective only, rather than any involvement by the Committee with the Slot Manager's (or the Compliance Committee's) legislated duties.

RECOMMENDATION 5.1

The following improvements from the WASG should be adopted at Sydney Airport under updated demand management arrangements:

- 1. no longer requiring that the Compliance Committee or Slot Manager review slot performance against a size of aircraft test, consistent with the WASG, unless the Slot Manager has advised a carrier at the time a slot is allocated that the size of aircraft was the determining factor in allocating the slot or slots and so must be utilised**
- 2. Adopt the definition of a slot from the WASG, clarifying that allocation of a slot extends to ensuring that an operator has the right to use the full range of airport infrastructure necessary to perform a movement.**

5.2: Setting priorities amongst competing claims for slots

As noted in **Section 3**, dealing with competition issues, the primary task of the Slot Manager at Sydney Airport is to allocate slots. And the manner in which that is done can restrict competition, or assist it (within the constraints imposed by demand management).

The WASG offers Slot Co-ordinators (like Sydney's Slot Manager) guidance on possible ways to judge between carriers competing for the same slot.

The WASG infers an order of priority for slot allocation as follows:

1. Unchanged historic slots
2. 50% of remaining slots to new entrants and 50% to non-new-entrants, assuming there are bids up to those levels
3. Preference between parties (*within* each of the 50% pools of slots) to those proposing to extend to year-round operations an existing service over those proposing a new service

4. A number of additional criteria, to be applied by the Slot Co-ordinator in their own judgment – length of proposed operation; requirement to avoid an impediment, such as a curfew, at the other end of a route; length of time the applicant has been on a waiting list; type of service (e.g. freight vs passenger).

The Slot Manager at Sydney Airport applies this form of judgment already (and indeed the regulations require the Slot Manager to take IATA standards into account).

This Review has proposed above that size of aircraft, as a test for slot compliance that the Slot Manager is meant to monitor and enforce, should no longer be reviewed under the compliance process, other than where it is used by the Slot Manager explicitly to determine a head-to-head contest between like carriers over a particular slot.

The Review believes size of aircraft should thus be allowed as an option to the Slot Manager in allocating slots at Sydney Airport. However, simply because a carrier stated a particular size of aircraft in its application should not trigger a compliance obligation.

This suggests two policy improvements as the WASG is adopted at Sydney Airport: first, consistent with the Recommendation in 5.1 above, the hierarchy of preference when applied at Sydney Airport should not require a size of aircraft be specified by the Slot Manager when allocating a slot; and second, to the extent that the Slot Manager does, it should only do so where the size of aircraft was its crucial differentiating point between two carriers seeking the same slot. This will be a continuing but most likely minor point of difference with the WASG.

Consequently, some of the past monitoring and compliance action at Sydney Airport should be reduced.

The other departure from the WASG hierarchy must be to ensure that the ability for PRSS slots to move within an hour as recommended in **Section 4** is a priority that will rank above all but unchanged historics in the order of preference implemented in future by the Slot Manager, for two seasons.

To avoid any confusion, the Review reiterates that the amendment to the Scheme at Recommendation 3.3 should be a permanent alteration to the Scheme, but is consistent with the WASG.

RECOMMENDATION 5.2

The ranking for slot allocation at Sydney Airport should provide (temporarily, for two consecutive seasons only at the commencement of these reforms) for PRSS slots to move within an hour of their original position in order to obtain a more consistent daily schedule and reduce stranded slots. Only unchanged historics should outrank such PRSS movements for allocation in these two seasons.

5.3: Slot trading

An alternative source of slot allocation to that managed by the Slot Manager and recommended by the WASG is slot trading.

In principle, trading is an efficient means of seeing a scarce commodity allocated to its highest value use. Trading is moreover not an unusual mechanism to allocate access to public rights, such as slots, and regulation can ensure that priorities are observed e.g. that parties who receive an allocation from the Slot Manager meet not only a price criterion (whether by bid or fee) but also other criteria such as those in favour of new entrants or regional services.

But there are limits to its efficacy.

Carriers that require formal planned slot allocation at both ends of a movement will be at risk of severe disadvantage under an auction system i.e. the value of arrival in Sydney is only clearly established when a carrier is certain that the departure time is locked in. Bids would have to be conducted jointly by airports, in order for price discovery to be efficient. The highest value movements at Sydney Airport are international flights, and these key routes to/from Australia link demand-managed airports, and so are exposed to this risk. The Review does not consider auction to be a viable strategy for allocation.

Under other price-based allocation mechanisms that do not involve auctions, a price would have to be set for all slots (i.e. including all historic) or new competitors start out with an additional cost burden. Judging what price is reasonable is problematic, with no existing price guide. Efforts to 'price' taxi plates have demonstrated some of the difficulties.

Assuming this could be overcome, and the one-off cost accepted by incumbents, a public policy conundrum then arises: slots become property, and should the Government - whose Scheme this is - need to re-acquire slots, or if they were altered in their perceived value due to policy shifts, complicated arrangements may arise. At present, slots can be cancelled by the Minister, or lost due to misuse. Both actions would be affected by selling rather than awarding slots.

Finally, the secondary market for slots would still need to be regulated - that is, all carriers currently recognise that the Slot Manager makes the choices according to reasonably well-known criteria between the competing parties, and slots are returned when not likely to be used. But with a trading market, the buyer would need to accept that payment does not result in the final awarding of a slot.

The WASG does envisage secondary trading as a possibility; it is allowable in the United States and United Kingdom.

From a public policy viewpoint, what would be lost is the transparency of a pool arrangement, and the ability of the Slot Manager to force the return of slots where public information suggested they were going to be unused. In receivership, for example, if slots had a pre-existing value, a receiver would have every reason not to return slots at a due date for re-allocation but instead to attempt to retain them until a sale was achieved. Different bankruptcy regimes around the world would all need to be encompassed by the Sydney Airport compliance regime ; or it would have to be accepted that, once sold, slots forever move beyond the control of the Slot Manager. This seems

highly undesirable. Slots could be held for very long periods, resulting in significant cost to the airport and dependent industries (e.g. tourism).

Finally, slot sale could lead to anti-competitive practice - attempting to hold unused slots that are 'paid for' such that your competitors cannot operate using them. This is another incentive a price system would need to deal with.

Overall, the Review is unconvinced that pricing or trading offers a serious advantage over the current (and future updated) Scheme at Sydney Airport.

It is not that it could not be made to work, but rather that the design of any market is not likely to prove more elegant than the current system; and arguably will do less for competition.

5.4 WASG and compliance – the source of slot allocation credibility

Finally, the WASG has a substantial level of guidance on the process to be used for ensuring **compliance with performance standards** – particularly regarding the use-it-or-lose-it rules and other misuse of slots.

In future, by applying the WASG approach, the following practices will need to be scrutinised by the Committee:

- a) operating without an allocated slot;
- b) operating a flight at a significantly different time from the allocated slot.
- c) operating a flight in a significantly different way to conditions that accompanied the allocated slot without the prior confirmation of the coordinator;
- d) holding slots that the airline or other aircraft operator does not intend to operate, transfer, swap, or use in a shared operation;
- e) holding slots for an operation other than that planned for the purpose of denying capacity to another airline or aircraft operator;
- f) requesting new slots that the airline or other aircraft operator does not intend to operate;
- g) requesting slots for an operation other than that indicated, with the intention of gaining improved priority; or
- h) where applicable, operating in curfew or another restricted operations period without holding an allocated slot for that period.

The approach in the WASG is similar to that required at present at Sydney Airport under the Compliance Scheme, but much more comprehensive. Applying rigorously the definition of slot misuse will be a valuable addition to Scheme credibility.

In addition, ensuring that the Compliance Committee is able to examine not just individual slot performance but potentially a pattern of slot misuse across more than one series by the same carrier is essential.

A number of key stakeholders at Sydney Airport expressed a desire to see the efforts of the Compliance Committee at Sydney Airport take a more transparent and active approach.

While their advocacy is important, the Review is primarily convinced of the need to upgrade the activity and scope of review by the Compliance Committee because it is vital to the credibility of the Scheme as a whole.

Later Sections of this Report will recommend changes to the Scheme and Demand Management Act which are of benefit to airlines and the airport itself. This Review sees compliance with the planning cap as being essential to the credibility needed to implement key changes, in particular to free Airservices Australia from some aspects of its role in guaranteeing the delivery of the cap of 80 movements per hour. Stronger compliance means less for Airservices Australia to monitor.

Anecdotes about misuse of slots are often raised. The present system is not transparent, and so makes it hard for rumours to be run to earth. It has been credibly suggested to the Review that one Australian carrier may be consciously scheduling a series of movements that is substantially different (45 minutes) to its slot allocation. An international carrier has also been named as persistently scheduling movements inconsistently with its slot. But the sources of these comments are – understandably – all entities with commercial skin in the game. Compliance must be able to respond to these matters quickly, rather than have to wait to the end of a season in some cases.

Slot hoarding has also been asserted. It has similar characteristics to the incidents noted above. Sydney Airport offered the PC Inquiry some information, while noting that this behaviour too is hard to prove. The Sydney Airport compliance Scheme should be able to specifically inquire into such claims. Or refer them to the Department for inquiry. The credibility of the Scheme and the case for introducing flexibilities of the kind under consideration in this Review is undermined if the community perception – particularly that of parties affected by aircraft noise – is that there are plenty of slots, they are just being hoarded. Or misused.

Cancellation rates of up to 19% have been suggested (which of course is just under the 20% limit that may see a slot lose its historic reservation).

More worryingly, data from the Slot Manager indicates a key route like Sydney-Melbourne was, pre-COVID-19, *averaging* more than 6% cancellations in 2019, whereas the across-the-board rate at Sydney averages around 2%.

Of course, the thickest routes (like Sydney-Melbourne) are potentially quite exposed to higher cancellations i.e. they have the most opportunity to combine services in the face of weather or other interference with schedules. But equally, by being the most attractive (profitable), these routes are exposed to potential slot misuse if it can impede competition.

As noted in **Section 2** of this Report, the Scheme is in effect the airport's primary day-to-day planning tool. The cap on movements it delivers is a planning cap. But this planning is meaningless if carriers, once allocated a slot, do not adhere to the obligation to operate it in a manner and at a time that it has offered.

The absence of any formal sanction over the past twenty years leading to Federal Court action by the Compliance Committee might be explained by exemplary behaviour; or it might be explained by

uncertainty over the unusual arrangement that has made the Slot Manager responsible for taking legal action, and a regulatory structure that ensures both a board review and mediation (at the Slot Manager's expense) prior to that. ACA, as Slot Manager at Sydney Airport, has noted that in its view there is weakness to the legal process applying to more serious compliance breaches.

The Review notes that loss of historic preference as a sanction has been applied by the Compliance Committee and Slot Manager, but taking action beyond that, for example by applying fines for persistent slot misuse, has not.

The process for taking action beyond administrative actions envisages that either the Compliance Committee or the Slot Manager may issue infringement notices, with a process to follow which has a legal pathway quite disproportionately onerous for the Slot Manager.

The incentives against any genuine action to fine slot abusers is substantial and appears to represent a failure of policy design. The Review does not assume that by now there should have been fines issued. Rather, it has considered the actions the Slot Manager would need to undertake to enforce an action that leads to a fine, including in particular the layers of review arrangements – all of which are at the Slot Manager's expense – and concluded that the design is one where the strongest legal sanction in support of slot compliance is not likely to ever be used.

Adoption of the WASG standard for slot misuse should form the basis for improving the scope of a credible Compliance Committee process; but it is evident to the Review that either the option of imposing fines for the most serious breaches should be either abandoned, given its poor prospect of ever being applied as currently constructed; or strengthened.

In the interests of credibility - both amongst the community and across the aviation sector - as other reforms to allow greater judgment and flexibility by both the Slot Manager and Airservices Australia are put in place, the Review favours strengthening the compliance regime.

The Review envisages that the delegate of the Minister is appointed to observe the Compliance Committee and empowered to take responsibility for actions that the Compliance Committee recommends require action in the Federal Court.

Revised regulation should ensure that the delegate of the Minister has a credible pathway to the Federal Court which is not littered with internal review steps as at present. The purpose of taking Federal Court action should be limited to circumstances involving serious or persistent behaviour that meets the descriptions adopted by the WASG of slot misuse.

This stronger and clearer review of slot misuse will still allow the Compliance Committee to choose to apply an administrative sanction, such as loss of historic rights to a slot. But repeat breaches by the same carrier that, in the Committee's view, show a pattern of disregard for the intent of the Scheme should be also available to it.

Accordingly, the Slot Manager should not be burdened in future with having to take actions beyond the administrative sanctions for which it is well-equipped.

The make-up of the Compliance Committee should also change, to reflect the more serious approach recommended in this Review and consistency with the WASG. Applying the broader

WASG definition of misuse of slots may see compliance activity increase, even though some current compliance matters are being removed by other recommendations of the Review. For these reasons, an independent Chair with substantial legal experience in a compliance context should be appointed as part of this reform process.

Moreover, it is not clear to the Review whether decisions may be taken by the Compliance Committee on a majority vote basis. For credibility, clarification that this is appropriate should be made.

RECOMMENDATIONS 5.4

The WASG standard for slot misuse should be adopted in full for use in the Sydney Airport slot management scheme.

The Minister should appoint a delegate of the Minister with responsibility to take forward any action in the Federal Court that is recommended by the Compliance Committee in response to slot misuse.

An independent Chair with substantial legal experience in a compliance context should be appointed to the Compliance Committee.

5.5: The 80:20 standard

Compliance Committee and Slot Manager efforts are at present primarily directed by the Demand Management Act and Slot Management and Compliance Schemes towards scrutinising ‘off slot’ movements and performance under the 80:20 rule.

This latter rule requires operators, in order to retain historic rights to slots for the same season next year, to operate them 80% or more of the time. There is contention over whether the rule is being responsibly observed. As noted earlier, Sydney Airport has raised some doubts it holds over whether slots are being hoarded and then selectively cancelled.

Operators have responded by noting that cancellations in the thickest routes are the best mechanism for managing disruptions with least cost to passengers.

Nevertheless, the Review notes that the potential for slot hoarding and other slot misuse is sufficiently present around the world that the WASG now deals explicitly with it. The Review believes it is unlikely that Australia is fully insulated from global bad practice.

The Review has accordingly given consideration to a recommendation to impose a stronger test on domestic interstate flights than the present 80:20 rule – for example, a 90:10 rule.

However, the evidence is not there to justify this.

As argued at length above, it is essential that the revised Compliance Committee arrangements and the Slot Manager’s efforts to identify slot misuse are directed and resourced properly, in support of Scheme credibility as flexibilities are introduced.

This includes forensic analysis of data that would indicate active scrutiny is occurring. For example, a constant selective audit of cancellations data by an independent accountancy or advisory practice and publication of its results.

The Slot Manager should commission this work and the Compliance Committee should consider it on at least a seasonal basis.

RECOMMENDATION 5.5

Additional compliance resourcing should be devoted to scrutiny of cancellations data for selected domestic slots services where gross cancellations materially exceed the domestic service average.

The Slot Manager should identify services for scrutiny. A reputable, unconflicted auditor should be appointed to conduct this scrutiny, and the data and conclusions of the audits published in a timely manner.

The Compliance Committee should meet *during the season* and have the ability to act during the season in response to audit reports where the Slot Manager has asked it to conduct an in-season continuous review of data.

Section 6. Improved flexibility in delivering the cap

If compliance with the planning cap is strengthened as proposed in **Section 5** above, the Review believes there is scope to release some of the tight focus imposed by the Demand Management Act on Airservices Australia to control operations and act as a fail-safe device to deliver no more than 80 movements per hour at Sydney Airport.

The operational cap applies a 15-minute rolling count on arrivals and departures, with the aim that any sequence of four 15-minute periods does not exceed 80 movements per hour.

As the Productivity Commission has noted, it is this count which contributes to inefficiency at the airport.

Some submitters have suggested that there is no need for Airservices Australia to do more than ensure that its operational cap achieves an *average* maximum of 80 movement per hour over a period of a day or week or even year (noting that other major slot-managed airports have this sort of flexibility).

A move to require Airservices Australia to monitor and achieve an average of 80 movements requires the operational cap to be moved to no more than 1360 movements per day - an average of 80 across 17 hours a day – unless proponents actually envisage a yearly or similar cap (as occurs overseas, e.g. Heathrow). The former is the more common view as put to the Review.

Either of these approaches would create much greater flexibility for Airservices Australia and for airlines, but also means there is no limit to peak hour movements until all *non-peak* hour movements also approach 80. That is likely to be many years away and perhaps, with the advent in 2026 of Western Sydney International Airport, will never actually arrive.

The less controversial of these averaging approaches – resetting the operations cap to 1360 movements per day – is still a large apparent departure from both the perceived effect of an 80 per hour limit; and the reality. Perceptions are very important to quality public policy. The community is heavily invested in the figure of 80 movements per hour.

There is also a more nuanced proposal to apply averaging to the *planning* cap, administered by the Slot Manager. This is also examined below.

6.1 The 15-minute rolling cap is a planning tool

The *planning* cap is implemented by the Slot Manager using 5 and 15 minute limits on slot allocations to deliver a smoothing of scheduling by carriers, such that undeliverable numbers of movements are not all planned to present at the same key times of the day. This is one of the core objectives of the Scheme. Without these planning limits, carriers can and most likely would plan and market services that stated an intention to operate that creates holding and congestion in peak periods.

In unplanned environments, this congestion makes air traffic control a purported reason for delay - whereas it is the absence of any guidance on what is a fair distribution of traffic amongst carriers across any hour that in reality creates this situation.

In economics, this is known as the problem of the commons, which refers to the over-grazing of common land. If use of a desirable facility (or time of arrival, in this case) is unmanaged, it will be over-exploited until it proves unusable.

The congestion that then develops can (and did before the implementation of the Scheme) result in serious consumer delay costs, poor use of airport facilities and significant unnecessary frustration for air traffic control. It also can slow down the point in the operating day at which switching to noise sharing mode commences.

Turning from planning to operations, if all services operated perfectly to time there would be minimal difference between the planning cap and the operational cap. But of course that does not happen – weather, mechanical failure, infrastructure failure on the ground, and emergencies all combine to ensure that matching does not occur.

This Review sees the retention in the *planning* cap of 5 and 15 minute limits within the overall target per hour of 80 movements as essential to a key objective of the Scheme – that airlines plan to achieve no more than 80 movements per hour, in a fashion that creates the least likelihood of congestion. **It should be retained in its current form.**

The Review has nevertheless noted, in arriving at this conclusion, an interesting idea from Sydney Airport that the planning cap be altered to deliver an *average* of 80 movements per hour rather than a fixed 80 movements per hour or less. The opportunity for **an averaging approach** to be used is created by the existence of long-known stranded slots or fragmented slot series, as not all carriers holding slots are able to operate for a full season at the same time and day of the week. PRSS fixed slots in particular create this possibility.

In practice, averaging - as the Review interprets it - would require the Slot Manager, applying years of experience and judgment, to add in a slot or slots at a more convenient time later or earlier in an hour, in effect shifting a known stranded slot by recognising that it is unusable.

It appears to the Review that it may be possible to achieve a flexibility like this and still not exceed 80 planned movements in an hour, but the gains appear likely to be modest unless, as Sydney Airport also advocates, the planning cap abandons the use of 15-minute rolling windows. The Review does not favour this latter choice, as noted above. But modest gains are still gains, if the Slot Manager sees this as workable.

Mathematically, the 15-minute window with the extra movement that offsets a slot stranded earlier in the hour will still then be present for the next three 15-minute periods.

In practice, in order to stay within 80 movements it appears to the Review that this kind of averaging will only be of use at the late part of each of the operating day's two peak periods. It appears that perhaps only a handful of new movements might be created. But that is a desirable outcome, as it remains consistent with the 80 movements cap, if it indeed offers small but material gains in peak times. These would be improvements in airport and consumer service which do not breach the 80 movements limit nor do they add to noise impacts beyond a level already agreed i.e. 80 movements per hour.

The alterations to PRSS arrangements recommended by the Review (**Section 4**) may see some stranded slots freed up. That change is limited to two seasons. Beyond that, judgment by the Slot Manager to apply averaging is still worth investigating.

The Review suggests that ACA and Sydney Airport meet to discuss and attempt to design a trial to see what could be achieved while retaining the rolling window. The parties should consult the Department during this process.

Early application of this might also ease concerns that new entrants on key trunk routes could find themselves with no slots, owing to the impact of the COVID-19 waiver (see **Section 8** for the unusual circumstances that may well see COVID-19 waivers deliver increased slot allocations even as movement levels collapse).

Communications about any trial would need to be transparent. Retention of the planning cap's 15-minute window will remove the possibility that this would see some hours in the peak exceed 80 movements. Policy-makers should note that a community representative suggested to the Review that, without the 15-minute window being retained, a clock hour that had the last two 15-minute periods with 30 movements in each, and the first two 15-minute periods of the next clock hour also with 30 movements each, added to 120 movements in a single rolling hour, but still was capable of achieving an *average* of 80 movements per clock hour. Although the Review is aware that this is operationally undeliverable in other than perfect conditions and procedures at Sydney Airport, it illustrates why work to develop and consult on a trial would be essential.

RECOMMENDATION 6.1

Sydney Airport, the Department and the Slot Manager should investigate the capacity of the Slot Manager to move known peak period stranded slots within any 15-minute period to a subsequent 15-minute period, to achieve a more usable number of slots while remaining within an overall allocation of 80 movements per hour.

6.2: The rolling 15-minute window as an operating cap

Replication of the 15-minute planning tool in the *operational* cap appears to the Review to be an unnecessary replication of the planning cap. Removing it would mean that the 80 movements cap would still be applied by Airservices Australia, but numbers of movements could flex up until the last few minutes of each hour.

The 15-minute rolling window is unnecessary because applying a planning standard to actual operations cannot deliver the principal element of the objectives of the Scheme. By the time operations are in the air, the opportunity to deliver congestion prevention that comes with effective *planning* is over.

Air traffic control must operationally handle operations that present in a manner consistent with safety, and while it can presently hold aircraft on the ground at 15-minute points during the hour in order to keep to a standard (which is the safer way of keeping to a cap, with holding a secondary choice), the action is entirely an artificial burden on passengers and their needs. This is because the 15-minute calculation offers no material community noise benefit at all.

Delaying a departure to the next 15-minute window is undetectable by even the most dedicated plane-watcher, ***because all planned movements will eventually take place that day*** (other than if a severe disruption lasts right through until the curfew).

Thus the noise so generated that day will be the same. All that occurs is higher delay costs to business, holidays, family reunions; and lower credibility of Australian infrastructure planning in international eyes.

Under the revised approach examined here, Airservices Australia would only need to consider how close operations are to 80 movements once per hour.

There was, historically, a reason for the dual caps.

When the Scheme was first designed, it was expected that airlines (particularly domestic carriers) would take many seasons to adjust to not scheduling to all arrive at Sydney Airport at (say) 8am, despite the self-evident impossibility of all landing simultaneously at that time. This was the problem of the commons, noted above. It was observable all through the 1990s. The 15-minute *planning* increments, it was felt, needed to be reinforced by an operations cap so that schedulers working for airlines would take it seriously. Airline resistance to the cap in the 1990s was common.

Ad hoc evidence of poor practice by a handful of carriers notwithstanding (to be addressed by recommendations in **Section 5**), the outcome over the past twenty years is that airlines have generally adjusted to the planning cap and most now accept its objectives.

Hopefully, it should by now be evident why the Review sees stronger compliance being a necessary adjunct to greater flexibility in operations.

Under the proposal addressed here, the community can still reasonably expect that no more than 80 movements per hour will be the persistent norm overhead at Sydney Airport. Airservices Australia should track the clock hour only, and deliver air traffic control services that minimise delay in the morning and evening peaks with the aim to switch from parallel runway operations to noise sharing modes as expected under LTOP as soon as traffic presenting allows the switch. Some delay costs will disappear. Switching might occur more readily than today, on occasion.

The Review sees this change as nothing more than common sense. It is an operational improvement, but it will not deliver more than a simple reduction in one of the many frustrations that affect airport and airline operation. Productivity gains will again amount to perhaps a couple of movements in each of the peaks. Not so small as to be ignored, but no major alteration to any stakeholder's balance of advantage.

And because these come at no cost to aircraft noise, and each respects and preserves the community expectation of 80 movements per hour, they should be implemented at the earliest opportunity. If done effectively, they set a precedent for further reforms, perhaps at the time Western Sydney International Airport opens.

Airservices Australia should still publish, as close to real time as possible with its newly improved counting technology, each hour's total movements.

Publication will provide an opportunity for community representatives to track performance and see if noise sharing hours under LTOP can then be slightly better delivered over a period of months or years, even as aircraft operations are more efficiently delivered each day.

RECOMMENDATIONS 6.2

Airservices Australia should in future only monitor, seek to deliver and publicly report movements at Sydney Airport on a clock hour basis.

The objective to which air traffic control should work should remain a maximum 80 movements per hour.

Airservices Australia should publish in as close to real time as possible (e.g. the next day) the number of movements per hour achieved.

6.3 Recovery from incidents

While Airservices Australia would aim, under these recommendations, to always deliver actual movements of 80 movements per hour, there are circumstances in which that may not be desirable and that, for a short time, higher numbers of operations might be accepted by the community as being necessary.

This is when the airport is recovering from major incidents.

Allowing Airservices Australia the flexibility to potentially exceed the maximum number of movements per hour when serious weather events are declared by the Bureau of Meteorology; or emergencies or serious terminal incidents (e.g. police operations) cause major delays to aircraft operation and passengers, is a desirable reform.

It was notable to the Review that some community representatives were not opposed to investigating how Airservices Australia should exercise flexibility to exceed the cap for an hour or two, in order to assist the airport – and more relevantly, the affected passengers – recover from major incidents.

This community willingness to be open to thinking about how air traffic control copes better with extreme events is a positive factor that can only be preserved by being very careful about what events are able to trigger ‘Recovery Mode’.

The Review judges that the flexibility inherent in the recommendation above to cease recording and controlling movements on a 15-minute basis will not of itself create sufficient flexibility to see recovery from extreme events. Minor incidents are quite likely to be better handled without the 15-minute count, but true efficiency improvements to handling large incidents will only come about with a clear, documented understanding with the community on recovery mode.

This change can be implemented by or before the end of 2021 in the judgment of the Review, unlike some other reforms which may have to wait until next year, given legislative needs. The likely lower level of movements as the airline business comes out of COVID-19 will significantly

assist all involved in learning to apply Recovery Mode, and again indicates a value in moving now on this issue.

The Review offers the following input to such a discussion:

- Recovery Mode may be triggered only where a third party authority – not the airport nor an airline or airlines – has indicated to Airservices Australia an incident has occurred or is occurring
- examples of third party authorities are the Bureau of Meteorology (BOM), the Australian Federal Police, Australian Border Force (ABF), or another emergency authority
- Recovery Mode should last until the disrupted flights are cleared or two hours, whichever is the shorter (i.e. there should always be a limit of not more than two hours for Recovery Mode)
- greater consideration may be given to freight operations, which are otherwise amongst the first casualties of disruption under current recovery procedures
- improvements in the application of technology (e.g. extended use of Precision Runway Monitoring) and cross-wind standards on the East-West runway could be advanced by CASA and Airservices Australia as part of an overall package of improvements in Recovery Mode.

Disruption from serious events declared to Airservices Australia by third party authorities (BOM, ABF, other emergency managers) such as those suggested above is only rarely likely to increase movements per hour beyond the 80 maximum. But this can and should be allowed to occur once formally declared.

Being subsequently able to explain, in plain English, the disruption that resulted in Recovery Mode being declared will help community understanding.

These will be rare occurrences, not just because major weather and emergencies do not occur that often but because the likelihood of ever exceeding 80 in Recovery Mode is dependent on the number of movements allocated under the planning cap in the hours subsequent to the emergency or other major event.

The Productivity Commission analysed 104 disruptive events at the airport over the course of 2018 and found that only in 12 cases was the following hour sufficiently fully allocated that greater flexibility might have seen the cap of 80 per hour exceeded.

Disruptive events at Sydney Airport^{a,b,c} 2018

Duration of disruptive event	Total number of events	Number of events in which the number of actual movements after the event reached ...		
		80	78–79	76–77
1 hour	44	2	2	4
2 hours	22	1	0	0
3 hours	18	1	0	1
4 + hours	20	1	0	0

^aData on actual movements include movements that are exempt from the movement cap.

^bData on disruptive events only capture events that caused delays to aircraft arriving at Sydney Airport. The causes of these events (including weather and technical failures) are likely to have led to delays to departing aircraft as well. Events that only caused delays to departing aircraft were not observed in the data.

^cThe Commission examined the number of disruptive events in which the number of movements reached at least 76 in the hours afterwards to avoid underestimating how often the movement cap was a constraint. *Sources:* Commission estimates based on Airservices Australia (2018a, 2019c).

Sydney Airport supplied its own estimates of the number of movements affected by significant interruptions and events (Appendix C). While some appear to be planned events (and so not necessarily relevant to the approach being considered here for Recovery Mode) they do show the substantial impact that a disruption can have. As a measure of the efficiency gains that can occur with the ability to move into Recovery Mode for a period of time, they are clearly material. It appears to the Review to be the largest single efficiency measure open to the Government at this time.

Another factor limiting the likelihood that, say, a two hour recovery period will result in an excess above 80 movements per hour is the limited flexibility with on-ground infrastructure at Sydney Airport. Taxiway and terminal facilities will be constrained by the back-up in passengers and delayed aircraft on the ground both in Sydney and elsewhere. The gains will still be material from this measure, but not as large as might be suggested by gross figures of delayed or cancelled movements. Projections of what air traffic control can do if freed from the need to operate according to the cap are often highly optimistic, requiring perfect conditions after the incident.

The most in-depth analysis of what might be achieved with Recovery Mode is outlined in Part 4 of the *Joint Study on Aviation Capacity in the Sydney Region 2012*. **At the most, this suggests an extra 5-7 movements over an hour might occur for a short period.**

Those extra 5-7 movements may in a handful of circumstances per year put the airport over 80 movements for an hour in Recovery Mode. This would require an unusual confluence of events:

- a serious disruption event, which is followed by
- an hour where at or near to 80 movements has been allocated already; plus
- ready availability of Sydney Airport taxiway and terminal infrastructure immediately after the disruption passes; plus
- aircraft not held on the ground at departure points but instead ready to present for arrival; plus
- benign weather conditions.

This is a very small but still material likelihood. It should be noted up-front to the community as a possibility. By using evidence such as that drawn on by the Review above, the development of Recovery Mode and the possibility of 5-7 additional movements per hour pushing the airport beyond 80 per hour stands a good chance of being understood by the community as a reasonable effort simply to help other community members in serious circumstances.

In the next few years at Sydney Airport, the slow recovery of operations from the pandemic and public health response will make such events even rarer than the number of events noted above, thus assisting all parties with the introduction of Recovery Mode if development work commences soon.

RECOMMENDATIONS 6.3

Airservices Australia should be given the ability, for up to two hours after an incident is formally declared, to operate movements into and out of Sydney Airport at the maximum rate necessary to aid the early return of air traffic to normal schedule after a major incident or serious weather event.

The Minister should authorise the Department to convene a small working group composed of community representatives, Airservices Australia, the Bureau of Meteorology and other emergency services at Sydney Airport to design and document the procedures necessary before Airservices Australia can declare a Recovery Mode for air traffic control.

Airservices Australia should continue to report quarterly to the Minister and the Parliament on the number of hours in which movements exceed 80 per hour occur, noting that in rare and perfect recovery conditions Recovery Mode could see a movement level as high as 85-87 movements in an hour.

Each of the hours where Recovery Mode results in movements exceeding 80 per hour should be explained in the report to Parliament in plain English.

Recovery mode should not ever extend into the curfew period.

6.4 Quieter aircraft technology and the scope to exclude aircraft from the cap

At present, both emergency aircraft movements and State aircraft movements are excluded from the movement caps. In both cases, the Slot Manager and Airservices Australia have existing administrative and safety practices that deal with these unusual circumstances.

Both such events however have the ability to trigger a disruption event that would be materially assisted by the application of Recovery Mode reform above.

In the case of State aircraft movements, the advance planning for such events suggests that any use of Recovery Mode should be of a shorter duration than proposed above. And the requirement to publicly explain in plain English if the cap is exceeded, identifying the parties involved, should itself also discourage use of this mode for all but the most exceptional State occasion (e.g. US Presidential visits).

It has been suggested in a number of submissions that more aircraft could be excluded from the cap. For example, ‘quieter’ aircraft; or regional services when turbo-prop rather than jet aircraft are used.

First, it should be clear in this point of the discourse to all readers of this Report that the cap administered by the Slot Manager – i.e. the Scheme itself – is a crucial planning tool that prevents over-use of facilities at peak times and the creation of congestion. It would be utterly inconsistent with the intent of having a planning tool to allow some quieter aircraft – which will still occupy airspace and so affect the flow of arrivals and departures, use of terminals and taxi-ways etc. – to be excluded from planning.

Thus the Review does not support any such exclusions from the planning cap.

The Review has considered whether it is still plausible for Airservices Australia to determine not to recognise certain flights in its count of 80 per hour.

The number of additional movements created by ‘not counting’ turbo prop aircraft or ‘quieter’ aircraft while avoiding additional congestion delays can *at best* be only as many aircraft as Airservices Australia can accommodate through the airport in perfect conditions. As noted earlier, sustainably this is 85-87 movements per hour.

It would also be necessary for Airservices Australia to know that an aircraft had been accepted as quieter for this purpose. A noise profile assessment would be required for each type of aircraft operating into Sydney Airport.

Airlines would also need to be specifically restricted to not substituting a noisier aircraft, for this to work at the operational level.

The Review thinks it unreasonable that Airservices Australia should be expected to be aware of all the different noise profiles of the various aircraft that plausibly might present at Sydney Airport on any day. IATA and the WASG area advocates against having a size of aircraft rule at Sydney Airport, which the Review broadly supports. The option under consideration here would require the establishment of a ‘noise of aircraft’ rule. The Slot Manager would presumably be required to allocate slots on that basis, and advise Airservices Australia. An additional task would need to be added to the Compliance Committee.

This additional regulatory burden could be implemented, but all involved need to recognise the issues outlined above.

Looking first at turbo prop aircraft, it appears from the information available to the Review that there are at least 150 regional movements per day, almost all of which will be turbo prop. Should this option to exclude them from the operational cap count proceed, a more specific number of slots will need to be obtained from the Slot Manager. But for the Review’s purpose, this serves to illustrate that the capacity gain to Sydney Airport will be material. Thus the option is worth considering from an efficiency perspective.

However, it is hard to see what it would achieve unless these movements are excluded from the planning cap, which the Review has found would undermine the objective of smoothing schedules

such that congestion is minimised. Even if only half these 150 movements are in the peaks, they represent an addition to capacity likely to be beyond Airservices Australia's ability to deliver sustainably without adding to peak congestion, noted in a number of places in this Report.

Finally, the Review notes that it has been tasked with taking the cap of 80 movements per hour as a clear Government policy objective. This option would allow the operational numbers in peaks to exceed 80 movements on a material basis as a regular event, rather than a rare event in Recovery Mode, as proposed by the Review.

If extended to 'quieter' jets, the inconsistency is even greater. And the congestion effect too.

On-ground infrastructure would clearly need supplementation to deliver gains from this option. The ability to expand on-ground infrastructure is not a question the Review is equipped to assess, but it is a caveat that advocates of this policy need to address before it could be implemented.

The Productivity Commission has noted that while quieter aircraft than, say, a decade ago are now in use at Sydney Airport, the number of noise events greater than 70 decibels dB(A) increased by more than the number of movements over that period.

"Further, the number of aircraft movements has increased by 12.4 per cent since 2008 and the average number of aircraft noise events above 70 dB(A) across Sydney also increased over the same period — by 16.3 per cent (Commission estimates based on Airservices Australia 2019c).

For the community on the ground, it is the number of noise events that matter most. Continuing growth in movements, after COVID-19 recovery takes place, will eventually see noise events increase still further. In the sense of a noise "budget", which does not apply at Sydney Airport but has been a way to think about noise externality costs generally, the smallish drop in dB(A) per aircraft is easily exceeded by the gross noise still generated for each additional movement.

Excluding quieter aircraft will need community consultation. A standard for what is a quieter aircraft will need to be developed. The process for doing this has been pioneered at Sydney Airport in relation to movements in the curfew. The comments to the Review from the parties involved in that process suggest that this was a difficult pathway, despite no increase in the overall number of movements. Whereas in this instance, it is clearly an intention that the overall number of movements increase above 80 per hour for some periods of the day.

Finally, an additional vital factor to consider with the application of a 'quieter' aircraft exclusion is that it would in its most practical form in effect spell the end of the cap over the longer term.

Ultimately, each new generation of passenger jet aircraft will be quieter than its predecessor, all other things being equal. Thus any exemption for a quieter noise profile today is likely over time to be met by *all* future jets. As such, the cap eventually becomes meaningless. The Review doubts this is a desirable outcome from a congestion perspective; and from a noise perspective certainly not deliverable without explicit acknowledgment and clear community consultation.

The Review accordingly does not favour excluding quieter aircraft from the Airservices Australia-monitored actual operations cap.

As an observation only, advocates of exclusions might choose to revisit this concept with much more detail and consideration of the issues above should the question of a reduction in the hourly cap in some non-peak hours at Sydney Airport ever appear on the table (e.g. in the context of the development of Western Sydney International Airport, and the scope to improve LTOP at Sydney Airport).

The Review has no basis for suggesting that such an option will ever arise, but there is a discussion to come on how the new airport will evolve.

6.5: Other Technology Improvements

A number of submissions pointed out that technological improvements available in other airport environments could improve operations at Sydney Airport, and could either increase capacity or reduce noise impacts for some (but not all).

These include less use of 'open standard terminal arrival routes (STARs)' and more use of Precision Runway Monitoring (PRM).

These options are best left to the wider review of the Future of Aviation that the Government is separately undertaking, and assessment by Airservices Australia as the potential implementing authority.

Section 7. Governance

A number of questions were posed in the Discussion Paper that preceded the Review, related to the governance standards of the Scheme, the appointment of the Slot Manager and which parties should be able to initiate changes to the Scheme.

There were relatively few responses and generally parties were supportive of the way the Scheme is managed and the Slot Manager.

Other Sections of this Report have proposed changes to the highest profile areas of governance – to strengthen the Compliance Committee; to improve the legal certainty around the application of fines for off-slot behaviour or misuse of slots; and the improved application of the WASG.

Remaining issues are:

- the financial independence of the Slot Manager
- the process to appoint a Slot Manager
- the publication of information on which slots are allocated and which are not
- whether the current structure of the Legislation that gives the Slot Manager the ability to propose changes to the Legislation remains appropriate and
- whether it remains appropriate for the Slot Manager to potentially refer its responsibilities to the airport.

7.1: Financial Independence

The Review understands that the basic structure of the Slot Manager appointment process at Sydney Airport remains unchanged since the 1990s. As noted in the Introduction to this Report, the policy behind the Slot Manager at Sydney Airport was pioneering for its time (e.g. including a role for the airport; the use of a corporate entity for governance; and the use of an industry-led fee structure to fund the Slot Manager's costs and form the Board of the appointing entity). These have all contributed to guaranteeing the practical independence of the Slot Manager, and the continuing credibility of the Scheme.

While a number of submitters reiterated the need for the Slot Manager to be financially independent, none specifically pointed to a flaw in the current arrangements. Sydney Airport did however seek to see performance key performance indicators established for the Slot Manager; and competitive review of the Slot Manager's contract from time to time.

The Review agrees that there should be a contest at Sydney Airport for the right to manage the Scheme, possibly every five years. Given that there will be additional costs for the Slot Manager to bear as a consequence of the Review's recommendations (see **Section 7.2**) to ensure better data release and the ability for carriers to undertake interactive analysis of slot vacancies, the basis for a negotiation seems readily available.

However, the Government should tread carefully in thinking about specific changes to the Slot Manager's performance obligations. Any such obligations would need to be consistent with (and exceptionally clear about the primacy of) the legislative obligations of the Slot Manager.

RECOMMENDATION 7.1

The Minister should, prior to implementing governance reforms as a consequence of this Review, write to the Board of the Slot Manager and seek to open a discussion about both the selection of the Slot Manager and how best to meet additional costs e.g. of better data provision.

7.2 Transparency – release information on which carriers hold which slots

The Slot Manager (ACA) proposes to make data on slot opportunities available via its website to all interested parties in 2021. This will be a desirable improvement, although the Review has not viewed how the data will be provided.

Being able to interrogate the data i.e. each carrier being able to undertake searches on the Slot Manager's website and put together hypothetical linked opportunities to see if they are viable options is the sort of data availability that a quality slot management scheme should offer.

Submitters have suggested that being able to readily view information indicating which carriers hold slots for each 5-minute window, and whether historic rights have been retained after the completion of a season would improve both efficiency in development of slot swaps and competitive entry.

As the Review understands it, this post-season performance information is not going to be accessible under ACA data releases. The submission from ACA suggests that information on the holders of historic slots is in some way commercially sensitive.

The Review does not agree that commercial confidentiality extends this far. The allocation of a public resource, and the retention of a barrier to entry (even a necessary barrier, such as the provision of historic rights) should be a matter readily open to viewing.

Published data should cover in easily accessible electronic form which airline holds slots in each 5-minute period; whether the slot is held on an historic basis or not; whether a slot is part of a PRSS or not; and vacancies.

RECOMMENDATION 7.2

The Slot Manager at Sydney Airport should publish in electronic form information available to all parties at the completion of each season showing all slots allocated by carrier designation, and matching this information with a display showing vacancies.

In future, the provision of information online should extend to allowing an interested party to interact electronically with the allocation of slots for a particular season and seek to test potential slot combinations before making an application.

7.3 – Ability to recommend changes to the Scheme

As the Discussion Paper notes, the current legislation is structured so that the Slot Manager is tasked with recommending to the Minister changes to the Compliance Scheme; and the Compliance Committee to compliance.

Self-evidently, this does not limit the Minister (with support from the Department or outside advice, e.g. this Review) from making changes to the Compliance Scheme but it is an unusual allocation of responsibilities.

The Review does not propose to remove from the Slot Manager the ability to recommend changes.

However, section 56 of the Demand Management Act allowing the Compliance Committee to propose changes to the Compliance Scheme is no longer justified, in the judgment of the Review. It is clear the power is not being used. Yet the legislation as structured carries the inherent risk that other parties are deterred from proposing change because the Committee itself appears to hold the primary role.

Consistent with normal practice in other public policy enforcement situations, there should be a clear division of responsibilities between the entity enforcing the rules and the entity with responsibility for designing the scheme itself.

The Minister should be the sole party responsible for changes to the compliance arrangements.

RECOMMENDATION 7.3

The *Sydney Airport Demand Management Act 1997* should be amended to clarify that the Compliance Committee is not responsible for recommending changes to the Compliance Scheme at Sydney Airport.

8. The Impact of COVID-19 on Proposed Reforms

This Section of the Review is advice to policy-makers, based on the Review's assessment of the environment in which reforms will need to proceed, if not put on the back-burner until COVID-19 passes. While that may be the natural inclination of some parties, the Review is of the view that COVID-19 will be with us for some years, and many of the changes recommended in previous Sections will benefit from being introduced at a time like this when there is less pressure on movement rates and noise, due to COVID-19. This Section contains no recommendations, as such.

Generally, structural reforms (which are the primary focus of the Review – i.e. those setting the core elements to deliver long term objectives) should not give substantial attention to temporary or cyclical issues. A downturn in demand in aviation is (most often) a cyclical issue and although many operators in an industry might argue that any cyclical factors impacting their business should be a primary factor considered, most often that is not correct. Policy developed this way is not structured for a future but rather responsive to a present that is not likely to persist.

The COVID-19 pandemic has obviously had a serious impact on the aviation sector throughout 2020 and continuing into 2021. For example, international scheduled passenger traffic in October 2020 compared to October 2019 shows a decrease of 98.1 %⁴. Similarly, 79.4% fewer passengers travelled on domestic services (including charter operations) in October 2020, compared to October 2019⁵.

This kind of downturn may prove to be more than cyclical. Structurally, confidence in travel will be altered, both by improved technological substitutes for travel (video conferencing apps) and by uncertainties over the efficacy of public health (given the proclivity of public health authorities to adopt uniquely Australian interventions e.g. to prevent domestic passengers from returning to their home, with minimal notice). As such, the Review needs to at least consider the circumstances that introducing these reforms will face.

In the short term, **Ministerial waivers** may provide a counterweight to the severe uncertainty facing aviation operators at Sydney Airport.

The Deputy Prime Minister made Ministerial Directions on 12 March 2020 and 31 August 2020 to allow slots allocated to airlines at Sydney Airport based on historical precedence for the period March 2020 to March 2021 to be retained for the same period in 2021-22. By waiving the 'use-it-or-lose-it' rule⁶ for that period, the Directions allow airlines to retain their historic precedence for slots at Sydney Airport, without having to operate commercially unviable flights.

A further waiver primarily directed at allowing international services to retain their slots in 2022 has recently been finalised.

But waivers cannot persist as a policy tool. Waivers allow (indeed, authorise) the option of a commercially exploitative use of slots. As an example, when carriers are guaranteed under a waiver that a failure to operate all their past Sydney-Melbourne services will not result in a loss of

⁴ <https://www.bitre.gov.au/statistics/aviation/international>

⁵ <https://www.bitre.gov.au/statistics/aviation/domestic>

⁶ The 'use it or lose it' rule requires the relevant gate movements to have been conducted by the airline for at least 80 per cent of the slots allocated in the series. This is also referred to as to 80/20 rule.

each slot, they have a very powerful incentive to *bid for all remaining unallocated slots*; then choose to operate those slots as their first preference in any revised schedule, and perhaps not worry about the others as they are protected by the waiver; and so squeeze out competition in future.

This is particularly relevant to the situation of new entrants to the most profitable routes. Waivers and slot bidding as outlined above could seriously undermine such plans.

The longer waivers are used to restrict the slot system from operating as intended, the greater the additional barrier to innovation and competition possible. Waivers are perhaps useful for immediate relief but are not desirable policy.

In addition, and of particular relevance to the reforms proposed to regional services by the Review, tying up slots via waivers will potentially restrict the ability of regional carriers and PRSS slots to move in the proposed new peaks.

A more permanent solution than waivers has been suggested in some submissions to the Review, via a new **'force majeure'** exemption from compliance with the use-it-or-lose-it test. The closing of Australian borders (international and domestic) would qualify as force majeure under this approach.

First, the Australian Government as sole regulator of international and domestic aviation should note the policy creep induced by such a step. State governments would permanently acquire new ability to manage Australian aviation policy under this approach.

The adoption of force majeure would also be inconsistent with efforts to develop international travel 'bubbles' and with the Government's preferred approach to defining hot spots and managing the pandemic response over the longer term.

Once in place, force majeure would also open up opportunities for legal argument many years hence about slot misuse. As a term, 'force majeure' is not limited to the actions of border and public health authorities during pandemics. The term has long been the subject of legal debate, and precedent from those disputes will be imported along with the term into the future activities of the Slot Manager. This litigator's opportunity is undesirable in managing a Scheme of this kind.

It is widely suggested that domestic services will recover sooner than international services. While all forecasts like this are highly qualified, if policy is to remain consistent with efficient use of infrastructure, the likelihood is that some new or expanding carriers will be seeking access to otherwise unused slots in the recovery period, while others will take advantage of waivers or legal argument to prevent that. These approaches risk making a well-functioning system redundant.

Temporarily moving to a 50:50 rather than the present 80:20 use-it-or-lose-it rule, as proposed by IATA, is preferable to either waivers or 'force majeure'.

However, while Australia's international border remains closed, international services will be much more deeply affected by this rule than domestic services; and skewing use of Sydney Airport peak capacity is not at all an efficient use of a scarce resource.

This suggests to the Review a simpler solution:

- issue no more waivers and instead allow the Scheme to follow its natural course, with surrender of slots where operations cease; and
- allow the slots so vacated to be taken up by other carriers, most likely domestic but potentially including fortunate members of any ‘bubble’ arrangements if these develop; but
- prevent slots vacated and reallocated by international services from being reallocated permanently (i.e. delay awarding new slot holders historic rights) until the equivalent season in 2023.

This arrangement would provide for carriers that suspend services to/from Australia the ability choose to resume them in future, thus retaining the highly competitive environment in Australian aviation, yet not impede any innovations (e.g. more regional services; a new Sydney-Melbourne competitor; ‘bubble’ environments) that may assist recovery if the world does not return to normal for some time.

And it would maximise use of Sydney Airport capacity, both in the short term and longer term.

The Review recognises that not allowing those carriers that take up vacated international slots to become historic until 2023 may make them unattractive to some potential new or expanding carriers. Clearly, any carrier is better off if it can obtain a slot knowing that good performance will see it retained in perpetuity.

But this is an unusual situation and the model here is not unlike that which already applied to PRSS slots if they become unused.

It is, on balance, preferable that the Scheme is able to return as far as possible to business as usual and allow the reallocation process to do as much of the work as possible.

Appendix A: Government's 2019 response to the Productivity Commission Inquiry into the Economic Regulation of Airports (Components relevant to Sydney Airport)

Recommendation 7.1 Using any Peak-Period Slot for Regional Flights

The Australian Government should amend the Sydney Airport Slot Management Scheme 2013 (Cwlth) to allow peak period slots that are not part of a permanent regional service series (PRSS) to be used for either regional or non-regional flights. These slots should not become PRSS slots when used for regional flights.

The Australian Government **supports** this recommendation in principle.

The Australian Government will explore opportunities to implement the proposed recommendation.

Protections for regional slots have played a crucial role in ensuring air access to Sydney for regional communities since their introduction in 2001. The Government supports amending these provisions to ensure continued access to Sydney Airport by regional communities.

A new Declaration regarding the regional price cap and notification scheme was made ahead of the release of the Commission's draft report. The Declaration commenced on 1 July 2019 and will cease on 30 June 2022.

As part of any changes to the Sydney Airport Slot Management Scheme 2013, the Declarations and their applicability to non-PRSS slots will be examined.

Recommendation 7.2 Commercial Negotiations for NSW Regional Services

The Australian Government should ensure that future Declarations relating to the regional price cap and notification regime at Sydney Airport only apply to aeronautical services that are not covered in commercial agreements between Sydney Airport and airlines operating flights servicing regional New South Wales, after the current Declaration ceases on 30 June 2019. Future Declarations should specify that prices in commercial agreements cannot be used to assess whether Sydney Airport has breached section 95Z of the Competition and Consumer Act 2010 (Cwlth).

The Australian Government **supports** this recommendation in principle.

The Australian Government notes a new Declaration commenced on 1 July 2019 and is valid until June 2022.

The Australian Government remains committed to ensuring regional access to Sydney Airport. If airlines and Sydney Airport are able to negotiate commercial terms, which provide better access outcomes through commercial-in-confidence agreements, the Government does not wish to undermine this outcome through the mandatory publication of commercial terms.

Stakeholders will be consulted in any drafting of declarations to ensure no airline is worse off under these arrangements.

Recommendation 7.3 Measuring Sydney Airport's Movement Cap Once an Hour

The Australian Government should amend section 6(2) of the Sydney Airport Demand Management Act 1997 (Cwlth) to define a regulated hour as a period of 60 minutes starting on the hour.

The Australian Government **notes** this recommendation.

The Australian Government will review the legislative definition of regulated hour in the Sydney Airport Demand Management Act 1997. Any proposal for changes will be subject to a detailed consultation process with the community and industry.

The Australian Government recognises operating restrictions, including the 80 aircraft per rolling hour movement cap, are important measures to protect surrounding communities from the impacts of aircraft noise. However, the Government acknowledges these restrictions can limit the growth and productivity of Sydney Airport and have an impact on passengers and the local, regional and national economies.

The Australian Government remains committed to facilitating access within the movement cap, with options for updating or streamlining the current movement cap arrangements. However, legislative change will be considered only if there is a net benefit to the community.

Recommendation 7.4 Alternative Types of Freight Aircraft During the Curfew

The Australian Government should amend the Sydney Airport Curfew Act 1995 (Cwlth) to introduce noise standards for freight aircraft allowed during the curfew, rather than specifying only one type of freight aircraft (the British Aerospace 146). The noise standards should allow alternative types of freight aircraft to operate during the curfew, provided they do not increase aircraft noise above current levels, or the number of freight aircraft movements above the current cap (74 a week). The new aircraft noise standards should be in place by the end of 2020.

The Australian Government **supports** this recommendation in principle.

The Australian Government remains committed to maintaining the curfew at Sydney Airport but agrees with the findings of the Commission that freight aircraft should not be defined as if limited to one particular aircraft type. The Government remains committed to the principle that any change to freight aircraft types not involve increases in aircraft noise above current levels, or increase freight aircraft movements during curfew hours.

Any future changes to the *Sydney Airport Curfew Act 1995* to take into account noise standards will be subject to regulatory change processes, including stakeholder consultation.

Recommendation 7.5 Reviewing Slot Management at Australian Airports

The Australian Government should commission a public review of the Sydney Airport Slot Management Scheme 2013 (Cwlth) following the completion of the International Air Transport Association's review into the Worldwide Slot Guidelines (WSG), expected at the end of 2019.

The public review should assess how effectively the Scheme contributes to the efficient use of airport infrastructure, taking into account regional access and noise management objectives. The review should consider reform options in relation to:

- whether slot allocation arrangements generate the greatest net benefits to the community or if alternatives that are not based on historical precedence would improve outcomes for passengers
- the outcomes of the WSG review and any WSG provisions that are not currently part of the Scheme
- the costs and benefits of continued alignment with the latest WSG, including the effects on competition between airlines.

The review should also investigate the need to implement or revise slot management at other major Australian airports.

The Australian Government **notes** this recommendation.

The Sydney Airport Slot Management Scheme 2013 is scheduled to sunset in 2024. Prior to this date a public review of the scheme and associated legislative instruments, including the Sydney Demand Management Regulations 1998 and Sydney Airport Slot Compliance Scheme 2012, will be conducted to provide the Government with valuable guidance on whether the scheme remains fit for purpose and provides for the efficient use of airport infrastructure.

The Australian Government **does not support** an investigation of the need to implement slot management at other major Australian airports at this time.

As several major airports are making substantial investments to increase capacity allowing the services needed by the travelling public, including another runway at Brisbane, in development at Perth and in planning at Melbourne, there is not a strong case for a review of slot management at other major Australian airports at this time.

In addition, a number of major airports in Australia have been proactive in the recognition of the need for, and implementation of, slot management schemes without the need for regulatory oversight.

Appendix B: Consultation participants

List of participants in targeted consultation meetings on the Sydney Airport Demand Management Review

1. Airport Coordination Australia
2. Airservices Australia
3. Albury City Council
4. Australian Mayoral Aviation Council
5. Board of Airline Representatives of Australia
6. Bega Valley Shire Council
7. Catherine King MP
8. Dr Ernestine Gross
9. Inner West Council
10. International Air Transport Association
11. New South Wales Government Department of Premier and Cabinet
12. Office of Tanya Plibersek MP
13. Qantas Group
14. Regional Express
15. Sydney Airport
16. Sydney Airport Community Forum – John Alexander MP (Chair)
17. Sydney Airport Community Forum – John Clarke
18. Sydney Airport Community Forum – Jon Stewart
19. Sydney Airport Community Forum – Robert Hayes, Community Representative for the North
20. Virgin Australia Group
21. Western Sydney Airport Corporation

List of submissions received to the Sydney Airport Demand Management Review

** Submissions marked with an asterisk have redacted 'In confidence' content – and part or all of the submission is not publicly available.*

1. Adelaide Airport Limited
2. Airlines for Australia and New Zealand
3. Airport Coordination Australia
4. Airport Coordination Limited ** in confidence content redacted*
5. Airports Council International
6. Australia Pacific Airports Corporation (Melbourne Airport)
7. Australian Airports Association
8. Australian Business Aviation Association
9. Australian Competition and Consumer Commission
10. Australian Mayoral Aviation Council
11. Aviation Advisory
12. Bathurst Regional Council
13. Bega Valley Shire Council
14. Board of Airline Representatives of Australia

15. Brisbane Airport Corporation Limited
16. Business Events Sydney
17. Business Council of Australia
18. Canberra Airport Pty Ltd
19. Committee for Sydney
20. Country Women's Association of NSW
21. Dr Ernestine Gross
22. Eurobodalla Shire Council
23. Infrastructure Partnerships Australia
24. Inner West Council
25. International Air Transport Association
26. John Clarke
27. Moree Plains Shire Council
28. Narrabri Shire Council
29. New South Wales Department of Planning, Industry and Environment
30. Name withheld * *confidential*
31. No Aircraft Noise Party
32. Qantas Group
33. Regional Aviation Association of Australia
34. Regional Express
35. Sydney Airport * *in confidence content redacted*
36. Sydney Airport Community Forum
(Mr Robert Hayes, Community Representative for the North)
37. Sydney Business Chamber
38. Toll Group * *confidential*
39. Tourism and Transport Forum
40. Virgin Australia Group * *confidential*
41. Name withheld **confidential*

APPENDIX C: Event Snapshots - 2019

Date	Event Type	Event Commenced	Event Ceased	Event Duration	Arrival Rate	Arrival Cancellations	Departure Cancellations
6-Sep-19	Single Runway	18:03	23:59	5:56	23	30	33
7-Sep-19	Single Runway	6:28	19:14	12:46	23	26	28
9-Sep-19	Single Runway	8:00	15:30	7:30	23	49	41
23-Sep-19	Single Runway	17:19	18:36	1:17	23	12	12
11-Oct-19	Single Runway	13:14	14:30	1:16	23	11	11
17-Oct-19	Single Runway	14:01	20:02	6:01	23	26	28
19-Oct-19	Single Runway	14:14	20:25	6:11	23	5	6
3-Nov-19	Thunderstorm	16:01	16:30	0:29	26	1	1
4-Nov-19	Thunderstorm	18:42	20:53	2:11	26	13	12
8-Nov-19	Single Runway	12:44	21:50	9:06	23	53	56
12-Nov-19	Single Runway	14:59	19:08	4:09	23	4	4
22-Nov-19	Thunderstorm	16:41	20:15	3:34	34	27	28
23-Nov-19	Thunderstorm	16:14	17:04	0:50	34	1	3
25-Nov-19	Thunderstorm	15:01	23:37	8:36	26	32	37
26-Nov-19	Thunderstorm	12:11	13:53	1:42	26	27	27
26-Nov-19	Single Runway	16:36	19:02	2:26	23	27	27