

# Response to Sydney Airport Demand Management: Discussion Paper

By John Clarke

## About the Author

I am a longstanding member of the Sydney Airport Community Forum (SACF) and have sat on the Forum in different representative roles since its inception in 1996. I am also a member of the Implementation and Monitoring Committee for Sydney Airport. This submission however, is made by me as an individual with significant community experience of aircraft noise rather than specifically as a SACF representative.

## Purpose

The purpose of this paper is to respond to the Department of Infrastructure, Transport, Regional Development and Communications November 2020 discussion paper on Sydney Airport Demand Management. Specifically it will address those sections in the paper dealing with the Productivity Commission's Recommendation 7.3<sup>1</sup> Measuring Sydney Airport's Movement Cap Once an Hour, being:

*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.*

It will answer the questions raised in the Discussion Paper:

- A. How would changes to the definition of a regulated hour (i.e. removing the rolling hour) impact stakeholders?
- B. Should any flights be excluded from the movement cap, while still providing a net benefit to the community? What impacts would this have?
- C. What means of publication would satisfy public accountability and transparency with respect to both breaches and non-breaches?

It will also address, albeit briefly, some other matters raised in the discussion paper and in a video conference discussion with Mr Harris, who is undertaking the review of demand management at Sydney Airport, including: the roll of the cap at Sydney Airport for ensuring that airlines use the new overflow airport being built in Western Sydney; the definition of peak period; alignment of slots

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<sup>1</sup> Productivity Commission *Economic Regulation of Airports*, Report No. 92, 21 June 2019

management with current international practice; the Productivity Commission's recommendation 7.4 on alternative types of freight aircraft during the Curfew; and, the cost of aircraft noise.

## Introduction

The opening of the Third Runway in November 1994 and the significant changes to airspace management that occurred as a consequence resulted in existing and new areas being affected by massively increased and concentrated aircraft movements and relentless aircraft noise pollution. There was huge public outcry with mass protests and blockades of the Airport, and a major public enquiry - the 1995 *Senate Select Committee on Aircraft Noise in Sydney* to which over 5,200 submissions were made. The political response to this was the Coalition's *Putting People First* policy, which when they were elected in 1996 resulted in: the Long Term Operating Plan (LTOP) to share the noise; the *Sydney Airport Demand Management Act 1997* to put a definite limit on the number of aircraft that could cause aircraft noise (in any one rolling hour); and, retention of the *Sydney Airport Curfew Act 1995* to protect the ability of more people to sleep free from aircraft noise. Subsequent governments of all parties have endorsed these initiatives. These regulations, along with the *Airports Act, 1995* create a legislative context for limiting and managing operations at Sydney Airport that is a necessary consequence of having an airport so close to the centre of the city, surrounded by suburbs and where planes are required to fly for many tens of kilometres over suburban Sydney at great cost to the health and amenity of residents.

The 1997 decision to impose a "cap" of 80 movements, within all four regulated hours, is intended to create a balance between the interests of the aviation industry and affected residents. It provided Sydney Airport with a considerable period of time over which hourly demand at that time could increase and continue to be accommodated while supporting the development of a second airport to be available when it was needed to cope with any overflow and with any further growth in demand beyond that time. However, it was never anticipated that all 80 movements would be used outside of peak periods.

It is necessary to question why we are here, yet again, having to defend the most basic protections for the community from being overwhelmed by aircraft noise from Sydney Airport. The movement cap of 80 movements per *regulated hour* is a fundamental pillar of aircraft noise management in Sydney. While the discussion paper states that: "changing the number of aircraft movements permitted each hour at Sydney Airport...(is) out of scope of this paper" (p5), this is disingenuous, because what is being proposed will redefine the cap to allow more than 80 actual aircraft movements at Sydney Airport. This also contradicts the Prime Minister's statements that have ruled out any changes to the cap.<sup>2</sup>

It is also telling that nowhere in the paper is there any discussion about the aircraft noise pollution caused by Sydney Airport which the *Demand Management Act, 1997*, along with the other legislation, is intended to address. There is no discussion of the objectives of the Act and whether the Act is meeting these objectives with regards to aircraft noise, and if it is not, how the Act and other legislation might be better implemented to manage demand to limit and mitigate the problems of aircraft noise pollution on the community of Sydney, and in particular to allow noise sharing objectives to be met.

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<sup>2</sup> Prime Minister's interview with Ben Fordham, 2GB, 1 October 2020

## How would changes to the definition of a regulated hour (i.e. removing the rolling hour) impact stakeholders?

Sydney Airport is environmentally constrained. The *Sydney Airport Demand Management Act, 1997* intentionally put a limitation on the number of aircraft movements at Sydney Airport in order to put some constraint on the problems created by aircraft noise pollution from Sydney Airport's operations. As a significant factor in annoyance from aircraft are the number of noise events at a particular time, the movement cap is a specific response limiting the maximum number of movements effectively during any 60 minute period. It is very clear from a reading of the Act that measurement of the cap over a rolling 60 minutes, when read in conjunction with the provisions for Slot management, is specifically intended to spread aircraft movements more evenly over the hour as well as provide for a maximum number of flights. The authors of the Act knew what they were doing when they drafted the Legislation and the Parliament knew what it was doing when it was approved with the support of both the Government and Opposition at the time.

It is important to understand that an 80 movement cap spread evenly over an hour will still result in a person experiencing an aircraft on average every 90 seconds (assuming an even split between takeoffs and landings). However, because the noise builds as the plane approaches and fades as it moves away, in practice there is very little respite between flights for many residents. The proposal to amend the measurement of the cap to a period of 60 minutes starting on the hour would result in periods where the effective rate could be as high as 100 movement an hour to be offset by a lesser number of movements during another period within the hour in which it is measured. This is analogous to saying to a policeman when caught doing 100 km/h in an 80 km/h zone, *"it doesn't matter officer I'll be doing less than 80 a bit later so it will even itself out in the end."* While the overall number of noise events would be the same there would be periods of time where residents would then be exposed to many more noise events and constant actual noise.

The discussion paper puts the view that *"it is anticipated significant condensing of flights and related noise at any particular part of an hour to be highly unlikely."* (p12) However, this is unsupported by any analysis whatsoever, and new Performance Based Navigation (PBN) technologies are allowing separation standards to be reduced so there is no way that this can be guaranteed.

In support for changing the way the cap is measured the discussion paper talks about this being beneficial to being able to recover from disruptions. It quotes Sydney Airport as saying that there were 2 events in 2018<sup>3</sup> that resulted in collectively 230 flight cancellations, and that the inability to absorb the delays without breaching the current movement cap exacerbated the number of flights affected and the duration of the delays. However, this is highly misleading and even the Productivity Commission noted in their final report that *"The Commission's analysis shows that there were relatively few times when the movement cap may have constrained recovery from a disruptive event in 2018"* (Productivity Commission, p246). The reality is that there are a great many factors that contribute to the ability to recover from delays and the cap plays, at best a minor part.

Similarly, the statement in the discussion paper that *"maintaining the movement cap following interruptions distorts the balance between the objectives the Legislation is intended to achieve"*(p13), is simply unsupported nonsense. The objectives of the Legislation are to smooth the demand using

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<sup>3</sup> The discussion paper says these flight disruptions occurred in 2017. However the Productivity Commission quotes 2018. It is assumed this is an error in the discussion paper

the slots and a rolling regulated hour to limit the number of noise events during any 60 minute period in time, as well as to put an overall limit on the number of aircraft movements. As the *Sydney Airport Demand Management Act 1997* itself states: “*This Act provides for the limitation of aircraft movements at Sydney Airport (otherwise than during curfew periods).*” It does this by spreading aircraft movements evenly over the hour as well as provide for a maximum number of flights. That is the objective of the Legislation.

The discussion paper also continues with the fallacy that the cap “*has unintended consequences as aircraft can spend longer overhead of Sydney communities*” (p12). This view was initially put by Sydney Airport and then also by the Tourism and Transport Forum to the Productivity Commission, but debunked in the Productivity Commission’s final report where it was pointed out that aircraft holding locations are well away from Sydney<sup>4</sup>. Airservices Australia also noted that: “*any delays necessary to comply with the movement cap are applied to departing aircraft, not arriving aircraft. This means that any costs associated with aircraft placed in holding patterns are not due to the movement cap.*” (Productivity Commission, p249) Put simply, the cap does not result in aircraft spending longer overhead of Sydney Communities.

In summary, changing the definition of a regulated hour would have a detrimental impact on the community. Regardless of how it is dressed up, the whole purpose of changing the definition is very clearly nothing more than an attempt to allow an unstated number of additional actual aircraft movements at Sydney Airport. This would placate the vested interests of Sydney Airport and the aviation industry at the cost of the noise impacted community. A great many of the points put forward in the discussion paper to support such a change are simply wrong, and there is no benefit to the community by increasing the number of aircraft noise events they experience at any particular point in time.

## **Should any flights be excluded from the movement cap, while still providing a net benefit to the community? What impacts would this have?**

In discussing excluded movements the discussion paper wrongly states that while emergency and state aircraft can operate without a slot that they are still counted towards the movement cap. Part 2, Section 6 of the *Sydney Airport Demand Management Act 1997* in fact specifically directs that these are not counted. It states:

*In applying the limit imposed by this section, \*aircraft movements \*associated with \*gate movements that are permitted by Division 5 of Part 3 are not to be counted.*

Division 5, Part 3 Sections 29 to 32 list the exemptions for emergency and state aircraft.

I recognise that following my discussion with Mr Harris where I raised this, the Department has since contacted me acknowledging this is an error in the discussion paper.

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4. Airservices Australia advised the Sydney Airport Community Forum (SACF) that holdings occur at the following locations and distances from Sydney Airport: **East of Sydney** - over water; **North of Sydney** - BOREE 45nm (83 Km), SADLO 70nm (130 Km), MEHAN >120nm SYD (>222 Km); **South/West of Sydney** - TARAL 75nm (139 Km), CULIN/MAKKA 100nm (185 Km) from Sydney.

The discussion paper also canvases that aircraft below a certain noise threshold could be exempted from the movement cap on the same basis that the current curfew legislation allows very limited operations of some lower noise aircraft during curfew hours. This shows a lack of understanding of how the curfew works in Sydney and ignores 4 important points:

1. While some aircraft are quieter than others they are not quiet. There is no such thing as a quiet aircraft and the growth in airline traffic before COVID has meant that there are many many more of them causing many more noise events.
2. There is a specific curfew mode of operations (Mode 1) which only allows those aircraft permitted to operate during the curfew to use the long runway with departures to the south and landings from the south over Botany Bay, and avoiding the Kurnell Village.
3. In addition to there being limited types of aircraft, there are also very limited numbers of aircraft movements allowed during the curfew at Sydney Airport. For example the BAe146 freight jets have a cap of 74 movements per week.
4. Despite the limitations imposed on them, curfew operations still cause aircraft noise disturbance to people on the Kurnell Peninsular and surrounding areas.

The curfew at Sydney Airport does not provide a blanket exemption for planes below a noise threshold. Rather it allows a very limited number of movements of specific types of planes to operate only in a particular way. It is completely ridiculous to suggest that the very restrictive operations allowed during the curfew somehow set a precedent to allow for blanket noise based exclusions from the 80 movement per hour cap during daytime operations. The purpose of the cap is to limit and measure aircraft movements on the basis that it is the number of noise events above background noise levels that is a major contributor to the problems of aircraft noise pollution, not just the noise of an individual plane.

The discussion paper also canvases other *exclusions* from the cap:

*... such as route-specific exclusions from the cap. Exclusion of regional flights from the movement cap for example, or regional flights which also meet a particular noise standard, could increase the utilisation of the 80 permitted aircraft movements by high volume aircraft, while guaranteeing ongoing access to the airport for regional flights and encouraging the adoption of newer, quieter aircraft. (p14)*

It is impossible to see how these exclusions from the cap would provide any benefits to the noise effected community the Demand Management Act is intended to protect. Not only will there be more aircraft overall causing a disturbance, but larger higher volume aircraft are generally much more noisy. They are also more likely to require use of the parallel runways further limiting the operational flexibility to achieve acceptable noise outcomes through noise sharing prescribed by the Long Term Operating Plan. These are nothing but proposals to allow for an increase in the number of aircraft movements to try and get around the current cap, with a consequential detrimental effect on the community. The Productivity Commission did not support these exclusions and noted that *“this option would likely increase the total number of movements ..... (and) have a negative effect on some residents.* (Productivity Commission, p250)

In summary, there are already provisions to exclude the counting of emergency and state aircraft from the movement cap. The other exclusions mentioned by the discussion paper for planes below a certain noise threshold and regional flights are nothing more than further attempts to increase the

actual number of aircraft permitted to operate at the airport. None of which would provide any benefit to the noise effected community, and all of which would increase the number of noise events to the considerable detriment of this community contrary to the objectives of the Act.

## **What means of publication would satisfy public accountability and transparency with respect to both breaches and non-breaches?**

The discussion paper notes that reporting of compliance to the movement cap occurs via a statutory report from Airservices that is tabled in Parliament each quarter by the Minister, as well as voluntary reporting by Airservices on its web-site. While the paper mentions that the report tabled in Parliament is not frequently accessed, this method of reporting provides for a significantly higher level of accountability than would be achieved by relying on Airservices to report on compliance voluntarily. That many more people accessed the reporting on the Airservices web-site is simply an example of the ease of access to the information compared to accessing the Parliamentary web-site. Reporting to Parliament is a public demonstration of the importance of cap compliance, and it would be entirely inappropriate to rely upon some form of voluntary reporting by Airservices which they could cease at any time, as they have for example, recently done without consultation with the consolidated Sydney Airport Operating Statistics report.

## **Other Matters**

### **The Movement Cap at Sydney and WSA.**

In addition to providing some protection for residents from being completely overwhelmed by the number of aircraft noise events from operations at Sydney Airport, the *Demand Management Act, 1997* and the movement cap it establishes is very deliberately there in its current form to provide a ceiling on the growth of the airport. The need for another airport for Sydney has long been recognised and the decision to finally build the Western Sydney Airport (WSA) as an overflow airport is supported by the cap. Indeed this is made very clear in the Coalitions 1996 *Putting People First* policy when talking about the cap and a second airport, which states:

*Our policy of capping the movement rate at Sydney Airport and imposing differential landing charges will give airlines an incentive to use the new airport. (Putting People First, The Coalitions Policy on Sydney Airport and Sydney West Airport, 29 January 1996 p10)*

Any loosening of the cap by changing its definition or providing for additional exclusions to allow for ever more aircraft to use Sydney Airport would undermine the incentives to use WSA. This is particularly the case in the current COVID environment where air travel is at historic lows and unlikely to recover to the extent that there is any significant pressure on the capacity at Sydney Airport before WSA opens in 2026.

The *Sydney Airport Demand Management Act 1997* Part 2, Section 7 also has specific provision for the Minister to determine a lower maximum movement limit (but not to increase it). This allows an opportunity to develop a concept of capacity management for the entire Sydney Basin, where a lower cap could be used at Sydney to encourage demand for WSA, and not impact the overall capacity in the Sydney Basin. Further, this provision could be used with the specific aim of enabling the noise sharing objectives of the LTOP to be achieved at Sydney by specifying a lower cap during non peak

periods when demand can also be shifted to WSA. This would enable the lower capacity LTOP noise sharing modes to be used more extensively as LTOP intended. These modes, which mostly utilise all 3 runways have a maximum capacity of approximately 60 movements per hour, so have been used less often as pre-COVID demand for the airport increased, forcing the use of the parallel runways and undermining noise sharing. Indeed only when this provision is utilised will the true balance between the needs of the aviation industry and the community be restored. It is therefore imperative that this provision remain to enable the Minister to have the power to provide both an additional incentive for air traffic to use WSA, and achieve the objectives of noise sharing.

### **Definition of Peak Period**

The discussion paper states without reference that:

*Peak period is defined as 6-11am and 3-8pm, Monday to Friday. All other times between 6am and 11pm, seven days, are considered off peak. (Note 41, p37. See also p19)*

This is not correct. The peak periods at Sydney Airport has always been the specified period reserved for parallel operations to handle traffic demand. The LTOP specified a peak period of 0730 to 1030 and 1600 to 2000, Monday to Friday when parallel operations could be used to handle “*peak traffic demands*” (LTOP Recommendation 5). However, when implemented this was changed to 0700 to 1100 Monday to Saturday, 0800 to 1100 Sunday, and 1500 to 2000 Sunday to Friday (although parallel operations are frequently also used outside of these times undermining noise sharing). These times have been this way since 1997 and continue to be referenced as such in the Sydney Airport Operating Statistics.<sup>5</sup> Most importantly, the peak period is supposed to commence at 7 am not 6 am as stated in the discussion paper. This is extremely important to residents as some of the most disruptive aircraft movements under parallel operations are those that wake people up at 6 am.

### **Alignment of Slots with International Practice.**

In the discussion about alignment of the slots scheme with international practice it is noted that at the time of its implementation at Sydney Airport there were important and deliberate differences to differentiate the Legislation from the then international Worldwide Slot Guidelines (WSG), including, that the movement cap had to have regard to the impacts of aircraft noise on the community (p23). While the detail of the administration of the slots and whether it should align with the new Worldwide Airport Slot Guidelines (WASG) is not something I wish to comment on in any detail, it is important that any future changes continue to specify that the slots must have regard to the impacts of aircraft noise on the community. This was of course one of the main objectives of implementing slots at Sydney Airport in the first place and remains no less a critical consideration to this day.

### **Alternative Types of Freight Aircraft During the Curfew**

The discussion paper lists at appendix A the Productivity Commission’s recommendations that relate to Sydney Airport. One of these is Recommendation 7.4 which recommends that noise standards be introduced for freight aircraft allowed during the curfew, rather than specifying only one type of freight aircraft. While not the subject of further discussion in the discussion paper, it was something addressed in my meeting with Mr Harris. I would note that this was supported in principle by me and by the Sydney Airport Community Forum in our submissions to the Productivity Commission. However, it is important that these noise standards allow for aircraft no louder than the Be 146, and ideally less, and that this be the actual measured operational noise profile at Sydney and not simply the noise certified by the manufacturer, which at best is obtained under ideal conditions. There should be no change to the number of aircraft allowed to operate during the Curfew.

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<sup>5</sup> See for example, Airservices Australia: *Sydney Airport Operating Statistics*, October 2019

## **The Cost of Aircraft Noise**

A further discussion that was had with Mr Harris was around the economic cost of aircraft noise pollution. Economic arguments to change the cap to allow more aircraft to take off and land based on “efficiency” ignore the economic, social and health costs of aircraft noise pollution on the community. Aircraft noise pollution is treated as a ‘free-good’ to be consumed at will as far as Sydney Airport and the aviation industry are concerned. Basic economic theory would say that a free good has a tendency to be over consumed. Currently it is only through effective regulation that the community is currently given some protection. It is therefore not surprising that Sydney Airport and the aviation industry are calling for changes to the cap to increase their revenues at no cost to themselves but rather at the additional cost to the amenity and health of the noise impacted community.

Discussions around “the cost” to the Airport and Industry of addressing noise objectives ignore the costs of aircraft noise pollution on the health, amenity and productivity of the noise impacted community. Until these ‘externalities’ are properly costed and compensated for then discussion about the costs to Sydney Airport and the industry of current noise objectives lack validity.

## **Conclusion**

The *Sydney Airport Demand Management Act 1997* is intended to put an absolute limit on the number of aircraft movements at Sydney Airport in an hour and to ensure that the demand is spread evenly over the hour to limit the number of noise events experienced by residents at any particular time. The existing regulations were put into place to strike a balance between the competing demands of the aviation industry and the community’s health and amenity following the opening of the Third Runway, and within this context the Act is working as intended.

The recent history of Sydney Airport is one of incremental expansion, with the Airport and its proponents arguing that each new proposal is only a small change over what exists and is necessary for its efficiency and profitability. Sydney Airport and the aviation industry would like to dispense with the cap altogether for their commercial benefit and convenience, but in the absence of being able to achieve this are putting forward proposals to keep it in name only. It is particularly disappointing and disturbing that the Department of Infrastructure, Transport, Regional Development and Communications would provide a discussion paper that states on the one hand that the number of aircraft movements permitted each hour at Sydney Airport is out of scope, but on the other hand canvases proposals from Sydney Airport and the industry that have the specific purpose of increasing the number of actual movements. This is grossly disingenuous. In addition to its many errors of fact, the paper repeats arguments around excluding certain aircraft from the cap that even the Productivity Commission discounted, yet gives little regard and shows scant understanding of the problems of aircraft noise pollution on the residents of Sydney that the legislation is intended to address.

Changing the definition of a regulated hour and allowing for any additional flights other than the current provisions for emergency and state aircraft to be excluded from counting towards the cap are contrary to the objectives of the Act and would have a very detrimental effect on the community. With the increase in demand for the airport before COVID these provisions are more important than ever and along with the requirement to report to Parliament and retention of the power for the Minister to specify a lower cap, should remain unchanged in the the *Sydney Airport Demand Management Act 1997*.