



***National Aviation Policy  
Discussion Paper: Safeguards for airports and the  
communities around them***

Sydney Airport Corporation Limited

Submission to the Department of Infrastructure,  
Transport, Regional Development and Local  
Government

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## Issues and Options for Safeguards

### 1. Planning for compatible developments

The Discussion Paper<sup>1</sup> correctly indicates that airports are essential elements of regional and national transport networks and are valuable infrastructure assets. In the case of Sydney Airport, 32.9 million passengers passed through its terminals in 2008. Sydney Airport is a vital link to the rest of the world with 45% of all Australia's international traffic arriving in Sydney. Sydney Airport's contribution to the economy is significant with its economic impact being equivalent to 2% of the Australian economy and 6% of the NSW economy. More than 206,000 jobs rely either directly or indirectly on Sydney Airport.<sup>2</sup> Sydney Airport is therefore arguably the single most important piece of transport infrastructure in Australia today.

Sydney Airport's Master Plan 2009<sup>3</sup> (the Master Plan) is focussed on the future aeronautical development of Sydney Airport and on Sydney Airport Corporation Limited's (SACL's) plans for the airport, based on robust and independently prepared aviation activity forecasts, to cater for future aviation growth in all sectors. The Sydney Airport Environment Strategy 2005 – 2010<sup>4</sup> - which is currently being reviewed and updated – provides the strategic direction for the environmental management of Sydney Airport. Collectively, the Master Plan and Environment Strategy reflect SACL's strong commitment to ensuring that the future aeronautical needs of civil aviation users of Sydney Airport are met in a way that minimises environmental or other impacts in residential and other areas close to the airport.

The Master Plan acknowledges that aircraft noise and its effects on human health and well-being have been extensively studied in Australia and around the world. Sydney Airport acknowledges the reported aircraft noise related impacts and, as the Master Plan indicates, is committed to working with others in the aviation industry to mitigate impacts in areas in the vicinity of the airport or under flight paths.

Sydney Airport reiterates the comments it made previously in submissions to the *Towards a National Aviation Policy: Issues Paper* (June 2008)<sup>5</sup> and *National Aviation Policy Green Paper: Flight Path to the Future* (March 2009)<sup>6</sup> concerning noise management strategies. That is, Sydney Airport is supportive of proposals to better inform State and local planning authorities and the communities they represent on the levels of actual and forecast aircraft noise exposure.

For reasons of transparency, public accountability and increasing the community's understanding of airport operations, SACL believes it is important to provide accurate information about the various roles and responsibilities concerning the management of aircraft noise and its impacts. Such information should be widely communicated and well

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<sup>1</sup> *Safeguards for airports and the communities around them*, Australian Government, July 2009.

<sup>2</sup> *The Economic Impact of Growth at Sydney Airport*, Sydney Airport Corporation Limited, 2008.

<sup>3</sup> *Sydney Airport Master Plan 2009*, Sydney Airport Corporation Limited (June 2009).

<sup>4</sup> *Sydney Airport Environment Strategy 2005 – 2010*, Sydney Airport Corporation Limited (January 2005).

<sup>5</sup> Submission to *Towards a National Aviation Policy: Issues Paper* (June 2008), Sydney Airport Corporation Limited, pp 16 - 18.

<sup>6</sup> Revised submission to *National Aviation Policy Green Paper: Flight Path to the Future* (March 2009), Sydney Airport Corporation Limited, pp 19 – 23.

understood, particularly in those areas most affected by aircraft noise. While the Discussion Paper does not explicitly raise this issue, should the Government proceed with the proposal suggested in the Green Paper to investigate more appropriate roles for airlines, airport operators, governments, planning agencies and the community in aircraft noise management and mitigation<sup>7</sup>, Sydney Airport believes that, as a starting point, the *existing* roles and responsibilities should be better communicated by the Government. From a community perspective, it is important to recognise that no single stakeholder can in isolation effectively manage all of the impacts of aircraft noise, let alone mitigate or eliminate those impacts where possible. As the Master Plan indicates<sup>8</sup>, the plans, actions and strategies for managing, reducing or eliminating the impacts of aircraft noise in areas around Sydney Airport fall into two broad categories:

- those undertaken directly by SACL as the airport lessee company for Sydney Airport. These cover issues that are directly within Sydney Airport's control or for which it is primarily responsible; and
- those undertaken by other stakeholders, including by government or the aviation industry more broadly. These cover issues that are not directly within Sydney Airport's control or for which it is not primarily responsible.

While the International Civil Aviation Organization (ICAO), governments, airports, airlines, aircraft and jet engine manufacturers and regulators all have differing responsibilities in this area (as summarised in the table shown on pp 132 – 133 of the Master Plan), they collectively play a crucial role in effectively managing and reducing aircraft noise impacts. Effective coordination of effort is therefore required if continued progress in aircraft noise reduction is to continue to be achieved.

#### Australian Noise Exposure Forecast: An Effective Noise Descriptor?

To maximise transparency, Sydney Airport is committed to providing the community and other stakeholders with accurate and meaningful information on aircraft noise impacts in forms that can be easily understood. As the Discussion Paper points out, the Australian Noise Exposure Forecast (ANEF) has a number of limitations.<sup>9</sup> Sydney Airport therefore acknowledges that additional noise descriptors are needed to ensure the community is provided with meaningful and understandable information. For this reason, Sydney Airport provided the following additional noise descriptors in both the Preliminary Draft Master Plan 2009 (which was released for public comment) and in the approved Master Plan 2009:

- predicted average daily jet flight path movements at the end of the 20 year planning period (ie in 2029). These allow members of the public to assess where aircraft fly, how many overflights there are forecast to be at the end of the planning period (including the average daily movements and forecast daily range), the percentage of overall movements at Sydney Airport that these overflights represent and the percentage of days when there will be no aircraft movements.
- predicted average daily jet aircraft respite periods at the end of the 20 year planning period based on the number of whole clock hours when there are no aircraft

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<sup>7</sup> *National Aviation Policy Green Paper: Flight Path to the Future*, Australian Government (December 2008), p 196.

<sup>8</sup> See note 3, p 134.

<sup>9</sup> See note 1, p 8.

movements on the particular flight paths, and reporting these as a percentage of the sum of all the clock hours in the period in question. The figure used showed respite during three discrete periods, morning (6am to 7am), daytime (7am to 8pm) and evening (8pm to the start of the curfew at 11pm).

- projected number of aircraft noise events louder than 70 dB(A) at the end of the 20 year planning period and, for comparison, the equivalent contours in 2007. These are known as N70 contours.

Each of these Sydney Airport-specific noise descriptors are regularly published by Airservices Australia (AsA) thus allowing members of the public to compare present day outcomes with those forecast in the Master Plan.

All NSW councils, including those in the vicinity of Sydney Airport, are in the process of preparing new local environment plans (LEPs). A number of councils are well advanced in this process. For this reason, the location of the various ANEF contours is important because it enables councils to locate zone boundaries in appropriate locations and to know what uses should and should not be permissible within those zones.

As Sydney Airport's three neighbouring councils – Botany Bay, Rockdale and Marrickville – also have clauses in their existing LEPs that require them to consider aircraft noise when making decisions on development applications affecting land within certain ANEF contours, knowing the location of ANEF contours is essential for the making of many day-to-day decisions concerning development applications. This is because consideration needs to be given as to whether or not a condition requiring the installation of noise insulation should be included in a development consent or, indeed, whether a particular development should be refused outright.

It is therefore of some concern that the ANEF councils in the vicinity of Sydney Airport must use is dated 2029. That is, a decision being made today concerning whether or not to approve a particular development or to include land in a particular zone is being informed by an ANEF that is dated 20 years hence. This raises three important issues concerning the relevance and validity of the ANEF.

First, the A380 is already being used by several airlines regularly using Sydney Airport. That number will grow over time. However, the Integrated Noise Model (INM) which is used to model aircraft noise at an airport currently does not contain noise data for the A380. Sydney Airport, in consultation with AsA, therefore used the noisier B747-400 to represent this aircraft when preparing the ANEF 2029 that is included in the Master Plan. However, AsA has itself already released a report showing that the A380 is between 2.3 and 6.7 decibels *quieter* than the B747-400 when departing Sydney Airport.<sup>10</sup>

Second, the impact of other quieter aircraft such as the B787 and A350XWB has similarly not been taken into account when preparing the ANEF 2029. Once again, this is because the INM also does not yet contain the relevant noise data. While, unlike the A380, these aircraft are not yet flying, they will be in the not-too-distant future and many airlines regularly using Sydney Airport have placed large orders with aircraft manufacturers.<sup>11</sup> Boeing claims that the noise footprint of the B787 will be 60% smaller than that of today's similarly sized

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<sup>10</sup> *Noise monitoring report: A380 v 747-400*, Airservices Australia (2008).

<sup>11</sup> For example, the B787 has been selected as the cornerstone of the Qantas Group's domestic and international fleet renewal program.