

## **Submission to Aviation White Paper**

Complainants to the Aircraft Noise Ombudsman (ANO) often express confusion when trying to find out who is responsible for regulating aircraft noise and anger at what appears to be a general lack of regulation. In considering the current regulatory framework, it is useful to examine its history and development.

### **Legal and regulatory framework**

When the Australian Constitution was made in 1901, aviation barely existed. While the Constitution gave the Commonwealth government power to legislate over railways, it gave no specific power to make laws with respect to aviation. Under its external affairs power, the Commonwealth entered into an international convention on “the Regulation of Aerial Navigation” and enacted the *Aircraft Navigation Act 1920*. Following a challenge by an unlicensed pilot flying over and under the Sydney Harbour Bridge, the High Court ruled that the parliament had no general control over civil aviation and the law requiring pilots to be licensed was invalid as it went further than necessary to give effect to the international convention.<sup>1</sup> A referendum held on 6 March 1937 to give power over air navigation and aircraft to the Commonwealth failed. The Commonwealth’s power to regulate aviation therefore derives from its adherence to international conventions under the auspices of the International Civil Aviation Organisation (ICAO).

The *Airspace Act 2007* removed the regulation of airspace from Airservices Australia (Airservices) to an office within the Civil Aviation Safety Authority (CASA). In her second reading speech, the then Parliamentary Secretary to the Minister for Transport and Regional Services said: “airspace regulatory functions need to be separated from Airservices Australia due to the potential for conflict of interest between Airservices Australia’s industry and commercial focus and its airspace regulatory functions...The government has decided that it is time to remove any perception of conflict of interest by moving airspace classification and designation to the government’s civil aviation safety regulator – CASA.”<sup>2</sup>

CASA has final approval of flight paths into airports. Aircraft noise that results from those flight paths is not a relevant consideration for CASA.

Airservices has a prominent role in the design and implementation of aircraft flight paths. The *Air Services Act 1995 (Air Services Act)*, requires Airservices to both promote and foster civil aviation and to perform its functions in a manner that ensures that, as far as practicable, the environment is protected from the effects...of the operation and use of aircraft.”<sup>3</sup>

In carrying out its functions Airservices is also required to consult with “consumer and other relevant bodies”.<sup>4</sup> Ministerial directions and Statements of Expectations made and issued under the *Air*

---

<sup>1</sup> *R v Burgess; Ex parte Henry* (1936) 55 CLR 608.

<sup>2</sup> *Airspace Bill 2006*, second reading, page 5.

<sup>3</sup> *Air Services Act 1995*, sections 8(1)(d) and 9.

<sup>4</sup> *Ibid*, section 10.

*Services Act* require it “initiate...consultations...with the aviation industry and community in relation to the environmental aspects of air traffic management” and to “undertake ongoing and effective engagement with the community...”.<sup>5</sup>

Perhaps because of its focus on servicing, promoting and fostering the aviation industry, Airservices has historically taken a minimalist approach to its engagement with the community, tending to avoid it where possible. It is fair to say, however, that it has recently invested more resources in this area and continues to improve its capacity to conduct community engagement.

### **Planning and development of airports relevant to aircraft noise**

The impact of aircraft noise on overflown communities is an inevitable result of airport operations, and discussion of aircraft noise management should begin with regulation on the planning and approval processes of airports. Given the limitations on Commonwealth power in aviation, distinctions must be drawn between Commonwealth controlled and other airports.

#### *Commonwealth controlled airports*

The Commonwealth *Airports Act 1996 (Airports Act)* mandates the contents of both Master Plans (established airports) and Major Development Plans (expanding airport operations by, for example, a new runway) for Commonwealth leased airports. Master Plans must include “an Australian Noise Exposure Forecast [ANEF] for areas surrounding the airport”; “flight paths...at the airport” and “plans...for managing aircraft noise intrusion in areas forecast to be above the significant ANEF levels”, defined noise above the 30 ANEF levels.<sup>6</sup> Major Development Plans must include the effect the development would be likely to have on noise levels; the effect on flight paths, and plans for managing aircraft noise intrusion at “significant levels”. As above, significant levels are defined as the 30 ANEF level for residences and the 25 ANEF level for public buildings.<sup>7</sup>

#### *Use of the ANEF*

Apart from the requirement for airport plans to include flight paths, the legislative requirements regarding aircraft noise relate principally to the use of land around airports, founded on the ANEF. The Department of Infrastructure, Transport, Regional Development, Communications and the Arts website contains a document titled *Guidelines for Managing Aircraft Noise*.<sup>8</sup> An attachment titled *Supplementary Aircraft Noise Metrics* sets out the “limitations” of using the ANEF as a noise information tool. The ANEF was developed following a study by the National Acoustic Laboratories (NAL) in 1982. That study did not suggest or recommend acceptable levels of aircraft noise, recognising these were decisions for planners and governments.

The attachment to the *Guidelines* notes that the NAL study said that a slightly better correlation between the tool and its impact on residents could be achieved by combining the ANEF value with

---

<sup>5</sup> Ministerial Direction M37/99; Statement of Expectations for Airservices Australia.

<sup>6</sup> S 71 (2)(d), (da) and (e) *Airports Act*.

<sup>7</sup> S 91 (1)(e), (ea) and (f) *Airports Act*.

<sup>8</sup> National Airports Safeguarding Framework, [Guideline A](#).

decibel level measurements but “the computer technology of the day made this unacceptably complex.”<sup>9</sup>

The Australian Standard of aircraft noise intrusion relevant to building siting and construction (AS 2021:2015) notes that the ANEF values average noise exposure over a year and suggests the use of other parameters such as maximum noise levels and frequency of events. The 1982 study on which the ANEF was based found little relationship between annoyance and aircraft numbers, but a 2007 study found there was a strong relationship. In Sydney there were 138,000 aircraft movements in 1985-86, growing to over 290,000 in 2010-11.<sup>10</sup> Sydney Airport had 322,535 aircraft movements in 2018-19.<sup>11</sup>

Indeed, the ANEF is now generally regarded only as a partly relevant tool for determining the kinds of developments that can occur on land affected by aircraft noise. Even for this purpose, it is recognised as an inadequate measure.

The ANEF was developed following a study that is now over 40 years old and is deficient as a mechanism to describe the impact of aircraft noise on affected communities. Nevertheless, there appears to be scope to update and improve it so that it is a useful tool for predicting aircraft noise impacts more accurately.

Such improvements could include increasing the ANEF contours displayed in Master Plans and Major Development Plans. In such a way, an ANEF could provide valuable information for land use planning and to assist impacted communities in understanding potential future noise impacts. Currently ANEF maps display the ANEF 20-35 contours which are generally located in close proximity of the applicable airport. However, an updated and expanded ANEF model incorporating both recent technical developments and reflecting the communities’ current experience and expectations in relation to aircraft noise, would enable the aviation industry to manage risks of future operational restrictions while also assisting the community to make informed decisions.

ANEFs are of three types - short-range (5-20 year); +20 year traffic and Ultimate Practical Capacity. It appears to be common practice to use the 20 year ANEF for Master Plans. An Ultimate Practical Capacity ANEF should be required as part of a Master Plan or Major Development Plan that introduces significant flight path changes.

#### *Planning requirements for flight paths*

Section 71 (2) (da) of the *Airports Act* requires a Master Plan to include “flight paths (in accordance with regulations, if any, made for the purpose of this paragraph) at the airport”. There appear to be no relevant regulations. Section 91 (1) (ea) of the Act requires a Major Development Plan to set out “if the development could affect flight paths at the airport – the effect that development would be likely to have on those flight paths”.

The lack of clear requirements on what should be included in a Master Plan or Major Development Plan regarding the impact of flight paths leaves it open to the airport operator to provide more or

---

<sup>9</sup> Attachment to Guideline A, page 4.

<sup>10</sup> Ibid page 5-6.

<sup>11</sup> Bureau of Infrastructure and Transport Research Economics (BITRE), [Airport traffic data](#), released 7/12/2022.

less detail. Minimum requirements should include expanded noise-above contour maps for 10dB(A) intervals between 40dB(A) and 80dB(A). This will enable both more informed community contributions to consultation activities and greater transparency of noise impacts that may be experienced, beyond those communities in close proximity to an airport.

### *Flight path approval*

Flight paths in Master Plans and Major Development Plans may be more or less developed, and subject to varying degrees of community engagement and input. Flight paths in initial Plans may be subject to further development and review if the Plans are referred under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* to the Minister for the Environment, who requires an environmental impact statement. During this sometimes lengthy process, flight plans may be remodelled. The role of Airservices is to approve the technical viability of the proposed flight paths. Given Airservices' growing capacity in community engagement and its ability to work jointly with airport operators in this area, it should also be able to advise on the adequacy of community engagement. Section 81 of the *Airports Act* requires the Minister, in deciding whether to approve a plan, to take into account (3) (c) consultations undertaken in preparing the plan and (d) the views of CASA and Airservices "in so far as they relate to the safety aspects and operational aspects of the plan." Airservices should also be able to advise the Minister on the adequacy of community engagement in the development of the flight paths in the plan as well as the purely operational aspects.

### *Public Consultation/Community engagement*

The *Airports Act* sets out the current requirements for public consultation.<sup>12</sup> The plan must be available for public viewing and 60 business days allowed for public comment and submissions. If members of the public have made any comments, the airport lessee must provide copies; a list of those persons; a summary of their comments and demonstrate that the lessee "has had due regard to those comments" in preparing the draft plan. The *EPBC Act*, requires a Commonwealth agency or employee to consider the advice of the Minister for the Environment with regard to a plan for airspace management likely to have a significant impact on the environment and the adoption of a Major Development Plan under the *Airports Act*.<sup>13</sup> In the event the Minister requires an environmental impact statement, the period for public comment must not be less than 20 business days.<sup>14</sup>

These are essentially passive methods of public exposure and fail to actively engage the communities likely to be affected. The International Association for Public Participation (IAP2) provides a framework for best practice in community engagement, the Public Participation Spectrum (the Spectrum).<sup>15</sup> The IAP2 Spectrum for increased public impact on the decision is to inform, consult, involve, collaborate and empower. Although the final stage, placing the decision in the hands of the public, must be subordinate to overriding safety issues, the spectrum provides a useful model for assessing community engagement in the design of flight paths.

---

<sup>12</sup> Sections 79, 80 for MPs and 92,93 for MDPs.

<sup>13</sup> *EPBC Act*, Sections 160 (2) (b) and (c) respectively.

<sup>14</sup> *EPBC Act*, section 103(3).

<sup>15</sup> IAP2 International, [Public Participation Spectrum](#).

The massive amounts of often highly technical information in Master Plans and Major Development Plans covering numerous aspects of airport development besides aircraft noise impact are extremely difficult for average members of the public to assess. Relevant and accurate information should be targeted to those likely to be affected and sufficient opportunity afforded to them to have meaningful input. Airports themselves understand this and recent large projects have involved extensive community engagement exercises outside the statutory requirements. The ANO's experience, however, is that airports tend to emphasise the benefits of airport development at the expense of accurate and detailed information about adverse impacts. Airservices is developing a community engagement approach informed by the IAP2 spectrum and is in a position to work jointly with airports' efforts to engage the impacted community and to inform relevant approving authorities of the adequacy of the community engagement undertaken.

### *Non-Commonwealth leased airports*

These airports are not subject to the Commonwealth *Airports Act*, although larger airports with significant air traffic tend to follow a similar course in their planning and development. While there are no requirements for community engagement in the planning of flight paths, unless an environmental impact statement is required under the *EPBC Act*, the flight paths proposed are subject to review by Airservices and approval by CASA. The capacity of Airservices to advise on the adequacy of community engagement could form part of its review of proposed flight paths, and further engagement could be required when appropriate before Airservices endorses proposed flight paths.

### **Notice to prospective residents**

A prominent aspect of the complaints about Brisbane's new runway were from residents who bought in areas previously unaffected by aircraft noise complaining that they received no notice of the future impact when they bought their residence. The land use provisions regarding Commonwealth leased airports are set out above. With respect to non-Commonwealth airports, the National Airports Safeguarding Framework has been formulated by the National Airports Safeguarding Advisory Group (NASAG) consisting of Commonwealth, state and local governments.

Guideline A, developed under the framework, deals with the planning of land use around airports and states that "Commonwealth, State, Territory, Local Governments and airport operators should support effective disclosure of aircraft noise to prospective residents. This should be considered as broadly as possible but required where ultimate capacity noise modelling for the airport indicates either:

- the area is within the 20 ANEF;
- 20 or more daily events greater than 70 dB(A);
- 50 or more daily events of greater than 65 dB(A);
- 100 events or more daily events of greater than 60 dB(A); or
- 6 or more events of greater than 60 dB(A) between the hours of 11pm and 6 am. It additionally recommends consideration of restrictions on development based on volume of noise measured in decibels and frequency of flight per day."<sup>16</sup>

---

<sup>16</sup> National Airports Safeguarding Framework, Guideline A, page 5.

A search of Brisbane City Council's online planning tool<sup>17</sup> revealed inclusion of the ANEF contours for Brisbane and Archerfield airports, but no information on the noise above contours. Queensland state planning instruments<sup>18</sup> similarly do not appear to include noise above contours. In New South Wales, planning regulations deal specifically with the Western Sydney Aerotropolis<sup>19</sup> while local councils near airports may include restrictions in their Local Environmental Plans<sup>20</sup> which should then be advised to prospective purchasers in affected areas through planning certificates. In Victoria, the Department of Transport and Planning website provides information consistent with the NASAG guideline.<sup>21</sup> For the impact on specific areas, however, it simply provides a link to the relevant airport Master Plan and advises it "will work with airport operators to provide further airport spatial data...when available."

Given the variations apparent above, it may be appropriate for NASAG to conduct an audit of compliance with its Guideline A including accessibility of relevant information.

### **Compensation and buy outs**

The United States Federal Aviation Administration provides for approved airports to levy a charge on each passenger using an airport to fund sound insulation treatment for premises and the acquisition of land around the airport.<sup>22</sup>

Internationally, in accord with ICAO Annex 16, Volume 1 certification requirements, aircraft noise levels are tested and certified to the applicable standard. In Europe, levies are charged on noisier aircraft encouraging airlines to adopt newer, quieter aircraft models. The funds gathered by the levy support noise amelioration programs for impacted communities. In the United Kingdom alone, some form of a noise-based charge is in place at Heathrow, Gatwick, Manchester, Stansted, Birmingham and East Midlands airports.<sup>23</sup> Swedavia which operates 10 airports in Sweden, utilises a Noise Charge to pay for both noise monitoring and noise mitigation activities, including soundproofing and sound barriers.<sup>24</sup>

In Australia, there is existing machinery for compensation for the impacts of aircraft noise at "significant levels" (25 ANEF for public buildings and above 30 for residential properties). A Commonwealth Noise Amelioration Program was developed because of Sydney's third runway opened in the mid-1990s. The compensation included the purchase of 161 residences and a church, being replaced with a park and sound insulation for around 4,200 residences. The program was funded by a levy on aircraft landing at Sydney airport.<sup>25</sup>

---

<sup>17</sup> Brisbane City Council, [Brisbane City Council City Plan online](#), version 25.00.

<sup>18</sup> Queensland Government, [State Planning Policy Interactive Mapping System](#).

<sup>19</sup> *Environment Planning and Assessment Regulation 2021*, Sch 2, section 20.

<sup>20</sup> E.g. Rockdale City Council Local Environment Plan 2012, 6.9.

<sup>21</sup> Department of Transport and Planning (Victoria), [Airport Spatial Information](#).

<sup>22</sup> FAA Advisory Circular 150/5000 – 9B.

<sup>23</sup> UK Civil Aviation Authority, [CAP1119: Environmental charging - Review of impact of noise and NOx landing charges](#), 2013, page 20.

<sup>24</sup> Swedavia, [Airport Charges & Conditions of Services](#), page 13.

<sup>25</sup> *Aircraft Noise Levy Act 1995; Aircraft Noise Levy Collection Act 1995*.

Section 71 (2)(e) of the *Airports Act* requires Master Plans to include the operator’s “plans, developed following consultation with airlines...and local government bodies in the vicinity of the airport, for managing aircraft noise intrusion in areas forecast to be subject to exposure above the significant ANEF levels”.

Where existing properties are impacted by aircraft noise at “significant” levels, it might be expected that plans to manage the noise intrusion would include at least consideration of a noise amelioration program in line with the existing Commonwealth framework. The 2020 Perth Airport Master Plan notes that “there are 38 houses in the Guildford and South Guildford areas that sit within the 30 ANEF contour.”<sup>26</sup> The airport’s plans for managing this are unlikely to make any real difference on the ground and there is no mention of a noise amelioration scheme that involves compensation to residents. Likewise, Melbourne Airport’s Master Plan estimates there will be 33 dwellings and one public building within the 30 ANEF by 2052 and makes no mention of compensation in its plans for managing the impacts of this noise.<sup>27</sup>

Where an airport’s operation places public buildings and residences over the 30 ANEF contour, a Master Plan or Major Development Plan should at least address the issue of compensation for affected residents either through a Commonwealth noise amelioration program or non-government scheme providing similar outcomes.

---

<sup>26</sup> Perth Airport Pty Ltd, [Perth Airport Master Plan 2020](#), page 168, section 7.3.5.

<sup>27</sup> Australia Pacific Airports (Melbourne) Pty Ltd, [Melbourne Airport Master Plan 2022](#), page 305, section 15.7.2.