

**DEPARTMENT OF INFRASTRUCTURE, TRANSPORT, REGIONAL
DEVELOPMENT AND LOCAL GOVERNMENT – SUBMISSION TO THE SENATE
STANDING COMMITTEE INQUIRY INTO AIRSERVICES AUSTRALIA'S
MANAGEMENT OF AIRCRAFT NOISE**

1. Aircraft Noise – An Overview

Airports are essential economic assets that provide cities, towns and regions with great benefits in terms of employment, tourism and economic growth.

However aircraft noise is an inevitable by-product of aviation activity and the residents living in the vicinity of those airports or under busy flight paths are exposed to the ongoing impacts of aircraft noise.

The aircraft noise burden on a particular community or individual is determined by the location of flight paths; the number of overflights; the noise level of each aircraft; and the time of day of the flights. Other factors likely to impact include flight procedures, distribution of flights over different flight paths, runway use and destination of flight. Special attention is also given to the effects of night time aircraft noise when annoyance is likely to be triggered at much lower noise levels.

According to the International Civil Aviation Organization (ICAO), aircraft noise is the most significant cause of adverse community reaction to the operation and expansion of airports.

While modern aircraft have become significantly quieter due to advances in technology, there has been continuing growth in the numbers of aircraft movements and changes in flight paths in Australia to address safety, environmental and efficiency issues.

As a result, while the total noise received at a particular point on the ground near an airport may not have changed, or even may well have reduced, the composition of that noise is very different. The resident living at that particular point today is likely to receive their noise from a higher number of relatively quiet over flights, rather than from a relatively small number of very loud noise events, as was formerly the case.

Further, aircraft noise impacts can be perceived by different people in different ways at the same location. To some people aircraft noise may be barely noticeable, to others the impact ranges from annoyance to directly affecting their health.

The issue of concern for many people living in the areas outside the conventional high noise contours is not so much the level of noise generated by individual aircraft, but rather the cumulative impact of a large number of over flights. They perceive that the times when there are no over flights, the periods of 'respite', are rapidly disappearing and that noise events are becoming more frequent in the sensitive time periods such as evenings and weekends.

This change in the nature of the noise pattern would appear to be a significant factor in the widening geographic range of community reaction to aircraft noise and creates challenges for what represents appropriate consultation on noise management issues.

2. *Responsibility for Aircraft Noise Management*

Aircraft noise management and efforts to minimise the impact of aircraft noise on the community is a shared responsibility between many stakeholders including:

- aircraft manufacturers: responsible for reducing noise generated by the aircraft;
- airline and aircraft operators: responsible for using noise compliant aircraft; implementing noise abatement principles for flight operations; and contributing to noise reduction initiatives;
- air traffic service providers (e.g. Airservices Australia): responsible for flight track, noise sharing and air traffic management as well as noise monitoring and complaint reporting;
- airport operators: responsible for community engagement; development of noise management plans; working with local planning authorities; and using their scope of influence to participate in noise reduction programs and noise monitoring; and
- state/regional authorities and land planners: required to work in partnership with airports to ensure zoning is consistent with noise exposure information; introducing appropriate land use development around airports; and preventing incompatible development.

The Government also has an important role to play in policy formulation, regulatory oversight (e.g. curfews and slot management) and program management for aircraft noise.

Local communities and individuals living in the vicinity of airports and flight paths can also improve their understanding of aircraft noise issues through ensuring they are well informed of existing and potential future aircraft noise exposure; and contributing effectively to the policy and operational proposals on the management of aircraft noise.

While Airservices Australia (Airservices) has an important role to play in aircraft noise management, it is important to recognise that a range of operational factors can affect the level of noise management obtainable at any particular location. The paramount operational factor is ensuring safe aircraft operations. The impact of prevailing and changing weather conditions will also impact on available operational practices and flight path use.

3. *Land Use Planning Around Airports*

In Australia the conventional approach to providing information on aircraft noise has been to publish Australian Noise Exposure Forecast (ANEF) contours which indicate on a map the amount of total noise energy received at locations on the ground near airports on an annual average day. The ANEF system, and the associated acoustic building standard AS2021, was established in the early 1980s to provide guidance and direction to regional and local authorities on the siting and construction of new buildings against aircraft noise intrusion.

The ANEF system is used in a number of jurisdictions in Australia for guiding planning decisions in areas exposed to aircraft noise, and is based on similar systems used in the USA and other countries. The system involves a calculation of the forecast average daily noise taken over a year based on a forecast mix of traffic. It shows an estimate of the total noise load for an average annual day and movements which take place between 7pm and 7am are treated with a four times multiplier to reflect the additional sensitivity of noise at night.

4. *Australian Government Policy – Minimising the impact of Aircraft Noise*

The National Aviation Policy White Paper, released on 16 December 2009, sets out the Australian Government's policy goal in terms of noise management - that the recognition of the economic importance of airports needs to be balanced with better management of the impact of aircraft noise in the vicinity of airports and near flight paths.

The Government remains strongly committed to ensuring the impacts of airports and aircraft noise are minimised and to finding balanced and practical solutions to limit those impacts on communities. For example, in considering the construction of the Runway End Safety Area at Sydney Airport, the Government took strong steps to ensure the noise impacts would be minimised to the extent possible and managed in a way that would maintain noise sharing for Sydney residents to the greatest possible extent.

In the Aviation White Paper the Government outlined a number of key initiatives to further enhance aircraft noise management including:

- developing an effective national land use planning regime, in cooperation with the States and Territories, to ensure future airport operations and their economic viability are not constrained by incompatible development and to protect future communities from undue aircraft noise exposure;
- regulating to restrict the operation of marginally compliant (ICAO) Chapter 3 aircraft on an airport by airport basis where they contribute to unacceptable levels of noise;
- maintaining existing curfews at Sydney, Coolangatta (Gold Coast) and Adelaide Airports;
- monitoring the future impact of aircraft noise at Brisbane Airport where significant new development and activity is planned;
- establishing within Airservices Australia an Aircraft Noise Ombudsman to independently review noise complaint handling procedures and improve Airservices' consultation arrangements and the presentation and distribution of aircraft noise related information to the general public;
- ensuring ready access for stakeholders to easily understood aircraft noise information; including through the development of an interactive web based application for non-experts to access aircraft noise information using the Transparent Noise Information Package (TNIP); and
- developing a framework for an industry funded noise amelioration program where future major civil airport operations and air traffic changes place residences into high noise exposure zones.

The Australian Government is also committed to improving the current system for assessing and managing aircraft noise and will:

- retain the current Australian Noise Exposure Forecast (ANEF) system in airport master plans as a land use planning tool around leased federal airports;
- work to have all jurisdictions reflect the ANEF system in local planning regimes while improving the technical processes and independence associated with assessment and scrutiny of ANEFs;
- work to improve planning controls for land use around airports to supplement the ANEF system with additional tools such as flight path location and activity diagrams and single event contours based on decibels to assist planners and the public to better understand and take account of aircraft noise exposure patterns; and

- work closely with state and territory planning agencies to prevent noise sensitive developments including schools and residences, in the vicinity of airports and under flight paths with increased focus on the preservation of existing green field sites and scrutiny of rezoning proposals for industrial and rural lands impacted by aircraft noise.

The Aviation White Paper identifies the need for more effective engagement with communities and industry on the impact of aircraft noise on surrounding neighbourhoods. Accordingly the Government has announced it will require airports subject to the planning framework in the *Airports Act 1996* to establish and lead Community Aviation Consultation Groups to address planning and development issues and a range of operational matters, such as aircraft noise, which may affect airports' relations with their neighbours.

5. *Functions of Airservices Australia*

Under the *Air Services Act 1995* (the Act), Airservices' core function is providing services for purposes relating to the safety, regularity or efficiency of air navigation. The two key services provided are air traffic control and aerodrome rescue and fire fighting.

The Act specifies that in exercising its powers and performing its functions, Airservices must regard the safety of air navigation as the most important consideration. Airservices is also required, under Section 8, to carry out activities to protect the environment from the effects of, and the effects associated with, the operation of aircraft whether in or outside Australia.

Section 10 of the Act also requires Airservices in the performance of its functions and the exercise of its powers, where appropriate, to consult with government, commercial, industrial, consumer and other relevant bodies and organisations (including ICAO and bodies representing the aviation industry).

Section 16 of the Act enables the Minister to give written directions to Airservices relating to the performance of its functions or the exercise of its powers.

The Minister for Infrastructure, Transport, Local Government and Regional Development has issued a Statement of Expectations to the Board of Airservices under Section 17 of the Act which requires the organisation to support the Government's environmental initiatives including those in relation to aircraft noise management and the maintenance and appropriate resourcing of the Noise Enquiry Unit.

Airservices performs a number of important environmental functions. These include the operation of a Noise and Flight Path Monitoring System (NFPMS) at Australia's major airports (Brisbane, Cairns, Canberra, Coolangatta, Sydney, Melbourne, Essendon, Adelaide and Perth) to collect noise and flight path data.

The NFPMS is the world's largest, most geographically spread system of its type and collects noise and flight path data 24 hours a day, seven days a week. Specifically, it records the identity, flight path and altitude of each aircraft operating to and from the airport, the noise levels produced by individual aircraft, weather data, and the general background noise.

The information collected is used to:

- determine the contribution of aircraft to overall noise exposure;
- detect occurrences of excessive noise levels from aircraft operations;

- assess the effects of operational and administrative procedures for noise control and compliance with these procedures;
- assist in planning of airspace usage;
- validate noise forecasts and forecasting techniques;
- assist relevant authorities in land use planning for developments on areas in the vicinity of an airport; and
- generate reports and provide responses to questions from the Government, industry organisations, community groups and individuals.

Airservices also operates a Noise Enquiry Unit which provides information to the public and summary reports or information to relevant airports, airlines and authorities as appropriate.

The WebTrak initiative, a flight monitoring service available online to the public, has also been a major step forward in improving the presentation of aircraft noise information to the general public and the Government sees potential for further improvements in this area.

Airservices' role in monitoring and distributing information about aircraft noise and dealing with community concerns is important and the Government has decided to strengthen this role and the processes that support it.

In the Aviation White Paper the Government has outlined that Airservices will establish an Aircraft Noise Ombudsman within the organisation to oversee the handling of aircraft noise enquiries and complaints, conduct independent review of noise complaints handling and make recommendations for improvements where necessary.

The Aircraft Noise Ombudsman will also monitor Airservices' consultation arrangements and presentation of noise information with a view of continuing to improve the flow of information to the affected communities.

The Department will be providing advice to the Government on the establishment of this function including consideration of a new Statement of Expectations, under section 17 of the Act, to the Airservices Board to reflect these new requirements of Airservices.

6. Conclusion

The Department supports the steps being taken by Airservices to further improve their consultation arrangements with community and industry stakeholders. The WebTrak initiative is an excellent example of where Airservices has already improved the presentation of aircraft noise information to the community.

Airservices has a range of existing public reporting arrangements on its performance, including on environmental (such as noise) issues, including its annual report, corporate plan and quarterly industry reports as well as its participation on airport committees and forums such as the Sydney Airport Community Forum.

The Aviation White Paper also identifies a number of Government initiatives that will further improve aircraft noise management in Australia. In particular, the implementation of these initiatives will provide for more effective engagement with community and industry, increased accountability and the continuation of effective noise sharing arrangements.