Our Commitment to Aircraft Noise Management

airservices

We are committed to transparent and proactive aircraft noise management, international benchmarking and collaboration across industry to minimise as far as practicable the impact of aircraft noise.

This document outlines our commitment and approach to managing aircraft noise now and in the future.

About Airservices

We are our nation's air traffic management and aviation rescue fire fighting service provider operating at 29 of Australia's major airports and managing 11 per cent of the world's airspace, including the upper airspace for Nauru and the Solomon Islands.

We connect people with their world safely through our world-class services - linking family and friends, generating economic activity, creating jobs, and facilitating trade and tourism.

As our skies get busier and more complex, we will ensure we make aviation safer, more efficient and cleaner.

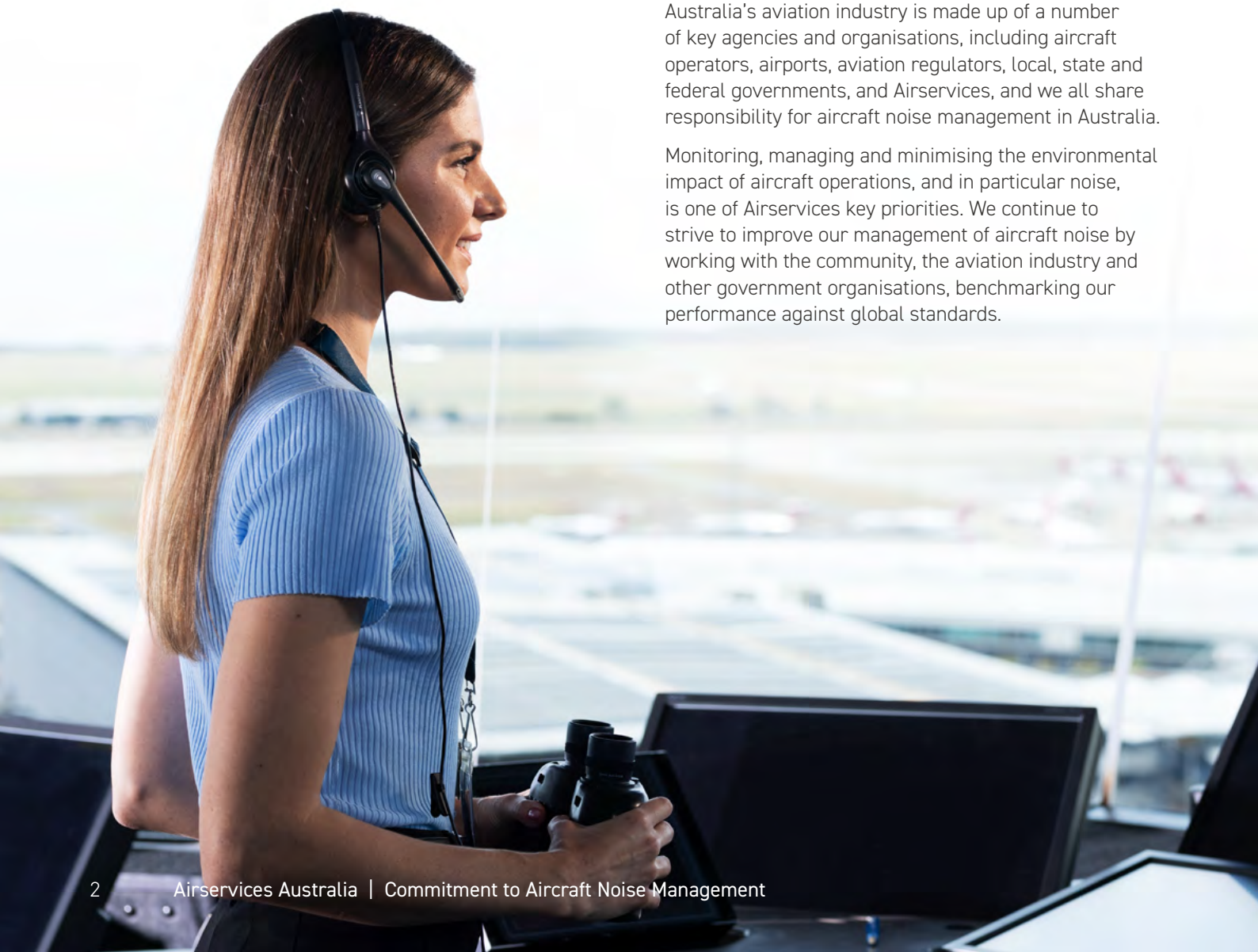
Overview

As Australia's air navigation service provider, Airservices Australia (Airservices) strives to achieve safe, efficient, equitable and transparent management of Australia's airspace and the aircraft noise impacts that result from aircraft operations. Our industry partners and regulators also have a critical role to play in managing and minimising aircraft noise impacts. This is why our commitment to aircraft noise management extends to benchmarking and challenging our performance, as well as encouraging world's best practice across the Australian aviation industry.

Airservices collaborates with industry partners and seek to continuously improve practices in line with the International Civil Aviation Organization's (ICAO) Balanced Approach to Aircraft Noise Management.

Australia's aviation industry is made up of a number of key agencies and organisations, including aircraft operators, airports, aviation regulators, local, state and federal governments, and Airservices, and we all share responsibility for aircraft noise management in Australia.

Monitoring, managing and minimising the environmental impact of aircraft operations, and in particular noise, is one of Airservices key priorities. We continue to strive to improve our management of aircraft noise by working with the community, the aviation industry and other government organisations, benchmarking our performance against global standards.



Roles and Responsibilities

AIRSERVICES

Airservices is a government-owned Air Navigation Service Provider (ANSP) responsible for providing safe, secure, efficient, and environmentally sustainable services to the aviation industry. We provide a range of world-class services that allow safe and equitable access to our skies for airspace users.

AIRPORT OPERATORS

Airport operators are the decision-makers for all on-airport activities, including developing infrastructure to support aircraft operations, such as new runways, and safeguarding aviation operations. Airport operators may also develop noise management plans, limit aircraft movements, encourage quieter fleets, prepare long-term forecasting of aircraft noise around the airport, such as the Australian Noise Exposure Forecast (ANEF), and manage local community engagement.

AIRCRAFT OPERATORS

Aircraft operators are responsible for what is referred to as "noise at source". They make decisions about what type of aircraft they operate, what engines they equip aircraft with, and which airports they fly those aircraft to. Aircraft operators can also modify aircraft to reduce noise impacts and invest in newer fleets. All of these factors can impact the noise experienced on the ground.

CIVIL AVIATION SAFETY AUTHORITY (CASA)

CASA is a government body that regulates Australian aviation safety. It sets rules that pilots, aircraft operators, air traffic controllers and airports must comply with. CASA validates the instrument flight procedures Airservices produces and is the ultimate approver of Airspace Change Proposals.

DEPARTMENT OF INFRASTRUCTURE, TRANSPORT, REGIONAL DEVELOPMENT AND COMMUNICATIONS

The Department of Infrastructure, Transport, Regional Development and Communications (DITRDC) is responsible for administering Minister approval of airport infrastructure projects for federally leased airports, generally submitted through a Major Development Plan (MDP) and Environmental Impact Statement (EIS), and for providing policy advice to the Minister on the efficient management of Australian airspace and aircraft noise and emissions. The Department can make recommendations to the Government on regulatory measures to manage aircraft noise. This department is also responsible for setting the requirement for federally leased airports to produce an ANEF.

DEPARTMENT OF AGRICULTURE, WATER AND ENVIRONMENT

The Department of Agriculture, Water and Environment (DAWE) administers the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and is involved in assessing any proposed changes to aircraft operations that trigger "significance" under this Act. The Commonwealth Minister for Environment provides advice on these changes.

Our Commitment to Aircraft Noise Management

Airservices purpose is to connect people with their world safely. We are committed to transparent and proactive aircraft noise management, international benchmarking and collaboration across industry to minimise as far as practicable the impact of aircraft noise.

We recognise that aircraft noise is an inevitable by-product of aircraft operations and can be the cause of adverse community reaction to aviation operations. While it is not possible to guarantee any suburb, group or individual will be exempt from aircraft noise, we are committed to world's best practice aircraft noise management processes and practice, to respectfully managing noise complaints, and to providing transparent information to communities.

We aim to minimise the impact of aircraft operations on the community where practicable. This includes designing flight paths to avoid overflying residential areas, where possible, and consulting with the community and aviation industry on proposed flight path and airspace changes to achieve the best outcome, balancing the needs of all stakeholders.

We also work with the aviation industry toward smarter operating solutions, for the benefit of everyone. Only by monitoring and bringing together the contributions of all aviation users can we achieve our ambition to reach world's best practice in aircraft noise management.

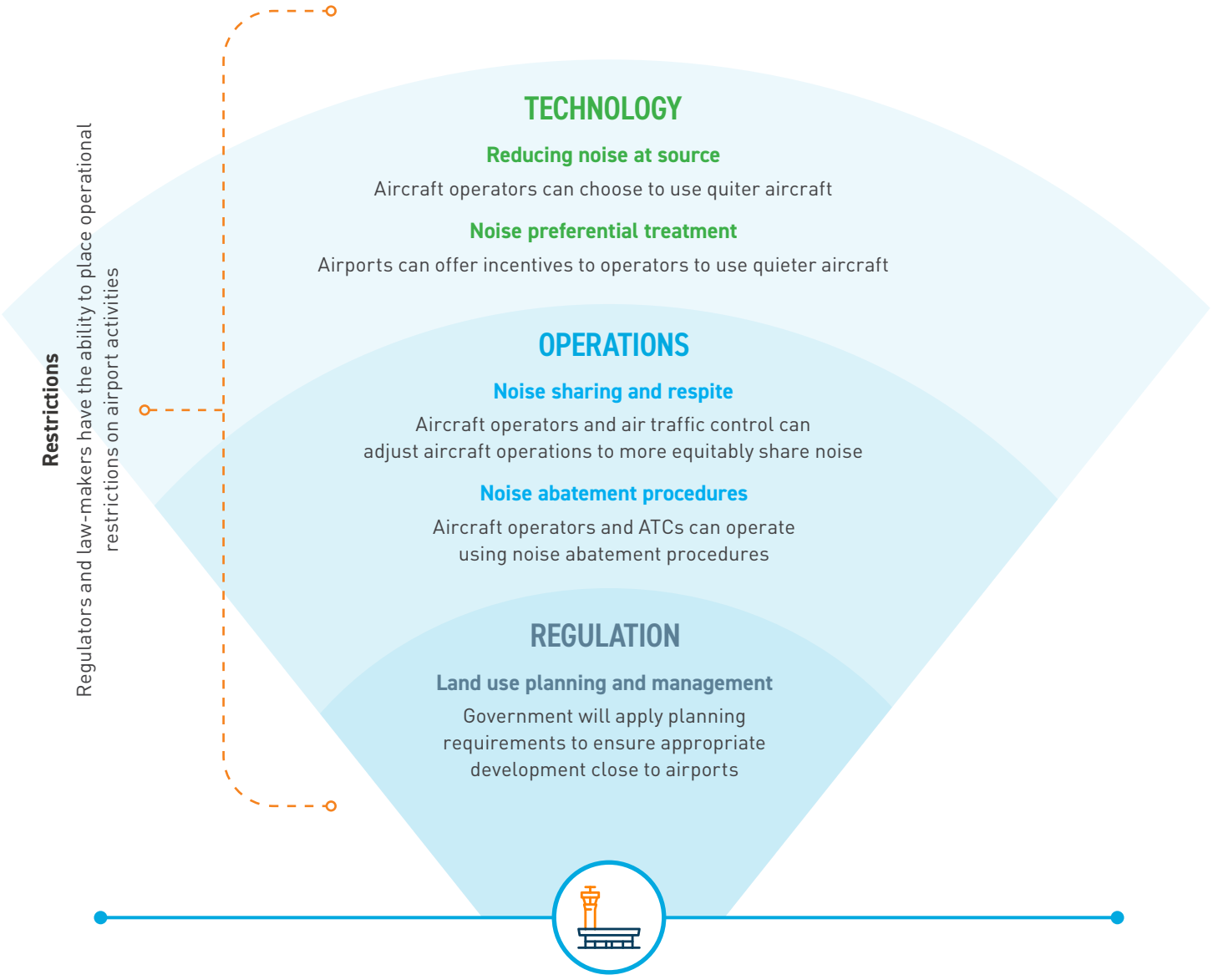
We recognise the value of engagement and dialogue with the community on flight path design, airspace changes, current operations and aircraft noise. We are committed to a rigorous process to ensure the delivery of meaningful community engagement and consideration of improvements to noise outcomes where safe and feasible.

Information on how we work with the community and manage aircraft noise is available on our website: airservicesaustralia.com/community/environment/aircraft-noise/. This includes the Airservices Community Engagement Framework, which provides our commitment and approach to engaging the community on our flight path changes, and our Flight Path Design Principles, which guide Airservices design, development and decision-making regarding flight paths and their implementation.

Aircraft Noise Management

The management of aircraft noise is multifaceted. There are many different stakeholders in the process including air navigation service providers (e.g. Airservices), airports, airlines, regulators, and aircraft manufacturers. All these stakeholders play a critical role in managing aircraft noise using their different levers.

The diagram below outlines the different aspects of aircraft noise management, the stakeholders that have jurisdiction over these aspects, and some examples of levers that can be used to manage aircraft noise.



New Flight Paths

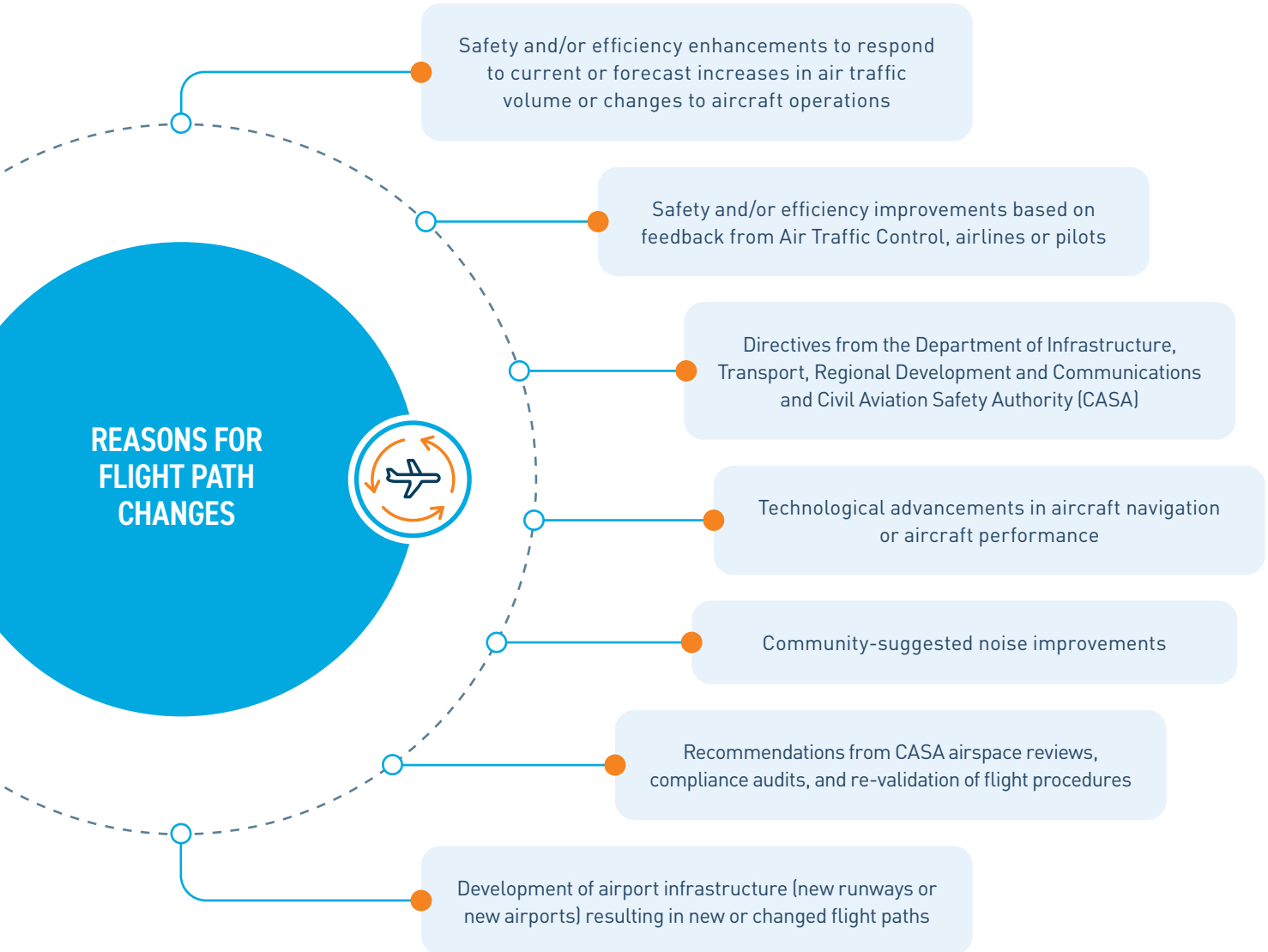
The development of a new runway at an existing airport is approved through a Major Development Plan (MDP) or Environmental Impact Statement (EIS) prepared by the airport, approved by the relevant Minister and subject to legislated community consultation requirements.

The MDP includes details of the proposed runway orientation, which is the biggest factor in determining flight path location close to an airport, as well as concept flight paths showing the proposed location of the new flight paths. These concept flight paths can be developed by the airport and reviewed by Airservices for compliance with the required standards, or Airservices can work with the airport to develop these concepts based on the runway orientation. The MDP or EIS defines the forecast noise and other impacts of the airport's proposal, based on these concept flight paths.

Once this MDP or EIS is approved by government, Airservices is required to develop the final flight paths and associated airspace systems that support the approved plan, adhering as closely as possible to the approved concept.

Flight Path Changes

Changes to existing flight paths or the introduction of new flight paths can result in changes to the community experience of aircraft noise. As the aviation industry grows to the level of service expected in a modern society, change to airport operations and the flight paths that safely service them are inevitable. We make changes to flight paths, where safe and feasible, for a variety of reasons, including:

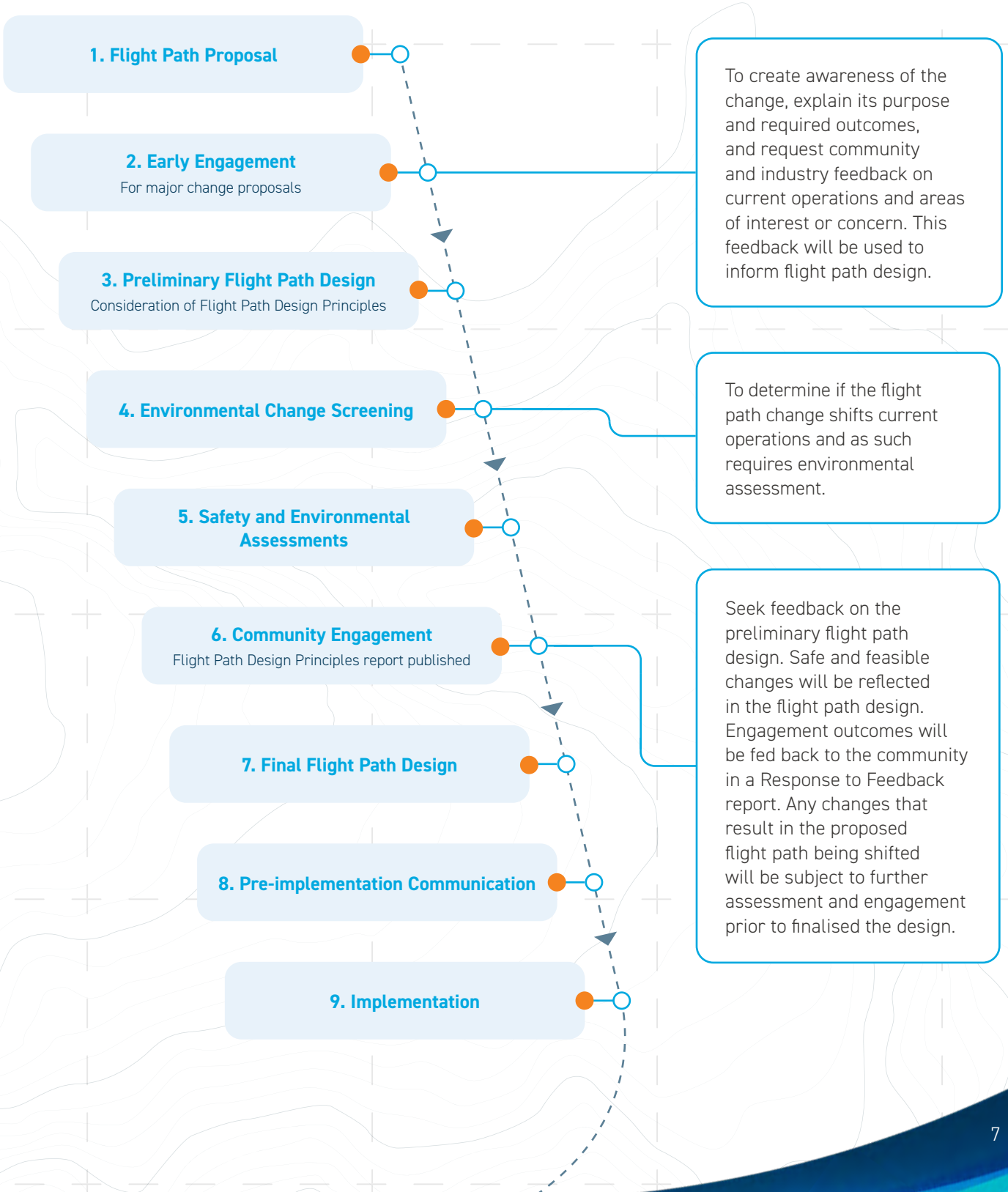


Flight Path Change Process

The flight path change process involves several steps that aim to deliver a safe and compliant airspace design, that strikes a balance between industry efficiency/emissions, community noise impact and operational/network performance, by applying our Flight Path Design Principles.

It is recognised that safety of air navigation will always be the most important consideration. Flight path designs must comply with Australian and International design standards, and cater for the range of aircraft that will operate on the flight paths. These standards can constrain our ability to design flight paths that avoid communities, particularly those close to an airport.

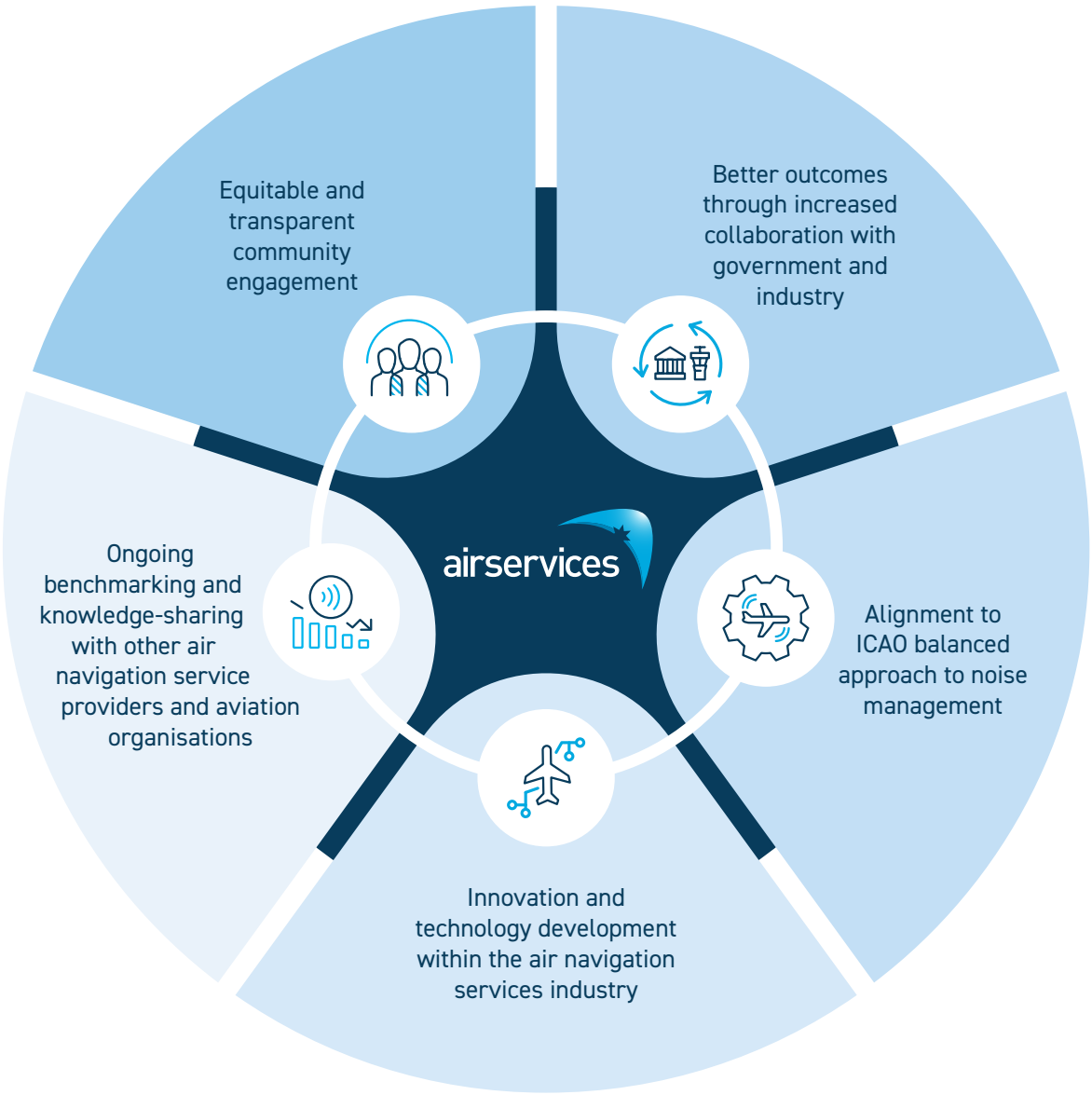
The diagram below presents the key steps in our flight path change process.



Our Approach

To deliver on our commitment to aircraft noise management, we have identified five key areas of focus. The work we undertake in these areas will lead to opportunities for innovation and improvements in the management of aircraft noise and its impact on communities.

Aircraft Noise Management Focus Areas



Underpinning our approach across all five areas is our *Environmental Sustainability Strategy 2021-2026* which includes Aircraft Noise as a strategic pillar. The key elements of focus are:

- Improved balancing of competing flight path design constraints – "environment by design" approach to planning, development and implementation of new and revised flight paths
- Expansion of flight path monitoring data – improved technology to monitor and report on flight path compliance
- Continuous descent operations – through our OneSKY program
- Unmanned Traffic Management: Flight Information Management System – consideration of environmental protection as we support access to lower level airspace.

Equitable and Transparent Community Engagement

We value equitable and transparent engagement with communities and have developed a Community Engagement Framework to guide our approach to engagement. Using this process, we aim to:

- provide clear, timely and accessible information to the community on current aircraft noise, future aircraft noise and aircraft operations
- engage openly and constructively with the community, and consult in a timely manner on aircraft noise and changes to air traffic management
- actively investigate changes which might deliver improved noise outcomes if deemed safe and feasible
- ensure transparency in our processes and decisions, by:
  - ensuring decisions are made against clear criteria supported by the best possible data
  - ensuring consideration of the views of all stakeholders including regulators, industry and community
  - communicating outcomes including the options, outcomes and basis for decision
  - making relevant information available as part of our consultation with the community
- inform the community in a timely manner of upcoming changes, ongoing activity and implementation of emerging technologies that may affect aircraft noise
- participate in Community Aviation Consultation Groups (CACGs)
- respond to complaints and enquiries about aircraft noise respectfully, with the aim to resolve the matter in a timely manner.

Better Outcomes Through Increased Collaboration with Government and Industry

Collaboration on aircraft noise across the aviation industry provides an opportunity to develop holistic approaches to improve noise outcomes. To facilitate a collaborative approach with aviation industry stakeholders , we will:

- actively connect and collaborate with stakeholders with the aim of achieving the best possible balance of community, industry and environmental needs
- engage with relevant government departments and agencies about airspace changes
- seek out and involve industry stakeholders and experts when making decisions about specific changes, particularly where we are seeking to balance industry efficiency with noise outcomes
- engage with CASA on changes that might improve noise outcomes, which do not compromise safety
- consult with airport operators, airlines and the community on any changes to Noise Abatement Procedures
- support the provision of relevant information to State and Local government authorities that have land use planning responsibilities, to enable the disclosure of noise exposure information to communities in close proximity to airports
- support the development of Australian Noise Exposure Forecasts (ANEFs), as a land use planning tool to ensure that incompatible developments are not built close to airports
- use industry forums and frameworks to support stakeholder consultation and engagement on aircraft noise
- actively respond to industry requests for information and operational improvements.

Alignment to ICAO Balanced Approach to Noise Management

The International Civil Aviation Organization (ICAO) developed the Balanced Approach to Noise Management to guide aircraft noise management. Since 2001, it has required its member states (including Australia) to adopt this approach. This approach addresses aircraft noise management through four elements:

- reduction of noise at source, for example quieter aircraft and noise standards
- land-use planning and management, for example zoning, easements and building standards
- noise abatement operational procedures, for example preferred flight paths and runways
- operating restrictions on aircraft, for example caps, curfews and quotas, which are regarded as last resorts and only to be used after the other three options above have been exhausted.

Where applicable, we will align our actions and processes to these four elements and proactively work with and assist airlines, airports, government departments and other stakeholders to adopt this approach, noting the fourth element is within the remit of Australia's aviation regulators, not Airservices.

The diagram on the next page shows the different areas of influence that aircraft noise stakeholders have for each of the four elements of the ICAO Balanced Approach.

Innovation and Technology Development Within the Air Navigation Services Industry

In addition to staying informed of technical advancements and global developments in noise management, we will:

- undertake research (and encourage through collaboration with aviation stakeholders), develop and trial the deployment of enhanced and cost-effective procedures, tools, technologies and systems that may result in improved noise outcomes
- actively seek out and implement changes which deliver improved noise outcomes, such as introduction of Required Navigation Procedures (RNP) technology which reduces the spread of noise across communities by providing an extremely high degree of navigational accuracy.

Ongoing Benchmarking and Knowledge-Sharing with Other Air Navigation Service Providers and Aviation Organisations

To measure the success of our processes and actions in managing the impact of aircraft noise, we will:

- benchmark our approach against other air navigation service providers and industry stakeholders internationally
- review our commitment and measures of success on a regular basis
- seek out learning opportunities to ensure that we remain connected with the global aircraft noise management community and take learnings from their experience.

ICAO Balanced Approach – Stakeholders and their influence

REDUCTION OF NOISE AT SOURCE

Aircraft Operators
New technology

Aircraft Manufacturers
Quieter aircraft

Commonwealth Government
Noise standards

LAND-USE PLANNING AND MANAGEMENT

Airports
Australian Noise Exposure Forecast
Airport Master Plan

Commonwealth Government
Airport development approvals
National Airports Safeguarding Framework

State and Local Government
Planning policies
Compatible land use

NOISE ABATEMENT OPERATIONAL PROCEDURES

Airservices
Preferential runway use
Reduced holding
Continuous ascent & descent

Airports
Engine ground running procedures

Aircraft Operators
Performance based navigation
Delayed landing configuration

OPERATING RESTRICTIONS

Airports
Differential pricing
Limiting engine and auxiliary power unit ground running

Commonwealth Government
Movement caps
Curfews

Considerations

We are committed to minimising the impact of aircraft operations on the community in accordance with the *Air Services Act 1995* (the Act), which defines our role and responsibilities, acknowledging the limitations that impact our approach to this important aspect of our work.

1. There are many factors that influence aircraft noise and its management. As an air navigation service provider, Airservices can use tools such as flight path design and noise abatement procedures to minimise the impact of aircraft operations on the community. However, there are other areas of aircraft noise that are outside of our control, including how pilots choose to fly their planes, how airports choose to construct their runways, and how government chooses to approve residential development near airports and regulations around airport operations.
2. Our commitment and approach to aircraft noise management applies to flight paths designed by Airservices. Other organisations, certified by CASA, are able to design flight paths within Australia and they are not obligated to apply our approach.
3. There may be situations where our commitments and approach cannot be applied due to legislative requirements, for example the specific requirements associated with the Long-Term Operating Plan (LTOP) for Sydney (Kingsford Smith) Airport and associated airspace, where our commitment and approach must also ensure all LTOP requirements will be maintained. Our commitment and approach will also not vary the legislated airport curfew acts.

Glossary

Aircraft noise exposure forecasts

Contour maps that forecast the aircraft noise exposure expected to exist in the future based on predictive modelling of airport expansion, aircraft movements and industry growth. They are prepared for all federally leased airports and are used for land use planning purposes.

Aircraft noise standards

The *Air Navigation (Aircraft Noise) Regulations 2018* (Cth) require all aircraft operating in Australian airspace to comply with noise standards and recommended practices introduced under the Convention on Civil Aviation. These standards are set out in the International Civil Aviation Organization (ICAO) document, *Annex 16, Environmental Protection- Volume I.*

Airspace

A defined volume of space in which aircraft operate.

Community Aviation Consultation Groups

These are independent forums where community members and organisations can raise opinions and issues at specific airports. A Community Aviation Consultation Group (CACG) addresses planning and development issues as well as operational matters such as aircraft noise which may affect airport relations with their neighbours. They also provide an opportunity for communication and consultation, although may not be public forums.

Curfew

A curfew is a legislated restriction on aircraft operations during a specified time period. Curfews are currently in place at four Australian airports (Sydney, Adelaide, Gold Coast and Essendon) between 11pm and 6am. The restrictions limit what aircraft can land and take off, and in some cases, the runways that can be used.

Flight paths

The route taken or due to be taken through the air by an aircraft.

Noise Abatement Procedures

Noise Abatement Procedures (NAPs) are designed to reduce the impact of aircraft noise on the community. They include procedures for runway use and flight paths to reduce flights over residential areas, as well as the designation of noise abatement areas. NAPs are implemented by air traffic control, but their use is not mandatory and is subject to weather conditions and aircraft requirements.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