

FLIGHT PATH DESIGN PRINCIPLES CONSIDERATION OF FEEDBACK

Version 1

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Disclaimer: While the information contained in this document has been presented with all due care, Airservices does not represent that the information is free from errors or omission.

1. PURPOSE

This document describes the activities undertaken during the Flight Path Design Principles (Principles) public comment period, summarises the feedback Airservices received, and describes how this feedback has been considered and applied in updating the final Principles document (formerly Application Notes).

2. BACKGROUND

In early 2020, we undertook national consultation on the draft Principles. During this time, thousands of community and industry stakeholders contributed to the national consultation by completing an online survey, participating in workshops or providing submissions.

The feedback we received during the national consultation helped to develop the final Principles and supporting Flight Path Design Principles Application Notes (Application Notes).

On 10 June 2020, we released the Principles, Application Notes and Stakeholder Consultation Outcomes Summary Report on our *Engage Airservices* website for a four week public comment period until 8 July 2020.

3. ENGAGEMENT ACTIVITIES

We released the following documents on the *Engage Airservices* [Flight Path Design Principles project page](#) for public comment on 10 June 2020:

- Flight Path Design Principles (June 2020) one page overview
- Flight Path Design Principles Application Notes (June 2020) document
- Flight Path Design Principles Rationale for Change Table (June 2020)
- Stakeholder Consultation Outcomes Summary Report (May 2020).

On the same day, we sent an e-newsletter to 1,504 community members registered with *Engage Airservices* and 1,001 community members registered with our Noise Complaints and Information Service (NCIS) to notify them that the public comment period had commenced.

On 11 June 2020, we provided correspondence about the public comment period to:

- 23 Airport Community Aviation Consultation Groups (CACGs) - a social media tile was included with the correspondence for any members of a CACG who wished to promote the comment period through their organisation and/or network
- 109 community members and community representatives (including Councils) who had registered to attend community workshops held during the national consultation
- 81 special interest groups who had been invited to attend, or had attended community workshops held during the national consultation
- 106 industry representatives who had been invited to attend, or had attended stakeholder panels held during the national consultation.

4. ENGAGEMENT REACH

During the public comment period, we had 4,083 visitors¹ to the project page.

One hundred and fifty-eight (158) visitors accessed the documents available for download. The top four documents downloaded were:

- Flight Path Design Principles (June 2020) one page overview – 166 downloads
- Flight Path Design Principles Rationale for Change Table (June 2020) – 107 downloads
- Flight Path Design Principles Application Notes (June 2020) document – 64 downloads
- Stakeholder Consultation Outcomes Summary Report (May 2020) – 59 downloads

While many visitors accessed the one page Principles overview, less than half of visitors downloaded the Application Notes document. This was reflected in the feedback and questions received about the Principles.

One hundred and seven visitors (107) also viewed the Frequently Asked Questions (FAQs) and 756 visitors accessed the Newsfeed update ‘Flight Path Design Principles released for public comment’.

A summary of visitors to the project page (between 10 June 2020 and 8 July 2020) is presented in **Figure 1**.

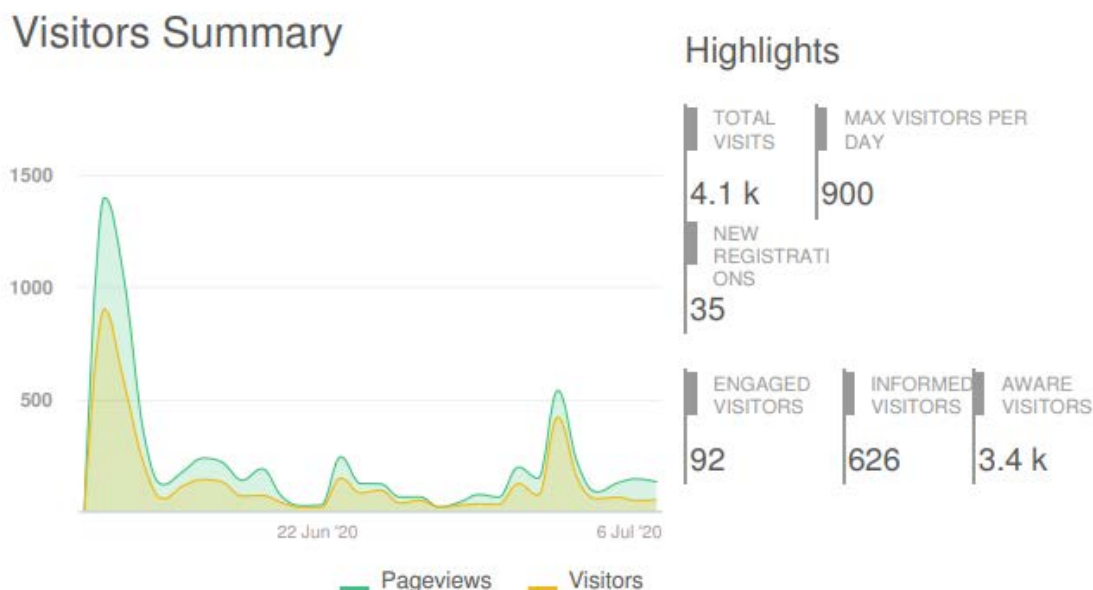


Figure 1: Number of visitors and page views during the public comment period (10 June 2020-8 July 2020 inclusive)

The majority of visitors accessed the project page directly, through links provided in the NCIS mail out and correspondence to community members, special interest groups and industry stakeholders. We recognise that direct correspondence continues to be an important way for us to engage.

A smaller number of visitors accessed the project page URL that was included in the *Engage Airservices* e-newsletter, searched the project directly through search engines, or accessed the URL through social media or through referrals from other websites.

¹ The number of visitors may include people who visited the page on multiple occasions

A summary of visits to the project page by channel (between 10 June 2020 and 8 July 2020) is presented in **Figure 2**.

Visits by Channel

Engage Airservices from 10 Jun'20 to 08 Jul'20

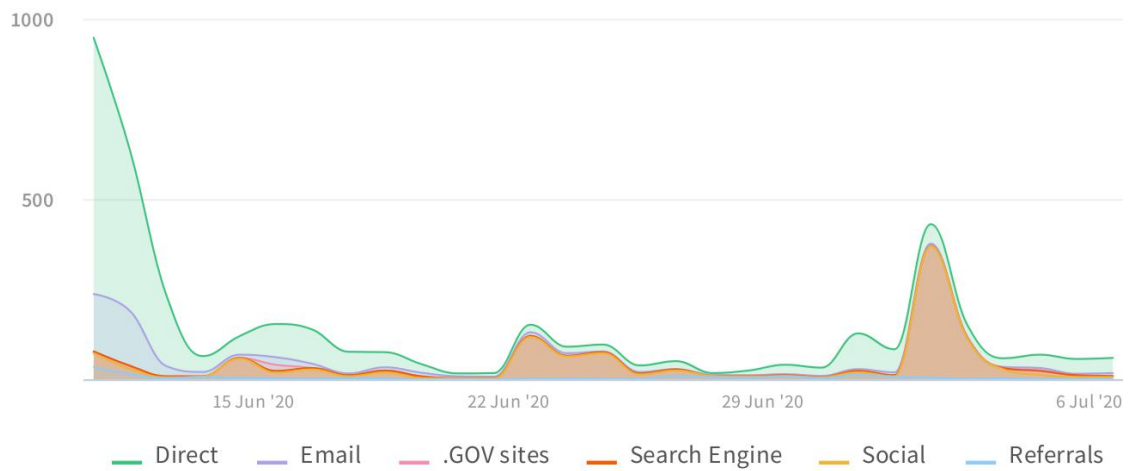


Figure 2: Number of visitors by channel during the public comment period (10 June 2020-8 July 2020 inclusive)

5. SUMMARY OF FEEDBACK

We received 143 comments and submissions during the public comment period. This included 100 comments from 90 users of *Engage Airservices*, and 43 comments by email (including 16 detailed submissions). Two of the email comments were duplicates of comments received through *Engage Airservices* and were removed from further analysis.

We analysed the remaining 141 comments and identified 77 comments that related to the Principles.

Other comments included questions on use of *Engage Airservices*, concerns or questions about location specific aircraft operations, and comments or questions about areas of aviation outside of Airservices role.

We classified comments related to the Principles into three categories:

- Feedback about the engagement and development process
- Questions about application of the Principles
- Suggestions for changes to the Principles and/or Application Notes

5.1. Feedback about the engagement and development process

We received 11 comments with feedback about the draft Principles engagement and consultation process, including the quantitative survey and community workshops, and the final Principles public comment period. We provided individual responses to each stakeholder and directed them to the [FAQs](#). We also added an additional FAQ about the national survey.

5.2. Questions about application of the Principles

We received 18 comments seeking clarification about application of the Principles. We provided individual responses to each question and in most cases were able to direct stakeholders to the [Application Notes](#) or [FAQs](#), which contained the information they were seeking.

5.3. Suggestions for changes to the Principles and/or Application Notes

We received 48 comments with suggestions for changes to the Principles and/or Application Notes. We analysed these suggestions to draw out key themes. The majority of comments contained multiple themes. These key themes are explored in the consideration of feedback below.

6. CONSIDERATION OF FEEDBACK

6.1. Include a specific engagement or consultation Principle

Some stakeholders requested that we add a specific community engagement Principle, or that engagement be referenced throughout the Principles and Application Notes.

“There is no specific flight path design principle that highlights the importance of community engagement in the flight path design process, nor is community engagement mentioned in any of the individual principles. A principle acknowledging the value of the input and feedback of communities and other stakeholders into the flight path design process would go some way towards generating stakeholder trust in the process.”

We are committed to meaningful, contemporary community engagement practices, and this has been strengthened through our Community Engagement Framework (CEF).

The CEF was developed based on stakeholder feedback from previous engagement activity, findings from investigations and reviews by the Aircraft Noise Ombudsman, and following consideration of established ‘best practice’ engagement processes, models and practices.

The Principles, combined with our CEF, provides a rigorous process for the design, development, and associated community engagement, for Airservices changes to flight paths and airspace.

We released the new Airservices CEF in August 2020 and it is available on [Engage Airservices](#) and our [Airservices website](#).

Outcome: Reference to the CEF has been included in the final Principles document (formerly Application Notes).

6.2. Remove the word ‘consider’ from the Principles or include ‘consider’ in all Principles

Some stakeholders questioned whether the use of the term ‘consider’ at the start of the Principles was less directive or prescriptive than the language used in the draft Principles. They reflected that it could convey that Airservices would consider information but not apply the Principles.

“Particularly concerning is that all of the principles that might provide some mitigation to the problems of aircraft operations and noise, even in the compromised form of the final Principles, are now only to be “considered”, whereas principles that reflect the priorities of the industry such as to “Design flight paths that deliver operational efficiency and predictability...” are absolute and not qualified in this way.”

Some stakeholders raised concerns regarding the presentation of the Principles, questioning the relationship between the order and perceived relative weighting of the Principles. This also included concerns that the word ‘consider’ used in a number of Principles meant that these Principles would be given a lower priority than Principles that do not include the word ‘consider’.

“I note that, in addition to the Safety and Compliance Principles, the only principles which do not start with or include the word “consider” are those regarding operations and efficiency. It appears that efficiency comes first, then the effects on people and the environment might be considered. This is simply not good enough and should be changed.”

“Why do efficiency issues outweigh community and noise issues?”

Safety is Airservices most important consideration and all flight path changes must be compliant, therefore the Safety and Compliance Principles must always apply.

All other Principles are not weighted. The use of the word ‘consider’ in most, but not all, of the Principles does not reflect their importance or weighting.

We removed numbering from the final Principles, as there is no relative order of importance.

We will consider all Principles in the flight path change process.

Outcome: The Weighting of Principles section of the final Principles document (formerly Application Notes) has been updated to provide further clarification.

6.3. Reinstate draft Principles

Some stakeholders indicated a preference for some of the earlier draft Principles instead of the final Principles, which had been updated following the national consultation.

“The very important respite principle of non-reciprocal flight paths, which was embodied in the draft Principle 11 has disappeared entirely from the Final Principles, as has draft Principle 9 to treat night time and weekend operations as being more sensitive than those that occur during the daytime or on weekdays. These are critical principles that must be reinstated.”

National consultation on the draft Principles commenced on 14 January 2020 and closed on 9 March 2020. During this time, thousands of stakeholders across community and industry contributed to the draft Principles national consultation, either through the online survey, participating in workshops or by providing submissions.

We developed the final Principles based on the feedback received during the national consultation. The [Flight Path Design Principles Rationale for Change](#) document provides a comparison of the draft and final Principles, and our rationale for change based on stakeholder feedback.

Outcome: No changes have been made.

6.4. Remove reference to ‘high-density’ residential and give greater consideration to lower density, quiet and rural residential areas

Some stakeholders suggested re-wording the following Principle ‘Where high-density residential areas are exposed to noise, consider flight path designs that distribute aircraft operations, so that noise can be shared’.

These stakeholders were concerned that the application of the Principles would prioritise avoidance of high-density population areas over lower density or rural areas, and suggested we remove specific reference to ‘high density’, include all residential areas, and/or mention low density rural areas.

“I think flight paths need to consider avoiding quiet suburbs where there is limited traffic noise, and concentrate on built-up suburbs where there is already substantial traffic noise, where plane noise wouldn’t really make much difference.”

“So places like [location] which are classified as not being high density residential areas, are not included in your design principles for noise?”

“We would not be considered a noise sensitive site based on that list, so I would like to add my feedback that you consider quiet suburbs as a noise sensitive site.”

In considering these comments, we identified that there was opportunity to clarify how residential areas are considered in the application of the Principles.

In the flight path design process we first consider avoiding defined noise sensitive sites, which consists of residential building of *any density* regardless of location (i.e. urban, regional, rural). We also recognise that rural and urban communities may be impacted by aircraft operations differently.

This consideration is captured in the Principle ‘Consider concentrating aircraft operations to avoid defined noise sensitive sites’.

Where we determine that flight paths cannot be designed to avoid residential areas, we then look at ways to distribute aircraft operations so that the noise can be shared, and ways to provide communities with periods of respite from aircraft noise.

We recognise that the term 'high density' has a specific definition in planning and zoning however, this is not our intended application in the Principles. Rather this term is used by Airservices to refer to any 'built up areas', including cities, towns, villages and suburbs.

Outcome: Further information clarifying 'high density' and 'built up areas' has been included in the final Principles document (formerly Application Notes).

6.5. Include a statement that the Principles must be read holistically and more clearly reference the Application Notes

We recognise that our stakeholders are diverse and appreciate information presented in a range of formats and to varying levels of detail. As part of the public comment period, we provided stakeholders with a range of information, which included a one page overview of the Principles, a rationale for change comparison table and the detailed Application Notes.

Some stakeholders suggested that it was not clear that the one page overview must be read with the Application Notes and therefore they thought the Principles could be read or applied without the full context.

"The principles may require a preamble or trailing note that articulates that the principles must be read with a systems-based holistic view."

Many of the comments we received indicated confusion about the relative importance of the Application Notes. The questions also demonstrated that in many cases, stakeholders had not read the Application Notes.

The Principles must be read in conjunction with the detailed Application Notes.

Outcome: For ease of access and to ensure the Principles are read in conjunction with the Application Notes, these documents have been combined into a final Principles document (formerly Application Notes).

6.6. Strengthen statements about application, including reference to relevant legislation

Some stakeholders raised concerns about the application of the Principles in conjunction with other existing legislation. They also requested that we reference specific legislation for some locations.

"The Application Notes should be updated to correctly reference the LTOP Legislative Instrument."

The Principles are nationally applicable to flight paths that are designed and managed by Airservices, and do not vary existing curfew legislation, airspace regulations, or the application of the *Environment Protection and Biodiversity Conservation Act 1999*.

However we recognise the community requests to have specific legislation contained in the document to ensure appropriate consideration of this at all times.

Outcome: The Sydney Airport Long Term Operating Plan (LTOP) and curfew legislation statements in the Overall Considerations section final Principles document (formerly Application Notes), have been updated to provide further clarification, and links to the legislation have been added.

6.7. Include the safety of communities with reference to health and wellbeing

Some stakeholders requested that we include the safety and/or health and wellbeing of communities in the Principles.

“Greater consideration about the impact of aircraft noise, and specifically the potential health impacts of aircraft noise on residents beneath flight paths, particularly night time movements.”

“A major concern is the approach by Airservices to “Safety of air navigation must be the most important consideration”. This implies a basic neglect of all other rights of those not in flight. People living close to an airport should be equally protected by Airservices from the negative effects of flying aircraft overhead. Residents of [location] should not be put in harm’s way 24/7/52 from danger caused by those passing overhead in aircraft.”

The safety of communities living near airports are addressed through a number of Commonwealth, State and Territory legislative and regulatory provisions. States and Territories generally work with Local Governments on implementation of planning and urban development. State and Territory Governments are able to control development around airports through legislation or policy (e.g. through managing noise impacts, building height controls or environmental regulations). More information is available through the Australian Government *Principles for a National Airports Safeguarding Framework*.

Airservices must consider the safety of air navigation as our most important consideration. We contribute to the safety of the community and aircraft passengers by designing flight paths that are safe and comply with international and domestic regulations and standards.

Australia is a member of the International Civil Aviation Organization (ICAO), a specialised United Nations agency, which provides standards and guidance for safety, security, air navigation and facilitation, and environmental protection.

The ICAO Committee for Aviation Environmental Protection (CAEP) assists in formulating new Standards and Recommended Practices (SARPs) related to aircraft noise and emissions, and the management of aviation environmental impact.

The CAEP monitors emerging scientific studies in relation to the health impacts of aircraft noise, including the World Health Organization (WHO) recommendations on aircraft noise exposure levels and their impact on health and wellbeing. CAEP is yet to accept the WHO recommendations or provide formal guidance on further mitigations on human health impacts.

Australia continues to work with ICAO, as a member State, and will work to adopt any formal recommendations when they are released.

Outcome: No changes have been made.

6.8. Provide details of how Airservices will report on how the Principles have been considered and applied

Some stakeholders requested that we include additional detail of how we will report on application of the Principles to flight path changes.

“Airservices’ commitment to ‘transparency and accountability by reporting on how the Principles have been considered and applied, and if they have not been applied, the reasons for this’ is welcome... [Our organisation] supports transparency in decision-making and looks forward to further information about the form, method and timing of the proposed reporting in future.”

For each new flight path or airspace change we will report on how the Principles have been considered and applied, and if they have not been applied, the reasons for this. The format of this report may vary based on the scale and breadth of the change.

Reports will be provided on the relevant project page on *Engage Airservices* at the commencement of our engagement.

Outcome: The Reporting section of the final Principles document (formerly Application Notes) has been updated to provide further clarification.

6.9. Include enforcement measures, specific KPIs and/or measurements

Some stakeholders requested we include ‘enforcement measures’, specific Key Performance Indicators (KPIs) and/or measurements for each Principle.

“The principles are good but it must also be enforceable on both public and private air operations. If the approach is assumed to be non consequential to operators, no one will take them more seriously.”

The Principles are not a legislative instrument and are not subject to enforcement measures.

They are part of Airservices flight path change management framework, and consistently guide our design and development of new flight paths. They are also nationally applicable and apply to flight path changes of varied scale and breadth. Therefore, specific KPIs or measurements are not suitable.

The final Principles document (formerly Application Notes) describe how we consider, apply and monitor the Principles, and any legislation that applies. We will report on how the Principles have been considered and applied, and if they have not been applied, the reasons for this.

Outcome: The Reporting section of the final Principles document (formerly Application Notes) has been updated to provide further clarification.

6.10. Consider location specific information in the Principles

Some stakeholders requested we include location specific information in the Principles, for example reference to a local area of cultural or heritage value.

“Plans definitely need to bear in mind the very significant changes in population density happening in [location]. The massive development at [location], and huge proposed development at [location], will totally change the balance of population in that area.”

“The air corridor around [location] and [location] should be off limits to all aircraft except those deemed necessary to perform search/rescue functions etc. It’s an area of natural beauty.”

The Principles are nationally applicable and therefore do not reference specific location information.

In applying the Principles for a specific flight path change, we will consider location specific information, and identify areas of social, economic, cultural and heritage value, and report on how we have considered these locations in our application of the Principles.

The following Noise and Community principle refers:

‘Consider potential impacts on social, economic and cultural values of communities and locations, including Indigenous and other heritage places’.

We undertake separate engagement on location specific flight path changes, in accordance with our Community Engagement Framework (CEF).

The CEF is available on [Engage Airservices](#) and [Airservices website](#).

Outcome: No changes have been made.

6.11. Expand defined noise sensitive sites to include additional sites or remove listed sites

Some stakeholders requested our definition of ‘noise sensitive sites’ be expanded to include noise sensitive businesses, public recreational areas, and reference to rural residential areas. Other stakeholders requested removal of some listed sites.

“The list of noise sensitive sites... could reflect the ASA 1995 obligation referred to in the first sentence of the overview “an obligation to provide environmentally responsible services by minimising impact of aircraft operations, including the impact of aircraft noise” better by adding the following to the list of sites: Public recreational places.”

The list of noise sensitive sites that we use is defined in the *Australian Standard AS2021:2015 (Acoustics - Aircraft noise intrusion - Building siting and construction)* and can include:

- residential buildings
- schools and places of education including pre-schools and child care centres
- hospitals, aged care facilities and other health-related facilities
- places of worship
- places of temporary residence including hotels and motels
- public recreational buildings.

It considers all residential areas, including rural and urban.

We use this defined list as it is based on an Australian Standard, which is subject to its own review and update processes. If the Australian Standard is updated, we will also update our list of noise sensitive sites.

Outcome: No changes have been made.

6.12. Apply the Principles to flight training and/or general aviation operations

Some stakeholders requested that we include reference to flight training, circuits and/or general aviation (GA) operations such as helicopters.

“As indicated, your number 1 priority is safety. If you are serious about this you must not allow training circuits over residential areas.”

“Why is there no specific reference to flight training?”

The Principles apply to flight paths that are designed and managed by Airservices. Generally, these flight paths are for aircraft flying according to Instrument Flight Rules (IFR), which is where the pilot uses instruments to fly.

GA operators, including helicopters, commonly fly according to Visual Flight Rules (VFR) where the pilot uses visual references to the ground or water rather than flying on a set flight path.

Where these operations occur outside controlled airspace, they must fly in accordance with Civil Aviation Safety Authority (CASA) airspace and flight regulations and standards, and may be subject to airport Fly Neighbourly Agreements.

Where these operations are inside controlled airspace, they must operate in accordance with Air Traffic Control clearances and instructions, but these may not require use of published flight paths, and may also be subject to training and circuit Noise Abatement Procedures (NAPs).

The location of designated flight training areas is determined and defined by CASA. The location of circuits, and how they are flown, must be in accordance with CASA regulations and standards.

Outcome: Further information clarifying the use of published ‘flight paths’ has been included in the final Principles document (formerly Application Notes).

6.13. Include a Principle around preserving aircraft-free areas

Some stakeholders requested that we include a Principle that ensures preservation of areas that have not previously been exposed to aircraft operations, such as national parks and residential areas.

“There seems to be a principal missing about environmental areas that needs to remain as areas of a flight free zone for existing communities and national parks that do not previously have a flight corridor. This needs to be risk ranked in the design principals.”

Aircraft noise is an inevitable by-product of aircraft operations and it is not possible to guarantee any suburb, group or individual exemption from aircraft noise exposure.

Under the *Air Services Act 1995*, we have an obligation to provide environmentally responsible services by minimising the environmental impact of aircraft operations, including the impact of aircraft noise. However, in Australia there are no regulations which specify a maximum, allowable level of aircraft noise and we do not have any powers of enforcement to cease an aircraft from operating due to its noise impacts.

Outcome: A statement clarifying aircraft noise regulations and enforcement options has been added to final Principles document (formerly Application Notes) for each Noise and Community Principle, and an additional clarifying statement has been added to the Overall Considerations section of the final Principles document (formerly Application Notes).