



WESTERN SYDNEY AIRPORT



Aviation Expert Steering Group

Terms of Reference

Background

The Department of Infrastructure and Regional Development (the Department) is responsible for delivering the airspace and flight path design for single runway operations at the Western Sydney Airport prior to the commencement of airport operations. In accordance with Condition 16 of the Airport Plan, determined on 5 December 2016, an Expert Steering Group (ESG), led by the Department, will oversee the detailed planning and technical design process for the airport's airspace arrangements and flight paths. The ESG will include senior representatives nominated by Airservices Australia, the Civil Aviation Safety Authority (CASA), and the Airport Lessee Company (once appointed).

The ESG will confirm the objectives and scope of work for the design process, provide advice in the development of airspace design options and make recommendations for appropriate community consultation mechanisms. It will also be responsible for ensuring the airspace design process integrates with any airspace modernisation and air traffic management initiatives in the Sydney basin.

The airspace and flight path design process will take account of the *Future airspace design principles* identified in the Airport Plan (see [Attachment A](#)) and evaluate design concepts against the key performance criteria of safety, efficiency, capacity, and noise and other environmental considerations. The process will also have regard to the phases, activities and outputs shown in Table 10 of the Airport Plan, *Airspace and flight path design process*, subject to ongoing review and revision as necessary (see [Attachment B](#)) and the matters set out in Condition 16(5).

The ESG will work collaboratively with the Forum On Western Sydney Airport (FOWSA) and ensure ongoing consultation with industry, government, and the community during the airspace and flight path design process for the airport's first stage of development.

The Department, as the proponent for the airspace design process, is responsible for developing the Plan for Aviation Airspace Management (the Plan), which will set out the airspace and flight path design for Western

Sydney Airport and, once finalised, will refer the Plan to the Environment Minister for consideration in accordance with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), as required by Condition 16(4).

1. Purpose of the Terms of Reference

The Terms of Reference establish a governance framework for a steering group to advise and provide expert technical input to assist the Department in delivering the airspace and flight path design for Western Sydney Airport in accordance with Condition 16 of the Airport Plan.

2. Role of the Expert Steering Group

The ESG will support the detailed planning and technical design of airspace arrangements, flight paths and relevant aircraft operational procedures for single runway operations at Western Sydney Airport.

The ESG will address all aspects of Condition 16 of the Airport Plan and ensure compliance with relevant provisions and conditions of the Airport Plan. This will include liaising with FOWSA on issues relating to airspace management and flight path options, noise abatement and other aircraft operating procedures, and potential noise and amenity impacts from aircraft overflights.

The ESG will assist the Department to finalise the Plan for Aviation Airspace Management to allow for airport operations to commence in 2026.

The ESG will support the Department by providing advice, as appropriate, on the following matters:

- a. the objectives, principles and parameters of the airspace design process;
- b. development of a statement of works and work program for delivery of the Plan for Airspace Management, including examining environmental, socio-economic and community issues associated with future aircraft operations at Western Sydney Airport;
- c. consultations with airlines, aerodrome operators, airspace users, state and local government authorities, and the community through FOWSA as appropriate;
- d. relevant legislative and regulatory requirements and standards for airspace planning;
- e. integration of airspace planning and design with any concurrent review of Sydney basin airspace and air traffic management arrangements undertaken in accordance with the *Airspace Act 2007* and other relevant legislation;
- f. development and assessment of conceptual air traffic management options (e.g. standard arrival and departure flight routes and procedures) against the key performance criteria of safety, efficiency, capacity and environmental impact, and having regard to the *Future airspace design principles*;
- g. identification, assessment and validation of feasible noise abatement operating procedures and noise respite opportunities for managing aircraft noise and amenity impacts;
- h. identification of a preferred high-level airspace design concept for detailed development and evaluation, including modelling and assessing aircraft noise exposure levels using a range of relevant aircraft noise exposure measures suitable for referral under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act);
- i. preparation and review of information and other materials to meet assessment requirements under the EPBC Act;

- j. the detailed design, evaluation and implementation of the preferred airspace design concept and aircraft operating procedures, taking into account the outcomes of the referral process, and any subsequent assessment, under the EPBC Act; and
- k. preparation of an Australian Noise Exposure Forecast (ANEF) chart, and consideration of other aircraft noise exposure measures as appropriate, for single runway and long-term parallel runway operations to inform strategic land use planning in the vicinity of the airport site.

3. Chair and membership

A senior official of the Department will Chair the ESG.

The Chair will invite nominations for senior representation from member organisations including the Department, Airservices Australia, the Civil Aviation Safety Authority and the Airport Lessee Company (once appointed).

The Chair of FOWSA, or a representative nominated by that Chair, may attend ESG meetings as an ex-officio member.

Member organisations may nominate additional representatives or advisers to attend ESG meetings for presentations and in support roles. Each member organisation must provide a list of prospective staff attendees to the ESG Secretariat at least one week prior to each ESG meeting.

Observers from other Commonwealth agencies may also be invited to attend meetings by the Chair.

The Chair will regularly review the ESG Terms of Reference and membership to ensure they meet the requirements of the airspace and flight path design, and consult with ESG members about any proposed changes before their implementation.

The ESG does not exercise decision-making powers or otherwise take on the individual authority or accountability of its members. Individual ESG members are responsible for the performance of their respective legislative, regulatory and service provision roles. Each agency reports their activities through established legislative and governance requirements to their relevant Ministers and Boards.

4. Meetings

The ESG Chair will determine the times and venues for meetings. The ESG will convene at least three times each year.

In general, ESG meetings will be held four to six weeks before the next scheduled FOWSA meeting.

5. Work program

The Chair, with the support of the Secretariat and input from member organisations, will establish a work program with associated tasks, milestones and timeframes that will ensure airport operations can commence by 2026.

The Chair may amend the work program, as necessary, following consultation with ESG members.

To progress the work program, the Chair may establish working groups to focus on technical matters or other tasks for reporting back to the ESG via the Chair.

6. Confidentiality and interactions with FOWSA

The ESG Chair will consider the need and if necessary authorise the distribution or release of information produced by, or for, ESG to any non-member agency or entity. Members must seek clearance from the Chair before any such information is disseminated other than on a need to know basis within their respective organisation.

The Department will lead the ESG representation at FOWSA. Members of ESG, or relevant representatives from the respective member organisations, may be asked by the ESG Chair to attend FOWSA meetings for presentations or to participate in general discussion. Attendance at FOWSA meetings may include informing members of the general public about the work of ESG and issues relating to the airspace and flight path design process more broadly. Information provided at FOWSA meetings by, or on behalf of, ESG members is not to be distributed more widely without the agreement of the ESG Chair.

7. Support

The Department will provide secretariat and administrative support to the ESG.

8. Reporting

The ESG Chair will report to the Minister for Urban Infrastructure twice each year on the work of the ESG and at other times as necessary.

The ESG Chair may, at his or her discretion, report on aspects of the ESG's work at FOWSA meetings.

Future Airspace Design Principles

Airport Plan 2.2.5 - Future airspace design principles

The following principles will apply to the comprehensive airspace design process for single runway operations:

1. Overflights of residential areas and noise sensitive facilities will be avoided to the maximum extent possible.
 - The most advanced satellite-based navigation technologies will be used to guide the design of flight paths that avoid residential and other noise sensitive areas as far as it is possible to do so.
2. Where flight paths are unable to avoid residential areas:
 - to the extent practicable, residential areas overflown by aircraft arrivals should not also be overflown by aircraft departing the airport; and
 - noise abatement procedures should be optimised to achieve the lowest possible overall impact on the affected community, taking into account safety and other operational factors.
3. Specific noise abatement procedures will be developed to minimise the community impacts of aircraft operations at night while not constraining airport operations and the economic benefits they would bring for Western Sydney.
 - When comparing options, operations that are conducted at night or on weekends will be treated as being more sensitive than those that occur during the daytime or on weekdays.
 - The use of head-to-head operations to and from the south-west, when it is safe to do so, is an important preferred option for managing aircraft noise at night. This preferred option will be thoroughly evaluated through further detailed assessment.
4. Noise mitigation measures will be developed consistent with Airservices commitment to aircraft noise management and the strategies developed by ICAO in its Balanced Approach to Aircraft Noise Management.
5. Aircraft arrivals will use a continuous descent approach where possible to keep aircraft at higher altitudes with low power settings and reduced noise (and greenhouse) emissions.
6. Aircraft arrivals will not converge through a single merge point over any single residential area.
7. Consideration will be given to the impacts of aircraft operations on natural and visually sensitive areas such as the Greater Blue Mountains World Heritage Area.
8. In determining the final flight paths, the community, aerodrome operators and airspace users will be consulted extensively and flight path designs will be subject to referral under the EPBC Act.
9. Changes to current noise sharing arrangements at Sydney Airport will be avoided.

10. Current airspace restrictions such as those associated with military establishments will be reviewed to improve efficiency and environmental impacts from commercial operations, while meeting Australia's future defence requirements.
11. The Australian Government will work with the New South Wales and local governments to ensure land use planning continues to prevent noise sensitive development in the highest noise exposure areas.
12. Safety is non-negotiable – only practical solutions that uphold Australia's long tradition of world-leading aviation safety will be implemented.

Condition 16(5) of the Airport Plan was included in the amended Airport Plan by the Minister for the Environment and Energy.

Airport Plan 3.10.3 - Airspace design process

16. Airspace design process

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- (5) The airspace and flight path design must take account of the following principles, in addition to the principles in section 2.2.5 of the Airport Plan:
 - (a) airspace and flight path design must explicitly consider the Aircraft Overflight Noise mitigation options presented in chapters 7 and 10 of the EIS;
 - (b) airspace and flight path design must have regard to the social and economic impacts on existing airspace users in the Sydney basin;
 - (c) airspace and flight path design must explicitly consider whether arrangements are required for managing Aircraft Overflight Noise at night; and
 - (d) airspace and flight path design must minimise to the extent practicable the impact of Aircraft Overflight Noise on the following:
 - (i) residential areas;
 - (ii) sensitive receptors;
 - (iii) the Greater Blue Mountains World Heritage Area – particularly areas of scenic or tourism value; and
 - (iv) wilderness areas.

Airspace and flight path design process¹

Phase	Key activities	Key outcomes	Timing
Planning	<ul style="list-style-type: none"> Establish expert steering group Collect stakeholder views on system requirements, including community and environmental inputs Confirm Sydney basin airspace and air route requirements and constraints Establish community and stakeholder reference group Develop and undertake a preliminary environmental assessment of airspace concept options (i.e. standard arrival and departure routes) 	<ul style="list-style-type: none"> Consultation conducted with interested parties, including regulatory authorities, government agencies, airlines, other Sydney basin aerodrome operators and airspace users, and the community Review of airspace concept options and potential noise abatement procedures including identification of a preferred high-level airspace concept option 	Approx. 2 years starting from determination of the Airport Plan
Preliminary design and environmental assessment	<ul style="list-style-type: none"> Evaluate the preliminary airspace design 	<ul style="list-style-type: none"> Preferred airspace design concept 	Approx. 1 year
	<ul style="list-style-type: none"> Refer preferred airspace design to the Environment Minister under the EPBC Act Prepare and submit any formal environmental assessment documentation required by the Environment Minister Public exhibition and community consultation Policy on property acquisition and noise insulation announced 		Approx. 2 years (c.2019–2021)
Detailed design	<ul style="list-style-type: none"> Evaluate, validate and refine the detailed design taking account of the EPBC Act process 	<ul style="list-style-type: none"> Final airspace design and noise abatement procedures for implementation Long-term ANEF chart 	Approx. 1 year
Implementation	<ul style="list-style-type: none"> Notify airspace and air route changes 	<ul style="list-style-type: none"> Airspace change proposal approved by CASA 	Approx. 2 years
		<ul style="list-style-type: none"> Commencement of air operations at WSA in accordance with specific noise abatement procedures identified in the airspace design process 	Mid-2020s

¹ Source: Western Sydney Airport - Airport Plan Table 10