



Office of Airspace Regulation Strategic Work Plan

3 December 2019

Purpose

This Strategic Work Plan (Plan) details the Office of Airspace Regulation's (OAR) priorities, processes and strategies over the next five years for ensuring that Australian airspace complies with the *Airspace Act 2007* and *Airspace Regulations 2007*.

The Plan also responds to the policy directions of the Australian Government on air traffic and airspace matters as outlined in the Australian Airspace Policy Statement 2018 (AAPS) and in the Minister's Statement of Expectations to the CASA Board (2019).

Background

Section 11 of the *Airspace Act 2007* confers on the Civil Aviation Safety Authority (CASA) functions and powers in connection with the administration and regulation of Australian-administered airspace.

These responsibilities are carried out through the OAR within CASA, which has responsibility for designating permanent or temporary airspace classifications, designating Prohibited, Restricted and Danger Areas (PRDs) and reviewing existing airspace, as well as the services and facilities provided in particular volumes of airspace.

The OAR also regulates air routes in Australian administered airspace.

Airspace classifications

Airspace administration in Australia is generally aligned with the International Civil Aviation Organization (ICAO) prescribed airspace classes and associated levels of service as set out in Annex 11 to the Convention on International Civil Aviation (Chicago Convention), from which, 'States shall select those airspace classes appropriate to their needs'.

The architecture and classes of airspace in Australia are based on the assessed level of risk to airspace users and the consequent need for air navigation services, to support safety outcomes.

Risk assessment approach

When determining the need for airspace classifications, or prohibited, restricted and danger areas (PRDs or 'protective airspace') the OAR conducts a risk assessment to

inform decisions about the classification of airspace required, with safety the primary consideration and taking into account a number of other aspects including:

- the air traffic control services and facilities needed in the airspace,
- the efficient use of airspace,
- equitable access for all airspace users,
- cost implications for all airspace users,
- advances in aviation technology on the ground and in the air,
- the capacity of Australian-administered airspace to accommodate changes in its use; and
- national security.

OAR Structure and Key Functional Areas

OAR's structure and key functional areas will continue to adapt to reflect changes in passenger and freight demand at different destinations, the introduction of new and different aircraft types, increased use of satellite-based technology and new airport infrastructure.

For example, the wider application of Automatic Dependent Surveillance - Broadcast (ADS-B), performance-based navigation (PBN), Required Navigation Performance (RNP), Ground Based Augmentation System (GBAS) and approaches with vertical guidance (APV) are all evident in Australian and international aviation. These developments generate opportunities and stakeholder expectations that Australian airspace will be structured in a way that maximises the advantages offered by modern airspace design and the latest technology, in relation to safety, efficiency and equitable access outcomes.

Therefore, the OAR is focussed on delivering an Australian airspace environment that is safe, efficient, equitable and "future proof".

The OAR's structure comprises three key functional areas each with their own roles and strategies:

- administration and reviews of existing airspace;
- processing airspace change proposals; and
- future airspace planning.

Administration and Reviews of Existing Airspace (Day to Day management)

Role. The OAR has assigned airspace specialists to each State and Territory in Australia, responsible for reviewing the existing airspace architecture within their designated areas, to identify any issues or risks to airspace users and to ensure the existing airspace is 'fit for purpose'.

The OAR specialists collaborate with Airservices Australia, airspace users, airport operators, Defence and other CASA regulatory areas when conducting an airspace review or proposing an airspace change.

Strategy. The OAR will build a high degree of trust and reliability whilst also fostering collaboration through regular stakeholder engagement that will enable early identification and mitigation of risks to airspace users through implementation of timely solutions. This will ensure that airspace architecture remains "fit for purpose" and meets the requirements of the *Airspace Act 2007*.

Airspace Reviews

Role. The OAR will conduct a preliminary airspace review as a desktop exercise, using aircraft and passenger movement data, aviation incident data, and other sources of information to identify any risks to airspace users that may require more detailed analysis through an airspace review.

The OAR manages requests for PRDs (such as air displays, military exercises and police operations). These requests are managed through the Airspace Change Proposal process.

Strategy. The OAR has developed a database that delivers reliable, robust and timely information about aircraft and passenger movements and aviation incidents in Australia.

The database is being enhanced and will be automated to enable real time data entry and information management while also enabling the extraction of detailed and specific types of reports that will inform and update OAR priorities for airspace reviews, should significant changes in activity or incidents emerge in respect of specific locations.

Future Airspace planning

Role. The OAR will ensure that Australian airspace is suitable for future safety, efficiency and capacity needs.

This will include the development of future airspace arrangements in consultation with the aviation industry, other Government agencies including civil and military air navigation service providers and analysis of international best practice airspace systems to deliver outcomes that benefit Australia's aviation environment.

The OAR will also focus on delivering airspace architecture consistent with ICAO requirements for safety and efficiency leveraging new technology and procedures wherever practicable.

Strategy. The OAR will focus on the development of a future airspace model that includes development of new airspace design guidelines based on Performance Based Navigation (PBN) and other advances in aviation technology.

Key Initiatives

Key initiatives under the Strategic Work Plan are shown at **Annex A**.

These reflect the 2019 Minister's Statement of Expectation to the CASA Board (notably 4f, 4h, 4j and 5a) and all relevant clauses in the current Australian Airspace Policy Statement.

These initiatives can be updated if higher priorities or new risks are identified.

The OAR Strategic Plan will be updated yearly in conjunction with the updating of CASA's corporate plan.

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Annex A – Key Initiatives

	Task	Ref	Description	Scheduled commencement date	Scheduled date (Date report to be released for public consultation)
Major	Melbourne	AAPS 25-31	Melbourne Basin Review	February 2017	On Hold. Uncertainty exists over the third runway development. The Basin Review is being divided into the various aerodromes. Avalon August 2019 Moorabbin May 2020 Essendon 2020 Melbourne 2020
Minor	Avalon	AAPS 25-31	Airspace Review	November 2018	Completed
Minor	Moorabbin	AAPS 25-31	Airspace Review	January 2019	September 2020
Minor	Essendon	AAPS 25-31	Airspace Review	July 2018	December 2020
Major	Bankstown Airspace Review	AAPS 26-31 AAPS 40-41	Airspace Review (depending on JAPAT progress)	February 2018	JAPAT Recommendations are progressing.
Major	Brisbane	AAPS 14	Provide advice and support during Airservices development of an airspace model for the future parallel runway	March 2017	Ongoing
Minor	West Sale/East Sale	AAPS 25-31	Airspace Review (to consider impact of military training activity)	February 2020	June 2020

	Task	Ref	Description	Scheduled commencement date	Scheduled date (Date report to be released for public consultation)
Strategic	Airspace Risk and Safety Management Manual	Airspace Act	Rewrite and update	December 2017	July 2020
Minor	Tamworth	AAPS 25-31	Airspace Review (potential changes in aviation activity)	January 2019	Completed
Minor	Broome and Karratha	AAPS 25-31	Airspace Review (potential increase in aviation activity)	May 2019	Completed
Minor	Pilbara Region	AAPS 25-31	Airspace Review	October 2019	May 2020
Major	Darwin	AAPS 25-31	Airspace Review	June 2019	Completed
Minor	Mildura	AAPS 25-31	Airspace Review (significant increase in aviation activity)	July 2019	Completed
Major	Western Sydney Airport	AAPS 14	Provide technical advice to Western Sydney Airport Technical Working Group on airspace modelling for the new airport	June 2017	Ongoing
Minor	Brisbane West Wellcamp	AAPS 25-31	Airspace Review	June 2019	Completed
Minor	Archerfield	AAPS 25-31	Airspace Review	December 2019	June 2020
Strategic	Airspace Design Guidelines	AAPS 14	Publish Airspace Design guidelines	October 2017	July 2020

	Task	Ref	Description	Scheduled commencement date	Scheduled date (Date report to be released for public consultation)
Major	Bankstown - Joint Airspace and Procedures Advisory Team (JAPAT)	AAPS 26-31 AAPS 40-41	Implement recommendations for airspace changes and new procedures to enhance safety of aviation around Bankstown	September 2017	Ongoing
Major	Adelaide and Parafield	AAPS 25-31	Airspace Review	June 2020	December 2020
Major	Jandakot	AAPS 25-31	Airspace Review	June 2020	December 2020
Major	Williamtown	AAPS 40-41	Implementation plan for future architecture and airspace solutions in Australian administered airspace	November 2017	Ongoing
Major	Perth	AAPS 14	Provide advice and support during Airservices development of an airspace model for the future parallel runway	July 2017	On Hold
Major	Brisbane	AAPS 25-31	Conduct an Aeronautical Study of the airspace classification within 50 nautical miles of Brisbane.	2021	2023
Strategic	Australian Airspace Concept	AAPS 37	Deliver a concept for the future implementation of airspace architecture and solutions in Australian administered airspace (including Performance Based Navigation)	October 2017	June 2020
Strategic	Australian Airspace Strategy	AAPS 37	Implementation plan for future architecture and solutions in Australian administered airspace	November 2017	June 2020
Strategic	Integration of RPAS into Controlled airspace	AAPS 37	Investigate strategies and procedures for integrating RPAS and elevated vehicles into controlled airspace	July 2019	December 2021

	Task	Ref	Description	Scheduled commencement date	Scheduled date (Date report to be released for public consultation)
Strategic	Review the use of Restricted Airspace outside Australian territorial waters	AAPS 15-16	Review the use of PRDs outside Australian territorial waters. Investigate the use of Military Warning Areas (MWAs) and Military Operating Areas (MOAs) by contracting states and their applicability to use in Australian Flight Information Regions	June 2019	December 2020
Strategic	Business as usual (BAU)	Act AAPS 10-13	Review Australian airspace classifications and architecture as detailed in the Australian Airspace Policy Statement.	Ongoing	Ongoing
Strategic		AAPS 15-16	Review all Restricted and Danger Areas to ensure they are still required and fit for purpose	Ongoing	Ongoing
Admin		AAPS 31 and 51	Update OAR web site	Ongoing	Ongoing
Admin		AAPS 29-32	Assess Airspace Change Proposals	Ongoing	Ongoing
Strategic	Assessment of options to enhance Class E airspace	AAPS 29-32 AAPS 40-41	Collaborate with Airservices Australia to identify opportunities to enhance controlled airspace by increasing Class E airspace	September 2017	Ongoing