



Australian Government

Department of Infrastructure, Regional Development and Cities



National Airports Safeguarding Framework

What

The National Airports Safeguarding Framework provides guidance on planning requirements for development that affects aviation operations. This includes building activity around airports that might penetrate operational airspace and/or affect navigational procedures for aircraft.

The Framework has been developed by the National Airports Safeguarding Advisory Group, which includes representatives from: Commonwealth Infrastructure and Defence departments, aviation agencies; state and territory planning and transport departments; and the Australian Local Government Association.

The Framework consists of:

- Principles for National Airports Safeguarding Framework
- Guideline A: *Managing Aircraft Noise*
- Guideline B: *Managing Building-Generated Windshear and Turbulence*
- Guideline C: *Managing Wildlife Strike Risk*
- Guideline D: *Managing Wind Turbine Risk to Aircraft*
- Guideline E: *Managing Pilot Lighting Distraction*
- Guideline F: *Managing Protected Airspace Intrusion*
- Guideline G: *Protecting Communications, Navigation and Surveillance Equipment*
- Guideline H: *Protecting Strategically Important Helicopter Landing Sites*
- Guideline I: *Managing the Risk in Public Safety Areas at the Ends of Runways*

Who

The Framework applies at all airports in Australia and affects planning and development around airports, including development activity that might penetrate operational airspace and/or affect navigational procedures for aircraft.

The Framework provides guidance to state, local and territory governments, which may be used to guide assessment and approvals for land use and development on and around identified airports.

Why

The Australian Government recognises that responsibility for land use planning rests primarily with state, territory and local governments, but that a national approach can assist in improving planning outcomes on and near airports and under flight paths.

The aim of the Framework is to:

- improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning decisions;
- improve community amenity by minimising noise sensitive developments near airports, including through the use of additional noise metrics; and
- improve aircraft noise-disclosure mechanisms.

The Framework is downloadable from the Department of Infrastructure, Regional Development and Cities website at: http://www.infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/

The *Principles for a National Airports Safeguarding Framework* acknowledge the importance of airports and aviation facilities to national, state, territory and local economies, transport networks and social capital.

Guideline A

Over the long term, inappropriate development around airports can result in unnecessary constraints on airport operations and negative impacts on community amenity due to the effects of aircraft noise.

Guideline A provides advice on the use of a supplementary suite of noise metrics, including the Australian Noise Exposure Forecast system and frequency-based noise metrics, to inform strategic planning and provide communities with comprehensive and understandable information about aircraft noise.

Guideline B

Building-induced windshear and turbulence can be a problem for aviation operations in cases where structures are situated close to airport runways. When a significant obstacle is located in the path of a crosswind to an operational runway, the wind flow will be diverted around and over the building and can cause the crosswind speed to vary along the runway.

Guideline B presents a layered risk approach to the siting and design of buildings near airport runways to assist land use planners and airport operators to reduce the risk of building-generated windshear and turbulence.

Guideline C

Wildlife strikes and/or avoidance can cause major damage to aircraft and/or compromise aircraft safety. Whilst the Civil Aviation Safety Authority has well-established safety requirements for wildlife management plans on-airport, wildlife hazards also occur outside the airport fence.

Guideline C provides advice to help protect against wildlife hazards originating off-airport. Many existing airports are surrounded by areas that are attractive to wildlife, especially birds, but appropriate land use planning decisions and the way in which existing land use is managed in the vicinity of airports can significantly reduce the risk of wildlife hazards.

Guideline D

Wind turbines can constitute a risk to low-flying aviation operations such as agricultural pilots. Additionally, temporary and permanent wind monitoring towers can be erected in anticipation of, or in association with, wind farms and can also be hazardous to aviation, particularly given their low visibility. These structures can also affect the performance of Communications, Navigation and Surveillance equipment operated by Airservices Australia and the Department of Defence. Guideline D provides advice on the location and safety management of these and other similar structures.

Guideline E

Pilots are reliant on the specific patterns of aeronautical ground lights during inclement weather and outside daylight hours. These aeronautical ground lights, such as runway lights and approach lights, play a vital role in enabling pilots to align their aircraft with the runway in use. They also enable the pilot to land the aircraft at the appropriate part of the runway.

It is therefore important that lighting in the vicinity of airports is not configured or is of such a pattern that pilots could either be distracted or mistake such lighting as being ground lighting from the airport. Guideline E provides advice on the risks of lighting distractions and how these can be minimised or avoided.

Guideline F

The operational airspace of airports is the volume of airspace above a set of imaginary surfaces, the design of which is determined by criteria established by the International Civil Aviation Organisation. These surfaces are established with the aim of protecting aircraft from obstacles or activities that could be a threat to safety – in particular, high-rise buildings.

Guideline F provides advice for planners and decision makers about working within and around protected airspace, including OLS and PANS-OPS intrusions, and how these can be better integrated into local planning processes.

Guideline G

Communications, Navigation and Surveillance (CNS) facilities are crucial to the safe and efficient operation of aircraft. They enable pilots to navigate while between airports, conduct instrument approaches and to communicate and confirm their position with air traffic control. While such facilities are generally associated with airports, some are offsite and at significant distances from airports. Inappropriate development in the vicinity of these facilities can compromise their effectiveness.

Guideline G is intended to assist land-use planners in their consideration of these facilities when assessing development proposals and rezoning requests and when developing strategic land use plans. It will also guide their interactions with Airservices Australia and the Department of Defence on when to consult on development proposals and in gaining up to date geographical locations for these facilities.

Guideline H

The protection of strategically important helicopter landing sites (HLS) (such as those associated with hospitals) from the adverse impacts of development has become a critical issue in recent years. There have been times where hospital emergency helipads have been closed due to safety concerns arising from the nearby operation of construction cranes. Guideline H seeks to provide a consistent national approach for land use planning in the vicinity of these facilities. State and Territory governments are responsible for identifying HLS that are considered to be of strategic importance, or those that are to be protected in the interest of public safety.

Guideline I

Public Safety Areas (PSAs) are designated areas of land at the end of airport runways within which certain planning restrictions may apply. While air crashes are rare events, the majority occur in the vicinity of airports during take-off and landing. The PSA Guideline was developed to mitigate the risk of on-ground fatalities from an aircraft incident, by informing a consistent approach to land use at the end of Australian airport runways.