



Strategic airports and aviation facilities state interest



Example planning scheme assessment benchmarks

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1.0 Introduction

The department's **Integrating state interests in a planning scheme – Guidance for local governments** document assists local government in the interpretation, integration and advancement of the state interests articulated in the state planning instruments – the State Planning Policy July 2017 (SPP) and statutory regional plans – when making or amending a planning scheme.

The measures to be included in a planning scheme include assessment benchmarks, being the matters against which a development proposed in a development application must be assessed against.

Assessment benchmarks to effectively integrate the Strategic airports and aviation facilities state interest can be technically complex and as such, this document provides example assessment benchmarks.

A local government may choose to adopt or otherwise adapt these assessment benchmarks when making or amending a planning scheme. The example assessment benchmarks should not be seen as the only way to appropriately reflect the Strategic airports and aviation facilities state interest.

Where a local government seeks to adopt the example assessment benchmarks, it is not intended they be used verbatim, as variations will be required to reflect the local circumstances, opportunities and aspirations of each local government area.

The careful drafting of assessment benchmarks will assist in facilitating development that:

- supports the delivery of the Strategic airports and aviation facilities state interest
- is consistent with the development referrals, assessments and approvals related to strategic airports and aviation facilities, that are required external to Queensland's planning framework – the **Integrating state interests in a planning scheme – Guidance for local governments** document provides further guidance on agency roles and these other statutory approvals and assessment processes.

2.0 Example assessment benchmarks

2.1 Application

The department's **Integrating state interests in a planning scheme – Guidance for local governments** document identifies the circumstances in which assessment benchmarks should be included in a planning scheme as part of the integration of the Strategic airports and aviation facilities state interest.

This includes where a planning scheme's provisions are to enable a local government to properly assess development:

1. Related to the protection of operational airspace of strategic airports, via assessment benchmarks for:
 - a. development and associated activities:
 - i. involving incompatible intrusions into operational airspace
 - ii. that could compromise aircraft safety in operational airspace
 - b. development on land within the light restriction zone
 - c. development on land within the wildlife hazard buffer zone.
2. Related to the protection of aviation facilities, via assessment benchmarks for development on land within the building restricted area.
3. Related to the protection of strategic airports and communities, via assessment benchmarks for development on land within a public safety area or within the 20 ANEF contour or greater.

2.2 Overall intent

To articulate the overall intent of the planning scheme provisions, it is recommended the planning scheme include the following overall assessment benchmarks:

The **purpose** of the following specific provisions in this planning scheme is to protect the safety, efficiency and operational integrity of strategic airports and aviation facilities by ensuring development and associated activities:

- do not create incompatible intrusions, or compromise aircraft safety, in operational airspace
- do not adversely affect the functioning of aviation facilities
- avoid increasing risk to public safety in a public safety area
- are compatible with forecast levels of aircraft noise within the 20 ANEF contour or greater (as defined by Australian Standard 2021-2015: Acoustics – Aircraft noise intrusion – Building siting and construction (AS 2021) as adopted 12 February 2015)
- complement the role of a strategic airport as an economic, freight and logistics hub, and enhance the economic opportunities that are available in proximity to a strategic airport.

2.3 Specific assessment benchmarks

2.3.1 Protecting operational airspace

To deliver on the intent to protect operational airspace, it is recommended the planning scheme include the following specific assessment benchmarks:

Outcomes		Measures	
Physical and transient obstructions			
Where involving development and activities on land included in an OLS area or height restriction zone:			
<p>Outcome 1</p> <p>Development and associated activities do not create a permanent or temporary physical or transient intrusion in a strategic airport's operational airspace, unless the intrusion is approved in accordance with the relevant federal legislation.</p> <p>Note – If a proposed development will intrude into the operational airspace of a strategic airport or involve high velocity gaseous plumes or the emission of airborne particulates that may impair visibility in operational airspace, it must be referred to the airport operator or Department of Defence (if relevant) for assessment.</p>		Measure 1.1	
		Buildings and structures do not intrude into the airport's operational airspace.	
		Measure 1.2	
		Cranes and other equipment used during construction do not intrude into the airport's operational airspace.	
		Note – The preparation of a construction management plan in accordance with the Construction management plan planning scheme policy can assist in demonstrating compliance with this outcome.	
		Measure 1.3	
		Landscaping does not include vegetation that at maturity will intrude into the airport's operational airspace.	
		Measure 1.4	
		Development does not include transient activities such as parachuting, hot air ballooning and hang-gliding that could affect an airport's operational airspace.	
Emissions			
Where involving development and activities on land included in an OLS area:			
<p>Outcome 2</p> <p>Emissions do not significantly increase air turbulence, reduce visibility or compromise the operation of aircraft engines in a strategic airport's operational airspace.</p> <p>Note – If a proposed development involves high velocity gaseous plumes or the emission of airborne particulates that may impair visibility in operational airspace it must be referred to the airport operator who will refer the proposal to the Civil Aviation Safety Authority (CASA) for assessment. Defence or joint-user airfields will require referral to the Department of Defence (DoD).</p> <p>Note – It is recommended proponents seek CASA or DoD advice during the pre-lodgement stage of the development assessment process.</p>		Measure 2.1	
		Development and associated activities do not emit smoke, dust, ash or steam into the airport's operational airspace.	
		Measure 2.2	
		Development and associated activities do not emit a gaseous plume into the airport's operational airspace at a velocity exceeding 4.3 metres per second.	
		OR	
		Development and associated activities which emit smoke, dust, ash, steam or a gaseous plume exceeding 4.3 metres per second are designed and constructed to mitigate adverse impacts of emissions upon operational airspace.	
Lighting and reflective surfaces			
Where involving development and activities on land included in a light restriction zone or lighting area buffer:			

<p>Outcome 3</p> <p>Development does not include or emit light sources or reflective surfaces that could distract or confuse pilots.</p> <p>Note – If a proposed development involves installation of external lighting sources or reflective surfaces that are likely to affect aircraft operations, it must be referred to the airport operator for assessment. Defence or joint-user airfields will require referral to the Department of Defence (DoD).</p> <p>Note – It is recommended lighting design matters be addressed during pre-lodgement stage of the development assessment process to avoid Civil Aviation Safety Authority (CASA) or DoD directives to modify lighting after it has been installed.</p>	<p>Measure 3.1</p> <p>Development in the light restriction zones (A, B, C, D or lighting area buffer) does not include any of the following types of outdoor lighting:</p> <ul style="list-style-type: none"> (a) straight parallel lines of lighting 500 metres to 1000 metres long (b) flare plumes (c) upward shining lights (d) flashing lights (e) laser lights (f) sodium lights (g) reflective surfaces. <p>Measure 3.2</p> <p>Development and associated activities in the light restriction zones (A, B, C or D) do not emit a light source that will exceed the following light intensities:</p> <ul style="list-style-type: none"> (a) Zone A – 0 candela (b) Zone B – 50 candela (c) Zone C – 150 candela (d) Zone D – 450 candela. <p>Note – Light intensity is measured from the light source at 3 degrees above its horizontal plane.</p>
<p>Wildlife hazards</p>	
<p>Where involving development and activities on land within a wildlife hazard buffer zone:</p>	
<p>Outcome 4</p> <p>Development and associated activities do not attract wildlife or increase wildlife hazards within the wildlife hazard buffer zone.</p> <p>Note – If a proposed development may increase the risk of wildlife strike, it must be referred to the airport operator for assessment. Defence or joint-user airfields will require referral to the Department of Defence.</p>	<p>Where involving development and activities on land within the 3km wildlife hazard buffer zone:</p> <p>Measure 4.1</p> <p>Development and associated activities do not involve the following high risk land uses:</p> <ul style="list-style-type: none"> (a) Rural activities such as cropping (e.g. turf farm, fruit tree farm), intensive animal industry (e.g. piggery), aquaculture (e.g. fish hatchery) (b) Green space activities such as environment facility (e.g. wetland) and major sport, recreation and entertainment facility (e.g. showground) (c) Industry activities such as low, medium or high impact industry (e.g. food processing plant, fish processing / packing plant) (d) Public infrastructure such as utility installation (e.g. food/organic waste facility, putrescible waste facility (e.g. a landfill or transfer station). <p>Measure 4.2</p> <p>Development and associated activities involving the following moderate risk land uses that may attract or support wildlife such as birds and bats include measures to reduce the potential to attract wildlife in consultation with the airport operator and qualified bird and wildlife management experts:</p> <ul style="list-style-type: none"> (a) Rural activities such as animal husbandry (e.g. cattle/dairy farm), intensive animal industry (e.g. poultry farm) (b) Green space activities such as park, outdoor sport and recreation, and entertainment facility (other than showground) (c) Public infrastructure such as utility installation (e.g. non-putrescible waste facility (e.g. landfill or transfer station), sewerage or waste water treatment facility.

	<p>Where involving development and activities on land within the 8km and 13km wildlife hazard buffer zone:</p> <p>Measure 4.3</p> <p>Development and associated activities involving the following high and moderate risk land uses that may attract or support wildlife such as birds and bats include measures to reduce the potential to attract wildlife in consultation with the airport operator and qualified bird and wildlife management experts:</p> <p>(a) Rural activities such as:</p> <ul style="list-style-type: none"> (i) cropping (e.g. turf farm, fruit tree farm) (ii) intensive animal industry (e.g. piggery or poultry farm) (iii) aquaculture (e.g. fish hatchery) (iv) animal husbandry (e.g. cattle/dairy farm) <p>(b) Green space activities such as:</p> <ul style="list-style-type: none"> (i) environment facility (e.g. wetland) (ii) major sport, recreation and entertainment facility (e.g. showground) (iii) park (iv) outdoor sport and recreation (v) entertainment facility <p>(c) Industry activities such as low, medium or high impact industry (e.g. food processing plant, fish processing / packing plant)</p> <p>(d) Public infrastructure such as a utility installation involving a:</p> <ul style="list-style-type: none"> (i) food/organic waste facility (ii) non-putrescible waste facility or putrescible waste facility (e.g. a landfill or transfer station) (iii) sewerage or waste water treatment facility.
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2.3.2 Protecting aviation facilities

To deliver on the intent to protect aviation facilities, it is recommended the planning scheme include the following **specific assessment benchmarks**:

Outcomes	Measures
Where involving development and activities on land included in a building restricted area:	
<p>Outcome 1</p> <p>Development and associated activities do not interfere with the function of aviation facilities.</p> <p>Note – If a proposed development will intrude into the building restricted area of an aviation facility, it must be referred to Airservices Australia, the Department of Defence (if relevant) and the airport operator (if relevant) and assessed as outlined in National Airports Safeguarding Framework (NASF) Principles and Guidelines – Guideline G, Attachment 3.</p> <p>Note – It is recommended that advice be sought during pre-lodgement stage of the development assessment process to avoid objections from Airservices Australia or Department of Defence.</p>	<p>Measure 1.1</p> <p>Development and associated activities do not create permanent or temporary:</p> <ul style="list-style-type: none"> (a) physical intrusions into the 'line of sight' between transmitting and receiving devices (b) radio frequency interference (c) electromagnetic emissions that will interfere with signals transmitted by the facility (e.g. arc welding) (d) reflective surfaces that could deflect or interfere with signals transmitted by the facility (e) plume rises in the building restricted area of an aviation facility protected under the Airports (Protection of Airspace) Regulations 1996 as declared in Instrument No: AA-01/2017, being Brisbane (RSR) radar.

Measure 1.2

Development and associated activities are designed and constructed to mitigate adverse impacts on the function of the facility.

Note – Written support from the relevant organisation may assist in demonstrating achievement of this measure.

2.3.3 Protecting strategic airports and communities

To deliver on the intent to protect strategic airports and communities, it is recommended the planning scheme include the following **specific assessment benchmarks**:

Outcomes	Measures
Public safety	
Where involving development on land included in a public safety area:	
Outcome 1 Development is compatible with protecting the safety of both aircraft passengers, property and people on the ground in the event of an aircraft incident during landing or take-off and does not increase the risk to public safety within a public safety area.	Measure 1 Development does not involve: (a) an increase in the number of people living, working or congregating in the area (b) the manufacture, use or storage of flammable, explosive, hazardous or noxious materials.
Aircraft noise	
Where involving development on land included in the 20 ANEF contour or above:	
Outcome 2 Incompatible uses are avoided, both to mitigate reverse amenity issues and protect the ongoing operational viability of strategic airports.	Measure 2 Development and associated activities do not involve the following incompatible land uses: (a) Within the 25 ANEF contour or greater: (i) Accommodation activity (excluding nature-based tourism, resort complex, rooming accommodation and short-term accommodation) (ii) Relocatable home park (iii) Childcare centre (iv) Educational establishment (v) Hospital (vi) Health care service (b) Within the 30 ANEF contour or greater: (i) Hotel where providing accommodation (ii) Rooming accommodation (iii) Short-term accommodation (iv) Resort complex (v) Nature based tourism (vi) Community activity (vii) Place of worship (c) Within the 35 ANEF contour or greater: (i) Office

	(d) Within the 40 ANEF contour or greater: (i) Low impact industry.																					
<p>Outcome 3</p> <p>Development is located, designed and constructed to attenuate adverse impacts from aircraft noise.</p> <p>Note – A Noise Assessment Report prepared by an appropriately qualified acoustic consultant may assist in demonstrating compliance with this outcome.</p>	<p>Measure 3</p> <p>Development for the following land uses within the respective ANEF contours are designed and constructed to attenuate aircraft noise by achieving the indoor design sound levels specified below:</p> <p>(a) In the 20- 25 ANEF contour:</p> <ul style="list-style-type: none">(i) Accommodation activity (excluding nature-based tourism, resort complex, rooming accommodation and short-term accommodation)(ii) Relocatable home park(iii) Childcare centre(iv) Educational establishment(v) Hospital(vi) Health care service <p>(b) In the 25- 30 ANEF contour:</p> <ul style="list-style-type: none">(i) Hotel where providing accommodation(ii) Rooming accommodation(iii) Short-term accommodation(iv) Resort complex(v) Nature based tourism <p>(c) In the 20- 30 ANEF contour:</p> <ul style="list-style-type: none">(i) Community activity(ii) Place of worship <p>(d) In the 25- 35 ANEF contour:</p> <ul style="list-style-type: none">(i) Office <p>(e) In the 30- 40 ANEF contour:</p> <ul style="list-style-type: none">(i) Low impact industry. <p>Indoor design sound levels:</p> <table><tr><th>Land use / defined term</th><th>Location within development</th><th>Indoor design sound level dB(A)¹</th></tr><tr><td rowspan="2">Accommodation activity (excluding rooming accommodation and short-term accommodation)</td><td>Sleeping areas</td><td>50</td></tr><tr><td>Other habitable</td><td>55</td></tr><tr><td><i>Hotel where providing accommodation</i> <i>Rooming accommodation such as hostels</i> Short-term accommodation</td><td>Sleeping areas</td><td>55</td></tr><tr><td rowspan="2"><i>Educational establishment</i> Childcare centre</td><td>Libraries, study areas, sleeping areas</td><td>50</td></tr><tr><td>Teaching areas, assembly areas</td><td>55</td></tr><tr><td><i>Hospital</i> Health care service</td><td>Wards, theatres, treatment and consulting rooms</td><td>50</td></tr></table>			Land use / defined term	Location within development	Indoor design sound level dB(A) ¹	Accommodation activity (excluding rooming accommodation and short-term accommodation)	Sleeping areas	50	Other habitable	55	<i>Hotel where providing accommodation</i> <i>Rooming accommodation such as hostels</i> Short-term accommodation	Sleeping areas	55	<i>Educational establishment</i> Childcare centre	Libraries, study areas, sleeping areas	50	Teaching areas, assembly areas	55	<i>Hospital</i> Health care service	Wards, theatres, treatment and consulting rooms	50
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¹ For further information on indoor sound levels refer to Table 3.3 Australian Standard 2021–2015: Acoustics—Aircraft noise intrusion—Building siting and construction (AS2021) as adopted 12 February 2015

		Laboratories	65
	<i>Community activity</i>	Internal areas	50
	Place of worship		
	Office	Private offices, conference rooms	55
		Open offices	65
	Low impact industry	Inspection, analysis, precision work	75
		Light machinery, assembly, bench work	80

Local governments should note additional notification, reporting and/or assessment requirements of the Department of Defence, CASA and Airservices Australia for tall structures and hazardous plumes located anywhere, including outside operational airspace, that may pose a hazard to aircraft operations (refer to CASA Advisory Circular AC 139-08 and Part 139 and 175 of the Civil Aviation Safety Regulations 1998).

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