

NASAG
National Airports Safeguarding
Advisory Group

28 September 2010

TITLE: South Australian Government Comment on
**POSSIBLE PRINCIPLES FOR A NATIONAL
LAND USE PLANNING REGIME NEAR
AIRPORTS AND FLIGHT PATHS TO
SAFEGUARD AIRPORTS AND COMMUNITIES
AROUND THEM FROM INAPPROPRIATE OFF-
AIRPORT DEVELOPMENT**

SUBMITTED BY: Department for Transport, Energy & Infrastructure (DTEI)
Department of Planning & Local Government (DPLG)

RECOMMENDATION: NASAG to note

General Planning Provisions

1. **Commonwealth leased airports:** Adelaide and Parafield airports' master plans provide the basis for appropriate planning protections through their inclusion of OLS/PANSOPS maps and ANEF/ANEC contours. Further discussion on the interaction of Commonwealth and State legislative measures follows.
2. **Identification of strategically important airports:** DTEI has identified strategically important airports that should be subject to airport safeguarding measures. DTEI maintains a database of significant aerodromes in SA and receives annual reports on the condition of most through the Local Government Association Mutual Liability Scheme. Criteria used to identify those requiring planning protection are based on their status under Civil Aviation Safety Regulations:
 - Civil Aviation Safety Authority (CASA) *certified* aerodromes, including Adelaide and Parafield (leased); Ceduna, Coober Pedy, Kingscote, Mt Gambier, Port Augusta, Port Lincoln and Whyalla (council); and Jacinth Ambrosia, Moomba, Olympic Dam and Prominent Hill (private sector - mining).
 - CASA *registered* aerodromes, including Cleve, Cowell, Kimba, Loxton, Naracoorte, Port Pirie, Renmark, Streaky Bay, Tumby Bay, Waikerie and Wudinna (council); and Leigh Creek (private sector-mining). Oodnadatta, to be operated by the Outback Communities Authority (OCA), is also expected to be registered this financial year.
 - Other Aeroplane Landing Areas (ALAs) (mostly airstrips) used regularly by the Royal Flying Doctor Service (RFDS).

The level of safeguarding measures necessary will vary according to community size and aerodrome function. The last category above will generally only require basic OLS protection for RFDS non-precision approach procedures. The level of protection should also take into consideration the likely risk of surrounding development.

3. **State Government requirements for airport planning documents:** This principle already applies to Adelaide and Parafield airports through Commonwealth requirements.

DTEI suggests it is the role of state/territory governments, rather than the airport operators, to identify airports within their jurisdictions that have strategic economic roles wider than serving the communities in which they are situated. States/territories should also articulate those roles and the airports' context within the regional economies.

DTEI encourages and assists the operators (generally councils) of significant (certified) airports to undertake master planning processes to ICAO standards. Properly constructed master plans, and CASA required Aerodrome Manuals, should deliver this principle at least within the context of the councils' boundaries.

Impacts of Noise

1. **Incorporation of ANEF contours in planning regimes:** SA is unlikely to agree to inclusion of ANEF contours in planning regimes for use around all identified airports for two reasons. Firstly, DPLG is concerned not to overload the planning system with too much technical information; and, secondly, appropriate noise metrics will vary according to the type of operations and aircraft used at particular airports.

DPLG and DTEI are currently working on options for land use planning around Adelaide Airport based on the ANEF system. They have produced an options paper and recommendations to Ministers that take into consideration the longstanding residential uses surrounding the airport and the need to balance growth pressures and the Government's urban infill strategies of the 30-Year Plan for Greater Adelaide with measures to safeguard the airport. These conflicting priorities require compromise and SA would not support rigid application of AS2021 to the ANEF contours. The proposed recommendations incorporate a mix of planning policies and changes to the Building Code that will reduce (but not eliminate) new residential developments within ANEF (ultimate capacity) contours and require all new residences to be insulated to AS2021 standards.

The ANEF/AS2021 system is not appropriate to the level and types of use at most significant SA regional airports. DTEI presently encourages councils to use the single event noise contour (70dBA) for the noisiest aircraft likely to use the airport to define areas not suitable for residential development. Other noise metrics may also be applied depending on local circumstances. While single event contours are included in a number of regional airport master plans, most councils have yet to transfer them to their development plans for use in building approvals. This will probably require Ministerial intervention in effecting "Ministerial Development Plan Amendments", which DPLG has yet to consider because of other priorities.

2. **Use of AS2021:** See comments above.
3. **Limitations of the ANEF system:** The planning system in SA allows flexibility in determining zones around airports not suitable for residential development through the "Building Near Airfields" standard policy module.

This is one of a number of policy modules developed by DPLG and DTEI for inclusion in restructured council development plans called "*Better Development Plans*" or BDPs. Councils with aerodromes within their boundaries are encouraged to include the module when they undertake conversion of their development plans to BDPs. The module is not specific in terms of the noise metric to be used and councils need to take the additional step of assessing the most appropriate metric (ANEF, N70, single event 70dBA, etc) and including provision for it in their BDPs. Incorporating insulation requirements through the building code is one way of maintaining existing zoning requirements (ie avoiding the imposition of development exclusion zones) while also protecting against the noise impacts linked to the ANEF or other noise contours.

4. Inclusion of alternative noise metrics and information tools:

Notwithstanding discussion under the previous point, DPLG is reluctant to require inclusion of noise metrics tools in development plans because that tends to overload the plans with technical detail.

Development plans are planning instruments under the *Development Act* and some issues raised under this principle are clearly outside the realm of the Act. Issues related to public information rather than planning approvals, such as flight path location and activity diagrams and triggers for resident notification requirements may more suitably be attached to land titles for information at the time of sale and purchase.

DTEI provides guidance to councils on *Development Plan Amendments* using the DOTARS discussion paper "*Going Beyond Noise Contours*" as a reference. This raises councils' awareness of the broader need for better public information about aircraft noise.

- 5. Mechanisms to use noise metrics and information tools:** SA has a basic framework in place through the "*Building Near Airfields*" policy module that is now a requirement of development plans. As discussed under point 3 above, this provides the policy guidance but is non-prescriptive in requiring the implementation of specific measures to give effect to the policy. This is a matter under discussion between DTEI and DPLG but has yet to be resolved

Protection of operational airports

- 6. Need for airspace protection:** Agreed. Airspace protection of all certified and registered aerodromes is already provided under existing Commonwealth regulations.
- 7. Awareness, recognition and consistency of airspace protection requirements:** The SA *Development Regulations Schedule 8* is compatible with the *Airports (Protection of Airspace) Regulations 1996* in that the body with direction powers (DITRDLG) is common to both. However, while the Commonwealth regulations require referral first to the airport lessee (in SA's case, Adelaide Airport Ltd), the SA Government is not prepared to require referrals to a private company. The State regulations raise developer awareness of the requirement to make referrals and, in our view, this outweighs the inconvenience involved in

their inconsistency with the Commonwealth regulations. However, DTEI is attempting to reduce the number of unnecessary referrals to DITRD LG by facilitating the replacement of the present outdated and overly conservative Building Heights Map in the City of West Torrens' development plan with a depiction of Adelaide Airport's actual OLS. This change has already been made to the City of Adelaide development plan. These are the two councils within which building applications are most likely to penetrate the Adelaide Airport OLS.

8. **State regulatory provisions for airspace protection:** SA is not likely to follow Queensland's example in implementing prescriptive planning policies such as its SPP 1/02 to protect non-Commonwealth (regional) airports, but DTEI believes that councils should be provided with guidelines for measures they should include in their development plans to give effect to the *Building Near Airfields* policy module. DTEI and DPLG are currently assessing this issue.

However, the airspace around all certified and registered aerodromes is already protected under Commonwealth CASR 139.360. That regulation requires the airport operator to inform CASA of any development or proposed construction that may create an obstacle. CASA is then required under CASR 139.370 to determine whether the development will be an obstacle and, if it will, to serve notice on the airport operator and the approval authority. In most cases in SA, the airport is operated by a council, which is also the approval authority. If the council elects to approve the development and it becomes an obstacle, CASR 139.360 details the steps the airport operator must take to ensure that aircraft operators are properly informed and the obstacle is lit etc. If the building nevertheless compromises flight safety, then CASA has powers under CAR 95 to require its removal.

These regulations are adequate to protect the safety of flight but, since the exercise of CAR 95 requires CASA to compensate the building owner, the regulation in practice is not applied. It should be assumed that a council on being notified that a proposed development will constitute an obstacle to its airport, will refuse to approve it. However, a council may place the value of the development above that of its airport. In most cases that is properly a judgement for the council, representing its community, to make. If the airport has wider strategic importance, then there may be a case for the State Government to override the council's approval and to ensure that it has provision to do so.

9. **Notification processes for protected airspace intrusion:** SA has the basic framework in place to require referral of development applications that may constitute obstacles for assessment (see discussion under point 7 above). However, while it is appropriate for *Schedule 8* of the SA *Development Regulations* to require referral of building applications to DITRD LG when the affected airport is subject to the *Airports (Control of Airspace) Regulations*, it is not appropriate for regional airports that are subject to CASR 139.360. DTEI and DPLG are therefore seeking to change the referral authority for these airports from DITRD LG to CASA in *Schedule 8*. The referral would not give direction power to CASA, but would ensure that developers and council planning assessment officials

are aware of the referral requirement. *Schedule 8* of the *SA Development Regulations* would then support the Commonwealth requirements and be fully consistent with them. DPLG is presently seeking CASA's concurrence with this arrangement.

It should be noted that the trigger for a referral under the SA regulations is the inclusion of a Building Heights Map (airport OLS depiction) in the council's development plan. No such map is presently included for many SA certified and registered regional airports, and DTEI is seeking their inclusion through council development plan amendments for the most significant of them. It should also be noted that this will only generate referrals in respect to development. Activities not fitting the definition of development under the SA regulations, such as tree growth, some exempt activities, cranes and thermal plumes etc, would not. Monitoring of airspace and notification of these activities to CASA by the airport operator is already required under CASR 139 and steps should be taken to ensure that operators are better informed of their responsibilities.

10. **Public Safety Zones** – The implementation of PSZs at airports such as Adelaide and Parafield, where the proposed zones are already fully developed, would be highly contentious. The objective of limiting population increase in an area of defined hazard while allowing existing populations to remain exposed to that hazard would require rigorous justification, which is probably not achievable.

As discussed under point 1, DTEI and DPLG have examined options to reduce population growth in high noise areas adjacent to Adelaide Airport, and those areas correspond to potential PSZs. These measures in themselves will be contentious and difficult to implement, but may achieve some of the objectives of PSZs.

A discussion paper that identifies international practice and the implementation risks and costs may be a place to start. The process should be led by the Commonwealth.

11. **State planning provisions to address windshear, wildlife, wind turbines and aviation safety infrastructure issues:** SA supports the Commonwealth's intention to develop draft guidance material in respect to these issues. While DTEI and DPLG would be happy to review such guidelines we are concerned that a number of these issues will require technical expertise to determine the level of impact. This will require the planning system to take on technical knowledge or for additional investigations to be prepared as part of a development applications. Both of these actions have the potential to overload the planning system – which is not consistent with the faster, quicker system the State Government is committed to achieving.

12. **COAG process to agree to recognise NASAG principles:** Noted.

Comments provided are officer-level only.

The new Victorian Government and newly appointed Minister/s have yet to be briefed.

Principles for a national land use planning regime near airports and flight paths

Introduction

Airports are important national infrastructure assets. They are essential transport hubs and contribute significantly to the national economy as well as to the economies of the cities, regions, states and territories where they are located.

The operations of airports impose a large environmental footprint on surrounding communities. Their noise impacts can be significant, ranging from mild annoyance to real, measurable effects on health and lifestyle. The need for maintenance of a safe operational environment free of potential risk to aviation operations can also impose constraints on some developments near airports.

Airport sites are scarce and finding new sites to replace existing airports is difficult. Existing sites in many cases pre-dated significant urban development. More recently, urban expansion and densification has seen increasing examples of incompatibility between residential and industrial development and airport operations. Population growth and aviation industry activity growth will combine in most cities to make complementary planning more challenging and more important.

Objectives

The Australian Government, in its December 2009 National Aviation White Paper, *Flight Path to the Future*, identified the development of a national land use planning regime for land near airports and flight paths as a priority to help safeguard airport operations and to protect communities from the negative impacts of aviation operations.

The *Principles for a national land use planning regime near airports and flight paths* (the Principles) are designed to assist with the implementation of the directions identified in the National Aviation White Paper as it pertains to safeguarding airports and their communities from inappropriate development. The Principles recognise that responsibility for land use planning rests primarily with state, territory and local governments but that a national approach will assist in improving planning outcomes in the vicinity of airports and in other locations where the interaction between aviation operations and other land uses needs to be carefully managed.

The Principles will underpin the proposed national framework to safeguard airports and communities around them from inappropriate off-airport developments which could threaten public safety and the viability of airport operations.

The proposed national framework will provide guidance to state and territory governments which can in turn be used to guide local governments in assessing new residential and commercial developments around identified airports, and in any re-zoning applications in relation to such developments.

Comments provided are officer-level only.

The new Victorian Government and newly appointed Minister/s have yet to be briefed.

Principles

1. Identifying strategically important airports

- 1.1. It is important to identify airports that should be safeguarded. Airports that should be safeguarded are those which are strategically important and essential for economic, transport or social needs.
- 1.2. Operators of identified airports should lead the preparation of planning documents that identify the airport's economic and strategic role, its operational plans and environmental impacts, as well as the airport's context within the region's planning regime.
- 1.3. The Commonwealth has identified 19 airports under Part 12 of the *Airports Act 1996* as airports subject to Commonwealth planning control. These airports are required to prepare 20 year Master Plans, updated every five years, and will also be subject to any additional safeguarding measures agreed under the proposed national land use planning regime. The Commonwealth has also identified 19 Defence airfields that will be similarly safeguarded.

States and Territories are encouraged to consider equivalent approaches.

Comment [mi1]: VIC: Regional Blueprint, VTP, Freight Futures, M@5M, State Planning Policy Framework, Municipal Strategic Statements, State Planning Policy Framework and zone and overlay provisions in council planning schemes.

2. Land use planning to better recognise the impacts of aircraft noise

- 2.1. A suite of noise metrics should be considered for adoption to ensure that planning and development systems fairly reflect contemporary community expectations in relation to aircraft noise. Consideration should include both the establishment of appropriate criteria based on noise metrics to guide planning and development and the development of formal approaches for warning communities of potential noise.
- 2.2. Australian Standard AS2021-2000 *Acoustics - Aircraft noise intrusion - Building siting and construction* provides guidance to regional and local authorities, organisations and communities on the siting and construction of new buildings against aircraft noise intrusion and the acoustical adequacy of existing buildings in areas near airports. Incorporation of the AS2021-2000 guidance within planning systems can assist identifying areas that are or will be subject to significant levels of aircraft noise in ensuring the possible effects are mitigated in new or modified buildings or redevelopment of those areas.
- 2.3. The Australian Noise Exposure Forecast (ANEF) system provides a well-established metric for land use planning around airports and should continue to play an important role.
- 2.4. However, experience has shown that there are limitations to the ANEF system in identifying impacts on communities in certain circumstances, particularly
 - (a) at smaller airports where flight operations are more variable than larger metropolitan airports;
 - (b) near certain flight paths; and
 - (c) for understanding the impact of night-time noise.

Comment [mi2]: Does this refer to training circuits? Defence activities?

Comment [mi3]: VIC: Not sure what is meant here. The ANEF uses a multiplier to improve the model's sensitivity to night-time noise.

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The new Victorian Government and newly appointed Minister/s have yet to be briefed.

- 2.5. Land use planning regimes and public information processes and tools may be enhanced by the incorporation of alternative measures of aircraft noise impact to supplement ANEF tools, such as:
- (a) frequency of noise event contours based on decibels (e.g. N70s, N65s and N60s);
 - (b) indicators of night-time noise; and
 - (c) broader descriptions of airports' zones of influence that trigger notification requirements for residents.
- 2.6. The measures described in 2.5 can be used together with the ANEF system to better address proposals for noise sensitive developments in the vicinity of airports and near flight paths, with increased scrutiny of rezoning proposals for industrial and rural lands exposed to, or likely to be exposed to, aircraft noise.
- 2.7. In addition, the following can be used to improve the description of aircraft noise events and improve community understanding of its potential impact:
- (a) single event contours based on decibels; and
 - (b) flight path location and activity diagrams.

Comment [j4]: Increased scrutiny where required? Suggest leave it at just "scrutiny" given eg Melbourne Airport already has formal referral mechanism for such amendments in the environs

Comment [mi5]: These are less useful in land use planning regimes, but provide useful background context and a valuable public information tool

3. Safeguarding community and aviation safety through a national regime

- 3.1. Appropriate protection of airspace is essential to ensure safe operations around airports and to ensure that the economic potential of the airport is not constrained by developments which give rise to restrictions on operations.
- 3.2. At the Commonwealth level, the safeguarding provisions exist in the following legislation:
- (a) the *Airports (Protection of Airspace) Regulations 1996* establish a system for the protection of airspace around the leased federal airports in the interests of the safety, efficiency or regularity of existing or future air transport operations into or out of airports;
 - (b) the *Defence (Area Control) Regulations 1989* protect airspace around the identified Defence airfields; and
 - (c) Part 139 of the *Civil Aviation Safety Regulations 1998* requires airport operators to monitor the airport and land in its vicinity for structures and activities that may infringe protected airspace.

States and Territories are encouraged to consider equivalent approaches.

- 3.3. A national land use planning regime would assist with:
- (a) raising awareness of Commonwealth and State/Territory requirements;
 - (b) providing assistance and, where necessary, technical advice to local government and planning authorities considering land use and development proposals;
 - (c) harmonising, as far as practicable, State and Territory land use planning regimes with the safeguarding provisions in Commonwealth airspace protection legislation;

Comment [mi6]: This is the highest area of risk, particularly since there is a lack of appropriate skills training of and liaison with local government by CASA as the regulatory authority

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The new Victorian Government and newly appointed Minister/s have yet to be briefed.

- (d) establishing similar provisions under state and territory planning regimes for non-Commonwealth airports identified by states and territories;
- (e) providing certainty and clarify requirements for proponents and local governments when dealing with development proposals; and
- (f) ensuring timely notification to the appropriate decision-making body of any proposals which may impact on aviation operations and thereby reduce unnecessary delays in development processes.

Comment [mi7]: CAS Regs apply to all airports. don't they???

- 3.4. States and Territories should consider establishing arrangements for the identification of appropriate risk based Public Safety Zones (PSZs) near the end of runways. Identified PSZs would assist in assessing approaches where new or extended runways are planned, or where new residential or commercial developments or increased population density is proposed in the vicinity of airports.

Comment [mi8]: This needs more work and clearer definition. VIC is happy to continue to work with Commonwealth

- 3.5. Guidance material should be developed and made widely available on other aspects of development which could affect safety and efficiency of aviation operations, including:

- (a) windshear and mechanical turbulence effects of new constructions on or near airports;
- (b) bird and other wildlife hazards to aviation from off-airport wildlife attractants;
- (c) wind turbine developments, with regard to the potential for electromagnetic interference as well as the potential physical obstruction for aircraft;
- (d) structures and certain activities that may affect the integrity of aviation safety infrastructures such as navigation aids and radar; and
- (e) high intensity lighting, lasers and other similar potential visual distractions to pilots near airports.

The Commonwealth will work in close collaboration with States, Territories and local government in developing appropriate guidance.

States and Territories are encouraged to work with local governments to ensure the material is recognised in state and local government arrangements and is promoted to prospective developers and decision makers.

Comment [mi9]: This requires active on-going involvement by the Commonwealth and its agencies. We are in this together...!!!

Comment [j10]: Eg guidance mat. should be provided by Commonwealth for referral authorities, not local government planners.

Principles for a national land use planning regime near airports and flight paths

Introduction

Airports are important national infrastructure assets. They are essential transport hubs and contribute significantly to the national economy as well as to the economies of the cities, regions, states and territories where they are located.

The operations of airports impose a large environmental footprint on surrounding communities. Their noise impacts can be significant, ranging from mild annoyance to real, measurable effects on health and lifestyle. The need for maintenance of a safe operational environment free of potential risk to aviation operations can also impose constraints on some developments near airports.

Airport sites are scarce and finding new sites to replace existing airports is difficult. Existing sites in many cases pre-dated significant urban development. More recently, urban expansion and densification has seen increasing examples of incompatibility between residential and industrial development and airport operations. Population growth and aviation industry activity growth will combine in most cities to make complementary planning more challenging and more important.

Objectives

The Australian Government, in its December 2009 National Aviation White Paper, *Flight Path to the Future*, identified the development of a national land use planning regime for land near airports and flight paths as a priority to help safeguard airport operations and to protect communities from the negative impacts of aviation operations.

The *Principles for a national land use planning regime near airports and flight paths* (the Principles) are designed to assist with the implementation of the directions identified in the National Aviation White Paper as it pertains to safeguarding airports and their communities from inappropriate development. The Principles recognise that responsibility for land use planning rests primarily with state, territory and local governments but that a national approach will assist in improving planning outcomes in the vicinity of airports and in other locations where the interaction between aviation operations and other land uses needs to be carefully managed.

The Principles will underpin the proposed national framework to safeguard airports and communities around them from inappropriate off-airport developments which could threaten public safety and the viability of airport operations.

The proposed national framework will provide guidance to state and territory governments which can in turn be used to guide local governments in assessing new residential and

commercial developments around identified airports, and in any re-zoning applications in relation to such developments.

Principles

1. *Identifying strategically important airports*

- 1.1. It is important to identify airports that should be safeguarded. Airports that should be safeguarded are those which are strategically important and essential for economic, transport or social needs.
- 1.2. Operators of identified airports should lead the preparation of planning documents that identify the airport's economic and strategic role, its operational plans and environmental impacts, as well as the airport's context within the region's planning regime.
- 1.3. The Commonwealth has identified 19 airportsⁱ under Part 12 of the *Airports Act 1996* as airports subject to Commonwealth planning control. These airports are required to prepare 20 year Master Plans, updated every five years, and will also be subject to any additional safeguarding measures agreed under the proposed national land use planning regime. The Commonwealth has also identified 19 Defence airfieldsⁱⁱ that will be similarly safeguarded. States and Territories are encouraged to consider equivalent approaches. An equivalent approach for strategically important airports identified by State and Territory governments would benefit the safeguarding of those airports.

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Comment [p1]: How the State and Territory governments or local government for that matter, should not be included in the principle – needs to be included in a 'heads of agreement' document that determines how the principles will be given effect to in each jurisdiction's planning regime. If it is to stay it could be reworded as suggested

2. *Land use planning to better recognise the impacts of aircraft noise*

- 2.1. A suite of noise metrics should be considered for adoption to ensure that planning and development systems fairly reflect contemporary community expectations in relation to aircraft noise. Consideration should include both the establishment of appropriate criteria based on noise metrics to guide planning and development and the development of formal approaches for warning communities of potential noise.
- 2.2. Australian Standard AS2021-2000 (Acoustics - Aircraft noise intrusion - Building siting and construction) provides guidance to regional and local authorities, organisations and communities on the siting and construction of new buildings against aircraft noise intrusion and the acoustical adequacy of existing buildings in areas near airports. Incorporation of the AS2021-2000 guidance within planning systems can assist in ensuring the possible effects of aircraft noise are mitigated in new or modified buildings.
- 2.3. The Australian Noise Exposure Forecast (ANEF) contours provide a well established metric for land use planning around airports and should continue to play an important role. Yet there are limitations to the usefulness of the ANEF

Comment [p2]: This is an unnecessary and emotive word. Should be deleted.

measure in assessing impact on communities in certain circumstances, particularly at smaller airports, near certain flight paths, and for understanding the impact of night-time noise.

- 2.4. Land use planning regimes and public information can be enhanced by the incorporation of alternative measures of aircraft noise impact to supplement ANEFs such as:
 - (a) frequency of event contours based on decibels (e.g. N70s, N65s and N60s);
 - (b) indicators of night-time noise; and
 - (c) broader descriptions of airports' zones of influence that trigger notification requirements for residents.
- 2.5. The measures described in 2.4 can be used to better address proposals for noise sensitive developments in the vicinity of airports and near flight paths, with increased scrutiny of rezoning proposals for industrial and rural lands exposed to, or likely to be exposed to, aircraft noise.
- 2.6. In addition to their use for land use planning, these tools and the following can be used to improve the description of aircraft noise and improve community understanding of its potential impact:
 - (a) single event contours based on decibels; and
 - (b) flight path location and activity diagrams.

Comment [p3]: Who will be producing the necessary mapping? I'd assume that the airport operator will take on this task. If so, should this be stated similar to clause 1.2?

Comment [p4]: This is an explanatory clause not a principle.

3. *Safeguarding community and aviation safety through a national regime*

- 3.1. Appropriate protection of airspace is essential to ensure safe operations around airports and to ensure that the economic potential of the airport is not constrained by developments which give rise to restrictions on operations.
- 3.2. At the Commonwealth level, the safeguarding provisions exist in the following legislation:
 - (a) the *Airports (Protection of Airspace) Regulations 1996ⁱⁱⁱ* establish a system for the protection of airspace around the leased federal airports in the interests of the safety, efficiency or regularity of existing or future air transport operations into or out of airports;
 - (b) the *Defence (Area Control) Regulations 1989* protect airspace around the identified Defence airfields; and
 - (c) Part 139 of the *Civil Aviation Safety Regulations 1998^{iv}* requires airport operators to monitor the airport and land in its vicinity for structures and activities that may infringe protected airspace.

States and Territories are encouraged to consider equivalent approaches.

Comment [p5]: Refer comment 1.

3.3. A national land use planning regime would assist with:

- (a) raising awareness of Commonwealth and State/Territory requirements within local government;
- (b) harmonising, as far as practicable, State and Territory land use planning regimes with the safeguarding provisions in Commonwealth airspace protection legislation;
- (c) establishing similar provisions under state and territory planning regimes for non-Commonwealth airports identified by states and territories;
- (d) increase administrative efficiency for proponents and local governments; and
- (e) ensuring timely notification to the appropriate decision-making body of any proposals which may impact on aviation operations and thereby reduce unnecessary delays in development processes.

Comment [p6]: Sounds better in the positive?

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3.4. Arrangements for the identification of appropriate risk-based Public Safety Zones (PSZs) near the end of runways should be established in State and Territory planning systems. Identified PSZs would assist in assessing approaches where new or extended runways are planned, or where new residential or commercial developments or increased population density is proposed in the vicinity of airports.

Deleted: States and Territories should consider establishing arrangements

Comment [p7]: Refer comment 1.

3.5. Guidance material should be developed and made widely available on other aspects of development which could affect safety and efficiency of aviation operations, including:

- (a) windshear and mechanical turbulence effects of new constructions on or near airports;
- (b) bird and other wildlife hazards to aviation from off-airport wildlife attractants;
- (c) wind turbine developments, with regard to the potential for electromagnetic interference as well as the potential physical obstruction for aircraft;
- (d) structures and certain activities that may affect the integrity of aviation safety infrastructures such as navigation aids and radar; and
- (e) high intensity lighting, lasers and other similar potential visual distractions to pilots near airports.

The Commonwealth will work in close collaboration with States and Territories in developing appropriate guidance. States and Territories are encouraged to work with local governments to ensure the material is recognised in state and local government arrangements and is promoted to prospective developers and decision makers.

Comment [p8]: Refer comment 1.

ⁱ The 19 airports subject to the planning provisions of the Commonwealth *Airports Act 1996* are Sydney (Kingsford Smith), Bankstown and Camden (NSW), Melbourne, Essendon and Moorabbin (Vic), Brisbane, Gold Coast, Townsville and Archerfield (Qld), Adelaide and Parafield (SA), Perth and Jandakot (WA), Hobart and Launceston (Tas), Canberra (ACT) and Darwin and Alice Springs (NT).

ⁱⁱ The Department of Defence is the owner/operator of the following major airfields: Williamtown, Richmond, Nowra and Wagga Wagga (NSW), East Sale, Point Cook and Avalon (Vic), Townsville, Amberley, Oakey and Scherger (Qld), Edinburgh and Woomera (SA), Pearce, Gingin, Learmonth, and Curtin (WA) and Darwin (NT).

ⁱⁱⁱ The *Airports (Protection of Airspace) Regulations 1996* are made under the *Airports Act 1996*. The Act and Regulations are administered by the Commonwealth Department of Infrastructure and Transport.

^{iv} The *Civil Aviation Safety Regulations 1998* are made under the *Civil Aviation Safety Act 1998*. The Civil Aviation Safety Authority administers the Act and Regulations.

Principles for a national land use planning regime near airports, military airfields and flight paths

Introduction

Civil airports are important national infrastructure assets. They are essential transport hubs and contribute significantly to the national economy as well as to the economies of the cities, regions, states and territories where they are located. Military airfields support critical pilot training for the Australian Defence Force and act as a staging base for military operations.

The operations and flying activities associated with Australia's airports and military airfields can have a large environmental footprint that may affect communities nearby. For example, noise impacts can distract or annoy nearby residents and the need for a safe operational environment free of potential risk to aviation operations can also impose constraints on some developments near airports.

Sites for airports and military airfields are scarce and finding new sites to replace existing airports and military airfields is difficult. Existing sites in many cases pre-dated significant urban development. More recently, urban expansion and densification has seen increasing examples of incompatibility between residential and industrial development and airport operations. Population growth and aviation industry activity growth will combine in most cities to make complementary planning more challenging and more important.

Objectives

The Australian Government, in its December 2009 National Aviation White Paper, Flight Path to the Future, identified the development of a national land use planning regime for land near airports and flight paths as a priority to help safeguard Australian aviation and to protect communities from the negative environmental aspects of aviation.

The *Principles for a national land use planning regime near airports and flight paths* (the Principles) are designed to assist with the implementation of the directions identified in the National Aviation White Paper as it pertains to safeguarding airports and their communities from inappropriate development. The Principles recognise that responsibility for land use planning rests primarily with state, territory and local governments but that a national approach will assist in improving planning outcomes in the vicinity of airports and in other locations where the interaction between aviation operations and other land uses needs to be carefully managed.

The Principles will underpin the proposed national framework to safeguard airports and communities around them from inappropriate off-airport developments which could threaten public safety and the viability of airport operations.

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Comment [BP1]: Although research generally points to health impacts, research into what these are and the scale is still ongoing. Australian research thinks health impacts likely, but hard to quantify due to long-term and/or chronic nature of impacts.

Deleted: Their noise impacts can be significant, ranging from mild annoyance to real, measurable effects on health and lifestyle. The need for maintenance of a

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The proposed national framework will provide guidance to state and territory governments which can in turn be used to guide local governments in assessing new residential and commercial developments around identified airports, and in any re-zoning applications in relation to such developments.

Principles

1. Identifying strategically important airports

- 1.1. It is important to identify airports that should be safeguarded. Airports and military airfields that should be safeguarded are those which are strategically important and essential for economic, transport, social or, in the case of military airfields, for national security purposes.
- 1.2. Operators of identified airports should lead the preparation of planning documents that identify the airport's economic and strategic role, its operational plans and environmental impacts, as well as the airport's context within the region's planning regime.
- 1.3. The Commonwealth has identified 19 airportsⁱ under Part 12 of the *Airports Act 1996* as airports subject to Commonwealth planning control. These airports are required to prepare 20 year Master Plans, updated every five years, and will also be subject to any additional safeguarding measures agreed under the proposed national land use planning regime.
- 1.4. The Commonwealth has also identified military-owned airfieldsⁱⁱ that will be similarly safeguarded. Due to the unique nature of military flying, training and military operations, the safeguarding needs of military airfields may differ to those of civil airports. Some of these military airfields are also used by civil operators under joint-user or licensing arrangements
- 1.5. States and Territories are encouraged to consider equivalent approaches for smaller airports and civil airfields.

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2. Land use planning to better recognise the impacts of aircraft noise

- 2.1. A suite of noise metrics should be considered for adoption to ensure that planning and development systems consider community expectations in relation to aircraft noise. Consideration should include both the establishment of appropriate criteria based on noise metrics to guide planning and development and the development of formal approaches for warning communities of potential noise.
- 2.2. Australian Standard AS2021-2000 (Acoustics - Aircraft noise intrusion - Building siting and construction) provides guidance to regional and local authorities, organisations and communities on the siting and construction of new development in a noise-exposed environment. Incorporation of the AS2021-

Comment [BP2]: This section has been reordered to make the distinction between ANEF and *supplemental* noise metrics clearer.

Deleted: fairly reflect contemporary

2000 guidance within planning systems can assist in ensuring that aircraft noise is considered when a rezoning or a new (or modified) building is proposed.

2.3. The Australian Noise Exposure Forecast (ANEF) has been Australia's established metric for land use planning around airports and military airfields since the early 1980s and will remain the primary mechanism to govern land use planning in areas affected by aircraft noise. However, it is recognised that the ANEF has certain limitations with respect to informing communities about the impact of aircraft noise and that supplementary tools may assist to educate the community.

2.4. Land use planning regimes and public information can be enhanced by the incorporation of supplemental measures of aircraft noise impact that can help to explain aircraft noise exposure. These supplementary tools include:

- (a) frequency of event contours based on decibels (e.g. N70s, N65s and N60s);
- (b) indicators of night-time noise;
- (c) broader descriptions of airports' zones of influence that trigger notification requirements for residents;
- (d) Timetables showing the frequency of aircraft activity and respite periods;
- (e) single event contours based on decibels; and
- (f) flight path location and activity diagrams.

2.5. The supplemental measures described in 2.4 can be used to help guide proposals for noise sensitive developments in the vicinity of airports and near flight paths, with increased understanding of how development proposals (including rezonings) may be exposed to aircraft noise. Consideration of these issues in addition to the criteria in AS2021:2000 may help reduce community concern about aircraft noise.

Comment [BP3]: The purpose of each tool will need to be considered. Some of the tools are educational, others may be used to make land-use-planning decisions.

Comment [BP4]: Care needs to be taken that the new supplementary tools do not conflict with the ANEF/AS2021:2000.

3. *Safeguarding community and aviation safety through a national regime*

3.1. Appropriate protection of airspace is essential to ensure safe operations around airports and to ensure that the economic potential of the airport is not constrained by developments which give rise to restrictions on operations.

3.2. At the Commonwealth level, the safeguarding provisions exist in the following legislation:

- (a) the *Airports (Protection of Airspace) Regulations 1996*ⁱⁱⁱ establish a system for the protection of airspace around the leased federal airports in the interests of the safety, efficiency or regularity of existing or future air transport operations into or out of airports;
- (b) the *Defence (Area Control) Regulations 1989* protect airspace around the identified Defence airfields; and

- (c) Part 139 of the *Civil Aviation Safety Regulations 1998*^{iv} requires airport operators to monitor the airport and land in its vicinity for structures and activities that may infringe protected airspace.

States and Territories are encouraged to consider equivalent approaches for the protection of smaller airports and civil airfields.

- 3.3. States and Territories should consider establishing arrangements for the identification of appropriate risk- based Public Safety Zones (PSZs) near the end of runways. Identified PSZs would assist in assessing approaches where new or extended runways are planned, or where new residential or commercial developments or increased population density is proposed in the vicinity of airports.

Comment [BP5]: What is 'appropriate' and why 'risk based'? Will Defence and civilian airport operators need to own PSZ land?

- 3.4. Guidance material should be developed and made widely available on other aspects of development which could affect safety and efficiency of aviation operations, including:

- (a) windshear and mechanical turbulence effects of new constructions on or near airports;
 - (b) bird and other wildlife hazards to aviation from off-airport wildlife attractants;
 - (c) wind turbine developments, with regard to the potential for electromagnetic interference as well as the potential physical obstruction for aircraft;
 - (d) structures and certain activities that may affect the integrity of aviation safety infrastructures such as navigation aids and radar; and
 - (e) high intensity lighting, lasers and other similar potential visual distractions to pilots near airports.
- (f) Structures such as high tension power lines, transmission towers and gas fired power stations that may also affect aircraft safety.

The Commonwealth will work in close collaboration with States and Territories in developing guidance. States and Territories are encouraged to work with local governments to ensure that relevant material is recognised and made available to developers and consent authorities.

4. A national land use planning regime

- 4.1. A nationally consistent land use planning framework around airports and military airfields could assist with:

- (a) raising awareness of Commonwealth and State/Territory requirements within local government;
- (b) harmonising, as far as practicable, State and Territory land use planning regimes with the safeguarding provisions in Commonwealth airspace protection legislation;

(c) establishing similar provisions under state and territory planning regimes for non-Commonwealth airports identified by states and territories;

(d) ensuring timely notification to the appropriate decision-making body of any proposals which may impact on aviation operations and thereby reduce unnecessary delays in development processes.

(e) Introducing effective systems to notify current and future landowners about the presence of aircraft noise, public safety zones and other safeguarding measures.

Deleted: <#>reducing administrative inefficiency for proponents and local governments, and¹

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Comment [BP6]: But could increase necessary delays. Defence would need to establish a policy of objecting to inappropriate development in 'unacceptable' areas and may need to follow through on this objection in the fact of community, business or political opposition.

ⁱ The 19 airports subject to the planning provisions of the *Commonwealth Airports Act 1996* are Sydney (Kingsford Smith), Bankstown and Camden (NSW), Melbourne, Essendon and Moorabbin (Vic), Brisbane, Gold Coast, Townsville and Archerfield (Qld), Adelaide and Parafield (SA), Perth and Jandakot (WA), Hobart and Launceston (Tas), Canberra (ACT) and Darwin and Alice Springs (NT).

ⁱⁱ The Department of Defence owns the following major airfields: Wagga Wagga, Williamtown, Richmond, Nowra (NSW), Avalon, Point Cook, East Sale (Vic), Townsville, Amberley, Oakey (Qld), Edinburgh (SA), Pearce, (WA), and Darwin (NT).

ⁱⁱⁱ The *Airports (Protection of Airspace) Regulations 1996* are made under the *Airports Act 1996*. The Act and Regulations are administered by the Commonwealth Department of Infrastructure and Transport.

^{iv} The *Civil Aviation Safety Regulations 1998* are made under the *Civil Aviation Safety Act 1998*. The Civil Aviation Safety Authority administers the Act and Regulations.

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National Airports Safeguarding Advisory Group

This purpose of this version of the draft principles paper is to inform you of the responses received so far. Substantive comments and suggested amendments have been consolidated within this document.

At the meeting we will be working through the version distributed on 11 November and decisions can then be made collectively about proposed amendments.

List of responses

Substantive comments incorporated into the attached from:

- South Australia
- Defence
- Tasmania

Supporting comments from:

- Queensland: draft principles paper is supported as a reasonably balanced statement of what was agreed at the last meeting.

Nil response from:

- Northern Territory – NT Lands and Planning advised of a nil response.

Comments to be provided at the meeting:

- Victoria

Awaiting responses from:

- ACT
- NSW
- WA

Principles for a national land use planning regime near airports, military airfields and flight paths

Introduction

Civil airports are important national infrastructure assets. They are essential transport hubs and contribute significantly to the national economy as well as to the economies of the cities, regions, states and territories where they are located. Military airfields support critical pilot training for the Australian Defence Force and act as a staging base for military operations.

The operations and flying activities associated with Australia's airports and military airfields can have a large environmental footprint that may affect communities nearby. ~~Their noise impacts can be significant, ranging from mild annoyance to real, measurable effects on health and lifestyle. The need for maintenance of a~~ For example, noise impacts can distract or annoy nearby residents and the need for a safe operational environment free of potential risk to aviation operations can also impose constraints on some developments near airports.

Defence: Although research generally points to health impacts, research into what these are and the scale is still ongoing. Australian research thinks health impacts likely, but hard to quantify due to long-term and/or chronic nature of impacts.

Sites for airport and military airfields are scarce and finding new sites to replace existing airports and military airfields is difficult. Existing sites in many cases pre-dated significant urban development. More recently, urban expansion and densification has seen increasing examples of incompatibility between residential and industrial development with airport operations. Population growth, development demands and aviation industry activity growth will combine in most cities to make complementary planning more challenging and more important. The challenge in planning for areas in proximity to airports is to manage the impacts such as noise and safety, taking into account the interests of existing communities, the needs of growing metropolitan regions and the need to protect airports to provide for ongoing development and operation.

(Comment: The paper could acknowledge that Australian cities must become more sustainable which will require a greater level of consolidation of development and it may not be appropriate to exclude all noise-sensitive development from the environs of airports.)

Comment: It is worth mentioning the problems with the ANEF system and AS2021 in the introduction as it contributes to setting the context for this paper and work. Suggested wording has been included below.

The system of aircraft noise measurement, which has traditionally been used in Australia for the purposes of evaluating land use compatibility, is the Australian Noise Exposure Forecast (ANEF) system. Australian Standard, *Acoustics-Aircraft noise intrusion-Building*

siting and construction, 2000 (AS2021) is based on the ANEF system but in recent years considerable concerns have been expressed regarding the use of the system as the basis for land use planning in the vicinity of general aviation airports. The thrust of these concerns is that the ANEF contours do not adequately reflect the level of noise nuisance associated with general aviation aircraft operations and that the ANEF system has not been validated for use in relation to general aviation airports.

There are also concerns regarding the ANEF system and AS2021 in relation to major airports and the *National Aviation White Paper, 2009* proposes a number of measures to address this situation including the development of a national land use planning regime for land near airports and flight paths. The proposed planning regime will assist in safeguarding Australian aviation infrastructure and protecting communities from the impacts of aviation infrastructure and operation.

Objectives

The Australian Government, in its December 2009 National Aviation White Paper, Flight Path to the Future, identified the development of a national land use planning regime for land near airports and flight paths as a priority to help safeguard Australian aviation and to protect communities from the negative environmental aspects aviation.

The *Principles for a national land use planning regime near airports and flight paths* (the Principles) are designed to assist with the implementation of the directions identified in the National Aviation White Paper as it pertains to safeguarding airports and their communities from inappropriate development. The Principles recognise that responsibility for land use planning rests primarily with state, territory and local governments but that a national approach could assist in improving planning outcomes in the vicinity of airports and in other locations where the interaction between aviation operations and other land uses needs to be carefully managed.

The Principles will underpin the proposed national framework to safeguard airports and communities around them from inappropriate off-airport developments which could reduce public amenity, threaten public health and safety and the viability of airport operations.

The proposed national framework will provide guidance to state and territory governments which can in turn be used to guide local governments in assessing new land uses and developments around identified airports, and in any re-zoning applications in relation to such developments.

Principles

Need for Co-operation

With the division between Commonwealth, State and local governments in relation to the planning of airports and surrounding land uses, a cooperative approach is needed, in which land use planning agencies at both State and local level work with the airport operator and relevant Commonwealth agencies to achieve a satisfactory outcome for all stakeholders. This will require:

- An appreciation of the strategic importance of airports and their operational requirements.
- An appreciation of the nature and significance of development which exists or is proposed in the vicinity of airports.
- A stable and predictable framework within which to plan for the future use and development of airports and land in the vicinity of airports.

(Comment: Some of the following points are a combination of statements or tasks, not principles, which should be clearly articulated and agreed upon, before defining the work to be done.)

1. Identifying strategically important airports (Comment: This is a task not a principle.)

- 1.1. It is important to identify airports that should be safeguarded. Airports and military airfields that should be safeguarded are those which are strategically important and essential for economic, transport or social needs or, in the case of military airfields, for national security purposes.
- 1.2. Operators of identified airports should lead the preparation of planning documents that identify the airport's economic and strategic role, its operational plans and environmental impacts, as well as the airport's context within the region's planning regime. This should be done in consultation with State planning agencies.
- 1.3. The Commonwealth has identified 19 airportsⁱ under Part 12 of the *Airports Act 1996* as airports subject to Commonwealth planning control. These airports are required to prepare 20 year Master Plans, updated every five years, and will also be subject to any additional safeguarding measures agreed under the proposed national land use planning regime.
- 1.4. [new para] The Commonwealth has also identified military-owned airfieldsⁱⁱ that will be similarly safeguarded. Due to the unique nature of military flying, training and military operations, the safeguarding needs of military airfields may differ to those of civil airports. Some of these military airfields are also used by civil operators under joint-user or licensing arrangements.
- 1.5. States and Territories are encouraged to consider equivalent approaches for smaller airports and civil airfields.
[Alternative:] An equivalent approach for strategically important airports identified by State and Territory governments would benefit the safeguarding of those airports.

TAS: How the State and Territory governments or local government for that matter, should not be included in the principle – needs to be included in a 'heads of

agreement' document that determines how the principles will be given effect to in each jurisdiction's planning regime. If it is to stay it could be reworded as suggested.

2. Land use planning to better recognise the impacts of aircraft noise

- 2.1. A suite of noise metrics should be considered for adoption to ensure that planning and development systems ~~fairly reflect contemporary~~ consider community expectations in relation to aircraft noise. Consideration should include both the establishment of appropriate criteria based on noise metrics to guide planning and development and the development of formal approaches for warning prospective purchasers, developers and communities of potential noise.

SA: There is no current requirement or legislation to undertake such a process in SA at this time. However, it is undertaken on a limited and informal basis in relation to Parafield Airport (discussed below) with the City of Salisbury requiring developers to distribute notices to prospective purchasers that they are buying near an airport.

- 2.2. Australian Standard AS2021-2000 (Acoustics - Aircraft noise intrusion - Building siting and construction) provides guidance to regional and local authorities, organisations and communities on the siting and construction of new buildings against aircraft noise intrusion and the acoustical adequacy of existing buildings in areas near airports. Incorporation of the AS2021-2000 guidance within planning systems can assist in ensuring the possible effects of aircraft noise are mitigated in new or modified buildings.

(Comment: Further guidance with regard to noise insulation is contained within the Western Australian Planning Commission report titled *Aircraft Noise Insulation for Residential Development In The Vicinity of Perth Airport, February 2004*. The report contains recommendations regarding deemed-to comply noise insulation measures to achieve the indoor design sound levels recommended within AS 2021.)

SA: Councils surrounding Adelaide Airport other than the City of Adelaide (within 20ANEF) do not apply AS2021. Our DPLG/DTEI joint proposals (currently being investigated) suggest only partial / limited application. We can only accept this principle to the extent that "guidance" does not imply full application of the Standard.

- 2.3. The Australian Noise Exposure Forecast (ANEF) contours provide a well established metric for land use planning around airports and should continue to play an important role. Yet there are limitations to the usefulness of the ANEF measure in assessing impact on communities in certain circumstances, particularly at smaller airports, near certain flight paths, and for understanding the impact of night-time noise.

(Comment: Given the known limitations of AS2021 for smaller GA airports, the standard should be reviewed and updated as soon possible.)

2.4. ~~Land use planning regimes and~~ Public information can be enhanced by the incorporation of supplementary ~~alternative~~ measures of aircraft noise impact to supplement ANEFs such as:

- (a) frequency of event contours based on decibels (e.g. N70s, N65s and N60s);
- (b) indicators of night-time noise; and
- (c) broader descriptions of airports' zones of influence that trigger notification requirements for residents.

SA: These metrics are noted to potentially widen the noise affected areas beyond ANEF contours. As SA is not seeking to adopt the full AS2021 / ANEF application around Adelaide Airport, more onerous requirements are not considered viable.

In addition, it is important that land use planning regimes make reference to a single set of criteria (ie ANEF) to ensure certainty and consistency of measurement and assessment for development applications. 'Alternative measures' (ie non-ANEF) are only recommended where the ANEF system is not considered a satisfactory method of measurements / assessment (eg some regional, non-strategic airports) but again, this would need to be reflected in the relevant Development Plan etc.

Availability of information for public information / understanding (as per 2.1 above) is supported, however, it is important that it does not conflict with the requirements of the planning system. The reference to 'land use planning regimes and ..' has therefore been deleted in this point.

TAS: Who will be producing the necessary mapping? I'd assume that the airport operator will take on this task. If so, should this be stated similar to clause 1.2?

2.5. ~~The supplementary measures described in 2.4 can be used to help guide [see comment 1] proposals for noise sensitive developments in the vicinity of airports and near flight paths, with increased scrutiny of rezoning proposals for industrial and rural lands exposed to, or likely to be exposed to, aircraft noise. Consideration of these issues in addition to the criteria in AS2021:2000 may help reduce community concern about aircraft noise [see comment 2]~~

Defence:

1. The purpose of each tool will need to be considered. Some of the tools are educational, others may be used to make land-use-planning decisions.
2. Care needs to be taken that the new supplementary tools do not conflict with the ANEF/AS2021:2000.

TAS: This is an explanatory clause not a principle.

2.6. In addition to their use for land use planning, these tools and the following can be used to improve the description of aircraft noise and improve community understanding of its potential impact:

- (a) single event contours based on decibels; and
- (b) flight path location and activity diagrams.

SA: SA DTEI supports use of critical aircraft (most noisy) single event noise contours to define buffer zones for residential development should not occur in relation to regional airports.

3. *Safeguarding community and aviation safety through a national regime*

- 3.1. Appropriate protection of airspace is essential to ensure safe operations around airports and to ensure that the economic potential of the airport is not constrained by developments which give rise to restrictions on operations.

(Comment: It is suggested that the reference to 'economic potential' be deleted above, as the primary focus here should be on safe airport operations.

- 3.2. At the Commonwealth level, the safeguarding provisions exist in the following legislation:

- (a) the *Airports (Protection of Airspace) Regulations 1996ⁱⁱⁱ* establish a system for the protection of airspace around the leased federal airports in the interests of the safety, efficiency or regularity of existing or future air transport operations into or out of airports;
- (b) the *Defence (Area Control) Regulations 1989* protect airspace around the identified Defence airfields; and
- (c) Part 139 of the *Civil Aviation Safety Regulations 1998^{iv}* requires airport operators to monitor the airport and land in its vicinity for structures and activities that may infringe protected airspace.

States and Territories are encouraged to consider equivalent approaches for the protection of smaller airports and civil airfields that reinforce these provisions by improving developers' and planners' knowledge of them.

SA: It is not considered necessary for states / territories to implement "equivalent approaches" as this becomes duplication. SA currently reinforces the role of the Commonwealth regulations through Development Regulations Schedule 8 referral requirements.

TAS: refer to comment under draft principle 1.5 above.

- 3.3. A nationally consistent land use planning framework to protect airport airspace around airports and military airfields could assist with: ~~A national land use planning regime would assist with:~~

SA: Wording amended to clarify that this principle specifically refers to airspace protection in accordance with the Commonwealth requirements (building heights/thermal plumes/ lighting etc).

- (a) raising awareness of Commonwealth and State/Territory requirements within local government;
- (b) harmonising, as far as practicable, State and Territory land use planning regimes with the safeguarding provisions in Commonwealth airspace protection legislation;
- (c) establishing similar provisions under state and territory planning regimes for non-Commonwealth airports identified by states and territories;

SA: Refer 3.2 comment – it is not considered necessary for states / territories to implement “equivalent approaches” as this becomes duplication. However, it is acknowledged that the SA planning system could reinforce the Commonwealth provisions more effectively – eg significant regional airports to include Building Heights Maps in their development plans to trigger referrals.

- (d) ~~reducing administrative inefficiency for proponents and local governments; and~~ [deleted by Defence]
[Alternative:] increase administrative efficiency for proponents and local governments;
- (e) ensuring timely notification to the appropriate decision-making body of any proposals which may impact on aviation operations and thereby reduce unnecessary delays in development processes.

Defence: But could increase necessary delays. Defence would need to establish a policy of objecting to inappropriate development in ‘unacceptable’ areas and may need to follow through on this objection in the face of community, business or political opposition.

- (f) Introducing effective systems to notify current and future landowners about the presence of aircraft noise, public safety zones and other safeguarding measures.

Defence: make 3.3 a stand-alone segment entitled ‘A national land use planning regime.

- 3.4. The Commonwealth should work with States and Territories ~~should consider establishing~~ to undertake a detailed examination of the implications of and ~~arrangements for the identification of appropriate risk-based~~ [note Defence comment below] **Public Safety Zones (PSZs) near the end of runways.**
[Alternative:] Arrangements for the identification of appropriate risk-based Public Safety Zones (PSZs) near the end of runways should be established in State and Territory planning systems.

Identified PSZs would assist in assessing approaches where new or extended runways are planned, or where new residential or commercial developments or increased population density is proposed in the vicinity of airports.

SA: Wording amended to reflect the White Paper. It has been understood from the outset that the Commonwealth would lead this. SA has previously commented on the difficulties involved in introducing PSZs over established residential areas and that that implementation of a PSZ would go beyond the joint DPLG/DTEI measures proposed to restrict population increase in the 30/35ANEF at Adelaide Airport.

Defence: What is 'appropriate' and why 'risk based'? Will Defence and civilian airport operators need to own PSZ land?

TAS: refer to comment under draft principle 1.5 above.

3.5. Guidance material should be developed and made widely available on other aspects of development which could affect safety and efficiency of aviation operations, including:

- (a) windshear and mechanical turbulence effects of new constructions on or near airports;
- (b) bird and other wildlife hazards to aviation from off-airport wildlife attractants;
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- (e) high intensity lighting, lasers and other similar potential visual distractions to pilots near airports.
- (f) Structures such as high tension power lines, transmission towers and gas fired power stations that may also affect aircraft safety.

The Commonwealth will work in close collaboration with States and Territories in developing appropriate guidance. States and Territories are encouraged to work with local governments to ensure the material is recognised in state and local government arrangements and is promoted to prospective developers and decision makers.

SA: SA notes that these elements are all included in Development Plans via the BDP Building near Airfields module (although protecting en-route airspace from windfarms is a separate issue). However, SA DPLG / DTEI acknowledge that in some cases, Development Plans need to be strengthened with provisions that more directly address measurement and implementation of air safety requirements as well as providing general guidance for better understanding to fully satisfy this principle.

TAS: refer to comment under draft principle 1.5 above.

General comments:

1. A section on implementation of the national planning regime within State planning systems is needed as this will be a difficult issue to address.

A clear understanding of the existing State legislative and planning frameworks and the interrelationship with the national land use planning regime would be beneficial as this will influence the scope of the final document.

2. Include a section on stakeholder consultation and referral arrangements in regard to subdivision, development applications etc.

3. The paper focuses on preventing 'inappropriate off-airport developments'. Consideration of minimising the impact of airport operations on existing and future communities should also be considered as a balanced approach to land use planning around airports is needed.

4. A section on the need for the integration of airport master plans and surrounding land uses and infrastructure and the mechanisms in which this would be achieved would be beneficial.

ⁱ The 19 airports subject to the planning provisions of the Commonwealth *Airports Act 1996* are Sydney (Kingsford Smith), Bankstown and Camden (NSW); Melbourne, Essendon and Moorabbin (Vic); Brisbane, Gold Coast, Townsville and Archerfield (Qld); Adelaide and Parafield (SA); Perth and Jandakot (WA); Hobart and Launceston (Tas); Canberra (ACT); and Darwin and Alice Springs (NT).

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Principles for a national land use planning regime near airports, military airfields and flight paths

Introduction

Civil airports are important national infrastructure assets. They are essential transport hubs and contribute significantly to the national economy as well as to the economies of the cities, regions, states and territories where they are located. Military airfields support critical pilot training for the Australian Defence Force and act as a staging base for military operations.

The operations and flying activities associated with Australia's airports and military airfields can have a large environmental footprint that may affect communities nearby. ~~Their noise impacts can be significant, ranging from mild annoyance to real, measurable effects on health and lifestyle. The need for maintenance of a~~ For example, noise impacts can distract or annoy nearby residents and the need for a safe operational environment free of potential risk to aviation operations can also impose constraints on some developments near airports.

Defence: Although research generally points to health impacts, research into what these are and the scale is still ongoing. Australian research thinks health impacts likely, but hard to quantify due to long-term and/or chronic nature of impacts.

Sites for airport and military airfields are scarce and finding new sites to replace existing airports and military airfields is difficult. Existing sites in many cases pre-dated significant urban development. More recently, urban expansion and densification has seen increasing examples of incompatibility between residential and industrial development with airport operations. Population growth, development demands and aviation industry activity growth will combine in most cities to make complementary planning more challenging and more important.

Objectives

The Australian Government, in its December 2009 National Aviation White Paper, Flight Path to the Future, identified the development of a national land use planning regime for land near airports and flight paths as a priority to help safeguard Australian aviation and to protect communities from the negative environmental aspects aviation.

- The *Principles for a national land use planning regime near airports and flight paths* (the Principles) are designed to assist with the implementation of the directions identified in the National Aviation White Paper as it pertains to safeguarding airports and their communities from inappropriate development. The Principles recognise that responsibility for land use planning rests primarily with state, territory and local governments but that a national approach could assist in improving planning outcomes in the vicinity of airports

and in other locations where the interaction between aviation operations and other land uses needs to be carefully managed.

The Principles will underpin the proposed national framework to safeguard airports and communities around them from inappropriate off-airport developments which could reduce public amenity, threaten public health and safety and the viability of airport operations.

The proposed national framework will provide guidance to state and territory governments which can in turn be used to guide local governments in assessing new land uses and developments around identified airports, and in any re-zoning applications in relation to such developments.

Principles

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- 1.5. States and Territories are encouraged to consider equivalent approaches for smaller airports and civil airfields.
[Alternative:] An equivalent approach for strategically important airports identified by State and Territory governments would benefit the safeguarding of those airports.

TAS: How the State and Territory governments or local government for that matter, should not be included in the principle – needs to be included in a 'heads of agreement' document that determines how the principles will be given effect to in each jurisdiction's planning regime. If it is to stay it could be reworded as suggested.

2. Land use planning to better recognise the impacts of aircraft noise

- 2.1. A suite of noise metrics should be considered for adoption to ensure that planning and development systems ~~fairly reflect contemporary~~ consider community expectations in relation to aircraft noise. Consideration should include both the establishment of appropriate criteria based on noise metrics to guide planning and development and the development of formal approaches for warning prospective purchasers, developers and communities of potential noise.

SA: There is no current requirement or legislation to undertake such a process in SA at this time. However, it is undertaken on a limited and informal basis in relation to Parafield Airport (discussed below) with the City of Salisbury requiring developers to distribute notices to prospective purchasers that they are buying near an airport.

- 2.2. Australian Standard AS2021-2000 (Acoustics - Aircraft noise intrusion - Building siting and construction) provides guidance to regional and local authorities, organisations and communities on the siting and construction of new buildings against aircraft noise intrusion and the acoustical adequacy of existing buildings in areas near airports. Incorporation of the AS2021-2000 guidance within planning systems can assist in ensuring the possible effects of aircraft noise are mitigated in new or modified buildings.

SA: Councils surrounding Adelaide Airport other than the City of Adelaide (within 20ANEF) do not apply AS2021. Our DPLG/DTEI joint proposals (currently being investigated) suggest only partial / limited application. We can only accept this principle to the extent that "guidance" does not imply full application of the Standard.

- 2.3. The Australian Noise Exposure Forecast (ANEF) contours provide a well established metric for land use planning around airports and should continue to play an important role. Yet there are limitations to the usefulness of the ANEF measure in assessing impact on communities in certain circumstances, particularly at smaller airports, near certain flight paths, and for understanding the impact of night-time noise.

- 2.4. ~~Land use planning regimes and~~ Public information can be enhanced by the incorporation of supplementary ~~alternative~~ measures of aircraft noise impact to supplement ANEFs such as:

- (a) frequency of event contours based on decibels (e.g. N70s, N65s and N60s);
- (b) indicators of night-time noise; and
- (c) broader descriptions of airports' zones of influence that trigger notification requirements for residents.

SA: These metrics are noted to potentially widen the noise affected areas beyond ANEF contours. As SA is not seeking to adopt the full AS2021 / ANEF application around Adelaide Airport, more onerous requirements are not considered viable.

In addition, it is important that land use planning regimes make reference to a single set of criteria (ie ANEF) to ensure certainty and consistency of measurement and assessment for development applications. 'Alternative measures' (ie non-ANEF) are only recommended where the ANEF system is not considered a satisfactory method of measurements / assessment (eg some regional, non-strategic airports) but again, this would need to be reflected in the relevant Development Plan etc.

Availability of information for public information / understanding (as per 2.1 above) is supported, however, it is important that it does not conflict with the requirements of the planning system. The reference to 'land use planning regimes and ..' has therefore been deleted in this point.

TAS: Who will be producing the necessary mapping? I'd assume that the airport operator will take on this task. If so, should this be stated similar to clause 1.2?

- 2.5. The supplementary measures described in 2.4 can be used to help guide [see comment 1] proposals for noise sensitive developments in the vicinity of airports and near flight paths, with increased scrutiny of rezoning proposals for industrial and rural lands exposed to, or likely to be exposed to, aircraft noise. Consideration of these issues in addition to the criteria in AS2021:2000 may help reduce community concern about aircraft noise [see comment 2]**

Defence:

1. The purpose of each tool will need to be considered. Some of the tools are educational, others may be used to make land-use-planning decisions.
2. Care needs to be taken that the new supplementary tools do not conflict with the ANEF/AS2021:2000.

TAS: This is an explanatory clause not a principle.

- 2.6. In addition to their use for land use planning, these tools and the following can be used to improve the description of aircraft noise and improve community understanding of its potential impact:**

- (a) single event contours based on decibels; and
- (b) flight path location and activity diagrams.

SA: SA DTEI supports use of critical aircraft (most noisy) single event noise contours to define buffer zones for residential development should not occur in relation to regional airports.

3. *Safeguarding community and aviation safety through a national regime*

- 3.1. Appropriate protection of airspace is essential to ensure safe operations around airports and to ensure that the economic potential of the airport is not constrained by developments which give rise to restrictions on operations.
- 3.2. At the Commonwealth level, the safeguarding provisions exist in the following legislation:
 - (a) the *Airports (Protection of Airspace) Regulations 1996*ⁱⁱⁱ establish a system for the protection of airspace around the leased federal airports in the interests of the safety, efficiency or regularity of existing or future air transport operations into or out of airports;
 - (b) the *Defence (Area Control) Regulations 1989* protect airspace around the identified Defence airfields; and
 - (c) Part 139 of the *Civil Aviation Safety Regulations 1998*^{iv} requires airport operators to monitor the airport and land in its vicinity for structures and activities that may infringe protected airspace.

States and Territories are encouraged to consider equivalent approaches for the protection of smaller airports and civil airfields that reinforce these provisions by improving developers' and planners' knowledge of them.

SA: It is not considered necessary for states / territories to implement "equivalent approaches" as this becomes duplication. SA currently reinforces the role of the Commonwealth regulations through Development Regulations Schedule 8 referral requirements.

TAS: refer to comment under draft principle 1.5 above.

- 3.3. A nationally consistent land use planning framework to protect airport airspace around airports and military airfields could assist with: ~~A national land use planning regime would assist with:~~

SA: Wording amended to clarify that this principle specifically refers to airspace protection in accordance with the Commonwealth requirements (building heights/thermal plumes/ lighting etc).

- (a) raising awareness of Commonwealth and State/Territory requirements within local government;
- (b) harmonising, as far as practicable, State and Territory land use planning regimes with the safeguarding provisions in Commonwealth airspace protection legislation;

- (c) establishing similar provisions under state and territory planning regimes for non-Commonwealth airports identified by states and territories;

SA: Refer 3.2 comment – it is not considered necessary for states / territories to implement “equivalent approaches” as this becomes duplication. However, it is acknowledged that the SA planning system could reinforce the Commonwealth provisions more effectively – eg significant regional airports to include Building Heights Maps in their development plans to trigger referrals.

- (d) ~~reducing administrative inefficiency for proponents and local governments;~~
~~and~~ [deleted by Defence]
[Alternative:] increase administrative efficiency for proponents and local governments;

- (e) ensuring timely notification to the appropriate decision-making body of any proposals which may impact on aviation operations and thereby reduce unnecessary delays in development processes.

Defence: But could increase necessary delays. Defence would need to establish a policy of objecting to inappropriate development in ‘unacceptable’ areas and may need to follow through on this objection in the face of community, business or political opposition.

- (f) Introducing effective systems to notify current and future landowners about the presence of aircraft noise, public safety zones and other safeguarding measures.

Defence: make 3.3 a stand-alone segment entitled ‘A national land use planning regime.’

- 3.4. The Commonwealth should work with States and Territories ~~should consider establishing~~ to undertake a detailed examination of the implications of and ~~arrangements for the identification of appropriate risk-based~~ [note Defence comment below] **Public Safety Zones (PSZs) near the end of runways.**

[Alternative:] Arrangements for the identification of appropriate risk-based Public Safety Zones (PSZs) near the end of runways should be established in State and Territory planning systems.

Identified PSZs would assist in assessing approaches where new or extended runways are planned, or where new residential or commercial developments or increased population density is proposed in the vicinity of airports.

SA: Wording amended to reflect the White Paper. It has been understood from the outset that the Commonwealth would lead this. SA has previously commented on the difficulties involved in introducing PSZs over established residential areas and that that implementation of a PSZ would go beyond the joint DPLG/DTEI measures proposed to restrict population increase in the 30/35ANEF at Adelaide Airport.

Defence: What is 'appropriate' and why 'risk based'? Will Defence and civilian airport operators need to own PSZ land?

TAS: refer to comment under draft principle 1.5 above.

3.5. Guidance material should be developed and made widely available on other aspects of development which could affect safety and efficiency of aviation operations, including:

- (a) windshear and mechanical turbulence effects of new constructions on or near airports;
- (b) bird and other wildlife hazards to aviation from off-airport wildlife attractants;
- (c) wind turbine developments, with regard to the potential for electromagnetic interference as well as the potential physical obstruction for aircraft;
- (d) structures and certain activities that may affect the integrity of aviation safety infrastructures such as navigation aids and radar; and
- (e) high intensity lighting, lasers and other similar potential visual distractions to pilots near airports.
- (f) Structures such as high tension power lines, transmission towers and gas fired power stations that may also affect aircraft safety.

The Commonwealth will work in close collaboration with States and Territories in developing appropriate guidance. States and Territories are encouraged to work with local governments to ensure the material is recognised in state and local government arrangements and is promoted to prospective developers and decision makers.

SA: SA notes that these elements are all included in Development Plans via the BDP Building near Airfields module (although protecting en-route airspace from windfarms is a separate issue). However, SA DPLG / DTEI acknowledge that in some cases, Development Plans need to be strengthened with provisions that more directly address measurement and implementation of air safety requirements as well as providing general guidance for better understanding to fully satisfy this principle.

TAS: refer to comment under draft principle 1.5 above.

ⁱ The 19 airports subject to the planning provisions of the Commonwealth *Airports Act 1996* are Sydney (Kingsford Smith), Bankstown and Camden (NSW); Melbourne, Essendon and Moorabbin (Vic); Brisbane, Gold Coast, Townsville and Archerfield (Qld); Adelaide and Parafield (SA); Perth and Jandakot (WA); Hobart and Launceston (Tas); Canberra (ACT); and Darwin and Alice Springs (NT).

ⁱⁱ The Department of Defence is the owner/operator of the following major airfields: Williamtown, Richmond, Nowra and Wagga Wagga (NSW); East Sale, Point Cook and Avalon (Vic); Townsville, Amberley, Oakey and Scherger (Qld); Edinburgh and Woomera (SA); Pearce, Gingin, Learmonth, and Curtin (WA); and Darwin (NT).

ⁱⁱⁱ The *Airports (Protection of Airspace) Regulations 1996* are made under the *Airports Act 1996*. The Act and Regulations are administered by the Commonwealth Department of Infrastructure and Transport.

^{iv} The *Civil Aviation Safety Regulations 1998* are made under the *Civil Aviation Safety Act 1998*. The Civil Aviation Safety Authority administers the Act and Regulations.

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