



**Australian Government**

**Department of Defence**  
Estate and Infrastructure Group

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Department of Planning, Transport and Infrastructure  
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Dear Sir / Madam

**RE: DRAFT PLANNING AND DESIGN CODE: PHASE 2 RURAL AREAS**

The Department of Defence (Defence) would like thank the Department of Planning, Transport and Infrastructure (DPT&I) for the opportunity to comment on the draft Planning and Design Code (the Code) Phase Two Rural Areas which is currently on public notification. Defence recognises that South Australia has undergone significant population and economic growth, and acknowledges the need to more effectively plan for future development and strategic investment in the State.

Defence understands that the South Australian (SA) Government is seeking to establish a single set of rules that will determine what landowners can do on their land. The Code will become the key source of South Australia's new planning and development system and will eventually replace all current council development plans with a single set of state-wide rules. In summary, Defence supports the development of a Planning and Design Code in the SA context on the proviso that allowance for relevant Defence constraints is captured in the code.

Defence has reviewed the draft Code in terms of its potential to impact military operations in SA. Overall Defence supports SA's development and adoption of the Code and greatly appreciates the opportunity to participate in the Code's ongoing development, particularly as it deals with Defence activities and their associated constraints and the ongoing management of Defence owned and leased land. Defence is seeking to ensure that the presence and potential impact on Defence facilities is fully considered as part of the future planning for SA. As such, Defence comments on the Code are set out in the following paragraphs. A number of suggested amendments to better reflect Defence operations within SA and further details on relevant constraints associated with Defence facilities are also incorporated within Annex A to this letter.

**Defence Presence in South Australia**

Defence has a long association with SA with significant Defence facilities within the region including, significant land holdings and associated infrastructure in Regional SA including: the Woomera Range Complex; Cultana Training Area; Murray Bridge Training Area; Port Wakefield Proof and Experimental Establishment; and significant establishments within the Greater Adelaide area including the Edinburgh Defence Precinct, Keswick Barracks, Warradale Barracks and Woodside Barracks.

Defence is also a key stakeholder in the vitally important ship construction and submarine maintenance facilities at Osborne, Port Adelaide. The Government launched the 2017 Naval Shipbuilding Plan to establish a sustainable long-term Australian naval shipbuilding enterprise

under the Plan, Australia will consolidate its shipbuilding capacity at the Australian Naval Infrastructure's Osborne Naval Shipyard (SA), and at the Australian Marine Complex at Henderson (WA). The Osborne Naval Shipyard commenced construction of the Arafura Class Offshore Patrol Vessels in November 2018 and the Hunter Class Frigates will be built commencing in 2020.

The Government is committed to utilising most of these facilities as an ongoing base for significant operational capabilities and associated capital investment.

### **Urban Encroachment**

The Defence facilities listed above are enduring therefore, Defence requires all of its current landholdings in order to maintain support of its operational capabilities. Encroachment of Defence sites by incompatible surrounding land uses is a significant issue for Defence. In this regard, Defence requests that DPT&I prudently consider any land use or development proposals in the vicinity of Defence facilities to ensure that the potential for land use conflict is minimised. To achieve this, it is important Defence land is correctly identified and zoned appropriately to inform State and Local Government strategic planning and development responsibilities.

Defence requests that the Code adopt a consistent zoning for all of the Defence sites within SA, this could be either a 'Defence land zone' or 'Commonwealth Facility Zone' which has been used in the draft Planning and Design Code Phase Three (Urban Areas) paper.

Defence appreciates the complexities involved in balancing the protection of key infrastructure, such as Defence facilities, with implementation of policy to facilitate urban growth and development. An effective planning process must acknowledge and respond to Defence concerns that land use planning in areas surrounding its facilities, training areas and ranges not adversely impact on the long-term viability of these facilities, nor disrupt Defence training and operations. At the same time, surrounding communities also need appropriate buffers to ensure public safety and mitigate amenity issues generated by Defence activities.

Key land use considerations for the Defence facilities within SA include the need for protection from tall structures and other hazards to aviation safety, trespass, surveillance; noise and vibration-sensitive land uses, electromagnetic radiation; flooding, and continued access to shared resources such as road networks and airspace. At the same time, surrounding communities need appropriate buffers to ensure public safety and mitigate amenity issues generated by Defence activities.

There are 58 overlays in the draft Code. The overlays contains policies and maps that show the extent of special features and sensitives that are intended to be applied in conjunction with the relevant zone. The key overlays that are relevant to Defence operations include; "Building Near Airfields"; 'Aircraft Noise Exposure'; 'Defence Aviation Area'; and 'Airport Building /Heights' A number of suggested amendments to better reflect Defence operations and details on relevant constraints associated with Defence facilities located within SA are at Annex A. In addition, I would like to provide the following comments.

### **Building Near Airfields Overlay**

The 'Building Near Airfields' overlay in the draft Code provides the overarching principles for the management of lighting and bird attraction impacts on the operational and safety requirements of commercial and military airfields. The overlay does not refer to CASA lighting or birdstrike maps and there is no reference to glare. Defence is concerned that the overlay is

limited in detail and does not cover all airfield related constraints that are included in the existing SA Planning Policy Library.

Defence recommends that the Building Near Airfields Overlay include a reference to all airfield related constraints and their associated overlay maps in relation to building heights, aircraft noise, outdoor lighting, glare, wind turbulence and attraction of birds in proximity to airfields. There should also be a cross reference to other related overlays included in the Code, such as the 'Aircraft Noise Exposure Overlay' and 'Defence Aviation Area overlay'.

Defence also notes that the National Airports Safeguarding Advisory Group (NASAG) has developed additional guidelines in relation to aviation safety. Defence would like to see these additional guidelines included in the new Code and any revised version of the 'Building Near Airfields' module.

### **Defence Aviation Area Overlay**

The Defence Aviation Area overlay included in the draft Code seeks to manage the impacts of building heights on the operational and safety requirements of Defence Aviation Areas (DAA). Whilst reference to the DAA is appreciated, Defence recommends that the overlay code be amended to accurately reflect the requirements under the Regulations.

The DAA Regulations provides for Defence approval of development activity within approximately 15km radius of an airfield. The DAAR apply height controls to buildings, structures, vegetation, and construction equipment in the vicinity of RAAF Base Edinburgh. The regulations apply to permanent structures such as buildings and communication towers, and temporary structures such as cranes within approximately 15 kilometres of DAA. Vegetation, including trees and plants used for landscaping, and gas plumes emanating from an exhaust stack are also covered. Further detail regarding the DAA regulations including a copy of the RAAF Base Edinburgh DAA Plan overlay map, can be found at:

<https://www.defence.gov.au/id/AviationAreas.asp>

### **Aircraft Noise Exposure Overlay**

The Aircraft Noise Exposure overlay seeks to manage the impact of aircraft noise on buildings that incorporate activities that are sensitive to aircraft noise intrusion and provide appropriate acoustic amenity. Noise from military aircraft is most significant under flight paths during low-flying operations, take off/landings, and whilst using engine run up facilities. Defence does not support new noise sensitive development around its air bases as it exposes new users to aircraft noise and may limit opportunities to mitigate against noise impacts in the future.

To manage the impact of aircraft noise Defence is responsible for the production of Australian Noise Exposure Forecasts maps (ANEF) for military airfields. The ANEF system is a scientific measure of the forecast noise exposure levels. The ANEF maps are plans of the airfield and environs on which noise exposure contours define land areas around the airfield which are affected by aircraft noise. Defence prepares the ANEF maps in accordance with Australian Standard 2021-2015 (AS2021) *Acoustics - Aircraft Noise Intrusion - Building Siting and Construction* - the same standard used by the civil authorities in the preparation of ANEF maps for civil airfields.

Defence recommends that a reference to the ANEF system and AS2021 be included in the Aircraft Noise Exposure Overlay.

Defence supports SA's development and adoption of the Code and would greatly appreciate the opportunity to continue participating in the ongoing development of the Code, particularly as it deals with Defence activities and their associated constraints and the ongoing management of Defence owned and leased land.

Defence would welcome an opportunity to discuss the content of this advice further with representative from DPT&I, my point of contact is Mr Tim Hogan at land.planning@defence.gov.au or by telephone on (02) 6266 8193.

Yours sincerely

**Charles Mangion**  
Director Land Planning & Regulation

27 November 2019

Annex

A, Additional Defence Comments and/or Suggested Amendments

**ADDITIONAL DEFENCE COMMENTS AND/OR SUGGESTED AMENDMENTS**

<b>Constraints / Suggested edits</b>	<b>Defence Comments</b>
<b>Aircraft Noise</b>	<p>Australian Noise Exposure Forecast (ANEF) modelling gives a forecast of aircraft noise exposure for a future year. RAAF Base Edinburgh 2022 ANEF is the current ANEF.</p> <p>Defence requests that State Government and Local Councils use the ANEF Maps that Defence publishes to apply the <i>Australian Standard 2021 2015 Acoustics - Aircraft Noise Intrusion - Building Siting and Construction</i> to identify whether land is suitable for certain types of development.</p>
<b>Building Height restrictions</b>	<p>The Defence (Aviation Areas) Regulations (DAAR) provides for Defence approval of development activity within approximately 15km radius of an airfield.</p> <p>The DAAR apply height controls to buildings, structures, vegetation, and construction equipment in the vicinity of RAAF Base Edinburgh.</p>
<b>Tall Structures</b>	<p>There is ongoing need to obtain and maintain accurate information about tall structures so that this information can be marked on aeronautical charts. Marking tall structures on aeronautical charts assists pilot navigation and enhances flight safety. Air Services Australia (ASA) is responsible for recording the location and height of tall structures. The information is held in a central database managed by ASA and relates to the erection, extension or dismantling of tall structures the top of which is above:</p> <ul style="list-style-type: none"> <li>a. 30 metres above ground level (AGL) within 30 kilometres of an aerodrome; or</li> <li>b. 45 metres AGL elsewhere.</li> </ul>

<b>Constraints / Suggested edits</b>	<b>Defence Comments</b>
<b>Public Safety</b>	<p>Defence has a particular interest in ensuring that land uses along the extended centreline of RAAF Base runways do not facilitate people intensive uses or the bulk storage of hazardous and flammable materials. Defence has identified a Military Public Safety Area at either end of the main runway for this purpose.</p> <p>For further details regarding Military Public Safety Areas and compatible land uses please refer to the National Airport Safeguarding Framework Guideline I on “Managing the Risk to Public Safety at the Ends of Runways”.</p>
<b>Extraneous Lighting</b>	<p>Outdoor lighting situated within 6km of an airfield has the potential to be confusing for pilots due to similarities with approach or runway lighting; impede a pilot’s ability to see due to brightness or glare; and affect visibility from the Air Traffic Control Tower due to the brightness or glare.</p> <p>Defence has adopted CASA guidelines for extraneous lighting at RAAF Base Edinburgh and any future development should comply with the extraneous lighting controls detailed in the CASA Manual of Standards (MOS-139) Aerodromes.</p>
<b>Bird Strike</b>	<p>Development near airfields that provides refuge, feeding or breeding opportunities for large numbers of birds or flying fox contributes to increased risk of bird strike. Bird strike occurs when a bird collides with an aircraft. RAAF Base Edinburgh Bird Strike Constraints Map, identifies certain land uses that have the potential to attract wildlife and these should be avoided as they will potentially increase the risk for bird strike for aircraft operating from RAAF Base Edinburgh.</p>
<b>Turbulence / Windshear</b>	<p>Defence notes that the NASAG has developed a guideline in relation to Managing the Risk of Building Generated Windshear and Turbulence at Airport. Defence is supportive of the intent of having a designated windshear affected area included in the Code.</p>

<b>Constraints / Suggested edits</b>	<b>Defence Comments</b>
<b>Training Area Noise and Vibration</b>	<p>Noise and vibration from Defence activities can have a significant impact on communities in the vicinity of Defence Establishments. Encroachment near Defence sites is creating greater pressure to accommodate the amenity expectations of those occupying adjacent lands.</p> <p>Common noise sources from Defence sites which have the potential to create environmental noise include firearms (rifles and high powered weaponry), trucks and armoured vehicles, fixed equipment plant such as air conditioning and power generators, ground level aircraft engine testing, noise during docking of naval vessels as well as troop movements.</p> <p>Vibration from Defence activities can lead to a number of consequential impacts that can pose significant hindrance to Defence operations. Complaints from vibration usually relate to structural issues.</p>