

B

**APPENDIX B**

# APPENDIX B HISTORY OF SYDNEY AIRPORT AND EXISTING FACILITIES

## 1.0 Key stages in the development of Sydney Airport

Key stages in the development of Sydney Airport are set out in **Table B1**.

**Table B1 – Development of Sydney Airport**

	Year	Activity	Master Plan implications
Pre-aviation		The land on which the airport is sited – the northern shore of Botany Bay – is within the traditional country of the Eora people, the name given to the coastal Aborigines around Sydney.	A number of studies have been undertaken and have indicated that there are no Aboriginal archaeological sites or areas of potential archaeological sensitivity within the airport.
	19th century	Freshwater supply for Port Jackson sourced from ponds on eastern side of airport site (1835). Construction of Alexandra Canal which was planned to connect Botany Bay with Port Jackson. During late 19th and early 20th centuries, airport site is used for industrial buildings including textile and flour mills.	The Engine and Mill Ponds are identified as environmentally significant areas in the Airport Environment Strategy – in recognition of pre-aviation uses of the airport site.
Early airport development	1911	The first flight occurs when an aircraft takes off from the former Ascot Racecourse (now part of the airport site).	Environmentally significant remnant fig trees remain within the area.
	1920s	Mascot Aerodrome officially opens and Commonwealth Government acquires the aerodrome.	This is part of a program to develop a nationwide airport network.
	1930s	Additional land is purchased, the main runway is surfaced with gravel and two ancillary grass runways are laid out.	These early runways were located in the vicinity of what is now the T2/T3 and Qantas Jet Base.
	1940-45	New passenger terminal opens and airport is further developed during World War II to enhance its civilian and military facilities.	Elements of this building remain in the T2/T3 precinct and have been identified as having heritage significance.
	Post 1945	Cooks River is diverted and two new runways are built.	Key elements of existing airport laid out – in particular the runway.
Into the jet era	1959	Arrival of B707 and other jet and turbo-prop aircraft ushers in rapid growth in air travel.	Curfew at Sydney Airport first introduced after the government decided that these older noisy jet aircraft "will not be scheduled to take off or land during the quiet hours of the night".
	1968	Main north-south runway (16R/34L) is extended by land reclamation into Botany Bay to cater for long-haul international jets.	Curfew remains a key operating influence for Sydney Airport.
	1970	First stage of international terminal opens on current site.	Location of General Holmes Drive under the runway and diversion of the southern and western suburbs ocean outfall sewers.
	1970s	Further expansion of the international and domestic terminals. In 1972, Runway 16/34 is extended into Botany Bay to its present length of 3,962m.	

Major airport expansion	1992	Major expansion of International terminal adds eight gates for B747-400 aircraft.	
	1994	The parallel runway (16L/34R) opens at its current length of 2,438m. New flight paths added.	
	1996	Current control tower opens.	Complements parallel runways.
	1997	Aircraft movement cap of 80 flights per hour is legislated.	The Long Term Operating Plan commences. Noise insulation program commences and is completed by the late 1990s.
	2000	International and domestic terminals significantly upgraded and expanded.	
	2000	Significant ground access infrastructure developed – the Airport Rail Link, the Eastern Distributor and M5 East Motorway.	
Post-privatisation	2002	Sale of Sydney Airport to Southern Cross Airports Corporation is completed.	Statutory requirement for development of a 20 year Master Plan for the airport.
	2004	Sydney Airport Master Plan 03/04 approved.	Sets out planning proposals for Sydney Airport for a 20 year period to 2023/24.
	2007	The first ever commercial flight by the new generation quieter A380 lands at Sydney Airport. Sydney Airport will soon become one of the busiest A380 airports in the world.	
	2009	Sydney Airport Master Plan 2009 approved.	Sets out planning proposals for Sydney Airport for a 20 year period to 2029.
	2011	Sydney Airport announces New Vision that will see terminal precincts transformed into integrated international, domestic and regional precincts by 2019 without any change to operating restrictions.	The feedback and comments received during consultation on the New Vision have informed the preparation of the development plan in this Master Plan.
	2002–2013	Over \$2 billion of investments and other initiatives during the past decade have led to increased service levels, enhanced safety and security, delivered environmental improvements and increased capacity to meet demand. Key projects include terminal upgrades, new car parks, new checked baggage screening facilities, runway end safety areas and making Sydney Airport ready for larger, quieter, cleaner and more fuel efficient aircraft.	

## 2.0 Existing facilities

### 2.1 Existing terminals

Passenger terminals serve the needs of different types of users by:

- Processing check-in, security, border controls, aircraft boarding and disembarking, and baggage handling for travellers
- Providing for passengers waiting for or transferring between flights
- Providing passengers and airport visitors with facilities including food and beverage, toilets, shopping and other activities

Associated activities and infrastructure such as landside access, car parking and utilities support the operation of the terminals and facilitate the passenger experience.

Over many years, there has been substantial investment in the terminals at Sydney Airport. Terminal 1 (T1) and Terminal 2 (T2) are respectively the common user international and domestic facilities. Terminal 3 (T3) is currently a dedicated Qantas owned and operated domestic terminal servicing Qantas mainline operations.

### 2.1.1 Terminal 1

Opened in 1970, it is the current international terminal located in the North West Sector of the airport. Since that time, the terminal has been extensively modified and expanded.

T1 is a four level structure, with vertically separated arrival and departure passenger concourses currently supporting 24 contact aircraft gates with aerobridges and a walk-up gate, together with other bussed and layover stands in a number of locations on the airfield.

The current total floor area is approximately 254,000 square metres. Major functional elements include:

- 212 departure check-in counters
- 15 check-in kiosks
- Integrated outbound baggage handling and security screening system
- 38 departure passport control positions
- Passenger and hand baggage screening facilities
- 24 conventional passport control positions and 6 Smart Gate positions in Pier B, and 20 conventional passport control positions and 9 Smart Gate positions in Pier C
- Transfer passenger and baggage screening facilities
- 12 baggage reclaim units
- Inbound baggage screening facilities
- Extensive retail and related facilities.

### 2.1.2 Terminals 2 and 3

The current domestic terminal complex is located in the North East Sector of the airport and comprises two adjacent but currently unconnected buildings –T2 and T3.

T2, owned by Sydney Airport, is a three-level structure which supports two single-level arrival/departure pier type concourses. Currently, the piers, after the recent expansion of Pier A, serve up to a total 23 contact aircraft gates and a number of stand-off bussed aircraft positions.

T3, operated by Qantas, is a three-level structure which is integrated with a single-level linear and satellite type arrival/departure passenger concourse. Currently, the concourse provides a nominal 16 contact aircraft gates with aerobridges and several stand-off bussed aircraft positions. The lease on T3 expires in 2019.

T2 and T3 are not physically linked at terminal level, although underground pedestrian access between the terminal baggage halls is available via the links to the airport rail link domestic terminal station. Together, T2 and T3 have a gross floor in excess of 100,000 square metres. The existing terminal facilities provide good levels of service at current traffic levels. Major functional elements include:

- 50 check-in counters, no bag drops, 42 kiosks/passenger and hand baggage screening facilities at T2
- 10 check-in counters, 24 bag drops, 48 kiosks/passenger and hand baggage screening facilities at T3
- Transfer passenger and baggage screening facilities
- Integrated outbound baggage handling and security screening system
- A combined 11 baggage reclaim units.

## 2.2 Existing movement areas

The existing airfield layout is shown on **Figure 11.3** in Chapter 11.

### 2.2.1 Runways

Sydney Airport has three runways. The dimensions and declared distances of these runways are given in **Table B2**.

Runways 16R/34L and 16L/34R are parallel on an approximate north-south alignment separated by a distance of 1,037m. Runway 16R/34L is suitable for heavy long haul departures. Runway 07/25 crosses Runway 16R/34L and is on an approximate east-west alignment. Weather requires the exclusive use of Runway 07/25 for a limited number of hours per year when strong winds preclude the use of the north/south runways.

Runways 16R/34L and 07/25 and their supporting taxiways currently accommodate operations by Code F aircraft.

Sydney Airport has sophisticated equipment to assist with safe take-off and landing during low visibility conditions. This allows the airport to remain operational during a wide range of weather conditions:

- All runways are provided with precision approach path indicator systems (PAPIS) to provide visual approach slope guidance to aircraft.
- Transmissometer units are operational on all runways and provide accurate visibility assessments to aircraft crews when operating in low visibility conditions. This technology facilitates increased aircraft movements in those conditions.
- Stop bars have been commissioned at Sydney Airport to enhance runway safety and better facilitate low visibility operations.
- Runways 16L and 16R are currently equipped with Cat 1 high intensity approach lighting (HIAL) systems.
- All runways are equipped with instrument landing systems (ILS) to permit aircraft to conduct precision approaches in poor weather. Instrument landing systems are classified according to their ability to facilitate landings in poor weather conditions. Runways 16L and 16R currently facilitate approaches in visibility conditions down to 550 metres.
- All runways have complying runway end safety areas (RESAs).

**Table B2 Runway data**

Runway direction	Length (m)	Width (m)	Take-off run available (m)	Take-off distance available (m)	Accelerate stop distance available (m)	Landing distance available (m)
16R	3962	45	3962	4052	3992	3877
34L	3962	45	3962	4052	3962	3962
16L	2438	45	2438	2528	2438	2207
34R	2438	45	2438	2498	2438	2400
07	2530	45	2530	2620	2560	2530
25	2530	45	2530	2590	2530	2429

### 2.2.2 Taxiways

Runways are supported by a comprehensive taxiway system designed to facilitate the efficient movement of aircraft between the runways and terminal areas. Rapid exit taxiways are provided on the parallel runways to minimise runway occupancy time.

### 2.2.3 Aprons and stands

Apron areas are provided to facilitate aircraft parking. The parking position is known as an aircraft stand (or gate). Existing aprons at Sydney Airport accommodate operations by the full range of aircraft types. Currently there are approximately 106 aircraft stands dedicated to supporting international, domestic, regional and freight operations.

There are a number of additional parking positions on the aprons within the general aviation area for aircraft of various sizes and Qantas currently provides parking positions for its own use within the engineering facilities north of T3 in the North East Sector of the airfield.

Apron areas also support activities associated with the servicing of aircraft such as baggage, freight, refuelling and flight catering and utilise a variety of ground support equipment (GSE) operated by third parties. A network of airside roads provides for GSE and other vehicle movements.

### 2.2.4 Engineering facilities

The engineering facilities are located in the North East Sector of the airport north of Terminal 3. The area comprises a lease area of approximately 30 hectares. The engineering facilities are used by Qantas for aircraft maintenance, layover parking and also contain a variety of aviation support facilities.

During the master planning period it is planned that a maintenance and engineering precinct will be developed in the South East Sector of the airfield and that potentially there will be a reconfiguration of facilities in the North East Sector.

### **2.2.5 General aviation**

The general aviation parking area is located in the North East Sector, adjacent to the Runway 25 threshold. The area provides aircraft parking for a number of freight, corporate and private aircraft as well as a variety of aviation support facilities such as maintenance hangars, freight handling and administrative buildings.

### **2.2.6 Helicopters**

A helicopter precinct is located in the South East Sector adjacent to the Runway 25 threshold. The area includes a touch down and lift off (TLOF) area, taxiways, parking pads, storage/maintenance hangars and administrative buildings.

### **2.2.7 Emergency facilities**

Sydney Airport has two marshalling areas for the staging of emergency vehicles and associated communication and coordination facilities located adjacent to the aviation rescue and fire fighting (ARFF) services facilities. There are also two emergency evacuation facilities for marine rescue and recovery located adjacent to the parallel runways within Botany Bay.

## **2.3 Existing support systems**

### **2.3.1 Airservices Australia facilities**

Airservices Australia is responsible for the provision of air traffic control (ATC), ARFF and the provision and maintenance of radio navigation aids and systems.

The control tower is situated mid-way between runways 16R/34L and 16L/34R and south of Runway 07/25. The primary responsibility of ATC staff is the processing and separation of air traffic in both the initial and final stages of flight. ATC also provides surface movement control to aircraft and vehicles on the runways and taxiways.

Sydney Airport is equipped with an advanced surface movement guidance and control system (ASMGCS) to assist with identification and management of all aircraft and vehicles on the airport manoeuvring area. ASMGCS consists of an enhanced surface movement radar (SMR) combined with a multilateration system to track aircraft and vehicles on the airport surface (see Section 6.8).

The wide area multilateration system (WAM) is a surveillance technology with a high update rate, which permits ATC to accurately undertake precision runway monitoring for aircraft on approach to the parallel runway system in poor weather conditions. It is critical to maintaining runway capacity in these conditions.

The terminal area radar provides a primary radar surveillance capability out to a radius of 50 nautical miles from Sydney Airport. It provides secondary radar coverage to about 175 nautical miles. This system is augmented by the wide area multilateration and automatic dependent surveillance broadcast system.

Surveillance and navigation systems rely on the transmission of radio waves that must be protected from any structures or obstacles that could cause signal refraction or interference. Consequently, areas located either on-airport or off-airport surrounding these facilities may have development restrictions imposed through Sydney Airport's development approval assessment process (see Appendix F).

The ARFF service has two on-airport fire stations and currently provides ICAO Category 9 standard during hours of flight operations, upgrading to Category 10 as required to facilitate A380 operations. The ARFF service is also equipped to undertake marine rescue within Botany Bay. A fire training area is located to the north of the ARFF facility near Runway 16L.

### **2.3.2 Bureau of Meteorology facilities**

The Bureau of Meteorology (BOM) has a number of airport facilities to support aircraft operations. These include:

- A weather balloon-launching station
- Instrument enclosure
- A vertical wind profiler
- Visibility sensors
- Observation office

## 2.4 Overview existing freight facilities and service providers

The existing airside and landside cargo terminal facilities at Sydney Airport are occupied by and the responsibility of various service providers or Cargo Terminal Operators (CTOs).

There are currently four international CTOs and two domestic CTOs operating at Sydney Airport, providing a broad range of services. The international CTOs are Qantas Freight, Toll/Dnata, Australian Air Express and Menzies. The domestic CTOs are Australian Air Express and Toll Aviation. DHL operates as an independent express operator. The area dedicated to freight operations/international and domestic CTOs is 11.5 hectares.

The airside terminal facilities are located on land leased from Sydney Airport. These are primarily located in the Link Road precinct for international air freight handling and domestic air freight handling located within the passenger terminal precinct of T2 and T3.

Livestock handling facilities are provided at Sydney Airport in accordance with Australian quarantine requirements in the current international precinct.

Off-site, there are around 130 forwarders, logistics providers and integrators located within a 5km radius of Sydney Airport. These operations range in scale, complexity and degree of service from major operations to small owner-operators offering very basic services.

Sydney Airport air freight volumes are dominated by imported goods and associated handling requirements. As a hub airport, air freight to and from Sydney is transhipped via domestic routes, which produces different handling characteristics for airlines.

Freight terminal capacity requirements are a consequence of terminal and ground handling productivity, efficiency and handling requirements. Based on average airport-wide productivity of 12 tonnes per square metre per annum the capacity of existing on airport facilities is around 450,000 to 500,000 tonnes per annum for international and 80,000 tonnes per annum for domestic. Future demand will be met through improved handling efficiencies, higher productivity and increased focus on time critical products on airport by service providers.



C

**APPENDIX C**

# APPENDIX C RUNWAY MODES OF OPERATION

To facilitate noise sharing and implementation of the Long Term Operating Plan for Sydney Airport, Airservices Australia has adopted a preferred runway selection system which, depending on weather and traffic, utilises the runway modes of operation on specified days and times. The following arrangements set out in **Tables C1** and **C2**, and **Figure C1** became effective on 1 July 2010.

**Table C1 Preferred runway selection – Monday to Friday**

<b>2300 to 0600</b>	1.	Curfew – Departures 16R / Arrivals 34L (Mode 1)
<b>0600 to 0700</b>	1.	SODPROPS – Departures 16L / Arrivals 34L
	2.	Departures 16L&R / Arrivals 34L (shoulder curfew). If traffic permits.
	3.	Departures 34R, 25 & 34L/Arrivals 34L&R (Mode 8), <b>or</b> Departures 25 / Arrivals 34L&R (Mode 7), <b>or</b> Departures 16L&R / Arrivals 25 (Mode 5), <b>or</b> Departures 16L&R / Arrivals 07 (Mode 14A)
	4.	34 (Mode 9) or 16 (Mode 10)
	5.	07 (Mode 12) or 25 (Mode 13)
<b>0700 to 2245 / 2300</b>	1.	SODPROPS - Departures 16L / Arrivals 34L
	2.	Departures 16L&R / Arrivals 07 (Mode 14A), <b>or</b> Departures 34R, 25 & 34L / Arrivals 34L&R (Mode 8), <b>or</b> Departures 25 / Arrivals 34L&R (Mode 7), <b>or</b> Departures 16L&R / Arrivals 25 (Mode 5)
	3.	34 (Mode 9) or 16 (Mode 10)
	4.	07 (Mode 12) or 25 (Mode 13)
<b>2245 to 2300</b>	1.	SODPROPS - Departures 16L (mandatory) / Arrivals 34L
	2.	Departures 16L&R (mandatory) / Arrivals 34L (shoulder curfew) unless there would be significant delays to either departing or arriving aircraft, or traffic complexity requires a variation, or weather conditions preclude the use of 34L
	3.	Departures 16L&R / Arrivals 25 (Mode 5), <b>or</b> Departures 16L&R / Arrivals 07 (Mode 14A)
	4.	16 (Mode 10)
<b>2300 to 0600</b>	1.	Curfew – Departures 16R / Arrivals 34L (Mode 1)

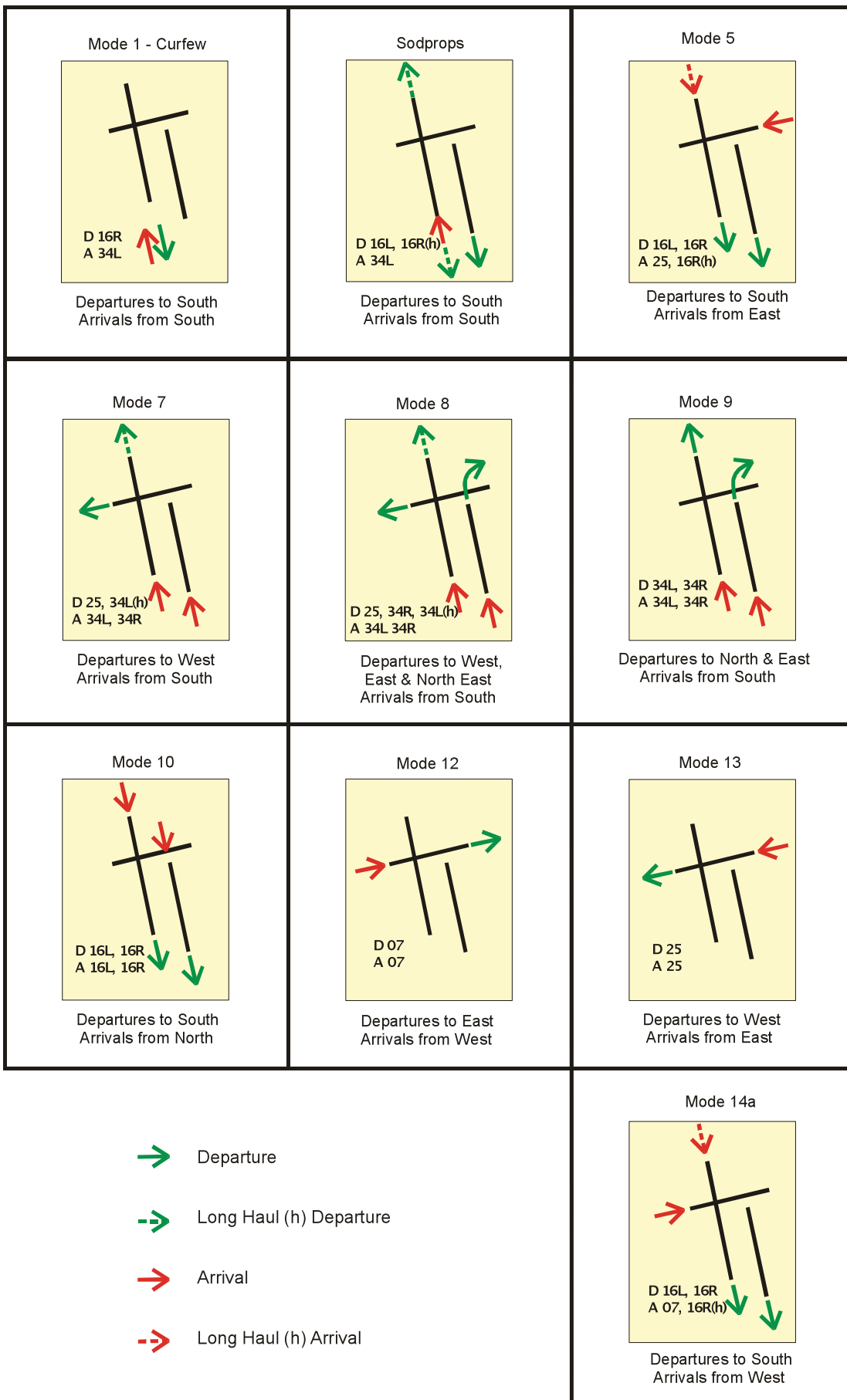
## Table C2 Preferred runway selection – Saturday and Sunday

<b>0600 to 0700 Saturday</b>	1.	SODPROPS – Departures 16L / Arrivals 34L
or		
<b>0600 to 0800 Sunday</b>	2.	Departures 16L&R / Arrivals 34L (shoulder curfew). If traffic permits.
	3.	Departures 16L&R / Arrivals 25 (Mode 5), <b>or</b> Departures 16L&R / Arrivals 07 (Mode 14A), <b>or</b> Departures 34R, 25 & 34L / Arrivals 34L&R (Mode 8), <b>or</b> Departures 25 / Arrivals 34L&R (Mode 7)
	4.	34 (Mode 9) or 16 (Mode 10)
	5.	07 (Mode 12) or 25 (Mode 13)
<b>0700 to 2200 Saturday</b>	1.	SODPROPS - Departures 16L / Arrivals 34L <b>or</b>
<b>0800 to 2200 Sunday</b>	2.	Departures 16L&R / Arrivals 07 (Mode 14A), <b>or</b> Departures 34R, 25 & 34L / Arrivals 34L&R (Mode 8), <b>or</b> Departures 25 / Arrivals 34L&R (Mode 7), <b>or</b> Departures 16L&R / Arrivals 25 (Mode 5)
	3.	34 (Mode 9) or 16 (Mode 10)
	4.	07 (Mode 12) or 25 (Mode 13)
<b>2200 to 2245</b>	1.	SODPROPS - Departures 16L (mandatory) / Arrivals 34L
	2.	Departures 16L&R (mandatory) / Arrivals 34L (shoulder curfew) unless there would be significant delays to either departing or arriving aircraft or traffic complexity requires a variation or weather conditions are not suitable.
	3.	Departures 16L&R / Arrivals 25 (Mode 5)
	4.	Departures 16L&R / Arrivals 07 (Mode 14A)
	5.	Departures 34R, 25 & 34L / Arrivals 34L&R (Mode 8)
	6.	Departures 25 / Arrivals 34L&R (Mode 7)
	7.	34 (Mode 9) or 16 (Mode 10)
	8.	07 (Mode 12) or 25 (Mode 13)
<b>2245 to 2300</b>	1.	SODPROPS – Departures 16L&R (mandatory) / Arrivals 34L
	2.	Departures 16L&R (mandatory) / Arrivals 34L (shoulder curfew) unless there would be significant delays to either departing or arriving aircraft, or traffic complexity requires a variation, or weather conditions preclude the use of 34L.
	3.	Departures 16L&R / Arrivals 25 (Mode 5), <b>or</b>
	4.	Departures 16L&R / Arrivals 07 (Mode 14A) 16 (Mode 10)

### Notes:

1. Rwy 34 and Rwy 16 parallel runway operations should only be considered for use if required for traffic management purposes during the following hours:
  - 0700 to 1100 Monday to Saturday
  - 0800 to 1100 Sunday
  - 1500 to 2000 Sunday to Friday.
 In order to take advantage of suitable traffic dispositions, variations to these times will occur.
2. 20 knot crosswind and 5 knot downwind criteria apply to all dry runway conditions
3. This is not an operational document. It has been prepared for information purposes only and is subject to change without notice.

Figure C1 Runway modes of operation



D

**APPENDIX D**

# APPENDIX D OPERATIONAL LAWS AND REGULATIONS

Sydney Airport is subject to various airport specific and general laws and regulations. Set out below is an explanation of some of the key operational laws and regulations that apply at Sydney Airport.

## 1.0 Overnight curfew on aircraft movements

The Sydney Airport Curfew Act 1995 and associated instruments (curfew laws) restrict take-offs and landings during the curfew period from 11pm to 6am to:

- Small propeller and jet aircraft that comply with specified noise standards
- Limited numbers of medium size freight jets meeting specified noise standards

During the curfew period, all aircraft must operate over Botany Bay rather than residential areas. Arrivals are required to operate to the north on Runway 34L. Departures are required operate to the south on Runway 16R.

Under the Sydney Airport Curfew Regulations 1995, international passenger aircraft are permitted to arrive in the curfew shoulder period between 5am and 6am. However, no more than 24 international passenger aircraft arrivals are permitted per week (and no more than 5 per day).

The curfew restrictions do not apply in the case of emergency. In exceptional circumstances, the Minister for Infrastructure and Regional Development may grant dispensations for other aircraft to operate during the curfew period.

## 2.0 Aircraft movement limit and slot management scheme

The Sydney Airport Demand Management Act 1997 and associated instruments (slot laws) establish:

- A maximum aircraft movement limit, or movement cap, of no more than 80 aircraft movements at Sydney Airport per operational hour
- A framework for the allocation and management of slots within the movement cap

All commercial and private aircraft require a slot to land or take-off from Sydney Airport. Military, emergency and helicopter movements are exempt. Airport Coordination Australia (ACA) allocates slots and manages slot coordination at Sydney Airport.

ACA allocates slots to airlines on a seasonal basis in accordance with the following:

- ACA will first allocate slots to airline operators with historical precedence
- ACA will then allocate slots to new entrant and incumbent airlines
- Any remaining slots may be allocated to regional airlines, non-scheduled and general aviation operators. However, the slot laws contain a mechanism that preserves a certain number of slots for regional airlines in an effort to guarantee access to Sydney Airport for regional communities

In allocating slots, ACA must consider any advice provided by Airservices Australia as to the likely effect of allocation on the operational efficiency of Sydney Airport.

## 3.0 Noise sharing and the long term operating plan

The Sydney Airport Long Term Operating Plan (LTOP) was introduced following extensive consultation in 1996 and 1997 as a program of aircraft noise management. The LTOP seeks to ensure that aircraft movements are maximised over water and non-residential land. Where flight over residential areas cannot be avoided, the LTOP aims to safely share the noise between communities.

Ten runway modes of operation (RMO) are currently available for use at Sydney Airport to facilitate noise sharing consistent with LTOP. Appendix C sets out the RMO in use at Sydney Airport.

The implementation of noise sharing arrangements is monitored by the Sydney Airport Community Forum (SACF) and an implementation and monitoring committee (IMC). SACF is the main body for community consultation on Sydney Airport flight paths and their impacts. SACF includes representatives from the community, local councils, industry and state and federal parliaments.

## 4.0 Aviation security

Australia's aviation security regime has been progressively enhanced following the terrorist attacks in the USA in September 2001.

The Aviation Transport Security Act 2004 and Aviation Transport Security Regulations 2005 (aviation security laws) require security controlled airports, including Sydney Airport, to:

- Prepare and implement a transport security program (TSP)
- Conduct security screening of all passengers, staff and visitors, including random explosive trace detection and body scanning
- Conduct security screening of all carry-on baggage
- Screen all checked bags
- Control airside access and secure areas
- Implement enhanced inspection area controls

## 5.0 Aviation safety

The Civil Aviation Safety Regulations 1998 and associated instruments (aviation safety regulations) set out Sydney Airport's safety standard obligations and the requirement for Sydney Airport to comply with the manual of standards (MOS). The MOS comprises the specifications and standards that are necessary for the safety of air navigation at aerodromes. These include standards in relation to:

- Airport emergency planning
- Aerodrome lighting
- Operational requirements
- Inspections, audits and certification
- Wildlife management
- Safety management systems

MOS Part 139 sets out the standards and operating procedures for certified, registered aerodromes and other aerodromes used in air transport operations.



E

**APPENDIX E**

# APPENDIX E PLANNING LAWS AND REGULATIONS

Sydney Airport is subject to various airport specific and general laws and regulations. Set out below is an explanation of some of the key planning laws and regulations that apply at Sydney Airport.

All development undertaken at Sydney Airport pursuant to this Master Plan will be of the quality and standard reasonably expected of a major international airport in Australia, and will provide appropriate facilities for comfort, ease of access, expeditious movement and efficient use of Sydney Airport by passengers and all other users of Sydney Airport.

## 1.0 Airport master planning

The Airports Act 1996 (the Act) requires the Master Plan to identify Sydney Airport's intentions for land use and related development of the airport site where the uses and developments embrace – airside, landside, surface access, and land planning/zoning aspects.

The master planning requirements are part of the Australian Government's regulatory framework for airport lessee companies. The Australian Government announced several reforms to the airport planning framework in its National Aviation Policy White Paper released in December 2009. These reforms were introduced by way of amendments to the Airports Act in December 2010.

On 5 December 2011, an extensive community consultation and engagement process for Sydney Airport's development plan commenced. The plan would see the phased development of Sydney Airport, transforming it into two integrated terminal precincts, with international, domestic and regional services in each of the two terminal precincts.

This Master Plan has been prepared in accordance with the requirements of the Act. In summary, a master plan must include the strategic direction for efficient and economic development at the airport and to indicate to the public the intended uses of the airport site. A master plan must cover a period of 20 years and ordinarily, be reviewed every five years. A master plan must be displayed for public comment for 60 business days and must address a variety of issues including:

- Development objectives and assessment of future needs
- Intentions for land use
- Australian Noise Exposure Forecast and the airport's intentions for managing noise
- Flight paths
- Environmental concerns
- Ground transport
- Commercial activities
- Economic contributions

The Airports Regulations 1997 provide land use, planning and building controls for Commonwealth leased airports. Part 5 of the regulations states that the Master Plan must set out proposals in a similar format to that required by state or territory legislation (as described above), specifically:

*'For Section 71 of the Act, an airport master plan must, in relation to the landside part of the airport, where possible, describe proposals for land use and related planning, zoning or development in an amount of detail equivalent to that required by, and using terminology (including definitions) consistent with that applying in land use planning, zoning and development legislation in force in the State or Territory in which the airport is located'. The land use definitions (see Appendix C) and terminology used in NSW planning legislation have been used, where appropriate, to provide a level of detail and transparency.*

Additionally the Airports Regulations 1997 specify that for Subsection 71(5) of the Airports Act a Master Plan must address:

*'any obligation that has passed to the relevant airport — lessee company under Subsection 22 (2) of the Act or Subsection 26 (2) of the Transitional Act'.*

## 2.0 Airport developments

Construction of new development at the airport is subject to a robust development assessment process that provides a system for approving building activities. The Airports (Building Control) Regulations 1996 establish a system for approving appropriate building activities on the airport site.

Regulation 2.05 of the Airports (Building Control) Regulations 1996 requires an application for approval of a building activity to include a statement describing how the proposed building activity is consistent with both the Master Plan and the Environment Strategy.

Building activities at the airport require a building activity approval from the airport building controller (ABC) who is advised by the airport environment officer (AEO). Both the ABC and the AEO are independent officers employed by the Department of Infrastructure and Regional Development.

In addition, a corresponding consent must also be granted by Sydney Airport. In this way, all proposed developments are assessed using the same process so as to determine whether the development is consistent with the Master Plan. This facilitates the independent assessment of development within the airport environment. Sydney Airport has an internal process for assessing development proposals which is described in more detail in section 3 below. A statutory assessment of the environmental impacts created by a new development is also undertaken by the AEO.

Where proposed works are deemed to require a major development plan (MDP), an environmental assessment is carried out and community consultation is undertaken prior to seeking (pursuant to Division 4 Part 5 of the Act, including Section 89), approval from the Minister for Infrastructure and Regional Development. Major development plans may only be approved if they are consistent with the master plan in force for the airport.

### **3.0 Development assessment at Sydney Airport**

Development at Sydney Airport is managed under a regulatory framework set by the Airports Act 1996 and associated regulations as well as the Environment Protection and Biodiversity Conservation Act 1999.

#### **3.1 Regulatory processes**

The statutory and management process for lodging, assessing and approving works at Sydney Airport is summarised in the flow chart attached at **Figure E1**.

The Airports (Building Control) Regulations 1996 require that carrying out a building activity, as defined in Section 98 of the Airports Act 1996 (described as development in this Master Plan), must have written consent of the airport lessee company (Sydney Airport Corporation Limited). Sydney Airport's written consent is based on a management process through which stakeholder impact identification, infrastructure impacts, environmental impacts and management, current and future adjoining development interfaces, and property and legal risk issues are identified and addressed. Key aspects of this process are as follows:

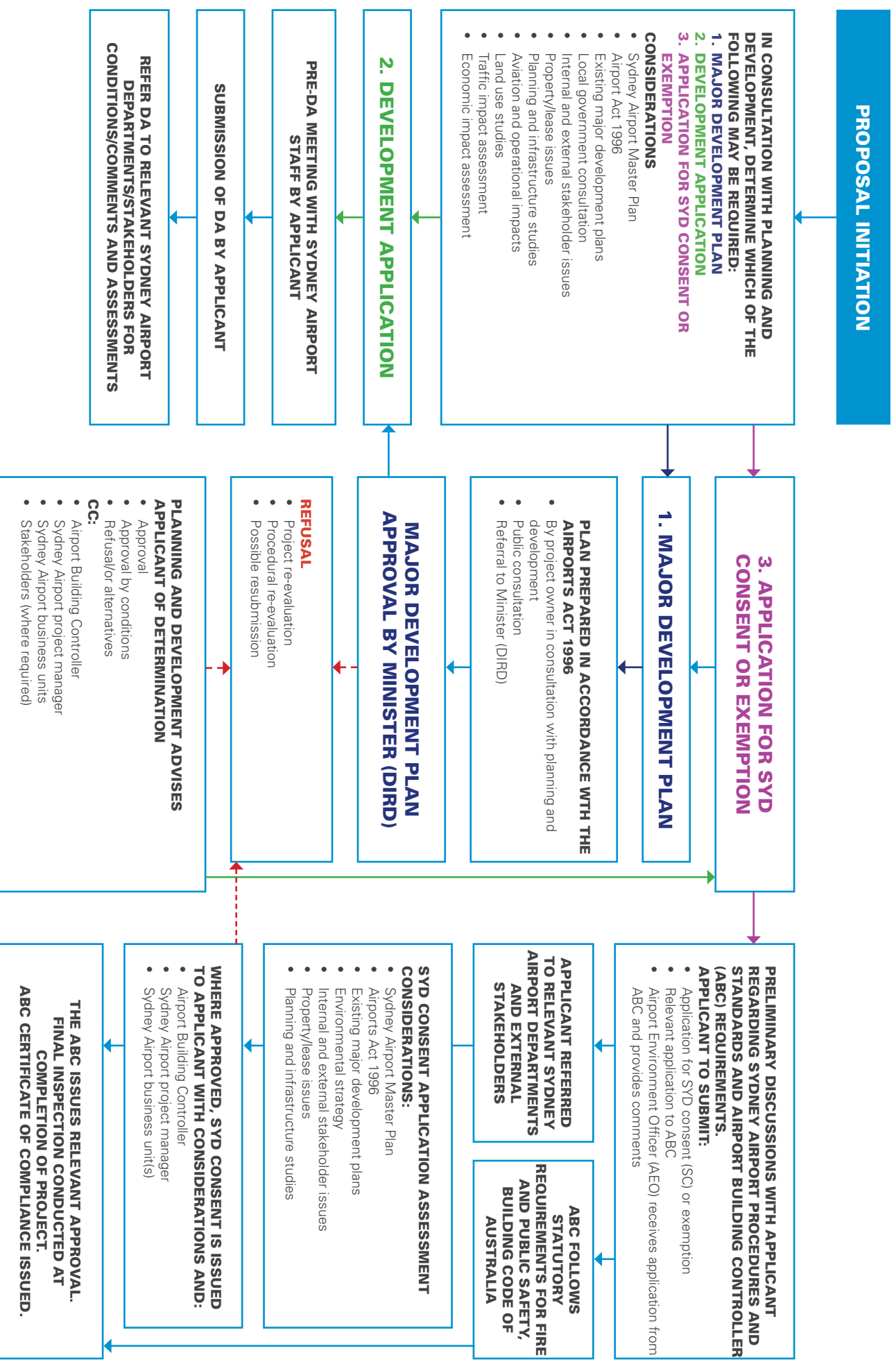
- Prior consultation with Sydney Airport planning and development as to the need for a major development plan (MDP), Sydney Airport development application, application for Sydney Airport consent or an exemption application under the Airports (Building Control) Regulations 1996. MDPs and development applications assess the general concept for the proposal and whether it is appropriate to proceed to applications for Sydney Airport consent or exemption. These applications are considered to be written consents under Airports (Building Control) Regulations 1996, regulations 2.03 and 2.05
- Determine whether the development is consistent with Section 32 of the Airports Act 1996
- Determine the development's consistency with the Master Plan and Environmental Strategy
- Consult with internal and external stakeholders, in particular, local government, regarding developments in proximity to boundaries as well as state government agencies

Pursuant to the Airports Act and Airports 1996 (Building Control) Regulations, Sydney Airport's written consent must also be accompanied by the consent of the airport building controller before works commence. Works of a minor nature may be expected only after consultation with the ABC. ABC applications are made pursuant to the Airports Act and Regulations 1996 and focus primarily on:

- Consistency of the development with the Master Plan
- Compliance with the Building Code of Australia
- A statutory assessment of the environmental impacts created by new developments, which is assessed by the airport environmental officer through the airport building controller, in accordance with the Airport (Building Control) Regulations 1996. Sydney Airport also has regard for the "type, location, bulk, height, density, design and external appearance of the development that will result from the proposed building activity ('development' for the purpose of this Master Plan)"

Environmental impact assessment is regulated by the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act), the Airport (Environmental Protection) Regulations 1997 (AEPR) and the Sydney Airport Environmental Strategy 2005-2010. Sydney Airport's environmental requirements are summarised in the fact sheet for environmental impact assessment of development and other applications at Sydney Airport, July 2003.

Figure E1 Sydney Airport planning and development process



### 3.2 Development standards

In addition to assessing proposals on regulatory compliance, proposals are also assessed on their performance in relation to a range of aviation, infrastructure, planning and environmental studies.

Due to the nature of the airport environment, development standards relating to each development are assessed on aviation-related standards not normally found in local planning ordinances. However, common planning standards and practices are applied to airport development where it is prudent to do so.

Sydney Airport's development standards are typically based on the list of documents and issues at **Table E1**. Each development is assessed on its performance against each of these issues and corresponding guidelines and benchmark documents.

**Table E1 Development standards**

Issue	Area	Sydney Airport guidelines and benchmark documents
<b>Airside infrastructure</b>	Aviation	MOS 139, ICAO Annex 14
<b>Navigation surveillance systems</b>	Aviation	Airservices Australia Navigational Aid Surface Drawings, MOS 172
<b>Aircraft noise</b>	Aviation	Building siting and insulation AS2021-2000 – Aircraft Noise Intrusion – Building, Siting and Construction
<b>Obstacle limitation surface</b>	Aviation	Airports (Protection of Airspace Regulations)
<b>Runway end safety</b>	Aviation	MOS 139
<b>Lighting</b>	Aviation	MOS 139
<b>Bird hazard</b>	Aviation	Wildlife management plan
<b>Dust hazard</b>	Aviation	Airport works plans
<b>Aviation security</b>	Aviation	Transport security program
<b>Radar reflectivity and navigational aids</b>	Aviation	Assessed on a case by case by Airservices Australia
<b>Master grading</b>	Infrastructure	Services master plan
<b>Utilities</b>	Infrastructure	Services master plan
<b>Advertising and signage</b>	Planning	Sydney Airport Master Plan; SEPP 64 principles
<b>Land use</b>	Planning	Sydney Airport Master Plan
<b>Road traffic generation, traffic and transport management</b>	Planning	Ground transport strategy, RTA guide to traffic generating development
<b>Utilities protection</b>	Planning	New southern railway, underground fuel and gas pipelines, SWSOOS, services master plan
<b>Contaminated sites</b>	Environmental	Contaminated sites register
<b>Heritage</b>	Environmental	Environment strategy and heritage management plan
<b>Fuel storage</b>	Environmental	Above-ground fuel storage policy
<b>Asbestos</b>	Environmental	Work health and safety standards
<b>Environmentally sustainable development</b>	Environmental	Environment strategy

### 3.3 External consultation

**Table E2** outlines a list of the agencies consulted on an ongoing basis. Note that agencies are consulted where there is a requirement for specific input on a particular issue. Other agencies not appearing below may also be consulted.

**Table E2 External consultation**

Consulted party	Reason
<b>Department of Planning and Infrastructure (NSW)</b>	Consultation regarding major on-airport developments
<b>Airlines and tenants</b>	Consultation regarding major on-airport developments
<b>Local government authorities</b>	Stakeholder consultation with local government on development interface issues on the airport boundary, including major developments
<b>Airservices Australia and Civil Aviation Safety Authority</b>	Radar/Navigational/OLS interference issues
<b>Roads and Maritime Services</b>	Trunk road access, advertising signage, traffic generating developments
<b>Sydney Water Corporation</b>	Potable water, trade waste, heritage (Alexandra Canal), air rights, SWSOOS
<b>Sydney Ports Corporation</b>	Port Botany/airport interface issues
<b>Ausgrid</b>	Electrical supply – network issues on-site/off-site
<b>JUHI</b>	Pipeline protection – hydrant installation and pipeline
<b>Airport Link Company</b>	New southern railway tunnel protection
<b>APA Group</b>	Moomba Gas pipeline protection
<b>Department of Sustainability, Environment, Water, Population and Communities</b>	Heritage matters

## 4.0 Consistency with state environmental planning policies, zones and Section 117 directions

### 4.1 Consistency with state environmental planning policies

**Table E3 State environmental planning policies**

State environmental planning policy (SEPP)	Relevance / consistency
<b>No 1 – Development Standards</b>	<p>The purpose of SEPP No. 1 is to provide more flexibility to development standards. The SEPP allows an authority to approve a non-complying development proposal provided that they can show that the set standard is unreasonable or unnecessary.</p> <p>Sydney Airport has a comprehensive development assessment process pursuant to the aims and objectives of the Airports Act 1996.</p>
<b>No 4 – Development Without Consent and Miscellaneous Exempt and Complying Development</b>	<p>The purpose of SEPP No. 4 is to provide a planning framework for small scale developments with minimal environmental effect and community impact.</p> <p>Sydney Airport has a comprehensive development assessment process pursuant to the aims and objectives of the Airports Act 1996.</p>
<b>No 19 – Urban Bushland</b>	<p>The aim of this SEPP is to protect and preserve bushland in urban areas. The SEPP applies to the local government areas (LGAs) of Botany Bay and Marrickville. This SEPP applies to Wolli Creek Regional Park located within Rockdale LGA and runs from Cooks River approximately 1 km from Sydney Airport. The provisions of this SEPP do not specifically apply to the airport. However, as the relevant LGAs are identified as land to which the SEPP applies, it has been considered.</p>
<b>No 22 – Shops and Commercial Premises</b>	<p>SEPP No. 22 permits a change of non-conforming (commercial) use within a business zone, from one kind of commercial premises to another kind of commercial premises or shop, provided that that change will incur only minor (if any) environmental impact within that zone and on surrounding uses. Any change of use is handled through Sydney Airport's internal development assessment process and may also require airport building controller approval.</p>

<p><b>No 33 – Hazardous and Offensive Development</b></p>	<p>SEPP 33 aims to identify potentially hazardous or offensive development and, in determining whether a development is hazardous or offensive industry, requires measures to be employed to reduce the impact of such development.</p> <p>Any proposed development of a hazardous or offensive nature on Sydney Airport requires development consent. Supporting information may include a hazard analysis prepared in accordance with relevant requirements.</p>
<p><b>No. 55 – Remediation of Land</b></p>	<p>The objectives of SEPP 55 include the remediation of contaminated land for the purpose of reducing the risk to human health or another aspect of the environment. Under the SEPP, a consent authority must not grant consent to a development unless it has considered whether the land is contaminated and whether it is suitable, or can be made suitable, for the proposed use.</p> <p>Sydney Airport has legislative requirements and internal processes to manage contaminated sites to achieve objectives similar to the aims and objectives of SEPP 55. These objectives are documented in Sydney Airport Environment Strategy 2013 - 2018.</p>
<p><b>No 64 – Advertising and Signage</b></p>	<p>SEPP 64 aims to ensure outdoor advertising is compatible with the desired amenity and visual character of an area, provides effective communication in suitable location, and is of high quality design and finish.</p> <p>Consistent with the aims of SEPP 64, Sydney Airport considers issues of road safety, amenity, character and finish when assessing proposals for advertisements and signage within the airport.</p>
<p><b>No 71 – Coastal Protection</b></p>	<p>The aims of SEPP 71 is to ensure that development in the NSW coastal zone is appropriate and suitably located, to ensure that there is a consistent and strategic approach to coastal planning and management, and to ensure there is a clear development assessment framework for the coastal zone.</p> <p>The Master Plan provides for improved public access in the area of Commonwealth Beach (Kyeemagh) which is consistent with the aims of this SEPP. Any future development in this area would also be cognisant of the need to ensure protection of the visual amenity and beach environment. The SEPP outlines development controls for the disposal of effluent and stormwater and public access to areas covered by this SEPP.</p>
<p><b>Major Development 2005</b></p>	<p>This SEPP applies to state significant sites, as described in Schedule 3 of the SEPP, and transitional Part 3A projects as described in Schedule 6A of the Environmental Planning and Assessment Act 1979. It is noted that Part 3A only continues to apply to projects that were approved prior to 1 October 2011 or undetermined project and concept plan applications where director general requirements were issued before this date. The major development SEPP would therefore only apply where there are any existing Part 3A approvals affected by the transitional provisions.</p>
<p><b>State and Regional Development 2011</b></p>	<p>This SEPP identifies development to which the state significant development assessment and approvals pathway (under Part 4 of the EP&amp;A Act) applies and relates to development deemed to be state significant and critical state significant infrastructure.</p> <p>This SEPP replaces SEPP (Major Development) 2005 to facilitate the application of assessment processes that apply to state significant development and state significant infrastructure not affected by commonwealth development approval requirements.</p>

<p><b>Infrastructure 2007</b></p>	<p>The aim of the infrastructure SEPP is to facilitate development of a range of infrastructure works in NSW. The SEPP establishes a consistent planning regime for infrastructure projects and the provision of services across NSW, along with providing for consultation with relevant public authorities during the assessment process. The SEPP supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency</p> <p>The commencement of infrastructure SEPP repealed a number of SEPPs that would have otherwise applied to the airport site. The provisions of the applicable repealed SEPPs have been subsumed in the infrastructure SEPP, including:</p> <ul style="list-style-type: none"> <li>• SEPP No. 11 – Traffic Generating Developments</li> <li>• SEPP No. 31 – Sydney (Kingsford Smith) Airport</li> <li>• SEPP No. 35 – Maintenance Dredging of Tidal Waterways</li> <li>• SEPP No. 43 – New Southern Railway</li> </ul> <p>In addition, the infrastructure SEPP was amended in 2011 in accordance with the state and regional development SEPP to facilitate the introduction of a new approvals pathway applicable to development classified as state significant development and state significant infrastructure (refer to SEPP State and Regional Development above). The Master Plan is consistent with the provisions of the infrastructure SEPP insofar as the Master Plan requires both an environmental assessment and accountability regime in requiring consent for all works undertaken on the airport site.</p>
<p><b>Temporary Structures and Places of Public Entertainment 2007</b></p>	<p>This SEPP provides for the erection of temporary structures and the use of places for public entertainment while protecting public safety and local amenity. The SEPP supports the transfer of the regulation of places of public entertainment and temporary structures from the Local Government Act 1993 to the EP&amp;A Act. The Master Plan considers this SEPP and has included temporary structures as a use that is permitted with consent in specified land use zones.</p>
<p><b>Sydney Regional Environmental Plan No. 33 – Cooks Cove</b></p>	<p>As of 1 July 2009, Regional Environmental Plans (REPs) are no longer part of the hierarchy of planning instruments in NSW and are now deemed as SEPPs. Cooks Cove REP is therefore deemed to be a SEPP.</p> <p>Cooks Cove is a 100 hectare site in Arncliffe, located to the west of the airport site. Development proposed for the site is largely consistent with adjacent airport operations and involves the relocation of the Kogarah Golf Club to the south of the site, urban development comprising a 21 hectare trade and technology centre and 80 hectares of open space. As part of the project, new and upgraded sporting fields.</p> <p>A key objective of the Cooks Cove REP is to capitalise on the physical proximity of Cooks Cove to the airport to create trade-focussed development. The REP establishes zoning and development controls to facilitate development within the Cooks Cove site. The REP provides opportunities to locate employment generating activities in the area, designates public and private open space, improves foreshore access and provides protection for the existing wetlands. Airport operations have been considered in the formulation of the SREP.</p>
<p><b>Port Botany SEPP 2013 (Proposed)</b></p>	<p>The proposed SEPP is to provide a revised planning framework within which the private operator (under a lease agreement with the NSW Government) will function. The revised planning framework is to rationalise existing controls and allow for efficient functioning of land at Port Botany, including waterfront / wharf areas, for port purposes and ensure ongoing integrity of the shipping channel to support Port operations.</p> <p>The proposed SEPP applies to land and water areas that are adjacent to Sydney Airport. Given the close proximity to Sydney Airport, the proposed SEPP and any other-port related relevant Guidelines must have regard to the need to ensure future development or other activities proceed in a manner that does not compromise aviation safety.</p> <p>The proposed SEPP is currently being assessed by the NSW Department of Planning and Infrastructure.</p>

## 4.2 Consistency of Master Plan's zones with local environmental plans

### 4.2.1 Introduction

Local environmental plans (LEPs) are prepared under Part 3 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) and provide the local planning provisions and development controls for a local government area (LGA). The Sydney Airport site is located within the Botany Bay, Rockdale and Marrickville LGAs (see **Figure 11.2** in Chapter 11). The applicable LEPs and the relevant associated provisions under each are outlined in this appendix, together with an assessment of the consistency of the Master Plan's land use zones with the relevant provisions.

### 4.2.2 Definition of development on Sydney Airport

In relation to Sydney Airport operations and development, an undertaking for the purpose of air transport is defined under Marrickville Local Environmental Plan 2011 (Marrickville LEP), Rockdale Local Environmental Plan 2011 (Rockdale LEP) and Botany Bay Local Environmental Plan 2013 (Botany Bay LEP) as either an 'airport' or 'public utility undertaking'.

Definitions contained within Botany Bay, Marrickville and Rockdale LEPs that are related to airports and airport associated uses are as follows:

*"Air transport facility means an airport or a heliport that is not part of an airport, and includes associated communication and air traffic control facilities or structures."*

*"Airport means a place that is used for the landing, taking off, parking, maintenance or repair of aeroplanes, and includes associated buildings, installations, facilities and movement areas and any heliport that is part of the airport. Airports are a type of air transport facility."*

*"Depot means a building or place used for the storage (but not sale or hire) of plant, machinery or other goods (that support the operations of an existing undertaking) when not required for use, but does not include a farm building."*

*"Freight transport facility means a facility used principally for the bulk handling of goods for transport by road, rail, air or sea, including any facility for the loading and unloading of vehicles, aircraft, vessels or containers used to transport those goods and for the parking, holding, servicing or repair of those vehicles, aircraft or vessels or for the engines or carriages involved."*

*"Passenger transport facility means a building or place used for the assembly or dispersal of passengers by any form of transport, including facilities required for parking, manoeuvring, storage or routine servicing of any vehicle that uses the building or place."*

*"Public utility undertaking means any of the following undertakings carried on or permitted to be carried on by or by authority of any government department or under the authority of or in pursuance of any commonwealth or state act:*

- (a) Railway, road transport, water transport, air transport, wharf or river undertakings,*
- (b) Undertakings for the supply of water, hydraulic power, electricity or gas or the provision of sewerage or drainage services,*
- (c) And a reference to a person carrying on a public utility undertaking includes a reference to a council, electricity supply authority, government department, corporation, firm or authority carrying on the undertaking"*

### 4.2.3 City of Botany Bay

The relevant zoning provisions of Botany Bay Local Environmental Plan 2013 (Botany Bay LEP), as they relate to and its land use zones, are detailed below.

#### 4.2.3.1 Botany Bay Local Environmental Plan 2013

The relevant zoning provisions of Botany Bay LEP as they relate to Sydney Airport and its land use zones, are described below.

#### Zoning of Sydney Airport land under Botany Bay LEP

##### SP2 Infrastructure (Airport)

The airport site is zoned SP2 Infrastructure (Airport) under the Botany Bay LEP, specifically zoning the site for airport use (refer to **Figure 11.2** in Chapter 11). The objective of the SP2 Infrastructure zone is 'to provide for infrastructure and related uses and to prevent development that is not compatible with or that may detract from the provision of infrastructure'. Environmental protection works in this zone are permitted without consent. Land uses permitted with consent in this zone include development for the airport or development ordinarily incidental or ancillary to development for the purpose of an airport.

The Master Plan has divided this portion of the land into the following separate zones to accurately reflect on-site activities. These zones include:

- AD1 – Aviation Activities and Aviation Support Facilities
- AD2 – Airport Terminal and Support Services

- AD3 – Airport Logistics and Support
- AD4 – Utilities Reservation
- AD5 – Aviation Reservation
- BD1 – Business Development
- BD2 – Enviro-Business Park
- EC1 – Environmental Conservation

Each zone provides for specific types of land uses related to airport operations and other development that is considered ancillary or incidental to airport operations. The aviation related land uses are consistent with the SP2 Infrastructure (Airport) zoning under Botany Bay LEP. The business, industrial and commercial land uses that are permissible with consent under the Master Plan are consistent with the SP2 Infrastructure (Airport) zoning provisions under Botany Bay LEP where a contemporary view is taken of what the purpose of an 'airport' is and the complementary land uses that support it.

### **SP2 Infrastructure (Railway)**

Adjacent to the SP2 Infrastructure (Airport) zone along the northern and eastern perimeter of the airport is the SP2 Infrastructure (Railway) zone under the Botany Bay LEP. This rail network services Port Botany and provides a buffer between the airport and adjacent industrial and business development zones. The objective of this zone is to 'provide for infrastructure and related uses and to prevent development that is not compatible with or that may detract from the provision of infrastructure'. Environmental protection works are permitted without consent in this zone. Land uses permitted with consent in this zone include development for the purpose of a railway or development ordinarily incidental or ancillary to development for the purpose of a railway.

Zoning adjacent to the northern perimeter of the airport is AD1 (Aviation Activity and Aviation Support Facilities), AD2 (Airport Terminal and Support Services), and AD3 (Airport Logistics and Support) under the Master Plan. Zoning adjacent to the eastern perimeter is AD1 (Aviation Activity and Aviation Support Facilities), BD1 (Business Development) and EC1 (Environmental Conservation) under the Master Plan. The zones specified under the Master Plan will not conflict with or prevent the efficient operations of SP2 Infrastructure (Railway) zone.

### **IN1 General Industrial**

A large parcel of land is located to the north of the airport site and is generally defined by Coward Street and Qantas Drive. This land is zoned IN1 General Industrial under the Botany Bay LEP. The objectives of this zone are to 'provide a wide range of industrial and warehouse land uses, encourage employment opportunities, minimise any adverse effect of industry on other land uses and to support and protect industrial land for industrial uses'.

A wide range of non-residential land uses are permitted with consent in the IN1 General Industrial zone.

This zone provides a transition to more sensitive land uses (for example, land zoned for residential uses) further north and east. In addition, the IN1 zone adjoins land zoned SP2 Infrastructure (Railway) under the Botany Bay LEP to the south, which provides a transition zone to the aviation activities located in the north of the airport site.

Land zoned AD1 (Aviation Activity and Aviation Support Facilities) and AD3 (Airport Logistics and Support) zones under the Master Plan adjoins land within the IN1 zone under the Botany Bay LEP. Collectively, these zones comprise a number of complementary land uses, ensuring that the zones will contribute towards an aviation-related commercial/light industrial hub.

### **B5 Business Development**

Land zoned B5 Business Development is located to the north-east of the airport site and is contiguous with the airport site as far south as General Holmes Drive. In addition, there is a small parcel of land zoned B5 to the east of the airport site, adjacent to Botany Road. A portion of the railway that adjoins the northern boundary of the airport is also zoned B5. The objective of this zone is 'to enable a mix of business and warehouse uses, and bulky goods premises that require a large floor area, in locations that are close to, and that support the viability of, centres'.

The Master Plan designates three separate zones within the area adjacent to B5 zoned land, those being AD1 (Aviation Activity and Aviation Support Facilities), AD2 (Airport Terminal and Support Services), AD3 (Airport Logistics and Support). Uses that are permissible with consent under these zones comprise aviation-related activities, including aviation support facilities, passenger transport terminals and support services as well as a business development. These uses are considered to be consistent with the objectives and permissible uses within the B5 zone.

### **R2 Low Density Residential**

Land zoned R2 Low Density Residential is located to the east of General Holmes Drive and adjoining the Mill Pond and the Sydney Airport landholding in this area. A portion of this residential land is identified as a heritage conservation area on the Botany Bay LEP Heritage Map. The primary objective of the R2 zone is 'to provide for the housing needs

of the community within a low density residential environment' and 'to enable other land uses that provide facilities or services to meet the day to day needs of residents. An expansive area of residential zoned land (R2 Low Density and R3 Medium Density) is located east of Botany Road, adjoining areas zoned for a range of business, commercial, retail and community uses (that is, B1 Neighbourhood Centre, B2 Local Centre, B4 Mixed Use and B7 Business Park).

Land zoned RE1 Public Recreation and Foreshore Road to the south east of the airport, provides a buffer between the airport site and the residential lands to the south east. This land has been zoned by council as low density residential in recognition of the potential for land use conflicts.

Airport land adjoining the R2 zone is zoned EC1 (Environmental Conservation) under the Master Plan. Land zoned BD1 (Business development) under the Master Plan is also located in proximity to land within the R2 Low Density Residential zone. The EC1 zone provides a buffer between residential dwellings to the south east and airport operations.

Land within the airport site zoned BD1 (Business Development) is separated by the majority of the airport site by land zoned SP2 Classified Road (Botany Road) under the Botany Bay LEP. The BD1 zone is not considered to be inconsistent with surrounding R2 zoned land given the presence of other business/commercial/retail type uses which are mostly interspersed throughout residential areas within the LGA. In addition, BD1 zoned land within the north-eastern portion of the airport site is separated from residential zoning by IN2 (Industrial) and B4 (Mixed Use) zoning, providing a transition between these uses.

### **R3 Medium Density Residential**

Land zoned R3 Medium Density Residential under Botany Bay LEP does not directly adjoin the airport site but is located in proximity of the site to the north and east. In accordance with the Botany Bay LEP, council will consider the suitability of higher density development within the R3 zone in relation to other uses, in particular airport operations, to minimise the potential for conflicting land uses. Zones under the Master Plan located in closest proximity to R3 zoned areas include zones BD1 (Business Development) and EC1 (Environmental Conservation), which are compatible with the purpose of the R3 zone.

### **B7 Business Park**

Land zoned B7 Business Park is situated to the north of the airport site and adjoins the airport to the east. The objectives of the B7 zone are to provide a range of office and light industrial uses, to encourage employment opportunities, and to provide facilities and services to service workers in the area. The B7 zone also aims to ensure that uses within this zone are commensurate with the capacity of the surrounding road network, particularly given the location of the airport to the south. Various different uses are permissible with consent in this zone, including business premises, community facilities, dwelling houses, light industries and recreation areas. Passenger transport facilities are also permissible within this zone and home occupations are permissible without consent.

Land zoned EC1 (Environmental Conservation), situated to the east of the airport, adjoins the B7 zone to the north and is generally bounded by General Holmes Drive and Bay Street. As noted above, the EC1 zone in this portion of the site provides a buffer to airport operations in the west and minimises the potential for land use conflicts between land zoned under the Botany Bay LEP and the Master Plan. The EC1 zone is therefore considered to be compatible with the B7 Business Park zone.

## **4.2.4 Marrickville Council**

### **4.2.4.1 Marrickville Local Environmental Plan 2011**

The relevant zoning provisions of Marrickville Local Environmental Plan 2011 (Marrickville LEP), as they relate to Sydney Airport and its land use zones, are detailed below.

#### **Zoning of Sydney Airport land under Marrickville LEP**

##### **Zone SP2 Infrastructure (Air Transport Facilities)**

A portion of the northern sector of the airport site, around Alexandra Canal, is located within the Marrickville LGA. Sydney Airport is zoned SP2 Infrastructure (Air Transport Facilities) under Marrickville LEP. The Master Plan has zoned this land for four (4) separate purposes. These are:

- AD1 – Aviation Activity and Aviation Support Facilities
- AD2 – Airport Terminal and Support Services
- AD3 - Airport Logistics and Support
- AD4 – Utilities Reservation

The objective of the SP2 (Infrastructure) zone is 'to provide for infrastructure and related uses, to prevent development that is not compatible with or that may detract from the provision of infrastructure and to protect and provide for land used for community purposes'.

Under the SP2 Infrastructure (Air Transport Facilities) zone, home occupations are permitted without consent. Roads and any development that is ordinarily incidental or ancillary to development for the purpose of air transport facilities is permitted with consent in the SP2 Infrastructure (Air Transport Facilities zone). All other land uses are prohibited in this zone.

The Master Plan proposes to zone this land as AD1 (Aviation Activity and Aviation Support Facilities), AD2 (Airport Terminal and Support Services) and AD3 (Airport Logistics and Support) which permit uses that are fundamental to airport operations.

### **Zone IN1 General Industrial**

Sydney Airport owns a freehold parcel of land north of Airport Drive and Alexandra Canal, which is within the airport boundary, as depicted in **Figure 11.2** in Chapter 11. This freehold land does not fall within the Commonwealth's landholding of the airport. This land is therefore governed under the provisions of the NSW EP&A Act and Marrickville LEP and is zoned IN1 General Industrial under Marrickville LEP.

The purpose of the IN1 zone is to provide for industrial and warehouse uses, to encourage employment, minimise adverse effect of industry on other land uses, and to protect industrial land in proximity to Sydney Airport and Port Botany. Under the Master Plan, this land is zoned AD3 (Airport Logistics and Support) which permits uses that support airport operations.

Types of development permissible with consent in the IN1 zone include (but are not limited to) dwelling houses, general industries, light industries, neighbourhood shops, and takeaway and food and drink premises. While permissible with consent in the IN1 zone, development consent in relation to dwelling houses only applies to alterations or additions to existing dwellings. It is also noted that a number of airport related uses, such as air transport facilities, airstrips and passenger transport facilities, are prohibited in the IN1 zone.

Existing development within the IN1 zone comprises a number of uses prohibited under Marrickville LEP, including animal boarding or training establishments, commercial premises, child care centres, and air transport facilities. Aviation-related uses within the AD3 zone would not unreasonably intensify the use of this area beyond what currently exists. In addition, there are no sensitive land uses adjoining or in proximity to this portion of the airport site.

A portion of the IN1 zoned land is owned by Sydney Airport but is not zoned under the Master Plan and is not subject to the requirements of the Airports Act or the Master Plan.

### **RE1 Public Recreation**

Land zoned RE1 Public Recreation is located adjacent to the airport site, to the north of Alexandra Canal. A small portion of this land is located adjacent to land zoned AD1 (Aviation Activity and Aviation Support Facilities) and AD2 (Airport Terminal and Support Services) under the Master Plan. The objective of the RE1 zone is to enable land to be used for public open space or recreational purposes, provide a range of recreational settings and activities, community facilities, services and compatible land uses, and to protect and enhance the natural environment for recreational purposes.

The location of the RE1 zone on the opposite side of Alexandra Canal, coupled with the purpose of the zone, minimises the potential for land use conflicts between this land and the airport site. In addition, RE1 zoned land provides a buffer between residential development to the north and airport operations.

A portion of the RE1 zoned land is owned by Sydney Airport but is not zoned under the Master Plan and is not subject to the Master Plan requirements. Sydney Airport also owns a small portion of land adjacent to the RE1 zone, along Old Street in Tempe, which currently accommodates a water tank. This land is zoned AD4 (Utilities Reservation) under the Master Plan, which permits uses that are consistent with the current use of this land.

### **Zone SP2 Infrastructure (Rail Infrastructure Facilities, Air Transport Facilities and Stormwater Management Systems)**

Land within the Marrickville portion of the site is zoned SP2 Infrastructure and includes land for rail infrastructure facilities, air transport facilities and stormwater management systems. The objective of the SP2 Infrastructure zone is to 'provide for infrastructure and related uses, prevent development that is not compatible with or that may detract from the provision of infrastructure and to protect and provide for land used for community purposes'.

Alexandra Canal to the north of the airport is zoned SP2 Infrastructure for the purpose of stormwater management systems. Port Botany freight line and Airport Drive are zoned SP2 Infrastructure (Rail Infrastructure Facilities and Air Transport Facilities respectively). This zoning supports airport operations and is therefore consistent with the AD2 zone under the Master Plan.

### **Acoustic and height considerations**

Marrickville LEP contains provisions relating to development on land that is near the airport, has an ANEF contour of 20 or greater and where the consent authority considers the land to be affected by aircraft related noise. This provision places specific controls on development within these areas and requires the consent authority to consider the following:

- Whether the development will result in an increase in the number of dwellings or people affected by aircraft noise

- The location of the development in relation to the criteria contained in Australian Standard AS 2021-2000, Acoustics – Aircraft Noise Intrusion – Building Siting and Construction
- Satisfaction that the development will meet the indoor design sound levels in relation to the criteria provided in Australian Standard AS 2021-2000, Acoustics – Aircraft noise intrusion – Building siting and construction

Marrickville LEP contains provisions relating to the protection of airspace operations to direct the consent authority when assessing development applications to have regard to whether the proposed development will penetrate the limitation or operations surface. Development consent must not be granted if the consent authority and commonwealth body are satisfied that the proposed development will penetrate the limitation or operations surface.

#### **4.2.5 Rockdale Local Environmental Plan 2011**

The relevant zoning provisions of Rockdale LEP, as they relate to Sydney Airport and its land use zones, are detailed below.

##### **Zoning of Sydney Airport land under Rockdale LEP**

###### **Zone SP2 Infrastructure (Airport)**

The portion of the airport site located within the Rockdale LGA is zoned SP2 Infrastructure (Airport), which permits development for airport purposes. Development that is ordinarily ancillary to airport purposes is permissible with consent in this zone. The Master Plan has zoned this land for five (5) separate purposes. These are:

- AD1 – Aviation Activities and Aviation Support Facilities
- AD2 – Airport Terminal and Support Services
- AD3 - Airport Logistics and Support
- BD1 – Business Development
- BD2 – Enviro-Business Park

The provisions of the Rockdale LEP that relate to land adjoining Sydney Airport are discussed below.

###### **Zone RE1 Public Recreation**

Land zoned RE1 Public Recreation under Rockdale LEP is located along the foreshore of the Cooks River, adjacent to the airport to the west. The objectives of this zone are to enable land to be used for public open space for a range of recreational purposes and to protect and enhance the natural environment for recreation purposes. The types of uses that are permissible in the zone are recreational related uses, which includes community facilities and child care centres.

The western sector of the airport site adjacent to RE1 zoned land is zoned AD1 (Aviation Activity and Aviation Support Facilities) and BD1 (Business Development) under the Master Plan.

The separation achieved by the Cooks River ensures that the proposed zonings will not conflict with the public recreation areas. Amenity impacts on existing open space areas will remain unchanged.

###### **Zone R2 Low Density Residential**

Land zoned R2 Low Density Residential is located to the south-west of the airport site, with a band of open space (zoned RE1 Public Recreation) separating this residential zoning and the Cooks River.

Land use zones within the airport that are closest to R2 zoned land are AD1 (Aviation Activity and Aviation Support Facilities) and BD1 (Business Development). The physical barrier created by the Cooks River provides a buffer between residential zoning in the west and airport activities in the east.

##### **Clause 6.3 Development in areas subject to aircraft noise**

The provisions of Clause 6.3 of Rockdale LEP place specific controls on developing land within areas directly affected by aircraft noise. That is, land in proximity to the airport site and within an ANEF contour of 20 or greater. The provision directs council to ensure the guidelines provided in Australian Standard AS 2021-2000 – Acoustics – Aircraft Noise Intrusion – Building Siting and Construction are incorporated in the design and construction of buildings that are affected by noise and vibration associated with airport operations.

#### **4.2.6 Commercial and retail development in areas adjacent to Sydney Airport**

As noted in section 11.5.6, for the first five years of the planning period, the Airports Act requires the Master Plan to include an analysis of how the proposed developments in the Master Plan fit within the planning schemes for commercial and retail development in the area that is adjacent to the airport.

Chapter 10 of the Master Plan (Commercial Development Plan) describes the type of commercial and retail development that may occur on the airport site over the planning period for the Master Plan, including the first five years.

Sydney Airport has a strong track record of delivering appropriate commercial activities/developments that enhance the passenger and other airport user needs. Sydney Airport's commercial planning activities comprise only 5.8% of allocated land. The majority of proposed future commercial development is expected to involve hotel accommodation for passengers, offices for aviation related businesses and general retail for passengers, their meeters and greeters, staff and related aviation service providers.

Therefore, having regard to the commercial and retail developments that are permitted by the various LEPs operating in areas adjacent to the airport (see section 4.2 above), and given the type of commercial and retail development Sydney Airport anticipates will occur on the airport site over the planning period (including the next five years), the proposed on-airport developments fit within the planning schemes for areas adjacent to the airport.

### 4.3 Consistency with relevant Section 117 directions

**Table E4 Relevant Section 117 directions**

Section 117 direction	Relevance/consistency
<b>1. Employment and resources</b>	
1.1 Business and industrial zones	<p>The objectives of this direction are to:</p> <ul style="list-style-type: none"> <li>• Encourage employment growth in suitable locations</li> <li>• Protect employment land in business and industrial zones</li> <li>• Support the viability of identified strategic centres</li> </ul> <p>The objectives of this direction are consistent with Sydney Airport's strategic direction for the airport to provide significant employment lands as presented in the Master Plan. The State Government has indicated the need to support and strengthen the nation's economic gateways (Sydney Airport and Port Botany) and this intent has been incorporated into the Master Plan. Accordingly, the Master Plan is generally consistent with this direction.</p>
1.2 Rural zones	Not relevant
1.3 Mining, petroleum production and extractive industries	Not relevant
1.4 Oyster aquaculture	Not relevant
1.5 Rural lands	Not relevant
<b>2. Employment and heritage</b>	
2.1 Environment protection zones	<p>The objective of this direction is to protect and conserve environmentally sensitive areas. Areas of the airport have been classified as environmentally sensitive and subsequently been acknowledged in Sydney Airport's Environment Strategy 2013 - 2018. Environmentally sensitive areas within the airport site are identified by EC1 (Environmental Conservation) zoning under the Master Plan. Within these zones, only land uses that are consistent with the environment protection standards applicable to the land are permitted. Accordingly, the Master Plan is generally consistent with this direction.</p>
2.2 Coastal protection	Not relevant
2.3 Heritage conservation	<p>The objective of this direction is to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance. There are various local and state heritage items located on the airport site. Heritage conservation is covered in the environment (in Chapter 13). Sydney Airport's Environment Strategy 2013 - 2018 identifies the relevant heritage legislation and standards that apply to the airport. Land within the airport site is governed by the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Sydney Airport is therefore required to comply with the provisions relating to heritage under the EPBC Act. Accordingly, the Master Plan is generally consistent with this direction.</p>
2.4 Recreation vehicle areas	Not relevant
<b>3. Housing, infrastructure and urban development</b>	
3.1 Residential zones	Not relevant
3.2 Caravan parks and manufactured home estates	Not relevant
3.3 Home occupations	Not relevant

3.4 Integrating land use and transport	<p>The objectives of this direction are to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives:</p> <ul style="list-style-type: none"> <li>• Improving access to housing, jobs and services by walking, cycling and public transport</li> <li>• Increasing the choice of available transport and reducing dependence on cars</li> <li>• Reducing travel demand including the number of trips generated by development and distances</li> <li>• Supporting efficient and viable operation of public transport services, and providing for the efficient movement of freight</li> </ul> <p>Sydney Airport is serviced by a public bus, rail and taxi services and as such is consistent with the objectives of this direction. The airport site integrates land use and transport effectively and is serviced by public transport. The site also provides space and services required for private transport modes. In addition, through the strategic co-location of facilities and services within the site, the needs of airport patrons and the local workforce are adequately catered for, thereby reducing special-purpose trip generation. Accordingly, the Master Plan is generally consistent with this direction.</p>
3.5 Development near licensed aerodromes	<p>The objectives of this direction are:</p> <ul style="list-style-type: none"> <li>• To ensure the effective and safe operation of aerodromes <ul style="list-style-type: none"> <li>• To ensure that their operation is not compromised by development that constitutes an obstruction, hazard or potential hazard to aircraft flying in the vicinity</li> <li>• To ensure development for residential purposes or human occupation, if situated on land within the ANEF contours of between 20 and 25, incorporates appropriate mitigation measures so that the development is not adversely affected by aircraft noise</li> </ul> </li> </ul> <p>This direction aims for the effective and safe operation of aerodromes and for appropriate development in the vicinity of aerodromes.</p> <p>Sydney Airport is required to apply the Australian Standard 2021-2000 with respect to internal noise levels of proposed developments and does so as required. Accordingly, the Master Plan is generally consistent with this direction.</p>
3.6 Shooting ranges	Not relevant
<b>4. Hazard and risk</b>	
4.1 Acid sulphate soils	<p>The objective of this direction is to avoid significant environmental impacts from the use of land that has a probability of containing acid sulphate soils (ASS). The Department of Planning and Infrastructure's ASS risk maps show that there is a risk of ASS adjacent to the airport. The intent of this direction is to ensure that intensification of land uses does not occur on land with a probability of containing ASS. As most of Sydney Airport's land has been subject to extensive modification, such as land-filling and terrain flattening, the land is generally classified as 'disturbed terrain' and the provisions of this direction do not directly apply.</p> <p>Sydney Airport has a contaminated sites strategy that has been documented in the Sydney Airport Environment Strategy 2013 – 2018. Sydney Airport ASS is identified as an environmental management issue, which requires assessment as part of new developments and earthworks.</p>
4.2 Mine subsidence and unstable land	Not relevant.
4.3 Flood prone land	<p>The objectives of this direction are:</p> <ul style="list-style-type: none"> <li>• To ensure that development of flood prone land is consistent with the NSW Government's flood prone land policy and the principles of the Floodplain Development Manual 2005</li> <li>• To ensure that the provisions of an LEP on flood prone land is commensurate with flood hazard and includes consideration of the potential flood impacts both on and off the subject land</li> </ul> <p>The airport site sits adjacent to the Cooks River and is identified as a flood planning area in accordance with Rockdale Council's flood planning map. The airport currently has flood planning measures in place to minimise and manage the impacts of flooding on airport operations. Accordingly, the Master Plan is generally consistent with this direction.</p>
4.4 Planning for bushfire protection	Not relevant.
<b>5. Regional planning</b>	
5.1 Implementation of regional strategies	Not relevant.
5.2 Sydney drinking water catchment	Not relevant.
5.3 Farmland of state and regional significance on the NSW Far North Coast	Not relevant.

5.4 Commercial and retail development along the Pacific Highway	Not relevant.
5.8 Second Sydney Airport Badgerys Creek	The objective of this direction is to avoid incompatible development in the vicinity of any future second Sydney Airport at Badgerys Creek. This direction gives guidance to local governments seeking to rezone land in areas surrounding the proposed second Sydney Airport site. This direction does not apply specifically to Sydney Airport.
<b>6. Local plan making</b>	
6.1 Approval and referral requirements	The objective of this direction is to ensure that LEP provisions encourage the efficient and appropriate assessment of development. This direction specifically applies to all councils in their preparation of a draft LEP and aims to minimise the inclusion of provisions that require the concurrence, consultation or referral of development applications to a minister or public authority. Notwithstanding, the national significance of Sydney Airport requires ongoing consultation and concurrence with the minister and public authorities to ensure that obstacle clearance areas are sufficient and that aviation practices are not compromised.
6.2 Reserving land for public purposes	Not relevant.
6.3 Site specific provisions	The objective of this direction is to discourage unnecessarily restrictive site specific planning controls. This direction is not specifically applicable to the operations of the airport or airport development proposals as the site is not strictly subject to the provisions of any state environmental planning instruments. Rather, the airport is required to demonstrate consistency, where possible, with state planning legislation. In this regard, the Master Plan has not incorporated any unnecessary restrictive planning controls. However land has been appropriately zoned for operational requirements. Accordingly, the Master Plan is generally consistent with this direction.
<b>7. Metropolitan planning</b>	
7.1 Implementation of the metropolitan plan for Sydney 2036	<p>The objective of this direction is to give legal effect to the vision, transport and land use strategy, policies, outcomes and actions contained in the metropolitan plan. Planning authorities are therefore required to ensure that planning proposals achieve the overall intent of the metropolitan plan.</p> <p>The metropolitan plan is the NSW Government's long-term strategic plan to maintain Sydney's role in the global economy and to plan for growth and change within the Sydney metropolitan area over the 25 year forecast period.</p> <p>Sydney Airport is designated as a specialised centre under the metropolitan plan, which emphasises the importance of promoting the role of the airport within the metropolitan economy and the global economic corridor.</p> <p>Sydney Airport and Port Botany are significant in that they provide the economic gateway to Sydney and the nation. The key economic role of Sydney Airport through the provision of employment and business opportunities is therefore emphasised within the metropolitan plan.</p>

## 4.4 Metropolitan planning

### 4.4.1 Metropolitan Plan for Sydney 2036

The Metropolitan Plan for Sydney 2036 (metropolitan plan) is the NSW Government's long-term strategic plan to maintain Sydney's role in the global economy and to plan for growth and change within the Sydney region over a 25 year period to 2036. The metropolitan plan was developed in 2010 and supersedes the 2005 Metropolitan Strategy – City of Cities (Metropolitan Strategy). The metropolitan plan builds on the strengths of the metropolitan strategy, with a focus on optimising coordination between state and local government to meet the aims of the plan.

The metropolitan plan recognises Sydney Airport as a specialised centre, which means its important role in the metropolitan economy should be promoted. In particular, the globalisation of the economy has resulted in a shift in demand for the types of goods and services to be provided in and around the airport. The metropolitan plan also recognises Sydney Airport's significant location within Sydney's global economic corridor (GEC). Economic corridors play a critical role for the metropolitan economy and the GEC in particular is a key driver of Sydney's wealth generation and will continue to be into the future. The GEC extends from Sydney Airport and Port Botany in the south to Sydney's Central Business District (CBD), North Sydney and Macquarie Park in the north. Employment and economic activity are concentrated along this corridor.

Strengthening the role of the economic corridor has been targeted through infrastructure upgrades to improve connectivity and through local planning to identify suitable land uses along the corridor, particularly in proximity of the airport. While the metropolitan plan has a vision for 770,000 new dwellings throughout Sydney's subregions, it recognises that the specialised centres of Port Botany and Sydney Airport would not be appropriate locations for new residential development. In addition, as Sydney Airport handles half of Australia's international air freight, the metropolitan plan recognises the opportunity to convert existing residential areas in proximity to the airport into industrial areas to support nearby freight industry. This would require investigating the suitability of locations near the airport (in terms of noise) over the medium to long term.

The metropolitan plan recognises the significant growth in airport activity forecast over the next 25 years and growth in passenger movements from 32 million in 2007 to 79 million by 2029. In addition, Sydney Airport and environs has an employment capacity target of +22,000 to 2036. The M5 Motorway is identified as an important link to the Sydney Airport Port Botany area which, with increased traffic movements to and from the airport and between the airport and the CBD, is already operating near capacity. Capacity issues would therefore need to be addressed in order to cater to increased airport activity generated by increased passenger and employee movements.

The metropolitan plan identifies future directions for strategic centres and summarises future directions for Sydney Airport and examples of NSW Government support for optimising the role and operations of the airport as follows:

*Future directions:*

- *Maintain international aviation gateway function for freight and passengers*
- *Work with federal and local governments to manage the impacts of on airport non-aviation development proposals*
- *Manage the impacts of airport freight and passenger growth on transport systems*
- *Protect and enhance strategic employment lands*
- *To ensure long-term demand for aviation infrastructure is met, the Federal and NSW Governments are preparing an aviation strategic plan for the Sydney region. A joint study has been established to prepare the plan which will identify options and strategies to meet the aviation capacity needs of the Sydney region. The joint study will also consider land transport infrastructure around Kingsford Smith Airport and the future use of the Commonwealth-owned Badgerys Creek site formerly earmarked for a second Sydney Airport*

*Examples of State Government support:*

- *Airport and port access strategy*
- *Strategic bus corridors 21, 29*
- *Potential improved road link from M5 to airport and Port Botany*

Furthermore, draft subregional strategies were developed as part of the 2005 metropolitan strategy and remain a key planning tool for councils to implement the metropolitan plan at the local level. Due to its location within three local government areas, Sydney Airport is identified in two subregional strategies – the Draft East Subregional Strategy (covering Botany Bay) and the South Subregional Strategy (covering Marrickville and Rockdale).

### 4.4.2 Draft Metropolitan Strategy for Sydney 2031

Draft Metropolitan Strategy for Sydney 2031 (released March 2013) builds on Metropolitan Plan Sydney 2036, providing an updated strategy for the growth of Sydney. The draft strategy collaborates with other state plans including the NSW Long Term Transport Master Plan and State Infrastructure Strategy.

The draft strategy promotes five key urban outcomes for Sydney: balanced growth; a liveable city; productivity and prosperity; healthy and resilient environment; accessibility and connectivity. Six new subregions are proposed, with Sydney Airport located within part of Central Subregion and South Subregion.

Under the strategy, Sydney Airport remains as a specialised precinct and the international and national gateway to the global economic corridor (GEC). The airport is therefore a key piece of economic infrastructure for the growth of global Sydney.

To support the on-going airport function, the draft strategy identifies strategic requirements to improve access and transport linkages.

### **4.4.3 Subregional strategies**

#### **4.4.3.1 Draft East Subregional Strategy**

The Draft East Subregional Strategy identifies the important role the East Subregion plays in the provision of transport infrastructure through Sydney Airport and Port Botany. The strategy outlines the significant employment opportunities and the transportation of passengers and freight, facilitating trade and cooperatively assisting to maintain Sydney's role as a global city. The key directions of the Draft East Subregional Strategy, as they relate to Sydney Airport, are described below.

##### **Economic gateway**

A key direction of the Draft East Subregional Strategy is to support and strengthen the nation's economic gateways through the protection of strategic employment lands in the area around Sydney Airport and Port Botany. The significance of Sydney Airport and Port Botany, and particularly their adjacency, is such that they provide the economic gateway to Sydney and the nation. The role of Sydney Airport within the GEC by providing employment and business opportunities will be strengthened through the Master Plan.

##### **Retail centres**

The Draft East Subregional Strategy identifies the need to support the future role of retail centres within the subregion, particularly given the potential expansion of retail development within Sydney Airport. Notwithstanding, the strategy identifies Sydney Airport and environs as a specialised centre through its provision of employment opportunities, and subregional and metropolitan services. While it is important to reinforce existing retail centres, retail services within the airport provide fundamental services for airport employees and passengers.

##### **Public transport access**

The Draft East Subregional Strategy asserts the importance of strengthening east-west public transport access for commuters and exploring opportunities to strengthen the movements between subregions and bordering growth centres, such as Green Square. Green Square contains significant transport infrastructure that links Sydney's CBD and western Sydney with the airport. This infrastructure, however, is currently underutilised.

##### **Mascot industrial area**

The Mascot industrial area is identified as being of strategic importance and should be retained for industrial purposes. This land is located north east of the airport and is zoned predominantly for airport-related business.

This land accommodates a significant amount of activity generated by the airport, such as freight and logistics. The importance of maintaining this land for airport-related purposes is emphasised, a direction that is in line with the Master Plan. Periphery land uses provide a compatible interface and an appropriate transition to aviation activities and aviation support facilities.

The 2012 Master Plan designates land for the purposes of aviation activities, business development, freight and logistics as well as interim industrial and commercial land uses adjoining the East Subregion. These will support, encourage and complement the strategic employment lands adjoining Sydney Airport as well as significantly contribute to job creation and target realisation over the planning period.

#### **4.4.3.2 Draft South Subregional Strategy**

Sydney Airport has a key role to play within Sydney's South Subregion, which is emphasised in the key directions and actions under the Draft South Subregional Strategy.

##### **Employment lands**

The first key direction for the South Subregion is to retain strategic employment lands, specifically the older industrial areas around the airport. This surrounding industrial land is considered to be key employment land as it has good access to the airport, existing rail infrastructure and connecting arterial roads. This land is also considered important for its provision of significant residential support services, light industry and the opportunity to accommodate more intensive employment land uses.

The Draft South Subregional Strategy identifies the portion of the Sydney Airport site within the Marrickville LGA as a significant employment lands precinct and as such has classified it Category 1 – Land to be Retained for Industrial Purposes, with its key functions being freight and logistics. A Category 1 classification does not prevent sites from being intensified in their use or redeveloped to meet current industrial requirements, creating additional employment and economic benefits. It ensures these sites continue to accommodate primarily industrial and related uses, within what is generally permitted under the land use zoning.

### **Employment growth at Sydney Airport and environs**

The second key direction for the South Subregion is to plan for employment growth at Sydney Airport and environs, including Cooks Cove, Wolli Creek and Turrella by improving connections between these areas and the airport and to protect employment lands around Sydney Airport and Port Botany. The Draft South Subregional Strategy outlines that planning needs to focus on integrating the functions between commercial centres within the airport environs by ensuring good access to adjacent subregions.

### **Sydney Airport – specialised centre**

The Draft South and East Subregional Strategies both identify Sydney Airport and environs as a specialised centre that plays a vital economic and employment role, generating metropolitan wide benefits. Sydney Airport and environs is linked by corridors with other strategic centres, such as the Sydney CBD. These corridors are generally highly concentrated areas of activity.

The Master Plan has designated land for the purposes of aviation activities, business development, freight and logistics as well as interim industrial and commercial land uses adjoining the east subregion. These areas will support, encourage and compliment the strategic employment lands adjoining Sydney Airport as well as contribute to job creation and target realisation over the planning period.

#### **4.4.3.3 Summary**

The Draft East and South Subregional Strategies both provide employment capacity targets for the airport and environs. The East Subregion is expected to accommodate 14,300 jobs and the portion of Sydney Airport located within Rockdale LGA is identified to accommodate 4,000 jobs, with a total of 18,300 jobs to be provided by Sydney Airport and environs between 2001 and 2031. Both the East and South Subregional Strategies outline the need for an effective working relationship between Sydney Airport and commonwealth, state and local governments in order to manage growth of aviation and non-aviation activities at Sydney Airport.

These draft strategies highlighted the significance of Sydney Airport's role in the economy and this was quantified in employment and gross state product terms. Approximately 60,000 people are employed directly servicing airport-related activities, with 11,000 working at the airport. The airport has a direct annual contribution of \$6.6 billion in gross state product and represents 6% of the state economy and 2% of the national economy.

In preparation of the Master Plan, the relevant key directions and actions of the Draft East Subregional Strategy and the Draft South Subregional Strategy have been identified and considered in relation to Sydney Airport to ensure that the Master Plan is generally consistent with the relevant components of the metropolitan plan. The metropolitan plan emphasises the significance of Sydney Airport, together with Port Botany, as being the economic gateways to the nation. It is therefore important to maintain employment lands that surround the airport.

The draft East Subregional Strategy's key directions focus on strengthening existing centres, improving infrastructure and protecting tourism in the area. Direction 1 aims to protect the employment lands in the vicinity of the airport/ Botany Bay. The Master Plan supports this direction through the appropriate allocation of land use zones, in particular the creation and allocation of zones that facilitate job creation, while not reducing employment areas. Direction 4 raises concerns in relation to the growth of out-of-centre retail at the expense of existing retail centres and notes that this could occur following growth in the airport's retail facilities. Furthermore, it is stated that non-aviation related commercial and retail facilities should not be permissible within the airport due to the impact on transport and surrounding centres.

The airport is serviced by public and private transport in the form of rail and bus lines and the M5 Motorway. Therefore access to retail facilities is not considered to be a constraint. The impact of additional retail uses at the airport on the viability of established centres would be considered at the development application stage. Additionally there are a range of land uses that would be provided to service the local (airport) workforce as opposed to focusing on patronage from further afield.

The key directions of the Draft South Subregional Strategy focus on developing employment and commerce while upgrading infrastructure in the region. Direction 1 encourages the growth of employment particularly light industry in close proximity to the airport and Botany Bay. Direction 2 aims to increase the number of jobs within the specialised centre incorporating the airport. These policies support the introduction of both the AD2 (Airport Terminal and Support Services) and BD1 (Business Development) zones in this section of the airport as they will implement the necessary land use controls to facilitate development for business purposes and thus generate employment. Additionally these

business areas will contribute to the growth of the employment hub centred on the airport / Botany Bay precinct in conjunction with the development of the light industrial area.

The Draft South Subregional Strategy identifies land in the Marrickville LGA abutting the northern perimeter of the airport for industrial uses associated with freight and logistics. Industrial zoning has been reflected in the Master Plan through zoning of the northern portion of the airport site as AD3 (Airport Logistics and Support) under the Master Plan. This zone facilitates freight logistics and other industrial and light industrial uses.

The Draft South Subregional Strategy notes that Kogarah may need to become a more distinctive specialised retail centre to distinguish itself from the larger retail offering available at Rockdale and Hurstville. This may, in turn, further distinguish Kogarah from the airport.

The Master Plan will provide the opportunity for the creation of economic precincts that will support, complement and encourage activity on adjoining and surrounding employment lands. These economic precincts will promote business activity and job generation and in this regard, are considered compatible with the metropolitan plan for Sydney and the relevant subregional strategies.

#### **4.4.4 NSW Long Term Transport Master Plan**

The NSW Long Term Transport Master Plan (LTTMP) was released in December 2012 and identifies strong growth to occur in numerous locations throughout metropolitan Sydney, including the Sydney Airport precinct. The LTTMP recognises the critical role of Sydney Airport as a gateway to Sydney that must be kept open and flowing. Addressing existing issues with traffic and access associated with Sydney Airport will be vital to ensuring the viability of aviation activities within Sydney Airport and surrounds, and enhancing its role as a specialised centre and part of Sydney's GEC.

The LTTMP recognises the corridor linking Sydney Airport to the CBD as one of Sydney's most important, providing access to Redfern, Central Station, Sydney CBD, and the East Hills Rail line which connects the airport to Central Station and the city loop. However, it also identifies existing capacity issues that are placing pressure on this corridor, which is only likely to grow with travel demand between Sydney Airport and the CBD anticipated to increase to 24,000 (morning peak) by 2031. With the implementation of the airport Master Plan, managing this growing demand will be essential to securing Sydney's economic growth and success.

In terms of traffic movements, Sydney Airport is already constrained as a result of increasing traffic capacities to and from the airport, particularly due to the mixing of traffic to and from the airport with through traffic to and from the CBD. Traffic congestion is also an issue along the Liverpool to Sydney Airport corridor, which will be exacerbated by high population growth forecast in Sydney's south-west. In addition, it is also anticipated that increasing capacities along the East Hills Rail Line will have further implications for the capacity of the rail system to cope with demand at Sydney Airport.

The LTTMP sets out long term plans to improve transport infrastructure and services to sustain growth in greater Sydney, including Sydney Airport and Port Botany. The LTTMP proposes to reduce congestion affecting Sydney Airport and Port Botany by targeting traffic pinch points, increasing rail services and investigating additional bus services to and from the airport, and improving the infrastructure that supports freight flows to and from Port Botany.

The Port Botany precinct, which includes Sydney Airport, is Sydney's second largest employment area after the CBD and is a key catalyst for surrounding employment activity and growth, with significant employment growth forecast to continue into the future. Improving connections to and from Sydney Airport and between key economic corridors is therefore vital to Sydney Airport's role within the GEC.

F

# APPENDIX F

# APPENDIX F COMPLIANCE WITH RELEVANT AIRPORT LEGISLATION

The following tables provide a checklist of relevant airport legislation and a reference to the relevant section of the Master Plan for compliance purposes.

Relevant statutory instrument	Requirement	Relevant section of Master Plan
AA s.70(1)	For each airport there must be a final master plan.	N/A
AA s.70(2)	The purposes of a final master plan for an airport are:	The entire Master Plan and appendices (including chapters 4, 11 and 15).
	(a) to establish the strategic direction for efficient and economic development at the airport over the planning period of the plan and	
	(b) to provide for the development of additional uses of the airport site and	Chapter 11
	(c) to indicate to the public the intended uses of the airport site and	Chapter 11
	(d) to reduce potential conflicts between uses of the airport site, and to ensure that uses of the airport site are compatible with the areas surrounding the airport and	Chapter 1, 7, 10, 11 and 13
	(e) to ensure that all operations at the airport are undertaken in accordance with relevant environmental legislation and standards and	Chapter 13 and the AES
	(f) to establish a framework for assessing compliance at the airport with relevant environmental legislation and standards and	Chapter 13 and AES (including Chapter 3)
	(g) to promote the continual improvement of environmental management at the airport.	Chapter 13 and the AES
AA s.71(1)	This section specifies the matters that must be set out in each draft or final master plan for an airport;	N/A
AA s.71(2)(a)	The master plan must specify Sydney Airport's development objectives for the airport.	The entire Master Plan and appendices (including Executive summary and Chapters 4 and 11)
AA s.71(2)(b)	The master plan must specify Sydney Airport's assessment of the future needs of civil aviation users of the airport, and other users of the airport, for services and facilities relating to the airport.	Chapters 3, 8 and 9
AA s.71(2)(c)	The master plan must specify Sydney Airport's intentions for land use and related development of the airport site, where the uses and developments embrace airside, landside, surface access and land planning/zoning aspects.	Chapters 4, 5, 6, 7, 8, 9, 10, 11
AA s.71(2)(d)	The master plan must specify an ANEF (in accordance with regulations, if any, made for the purpose of this paragraph) for the areas surrounding the airport.	Section 14.4
71(2)(da)	The master plan must specify flight paths (in accordance with regulations, if any, made for the purpose of this paragraph) at the airport.	Section 14.3
AA s.71(2)(e)	The master plan must specify Sydney Airport's plans, developed following consultations with the airlines that use the airport and local government bodies in the vicinity of the airport, for managing aircraft noise intrusion in areas forecast to be subject to exposure above the significant ANEF levels.	Section 14.2
AA s.71(2)(f)	The master plan must specify Sydney Airport's assessment of environmental issues that might reasonably be expected to be associated with the implementation of the plan.	Section 13.5
AA s.71(2)(g)	The master plan must specify Sydney Airport's plans for dealing with the environmental issues mentioned in paragraph (f) (including plans for ameliorating or preventing environmental impacts).	Section 13.6

Relevant statutory instrument	Requirement	Relevant section of Master Plan
AA s.71(2)(ga)	The master plan must specify, in relation to the first five years of the master plan, a plan for a ground transport system on the landside of the airport that details: <ul style="list-style-type: none"> <li>(i) a road network plan and</li> <li>(ii) the facilities for moving people (employees, passengers and other airport users) and freight at the airport and</li> <li>(iii) the linkages between those facilities, the road network and public transport system at the airport and the road network and public transport system outside the airport and</li> <li>(iv) the arrangements for working with the state or local authorities or other bodies responsible for the road network and the public transport system and</li> <li>(v) the capacity of the ground transport system at the airport to support operations and other activities at the airport and</li> <li>(vi) the likely effect of the proposed developments in the master plan on the ground transport system and traffic flows at, and surrounding, the airport.</li> </ul>	Chapter 7 and Appendix A
AA s.71(2)(gb)	The master plan must specify, in relation to the first five years of the master plan, detailed information on the proposed developments in the master plan that are to be used for: <ul style="list-style-type: none"> <li>(i) commercial, community, office or retail purposes or</li> <li>(ii) for any other purpose that is not related to airport services.</li> </ul>	Chapter 10
AA s.71(2)(gc)	The master plan must specify, in relation to the first five years of the master plan, the likely effect of the proposed developments in the master plan on: <ul style="list-style-type: none"> <li>(ii) employment levels at the airport and</li> <li>(iii) the local and regional economy and community, including an analysis of how the proposed developments fit within the planning schemes for commercial and retail development in the area that is adjacent to the airport.</li> </ul>	Chapter 2 (including Section 2.2), Chapter 11 (including Sections 11.4 to 11.6) and Appendix E
AA s.71(2)(h)	The master plan must specify an environment strategy that details: <ul style="list-style-type: none"> <li>(i) Sydney Airport's objectives for the environmental management of the airport and</li> <li>(ii) the areas (if any) within the airport site which Sydney Airport, in consultation with state and federal conservation bodies, identifies as environmentally significant</li> <li>(iii) the sources of environmental impact associated with airport operations and</li> <li>(iv) the studies, reviews and monitoring to be carried out by Sydney Airport in connection with the environmental impact associated with airport operations and</li> <li>(v) the time frames for completion of those studies and reviews and for reporting on that monitoring; and</li> <li>(vi) the specific measures to be carried out by Sydney Airport for the purposes of preventing, controlling or reducing the environmental impact associated with airport operations and</li> <li>(vii) the time frames for completion of those specific measures and</li> <li>(viii) details of the consultations undertaken in preparing the strategy (including the outcome of the consultations) and</li> <li>(ix) any other matters that are prescribed in the regulations.</li> </ul>	Chapter 13 and the AES
AA s.71(2)(j)	Such other matters(if any) as are specified in the regulations.	See below
AA s.71(6)	In specifying such an objective, the master plan must address: <ul style="list-style-type: none"> <li>(a) the extent (if any) of consistency with planning schemes in force under New South Wales (NSW) law; and</li> <li>(b) if the draft or final master plan is not consistent with those planning schemes—the justification for the inconsistencies.</li> </ul>	Chapter 11 (including Sections 11.4 to 11.6) and Appendix E
AA s.71(8)	In developing such plans, regard must be had to Australian Standard AS 2021–2000 (Acoustics – Aircraft Noise Intrusion – Building Siting and Construction) as in force or existing at that time.	Chapter 14

Relevant statutory instrument	Requirement	Relevant section of Master Plan
AA s.71A	<p>Draft or final master plan must identify proposed sensitive developments</p> <p>(1) A draft or final master plan must identify any proposed sensitive development in the plan.</p> <p>(2) A sensitive development is the development of, or a redevelopment that increases the capacity of, any of the following:</p> <ul style="list-style-type: none"> <li>(a) a residential dwelling</li> <li>(b) a community care facility</li> <li>(c) a pre-school</li> <li>(d) a primary, secondary, tertiary or other educational institution</li> <li>(e) a hospital</li> </ul> <p>(2A) A sensitive development does not include the following:</p> <ul style="list-style-type: none"> <li>(a) an aviation educational facility</li> <li>(b) accommodation for students studying at an aviation educational facility at the airport</li> <li>(c) a facility with the primary purpose of providing emergency medical treatment and which does not have in-patient facilities</li> <li>(d) a facility with the primary purpose of providing in-house training to staff of an organisation conducting operations at the airport</li> </ul> <p>(3) In this section:</p> <p>“aviation educational facility” means any of the following:</p> <ul style="list-style-type: none"> <li>(a) a flying training school</li> <li>(b) an aircraft maintenance training school</li> <li>(c) a facility that provides training in relation to air traffic control</li> <li>(d) a facility that provides training for cabin crew</li> <li>(e) any other facility with the primary purpose of providing training in relation to aviation related activities</li> </ul> <p>“community care facility” includes the following:</p> <ul style="list-style-type: none"> <li>(a) a facility that provides aged care within the meaning given by the Aged Care Act 1997</li> <li>(c) a retirement village within the meaning given by the Social Security Act 1991</li> <li>(d) a facility that provides respite care within the meaning given by the Aged Care Act 1997.</li> </ul>	N/A
AA s.72(1)	The plan relates to a period of 20 years (the planning period).	The entire Master Plan and Appendices
AA s.72(2)	The environment strategy must relate to a period of five years.	AES
AA s.79(1A)	<p>The following persons must be advised, in writing, of the intention to give the minister the Master Plan:</p> <ul style="list-style-type: none"> <li>(a) the minister with responsibility for town planning or use of land in NSW;</li> <li>(b) the NSW Department of Planning and Infrastructure;</li> <li>(c) each local government body with responsibility for an area surrounding the airport.</li> </ul>	Section 1.2
AA s.79(1B)	<p>The master plan must be accompanied by:</p> <ul style="list-style-type: none"> <li>(a) a copy of the advice given under 79(1A) and</li> <li>(b) a written certificate signed on behalf of Sydney Airport, listing the names of those to whom the advice was given.</li> </ul>	Documents to accompany Master Plan

Relevant statutory instrument	Requirement	Relevant section of Master Plan
AA s.79(1)	<p>(1) After giving the advice under Subsection (1A), but before giving the minister the Master Plan, the company must also:</p> <p>(a) cause to be published in a newspaper circulating generally in the state in which the airport is situated, and on the airport's website, a notice:</p> <ul style="list-style-type: none"> <li>(i) stating that the company has prepared a preliminary version of the draft plan and</li> <li>(ii) stating that copies of the preliminary version will be available for inspection and purchase by members of the public during normal office hours throughout the period of 60 business days after the publication of the notice and</li> <li>(iii) the place or places where the copies will be available for inspection and purchase and</li> <li>(iiia) in the case of a notice published in a newspaper—stating that copies of the preliminary version will be available free of charge to members of the public on the airport's website throughout the period of 60 business days after the publication of the notice and</li> <li>(iiib) in the case of a notice published in a newspaper—specifying the address of the airport's website and</li> <li>(iv) in any case—inviting members of the public to give written comments about the preliminary version to the company within 60 business days after the publication of the notice and</li> </ul> <p>(b) make copies of the preliminary version available for inspection and purchase by members of the public in accordance with the notice and</p> <p>(c) make copies of the preliminary version available free of charge to members of the public on the airport's website:</p> <ul style="list-style-type: none"> <li>(i) in a readily accessible format that is acceptable to the minister and</li> <li>(ii) in accordance with the notice.</li> </ul>	Section 1.3
AA s.79(2)	<p>If members of the public (including persons covered by Subsection 79(1A)) have given written comments about the preliminary version in accordance with the notice, the draft plan submitted to the minister must be accompanied by:</p> <p>(a) copies of those comments and</p> <p>(b) a written certificate signed on behalf of Sydney Airport:</p> <ul style="list-style-type: none"> <li>(i) listing the names of those members of the public and</li> <li>(ii) summarising those comments and</li> <li>(iii) demonstrating that Sydney Airport has had due regard to those comments in preparing the draft plan and</li> <li>(iv) setting out such other information (if any) about those comments as is specified in the regulations.</li> </ul>	Section 1.4, Appendix G and Documents to accompany the Master Plan
AA s.80	<p>(1) This section applies if:</p> <ul style="list-style-type: none"> <li>(a) an airport-lessee company gives the minister a Master Plan under Section 75, 76 or 78 and</li> <li>(b) before the publication under Section 79 of a notice about the plan, the company consulted (other than by giving an advice under Subsection 79(1A)) a person covered by any of the following subparagraphs: <ul style="list-style-type: none"> <li>(i) a state government</li> <li>(ii) an authority of a state</li> <li>(iii) a local government body</li> <li>(iv) an airline or other user of the airport concerned</li> <li>(v) any other person</li> </ul> </li> </ul> <p>(2) The draft plan submitted to the minister must be accompanied by a written statement signed on behalf of the company:</p> <ul style="list-style-type: none"> <li>(a) listing the names of the persons consulted and</li> <li>(b) summarising the views expressed by the persons consulted.</li> </ul>	Chapter 1 (including section 1.2) and Appendix G

## Regulations

Relevant statutory instrument	Requirement	Relevant section of Master Plan
AR 1997 -5.02(1)(a)	The master plan must specify any change to the OLS or PANS-OPS surfaces for the airport that is likely to result if development proceeds in accordance with the master plan. (OLS has customary use as an acronym for obstacle limitation surface. PANS-OPS is an acronym for procedures for air navigation systems operations.)	Section 12.7
AR 1997 -5.02(1)(b)	The master plan must specify, for an area of the airport where a change of use of a kind described in Subregulation 6.07 (2) of the Airports (Environment Protection) Regulations 1997 (i.e. a change of use that affects the soil in an area of land and that necessitates greater environmental protection measures because the use will result in land being used in a way, or for a purpose, that will, or is reasonably likely to, cause greater harm to an aspect of the environment or to the health, safety, or in any respect, the welfare of, human beings) is proposed: (i) the contents of the report of any examination of the area carried out under regulation 6.09 of those regulations and (ii) Sydney Airport's plans for dealing with any soil pollution referred to in the report.	Section 11.3
AR 1997 - 5.02(2)	(2) For Section 71 of the Act, an airport master plan must, in relation to the landside part of the airport, where possible, describe proposals for land use and related planning, zoning or development in an amount of detail equivalent to that required by, and using terminology (including definitions) consistent with that applying in, land use planning, zoning and development legislation in force in the state or territory in which the airport is located.	Chapter 11 and Appendix E
AR 1997 - 5.02(3)	The master plan must address: (a) any obligation that has passed to Sydney Airport under the lease from the Commonwealth (b) any existing interests in the land leased from the Commonwealth.	Chapter 4 and Appendix E
AR 1997 - 5.02A	Contents of draft or final master plan—matters to be specified in environment strategy (1) For Subparagraphs 71 (2) (h) (ix) and (3) (h) (ix) of the Act, the matters in this regulation must be specified in an environment strategy. (2) The environment strategy must specify any areas within the airport site to which the strategy applies that the airport-lessee company for the airport has identified as being a site of indigenous significance, following consultation with: (a) any relevant indigenous communities and organisations and (b) any relevant Commonwealth or State body. (3) The environment strategy must specify the airport-lessee company's strategy for environmental management of areas of the airport site that are, or could be, used for a purpose that is not connected with airport operations. (4) The environment strategy must specify: (a) the training necessary for appropriate environment management by persons, or classes of persons, employed on the airport site by the airport-lessee company or by other major employers and (b) the training programs, of which the airport-lessee company is aware, that it considers would meet the training needs of a person mentioned in paragraph (a).	AES

Relevant statutory instrument	Requirement	Relevant section of Master Plan
AR 1997 - 5.02B	<p>Contents of draft or final master plan—things to be addressed in environment strategy</p> <p>(1) For Subsection 71 (5) of the Act, a draft or final master plan must address the things in this regulation.</p> <p>(2) In specifying its objectives for the airport under Subparagraph 71 (2) (h) (i) or (3) (h) (i) of the Act, an airport-lessee company must address its policies and targets for:</p> <ul style="list-style-type: none"> <li>(a) continuous improvement in the environmental consequences of activities at the airport and</li> <li>(b) progressive reduction in extant pollution at the airport and</li> <li>(c) development and adoption of a comprehensive environmental management system for the airport that maintains consistency with relevant Australian and international standards and</li> <li>(d) identification, and conservation, by the airport-lessee company and other operators of undertakings at the airport, of objects and matters at the airport that have natural, indigenous or heritage value and</li> <li>(e) involvement of the local community and airport users in development of any future strategy and</li> <li>(f) dissemination of the strategy to sub-lessees, licensees, other airport users and the local community.</li> </ul> <p>(3) In specifying under Subparagraph 71 (2) (h) (ii) or (3) (h) (ii) of the Act, the areas within the airport site it identifies as environmentally significant, an airport-lessee company must address:</p> <ul style="list-style-type: none"> <li>(a) any relevant recommendation of the Australian Heritage Council and</li> <li>(b) any relevant recommendation of the Department of Environment regarding biota, habitat, heritage or similar matters and</li> <li>(c) any relevant recommendation of a body established in the state in which the airport is located, having responsibilities in relation to conservation of biota, habitat, heritage or similar matters.</li> </ul> <p>(4) In specifying the sources of environmental impact under Subparagraph 71 (2) (h) (iii) or (3) (h) (iii) of the Act, an airport-lessee company must address:</p> <ul style="list-style-type: none"> <li>(a) the quality of air at the airport site, and in so much of the regional airshed as is reasonably likely to be affected by airport activities and</li> <li>(b) water quality, including potentially affected groundwater, estuarine waters and marine waters and</li> <li>(c) soil quality, including that of land known to be already contaminated and</li> <li>(d) release, into the air, of substances that deplete stratospheric ozone and</li> <li>(e) generation and handling of hazardous waste and any other kind of waste and</li> <li>(f) usage of natural resources (whether renewable or non-renewable) and</li> <li>(g) usage of energy the production of which generates emissions of gases known as 'greenhouse gases' and</li> <li>(h) generation of noise.</li> </ul> <p>(5) In specifying under Subparagraph 71 (2) (h) (iv) or (3) (h) (iv) of the Act the studies, reviews and monitoring that it plans to carry out, an airport-lessee company must address:</p> <ul style="list-style-type: none"> <li>(a) the matters mentioned in Subregulation 5.02A (2) and Subregulations 5.02B (3) and (4); and</li> <li>(b) the scope, identified by the airport-lessee company, for conservation of objects and matters at the airport that have natural, indigenous or heritage value and</li> <li>(c) the approaches and measures identified by the airport-lessee company as its preferred conservation approaches and measures and</li> <li>(d) the professional qualifications that must be held by a person carrying out the monitoring and</li> <li>(e) the proposed systems of testing, measuring and sampling to be carried out for possible, or suspected, pollution or excessive noise and</li> <li>(f) the proposed frequency of routine reporting of monitoring results to the airport environment officer (if any) for the airport, or to the secretary.</li> </ul> <p>(6) In specifying under Subparagraph 71 (2) (h) (vi) or (3) (h) (vi) of the Act, the measures that it plans to carry out for the purposes of preventing, controlling or reducing environmental impact, an airport-lessee company must address:</p> <ul style="list-style-type: none"> <li>(a) the matters mentioned in Subregulations (2) to (4); and</li> <li>(b) the means by which it proposes to achieve the cooperation of other operators of undertakings at the airport in carrying out those plans.</li> </ul> <p>(7) An airport-lessee company, in specifying the company's strategy for environmental management under Subregulation 5.02A (3), must address the matters in Subregulations (2) to (6).</p> <p>(8) In this regulation:  "Department of Environment" means the department administered by the minister responsible for administering the Environment Protection and Biodiversity Conservation Act 1999.</p>	AES

Relevant statutory instrument	Requirement	Relevant section of Master Plan
CASR 98 139.250 - 254	The airport must have a safety management system (SMS) that complies with the standards set out in the manual of standards (i.e. 'Manual of Standards (MOS) – Subpart 139.H' issued by the Civil Aviation Safety Authority (CASA) under Regulation 139.712, as in force from time to time).	Section 12.1
CASR 98 171	A SMS must be in place to protect navigation aid and radar restricted surfaces.	Section 12.7

G

**APPENDIX G**

# APPENDIX G CONSULTATION MATERIALS AND RELATED INFORMATION

## Section G1 Feedback received during initial consultations

Stakeholder	Summary of issues raised
<b>Australian Government</b>	
Airservices Australia Australian Customs and Border Protection Services Civil Aviation Safety Authority Department of Infrastructure and Transport Australian Quarantine Inspection Service Bureau of Meteorology Department of Sustainability, Environment, Water, Population and Communities Office of Transport Security Australian Federal Police Department of Agriculture, Fisheries and Forestry Ministers (various)	<ul style="list-style-type: none"> <li>• Layout of airfield</li> <li>• ANEF-related issues</li> <li>• Regulatory compliance issues</li> <li>• Airfield capacity and impacts on implementation of the long term operating plan</li> <li>• Environmental issues associated with implementation of the development concept</li> <li>• Passenger processing arrangements and improvements in customer experience</li> <li>• Use of SmartGate technology</li> <li>• Preliminary Draft Master Plan (PDMP) needs to explain how operations during the curfew are regulated</li> <li>• Aircraft noise-related issues and the need to ensure these are clearly and transparently communicated in the PDMP</li> <li>• Duplication of resources in both precincts</li> </ul>

Stakeholder	Summary of issues raised
<b>NSW Government</b>	
<p>Department of Premier and Cabinet</p> <p>Transport for NSW</p> <p>Roads and Maritime Services</p> <p>Infrastructure NSW</p> <p>Department of Planning and Infrastructure</p> <p>Sydney Ports Corporation</p> <p>Destination NSW</p> <p>Office of Environment and Heritage</p> <p>Environment Protection Authority</p> <p>Bureau of Transport Statistics</p> <p>NSW Police Force</p> <p>NSW Trade and Investment</p> <p>Ministers (various)</p>	<ul style="list-style-type: none"> <li>• Positive response to the proposal to transform Sydney Airport into two integrated terminal precincts with international, domestic and regional services in each precinct</li> <li>• Road network within Sydney Airport's terminal precincts and linkages to the external road network (including traffic flows and performance of key intersections in the vicinity of the airport)</li> <li>• Public transport (including bus and train services, increasing the public transport mode share and the proposed public transport interchange)</li> <li>• Recommended actions in draft NSW Long Term Transport Master Plan and Infrastructure NSW's 20-year State Infrastructure Strategy and how they interact with the PDMP</li> <li>• RMS request for an inspection bay on Foreshore Drive</li> <li>• Environmental issues associated with implementation of the development concept (including stormwater run-off impacts, contaminated sites, ground-based noise impacts, air and water quality impacts, and soil and groundwater quality impacts)</li> <li>• Impacts of transporting hazardous goods to and from the airport</li> <li>• Aboriginal cultural heritage</li> <li>• Airspace protection surfaces</li> <li>• Consistency of PDMP and metropolitan planning strategies</li> <li>• Interface with surrounding land uses</li> <li>• Ground based noise attenuation</li> <li>• Threatened and migratory species under NSW and/or commonwealth environmental legislation and other international agreements</li> <li>• Feral animal management</li> <li>• Ongoing ecological assessment of airport site</li> <li>• Supply of appropriately zoned employment lands around the airport</li> <li>• Need to ensure noise metrics (other than the ANEF) are included in the PDMP</li> <li>• Draft ANEF 2033 has the potential to change permissible land uses in certain areas</li> <li>• Need to consider local environmental plans for the City of Botany Bay, City of Sydney, Randwick, Rockdale, Hurstville, Sutherland Shire, Marrickville and Leichhardt when preparing PDMP, particularly in relation to the accessibility and compatibility of land uses within and surrounding the airport</li> <li>• The impact of operating restrictions on capacity</li> <li>• Implications of the Commonwealth's response to the recommendations made in the joint study on aviation capacity in the Sydney region</li> <li>• Recognition that Sydney Airport will remain Sydney's main airport</li> </ul>

Stakeholder	Summary of issues raised
<b>Local government</b>	
<p>Councils in the vicinity of Sydney Airport, including those affected by the ANEF: City of Botany Bay, Marrickville, Rockdale City, Sutherland Shire, City of Sydney, Randwick City, Leichhardt, Ashfield, City of Canada Bay, Lane Cove, Hunters Hill, Burwood, Hurstville City, Canterbury City and Kogarah City Councils.</p> <p>Other councils in the Sydney metropolitan area or regional organisations of councils</p>	<ul style="list-style-type: none"> <li>• Positive response to the proposal to transform Sydney Airport into two integrated terminal precincts with international, domestic and regional services in each precinct</li> <li>• Aircraft noise-related issues, including noise impacts on residents and the need to ensure these are clearly and transparently communicated in the PDMP</li> <li>• Coordination of strategic planning with adjoining councils is needed</li> <li>• Impact of new ANEF on development opportunities around the airport</li> <li>• Road congestion in the vicinity of Sydney Airport and in the terminal precincts</li> <li>• Support for Sydney Airport's proposals to improve public transport access to the airport</li> <li>• Car parking related issues (including in airport car parks and in surrounding residential areas)</li> <li>• Importance of continued regional airline access to Sydney Airport</li> <li>• Importance of no change to curfew or aircraft movement cap</li> <li>• Environmental issues associated with implementation of the development concept</li> <li>• Implications of the Commonwealth's response to the recommendations made in the joint study on aviation capacity in the Sydney region</li> <li>• Non-aviation related commercial developments</li> <li>• Linkages to council biodiversity plans</li> <li>• Future development at Sydney Airport should be airport-related</li> <li>• Potential impact of second Sydney airport should be explained</li> <li>• Water quality monitoring in and around Port Botany and importance of contributing to the Botany Bay and Catchment Water Quality Improvement Plan</li> <li>• Community should be updated on progress with implementing PDMP</li> </ul>
<b>Business and tourism industry groups</b>	
<p>Sydney Business Chamber</p> <p>Tourism &amp; Transport Forum</p> <p>Infrastructure Partnerships Australia</p> <p>Business Events Sydney</p> <p>Australian Tourism Export Council</p> <p>Local hotel operators</p>	<ul style="list-style-type: none"> <li>• Positive response to the proposal to transform Sydney Airport into two integrated terminal precincts with international, domestic and regional services in each precinct</li> <li>• Expectation that Sydney Airport will remain Sydney's main airport.</li> <li>• Support for Sydney Airport's proposals to improve public transport access to the airport</li> <li>• Importance of air freight to state economy</li> <li>• Proposed changes to road network around Sydney Airport</li> </ul>

Stakeholder	Summary of issues raised
<b>Community</b>	
<p>Sydney Airport Community Forum</p> <p>Planning Coordination Forum</p> <p>Metropolitan Local Aboriginal Land Council</p> <p>Members of the Australian Parliament (various)</p> <p>Members of the NSW Parliament (various)</p> <p>Miscellaneous Rotary clubs</p> <p>Community open days (held in Alexandria, Arncliffe, Balmain, Bondi Junction, Chatswood, Chiswick, Eastlakes, Maroubra Junction, Miranda and St Peters)</p>	<ul style="list-style-type: none"> <li>• Positive response to the proposal to transform Sydney Airport into two integrated terminal precincts with international, domestic and regional services in each precinct</li> <li>• ANEF-related issues, including assumptions that underpin modeling (eg. forecast mix of aircraft types, load factors and impact of varying flight paths)</li> <li>• Importance of providing readily available and easily understood aircraft noise information, including for use with the Transparent Noise Information Package</li> <li>• Impact on noise sharing arrangements under the Long Term Operating Plan and of a second Sydney airport</li> <li>• Importance of continued regional airline access to Sydney Airport</li> <li>• Importance of no change to curfew or aircraft movement cap</li> <li>• Support for Sydney Airport's proposals to improve public transport access to the airport</li> <li>• Implications of the Commonwealth's response to the recommendations made in the joint study on aviation capacity in the Sydney region</li> <li>• Implications of Commonwealth's consideration of high speed rail</li> <li>• Taxi access</li> <li>• Impact of port expansion on airport operations</li> </ul>
<b>Airlines</b>	
<p>Virgin Australia</p> <p>Qantas</p> <p>Jetstar</p> <p>BARA</p> <p>Regional Express</p> <p>Air New Zealand</p> <p>Regional Aviation Association of Australia</p>	<ul style="list-style-type: none"> <li>• Layout of airfield</li> <li>• Passenger and aircraft movement forecasts</li> <li>• Airfield capacity</li> <li>• Terminal layout and configuration</li> <li>• Passenger processing arrangements and improvements in customer experience</li> <li>• Need to improve ground transport access. Support for Sydney Airport's proposals to improve public transport access to the airport</li> <li>• Access to South East Sector</li> <li>• Car parking related issues (for employees and passengers)</li> <li>• Development staging issues</li> <li>• Air freight-related issues</li> </ul>
<b>Other aviation industry stakeholders</b>	
<p>Qantas Freight (domestic and international)</p> <p>Menzies Aviation</p> <p>Toll Dnata</p> <p>DHL</p> <p>Qantas Freight</p>	<ul style="list-style-type: none"> <li>• Freight requirements, including airside access and terminals</li> <li>• Forecast growth in freight task</li> <li>• Need to ensure appropriate areas are identified in the development concept</li> </ul>

## Section G2

### Public notice of release of PDMP published in the Sydney Morning Herald and Daily Telegraph on 4 June 2013.

#### Public Exhibition of Preliminary Draft Master Plan 2013

##### Notice under s. 79(1) of the Airports Act 1996

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013.

As part of the consultation process, a Preliminary Draft Master Plan (PDMP) has been prepared and is being publicly exhibited for comment.

It was prepared following consultation with airlines, other members of the aviation industry, key government agencies, local government, the tourism industry, the business sector and the local community.

The PDMP details Sydney Airport's vision for the operation and development of the airport that will enable the forecast growth in air travel for tourism and trade well beyond the 2033 planning period.

The PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No change to access arrangements for regional airlines
- No new flight paths or runways

The PDMP will be on public exhibition from 5 June 2013 until 30 August 2013 and can be downloaded free of charge from [www.sydneyairport.com.au](http://www.sydneyairport.com.au).

Printed copies are also available for purchase for \$25 each (including GST and postage) from Sydney Airport by writing to the address shown below.

Copies of the PDMP will be available for inspection and purchase by members of the public during normal office hours throughout the exhibition period at Sydney Airport's Corporate Office,

Central Terrace Building, 10 Arrivals Court, Sydney International Airport.

Sydney Airport will undertake an extensive community and stakeholder consultation process. Copies of the PDMP will also be able to be viewed in various locations around Sydney Airport. Regular Community Updates will be provided in local newspapers and a series of Community Information Sessions will be held. Please refer to the Sydney Airport website for further details.

##### Submitting your comments

Sydney Airport encourages you to read the PDMP and welcomes your feedback.

Comments will be accepted until **30 August 2013**. They should be in writing and must include your name and address. All submissions received will be carefully considered by Sydney Airport. The PDMP will then be revised where appropriate before it is submitted to the Australian Government for consideration.

Please forward your written comments to:

**Mail** – Mr Ted Plummer  
Manager – Government and  
Community Relations  
Sydney Airport Corporation Limited  
Locked Bag 5000  
Sydney International Airport  
NSW 2020

**Email** – [masterplan@syd.com.au](mailto:masterplan@syd.com.au)

**Fax** – (02) 8338 4931

For further information please phone the community information line on **1800 252 040** or Ted Plummer on (02) 9667 6182.



## Section G3

### Fact sheets

#### SYDNEY AIRPORT: FACT SHEET



### Sydney Airport: A decade of investment and innovation

Sydney Airport is Australia's premier airport and major international gateway for passengers and freight.

To cater for growth and improve the airport experience for passengers over the past decade, over \$2 billion of investments and other initiatives have led to increased service levels, enhanced safety and security, delivered environmental improvements and increased capacity to meet demand.

#### T1 upgrade and expansion

The most significant project undertaken has been the upgrade and expansion of T1, completed in 2010.

#### Key features included:

- Redevelopment of 30,000sqm of the existing departures level
- The addition of 7,300sqm to the departures level for a new centralised passenger processing area, new retail, food and beverage outlets, additional moving walkways and passenger waiting areas
- New baggage handling systems for outbound and early checked baggage storage
- Upgrading the arrivals baggage system.



#### Boosting capacity at T2

T2 capacity was increased by nearly 30% in 2012.

The terminal can now accommodate up to an additional five aircraft as well as gate lounge facilities, amenities and aerobridge connections.



#### New car parks

The T1 Precinct has two new multi-storey car parks, the first completed in 2009 and the second in 2012. Together, these provide approximately 5,300 parking spaces for passengers and airport workers. Construction of a new car park in the T2/T3 Precinct is expected to be completed by 2014, which will provide around 900 additional parking spaces. The Long Term Car Park was also significantly expanded in 2012.

Sydney Airport has developed targeted customer initiatives using online offers and off-peak deals to satisfy different customer needs.

#### Runway and taxiway upgrades

The most significant resurfacing of Sydney Airport's main north-south runway in more than a decade was completed in 2011.

#### Runway safety – stop bar lights

Sydney Airport has installed 'stop bar lights' at all main taxiway entry points to its three runways. This \$25 million aviation safety initiative provides a valuable defence against aircraft inadvertently entering an active runway without Air Traffic Control clearance (above right).

#### Additional apron capacity

New apron capacity has been provided to allow additional aircraft parking in various locations around the airport.

#### Building a safer airport

To comply with Civil Aviation Safety Authority requirements, Sydney Airport invested over \$100 million to enlarge runway safety areas for each of the airport's three runways.

#### New generation aircraft

To be ready for the new generation of quieter, environmentally cleaner and more fuel efficient aircraft such as the A380, Sydney Airport invested \$120 million on new infrastructure including new gates and aerobridges and strengthened runway and taxiway pavements.

#### New hotel in T1 Precinct

The new four-star Rydges hotel in Sydney Airport's T1 Precinct opened for business in 2013. The hotel meets demand by international tourists and business travellers for convenient accommodation at Sydney Airport and will include conference facilities.

#### Water recycling

Sydney Airport's new water recycling plant (pictured below) was commissioned in 2009, now saving an average of 600,000 litres of drinking water every day.



#### More information

Please refer to the PDMP for more information on the issues identified in this Fact Sheet. For further information, call our Community Information Line on 1800 252 040 or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



Sydney Airport Corporation Limited. ACN 002 578 803

#### SYDNEY AIRPORT: FACT SHEET



### Sydney Airport: A major employer and economic driver

International trade and air routes are vital to Australia's continued national prosperity. Airports are an essential part of the transport networks on which all successful modern economies rely.

Sydney Airport acts as a major generator for a range of economic activity. Its close proximity only 8km from Sydney Central Business District also provides a unique advantage for business and tourism, major events and conference industries, over state capitals.

#### For example, Sydney Airport:

- influences decisions by companies to locate their head offices in Sydney and improves their competitiveness
- attracts new investment to the NSW and Sydney economy
- retains existing companies and secures their expansion projects
- promotes exports through air freight and enhances the competitiveness of our economy through the provision of efficient passenger and freight services
- attracts new businesses, leisure activities and tourism-based incomes and creates new jobs.

#### Creating jobs and economic activity

A recent study by Deloitte Access Economics into the economic impact of Sydney Airport measured the airport's economic and social benefits. Sydney Airport generates or facilitates:

- **Jobs:** Direct and indirect employment of 283,700 jobs (equivalent to 8 per cent of NSW employment), including 160,000 direct jobs (28,000 directly on airport) – average wages for airport workers are about 13 per cent higher than the NSW average
- **Economic activity:** Direct and indirect economic contribution of \$276 billion (equivalent to 6 per cent of the NSW economy and 2 per cent of the Australian economy)
- **Household income:** Direct and indirect contribution of \$13.2 billion
- **Taxes:** Direct and indirect taxes, including:
  - Substantial income tax and GST revenues to the Australian Government
  - Substantial payroll taxes to the NSW Government
  - Annual contributions, in lieu of rates, to the City of Botany Bay, Rockdale City and Marrickville Councils.



It is forecast that the economic activity generated or facilitated by Sydney Airport will increase from \$276 billion in 2012 to over \$42 billion in 2033. Total employment will increase from 283,700 jobs in 2012 to over 400,000 by 2033.

A relatively small activity at the airport can have a potentially large positive economic impact.

For example, an additional daily A380 service to Sydney from China would, over a year, contribute an estimated:

- \$388 million to the Australian economy
- \$233 million to Australia's household income
- 5,000 jobs (4,000 of which would be in NSW).

#### Supporting tourism

Sydney Airport has an unmatched route network which includes 46 international, 23 domestic and 26 regional destinations.

Sydney's status as a global city, in turn, supports this route network and the development of Sydney Airport and related businesses. The availability of direct flights to a wide network of destinations also significantly strengthens the competitiveness of the Sydney and NSW tourism industry.



Through its partnership agreement with Destination NSW and closer ties with Tourism Australia, Sydney Airport will continue to work in collaboration with the Australian and NSW Governments to grow tourism and the visitor economy.

#### Air freight

Air freight is a vital economic activity that contributes significantly to global business and to the NSW and Australian economies. It is a critical component of the airline industry, part of a value chain that includes airports, related trucking and logistics services, manufacturing and consumer operations and other support industries.

Sydney Airport is Australia's largest international and domestic air freight hub. In 2011, Sydney Airport handled around 530,000 tonnes of air freight (of which almost 400,000 tonnes was international air freight), which was 52 per cent more than Australia's second largest air freight hub, Melbourne Airport.

It is estimated that around 80 per cent of air freight is carried in passenger aircraft, making it vitally important to the economics of our airlines' passenger services.

The volume of freight handled by Sydney Airport is projected to double over the period to 2033 to over one million tonnes.

#### More information

Please refer to the PDMP for more information on the issues identified in this Fact Sheet. For further information, call our Community Information Line on 1800 252 040 or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



Sydney Airport Corporation Limited. ACN 002 578 803

## Section G3

### Fact sheets continued

**SYDNEY AIRPORT: FACT SHEET**



### Aviation and climate change

**Sydney Airport's global commitment**

The Intergovernmental Panel on Climate Change estimated in 2007 that aviation accounts for only around 2% of global carbon dioxide emissions, with most of that relating to in-flight emissions from aircraft. However, with airline travel becoming more popular this contribution could possibly reach 5% by 2050.

Aviation's challenge is to retain the many positive benefits that aviation provides, while reducing or eliminating its negative environmental impacts. The signing in April 2008 of the *Global Aviation Industry Commitment to Action on Climate Change* by aviation industry leaders (including Sydney Airport) is an important demonstration of the industry's worldwide commitment to introducing technological, operational and efficiency advances that will reduce aviation's contribution to climate change.

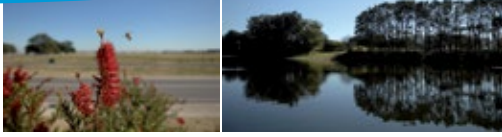
Sydney Airport is committed to working with organisations across the aviation industry to target carbon-neutral growth by 2020, as a step towards a carbon-free future for aviation.

Sydney Airport has implemented a range of initiatives aimed at reducing its carbon footprint. The aviation industry as a whole is also working to reduce carbon emissions:

- Encourage the development and introduction of new technologies, including cleaner fuels
- Further optimise the fuel efficiency of fleets and the way aircraft are flown
- Improve the efficiency of air routes and air traffic management



Sydney Airport Corporation Limited ACN 002 578 803



### Energy and Carbon Strategy 2013+

Most of the energy consumed by airports is electricity used in passenger terminals for heating, cooling and lighting. Electricity and natural gas consumption make up over 98% of greenhouse gases accounted for in Sydney Airport's carbon footprint which, in 2010-11, was measured to be 95,593 tonnes.

Sydney Airport has developed an *Energy and Carbon Strategy 2013+*, which sets out targets for responsible energy use and reduction of carbon emissions.

Key initiatives for the future include:

- Sydney Airport is planning for a trigeneration facility within the airport with initial feasibility assessments being considered. Trigeneration is the simultaneous production of three forms of energy: (low carbon) electricity, heating and cooling. Benefits include reduced greenhouse gas emissions
- Continued investment in fixed electrical ground power for aircraft, reducing emissions and noise and improving local air quality (pictured on first page)
- Encouraging the use of more sustainable forms of transport to access the airport, including public transport and cycling.

Other sustainable energy saving and related initiatives, including the use of solar hot water and LED lighting


### Improved fuel efficiency

The fuel efficiency of today's modern jets is 70% better than it was with early jets. Improved fuel efficiency means lower greenhouse gas emissions and a reduced contribution to climate change. And fuel efficiency will improve, as we've seen with the A380 and the soon-to-arrive B787 which Boeing claims uses 20% less fuel than any other airplane of its size.

The use of alternative fuels is also important. Many airlines and aircraft manufacturers around the world are exploring the use of renewable bio-fuels (in a way that does not impact food supplies) and synthetic fuels.

### More information

Please refer to the PDMP for more information on the issues identified in this Fact Sheet. For further information, call our Community Information Line on **1800 252 040** or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



Sydney Airport Corporation Limited ACN 002 578 803

**SYDNEY AIRPORT: FACT SHEET**



### Getting to and from Sydney Airport

Ensuring passengers, visitors and airport workers can get to and from Sydney Airport efficiently and in a timely manner is vitally important. To facilitate this, Sydney Airport is committed to enabling a range of reliable, sustainable and cost effective transport options.

The Preliminary Draft Master Plan (PDMP) includes a number of projects to significantly improve road traffic capacity in and around the airport. In particular, proposed works to intersections around the T2/T3 precinct, proposed road works within the T1 precinct and the creation of public transport facilities will reduce congestion and improve traffic flows in and around the airport (see over page).

Sydney Airport is also committed to increasing the use of public transport. Currently, public transport journeys account for 17% of total trips to Sydney Airport. This has been increasing by one percentage point per annum over the last five years and is anticipated to continue to increase at that rate to 2018. The NSW Government has committed to additional train capacity on the airport line in peak periods to facilitate this transition.

Infrastructure NSW's State Infrastructure Strategy announced in October 2012, includes a range of recommendations, that would address the commuter, freight and airport-related traffic in the vicinity of the airport, including:

- Constructing WestConnex, which expands and links the M4 and M5 East Motorways
- Fixing road pinch points in the Port Botany and Sydney Airport precinct
- Reducing rail fares to the airport stations
- Adding new bus routes to Sydney Airport
- Enhancing the capacity of the freight rail lines, which will divert some freight traffic from road to rail.


Finally, additional car parking facilities will be provided across the airport to service growing demand over the 20-year planning period.




Sydney Airport Corporation Limited ACN 002 578 803

### Improving the road network in and around Sydney Airport's passenger terminal precincts will significantly improve traffic flow, reduce congestion and make it easier for passengers to get to and from the airport

**T1 Precinct (present day)**




**T1 Precinct (by 2018)**




Changes to the internal road network in the T1 Precinct – including creating a new through road and exit – will reduce traffic congestion and make it easier for motorists to enter, move through and exit the precinct.

**T2/T3 Precinct (present day)**



**T2/T3 Precinct (by 2018)**




A new one-way ring road in the T2/T3 Precinct will provide a dedicated entry and exit roadway, reduce traffic congestion and make it easier for motorists to enter, move through and exit the precinct.

### More information

Please refer to the PDMP for more information on the issues identified in this Fact Sheet.

For further information, call our Community Information Line on **1800 252 040** or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



Sydney Airport Corporation Limited ACN 002 578 803

# Section G3

## Fact sheets continued

### SYDNEY AIRPORT: FACT SHEET



## Managing noise: The benefits of new generation quieter aircraft

For most of the world's major airports – including Sydney – aircraft noise has been a long standing issue.

Sydney Airport is committed to working with the community, governments and the aviation industry to manage and mitigate aircraft noise impacts, especially in areas close to the airport or under flight paths.

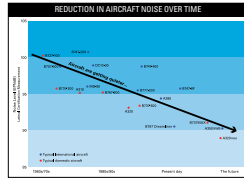
In the 1960s, after Sydney Airport's curfew was introduced, the most common jet aircraft was the Boeing 707. Early jet engines were extremely noisy, fuel guzzling and environmentally dirty.

Today, domestic and international aircraft in Australian skies are some of the most modern in the world. With new generation quieter aircraft continuing to replace older noisier aircraft, noise impacts from aircraft using Sydney Airport will continue to improve, helping to offset increased movements.

Sydney Airport's Preliminary Draft Master Plan (PDMP) is based on:

- No change to the curfew or movement cap
- No change to noise sharing arrangements

- No new flight paths or runways
- No change to access arrangements for regional airlines.



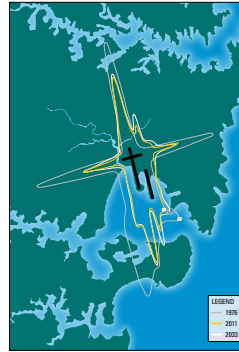
Aircraft built today are about 75% quieter than they were 40 years ago. The aviation industry is working to reduce this even more.

The chart on this page illustrates the effect of the new generation quieter aircraft.

Three noise exposure contours are shown:

- 1976 (when the fleet was comprised of older, noisy jet aircraft)
- 2011 (when new generation quieter aircraft are being progressively introduced)
- 2033 (when new generation quieter aircraft will dominate the fleet).

Since 1976, the area of land within this noise contour has decreased by 1,150 hectares or 35.6%, despite the increase in air traffic.



Sydney Airport Corporation Limited. ACN 002 578 808

However, Sydney Airport recognises that aircraft noise can still be an issue of concern for people living in areas outside these noise contours. As such, noise management needs to occur in affected areas close to and further away from the airport.

The PDMP includes other aircraft noise charts to illustrate forecast impacts in these areas.

Sydney Airport and the responsible government regulatory authorities are working hard to manage and mitigate the impacts of aircraft noise.

For Sydney Airport, this includes:

- Continuing to provide and maintain the necessary on-airport infrastructure that allows noise sharing to be implemented
- Investing in infrastructure to support new quieter aircraft – \$120 million already invested to accommodate the A380, with more to follow
- Working closely with the Australian, NSW and local governments – to ensure appropriate planning policies are in place to discourage inappropriate development in noise-affected areas
- Consulting and engaging with the local community and airlines that use Sydney Airport – including the Sydney Airport Community Forum.

### More information

Please refer to the PDMP for more information on the issues identified in this Fact Sheet. For further information, call our Community Information Line on 1800 252 040 or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



### SYDNEY AIRPORT: FACT SHEET



## Sydney Airport: Planning for growth and improving the passenger experience

As Australia's major international gateway, Sydney Airport's vision is to deliver a world-class airport experience and foster growth for the benefit of Sydney, NSW and Australia.

Over \$2 billion of investments and other initiatives during the past decade have increased service levels, enhanced safety and security, delivered environmental improvements and increased capacity to meet demand.

The Preliminary Draft Master Plan (PDMP) shows how Sydney Airport will build on this investment, **without any change to the curfew, aircraft movement cap or access arrangements for regional airlines.**

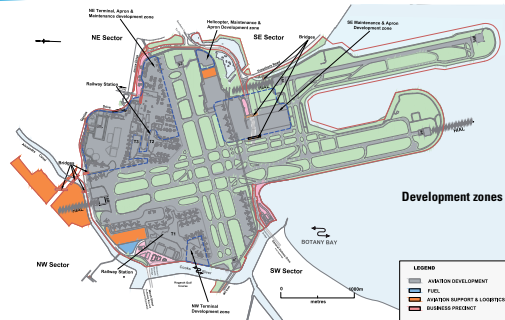
### Aviation activity forecasts

The forecast passenger numbers, aircraft movements and air freight volumes for 2033 shown in the PDMP provide the fundamental basis for future planning.

A comparison between 2012 and the aviation activity forecast for 2033 is shown below.

	2012	2028 – Forecast (existing 2009 Master Plan)	2033 – Forecast (PDMP)
International, domestic and regional passengers (millions)	38.9	78.9	74.3
Fixed wing aircraft movements	321,830	427,400	409,500
Air freight (tonnes)	737,000	1,077,000	1,011,000

This shows that, as a consequence of the Global Financial Crisis (GFC), the forecast number of passengers in 2033 is less than the forecast in the existing Master Plan. Though higher than today, aircraft movements at the end of 2033 are also below the forecasts for 2029 in the existing Master Plan, again as a result of the GFC.



### Master Plan development concept

The development concept for Sydney Airport shown in the PDMP (and above) improves the passenger experience, optimises the efficiency of the airport, maximises capacity and establishes the strategic direction of the airport. It has in-built flexibility and adaptability and can therefore meet the future needs of the constantly evolving aviation industry.

The development concept emerged from extensive initial consultation with stakeholders to understand their requirements and priorities. There has been a particular emphasis on improving the airport experience for airline passengers.

In summary, the development concept:

- Creates integrated terminals for international, domestic and regional passenger operations
- Provides for the development of engineering precincts which may accommodate multiple airlines in the long term
- Creates transport interchanges, well located to the terminal precincts, to facilitate fast, affordable and reliable access to multiple transport options
- Includes a number of road improvement projects to reduce traffic congestion
- Incorporates water and energy efficiencies into the new terminal developments.

Once complete, the development concept will:

- Significantly improve the airport experience for airline passengers
- Improve the door-to-door passenger experience, by improving traffic flows on roads in and around both terminal precincts
- Improve passenger connectivity by reducing inter-precinct transfers
- Enhance airport efficiency
- Increase the apron, terminal and airfield capacity of the airport, particularly for large aircraft such as the A380
- Retain many of the existing freight and fuel facilities adjacent to the terminal precincts
- Maximise flexibility across the day, week and year to meet changing demand
- Embed flexibility and adaptability into the development concept to allow it to respond to the changing aviation environment.

### More information

Please refer to the PDMP for more information on the issues identified in this Fact Sheet. For further information, call our Community Information Line on 1800 252 040 or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



## Section G3

### Fact sheets continued

#### SYDNEY AIRPORT: FACT SHEET



### Sydney Airport: Planning for the future

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013.

As part of the consultation process, a Preliminary Draft Master Plan (PDMP) has been prepared and is being publicly exhibited for comment. It was prepared following consultation with airlines, other members of the aviation industry, key government agencies, local government, the tourism industry, the business sector and the local community.

The PDMP details Sydney Airport's vision for the operation and development of the airport that will enable the forecast growth in air travel for tourism and trade well beyond the 2033 planning period. It is a vision that will significantly improve the airport experience for airline passengers – 37 million in 2012 growing to more than 74 million by 2033.

The PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No change to access arrangements for regional airlines

- No new flight paths or runways

Over \$2 billion of investments and other initiatives during the past decade have increased service levels, enhanced safety and security, delivered environmental improvements and increased capacity to meet demand. Continued investment will further increase airport efficiency, ensuring Sydney Airport continues to connect Sydney to other global cities and many other parts of Australia.

There will also be significant investments to reduce traffic congestion in and around the passenger terminal precincts.

With aircraft becoming environmentally cleaner, quieter and more fuel-efficient, the noise impacts of aircraft flying to Sydney have reduced significantly over the past decades. This trend will continue as new generation quieter aircraft continue to replace older noisier aircraft.



In consultation with the NSW Government, Sydney Airport has developed innovative ground transport solutions that will significantly improve access to the airport and road traffic flow around it.

In the Airport Environment Strategy, more than 100 actions and initiatives are outlined that together will minimise Sydney Airport's impact on the environment and support its objective of sustainable growth.

#### Your opportunity to comment

Talking with members of the community and other stakeholders and hearing their views about the PDMP is important to Sydney Airport.

Sydney Airport will consult the community across Sydney and NSW, local government, Australian and NSW Government agencies, airlines and others in the aviation industry, business and the tourism industry.

The PDMP will be on public exhibition until **30 August 2013**.

You can download the PDMP free of charge from [www.sydneyairport.com.au](http://www.sydneyairport.com.au). Copies will be available for viewing in various locations around Sydney Airport. There will be regular Community Updates in local newspapers and a series of Community Information Sessions will be held. Please refer to the Sydney Airport website for further details.

#### Have your say

Sydney Airport encourages you to read the PDMP and welcomes your feedback.

Comments should be in writing and include your name and address.

All comments received will be carefully considered by Sydney Airport. The PDMP will then be revised where appropriate before it is submitted to the Australian Government for consideration.

Please forward your written submission by **30 August 2013** to:

**Mail**  
Mr Ted Plummer  
Manager – Government and Community Relations  
Sydney Airport Corporation Limited  
Locked Bag 5000  
Sydney International Airport NSW 2020

**Email:** [masterplan@syd.com.au](mailto:masterplan@syd.com.au)

**Fax:** (02) 8338 4331

#### More information

Please refer to the PDMP for more information on the issues identified in this Fact Sheet.

For further information, call our Community Information Line on **1800 252 040** or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



Sydney Airport Corporation Limited ACN 002 518 808

#### SYDNEY AIRPORT: FACT SHEET



### Sustainable water management

With nearly 37 million passengers using Sydney Airport in 2012, the airport is one of NSW's biggest water users. Major uses include:

- Restroom and toilet facilities within the terminals
- Cooling towers (for air-conditioning)
- Construction and maintenance activities
- Vehicle washing facilities.

Sustainable water use and security of water supply are a priority for Sydney Airport, which is committed to securing alternative non-potable water supplies where feasible.

#### Recycled Water System

Sydney Airport has invested in a water recycling system in the T1 precinct, an initiative supported by the NSW Government. Wastewater is collected, treated using biological and chemical methods, then recirculated and reused throughout the precinct for toilet flushing and in cooling towers.

In 2012, the plant was saving an average of 600,000 litres of drinking water every day. The plant has additional capacity and is planned to be expanded.

#### Water Savings Action Plan

In 2012, Sydney Airport developed a new Water Savings Action Plan. The Plan identifies

opportunities where water can be used more efficiently and where alternative water sources can replace drinking water.

Sydney Airport extracts groundwater for irrigation purposes under a licence issued by the NSW Government. This avoids having to use drinking water for landscaping purposes.

#### Surface Water Quality

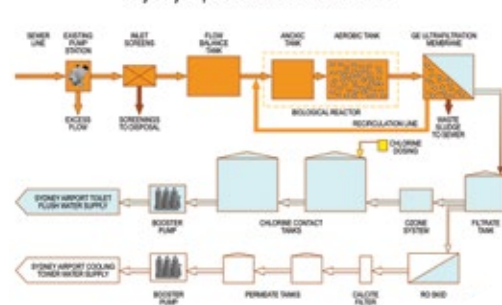
Sydney Airport is almost entirely surrounded by waterways, with Botany Bay to the south, the Sydney Airport Wetlands to the east, Alexandra Canal to the north and Cooks River to the west.

Various activities on the airport have the potential to impact on water quality in these waterways, including:

- Spills from aircraft servicing and maintenance
- Stormwater run-off
- Construction and maintenance activities
- Bulk liquids and hazardous materials storage
- Fire training exercises



#### Sydney Airport's Water Treatment Plant



To minimise the impact of airport operations on water quality in adjacent waterways, Sydney Airport conducts stormwater quality monitoring, works closely with airport tenants, operators and contractors to manage activities that have the potential to impact water quality and continues to identify opportunities to improve water quality.

Sydney Airport has a number of mechanisms in place to manage water quality. These include:

- Gross pollutant traps
- Dedicated spill response vehicle and provision of spill control kits on all aircraft parking aprons
- Pollution control flame traps on all aprons where aircraft refuelling or maintenance takes place
- Emergency stop gates on stormwater discharge points.

#### Sustainable Development

As part of the terminal redevelopments envisaged under the development concept in the Preliminary Draft Master Plan (PDMP), Sydney Airport aims to adopt forward thinking strategies that translate sustainable development principles and commitments to reality. A holistic approach will be taken, integrating green technologies, design and operations with a focus on sustainable energy, water and materials outcomes.

In addition to initiatives that secure a cleaner energy supply (such as trigeneration) and sustainable water supply (such as use of recycled water), Sydney Airport will pursue innovative opportunities that deliver smarter environmental and efficiency solutions across the airport.

#### More information

Please refer to the PDMP for more information on the issues identified in this Fact Sheet. For further information, call our Community Information Line on **1800 252 040** or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



Sydney Airport Corporation Limited ACN 002 518 808

## Section G3

### Fact sheets continued

#### SYDNEY AIRPORT: FACT SHEET



### Sydney Airport Environment Strategy

Sydney Airport's Preliminary Draft Master Plan (PDMP) includes a new Environment Strategy, which will provide the strategic direction for the management of ground-based environmental issues at Sydney Airport from 2013 to 2018.

As one of Australia's single most important pieces of infrastructure, Sydney Airport is a major employer and economic driver in the region, Sydney and the nation as a whole. It makes a direct and indirect contribution of \$276 billion to the economy, equivalent to 6% of the NSW economy.

The Environment Strategy and Master Plan are the key documents for ensuring these economic benefits are delivered in an environmentally responsible and sustainable manner.

A wide range of ground-based environmental matters are addressed in the new Environment Strategy. These are:

**Sustainability and Environmental Management**  
- developing and operating Sydney Airport in a sustainable manner

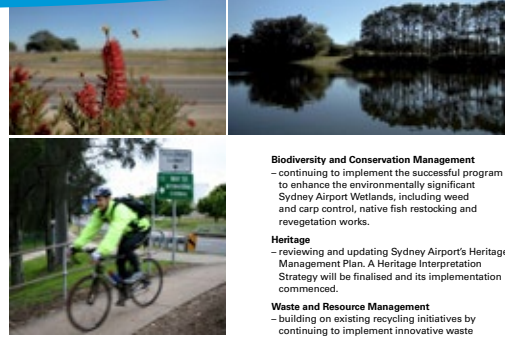
- implementing systems to assist with continual environmental improvement.

**Climate Change and Energy Management**

- reducing energy and carbon emissions by continuing to implement cost-effective energy efficiency opportunities and cleaner energy usage.  
- a trigeneration plant supplying cleaner energy is being planned, with possible reductions of up to 50% of greenhouse gas emissions.

**Water Management**

- building on existing water recycling and reuse initiatives by continuing to explore water efficiency opportunities, as outlined in Sydney Airport's Water Savings Action Plan. The recycled water plant at T1 will be expanded.



**Air Quality**

- completing air quality monitoring within the airport boundary and identifying opportunities to reduce pollution.

**Ground-based Noise**

- continuing to increase the use of fixed electrical ground power units to minimise the use of noisier on-aircraft auxiliary power units. This also improves air quality and reduces carbon emissions.

**Ground Transport**

- continuing to encourage the use of sustainable transport options (including public transport and cycling). These are outlined in the Ground Transport Plan included in the PDMP. Sydney Airport will continue to advocate to the NSW Government that bus and train services to and from Sydney Airport need to be improved.

**Biodiversity and Conservation Management**

- continuing to implement the successful program to enhance the environmentally significant Sydney Airport Wetlands, including weed and carp control, native fish restocking and revegetation works.

**Heritage**

- reviewing and updating Sydney Airport's Heritage Management Plan. A Heritage Interpretation Strategy will be finalised and its implementation commenced.

**Waste and Resource Management**

- building on existing recycling initiatives by continuing to implement innovative waste minimisation options identified in Sydney Airport's Waste and Resource Recovery Strategy.

**Soil and Land Management**

- continuing to minimise the potential for soil contamination and actively managing acid sulfate soils.

**Spills Response and Hazardous Materials**

- implementing best-practice environmental controls for prevention and management of spills and release of hazardous materials.

**More information**

Please refer to the PDMP for more information on the issues identified in this Fact Sheet. For further information, call our Community Information Line on **1800 252 040** or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



Sydney Airport Corporation Limited. ACN 002 578 803

#### SYDNEY AIRPORT: FACT SHEET



### Sydney Airport Wetlands

Located in close proximity to the Sydney CBD, the Botany Wetlands are the largest freshwater wetland in the metropolitan area and provide a precious haven for native wildlife.

On the northern side of Botany Bay in Sydney's Eastern Suburbs, the Wetlands' catchment extends from Moore and Centennial Parks in the north, south through Eastlakes and The Lakes Golf Courses before eventually flowing into Botany Bay next to Sydney Airport.

Although extensively altered in the 1800s to provide water for expanding local industries and a drinking water supply for colonial Sydney, they remain highly valued to this day for a range of environmental, social and economic reasons, including flood mitigation, wildlife habitat, cultural heritage and recreation.

The wetlands cover an area of 58 hectares, consist of 11 interconnected ponds and stretch over four kilometres. They are listed on the NSW State Heritage Register and are classified as significant in the Directory of Important Wetlands in Australia.

Sydney Airport manages the section of the Botany Wetlands known as the Mill Pond, Engine Ponds East and West and the Mill Stream. Collectively, these are known as the 'Sydney Airport Wetlands'.

Despite the airport and its immediate surroundings having been highly modified over the last century or more, the Wetlands are considered an environmentally significant area under Commonwealth airports legislation. They provide important habitat for a range of native flora and fauna species including reptiles, fish and birds. A number of migratory birds protected under international conservation agreements can also be found there.



White-faced heron

Carp removal

There are various pressures on the wetlands including pollution caused by stormwater run-off, sewage overflows and upstream catchment activities. The overriding need to protect aircraft from wildlife hazards and to manage impacts caused by introduced pest species also requires constant attention.

To address these pressures and associated impacts and to improve the quality and ecological function of the wetlands, Sydney Airport has developed a Management Plan for the Wetlands, which provides a framework to assist with addressing these often competing issues. Sydney Airport is also implementing a Wetlands Enhancement Program. In recent years, a number of important initiatives have been completed, including:

- Installation of a gross pollutant trap to remove litter from stormwater run-off into the ponds

- Installation of a fish ladder to allow movement of native fish from Botany Bay upstream into the Wetlands.
- A comprehensive survey of fish species
- Revegetation of a section of the East Engine Pond with native plant species.

Other activities carried out on a regular basis include:

- Removal of aquatic and terrestrial weeds
- Control of pest animals, including rabbits, foxes and carp
- Stocking with native fish.

**More information**

Please refer to the PDMP for more information on the issues identified in this Fact Sheet. For further information, call our Community Information Line on **1800 252 040** or go to [www.sydneyairport.com.au](http://www.sydneyairport.com.au).



Fish ladder



Sydney Airport Corporation Limited. ACN 002 578 803

## Section G3

### Frequently asked questions brochure



**Q: How are Sydney Airport and the broader aviation industry addressing climate change issues?**

**A:** The signing in 2008 of the *Global Aviation Industry Commitment to Action on Climate Change* by aviation industry leaders (including Sydney Airport) was an important demonstration of the industry's worldwide commitment to introducing technological, operational and efficiency advances to reduce aviation's contribution to climate change. Sydney Airport is committed to working with organisations across the aviation industry to target carbon-neutral growth by 2020, as a step towards a carbon-free future for aviation.

Airports are relatively large consumers of energy, most of which is electricity used in airport terminals for heating, cooling and lighting. Electricity and natural gas consumption make up over 98 per cent of greenhouse gases accounted for in Sydney Airport's carbon footprint which, in 2010-11, was measured to be 95,593 tonnes. Sydney Airport has developed an *Energy and Carbon Strategy 2015+*, which sets out targets for responsible energy use and reduction of carbon emissions.

Key initiatives being considered for the future include:

- Sydney Airport is planning for a trigeneration facility within the airport with initial feasibility assessments being considered. Benefits include reduced greenhouse gas emissions
- Continued investment in fixed electrical ground power for aircraft, reducing emissions and noise and improving local air quality

- Other sustainable energy saving and related initiatives, including the use of solar hot water and LED lighting
- Encouraging the use of more sustainable forms of transport to access the airport, including public transport and cycling.

**Q: Where can I find out more about the PDMP?**

**A:** The PDMP will be on public exhibition until **Friday 30 August 2013**. Sydney Airport is undertaking extensive community consultation with all key stakeholders including local government, Australian and NSW Government agencies, the aviation industry, business and community groups, as well as the broader community.

Copies of the PDMP and other related documents and information can be downloaded from [www.sydneyairport.com.au](http://www.sydneyairport.com.au). Copies will also be made available for public inspection in a number of locations around the airport. Regular Community Updates will be provided in local newspapers, and a series of Community Information Sessions will be held in public venues around the airport to allow people to view the documents, and have any questions answered by Sydney Airport representatives.

For further information, refer to the Sydney Airport website, phone the community information line on **1800 252 040** or email to [masterplan@syd.com.au](mailto:masterplan@syd.com.au).



## FREQUENTLY ASKED QUESTIONS



## Preliminary Draft Master Plan

**Q: Why does Sydney Airport need a new Master Plan?**

**A:** Every five years, Australia's major airports – including Sydney Airport – are required to prepare and submit to the Australian Government for approval a 20-year Master Plan. Sydney Airport's existing Master Plan was approved in 2009. A new Master Plan is now being prepared for the period 2013 to 2033.

The new Master Plan outlines the strategic direction for the airport's development over the next 20 years. It includes development objectives, an assessment of the future needs of airlines and other airport users, a land use zoning plan, forecast changes in the number of airline passengers, flights and the volume of air freight, information about aircraft noise and the plans for dealing with any environmental issues associated with implementing the new Master Plan.

For the first five years of the 20-year planning period, the Master Plan includes a ground transport plan (which includes initiatives to reduce traffic congestion and encourage public transport) and an environment strategy (which includes sustainability initiatives).



Sydney Airport Corporation Limited, ACN 803 578 809



**Q: How is the new Master Plan different to the existing 2009 Master Plan?**

**A:** The main difference between the existing 2009 Master Plan and the proposed new Master Plan is how the airport's passenger terminals will be used in the future.

Today, the airport is divided into two terminal precincts, with international services operating from T1 and domestic/regional services operating from T2/T3. The new Master Plan would see the phased development of Sydney Airport, transforming it into two integrated terminal precincts, **combining international, domestic and regional services under the one roof**. This transformation would improve the passenger experience, enhance airport efficiency, boost capacity and reduce traffic congestion on roads in and around the passenger terminals.

**Q: Is air travel forecast to increase over the next 20 years?**

**A:** As Sydney, NSW and Australia grow over the next 20 years, more people will choose to fly and demand for air travel will increase. Passenger numbers are forecast to gradually increase from 39.9 million in 2012 to 74.3 million in 2033 (average annual growth of 3.4%). Aircraft numbers are also forecast to gradually increase from 321,700 in 2012 to 409,500 in 2033 (average annual growth of 1.2%). Air freight is forecast to grow from 615,278 tonnes in 2012 to 1,011,312 tonnes in 2033 (average annual growth of 2.4%).

As a consequence of the Global Financial Crisis, forecast passenger and flight numbers in 2033 are **less than** the forecasts for 2029 shown in the existing Master Plan.



**Q: How will Sydney Airport accommodate forecast growth in air travel?**

**A:** Sydney Airport will accommodate forecast growth in air travel because airport infrastructure and facilities – passenger terminals, freight facilities, taxiways, hangars, aircraft parking and car parking – will all be progressively upgraded and expanded. The road network in and around Sydney Airport's passenger terminals will also be significantly upgraded to reduce traffic congestion.

At Sydney and around the world, the increasing use of new generation larger aircraft like the A380 means new aircraft can carry more passengers per flight than the older aircraft they are replacing. This makes aviation more efficient.

This is why in the period between 2000 and 2012, the number of passengers passing through Sydney Airport's terminals increased by just over 50% and the number of passenger aircraft flights increased by only around 10%.

The PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No change to regional airline access arrangements
- No new flight paths or runways.

**Q: Will growth in air travel at Sydney Airport create jobs and deliver economic growth?**

**A:** Sydney Airport is one of Australia's single most important pieces of infrastructure and is a **major generator of jobs and economic growth**. A recent study by Deloitte Access Economics found that the airport generates or facilitates:

- Direct and indirect employment of 283,700 jobs (equivalent to 8% of NSW employment), including 180,000 direct jobs (28,000 directly on airport)
- Direct and indirect economic contribution of \$276 billion (equivalent to 6% of the NSW economy and 2% of the Australian economy)

It is forecast that the economic activity generated or facilitated by the airport will increase to over \$42 billion in 2033 and total employment will increase to over 400,000 by 2033.

**Q: What steps are involved in preparing a Master Plan?**

**A:** As part of the process of preparing a new Master Plan, Sydney Airport has first prepared and is now publicly exhibiting a Preliminary Draft Master Plan (PDMP). The public exhibition period for the PDMP began on 5 June 2013 and concludes on **Friday 30 August 2013**.

As part of the consultation process, Sydney Airport invites the community and other stakeholders to view the PDMP and make a submission. After considering submissions, the PDMP will be revised where appropriate and submitted as a Draft Master Plan to the Australian Government for consideration.

**Q: What has Sydney Airport done to implement the existing 2009 Master Plan?**

**A:** To cater for growth, Sydney Airport has been implementing the existing 2009 Master Plan. Over \$2 billion of investments and other initiatives during the past decade have led to increased service levels, enhanced safety and security, delivered environmental improvements and increased capacity to meet demand.

Development projects and other initiatives in the existing 2009 Master Plan that have been or are being implemented include:

- New water recycling plant (2009)
- T1 Departures level upgraded and expanded (2010)
- New runway safety areas (2008–2010)
- Runways and taxiways upgraded (2011 and 2013)
- Additional capacity and improvements at T2 delivered (2012)
- New car parks at T1 and T2/T3 (2009, 2012 and 2013)
- New hotel in T1 Precinct (2013)
- New apron capacity to provide additional aircraft parking (2012 and 2013)

**Q: How are Sydney Airport and the aviation industry addressing aircraft noise impacts?**

**A:** Sydney Airport is committed to working with the community, governments and the aviation industry to manage and mitigate aircraft noise impacts, especially in areas close to the airport or under flight paths.

To be implemented, the new Master Plan requires no change to the curfew, no change to the aircraft movement cap, no change to noise sharing arrangements and no change to flight paths. No new runways are required.

Technology improvements mean that today's new generation aircraft – like the A380 and soon-to-arrive B787 Dreamliner – are significantly quieter than the older noisy aircraft they are replacing. In fact, aircraft built today are about **75% quieter than they were 40 years ago**. The aviation industry is working to reduce this even more. New technology means noise impacts from aircraft using Sydney Airport will continue to improve, helping to offset increased movements.

**Q: How will ground transport access to Sydney Airport be improved?**

**A:** Ensuring passengers, visitors and airport workers can get to and from Sydney Airport efficiently and in a timely manner is vitally important. To facilitate this, Sydney Airport is committed to enabling a range of sustainable and cost effective transport options.

The PDMP includes a number of projects to significantly improve road capacity in and around Sydney Airport. In particular, proposed works to intersections around the T2/T3 precinct, proposed road works within the T1 precinct and the creation of public transport facilities in both precincts will **improve traffic flow and reduce congestion** in and around the airport when compared to today. The projects were developed in consultation with the NSW Government's transport agencies.

## Section G3

### PDMP information brochure

#### Getting to and from Sydney Airport

Ensuring passengers, visitors and airport workers can get to and from Sydney Airport efficiently and in a timely manner is vitally important.

To facilitate this, Sydney Airport is committed to enabling a range of reliable, sustainable and cost effective transport options.

The PDMP includes a number of projects to significantly improve road traffic capacity in and around Sydney Airport. In particular, proposed works to the intersections around the T2/T3 precinct, proposed road works within the T1 precinct and the creation of public transport facilities in both precincts will reduce congestion and improve traffic flows in and around the airport when compared to today.

Sydney Airport consulted NSW Government transport agencies when developing these projects. Sydney Airport is also committed to increasing the use of public transport.



#### Have your say

The PDMP will be on public exhibition until **30 August 2013**. Sydney Airport encourages you to read the PDMP and welcomes feedback.

#### Where can I see the PDMP?

You can download the PDMP free of charge from [www.sydneyairport.com.au](http://www.sydneyairport.com.au) and copies are available for viewing in various locations around the airport. Look out for regular Community Updates in local newspapers. Community Information Sessions will be held in a number of public venues in the vicinity of Sydney Airport or under flight paths during the public exhibition period. You are invited to attend these sessions to find out more about the PDMP or have your questions answered by airport representatives. Please refer to the Sydney Airport website for further details or call our Community Information line on 1800 252 040 for further details.

#### How do I make a submission?

Submissions should be in writing and include your name and address.

All submissions received will be carefully considered by Sydney Airport. The PDMP will then be revised where appropriate before it is submitted to the Australian Government for consideration.

Please forward your written submission by **30 August 2013** to:

Mr Ted Plummer  
Manager – Government and Community Relations  
Sydney Airport Corporation Limited,  
Locked Bag 5000  
Sydney International Airport  
NSW 2020

Email: [masterplan@syd.com.au](mailto:masterplan@syd.com.au)

Fax: (02) 8338 4931

Community Information  
line **1800 252 040**



Sydney Airport Corporation Limited. ACN 082 578 809

#### SYDNEY AIRPORT



### Preliminary Draft Master Plan 2033

There is a new Master Plan being prepared for Sydney Airport

Find out more at [www.sydneyairport.com.au](http://www.sydneyairport.com.au)



#### Planning for the future

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013.

As part of the consultation process, a Preliminary Draft Master Plan (PDMP) has been prepared and is being publicly exhibited for comment.

Over \$2 billion of investments and other initiatives during the past decade have improved the passenger experience, enhanced safety and security, delivered environmental improvements and increased capacity to meet demand.

The PDMP builds on this investment, **without any change to the curfew, aircraft movement cap or access arrangements for regional airlines.**

In summary, the PDMP:

- Creates integrated passenger terminals for international, domestic and regional passenger operations
- Improves roads in and around the terminal precincts to reduce traffic congestion
- Provides for the development of aircraft engineering precincts
- Creates transport facilities, well located to the passenger terminals to facilitate fast, affordable and reliable access to multiple transport options
- Incorporates water and energy efficiencies in the new passenger terminal developments.



#### Commitment to the environment

The PDMP includes a new Environment Strategy, which will provide the strategic direction for the management of ground-based environmental impacts at Sydney Airport from 2013 to 2018.

Already our recycled water treatment plant in the T1 precinct saves an average of 600,000 litres of drinking water every day. The roll out of fixed electrical ground power for aircraft is reducing ground-based noise, carbon emissions and improving air quality.

#### New generation quieter aircraft

Sydney Airport is committed to working with the community, governments and the aviation industry to manage and mitigate the impact of aircraft noise, especially in areas close to the airport or under flight paths. The PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No new flight paths or runways
- No change to access arrangements for regional airlines.

With new generation quieter aircraft replacing older noisier aircraft, the noise impact of aircraft flying to Sydney Airport will continue to improve, helping to offset increased movements.



#### Aviation forecasts

The forecast passenger numbers, aircraft movements and air freight volumes for 2033 shown in the PDMP provide the fundamental basis for planning.

While higher than today, passenger and aircraft movements in 2033 are forecast to be below those for 2029 in the existing Master Plan.


#### Economic significance

Sydney Airport is one of Australia's single most important pieces of infrastructure.

The airport generates or facilitates 283,700 jobs including 160,000 direct jobs (28,000 directly on airport) and a direct and indirect economic contribution of \$27.6 billion (equivalent to 6% of the NSW economy).

## Section G3

### Summary brochure of Preliminary Draft Master Plan



**Have your say**

Sydney Airport encourages you to read the PDMP and welcomes your feedback.

Comments should be in writing and include your name and address.


All comments received will be carefully considered by Sydney Airport. The PDMP will be revised where appropriate before it is submitted to the Australian Government for consideration.

Please forward your written submission by 30 August 2013 to:

**Mr Ted Plummer**  
 Manager – Government and Community Relations  
 Sydney Airport Corporation Limited  
 Locked Bag 5000  
 Sydney International Airport NSW 2020


**Email:** masterplan@syd.com.au  
**Fax:** (02) 8338 4931

For further information, please phone the Community Information line on **1800 252 040**.



Sydney Airport Corporation Limited. ACN 002 578 800

## SYDNEY AIRPORT





# Preliminary Draft Master Plan

## 2033 Summary

Sydney Airport's Preliminary Draft Master Plan is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No new flight paths
- No new runways
- No change to regional airline access arrangements





**Chief Executive Officer's Foreword**

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013.

As part of the consultation process, I am delighted to present this summary of Sydney Airport's Preliminary Draft Master Plan (PDMP).

It was prepared following consultation with airlines, other members of the aviation industry, key government agencies, local government, the tourism industry, the business sector and the local community.

Sydney Airport is located just 8km from the CBD, and less than 10km from the iconic Sydney Harbour and southern beaches. This location gives our city and state a unique advantage when attracting the international business and tourism markets to Australia.

The PDMP details our vision for the operation and development of Sydney Airport that will enable the forecast growth in air travel for tourism and trade well beyond the 2033 planning period. It is a vision that will significantly improve the airport experience for airline passengers – 37 million in 2012 growing to more than 74 million in 2033.

Comments received while preparing the last 2009 Master Plan and feedback we've received since from our airline partners, the community and other stakeholders have informed the preparation of this PDMP.



**Kerrie Mather**  
 Chief Executive Officer

## The Master Plan Development Concept for Sydney Airport

**Planning for growth**

The development concept for Sydney Airport in 2033 shown in the PDMP improves the passenger experience, optimises airport efficiency, maximises capacity and establishes the airport's strategic direction for the next 20 years. It also contains a number of road improvements in and around the passenger terminal precincts to reduce traffic congestion.

The development concept emerged from extensive initial consultation with stakeholders to understand their requirements and priorities. There has been a particular emphasis on improving the airport experience for airline passengers.

In summary, the development concept creates integrated terminals for international, domestic and regional passenger operations. It also creates transport interchanges, well located to the terminal precincts, to facilitate fast, affordable and reliable access to multiple transport options.

Once complete, the development concept will:

- Significantly improve the airport experience for airline passengers
- Improve traffic flows on roads in and around the airport
- Improve passenger connectivity by reducing inter-precinct transfers and, where such transfers remain necessary, making increased use of the existing airside transfer corridor
- Enhance airport efficiency
- Increase the apron, terminal and airfield capacity of the airport, particularly for large aircraft such as the A380
- Retain many of the existing freight and fuel facilities adjacent to the terminal precincts

As the needs of the aviation industry sometimes change rapidly, the development concept embeds principles of flexibility and adaptability to ensure those needs can be met appropriately.



# Section G3

## Summary brochure of Preliminary Draft Master Plan continued

### Aviation forecasts

The forecast passenger numbers, aircraft movements and air freight volumes for 2033 shown in the PDMP (and below) provide the fundamental basis for future planning.

A comparison between 2012 and the aviation activity forecasts for 2033 is shown below. This shows that, as a consequence of the Global Financial Crisis (GFC), the forecast number of passengers in 2033 is below the forecast in the existing Master Plan. Though higher than today, aircraft movements by 2033 are also forecast to be below the forecast for 2012 in the existing Master Plan, again as a result of the GFC.

### Economic significance

Sydney Airport is one of Australia's single most important pieces of infrastructure. The airport generates or facilitates:

- **Jobs.** Direct and indirect employment of 283,700 jobs, including 160,000 direct jobs (28,000 directly on airport)
- **Economic activity.** Direct and indirect economic contribution of \$27.6 billion (equivalent to 6% of the NSW economy and 2% of the Australian economy)
- **Taxes.** Direct and indirect taxes, including:
  - Substantial income tax and GST revenues to the Australian Government
  - Substantial payroll taxes to the NSW Government
  - Annual contributions, in lieu of rates, to Botany Bay, Rockdale and Murrumbidgee Councils.

Economic activity is forecast to increase to over \$42 billion by 2033 and total employment will increase to over 400,000 by 2033.

Sydney Airport also underpins growth in the tourism industry and the hundreds of thousands of jobs it generates. Through its new partnership agreement with Destination NSW and



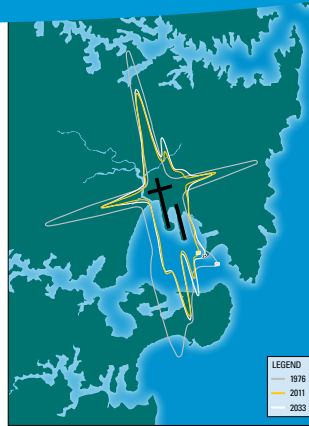
closer ties with Tourism Australia, Sydney Airport will continue to work in collaboration with the Australian and NSW Governments to grow tourism and the visitor economy.

### Sustainability, climate change and environmental management

Sydney Airport and the broader aviation community are working together to reduce environmental impacts.

This includes meeting voluntary global commitments for reducing carbon emissions, whilst continuing to deliver the benefits of fast, reliable, safe and efficient air travel.

The PDMP includes a new Airport Environment Strategy, which will provide the strategic direction for the management of ground-based environmental impacts at Sydney Airport from 2013 to 2018.



Sydney Airport is committed to working with the community, governments and the aviation industry to manage and mitigate aircraft noise impacts, especially in areas close to the airport or under flight paths.

Domestic and international aircraft noise impacts from aircraft using Sydney Airport will continue to improve, helping to offset increased movements.

Sydney Airport's PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No new flight paths or runways
- No change to regional airline access arrangements.

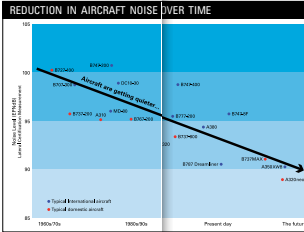
Aircraft built today are about 75% quieter than they were 40 years ago. The aviation industry is working to reduce this even more.

The chart on this page illustrates the effect of the new quieter aircraft, by comparing three noise exposure contours: one from 1976 (when the fleet comprised older noisy jets), one from 2011 (when new generation quieter aircraft are being introduced), and a forecast for 2033. The area of land within this noise contour has decreased by 1,150 hectares or 36% since 1976.

However, Sydney Airport recognises that aircraft noise can still be an issue of concern for people living in areas outside these contours. As such, noise management needs to occur in affected areas close to and further away from the airport.

The PDMP contains a range of charts that illustrate forecast aircraft noise impacts in areas around the airport.

	2012	2029 Forecast (existing 2009 Master Plan)	2033 Forecast (PDMP)
International, domestic and regional passengers (millions)	36.9	78.9	74.3
Fixed wing aircraft movements	321,630	427,400	409,500
Air freight (tonnes)	737,000	1,077,000	1,011,000



### Key initiatives include:

- The recycled water treatment plant in the T1 precinct – which already saves an average of 600,000 litres of drinking water every day – will be expanded
- A trigeneration facility is being planned, with initial feasibility assessments being considered. Benefits include a reduction in greenhouse gas emissions
- Continued investment in fixed electrical ground power for aircraft, reducing emissions and noise
- Other sustainable energy saving initiatives – including the use of solar hot water and LED lighting.

### The benefits of new generation quieter aircraft

For most of the world's major airports – including Sydney – aircraft noise has been a long standing issue.

### Getting to and from Sydney Airport

Ensuring passengers, visitors and airport workers can get to and from Sydney Airport efficiently and in a timely manner is vitally important.

To facilitate this, Sydney Airport is committed to enabling a range of reliable, sustainable and cost effective transport options.

The development concept shown in the PDMP includes a number of projects to significantly improve road traffic capacity in and around Sydney Airport. In particular, proposed works to intersections around the T2/T3 precinct, proposed road works within the T1 precinct and the creation of public transport facilities in both precincts will reduce congestion and improve traffic flows in and around the airport when compared to today.

Sydney Airport consulted NSW Government transport agencies when developing these projects.

Sydney Airport is also committed to increasing the use of public transport. Currently, public transport journeys account for 17% of total trips to Sydney Airport. This has been increasing by one percentage point per annum over the last five years and is anticipated to continue to increase at that rate to 2018.

The NSW Government has committed to additional train capacity on the airport line in peak periods to facilitate this further.

The Infrastructure NSW *First Things First* recommendations announced in October 2012 include a range of investments to address the commuter, freight and airport-related traffic in the vicinity of the airport, including:

- Constructing WestConnex, which expands and links the M4 and M5 East Motorways and will provide commuters with alternative routes that avoid the airport precinct
- Fixing road pinch points in the Port Botany and Sydney Airport precinct
- Reducing rail fares to the airport stations
- Adding new bus routes to Sydney Airport
- Enhancing the capacity of the freight rail lines, which will divert some freight traffic from road to rail

Finally, additional car parking facilities will be provided across the airport to service growing demand over the next 20 years.



### Sydney Airport Experience Centre

Sydney Airport is planning to develop an Experience Centre that members of the community can visit to find out more about the airport and the aviation industry. Visitors will be taken on an engaging journey behind the scenes of one of the world's busiest airports.

The Experience Centre will invite visitors to explore the history, operational challenges, environmental initiatives and future vision for the airport through a series of engaging and informative installations.

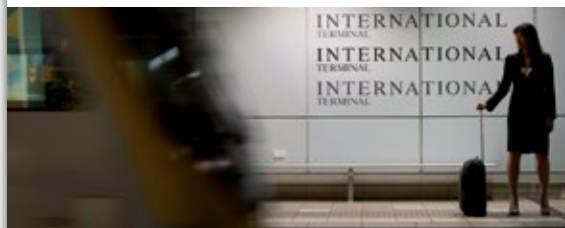
### Community and stakeholder consultation

Talking with members of the community and other stakeholders and hearing their views about the PDMP is important to Sydney Airport.

Sydney Airport will consult the community across Sydney and NSW, local government, Australian and NSW Government agencies, the aviation industry, business and tourism groups.

The PDMP will be on public exhibition until **30 August 2013**.

You can download the PDMP free of charge from [www.sydneyairport.com.au](http://www.sydneyairport.com.au). Copies will be available for viewing in various locations around Sydney Airport. There will be regular Community Updates in local newspapers and a series of Community Information Sessions will be held. Please refer to the Sydney Airport website for further details.





## Section G5

### Community updates (English language newspapers)

No. 1



**SYDNEY AIRPORT COMMUNITY UPDATE**

### Preliminary Draft Master Plan

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013. As part of the consultation process, a Preliminary Draft Master Plan (PDMP) has been prepared and is being publicly exhibited for comment.

The PDMP details Sydney Airport's vision to significantly improve the airport experience for airline passengers and accommodate forecast growth.

The PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No change to access arrangements for regional airlines
- No new flight paths or runways.

**Improving transport access**

The PDMP includes a number of projects to significantly improve road capacity around Sydney Airport's passenger terminals, as well as the creation of public transport facilities. This will improve traffic flow and reduce congestion in and around the airport.

**Managing aircraft noise**

Aircraft built today are about 75% quieter than they were 40 years ago. With new generation quieter aircraft like the A380 continuing to replace older noisier aircraft, noise impacts from aircraft using Sydney Airport will continue to improve, helping to offset increased movements.

**Consultation**

The PDMP is on public exhibition until

**30 August 2013.** It can be downloaded from [www.sydneyairport.com.au](http://www.sydneyairport.com.au). Copies are available for viewing in various locations around Sydney Airport. There will be regular Community Updates in local newspapers and a series of Community Information Sessions will be held. Please refer to the Sydney Airport website for further details.

**Submitting your comments**

Sydney Airport encourages you to read the PDMP and welcomes your feedback. Comments should be in writing and include your name and address. All comments received will be considered by Sydney Airport. The PDMP will then be revised where appropriate before it is submitted to the Australian Government for consideration.

Please forward your written submission by 30 August 2013 to:


**Mail:** Mr Ted Plummer, Manager – Government & Community Relations  
Sydney Airport Corporation Limited  
Locked Bag 5000  
Sydney International Airport NSW 2020  
**Email:** [masterplan@syd.com.au](mailto:masterplan@syd.com.au)  
**Fax:** (02) 8338 4931

For further information, please phone the Community Information line on **1800 252 040**.



The right future. Starting now.

No. 2



**SYDNEY AIRPORT COMMUNITY UPDATE**

### Preliminary Draft Master Plan

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013. As part of the consultation process, a Preliminary Draft Master Plan (PDMP) has been prepared and is being publicly exhibited for comment.

The PDMP details Sydney Airport's vision to significantly improve the airport experience for airline passengers and accommodate forecast growth.

The PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No change to access arrangements for regional airlines
- No new flight paths or runways.

**Improving transport access**

The PDMP includes a number of projects to significantly improve road capacity around Sydney Airport's passenger terminals, as well as the creation of public transport facilities. This will improve traffic flow and reduce congestion in and around the airport.

**Managing aircraft noise**

Aircraft built today are about 75% quieter than they were 40 years ago. With new generation quieter aircraft like the A380 continuing to replace older noisier aircraft, noise impacts from aircraft using Sydney Airport will continue to improve, helping to offset increased movements.

**Consultation**

The PDMP is on public exhibition until

**30 August 2013.** It can be downloaded from [www.sydneyairport.com.au](http://www.sydneyairport.com.au). Copies are available for viewing in various locations around Sydney Airport. There will be regular Community Updates in local newspapers and a series of Community Information Sessions will be held. Please refer to the Sydney Airport website for further details.


**Submitting your comments**

Sydney Airport encourages you to read the PDMP and welcomes your feedback. Comments should be in writing and include your name and address. All comments received will be considered by Sydney Airport. The PDMP will then be revised where appropriate before it is submitted to the Australian Government for consideration.

Please forward your written submission by 30 August 2013 to:

**Mail:** Mr Ted Plummer, Manager – Government & Community Relations  
Sydney Airport Corporation Limited  
Locked Bag 5000  
Sydney International Airport NSW 2020  
**Email:** [masterplan@syd.com.au](mailto:masterplan@syd.com.au)  
**Fax:** (02) 8338 4931

For further information, please phone the Community Information line on **1800 252 040**.



The right future. Starting now.

No. 3



**SYDNEY AIRPORT COMMUNITY UPDATE**

### Preliminary Draft Master Plan

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013. As part of the consultation process, a Preliminary Draft Master Plan (PDMP) has been prepared and is being publicly exhibited for comment.

The PDMP details Sydney Airport's vision to significantly improve the airport experience for airline passengers and accommodate forecast growth.

The PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No change to access arrangements for regional airlines
- No new flight paths or runways.

**Improving transport access**

The PDMP includes a number of projects to significantly improve road capacity around Sydney Airport's passenger terminals, as well as the creation of public transport facilities. This will improve traffic flow and reduce congestion in and around the airport.

**Managing aircraft noise**

Aircraft built today are about 75% quieter than they were 40 years ago. With new generation quieter aircraft like the A380 continuing to replace older noisier aircraft, noise impacts from aircraft using Sydney Airport will continue to improve, helping to offset increased movements.

**Commitment to the environment**

The PDMP includes a new Environment Strategy which contains more than

**100 actions to improve sustainability, climate change and environmental outcomes at Sydney Airport.**

**Consultation**

The PDMP is on public exhibition until

**30 August 2013.** It can be downloaded from [www.sydneyairport.com.au](http://www.sydneyairport.com.au). Copies are also available for viewing in various locations around Sydney Airport.

**Submitting your comments**

Sydney Airport encourages you to read the PDMP and welcomes your feedback. Comments should be in writing and include your name and address. All comments received will be considered by Sydney Airport. The PDMP will then be revised where appropriate before it is submitted to the Australian Government for consideration.

Please forward your written submission by 30 August 2013 to:

**Mail:** Mr Ted Plummer, Head of Government & Community Relations  
Sydney Airport Corporation Limited  
Locked Bag 5000  
Sydney International Airport NSW 2020  
**Email:** [masterplan@syd.com.au](mailto:masterplan@syd.com.au)  
**Fax:** (02) 8338 4931

For further information, please phone the Community Information line on **1800 252 040**.



The right future. Starting now.

The Land



**SYDNEY AIRPORT COMMUNITY UPDATE**

### Preliminary Draft Master Plan

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013. As part of the consultation process, a Preliminary Draft Master Plan (PDMP) has been prepared and is being publicly exhibited for comment.

The PDMP details Sydney Airport's vision to significantly improve the airport experience for airline passengers and accommodate forecast growth.

The PDMP is based on:

- No change to the curfew
- No change to the aircraft movement cap
- No change to noise sharing arrangements
- No change to access arrangements for regional airlines
- No new flight paths or runways.

**Supporting regional communities**

Sydney Airport recognises the importance of its existing network of regional air services to regional communities.

Over the past 20 years, regional traffic has grown at Sydney Airport with a 221% increase in passenger numbers.

Sydney Airport is proud of the service it provides to regional communities, including an extensive route network during the peak hours, facilitating connectivity with international and domestic routes, and lower airport charges than almost all other airports in the Sydney regional route network.

The PDMP is based on **no change to access arrangements for regional airlines.**

**Improving transport access**

The PDMP includes a number of projects to significantly improve road capacity around Sydney Airport's passenger terminals, as well as the creation of public transport facilities. This will improve traffic flow and reduce congestion in and around the airport.

**Consultation**

The PDMP is on public exhibition until

**30 August 2013.** It can be downloaded from [www.sydneyairport.com.au](http://www.sydneyairport.com.au).

**Submitting your comments**

Sydney Airport encourages you to read the PDMP and welcomes your feedback. Comments should be in writing and include your name and address. All comments received will be considered by Sydney Airport. The PDMP will then be revised where appropriate before it is submitted to the Australian Government for consideration.

Please forward your written submission by 30 August 2013 to:

**Mail:** Mr Ted Plummer, Manager – Government & Community Relations  
Sydney Airport Corporation Limited  
Locked Bag 5000  
Sydney International Airport NSW 2020  
**Email:** [masterplan@syd.com.au](mailto:masterplan@syd.com.au)  
**Fax:** (02) 8338 4931

For further information, please phone the Community Information line on **1800 252 040**.



The right future. Starting now.

Section G6

Community language newspapers

Arabic



Chinese



Greek



Indonesian



Italian



Korean



Spanish



Vietnamese



## Section G7

### Community information session notifications

#### COMMUNITY INFORMATION SESSIONS

### Sydney Airport Preliminary Draft Master Plan

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013.

As part of the consultation process, a Preliminary Draft master Plan (PDMP) has been prepared and is being publicly exhibited for comment.

The PDMP is based on no change to the curfew, aircraft movement cap, noise sharing arrangements flight paths or access arrangements for regional airlines.

Sydney Airport invites you to come along to one of our Community Information Sessions to learn more about the PDMP (details below).

Airport representatives will be on hand to explain details of the PDMP and answer any questions you may have.

The PDMP is on public exhibition until **30 August 2013**. Sydney Airport encourages you to view the PDMP and welcomes your feedback.

For further information, call our Community Information Line on **1800 252 040** or visit our website [www.sydneyairport.com.au](http://www.sydneyairport.com.au).

- **Marrickville Metro** (the Food Court, 34 Victoria Road, Marrickville) on Wednesday 19 June 2013 (9am to 5.30pm)
- **Orange Grove Markets** (Cnr Perry Street & Balmain Road, Leichhardt) on Saturday 22 June 2013 (8am to 1pm)
- **Broadway Shopping Centre** (Ground Floor, Bay Street, Broadway) on Wednesday 26 June 2013 (10am to 7pm)
- **Eveleigh Markets** (243 Wilson Street, Darlington, near Redfern Station) on Saturday 29 June 2013 (8am to 1pm)



#### COMMUNITY INFORMATION SESSIONS

### Sydney Airport Preliminary Draft Master Plan

Sydney Airport is preparing a new Master Plan to submit to the Australian Government by the end of 2013.

As part of the consultation process, a Preliminary Draft master Plan (PDMP) has been prepared and is being publicly exhibited for comment.

The PDMP is based on no change to the curfew, aircraft movement cap, noise sharing arrangements flight paths or access arrangements for regional airlines.

Sydney Airport invites you to come along to one of our Community Information Sessions to learn more about the PDMP (details below).

Airport representatives will be on hand to explain details of the PDMP and answer any questions you may have.

The PDMP is on public exhibition until **30 August 2013**. Sydney Airport encourages you to view the PDMP and welcomes your feedback.

For further information, call our Community Information Line on **1800 252 040** or visit our website [www.sydneyairport.com.au](http://www.sydneyairport.com.au).

- **Hurstville Library** (Exhibition Room) Cnr Queens Road & Dora Street, Hurstville on Saturday 13 July 2013 (9.30am to 4pm)
- **Pacific Square Shopping Centre** Anzac Parade, Maroubra Junction on Wednesday 24 July 2013 (9am to 5.30pm)
- **Eastgate Shopping Centre** (near Deli Fresco) Spring Street, Bondi Junction on Saturday 27 July 2013 (9am to 5.30pm)







# APPENDIX H

# APPENDIX H DICTIONARY

Term	Definition
<b>ABC</b>	Airport building controller
<b>ACA</b>	Airport Co-ordination Australia Pty Limited
<b>ACI / DKMA</b>	Airports Council International / DKMA
<b>ADSB</b>	Automatic dependant surveillance broadcast
<b>Advertisement</b>	A sign, notice, device or representation in the nature of an advertisement visible from any public place or public reserve or from any navigable water.
<b>Advertising structure</b>	A structure used or to be used principally for the display of an advertisement.
<b>AEO</b>	Airport Environmental Officer
<b>AEPR</b>	Airport Environment Protection Regulations
<b>AER</b>	Airport Environment Report
<b>AES</b>	Airport Environment Strategy
<b>AFP</b>	Australian Federal Police
<b>Aircraft maintenance facility</b>	A building or place used for the repair and fitting of accessories to aircraft or vehicles associated with airport operations, and includes work involving body building, panel building, panel beating, spray painting or chassis restoration.
<b>Airport</b>	A place used for the landing, taking off, parking, maintenance or repair of aeroplanes, and includes associated buildings, installations, facilities and movement areas and any heliport that is part of the airport.
<b>ALC</b>	Airport lessee company
<b>Amusement centre</b>	A building or place (not being part of a pub or registered club) used principally for playing: <ul style="list-style-type: none"> <li>(a) Billiards, pool or other like games, or</li> <li>(b) Electronic or mechanical amusement devices, such as pinball machines, computer or video games and the like</li> </ul>
<b>ANEC</b>	Australian noise exposure concept
<b>ANEF</b>	Australian noise exposure forecast
<b>ANEI</b>	Australian noise exposure index
<b>Animal boarding or training establishment</b>	A building or place used for the boarding, keeping, dog training for border security purposes or caring of animals for commercial purposes, and includes an ancillary veterinary hospital.
<b>Aprons</b>	Aprons are defined areas for the safe parking of aircraft. The transfer of passengers and freight between aircraft and terminal facilities as well as servicing and maintenance of aircraft in between flights takes place on aprons.
<b>APU</b>	Auxiliary power unit
<b>AQMS</b>	Air quality monitoring system
<b>ARFF</b>	Airport rescue and fire fighting
<b>ASA</b>	Airservices Australia
<b>ASC</b>	Airport Strategic Consulting Pty Limited
<b>ASMGCS</b>	Advanced surface movement guidance and control system
<b>ASS</b>	Acid sulphate soils
<b>AT-VASIS</b>	At-visual approach slope indicator systems
<b>ATC</b>	Air traffic control
<b>ATI</b>	Aerodrome technical inspection

<b>Australian noise exposure concept (ANEC)</b>	A set of contours based on hypothetical aircraft operations at an airport in the future. In this Master Plan, ANECs have been used to model the impact of the new generation of quieter aircraft such as the A380 and B787. As ANEC maps are based on hypothetical assumptions and may not have been subject to review or endorsement, they have no official status and cannot be used for land use planning purpose. An ANEC however, can be turned into an ANEF.
<b>Australian noise exposure forecast (ANEF)</b>	A set of contours showing forecast of future aircraft noise levels. The ANEF is fundamentally a tool for land use planning, and is used in Australian Standard 2021 to define areas where construction of certain building types is "acceptable", "conditionally acceptable" and "unacceptable". At ANEF values less than 20, all building types are considered "acceptable", and hence 20 ANEF is the lowest-valued contour generally shown on ANEF charts. ANEF maps are subject to review and endorsement by Airservices Australia.
<b>Australian noise exposure index (ANEI)</b>	A set of contours calculated using ANEF techniques and based on historical data that shows the average noise exposure for a given period such as a year. Airservices Australia publishes the quarterly and annual ANEI for Sydney Airport.
<b>Aviation activity</b>	Any activity for the arrival, departure, movement or operation of aircraft and includes aircraft aprons, helipads, heliports, runways, taxiways and the like.
<b>Aviation support facility</b>	Any aircraft maintenance facility, engine-run area, ground support equipment, airline catering, airline office, transport depot and associated ground-base activities necessary for the orderly and efficient operation of aviation activity.
<b>BARA</b>	Board of Airline Representatives of Australia Inc.
<b>BHS</b>	Baggage handling system
<b>BITRE</b>	Bureau of Infrastructure, Transport and Regional Economics
<b>BOM</b>	Bureau of Meteorology
<b>Building identification sign</b>	A sign that identifies or names a building and that may include the name of a building, the street name and number of a building, and a logo or other symbol, but that does not include general advertising of products, goods or services.
<b>Bulky goods premises</b>	A building or place used primarily for the sale by retail, wholesale or auction (or for the hire or display of) bulky goods, being goods that are of such a size or weight as to require: <p>(a) a large area for handling, display or storage, or</p> <p>(b) direct vehicular access to the site of the building or place by members of the public for the purpose of loading or unloading such goods into or from their vehicles after purchase or hire</p> <p>and including goods such as floor and window supplies, furniture, household electrical goods, equestrian supplies and swimming pools, but does not include a building or place used for the sale of foodstuffs or clothing unless their sale is ancillary to the sale or hire or display of bulky goods.</p>
<b>Business identification sign</b>	A sign: <p>(a) that indicates:</p> <ul style="list-style-type: none"> <li>• the name of the person or business, and</li> <li>• a the nature of the business carried on by the person at the premises or place at which the sign is displayed, and</li> </ul> <p>(b) That may include the address of the premises or place and a logo or other symbol that identifies the business</p>
<b>Business premises</b>	A building or place at or on which: <p>(a) an occupation, profession or trade (other than an industry) is carried on for the provision of services directly to members of the public on a regular basis, or</p> <p>(b) a service is provided directly to members of the public on a regular basis</p> <p>(c) And may include, without limitation, premises such as banks, post offices, hairdressers, dry cleaners, food and drink premises, travel agencies, internet access facilities, medical centres, betting agencies and the like, but does not include sex service premises</p>
<b>CAEP</b>	Committee on Aviation Environmental Protection (ICAO)
<b>CAGR</b>	Compound annual growth rate
<b>CAO</b>	Civil aviation order
<b>CAPA</b>	CAPA Centre for Aviation

<b>Car park</b>	A building or place primarily used for the purpose of parking motor vehicles, including any manoeuvring space and access thereto, whether operated for gain or not and may include valet parking services and car wash facilities/services.
<b>CASA</b>	Civil Aviation Safety Authority
<b>CASR</b>	Civil Aviation Safety Regulations
<b>CAST</b>	Comprehensive airport simulation technology computer program
<b>CBD</b>	Central business district
<b>CCTV</b>	Closed circuit television
<b>CDA</b>	Continuous descent approach
<b>CEO</b>	Chief executive officer
<b>Child care centre</b>	<p>A building or place used for the supervision and care of children that:</p> <ul style="list-style-type: none"> <li>(a) provides long day care, pre-school care, occasional child care or out-of-school-hours care, and</li> <li>(b) does not provide overnight accommodation for children other than those related to the owner or operator of the centre</li> </ul> <p>but does not include:</p> <ul style="list-style-type: none"> <li>(c) a building or place used for home-based child care, or</li> <li>(d) an out-of-home care service provided by an agency or organisation accredited by the NSW Office of the Children's Guardian, or</li> <li>(e) a baby-sitting, playgroup or child-minding service that is organised informally by the parent of the children concerned, or</li> <li>(f) a service provided for fewer than 5 children (disregarding any children who are related to the person providing the service) at the premises at which at least one of the children resides, being a service that is not advertised</li> <li>(g) a regular child-minding service that is provided in connection with a recreational or commercial facility (such as a gymnasium), by or on behalf of the person conducting the facility, to care for children while the children's parents are using the facility, or</li> <li>(h) a service that is concerned primarily with the provision of: <ul style="list-style-type: none"> <li>(i) Lessons or coaching in, or providing for participation in, a cultural, recreational or religious or sporting activity, or</li> <li>(ii) Private tutoring, or</li> </ul> </li> <li>(i) a school, or</li> <li>(j) a service provided at exempt premises (within the meaning of Section 200 of the Children and Young Persons (Care and Protection) Act 1998), such as hospitals, but only if the service is established, registered or licensed as part of the institution operation on those premises</li> </ul>
<b>Code</b>	<p>Australia has adopted ICAO methodology of using a code system, known as the Aerodrome Reference Code, to specify the standards for individual aerodrome facilities which are suitable for use by aeroplanes within a range of performances and sizes.</p> <p>Ascending letters indicate increasing aircraft size, for example a Boeing 737 or Airbus A320 is a Code C aircraft, a Boeing 747-400 or Airbus A330 is a Code E aircraft and the Airbus A380 is a Code F aircraft.</p>
<b>Convenience store</b>	Premises used for the purposes of selling small daily convenience goods such as foodstuffs, personal care products, newspapers and the like to provide for the day-to-day needs of people who live or work in the local area, and may include ancillary services such as a post office, bank or dry cleaning but does not include restricted premises (eg brothels). Convenience store has the same definition of "neighbourhood shop" (per the NSW LEP Standard definition).
<b>CTO</b>	Cargo terminal operator
<b>DA</b>	Development application

<b>Development</b>	For the purposes of this Master Plan means: (a) constructing buildings or other <b>structures</b> , (b) altering the structure of buildings or other structures, (c) undertaking, constructing or altering <b>earthworks</b> (whether or not in relation to buildings or other structures), (d) undertaking, constructing or altering <b>engineering works</b> , electrical works or hydraulic works (whether or not in relation to buildings or other structures), (e) demolishing, destroying, dismantling or removing: (i) Buildings or other structures, or (ii) Earthworks, or (iii) Engineering works, or (iv) Electrical works, or (v) Hydraulic works (f) undertaking land clearing
<b>DGPS</b>	Differential GPS
<b>DIRD</b>	Department of Infrastructure and Regional Development
<b>DME</b>	Distance measuring equipment
<b>DMP</b>	Draft Master Plan
<b>DOM</b>	Domestic
<b>DVOR</b>	Doppler very-high frequency omni range
<b>Earthworks or engineering works</b>	Means: (a) runways, taxiways and aprons, (b) surface car parks (c) retaining walls (d) dams (e) roads (f) railways (g) pipelines (h) tunnels
<b>Educational establishment</b>	A building or place used for education (including teaching), being: (a) a school, or (b) a tertiary institution, including a university or a TAFE establishment that provides formal education and is constituted by or under an Act
<b>EMP</b>	Environmental management plan
<b>EMS</b>	Environmental management system
<b>Entertainment facility</b>	A theatre, cinema, musical hall, concert hall, dance hall and the like, but does not include a pub, nightclub or registered club.
<b>Environmental facility</b>	A building or place that provides for the recreational use or scientific study of natural systems and including walking tracks, seating, shelters, board walks, observation decks, bird hides or the like, and associated display structures.
<b>Environmental protection works</b>	Works associated with the rehabilitation of land towards its natural state or any work to protect land from environmental degradation, and includes bush regeneration works, wetland protection works, erosion protection works, dune restoration and the like.
<b>EPA</b>	NSW Environment Protection Authority
<b>EP&amp;A Act</b>	Environmental Planning and Assessment Act 1979 (NSW)
<b>EPBC Act</b>	Environment Protection and Biodiversity Conservation Act 1999

<b>Existing leases</b>	All existing leases and interests in the land at the time the head lease was granted which are in effect as of the date of the Master Plan.
<b>FAA</b>	Federal Aviation Administration (USA)
<b>FBO</b>	Fixed base operator
<b>FEGPU</b>	Fixed electrical ground power unit
<b>Flight path movement maps</b>	These maps provide an indication of where aircraft fly and how many overflights there are over a particular period
<b>FOD</b>	Foreign object damage/foreign object debris
<b>Food and drink premises</b>	Premises that are used for the preparation and retail sale of food or drink (or both) for immediate consumption on or off the premises, and includes any of the following:  (a) a restaurant or cafe  (b) take away food and drink premises  (c) a pub  (d) a small bar
<b>Freight handling and transport facility</b>	A facility used principally for the bulk handling of goods for transport by road, rail, air or sea including any facility for the loading and unloading of vehicles, aircraft, vessels or containers used to transport those goods and for the parking, holding, servicing or repair of those vehicles, aircraft or vessels or for the engines or carriages involved.
<b>FTE</b>	Full time equivalent
<b>Function centre</b>	A building or place used for the holding of events, functions, conferences and the like, and includes convention centres, exhibition centres and reception centres, but does not include an entertainment facility.
<b>GA</b>	General aviation
<b>Gate</b>	Physical location where passengers depart/arrive at terminal to access aircraft – either directly for contact stands or via bus or walking for remote stands.
<b>GBAS</b>	Ground based augmentation system
<b>GDP</b>	Gross domestic product
<b>GEC</b>	Global economic corridor
<b>GLS</b>	Global landing systems
<b>GNSS</b>	Global navigation satellite systems
<b>GPS</b>	Global positioning system
<b>GSE</b>	Ground support equipment
<b>GSP</b>	Gross state product
<b>H5N1</b>	H5N1 bird flu
<b>Health care professional</b>	Any person registered under an Act for the purpose of providing health care.
<b>Helipad</b>	A place not open to the public used for the taking off and landing of helicopters.
<b>Heliport</b>	A place open to the public used for the taking off and landing of helicopters whether or not it includes:  (a) a terminal building, or  (b) facilities for the parking, storage or repair of helicopters
<b>Heritage conservation management plan</b>	A document that details the heritage significance of an item, place or heritage conservation area and identifies conservation policies and management mechanisms that are appropriate to enable that significance to be retained.
<b>Heritage impact statement</b>	A document consisting of:  (a) a statement demonstrating the heritage significance of a heritage item, archaeological site, place of Aboriginal heritage significance or other heritage conservation area, and  (b) an assessment of the impact that proposed development will have on that significance, and  (c) proposals for measures to minimise that impact

<b>Heritage item</b>	A building, work, archaeological site, tree, place or Aboriginal object described in an inventory of heritage items that is available at the head office of Sydney Airport.
<b>Heritage significance</b>	Archaeological, architectural, cultural, historical, natural or aesthetic value, scientific or social value.
<b>HIA</b>	Heritage impact assessment
<b>HIAL</b>	High intensity approach lighting
<b>Hotel or motel accommodation</b>	A building or place (whether or not licensed premises under the Liquor Act 2007 in accordance with the Airports (Control of On-Airport Activities) Regulations 1997 Part 1A):  (a) comprising rooms or self-contained suites, and  (b) that may provide meals to guests or the general public and facilities for the parking of guests' vehicles  but does not include backpackers accommodation, a boarding house, bed & breakfast accommodation or farm stay accommodation.
<b>HVAC</b>	Heating, ventilation, and air conditioning systems
<b>IATA</b>	International Air Transport Association
<b>ICAO</b>	International Civil Aviation Organisation
<b>ILS</b>	Instrument landing systems
<b>IMC</b>	Instrument meteorological conditions
<b>IMF</b>	International Monetary Fund
<b>Industrial retail outlet</b>	A building or place that:  (a) is used in conjunction with an industry (including a light industry) but not in conjunction with a warehouse or distribution centre, and  (b) is situated on the land on which the industry is carried out, and  (c) is used for the display or sale (whether by retail or wholesale) of only those goods that have been manufactured on the land on which the industry is carried out.  but does not include a warehouse or distribution centre.
<b>Industry</b>	Means the manufacturing, production, assembling, altering, formulating, repairing, renovating, ornamenting, finishing, cleaning, washing, dismantling, transforming, processing, recycling, adapting or servicing of, or the research and development of, any goods, substances, food, products or articles for commercial purposes, and includes any storage or transportation associated with any such activity.
<b>INM</b>	Integrated noise model
<b>IWI</b>	Illuminated wind indicators
<b>Jet Base</b>	Qantas Jet Base located in the North East Sector of the airport adjacent to Terminal 3.
<b>Joint Study</b>	Joint Study on aviation capacity in the Sydney region, Australian and NSW Governments, 2012
<b>JOSF</b>	Joint oil storage facility near T2 (now decommissioned)
<b>JUHI</b>	Joint user hydrant installation. An unincorporated joint venture currently comprising BP, Caltex, ExxonMobil, Shell and Qantas.
<b>JWG</b>	Transport for NSW and Sydney Airport joint working group
<b>Kiosk</b>	Retail premises used for the purposes of selling food, light refreshments and other small convenience items such as newspapers, films and the like.
<b>KPI</b>	Key performance indicator
<b>LAAS</b>	Local area augmentation systems
<b>Landscape and garden supplies</b>	A building or place used for the storage and sale of landscaping supplies such as soil, gravel, potting mix, mulch, sand, railway sleepers, screenings, rock and the like, and/or a building or place the principal purpose of which is the retail sale of plants and landscaping and gardening supplies and equipment. It may, if ancillary to the principal purpose for which the building or place is used, include a restaurant or cafe and the sale of any of the following: outdoor furniture and furnishings, barbecues, shading and awnings, pools, spas and associated supplies, and items associated with the construction and maintenance of outdoor areas; pets and pet supplies and/or fresh produce.

<b>LCC</b>	Low cost carrier
<b>LED</b>	Light emitting diode
<b>LEP</b>	Local environmental plan
<b>LGA</b>	Local government area
<b>Light industry</b>	A building or place used to carry out an industrial activity that does not interfere with the amenity of the neighbourhood by reason of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, or otherwise, and includes high technology industry.
<b>Liquid fuel depot and distribution facility</b>	Storage and distribution premises that are used for the bulk storage and distribution of petrol, oil, petroleum or other inflammable liquid for aircraft and airport vehicles.
<b>LTOP</b>	Long Term Operating Plan
<b>LTOP IMC</b>	Long Term Operating Plan implementation and monitoring committee
<b>LTTMP</b>	Long Term Transport Master Plan (NSW Government)
<b>MAGS</b>	Movement area guidance sign
<b>Manoeuvring areas</b>	That part of the aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.
<b>Marina</b>	A permanent boat storage facility (whether located wholly on land, wholly on the waterway or partly on land and partly on the waterway) together with any associated facilities, including any: <ul style="list-style-type: none"> <li>(a) facility for the construction, repair, maintenance, storage, sale of hire of boats, and</li> <li>(b) facility for providing fuelling, sewage pump-out or other services for boats, and</li> <li>(c) facility for launching or landing boats, such as slipways or hoists, and</li> <li>(d) associated car parking, commercial, tourist or recreational or club facility that is ancillary to a boat storage facility, and</li> <li>(e) associated single mooring</li> </ul>
<b>MDP</b>	Major development plan
<b>Medical centre</b>	Business premises used for the purpose of providing health services (including preventative care, diagnosis, medical or surgical treatment, counselling or alternative therapies) to outpatients only, where such services are principally provided by health care professionals, and may include the ancillary provision of other health services.
<b>Mixed use development</b>	A building or place comprising 2 or more different land uses, identified as permissible in the zone.
<b>MLAT</b>	Multilateration
<b>MMR</b>	Multi mode receivers
<b>MOS</b>	Manual of standards
<b>Movement areas</b>	That part of the aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the aprons.
<b>N70</b>	Noise events louder than 70dB(A)
<b>N70 contours</b>	These are one of a number of alternative noise descriptors. N70 refers to the number of noise events louder than 70dB(A) over a particular period. The level of 70dB(A) has been chosen because it is equivalent to the single event level of 60dB(A) specified in the Australian Standard AS2021 as the indoor design sound level for normal domestic areas in dwellings. An external single event noise level will be attenuated by approximately 10dB(A) by the fabric of a house with the windows open. An internal noise level of 60dB(A) is likely to interfere with conversation or with listening to radio or television. Airservices Australia publish regular N70 contour charts which will be able to be compared to the chart shown in the Master Plan.
<b>Navigational aids</b>	Any aircraft surveillance equipment, control towers, radars, visual and non-visual navigation aids and the like.
<b>NE sector</b>	North East Sector (of the airport)
<b>NFPMS</b>	Noise and flight path monitoring system
<b>NG</b>	New generation

<b>NMT</b>	Noise monitoring terminal
<b>NPI</b>	National pollutant inventory
<b>NSW</b>	New South Wales
<b>NSWDPI</b>	New South Wales Department of Planning and Infrastructure
<b>NW Sector</b>	North West Sector (of the airport)
<b>O&amp;D</b>	Origin and destination
<b>OECD</b>	Organisation for economic co-operation and development
<b>OEH</b>	NSW Office of Environment and Heritage
<b>Office premises</b>	A building or place used for the purpose of administrative, clerical, technical, professional or similar activities that do not include dealing with members of the public at the building or place on a direct and regular basis, except where such dealing is a minor activity (by appointment) that is ancillary to the main purpose for which the building or place is used.
<b>OLS</b>	Obstacle limitation surface
<b>OTS</b>	Office of Transport Security
<b>PANS-OPS</b>	Procedures for air navigation services – aircraft operations
<b>PAPIS</b>	Precision approach path indicator system
<b>Parking space</b>	A space dedicated for the parking of a motor vehicle, including any manoeuvring space and access to it, but does not include a car park.
<b>Passenger transport facility</b>	A building or place used for the assembly or dispersal of passengers by any form of transport, including public transport and facilities required for parking, manoeuvring, storage or routine servicing of any vehicle that uses the building or place.
<b>PCA</b>	Preconditioned air
<b>PDMP</b>	Preliminary Draft Master Plan
<b>Precision approach runway, category I</b>	An instrument runway served by instrument landing systems (ILS) or microwave landing systems (MLS) and visual aids intended for operations with a decision height not lower than 60m (200ft) and either a visibility not less than 800m or a runway visual range not less than 550m.
<b>PRM</b>	Precision runway monitor
<b>Pub</b>	Licensed premises under the Liquor Act 1982, the principal purpose of which is the sale of liquor for consumption on the premises, whether or not the premises include hotel or motel accommodation and whether or not food is sold on the premises, but excludes gaming facilities.
<b>Public administration building</b>	A building or facility used for offices, administrative, training, equipment storage, or other like purposes by the Crown, a statutory body, a council or an organisation established for public purposes, and includes police station, customs, aviation rescue and fire fighting services and the like.
<b>RAAF</b>	Royal Australian Air Force
<b>RBP</b>	Representative busy period
<b>Recreation area</b>	A place used for outdoor recreation that is normally open to the public, and includes: (a) a children’s playground, or (b) an area used for community sporting activities, or (c) a park, reserve or garden or the like (d) and any ancillary buildings but does not include a recreation facility (indoor), recreation facility (major) or recreation facility (outdoor).
<b>REF</b>	Review of environmental factors
<b>Registered club</b>	A registered club means a club that in accordance with the requirements of the Airports (Control of On-Airport Activities) Regulations 1997, holds licence under the Liquor Act 2007.
<b>REP</b>	Regional environmental plan
<b>RESA</b>	Runway end safety area

<b>Research station</b>	A building or place for the principal purpose of agricultural, environmental, fisheries, forestry, meteorological, minerals, scientific or soil data collection or research and includes any associated facility to education, training, administration or accommodation.
<b>Respite</b>	A respite hour is a whole clock hour where there are no aircraft movements over a particular area in that hour.
<b>Restaurant</b>	A building or place the principal purpose of which is the preparation and serving, on a retail basis, of food and drink to people for consumption on the premises, whether or not liquor, takeaway meals and drinks or entertainment are also provided.
<b>RET</b>	Rapid exit taxiway
<b>Retail premises</b>	A building or place used for the purpose of selling items by retail, or for hiring or displaying items for the purpose of selling them by retail or hiring them out, whether the items are goods or materials (or whether also sold by wholesale).
<b>RMO</b>	Runway modes of operation
<b>RMS</b>	Roads and Maritime Services (NSW)
<b>RNP</b>	Required navigation performance
<b>Road</b>	A public road or a private road within the meaning of the Roads Act 1993 and includes a classified road
<b>RPK</b>	Revenue per passenger kilometre
<b>RPT</b>	Regular public transport
<b>RTA</b>	Roads and Traffic Authority (now Roads and Maritime Services)
<b>Runway</b>	A paved strip on which aeroplanes land and take off.
<b>Runway strips</b>	Runway strips are areas surrounding a runway and are provided to reduce the risk of damage to aircraft running off runways and also to provide obstacle-free airspace for aircraft flying over the area during takeoff or landing operations
<b>Runways</b>	<p>Runways are the defined areas provided for the landing and taking-off of aircraft. Sydney Airport has three runways, which are identified by international convention by a two-part designator derived from the direction in which the aircraft is flying:</p> <ul style="list-style-type: none"> <li>• Runway 16R/34L is the main north-south runway</li> <li>• Runway 16L/34R is the shorter parallel north-south runway</li> <li>• Runway 07/25 is the east west runway.</li> </ul> <p>Runways 16R and 16L are used by aircraft landing or taking off towards the south. 16 approximates to a compass bearing of 160°. The R and L designators refer to right and left respectively when viewed from the direction in which the aircraft is flying. This serves to distinguish between the respective runways.</p> <p>Runway 34L is used by aircraft landing or taking off towards the north. 34 approximates to a compass bearing of 340°.</p> <p>Runway 34R is used by aircraft landing towards the north and taking off to the north-east and east.</p> <p>Runway 07 is used by aircraft landing or taking off towards the east. 07 approximates to a compass bearing of 70°.</p> <p>Runway 25 is used by aircraft landing or taking off towards the west. 25 approximates to a compass bearing of 250°.</p>
<b>RWTP</b>	Recycled water treatment plant
<b>Rwy</b>	Runway
<b>SACF</b>	Sydney Airport Community Forum
<b>SARS</b>	Severe acute respiratory syndrome
<b>Self-storage units</b>	Storage premises that consist of individual enclosed compartments for storing goods or materials (other than hazardous or offensive goods or materials).
<b>SEPP</b>	State environmental planning policy

<b>Service station</b>	A building or place used for the sale by retail of fuels and lubricants for motor vehicles, whether or not the building or place is also used for any one or more of the following:  (a) the ancillary sale by retail of spare parts and accessories for motor vehicles  (b) the cleaning of motor vehicles  (c) installation of accessories  (d) inspecting, repairing and servicing of motor vehicles (other than body building, panel beating, spray painting or chassis restoration)  (e) the ancillary retail selling or hiring of general merchandise or services or both
<b>SE Sector</b>	South East Sector (of the airport)
<b>Sewage reticulation system</b>	A building or place used for the collection and transfer of sewage to a sewage treatment plant or water recycling facility for treatment, or transfer of the treated waste for use or disposal, including associated:  (a) Pipelines and tunnels, and  (b) Pumping stations, and  (c) Dosing facilities, and  (d) Odour control works, and  (e) Sewage overflow structures, and  (f) Vent stacks
<b>SHA</b>	Strategic highway assignment model (Roads and Maritime Services)
<b>Shop</b>	Premises that sell merchandise such as groceries, personal care products, clothing, music, homewares, stationery, electrical goods or the like or that hire any such merchandise, and includes a convenience store but does not include food and drink premises or restricted premises.
<b>SIDS</b>	Standard instrument departures
<b>Signage</b>	Any sign, notice, device, representation or advertisement that advertises or promotes any goods, services or events and any structure or vessel that is principally designed for, or that is used for, the display of signage, and includes:  (a) Building identification signs, and  (b) Business identification signs, and  (c) Advertisements,  but does not include traffic signs or traffic control facilities
<b>SIS</b>	State infrastructure strategy
<b>SMP</b>	Stormwater management plan
<b>SMR</b>	Surface movement radar
<b>SMS</b>	Safety management system
<b>SODPROPS</b>	Simultaneous opposite direction parallel runway operations. A noise sharing procedure where aircraft depart and arrive over Botany Bay. Runway 16L is used for departures and Runway 34L is used for arrivals. This can only be operated in good weather conditions with low winds.
<b>SQID</b>	Stormwater quality improvement device
<b>SREP</b>	Sydney Regional Environmental Plan
<b>SSR</b>	Secondary surveillance radar
<b>Stand</b>	Physical location of an aircraft parking position for either passenger or cargo aircraft.
<b>STARS</b>	Standard arrival routes
<b>Storage premises</b>	A building or place used for the storage of goods, materials, plant or machinery for commercial purposes and where the storage is not ancillary to any business premises or retail premises on the same parcel of land.

<b>Structures</b>	Means: (a) Bridges (b) Fences (c) Towers and pylons (d) Tents and other temporary structures
<b>SW Sector</b>	South West Sector (of the airport)
<b>SWSOOS</b>	Southern and western suburbs ocean outfall sewer
<b>SYD consent</b>	Sydney Airport Corporation Limited's written consent, as required under Regulation 2.03(4) of the Airports (Building Control) Regulations.
<b>T-VASIS</b>	T-visual approach slope indicator systems
<b>T1</b>	Terminal 1 (international terminal – common user)
<b>T2</b>	Terminal 2 (domestic terminal – common user)
<b>T3</b>	Terminal 3 (Qantas domestic terminal)
<b>TAAM</b>	Total airport and airspace modeler
<b>Takeaway food and drink premises</b>	Food and drink premises that are predominantly used for the preparation and sale of food or drink (or both) for immediate consumption away from the premises.
<b>TAR</b>	Terminal area radar
<b>Taxiway</b>	A paved strip used by aircraft in taxiing to and from a terminal or runway
<b>Taxiways</b>	Taxiways are defined paths providing for the safe and expeditious surface movement of aircraft between runways and aprons. Due to its traffic levels, Sydney Airport has a complex taxiway system including rapid exit taxiways (RETs). RETs enable aircraft, after landing, to vacate runways at higher speeds, thus reducing runway occupancy time.
<b>TBus</b>	Sydney Airport terminal transfer shuttle bus service between T1 and T2/T3.
<b>TCU</b>	Terminal control unit
<b>Temporary structure</b>	Includes a booth, tent or other temporary enclosure (whether or not part of the booth, tent or enclosure is permanent), and also includes a mobile structure.
<b>TFI</b>	Tourism Futures International
<b>TfNSW</b>	Transport for New South Wales
<b>Thresholds</b>	Points on the runway from which the landing distance available to an aircraft is measured. A threshold is determined with reference to the obstacle-free approach gradient required for the particular category of runway. Where there is no obstacle infringement, the threshold and runway end normally coincide. Where obstacles infringe the approach surface it is necessary to displace the threshold to achieve the required obstacle-free gradient. A number of Sydney Airport's runways have displaced thresholds.
<b>TLOF</b>	Helicopter touch down and lift off area
<b>Tourist or visitor accommodation</b>	A building or place that provides temporary or short-term accommodation on a commercial basis, and includes hotel or motel accommodation, serviced apartments, bed and breakfast accommodation and backpackers' accommodation.
<b>Transfer corridor</b>	Provision of an area for the facilitation of inter-terminal transfers of passengers and baggage.
<b>Transport depot</b>	A building or place used for the parking or servicing of motor powered or motor drawn vehicles used in connection with a passenger transport undertaking, business, industry or shop.
<b>Trigeneration plant</b>	A plant that simultaneously provides electricity, heating, and cooling.
<b>TSP</b>	Transport security program
<b>ULD</b>	Unit load devices
<b>UST</b>	Underground storage tanks

<b>Utility undertaking</b>	<p>Any of the following undertakings carried on, or permitted to be carried on by authority of any government department or under the authority of or in pursuance of any commonwealth or state Act:</p> <p>(a) railway, road transport, water transport, air transport, wharf or river undertakings</p> <p>(b) undertakings for the supply of water, hydraulic power, electricity or gas or the provision of sewerage or drainage services, and</p> <p>a reference to a person carrying on a utility undertaking includes a reference to a council, electricity supply authority, government department, corporation, firm or authority carrying on the undertaking.</p>
<b>Vehicle sales or hire premises</b>	A building or place used for the display, sale (whether by retail or wholesale) or hire of motor vehicles, caravans, boats, trailers, agricultural machinery and the like, whether or not accessories are sold or displayed there.
<b>VET</b>	Visitor Economy Taskforce (NSW)
<b>VIP</b>	Very important person
<b>VOR</b>	Very high frequency omnidirectional range
<b>WAM</b>	Wide area multilateration system
<b>Warehouse or distribution centre</b>	A building or place used mainly or exclusively for storing or handling items (whether goods or materials) pending their sale or distribution, but from which no retail sales are made.
<b>Waterway or foreshore management activities</b>	<p>Activities comprising:</p> <p>(a) riparian corridor and bank management, including erosion control, bank stabilisation, re snagging, weed management, revegetation and the creation of foreshore access ways,</p> <p>(b) in-stream management or dredging to rehabilitate aquatic habitat or to maintain or restore environmental flows or tidal flows for ecological purposes, and</p> <p>(c) Coastal management and beach nourishment, including erosion control, dune or foreshore stabilisation works, headland management, revegetation activities and foreshore access ways.</p>
<b>WestConnex</b>	A proposed motorway to link the M4 motorway to the M5 East motorway at Sydney Airport.
<b>Wholesale supplies</b>	The display, sale or hire of goods or materials by wholesale only to businesses that have an Australian business number registered under the A New Tax System (Australian Business Number) Act 1999 of the Commonwealth.
<b>Works depot</b>	A building or place used for the storage (but not sale or hire) of plant, machinery or other goods (that support the operations of an existing undertaking, including construction) when not required for use. This includes ancillary temporary office facilities and amenities supporting such a depot.
<b>WWG</b>	Wildlife working group at Sydney Airport





# APPENDIX I

# APPENDIX I MASTER PLAN PREPARATION, CONSULTATION AND USE OF INDEPENDENT EXPERTS

## 1.0 Introduction

This appendix sets out the process by which key elements of the Master Plan have been prepared.

In order to produce a robust Master Plan that firmly establishes the strategic direction for the efficient and economic development of the airport, Sydney Airport has engaged leading independent experts and undertaken an extensive stakeholder consultation process to ensure that the new development proposal has been fully explored, concerns identified and alternatives considered.

All of the independent experts engaged by Sydney Airport are internationally recognised in their respective fields with many years of experience.

As noted in Chapter 1, Community Consultation and Engagement, Sydney Airport's approach to consultation when preparing the Master Plan has exceeded the statutory requirements of the Airports Act 1996, and is consistent with the Australian Government's suggested approach for effective consultation, as outlined in the Airport Development Consultation Guidelines (2007). The consultation process for the Master Plan commenced in December 2011 when Sydney Airport announced a New Vision for the airport. The feedback received during the extensive consultation undertaken during 2012 and the first half 2013 has informed the preparation of the Master Plan. Following the public exhibition period between June and August, Sydney Airport has given due regard to all the submissions received, and has undertaken additional work and made adjustments throughout the Master Plan where appropriate.

In addition, in order to confirm the quality and outcomes of the work carried out by the independent experts, Sydney Airport has engaged additional experts to undertake peer reviews. As a further check in the preparation of the Master Plan, Sydney Airport has worked closely with both federal and state government technical experts to test the assumptions used in the various analyses, to ensure that Sydney Airport has the capacity to meet the forecast growth in airport activity over the planning period.

The use of independent experts and the high level of consultation achieved are clearly demonstrated in the development of:

- Airport traffic forecasts
- Airport traffic schedule
- Aircraft stand demand and design
- Airfield modelling and design
- The ANEF (Australian noise exposure forecast)
- Ground transport vehicle forecasts
- Ground transport modelling and design

For each of the above elements of the Master Plan, **Table I1** provides a summary of the independent consultants engaged, consultation undertaken, and peer reviews performed.

**Table I1 Independent experts and consultation of particular Master Plan elements**

Master Plan element	Independent expert(s)	Consultation	Peer reviewer(s)
<b>Airport traffic forecasts</b>	Tourism Futures International (TFI)	Airline Network Planners	CAPA
<b>Airport traffic schedule</b>	Airbiz	TFI, ACA, Airline Network Planners	—
<b>Aircraft stand demand and design</b>	Airbiz	Airline Airport Planners	Landrum & Brown (L&B)
<b>Airfield modelling and design</b>	Airbiz	Airservices, CASA, BARA, Airline Pilots	Airservices; L&B
<b>ANEF</b>	Airbiz (& Wilkinson Murray)	Airservices, Department of Infrastructure and Regional Development, Airport Noise Ombudsman	Marshall Day, Airservices
<b>Ground transport vehicle forecasts</b>	AECOM, TfNSW	TfNSW and RMS	—
<b>Ground transport modelling design</b>	AECOM	TfNSW and RMS	—

## 2.0 Master Plan Element

### 2.1 Airport traffic forecasts

The annual forecasts that appear in the Master Plan were prepared by Tourism Futures International (TFI). TFI is a research-oriented company specialising in the future of aviation, travel and tourism. TFI has been very active in the consulting area for over 20 years, undertaking projects for airports, airlines and tourism organisations in Australia, New Zealand and the Pacific as well as in Asia and the Middle East. TFI has produced forecasts for:

- Sydney Airport’s previous approved master plans
- All of the larger and many regional airports in Australia, including all of the capital city airports.
- Auckland, Wellington, Dunedin and a number of smaller airports in New Zealand
- Airports across Asia including Hong Kong and major airports in India

The forecasts were prepared in an iterative manner in consultation with key airlines and their representatives to review assumptions and issues. TFI has stated that these consultations were the most extensive that TFI has been involved with, and provided TFI with detailed airline input to the development of the forecast. The airline consultation and inputs included:

- Detailed input that airlines provided to Sydney Airport as part of the New Vision discussions
- Meetings during the preparation of the draft forecasts and additional meetings following the preparation of the draft forecasts
- Discussion of methodology, assumptions and the draft forecasts. This included discussions of passenger demand, aircraft types, seating densities, load factors, frequencies, peak and off-peak operations, turnaround times, belly-hold freight and other factors
- Meetings with the Board of Airline Representative of Australia (BARA), the Regional Airlines Association of Australia (RAAA), and the network development teams of Virgin Australia, Qantas Group airlines (Qantas, QantasLink and Jetstar), Regional Express Group (Rex) and Air New Zealand

Following delivery of the draft forecasts they were peer-reviewed by CAPA Centre for Aviation. CAPA, established in 1990, is the leading provider of independent aviation market intelligence, analysis and data services, covering worldwide developments.

## 2.2 Airport traffic schedule

In consultation with TFI, Airbiz has taken the annual forecasts and prepared the representative day forecast schedules. Schedules were prepared for selected years, including 2018 (+ five years) and 2033 (+ 20 years). As a result of working closely with TFI, the schedules prepared by Airbiz have a high level of input from each of the major international, domestic and regional airlines serving Sydney Airport. Consultation was also undertaken with Airport Co-ordination Australia (ACA) and the Qantas Group.

Airbiz is an independent international aviation consultancy specialising in various aspects of aviation business including strategic planning, simulation and modeling, airport operations, terminal design, traffic projections, route development, and planning. The Airbiz team consists of airport and terminal planners, business analysts, aviation marketing specialists, project facilitators, simulation experts and creative strategists. The company provides expert advice to airport owners, operators, investors, airlines, government agencies and other aviation stakeholders. Airbiz has offices throughout Australia, New Zealand and Canada. With over 30 years' experience in the aviation industry the Airbiz team has successfully completed over 2,000 projects in 50 countries, on five continents. In recent years, Airbiz has undertaken studies for all the first and second level airports in the region.

## 2.3 Aircraft stand demand and design

From the representative 'busy day' forecast schedules, Airbiz has prepared aircraft stand and terminal passenger demand forecasts for assessing facility requirements.

Following the public exhibition of the PDMP, Sydney Airport engaged Airbiz to undertake a sensitivity analysis to understand how the development plan responds to the level of demand (particularly in relation to aircraft gauge). This analysis has demonstrated that the development plan is able to respond to a wide range of demand forecasts and as a result is 'future-proofed'.

Sydney Airport also engaged Landrum & Brown to peer review the aircraft stand demand and terminal design. L&B confirmed that the development plan included sufficient aircraft stands to meet the forecast demand.

L&B is a global leader in airport and aviation planning. The company is the oldest privately owned consultancy dedicated solely to the needs of the commercial aviation community, focusing on environmental and airport planning solutions. L&B's team of qualified and experienced professionals has established a strong reputation for delivering innovative aviation planning solutions to clients in markets as diverse as North America, Europe, the Middle East, India, Greater China, Asia and Australasia.

## 2.4 Airfield modelling and design

From the representative busy day forecast schedules, Airbiz has also prepared runway demand forecasts for assessing facility requirements. The airfield model was prepared using the comprehensive airport simulation technology (CAST) fast time simulation model. The model is a gate to gate real time simulator of aircraft movements. The CAST simulation model was structured around the 2033 Master Plan plan for the airfield movement area layout, the 2033 representative busy day forecast schedule, and weather assumptions facilitating maximum runway capacity in all runway modes of operation. Aircraft runway allocations in the airfield model are in accordance with parameters provided by Airservices Australia.

This model confirmed that the Master Plan development concept for the airfield layout is capable of efficiently handling the predicted traffic volumes. The modelling was reviewed by Airservices Australia, CASA, BARA, Qantas and Virgin.

The development concept for the airfield was prepared on the basis of being compliant with the Civil Aviation Safety Authority's manual of standards (MOS) Part 139 – Aerodromes.

As noted in Section 2.3, following the public exhibition of the PDMP, Sydney Airport engaged Airbiz to undertake a sensitivity analysis to understand how the development plan responds to the level of demand (particularly in relation to aircraft gauge). This analysis has demonstrated that the development plan is able to respond to a wide range of demand forecasts and as a result is 'future-proofed'.

Sydney Airport also engaged Landrum & Brown to peer review the Airfield Model and Airfield Design. L&B confirmed that the proposed airfield developments and operational improvements provide sufficient capacity and capability to meet demand.

## 2.5 Australian noise exposure forecast (ANEF)

The Airports Act 1996 requires that the Master Plan contains an Australian noise exposure forecast (ANEF). This document is the official forecast of future noise exposure patterns around the airport, and it constitutes the contours on which land planning authorities (ie. local councils) base their controls.

The ANEF 2033 for Sydney Airport is based on the traffic forecasts developed by TFI and schedules developed Airbiz. Wilkinson Murray prepared the ANEF 2033 document as a sub-consultant to Airbiz.

Sydney Airport also employed Marshall Day to peer review the ANEF 2033 prior to consultation with the state government and local councils.

Wilkinson Murray is an international firm which provides acoustical and air quality consulting services. The firm was originally formed as Carr and Wilkinson in 1962 and has operated in its current form since 1976. Wilkinson Murray's clients are primarily from government, transportation, manufacturing, resources and construction and the company is currently involved in major projects throughout Australia, Asia and Africa.

Marshall Day is a firm of acoustic consultants and noise control engineers with a proud history as an innovative, creative and specialist acoustic consultancy at an international and local level. Marshall Day was established in 1981 and has offices across Australia. The company's experience encompasses building acoustics, planning and resource consents, environmental noise, industrial and marine noise control, and structural dynamics and vibration analysis.

In accordance with the Airports Act 1996, Sydney Airport provided the NSW Department of Planning and Infrastructure and the 15 councils in the vicinity of Sydney Airport with an opportunity to comment on the draft ANEF 2033 and paid due regard to all issues raised. Following this consultation, the draft ANEF 2033 was endorsed by Airservices Australia for technical accuracy in December 2012 before being included in the Preliminary Draft Master Plan.

In addition, during the process, Sydney Airport consulted extensively with Airservices Australia, the Department of Infrastructure & Regional Development, and the Airport Noise Ombudsman.

In order to provide the community with relevant and accurate information about noise impacts in a way that can be easily understood, Wilkinson Murray has also prepared the following noise descriptors – flight path movement charts and frequency-based aircraft noise charts.

## **2.6 Ground transport vehicle forecasts**

The ground transport vehicle forecasts were prepared by AECOM, a global professional services company providing transportation services.

To forecast demand for ground access, AECOM used the projected passenger movements (from aircraft arrivals and departures) from the airport passenger forecasts undertaken by TFI. The passenger movements were plotted by time of day of arrivals to and departures from the airport, so that the distribution of peak activity at each terminal was understood.

A comprehensive survey of over 14,000 passengers, visitors and staff was jointly commissioned by Sydney Airport and TfNSW in June 2012. This survey provided information on the journeys people took to and from the airport, including how they travelled, and their origin and destination. Using this data, mode share proportions dependent on passenger type (ie. international/domestic and arriving/departing) were applied to passenger volumes to generate movements by mode. Vehicle occupancy rates were then applied to generate traffic volumes. Staff, freight, logistics, and commercial traffic were also included.

The demand model was calibrated to 2012 observed data so that it provided a clear representation of existing conditions. As a result, the demand model provided a suitable basis from which future year demands for 2018 and 2033 could be derived.

In preparing the vehicle forecasts, Sydney Airport and AECOM worked closely with Transport for NSW (TfNSW) and Roads and Maritime Services (RMS). In particular, TfNSW provided the regional traffic forecasts which set a baseline for traffic to and from the airport as well as a baseline for traffic through the airport precinct.

AECOM provides transportation modelling and design services in more than 100 countries and has been ranked No. 1 in Transportation globally for 10 consecutive years. AECOM's transportation division has been operating in Australia for over 30 years, during which time it has delivered strategic and detailed transportation modelling and design services for private and government projects.

Specifically relevant to this work for Sydney Airport, AECOM has completed ground access planning for airports including Melbourne, Brisbane and the Gold Coast, and has performed transport studies and modelling for major NSW transport projects including the Sydney CBD corridor modelling and the Port Botany Transport Improvement Plan. The AECOM team assembled for this work included leading transport planners, strategic modellers, simulation specialists, urban planners, aviation specialists and civil engineering specialists. AECOM has extensive Australian and international teams who were drawn upon to ensure the global skills and experience were applied to this work.

## **2.7 Ground transport modelling and design**

As noted in Section 2.6, Sydney Airport engaged in a collaborative working relationship with TfNSW and RMS to assess the transport access needs of the airport and the wider network around the airport. Sydney Airport will continue to work with TfNSW and RMS to further refine the proposals with an aim to achieve optimal outcomes.

Using the demand model outputs received from Sydney Airport, RMS incorporated the forecasts into their standard road model. The RMS model considers population and employment growth in the metropolitan area as well as future road network changes. RMS provided the resultant traffic outputs for the area surrounding Sydney Airport so that an assessment of local infrastructure changes could be made.

AECOM has undertaken detailed micro-simulation traffic modelling (using Commuter software) for the roads in the vicinity of the airport. Likewise for the demand model, the traffic simulation model was developed to replicate observed conditions in 2012. This again resulted in a platform from which future year models could be developed.

Subsequently, assessment of road infrastructure and operational changes required to support the short and long term demands was undertaken to ensure the final solution could effectively accommodate the forecast traffic movements.

Modelling shows that planned road changes in the Terminal 1 (T1) and Terminal 2/Terminal 3 (T2/T3) precincts, together with NSW Government initiatives outside the airport boundary, will deliver improved traffic flow around the precinct with increased capacity for traffic throughput.

Ground transport modelling undertaken by AECOM demonstrates that the proposed strategy and the state government initiatives, including the WestConnex motorway system, have the ability to meet the forecast traffic demands around the airport beyond the 2033 horizon of the Master Plan.

J

**APPENDIX J**

# APPENDIX J BIBLIOGRAPHY

## Commonwealth legislation

Airports Act 1996

Airports Regulation 1997

Airports (Building Controls) Regulation 1996

Airports (Environment Protection) Regulations 1997

Airports (Protection of Airspace) Regulations 1996

Air Navigation Act 1920

Air Navigation Regulations 1947

Air Navigation (Aerodrome Flight Corridors) Regulations 1994

Air Navigation (Aircraft Engine Emissions) Regulations

Air Navigation (Aircraft Noise) Regulations 1984

Air Services Act 1995

Air Services Regulations 1995

Air Services Act 1995 – Direction pursuant to section 16 concerning environmental responsibilities of Airservices Australia

Air Services Act 1995 – Direction pursuant to section 16 concerning the responsibilities of Airservices Australia in respect of the environmental effects of aircraft

Air Services Act 1995 – Direction pursuant to section 16 concerning the Sydney Airport Long Term Operating Plan

Australian Dangerous Goods Code (7th Edition), Department of Infrastructure and Transport, viewed 27 November 2012, [http://www.infrastructure.gov.au/transport/australia/dangerous/dg\\_code\\_6e.aspx](http://www.infrastructure.gov.au/transport/australia/dangerous/dg_code_6e.aspx) (accessed March 2013)

Australian Explosives Code

Australian Heritage Council Act 2003

Aviation Transport Security Act, 2004

Aviation Transport Security Regulations, 2005 (Aviation Security Laws)

Civil Aviation Safety Regulations 1998

Clean Energy Legislative Package, including: Clean Energy Act 2011; Clean Energy (Consequential Amendments) Act 2011; Clean Energy Regulator Act 2011; Climate Change Authority Act 2011; Clean Energy (Fuel Tax Legislation Amendment) Act 2011; Clean Energy (Excise Tariff Legislation Amendment) Act 2012; Clean Energy (Customs Tariff Amendment) Act 2012; and Clean Energy Legislation Amendment Act 2012

Environment Protection and Biodiversity Conservation Act 1998

Environment Protection and Biodiversity Conservation Regulations 2000

Hazardous Waste (Regulation of Exports and Imports) Act 1989

National Environment Protection (Air Toxics) Measure

National Environment Protection (National Pollutant Inventory) Measure 1998

National Environment Protection (Diesel Vehicle Emissions) Measure 2001

National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998

National Environment Protection (Assessment of Site Contamination) Measure 1999

National Environment Protection (Used Packaging Materials) Measure 2011

National Greenhouse and Energy Reporting (NGER) Legislation and Regulations, including: National Greenhouse and Energy Reporting Act 2007; National Greenhouse and Energy Reporting Regulations 2008; National Greenhouse and Energy Reporting (Measurement) Determination 2008; National Greenhouse and Energy Reporting (Audit) Determination 2009; and National Greenhouse and Energy Reporting (Auditor Registration) Instrument 2010

Ozone Protection and Synthetic Greenhouse Gas Management Act 1989

Product Stewardship Act 2011

Sydney Airport Curfew Act 1995  
Sydney Airport Curfew Regulations 1995  
Sydney Airport Demand Management Act 1997  
Sydney Airport Demand Management Regulations 1998  
Work Health and Safety Act 2011  
Work Health and Safety Regulations 2011

### **New South Wales legislation**

Contaminated Land Management Act 1997  
Contaminated Land Management Regulation 2008  
Energy and Utilities Administration Act 1987 – Part 6A  
Environmental Planning and Assessment Act 1979  
Environmental Planning and Assessment Regulations 2000  
Environmentally Hazardous Chemicals Act 1985  
Fisheries Management Act 1994  
Gas Supply Act 1996  
Heritage Act 1977  
National Parks and Wildlife Act 1974 – Parts 7 and 7A  
Noxious Weeds Act 1993  
Protection of the Environment Operations Act 1997  
Protection of the Environment Operations (Clean Air) Regulation 2002 – Part 3  
Protection of the Environment Operations (Noise Control) Regulation 2008  
Protection of the Environment Operations (Waste) Regulation 2005  
Protection of the Environment Operations (Underground Petroleum Storage Systems) Regulation 2008  
Threatened Species Conservation Act 1995  
Threatened Species Conservation Regulations 2010  
Waste Avoidance and Resource Recovery Act 2001  
Water Management Act 2000  
Work Health and Safety Act 2011  
Work Health and Safety Regulation 2011

### **State and local planning instruments**

Botany Local Environmental Plan 1995  
Botany Bay Local Environmental Plan 2013  
Local Planning Directions issued under section 117(2) of the Environmental Planning and Assessment Act  
Marrickville Local Environmental Plan 2011  
Rockdale Local Environmental Plan 2011  
Sydney Local Environmental Plan 2005  
Sydney Local Environmental Plan 2012  
Sydney Regional Environmental Plan 33 – Cooks Cove

### **Other publications**

Airport Development Consultation Guidelines, Department of Infrastructure and Transport, 2007.  
A New Planning System for NSW, NSW Government, 2012  
Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (as amended in 2005), Australian and New Zealand Governments, viewed on 27 November 2012, <http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html> (accessed March 2013)  
Australian Noise Exposure Index Reports, Airservices Australia (published quarterly)

Australian Standard AS/NZS ISO 14001:2004 Environmental management systems – Requirements with guidance for use

Australian Standard 2021 - 2000 – Acoustics – Aircraft Noise Intrusion – Building Siting and Construction

Australian Standard AS 1940-2004 – The Storage and Handling of Flammable and Combustible Liquids, amended in 2004 and 2006)

Aviation Industry Commitment to Action on Climate Change (2008), viewed 27 November 2012, [http://www.enviro.aero/Content/Upload/File/ATAG\\_declaration\\_Eng.pdf](http://www.enviro.aero/Content/Upload/File/ATAG_declaration_Eng.pdf) (accessed March 2013)

China – Australia Migratory Bird Agreement (CAMBA), 1988

Contaminated Sites: Guidelines for Assessing Service Station Sites, NSW Environment Protection Authority, viewed 27 November 2012, <http://www.environment.nsw.gov.au/clm/servicestation.htm> (accessed March 2013)

Cultural and Natural Heritage Values of Sydney Kingsford Smith Airport, Biosis Research Pty Ltd, 2001

Directory of Important Wetlands in Australia, Department of Sustainability, Environment, Water, Population and Communities, viewed 27 November 2012, <http://www.environment.gov.au/water/topics/wetlands/database/diwa.html> (accessed March 2013)

Draft Metropolitan Strategy for Sydney 2031, Department of Planning and Infrastructure, 2013

Draft Subregional Strategy (East subregion), Department of Planning, 2007

Draft Subregional Strategy (South subregion), Department of Planning, 2007

Draft Subregional Strategy (City of Sydney subregion), Department of Planning, 2008

Expanding ways to describe and assess aircraft noise: Discussion paper, Australian Government 2000

Falling on Deaf Ears, Senate Select Committee on Aircraft Noise, Parliament of Australia, Canberra, 1995

First Things First: State Infrastructure Strategy 2012 – 2032, Infrastructure NSW, 2012

Global Aviation and Our Sustainable Future: International Civil Aviation Organization (ICAO) Briefing for RIO +20, ICAO, 2012

Guidance Material for the Preparation of Airport Environment Strategies by Airport Lessee Companies, Department of Infrastructure and Transport, 2009.

Japan – Australia Migratory Bird Agreement (JAMBA), 1981

Joint study on aviation capacity in the Sydney region, Australian and NSW Governments, 2012

Long Term Operating Plan for Sydney Airport, Australian Government, 1996

Long Term Operating Plan for Sydney Airport: Proponent’s Statement, Australian Government, 1997

Long Term Operating Plan: Review of LTOP Performance, Airplan, 2005

Long Term Operating Plan: Review of LTOP Performance – Supplementary Report, Airplan, 2006

Metropolitan Plan for Sydney 2036, NSW Government, 2010

National Airports Safeguarding Framework, Australian Government, 2012

National Aviation Policy White Paper, Australian Government, 2009

National Pollutant Inventory Emission Estimation Technique Manual for Airports, Department of Environment, Water, Heritage and the Arts, 2008

National Waste Policy, Department of Sustainability, Environment, Water, Population and Communities, viewed on 27 November 2012, <http://www.environment.gov.au/wastepolicy/index.html> (accessed March 2013)

National Water Quality Management Strategy, Australian Government, from 1992 (see <http://www.environment.gov.au/water/policy-programs/hwqms/> (accessed March 2013)

Night Noise Guidelines for Europe, World Health Organisation, 2009

Noise Monitoring report: A380 vs B747-400, Airservices Australia, 2008

NSW Long Term Transport Master Plan, NSW Government, 2012

NSW 2021: A Plan to Make NSW Number One, NSW Government, 2012

NSW Waste Avoidance and Resource Recovery Strategy, NSW Environment Protection Authority, viewed on 27 November 2012, <http://www.environment.nsw.gov.au/warr/WARRStrategy2003.htm> (accessed March 2013)

Plane simple truth: Clearing the air on aviation’s environmental impact, G Thomas, G Norris, S Creedy, C Forbes Smith and R Pepper, 2008

Planning Multi-airport systems in Metropolitan Regions in the 1990s, US Federal Aviation Administration, 2000

Proposed Third Runway, Sydney (Kingsford Smith) Airport, Kinhill Engineers Pty Ltd (prepared for Federal Airports Corporation), 1990

Proposed Third Runway, Sydney (Kingsford Smith) Airport: Supplement to the Draft Environment Impact Statement, Kinhill Engineers Pty Ltd (prepared for Federal Airports Corporation), 1991

Sydney Airport Annual Review, Sydney Airport Corporation Limited, 2011

Sydney Airport Heritage Management Plan, Godden Mackay Logan, 2009

Sydney Airport Master Plan 03/04, Sydney Airport Corporation Limited, 2003

Sydney Airport Master Plan 2009, Sydney Airport Corporation Limited, 2009

Airport Environment Strategy 1999 – 2004, Sydney Airport Corporation Limited, 1999

Airport Environment Strategy 2005 – 2010, Sydney Airport Corporation Limited, 2005

Airport Environment Strategy 2010 – 2015, Sydney Airport Corporation Limited, 2010

Sydney Airport Ground Travel Plan, Sydney Airport Corporation Limited, 2006

Sydney Airport Operational Statistics, Airservices Australia (published monthly)

Sydney Airport Noise and Flight Path Monitoring System Reports, Airservices Australia (published quarterly)

Sydney's Rail Future: Modernising Sydney's Trains, NSW Government, 2012

The Economic Value of Sydney Airport, Deloitte Access Economics Pty Ltd, 2013

The Health Effects of Environmental Noise – Other Than Hearing Loss, Australian Health Council, 2004

Waste Classification Guidelines, NSW Environment Protection Authority, viewed on 27 November 2012, <http://www.environment.nsw.gov.au/waste/envguidlms/index.htm> (accessed March 2013)

Wetlands policy of the Commonwealth Government of Australia, Environment Australia, 1997







# Sydney Airport Master Plan 2033