



Darwin International Airport MASTER PLAN & ENVIRONMENT STRATEGY Preliminary Draft 2009

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SUMMARY
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ENVIRONMENT STRATEGY
Preliminary Draft
2009

SUMMARY

I am pleased to present Darwin International Airport's 2009 Preliminary Draft Master Plan and the 2009 Preliminary Draft Airport Environment Strategy.

Darwin International Airport Pty Ltd (DIA) has a 50 year lease plus 49 year option over the Darwin International Airport from the Commonwealth of Australia under the *Airports Act 1996*. DIA is also a Joint User Airport under the *Airports Act* and a Joint User Deed with the Department of Defence governs the co-located operation of DIA and RAAF Base Darwin.

DIA is positioning itself as a growing international gateway to Australia and the Northern Territory and is strategically important to the growth and development of the Northern Territory's tourism, trade, business and leisure activity.

The 2009 Master Plan and the 2009 Airport Environment Strategy (AES) retain the fundamental concepts of the 1999 and 2004 Plans. The changes that have been made largely reflect:

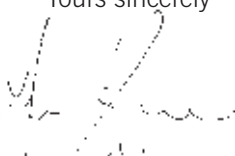
- the developing aviation industry structure with low cost carriers, the Darwin hubbing strategy and projected growth of aviation activity;
- the evolving Airport business, the needs of business partners and community requirements;
- the potential to diversify airport income by expanding the property portfolio; and
- sharpened focus on achieving more measurable environmental results.

The 20 year Master Plan provides a 2029 development concept for long term development as an airport with an optimal mix of aeronautical and non-aeronautical uses.

The AES outlines how we will build on our environmental achievements and continue to put systems in place to meet our environmental aspirations over the next 5 years and into the future. The AES provides the mechanisms to both better manage our environmental risks and further integrate and embed sustainable environmental management into every aspect of our business.

I encourage your feedback on the 2009 Preliminary Draft Master Plan and the 2009 Preliminary Draft Airport Environment Strategy for Darwin International Airport.

Yours sincerely



IAN KEW

Chief Executive Officer



2009 Preliminary Draft MASTER PLAN

Social, Economic and Regional Significance

Darwin International Airport is a key commercial, military and recreational facility for Northern Australia.

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The Airport's direct contribution of economic activity to the Northern Territory economy constitutes some 2% of Northern Territory Gross State Product (GSP). The Airport currently employs some 960 people in airport operations related activity and an additional 680 in other airport businesses.

In 2029/30, the projected annual output (or revenue) will be \$1.186 billion, and its value added (or contribution to GSP) will be \$648 million per year (both in today's dollar values). Approximately 40 percent of the value added (\$272 million in today's dollars) will go to employees as wages and other income. Total employment at the Airport will grow to some 3,600 by the end 2029/30.

Land Use map



Darwin International Airport's General Aviation sector, comprising 185 aircraft is essential to provision of services to Northern Australia's remote communities.

Airport Land Use

Land use planning is fundamental to an Airport Master Plan and is specifically highlighted in the Act. Land use planning in the 2009 Master Plan:

- ensures there is adequate land for expansion of aviation activity;
- clearly separates aeronautical and non aeronautical uses;
- has been developed using terminology and definitions consistent with that of the Northern Territory Planning Scheme where possible; and
- provides a considerable amount of land for conservation reserves.

A new land zone is Aviation Reservation which preserves land for ultimate aeronautical use but provides for a non aeronautical interim use.

Refer to Land Use map below left.

General Aviation

General Aviation facilities are nearing capacity and there is a requirement for additional General Aviation infrastructure at the Airport.

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During the preparation of this Master Plan specific studies were conducted on future General Aviation demand and car parking requirements. The amount of land in the Aviation Reserve Zone provides a significant area for expansion of General Aviation facilities both within and beyond the 20 year planning period. General Aviation facilities will be developed on a commercial basis.

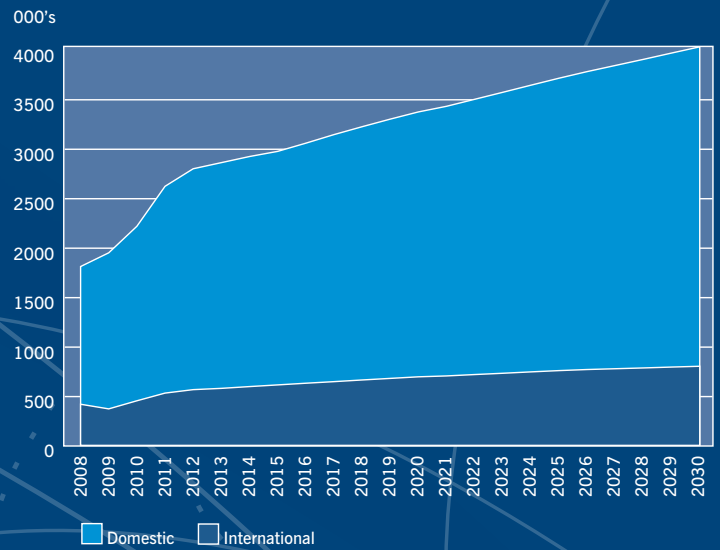
Aviation Activity Forecasts

Darwin International Airport's passenger numbers have grown strongly over the past 5 years, with over 1.8 million passengers passing through the terminal in 2008.

It is projected that by 2029:

- passenger movements, including transit and transferring passengers, will increase from just over 1.8 million passengers to approximately 4 million passengers; and
- combined Airline and General Aviation aircraft movements will grow from 88,000 movements to some 130,000 movements per year.

DARWIN INTERNATIONAL AIRPORT FORECAST PASSENGER MOVEMENTS (Including transit and transfer)



Aircraft Noise Management

As a Joint User Airport, Darwin has both civil and military aircraft movements. DIA as the civil airport operator has little direct control over noise produced by aircraft operations other than civil ground running.

The most important noise metric at an airport is the Australian Noise Exposure Forecast (ANEF). The ANEF is a set of geographical contours showing future aircraft noise levels and is used for building control both on the Airport and in areas surrounding the Airport.

The Master Plan incorporates a 2049 ANEF in order to provide a longer term view of aircraft noise than the minimum 20 year ANEF required.

In developing the joint civil-military ANEF consideration was given to the appropriate scenario for military movements. It was determined that the appropriate scenario was the representation of military movements at the Airport which characterises normal military movements (excluding peak exercise periods).

Refer to Joint civil-military 2049 ANEF diagram below.

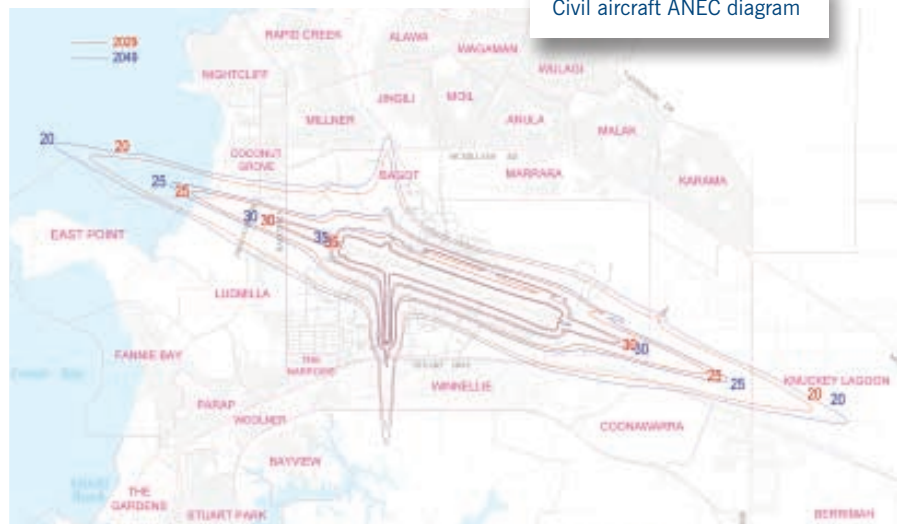
Civil aircraft noise either in 2029 or 2049 has limited impact outside the Airport boundary.

Refer to Civil aircraft ANEF diagram below.

Joint civil-military 2049 ANEF diagram



Civil aircraft ANEF diagram



“The Airport’s direct contribution of economic activity to the Northern Territory economy constitutes some 2% of Northern Territory GSP.”

Land Access

Projected growth in both aviation traffic and commercial development will result in an increase in daily airport trips from around 15,000 currently to some 48,000 in 2029. A feature of the overall trip generation will be commercial development focused along Osgood Drive.

The major external access development concept is a new all movements signalised intersection off McMillans Rd which will connect with Osgood Drive. The new intersection will be located between Rapid Creek and Sabine Roads.

The approach to development of the internal road network will be to:

- maximise the use of existing road capacity;
- segregation of passenger and non-passenger (eg maintenance, commercial developments) traffic as far as practicable; and
- progressive enhancement of road system capacity in line with demand.

A parking study has indicated a medium term requirement for multi-level parking capacity. The location of one or more multi-level car parks during the planning period will be subject to detailed planning and design at the time.

Environmental Management of Developments

DIA strives to integrate environmental considerations into the development of facilities and services and seeks to minimise their impact on the natural environment.

In order to minimise any environmental impact of potential developments presented in the 2009 Master Plan, individual projects will be subject to environmental assessment appropriate to the development. A Construction Environmental Management Plan (CEMP) will be developed where required.

All proposed developments will take into consideration the procedures and requirements contained in the Airport Environment Strategy (AES).

The 2009 Master Plan provides for some 28 hectares of land to cater for conservation and recreation activities. DIA will continue to enhance the airport environment and make areas publicly accessible where practicable.



Development Concept

Darwin International Airport's Development Concept demonstrates that the Airport can accommodate forecast growth in aircraft movements and passenger activity, aviation support facilities and commercial developments.

The 2029 Development Concept, as illustrated, is based on comprehensive technical studies, wide consultation and confidence in the future of the Airport business.

Refer to 2029 DIA Development Concept below

- No runway extensions are needed within the planning period. The existing runway system is adequate to cater for future projected traffic and is proposed to be retained in its existing configuration.
- Lengthening of Runway 18/36 is not required for civilian operations within or beyond the planning period.
- Taxiway system enhancement is needed to support the increase in Airline and General Aviation traffic and support new apron areas.
- The main apron will continue to effectively use the space and infrastructure available and expand in a linear manner and wrap around the terminal to the north-west until such time that the terminal demand triggers the need to alter this concept to cater for a pier terminal development.
- The 72 hectares in the Service Commercial, Commercial and Tourist Commercial Zones will be developed as commercial opportunities arise. A demand study for the greater Darwin region has estimated that some 153,000m² of development could occur in the Service Commercial and Commercial Zones over the next 20 years.
- Development planning in the Service Commercial Zone aims to provide the first fully integrated and planned precinct of its kind in the Northern Territory. It is envisaged that development in this zone will offer a premium level of centrally located commercial and retail space.

2029 DIA Development Concept



2009 Preliminary Draft ENVIRONMENT STRATEGY

Since privatisation of Darwin International Airport, DIA has laid the groundwork for sustainable environmental management, guided by the 1999 and then the 2004 Airport Environment Strategies (AES).

Recent Achievements

Some environmental achievements over the last 5 years have been:

- No significant environmental incident as defined by the *Airports Act*;
- Construction of a stormwater retention basin in a joint venture with the Department of Defence to reduce erosion and area flooding, plus reduce storm event flows into the Ludmilla Creek system;
- Establishment of a 15 hectare Conservation Reserve in partnership with Greening Australia. The partnership was awarded 1st place in the Commercial/Industry category of the 2008 NT Melaleuca Awards;
- Public amenity features have been installed by the Airport within the Rapid Creek Environment Reserve. This includes approximately 2.5km of public nature trails, picnic tables and resting seats, interpretive signage and stabilised entry points to the creek enabling safe public access without destroying the fragile creek banks.
- DIA created a landscaped environment alongside a developing quality airport business. To achieve this, the airport worked closely with Greening Australian NT and developed an Airport Landscaping Master Plan.

The 2009 AES is a revision of the 2004 AES and reflects a sharpened focus on achieving more measurable environmental results. It highlights outcomes the public can expect over the next five years and describes how DIA and relevant stakeholders intend to achieve these results.

The environmental management attributes addressed in this AES include:

- **Water** – minimise the impact of airport operations on water quality;
- **Land** – effective land management practices for the facilitation of safe and sustainable airport operations, whilst minimising detrimental effects on the Airport site, neighbouring land and the atmosphere;
- **Biodiversity** – protect rare and endangered species, natural habitats, flora and fauna wherever practicable. Minimise the rate and risk of bird and animal aircraft strikes;
- **Air Quality and Emissions** – minimise air emissions from airport ground activity. In particular greenhouse gases and ozone depleting substances;
- **Noise** – to ensure noise and vibration levels from civil ground running aircraft and other ground activity operations are compliant with relevant noise standards;
- **Hazardous Materials** – manage hazardous material storage, use and disposal in a manner that minimises risk to the surrounding environment;
- **Waste** – to minimise waste production from all Darwin International Airport operations and recycle waste products wherever practical.
- **Resource Use** – Minimise the use of non-renewable resources, through energy efficiency and use of renewable resources wherever practicable.
- **Cultural Heritage** – to preserve identified cultural heritage sites;
- **Development** – integrate environmental considerations into the development of facilities and services and seek to minimise their impact on the natural environment;
- **Tenants** – work with tenants and operators to ensure that best environment practice continue to be implemented in all Airport operations; and
- **Community** – promotion of positive relationships with community stakeholders for the implementation of environmental initiatives.



Consultation

Darwin International Airport is committed to effective and genuine consultation with all key stakeholders.

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The 2009 Preliminary Draft Master Plan (MP) and the 2009 Preliminary Draft Airport Environment Strategy (AES) are being released to the public for comment; however considerable consultation has already occurred. During preparation of the Preliminary Drafts, DIA has undertaken consultation with government agencies, airlines, general aviation operators, airport businesses, as well as community groups to scope the major issues. Consultation will continue through the public comment period.

As part of the public comment period, DIA proposes the following mediums and locations:

- Copies of the MP and AES will be available from the Darwin International Airport Management Centre and on www.darwinairport.com.au;
- Copies of the MP and AES will be available for viewing at the Darwin, Casuarina and Palmerston Public libraries;
- Public Display at the airport; and
- Public Display and face to face consultation at the Royal Darwin Show 23rd – 25th July 2009.

Darwin International Airport encourages you to read the Preliminary Draft Master Plan and Preliminary Draft Airport Environment Strategy and welcomes your feedback. Please refer to the “How to Comment Factsheet” on how to submit your feedback.

contact

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