## Projection of flight activity through the Australian Air Space

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## For:

AIRSERVICES AUSTRALIA

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## Introduction and major highlights

Projection of passenger demand

Projection of Jjuch ionnege
Projection of averege distance

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## Introduction.

層 At the request of AirServices Australia, IATA's forecasting experts produced a projection of aircraft activity through the Australian airspace for the next 6 years.

層 The IATA's forecasting experts has gained the right expertise thanks to undertaking several traffic studies in the recent past covering Australia as well as flight activity studies made for several air navigation services providers in the world.

요을 The IATA's forecasting experts constructed a model which is made up of mathematical links between all traffic components starting from passenger demand to flight activity and the number of charging units, through a series of indicators such as the average number of passenger per flight, average tones of MTOW tons and average flying distance over the Australian airspace.

## Methodology for the construction of historical figures.

莤 The data source.
$\checkmark$ A first file provided by ASA containing flight information for all aircraft regardless of their size, such as :

- Origin and Destination (4-letter ICAO code). When it is a pure local flight, the origin was blank.
- Aircraft code and MTOW tonnage
- Distance across the Australian Airspace
- Number of flights by month between January 1998 and December 2002
- However, the number of international flights were covering departures only whereas for domestic traffic all flights were covered.
$\checkmark$ A second file provided by ASA containing the same information but for aircraft with 5.7 tonnes and over, assumed to exclude general aviation flights, and covering the period January 1998 to September 2003, and also excluding all-cargo flights.
$\checkmark$ A third file provided by ASA containing the same information but for cargo aircraft and covering the period.
$\checkmark$ A fourth file provided by ASA containing the same information but for aircraft below 5.7 tonnes of MTOW for the period January to September 2003, to be a complement to the first file which covers the period up to December 2002 only.
$\checkmark$ The estimations of cargo flights were obtained from ASA which used a "filter" to isolate them from the other aircraft.


## Methodology for the construction of historical figures (continued).

The flight categorisation by origin-destination.
$\checkmark$ Each origin destination ICAO code was associated to a country.

- For Australia, the key airports of Sydney, Melbourne and Brisbane were isolated from the rest of the country.
- When the origin did not have a code, it meant that the flight was pure local (touch \& go, training) and thus was eliminated from the database so that the analysis is focused on origin-destination flights.
$\checkmark$ Flights for which both the origin and destination was not in Australia were considered as pure overflights.
$\checkmark$ All these flights were assigned to the relevant route area determined for the pertinence of the analysis. The domestic route areas are :
- Sydney - Melbourne;
- Sydney - Brisbane;
- Sydney - Rest of Australia;
- Melbourne - Rest of Australia;
- Brisbane - Rest of Australia and
- Domestic - Rest of Australia (all the other domestic flights not included in the above grouping).


## Methodology for the construction of historical figures (continued).

置 The flight categorisation by origin-destination (continued).
$\checkmark$ The international route areas are :

- Australia - Africa
- Australia - New Zealand
- Australia - Northeast Asia
- Includes China, Japan, Taiwan, Hong Kong, Korea.
- Australia - South Pacific
- New Caledonia, Fiji, Hawaii (considered as a separate entity from the USA) and all other countries located in the Pacific region and which are not included in the Australia - Southeast Asia category.
- Australia - S-SE Asia/Europe/Middle East
- Southeast Asia which includes Indonesia, Singapore, Thailand, Malaysia, Philippines, Vietnam, Cambodia, Brunei, Lao and Myanmar.
- South Asia which includes India, Pakistan, Sri Lanka, Maldives and Nepal
- Europe
- Middle East
- Australia - Transpacific
- North America (Hawaii is not considered to be in North America, although it is a US State)
- Central and South America
- Australia - Undetermined
- All ICAO origin-destination codes for which it was not possible to identify the country they belong to.


## Methodology for the construction of historical figures (continued).

The flight categorisation by category of flight.
$\checkmark$ Following recommendations from ASA it was assumed that all flights with aircraft with 5.7 tonnes of MTOW and over were commercial flights and all flights below 5.7 tonnes were general aviation flights.
$\checkmark$ All flights with aircraft below 5.7 tonnes were considered as general aviation or noncommercial.
$\checkmark$ Cargo flights were isolated from passenger flights given the fact that ASA provided two

- The composition of the database for the fiscal year 2002-2003.
$\checkmark$ Total number of flights with aircraft of 5.7 tonnes and over, including cargo flights $=$ 604,486.
$\checkmark$ Total number of flights where both the origin and destination were not in Australia (pure overflights) = 12,045.
$\checkmark$ Total aircraft with aircraft below 5.7 tonnes (excluding pure local - touch-and-go flights) $=563,027$
$\checkmark$ Total flights in the entire database (excluding touch-and-go flights) $=1,179,558$.


## Methodology for the construction of historical figures (continued).

를 The charging units have been constructed differently for aircraft with less than 20 tonnes and aircraft of 20 tonnes and over.

㗝 For aircraft with less than 20 tonnes :
$\checkmark$ Average MTOW tonnes x (distance divided by 100) x number of flights, then divided by the square root of 20.

을 For aircraft with 20 tonnes and over :
$\checkmark$ Square root of average MTOW tonnes x (distance divided by 100) x number of flights.

## Assumptions

욜 Assumptions were made for the projected evolution of passenger load factors, average aircraft size, average distance flown as well as for the mix if flights between the two weight categories (less than 20 tonnes and over 20 tonnes).

줄 Detailed on these assumptions can be found for each route area in Chapter 9.

## Projection of the total number of charging units.

Projected evolution of the number of charging units


## Projected annual rates of growth in the number of charging units.

Projected annual rates of growth in the number of charging units


## The projection of charging units by aircraft size category.

Projected evolution of the number of charging units between aircraft size categories


## 1

## 2

Introduction and major highilights

## Projection of passenger demand

Projection of average passengers per flight
Projection of the number of flights
Projection of Mitow tonnage
Projection of ayerage distance
Projection of MJTOW tonne-silometres
Projection of the number of charging units
Detailed table construction and assumptions
Appendix

## Evolution of Passengers in Australia.

를 In this section, the historical traffic figures was taken from various AVSTAT publications.
$\checkmark$ All domestic figures include regional passenger figures.
$\checkmark$ In this section all figures are on a fiscal basis.
Airline passengers in Australia, similar to the rest of the world, tends to grow year over year.
$\checkmark$ Since 1980/81 traffic has grown every year expect:

- 1982/83; 1989/1990 and 2001/2002 for the domestic market and
- 2002/02 for the international market. Consultancy
Forecasting


## Except for a few specific years, traffic grows annually.

 Passenger Evolution in Australia

## Passenger Traffic Growth.

兽 In 2001/02, passengers in Australia neared 76 million passengers making this one of the largest markets in Asia.
$\checkmark \quad$ The Australian market is much larger than any other Asian markets, in part due to its developed economy but also because Australia is one of the few markets in the region who has such an important domestic market.

尊 The international market is historically and still today is much smaller than the domestic market but growing quicker.

## Evolution of passenger figures in Australia

| Passenger Figures |  |  |  |
| :---: | :---: | :---: | :---: |
| 1980/81 | 1990/91 | 1995/96 | 2001/02 |


| Domestic |
| :--- |
| International |
| Total |


| $22,761,596$ | $28,190,050$ | $53,536,084$ | $59,495,583$ |
| ---: | ---: | ---: | ---: |
| $4,108,265$ | $8,424,511$ | $12,679,451$ | $16,407,887$ |
| $26,869,861$ | $36,614,561$ | $66,215,535$ | $75,903,470$ |


| Growth Rates <br> $1980 / 81-2001 / 02$ |  |  |
| :---: | :---: | :---: |
| 1990/91-2001/02 | 1996/97-2001/02 |  |
| $4.3 \%$ | $5.9 \%$ | $1.7 \%$ |
| $\mathbf{6 . 8 \%}$ | $6.2 \%$ | $3.6 \%$ |
| $\mathbf{4 . 8 \%}$ | $5.9 \%$ | $\mathbf{2 . 1 \%}$ |

## Because the international market is growing faster, over time it has a larger portion of the total Australian market. <br> Share of International Passengers in Australia



## The two largest Australian domestic routes account for about 40\% of all domestic passengers.

| Top Domestic Routes in Australia |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
| Rank Route $2001 / 02$ $2002 / 03$ Share <br> in 2002/03 AAGR <br> 1 MEL-SYD $5,421,075$ $5,352,499$ $18.7 \%$ $-1.3 \%$ <br> 2 BNE-SYD $3,717,785$ $3,502,613$ $12.3 \%$ $-5.8 \%$ <br> 3 BNE-MEL $2,227,196$ $2,209,892$ $7.7 \%$ $-0.8 \%$ <br> 4 ADL-MEL $1,405,945$ $1,428,450$ $5.0 \%$ $1.6 \%$ <br> 5 ADL-SYD $1,161,088$ $1,241,672$ $4.3 \%$ $6.9 \%$ <br>  Other $10,209,048$ $14,815,980$ $51.9 \%$ $45.1 \%$ <br>  Total $24,142,137$ $28,551,106$ $100.0 \%$ $18.3 \%$ |  |  |  |  |  |

Note: Figures are taken from AVSTAT but do not compare directly with domestic figures on previous pages.

## Sydney is the international gateway to Australia accounting for almost half of all international passengers.

욜 But over the next few years, we expect growth in international travel to be less important for Sydney than for the other Australian airports.
$\checkmark$ For example the emergence of Australian Airlines, has focused its development essentially out of Cairns to serve certain low yield markets to Northeast Asia.


Note: Figures are taken from AVSTAT but are based on Calendar and hence can not be compared directly with those on previous pages.

## Domestic traffic growth ：using as a starting base a regression model and using GDP growth projections．

䀦 Regression based on historical Australian GDP．
$\checkmark$ Historical data taken from WEFA and Consensus Economics．
定 Regression was based on calendar passenger data．
$\checkmark$ Given that GDP is available only on an annual basis the regressions had to be performed on a calendar basis．

을 Forecast GDP taken from Consensus Economics．
曾 Many models were tested and the best model was selected．
－The forecast figures were adjusted in two cases：
$\checkmark$ The 2003 figures were estimated．We took the latest actual 2003 figures and based on OAG figures we estimated the remainder of the year where we took into considerations the fact that the industry，in general，is showing signs of recovery and the fact that Australia hosted the Rugby World Cup．
$\checkmark$ Figures in 2004 we are also adjusted to take into account the start of a low cost carrier（LCC）by Qantas in 2004.
－We assumed that Qantas would operate 23 aircraft and would first chose to serve the main Australian trunk routes．

## Domestic traffic growth : using as a starting base a regression model, using GDP growth projections.

Domestic Passengers (Actual vs Fit)


Estimated domestic passenger traffic forecast figures.
Domestic Passengers


## International passenger forecast．

層 The international passenger forecast was taken from IATA＇s latest passenger forecast survey which was published in October 2003.
$\checkmark$ However，since this survey was produced in the summer of 2003，the year－by－year recovery shape was reflecting the opinion of the airline participants as of June－July 2003 and with no knowledge on how traffic actually developed during the period January to September 2003.
$\checkmark$ Although we have agreed to retain the IATA medium－term average trends for international traffic to／from Australia，particular efforts have been made to adjust the year－by－year trend to show a more optimistic picture for the fiscal year 2003－2004 than what airlines had originally submitted，having better information on 2003 trends than airline had at that time．It meant to show a more rapid recuperation than shown in the IATA forecast survey for the first year rather than showing the bulk of the growth to be taking place in the later years．

曾 2002 historical passenger figures were provided by IATA member carriers and might differ from that AVSTAT source．

酋 IATA international passenger forecast is based on calendar years and it was necessary to adjust the figures to translate to fiscal．

## International passenger forecast (continued).

요효 The IATA forecast shows for calendar year 2003 the effect of SARS and the Gulf war in most of the route areas, with a recovery to be spread during the two subsequent years.
$\checkmark \quad$ It was decided to adjust these year-by-year trends to benefit from more information on airline activities taking place in late 2003 early 2004 that was not available to the survey participants at the time they produced their forecasts.
$\checkmark \quad$ This is true especially for Asian routes which are expected to recover fairly quickly but the TransPacific route is expected to lag compared to the Asian routes.

## IATA International Passenger Forecast for Australia By Key Route Areas, in Thousands

| Route Area | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | AAGR | Share <br> 2002 | Share <br> 2007 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  |  | 1,789 | 1,732 | 1,863 | 2,001 | 2,107 | 2,179 | $4.0 \%$ | $10.1 \%$ |
| $9.4 \%$ |  |  |  |  |  |  |  |  |  |
| Americas (Trans-Pacific) | 274 | 342 | 387 | 418 | 447 | 472 | $11.5 \%$ | $1.5 \%$ | $2.0 \%$ |
| Middle East | 1,914 | 1,831 | 1,953 | 2,095 | 2,236 | 2,363 | $4.3 \%$ | $10.8 \%$ | $10.2 \%$ |
| Europe | 219 | 239 | 258 | 281 | 306 | 332 | $8.6 \%$ | $1.2 \%$ | $1.4 \%$ |
| Africa | 236 | 284 | 298 | 314 | 330 | 347 | $8.0 \%$ | $1.3 \%$ | $1.5 \%$ |
| Central/South Asia | 6,082 | 5,516 | 6,077 | 6,826 | 7,373 | 7,905 | $5.4 \%$ | $34.3 \%$ | $34.0 \%$ |
| Southeast Asia | 3,920 | 3,524 | 4,023 | 4,705 | 5,193 | 5,650 | $7.6 \%$ | $22.1 \%$ | $24.3 \%$ |
| Northeast Asia | 491 | 447 | 493 | 542 | 581 | 618 | $4.7 \%$ | $2.8 \%$ | $2.7 \%$ |
| South Pacific (w/o NZ) | 2,828 | 2,938 | 3,020 | 3,152 | 3,254 | 3,375 | $3.6 \%$ | $15.9 \%$ | $14.5 \%$ |
| New Zealand | 17,753 | 16,852 | 18,372 | 20,334 | 21,827 | 23,239 | $5.5 \%$ | $100.0 \%$ | $100.0 \%$ |
| Total |  |  |  |  |  |  |  |  |  |

## International passenger forecast (continued).

| IATA International RPK Forecast for Australia By Key Route Areas, in Millions |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | AAGR | Share <br> 2002 | Share <br> 2007 |
| Americas (Trans-Pacific) | 22,870 | 22,103 | 23,791 | 25,564 | 26,911 | 27,830 | 4.0\% | 16.8\% | 15.6\% |
| Middle East | 3,053 | 3,816 | 4,312 | 4,657 | 4,983 | 5,257 | 11.5\% | 2.2\% | 3.0\% |
| Europe | 32,582 | 31,223 | 33,313 | 35,753 | 38,129 | 40,301 | 4.3\% | 24.0\% | 22.6\% |
| Africa | 2,084 | 2,270 | 2,457 | 2,683 | 2,920 | 3,170 | 8.7\% | 1.5\% | 1.8\% |
| Central/South Asia | 2,303 | 2,738 | 2,877 | 3,040 | 3,201 | 3,365 | 7.9\% | 1.7\% | 1.9\% |
| Southeast Asia | 35,192 | 32,172 | 35,394 | 39,675 | 42,774 | 45,766 | 5.4\% | 25.9\% | 25.7\% |
| Northeast Asia | 28,515 | 25,678 | 29,311 | 34,266 | 37,803 | 41,111 | 7.6\% | 21.0\% | 23.1\% |
| South Pacific (w/o NZ) | 2,544 | 2,217 | 2,512 | 2,794 | 3,009 | 3,223 | 4.8\% | 1.9\% | 1.8\% |
| New Zealand | 6,686 | 6,945 | 7,139 | 7,451 | 7,693 | 7,978 | 3.6\% | 4.9\% | 4.5\% |
| Total | 135,829 | 129,162 | 141,106 | 155,884 | 167,424 | 178,000 | 5.6\% | 100.0\% | 100.0\% |

## International passenger traffic ：prospects for growth in 2003－2004．

盆 Australia－Africa route area ：
$\checkmark$ A fairly robust growth anticipated for calendar year 2003 and also fiscal year 2003－ 2004.
$\checkmark$ One of the driving force for this growth ：Air Mauritius capacity increases between Mauritius and both Perth and Melbourne（but Qantas is dropping out of the Mauritius market）．
$\checkmark$ The other main driver is SAA（the largest operator on this route area）which also plans expansion．
$\checkmark$ Qantas increases capacity on the JNB－SYD route．

## 益 Australia－New Zealand ：

$\checkmark$ Introduction of services（on a fifth freedom basis）by Emirates between New Zealand and Sydney，Melbourne and Brisbane．
$\checkmark$ Air New Zealand expands capacity by around 9\％during the 2003－2004 period over the 2002－2003 period．

## 益 Australia－Northeast Asia ：

$\checkmark$ Rapid recovery for most airlines after a depressed Spring 2003，making the FY 2003－ 2004 to experience a strong growth based on a collapsed base year（2002－2003）．
$\checkmark$ This is particularly true for the Chinese market，whereas the Taiwan and Japan markets will not see a strong recovery．
$\checkmark$ Expansion of Australian Airlines activities out of Cairns．

## International passenger traffic : prospects for growth in 2003-2004 (continued).

屏 Australia - South Pacific:
$\checkmark$ Strong growth in capacity anticipated for Fiji (with Air Pacific), which will be the driving force for growth in the whole route area.

腷 Australia - S-SE Asia/Europe/Middle East :
$\checkmark$ The driving force for growth in 2003-2004 will be from Emirates (between Perth and Dubai), Malaysian Airlines (between Kuala Lumpur and Adelaide, Perth, Sydney and Brisbane) and Thai Airways.
$\checkmark$ Expansion of Australian activities out of Cairns (to Singapore) but also out of Sydney and Melbourne to Denpasar.
$\checkmark$ Fast growing Vietnam market.
을 Australia - Transpacific :
$\checkmark$ Moderate capacity development planned by United Airlines.
$\checkmark \quad$ The US market in general is not yet expected to recover during that fiscal year. Such recovery is likely to take place in the subsequent years.

## Virgin Blue International Operations (Pacific Blue)

울 Currently the OAG shows no international flights operated by Pacific Blue (Virgin Blue).
$\checkmark$ Virgin Blue plans on starting international operations from Australia to/ from New Zealand but also to other destinations such as Fiji and Vanuatu.

- For those destinations it has recently obtained operating rights.
$\checkmark$ It has recently applied to fly to New Caledonia but has not yet received rights to operate.
- But it should receive those rights its most likely a question of time.
$\checkmark$ Currently, no flights can be found in the OAG even if Virgin Blue (Pacific Blue) was recently quoted as saying that it would operate to/ from New Zealand in March 2004 for example.
$\checkmark$ At this point we choose to be conservative and assumed that Pacific Blue would operate to these points over the forecast period but our approach was cautious as we assumed that its expansion would remain fairly small compared to the current overall seats offering.
$\checkmark$ Furthermore, the introduction of these new services could result in a scale down of capacity provided by the incumbent airlines.


## Projection of passenger traffic on pure overflights.

㞔 The approach used :
$\checkmark$ Determine total seating capacity on all overflights identified from the ASA data and identify origin-destination countries.
$\checkmark$ Assume passenger load factors based on industry trends as known from IATA statistics.
$\checkmark$ Construct passenger traffic levels for the base year (fiscal year 2002-2003).
$\checkmark$ Apply the IATA projected rates of growth for passenger traffic on the origindestination markets identified.

色 The markets :
$\checkmark$ Essentially New Zealand to/from Southeast Asia/Middle East/Europe.

## Projection of passenger traffic on non-commercial flights.

層 The number of passengers carried on non-commercial flights was estimated by assuming a load factor of $80 \%$ applied to an estimated number of seats available.

욜 The number of seats has been estimated for each aircraft type using the IATA aircraft database.

壁 The projection of passenger traffic was made by using a simple extrapolation of trends, not having enough elements to produce a sound econometric based forecast.

## Passenger traffic construction - past trends.

| Passenger dem and <br> projections |
| :--- |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | \% <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | N <br> change |


| Sydney - Melbourne <br> Sydney - Brisbane <br> Sydney - Rest of Australia <br> Melbourne - Rest of Australia <br> Brisbane - Rest of Australia <br> Domestic - Rest of Australia <br> Total Domestic <br> Australia - Africa <br> Australia - New Zealand <br> Australia - Northeast Asia <br> Australia - South Pacific <br> Australia - S-SE Asia/Eur/MEA <br> Australia - Transpacific <br> Australia - Undetermined <br> Total International <br> Cargo flights <br> Domestic International <br> Total O-D flights <br> Pure overlfights <br> Non-Commercfial flights <br> Total flights |
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|  |  |  | 6,731,806 |  | 5,421,075 | -19.5\% | 5,352,499 | -1.3\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 4,693,787 |  | 3,717,785 | -20.8\% | 3,502,613 | -5.8\% |
|  |  |  | 5,814,907 |  | 4,002,013 | -31.2\% | 5,161,230 | 29.0\% |
|  |  |  | 5,503,679 |  | 4,484,140 | -18.5\% | 5,074,999 | 13.2\% |
|  |  |  | 5,315,482 |  | 4,868,194 | -8.4\% | 5,020,952 | 3.1\% |
|  |  |  | 4,041,733 |  | 4,648,930 | 15.0\% | 4,438,622 | -4.5\% |
|  |  |  | 32,101,394 |  | 27,142,137 | -15.4\% | 28,550,915 | 5.2\% |
|  |  |  |  |  | 265,500 |  | 251,232 | -5.4\% |
|  |  |  |  |  | 3,461,996 |  | 3,691,409 | 6.6\% |
|  |  |  |  |  | 3,442,556 |  | 3,568,547 | 3.7\% |
|  |  |  |  |  | 855,701 |  | 877,253 | 2.5\% |
|  |  |  |  |  | 6,998,911 |  | 6,887,376 | -1.6\% |
|  |  |  |  |  | 1,383,223 |  | 1,347,265 | -2.6\% |
|  |  |  |  |  | 234,169 |  | 235,111 | 0.4\% |
|  |  |  |  |  | 16,642,056 |  | 16,858,193 | 1.3\% |
|  |  |  |  |  | 0 |  | 0 |  |
|  |  |  |  |  | 0 |  | 0 |  |
|  |  |  |  |  | 0 |  | 0 |  |
|  |  |  |  |  | 43,784,193 |  | 45,409,108 | 3.7\% |
| 1,969,443 | 2,226,463 | 13.1\% | 2,178,960 | -2.1\% | 2,371,348 | 8.8\% | 2,314,466 | -2.4\% |
| 2,856,272 | 2,773,426 | -2.9\% | 2,992,999 | 7.9\% | 2,797,336 | -6.5\% | 2,689,786 | -3.8\% |
|  |  |  |  |  | 48,952,878 |  | 50,413,360 | 3.0\% | Forecasting

## Passenger Forecast by route : Summary results.

| Passenger dem and <br> projections |
| :--- |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | \% <br> change | Number | $\%$ <br> change | Number | \% change | Number | \% <br> change | Number | \% change | Number | \% change |

Average
Annual
Grow th

| 5,698,118 | 6.5\% | 6,014,416 | 5.6\% | 6,241,057 | 3.8\% | 6,421,849 | 2.9\% | 6,591,729 | 2.6\% | 6,746,343 | 2.3\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3,688,943 | 5.3\% | 3,872,085 | 5.0\% | 4,000,595 | 3.3\% | 4,102,667 | 2.6\% | 4,203,005 | 2.4\% | 4,293,197 | 2.1\% |
| 5,581,183 | 8.1\% | 6,015,541 | 7.8\% | 6,387,834 | 6.2\% | 6,696,941 | 4.8\% | 7,004,519 | 4.6\% | 7,282,214 | 4.0\% |
| 5,414,669 | 6.7\% | 5,763,355 | 6.4\% | 6,086,454 | 5.6\% | 6,364,935 | 4.6\% | 6,625,531 | 4.1\% | 6,866,049 | 3.6\% |
| 5,381,284 | 7.2\% | 5,753,398 | 6.9\% | 6,080,826 | 5.7\% | 6,355,092 | 4.5\% | 6,614,250 | 4.1\% | 6,850,587 | 3.6\% |
| 4,715,915 | 6.2\% | 4,998,360 | 6.0\% | 5,254,082 | 5.1\% | 5,474,028 | 4.2\% | 5,681,806 | 3.8\% | 5,871,308 | 3.3\% |
| 30,480,112 | 6.8\% | 32,417,156 | 6.4\% | 34,050,848 | 5.0\% | 35,415,513 | 4.0\% | 36,720,839 | 3.7\% | 37,909,697 | 3.2\% |
| 272,448 | 8.4\% | 295,867 | 8.6\% | 322,093 | 8.9\% | 349,680 | 8.6\% | 378,404 | 8.2\% | 407,710 | 7.7\% |
| 3,894,437 | 5.5\% | 4,076,029 | 4.7\% | 4,229,814 | 3.8\% | 4,377,352 | 3.5\% | 4,534,723 | 3.6\% | 4,688,641 | 3.4\% |
| 3,925,402 | 10.0\% | 4,310,091 | 9.8\% | 4,719,550 | 9.5\% | 5,168,717 | 9.5\% | 5,633,902 | 9.0\% | 6,129,685 | 8.8\% |
| 943,047 | 7.5\% | 1,004,345 | 6.5\% | 1,067,619 | 6.3\% | 1,131,676 | 6.0\% | 1,193,918 | 5.5\% | 1,259,584 | 5.5\% |
| 7,472,803 | 8.5\% | 8,033,263 | 7.5\% | 8,579,525 | 6.8\% | 9,128,614 | 6.4\% | 9,676,331 | 6.0\% | 10,237,559 | 5.8\% |
| 1,376,256 | 2.2\% | 1,479,249 | 7.5\% | 1,572,367 | 6.3\% | 1,640,165 | 4.3\% | 1,693,513 | 3.3\% | 1,745,145 | 3.0\% |
| 240,000 | 2.1\% | 245,000 | 2.1\% | 250,000 | 2.0\% | 255,000 | 2.0\% | 260,000 | 2.0\% | 265,000 | 1.9\% |
| 18,124,393 | 7.5\% | 19,443,845 | 7.3\% | 20,740,969 | 6.7\% | 22,051,204 | 6.3\% | 23,370,790 | 6.0\% | 24,733,324 | 5.8\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 48,604,505 | 7.0\% | 51,861,001 | 6.7\% | 54,791,817 | 5.7\% | 57,466,716 | 4.9\% | 60,091,630 | 4.6\% | 62,643,021 | 4.2\% |
| 2,400,000 | 3.7\% | 2,500,000 | 4.2\% | 2,600,000 | 4.0\% | 2,700,000 | 3.8\% | 2,800,000 | 3.7\% | 2,900,000 | 3.6\% |
| 2,703,235 | 0.5\% | 2,730,267 | 1.0\% | 2,784,872 | 2.0\% | 2,840,570 | 2.0\% | 2,897,381 | 2.0\% | 2,949,534 | 1.8\% |
| 53,707,740 | 6.5\% | 57,091,268 | 6.3\% | 60,176,689 | 5.4\% | 63,007,286 | 4.7\% | 65,789,011 | 4.4\% | 68,492,555 | 4.1\% |


|  |
| :--- |
| $3.9 \%$ |
| $3.5 \%$ |
| $5.9 \%$ |
| $5.2 \%$ |
| $5.3 \%$ |
| $4.8 \%$ |
| $4.8 \%$ |
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| $9.4 \%$ |
| $6.2 \%$ |
| $6.8 \%$ |
| $4.4 \%$ |
| $2.0 \%$ |
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| $5.5 \%$ |
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| $1.8 \%$ |
| $1.5 \%$ |
| $5.2 \%$ |

Projection of passenger denand
3
Projection of average passengers per flight
4

Projection of alyerege distance

## 7

Projection of Jjow tonne-silonetres
Projection of the nunder of charging units
Detailed table constiruction and assunptions
Ajpendis

## The approach used to project the average number of passengers per flight.

層 The ratio of passengers per flight is influenced by two factors :
$\checkmark$ Future evolution of passenger load factors
$\checkmark$ Future evolution of average aircraft size.
을 Passenger load factors.
$\checkmark$ The projection gives room to possible improvements in passenger load factors to reflect productivity improvement, up to certain limits. Whenever the passenger load factors are found already high, improvements become more limited than when they are low (below 60\%).
$\checkmark$ We recognise differences in these limits between domestic and international routes, based on the nature of the flight operations.

## Evolution of aircraft size - Domestic routes.

層 Typically when routes are fairly mature the airlines tend to increase the average aircraft size since carriers have reached a reasonable of frequencies.
$\checkmark$ From a carrier point of view, it is more cost efficient to increase the average aircraft size as oppose to the frequencies.

- SYD-MEL, considered as a mature domestic route is a good example of this trend.
- SYD-BNE is also a fairly mature route but it has seen a decrease in average aircraft size and this is essentially due to the entry of Virgin Blue in 2000.
- Virgin Blue has its operating base in BNE and this route was the first route where it competed and when it entered this market its fleet of $B-737$ where on average smaller than the aircraft used by both Ansett and Qantas.
$\checkmark$ The other route areas, except MEL-to the rest of Australia, have all seen increase in average aircraft size.
- MEL-to the rest of Australia has seen a decline in part due to the fact that Qantas has based a large portion of its B-717 fleet in MEL where the aircraft is extensively used on the MEL-HBA route and this aircraft is smaller than the typical mainline Qantas aircraft.


## Evolution of aircraft size - collapse of Ansett.

룰 On September 14 $4^{\text {th }} 2001$ Ansett Airlines collapses when its owner, Air New Zealand, spun off the carrier enabling Air New Zealand to remain a float.

Historically Ansett was essentially a domestic Australian carrier which had a much smaller international presence than Qantas.
$\checkmark$ Historically the Australian domestic market was a duopoly with a few exception in its history when a third carrier entered the market (ex: Compass I \& II).

- In 2000 when both Impulse and Virgin Blue started operations the market entered one of those periods where the market no longer operated as a duopoly.
- Impulse lasted only a few months when Qantas purchased the carrier but Virgin Blue continued to operate as a low cost carrier.
$\checkmark$ When Ansett collapsed, this gave a unique opportunity for Virgin Blue to expand quickly (which it did) and also enabled Qantas to deploy larger aircraft.
- Qantas had to increase its seats offering to compensate for the collapse of Ansett and chose to use larger aircraft.
- When Qantas and Ansett competed they tended to compete head to head based on frequency since both carriers where tying to attract the high yield business market.


## Evolution of aircraft size - collapse of Ansett (cont'd).

- Virgin Blue, being a low cost carrier tends to be competing for the leisure market where price as oppose to frequency is paramount.
- Therefore when Qantas no longer competed against Ansett but now against Virgin Blue, Qantas was not forced to add frequencies (which were already very high in several domestic market) but had the leisure to add larger aircraft to file the void left by the departure of Ansett.
$\checkmark$ Therefore when looking at the tables on the next few slides, when comparing 2001 and 2002 for all the domestic routes we see a fairly significant increase in average aircraft size and this can be attributed to Qantas deploying larger aircraft to meet passenger demand.
$\checkmark$ Over the next 5-years this trend should continue as Qantas is set to continue receiving both Airbus and Boeing aircraft and these aircraft are larger than the current one it operates.
- For example, Qantas has started receiving some A-330 which are set to replace smaller B-767.


## Evolution of aircraft size－International routes．

语 Due to the long range of most international destinations（except New Zealand and the South Pacific），international flights to／from Australia are operated with very large aircraft．
$\checkmark$ Normally as international market develop we see smaller size aircraft deployed（ex： North Atlantic market）but over the next 5 years it will be doubtful that we see this trend emerge on most international market simply because smaller aircraft tend to have smaller range．
－This will be especially true to market such as the Transpacific．
$\checkmark$ Several international routes are expected to see an increase of average aircraft size when the A－380 enters service．
－Qantas will deploy this aircraft on the Transpacific route but other Asian markets （such as Singapore）．
－Other carriers could also deploy this aircraft to Australia such as Singapore Airlines or Emirates．

層 It should be noted that the evolution of the aircraft movements by categories，as shown over the next few slides，serves as a guide to project future evolution in the aircraft mix．

莤 Future aircraft orders and delivers by carriers（mainly Australians）are also taken into consideration．

## Evolution of the average aircraft size by main route.



The collapse of Ansett can be clearly seen

## Aircraft movements split by aircraft category - Domestic routes.

| Aircraft Movements split by Aircraft Category - Domestic |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Route | Aircraft Category | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Brisbane - Rest of Australia | 1-000-005 tonnes | 2.4\% | 2.2\% | 2.2\% | 1.6\% | 0.1\% | 0.0\% |
|  | 2-005-010 tonnes | 10.4\% | 14.1\% | 18.5\% | 12.5\% | 9.1\% | 7.2\% |
|  | 3-010-020 tonnes | 26.6\% | 20.5\% | 20.0\% | 18.9\% | 20.0\% | 21.5\% |
|  | 4-020-050 tonnes | 16.1\% | 14.6\% | 17.8\% | 21.1\% | 20.3\% | 8.7\% |
|  | 5-050-100 tonnes | 42.0\% | 47.2\% | 39.2\% | 41.6\% | 45.3\% | 59.8\% |
|  | 6-100-200 tonnes | 1.6\% | 0.8\% | 1.5\% | 3.7\% | 4.5\% | 2.1\% |
|  | 7-200-400 tonnes | 0.8\% | 0.6\% | 0.8\% | 0.6\% | 0.7\% | 0.5\% |
| Domestic - Rest of Australia | 1-000-005 tonnes | 31.1\% | 26.3\% | 24.7\% | 24.9\% | 25.7\% | 28.1\% |
|  | 2-005-010 tonnes | 20.2\% | 25.8\% | 27.6\% | 26.0\% | 20.4\% | 22.4\% |
|  | 3-010-020 tonnes | 23.2\% | 21.2\% | 23.3\% | 23.0\% | 26.2\% | 24.3\% |
|  | 4-020-050 tonnes | 17.8\% | 17.8\% | 17.1\% | 18.3\% | 17.5\% | 14.6\% |
|  | 5-050-100 tonnes | 7.2\% | 8.3\% | 6.7\% | 7.3\% | 9.9\% | 10.0\% |
|  | 6-100-200 tonnes | 0.4\% | 0.3\% | 0.2\% | 0.2\% | 0.3\% | 0.7\% |
|  | 7-200-400 tonnes | 0.1\% | 0.1\% | 0.4\% | 0.3\% | 0.0\% | 0.0\% |
| Melbourne - Rest of Australia | 1-000-005 tonnes | 0.0\% | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% |
|  | 2-005-010 tonnes | 7.4\% | 11.7\% | 8.6\% | 8.3\% | 8.8\% | 8.8\% |
|  | 3-010-020 tonnes | 25.0\% | 17.7\% | 19.7\% | 16.4\% | 24.1\% | 24.0\% |
|  | 4-020-050 tonnes | 4.3\% | 4.8\% | 17.4\% | 22.4\% | 5.3\% | 1.5\% |
|  | 5-050-100 tonnes | 56.7\% | 57.7\% | 46.8\% | 45.8\% | 56.6\% | 62.0\% |
|  | 6-100-200 tonnes | 5.9\% | 7.3\% | 6.8\% | 6.3\% | 4.4\% | 1.4\% |
|  | 7-200-400 tonnes | 0.6\% | 0.7\% | 0.7\% | 0.9\% | 0.7\% | 2.1\% |

Source: OAG

## Aircraft movements split by aircraft category - domestic routes (con't).

 Forecasting

## Aircraft movements split by aircraft category - International routes.

| Aircraft Movements split by Aircraft Category - International |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Route | Aircraft <br> Category | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Australia - Africa | 5-050-100 tonnes | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.4\% | 0.0\% |
|  | 6-100-200 tonnes | 1.5\% | 3.5\% | 17.7\% | 12.3\% | 0.0\% | 1.9\% |
|  | 7-200-400 tonnes | 98.5\% | 96.5\% | 82.3\% | 87.7\% | 99.6\% | 98.1\% |
| Australia - NE Asia | 3-010-020 tonnes | 0.2\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
|  | 5-050-100 tonnes | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
|  | 6-100-200 tonnes | 28.4\% | 23.1\% | 19.7\% | 19.0\% | 25.9\% | 31.5\% |
|  | 7-200-400 tonnes | 71.5\% | 76.9\% | 80.3\% | 81.0\% | 74.1\% | 68.5\% |
| Australia - New Zealand | 4-020-050 tonnes | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
|  | 5-050-100 tonnes | 21.0\% | 31.9\% | 36.1\% | 36.6\% | 40.6\% | 44.2\% |
|  | 6-100-200 tonnes | 50.2\% | 44.0\% | 44.4\% | 46.7\% | 42.1\% | 35.0\% |
|  | 7-200-400 tonnes | 28.5\% | 24.0\% | 19.5\% | 16.7\% | 17.4\% | 20.9\% |
| Australia - South Pacific | 1-000-005 tonnes | 0.0\% | 1.1\% | 1.4\% | 0.0\% | 0.0\% | 0.0\% |
|  | 2-005-010 tonnes | 1.8\% | 6.3\% | 10.4\% | 8.7\% | 4.5\% | 6.6\% |
|  | 3-010-020 tonnes | 8.3\% | 4.2\% | 1.8\% | 0.3\% | 0.0\% | 1.1\% |
|  | 4-020-050 tonnes | 23.0\% | 21.0\% | 17.4\% | 17.5\% | 17.1\% | 17.7\% |
|  | 5-050-100 tonnes | 32.0\% | 35.6\% | 35.3\% | 37.2\% | 38.8\% | 39.7\% |
|  | 6-100-200 tonnes | 20.0\% | 17.5\% | 23.9\% | 31.8\% | 26.9\% | 18.8\% |
|  | 7-200-400 tonnes | 14.9\% | 14.4\% | 9.9\% | 4.4\% | 12.6\% | 16.1\% |

## Aircraft movements split by aircraft category - International routes (con't).

| Aircraft Movements split by Aircraft Category - International |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Route | Aircraft Category | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Australia - S-SE Asia/Eur/MEA | 1-000-005 tonnes | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
|  | 2-005-010 tonnes | 0.0\% | 0.0\% | 0.7\% | 0.9\% | 0.2\% | 0.3\% |
|  | 3-010-020 tonnes | 0.0\% | 0.0\% | 5.6\% | 4.3\% | 4.8\% | 3.0\% |
|  | 4-020-050 tonnes | 0.0\% | 0.0\% | 0.3\% | 0.2\% | 0.0\% | 0.0\% |
|  | 5-050-100 tonnes | 8.8\% | 8.3\% | 5.4\% | 3.9\% | 3.2\% | 3.3\% |
|  | 6-100-200 tonnes | 26.4\% | 19.0\% | 15.4\% | 16.3\% | 16.8\% | 15.1\% |
|  | 7-200-400 tonnes | 64.8\% | 72.7\% | 72.7\% | 74.5\% | 75.1\% | 78.3\% |
| Australia - Transpacific | 7-200-400 tonnes | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: OAG Consultancy
Forecasting

## The projected average passengers per flight by route area.



Projection of passenger denanal

## 3

4
5
6

## 7

Projection of the number of charging units
Detailed telble construction and essungoions
Introduction and major highlights

Projection of average pessengers per flight

## Projection of the number of flights

## Projection of JJTOM ionnege

## Projection of alyerege distance

Projection of MJow tonne-silonetres

Ajpendis

## Past trends in aircraft movements as shown by the ASA database (Domestic routes).

No. Of flights - Commercial Domestic

| FY1998-1990 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | \% <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | change |

Average Annual Grow th

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40,334 | 42,013 | 4.2\% | 51,240 | 22.0\% | 40,342-21.3\% | 37,015 -8.2\% | 2.1\% |
| 1,605 | 1,823 | 13.6\% | 1,681 | -7.8\% | 1,014 -39.7\% | $875-13.7 \%$ | -14.1\% |
| 38,729 | 40,190 | 3.8\% | 49,559 | 23.3\% | 39,328-20.6\% | 36,140-8.1\% | -1.7\% |
| 28,808 | 28,634 | -0.6\% | 40,226 | 40.5\% | 32,425-19.4\% | 29,899 -7.8\% | 0.9\% |
| 2,339 | 1,746 | -25.4\% | 1,823 | 4.4\% | 1,390-23.8\% | 1,219-12.3\% | -15.0\% |
| 26,469 | 26,888 | 1.6\% | 38,403 | 42.8\% | 31,035-19.2\% | 28,680 -7.6\% | 2.0\% |
| 134,221 | 139,487 | 3.9\% | 148,234 | 6.3\% | 120,047 -19.0\% | 118,580 -1.2\% | -3.1\% |
| 80,765 | 85,831 | 6.3\% | 93,763 | 9.2\% | 74,604-20.4\% | 64,993-12.9\% | -5.3\% |
| 53,456 | 53,656 | 0.4\% | 54,471 | 1.5\% | 45,443-16.6\% | 53,587 17.9\% | 0.1\% |
| 94,791 | 99,358 | 4.8\% | 112,235 | 13.0\% | 97,942 -12.7\% | 101,772 3.9\% | 1.8\% |
| 29,522 | 28,907 | -2.1\% | 29,028 | 0.4\% | 26,263 -9.5\% | 28,984 10.4\% | -0.5\% |
| 65,269 | 70,451 | 7.9\% | 83,207 | 18.1\% | 71,679-13.9\% | 72,788 1.5\% | 2.8\% |
| 73,030 | 77,640 | 6.3\% | 81,967 | 5.6\% | 69,697-15.0\% | 64,731 -7.1\% | -3.0\% |
| 37,391 | 39,884 | 6.7\% | 40,218 | 0.8\% | 32,700-18.7\% | 27,501-15.9\% | -7.4\% |
| 35,639 | 37,756 | 5.9\% | 41,749 | 10.6\% | 36,997-11.4\% | 37,230 0.6\% | 1.1\% |
| 166,564 | 176,753 | 6.1\% | 178,958 | 1.2\% | 151,267-15.5\% | 153,599 1.5\% | -2.0\% |
| 108,542 | 121,141 | 11.6\% | 123,329 | 1.8\% | 108,047-12.4\% | 108,388 $0.3 \%$ | 0.0\% |
| 58,022 | 55,612 | -4.2\% | 55,629 | 0.0\% | 43,220-22.3\% | 45,211 4.6\% | -6.0\% |
| 537,748 | 563,885 | 4.9\% | 612,860 | 8.7\% | 511,720-16.5\% | 505,596 -1.2\% | -1.5\% |
| 260,164 | 279,332 | 7.4\% | 289,842 | 3.8\% | 244,018-15.8\% | 231,960 -4.9\% | -2.8\% |
| 277,584 | 284,553 | 2.5\% | 323,018 | 13.5\% | 267,702-17.1\% | 273,636 2.2\% | -0.4\% |

## Past trends in aircraft movements as shown by the ASA database (International routes).

| No. Of flights - Commercial <br> International |
| :--- |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average Annual
Grow th

| 957 | 1,033 7.9\% | 1,110 | 7.5\% | 1,123 1.2\% |  | $992-11.7 \%$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 957 | 1,033 7.9\% | 1,110 | 7.5\% | 1,123 | 1.2\% | 992 | -11.7\% |
| 22,901 | 25,188 10.0\% | 28,008 | 11.2\% | 27,037 | -3.5\% | 29,935 | 10.7\% |
| 133 | $122-8.3 \%$ | 79 | -35.2\% | 78 | -1.3\% | 154 | 97.4\% |
| 22,768 | 25,066 10.1\% | 27,929 | 11.4\% | 26,959 | -3.5\% | 29,781 | 10.5\% |
| 16,096 | 15,563 -3.3\% | 15,923 | 2.3\% | 14,731 | -7.5\% | 16,103 | 9.3\% |
|  | $0 \quad 0.0 \%$ | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 16,096 | 15,563 -3.3\% | 15,923 | 2.3\% | 14,731 | -7.5\% | 16,103 | 9.3\% |
| 9,757 | 10,256 5.1\% | 10,075 | -1.8\% | 9,681 | -3.9\% | 9,217 | -4.8\% |
| 1,803 | 1,892 4.9\% | 1,624 | -14.2\% | 1,674 | 3.1\% | 1,689 | 0.9\% |
| 7,954 | 8,364 5.2\% | 8,451 | 1.0\% | 8,007 | -5.3\% | 7,528 | -6.0\% |
| 30,092 | 34,233 13.8\% | 39,057 | 14.1\% | 36,215 | -7.3\% | 33,727 | -6.9\% |
| 450 | 1,821 304.7\% | 3,584 | 96.8\% | 3,936 | 9.8\% | 3,665 | -6.9\% |
| 29,642 | 32,412 9.3\% | 35,473 | 9.4\% | 32,279 | -9.0\% | 30,062 | -6.9\% |
| 3,858 | 4,615 19.6\% | 5,469 | 18.5\% | 4,124 | -24.6\% | 3,966 | -3.8\% |
|  | 0 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 3,858 | 4,615 19.6\% | 5,469 | 18.5\% | 4,124 | -24.6\% | 3,966 | -3.8\% |
| 4,268 | 3,289 -22.9\% | 3,111 | -5.4\% | 2,929 | -5.9\% | 2,552 | -12.9\% |
| 1,661 | 1,323-20.3\% | 1,442 | 9.0\% | 1,258 | -12.8\% | 920 | -26.9\% |
| 2,607 | 1,966-24.6\% | 1,669 | -15.1\% | 1,671 | 0.1\% | 1,632 | -2.3\% |
| 87,929 | 94,177 7.1\% | 102,753 | 9.1\% | 95,840 | -6.7\% | 96,492 | 0.7\% |
| 4,047 | 5,158 27.5\% | 6,729 | 30.5\% | 6,946 | 3.2\% | 6,428 | -7.5\% |
| 83,882 | 89,019 6.1\% | 96,024 | 7.9\% | 88,894 | -7.4\% | 90,064 | 1.3\% |

 Consultancy

## Past trends in aircraft movements as shown by the ASA database (Other flights).

No. Of flights - Other

| FY1998-1990 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

[^0]| Cargo flights <br> Domestic <br> $<20$ tonnes <br> 20 tonnes and over <br> International <br> $<20$ tonnes <br> 20 tonnes and over <br>  <br> Total O-D flights (incl. Cargo) <br> $<20$ tonnes <br> 20 tonnes and over <br> Pure overlfights <br> $<20$ tonnes <br> 20 tonnes and over <br> Non-Commercfial flights <br> $<20$ tonnes <br> 20 tonnes and over <br> Total flights <br> $<20$ tonnes <br> 20 tonnes and over |
| :--- |



## Projected trends in aircraft movements for domestic flights.

| No. Of flights - Commercial <br> Domestic |
| :--- |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | \% change | Number | \% change | Number | \% change | Number | $\%$ change | Number | $\%$ change | Number | \% change |

Average
Annual
Grow th

| 38,752 | 4.7\% | 40,025 | 3.3\% | 40,910 | 2.2\% | 41,365 | 1.1\% | 41,729 | 0.9\% |  | 0.1\% | 20\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | 2.0\% |
| 871 | -0.5\% | 851 | -2.2\% | 821 | -3.6\% | 782 | -4.8\% | 739 | -5.4\% | 694 | -6.2\% | -3.8\% |
| 37,881 | 4.8\% | 39,174 | 3.4\% | 40,089 | 2.3\% | 40,584 | 1.2\% | 40,989 | 1.0\% | 41,083 | 0.2\% | 2.2\% |
| 31,071 | 3.9\% | 32,511 | 4.6\% | 32,715 | 0.6\% | 32,880 | 0.5\% | 33,011 | 0.4\% | 33,130 | 0.4\% | 1.7\% |
| 1,213 | -0.5\% | 1,185 | -2.3\% | 1,156 | -2.5\% | 1,118 | -3.3\% | 1,072 | -4.1\% | 996 | -7.2\% | -3.3\% |
| 29,857 | 4.1\% | 31,326 | 4.9\% | 31,559 | 0.7\% | 31,762 | 0.6\% | 31,939 | 0.6\% | 32,134 | 0.6\% | 1.9\% |
| 126,527 | 6.7\% | 133,039 | 5.1\% | 137,786 | 3.6\% | 141,198 | 2.5\% | 143,518 | 1.6\% | 144,500 | 0.7\% | 3.3\% |
| 68,992 | 6.2\% | 71,889 | 4.2\% | 73,665 | 2.5\% | 74,891 | 1.7\% | 74,847 | -0.1\% | 74,740 | -0.1\% | 2.4\% |
| 57,535 | 7.4\% | 61,150 | 6.3\% | 64,121 | 4.9\% | 66,306 | 3.4\% | 68,672 | 3.6\% | 69,760 | 1.6\% | 4.5\% |
| 104,737 | 2.9\% | 108,179 | 3.3\% | 110,917 | 2.5\% | 112,669 | 1.6\% | 113,976 | 1.2\% | 114,837 | 0.8\% | 2.0\% |
| 29,696 | 2.5\% | 30,525 | 2.8\% | 31,145 | 2.0\% | 31,483 | 1.1\% | 31,691 | 0.7\% | 31,771 | 0.3\% | 1.5\% |
| 75,041 | 3.1\% | 77,655 | 3.5\% | 79,771 | 2.7\% | 81,186 | 1.8\% | 82,285 | 1.4\% | 83,066 | 0.9\% | 2.2\% |
| 68,412 | 5.7\% | 71,378 | 4.3\% | 74,078 | 3.8\% | 76,184 | 2.8\% | 78,036 | 2.4\% | 79,553 | 1.9\% | 3.5\% |
| 28,754 | 4.6\% | 29,303 | 1.9\% | 30,101 | 2.7\% | 30,783 | 2.3\% | 31,353 | 1.9\% | 31,781 | 1.4\% | 2.4\% |
| 39,658 | 6.5\% | 42,075 | 6.1\% | 43,976 | 4.5\% | 45,401 | 3.2\% | 46,682 | 2.8\% | 47,771 | 2.3\% | 4.2\% |
| 160,464 | 4.5\% | 165,835 | 3.3\% | 169,947 | 2.5\% | 172,657 | 1.6\% | 175,025 | 1.4\% | 177,128 | 1.2\% | 2.4\% |
| 112,753 | 4.0\% | 115,390 | 2.3\% | 117,053 | 1.4\% | 117,624 | 0.5\% | 117,840 | 0.2\% | 117,612 | -0.2\% | 1.4\% |
| 47,710 | 5.5\% | 50,445 | 5.7\% | 52,893 | 4.9\% | 55,033 | 4.0\% | 57,185 | 3.9\% | 59,516 | 4.1\% | 4.7\% |
| 529,962 | 4.8\% | 550,967 | 4.0\% | 566,351 | 2.8\% | 576,954 | 1.9\% | 585,296 | 1.4\% | 590,924 | 1.0\% | 2.6\% |
| 242,279 | 4.4\% | 249,143 | 2.8\% | 253,941 | 1.9\% | 256,681 | 1.1\% | 257,542 | 0.3\% | 257,593 | 0.0\% | 1.8\% |
| 287,683 | 5.1\% | 301,825 | 4.9\% | 312,410 | 3.5\% | 320,273 | 2.5\% | 327,753 | 2.3\% | 333,331 | 1.7\% | 3.3\% | Forecasting

## Projected trends in aircraft movements for international flights.

No. Of flights - Commercial International

| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average
Annual
Grow th


Forecasting

## Projected trends in aircraft movements for other flights and total.



## 1

## 2

3
4

5
6

## 7

8
Projection of the nunder of charging unts
Deteiled table construction ancl assunptions Forecasting

## Past trends in aircraft MTOW tonnage (Domestic routes).

| No. of MTOW Tons |
| :--- |
| Commercial Domestic |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number |  | | $\%$ |
| :---: |
| change |

Average Annual
Grow th

| 5,546,458 | 5,648,222 | 1.8\% | 6,142,011 | 8.7\% | 5,399,284 | -12.1\% | 4,928,672 | -8.7\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11,774 | 12,866 | 9.3\% | 12,002 | -6.7\% | 7,173 | -40.2\% | 6,508 | -9.3\% |
| 5,534,684 | 5,635,356 | 1.8\% | 6,130,010 | 8.8\% | 5,392,111 | -12.0\% | 4,922,164 | -8.7\% |
| 3,154,628 | 3,119,329 | -1.1\% | 3,831,759 | 22.8\% | 3,175,177 | -17.1\% | 2,817,752 | -11.3\% |
| 17,785 | 12,717 | -28.5\% | 13,503 | 6.2\% | 11,018 | -18.4\% | 8,838 | -19.8\% |
| 3,136,843 | 3,106,612 | -1.0\% | 3,818,256 | 22.9\% | 3,164,159 | -17.1\% | 2,808,915 | -11.2\% |
| 5,527,107 | 5,714,912 | 3.4\% | 5,669,684 | -0.8\% | 5,175,581 | -8.7\% | 5,328,417 | 3.0\% |
| 963,568 | 1,064,190 | 10.4\% | 1,203,556 | 13.1\% | 1,022,989 | -15.0\% | 956,879 | -6.5\% |
| 4,563,540 | 4,650,721 | 1.9\% | 4,466,127 | -4.0\% | 4,152,592 | -7.0\% | 4,371,538 | 5.3\% |
| 5,234,175 | 5,381,900 | 2.8\% | 5,768,441 | 7.2\% | 5,637,162 | -2.3\% | 5,533,091 | -1.8\% |
| 333,548 | 332,170 | -0.4\% | 333,930 | 0.5\% | 320,917 | -3.9\% | 362,731 | 13.0\% |
| 4,900,627 | 5,049,730 | 3.0\% | 5,434,511 | 7.6\% | 5,316,245 | -2.2\% | 5,170,360 | -2.7\% |
| 2,586,897 | 2,689,201 | 4.0\% | 2,855,024 | 6.2\% | 2,794,722 | -2.1\% | 2,769,488 | -0.9\% |
| 411,718 | 427,264 | 3.8\% | 433,630 | 1.5\% | 368,344 | -15.1\% | 348,096 | -5.5\% |
| 2,175,178 | 2,261,936 | 4.0\% | 2,421,394 | 7.0\% | 2,426,378 | 0.2\% | 2,421,392 | -0.2\% |
| 3,760,497 | 3,751,390 | -0.2\% | 3,871,533 | 3.2\% | 3,150,280 | -18.6\% | 3,357,085 | 6.6\% |
| 1,128,861 | 1,265,392 | 12.1\% | 1,305,008 | 3.1\% | 1,155,051 | -11.5\% | 1,181,384 | 2.3\% |
| 2,631,636 | 2,485,998 | -5.5\% | 2,566,525 | 3.2\% | 1,995,228 | -22.3\% | 2,175,701 | 9.0\% |
| 25,809,762 | 26,304,954 | 1.9\% | 28,138,453 | 7.0\% | 25,332,206 | -10.0\% | 24,734,505 | -2.4\% |
| 2,867,253 | 3,114,600 | 8.6\% | 3,301,630 | 6.0\% | 2,885,492 | -12.6\% | 2,864,436 | -0.7\% |
| 22,942,508 | 23,190,354 | 1.1\% | 24,836,823 | 7.1\% | 22,446,714 | -9.6\% | 21,870,069 | -2.6\% |


|  |
| ---: |
| $-2.9 \%$ |
| $-13.8 \%$ |
| $-2.9 \%$ |
| $-2.8 \%$ |
| $-16.0 \%$ |
| $-2.7 \%$ |
| $-0.9 \%$ |
| $-0.2 \%$ |
| $-1.1 \%$ |
| $1.4 \%$ |
| $2.1 \%$ |
| $1.3 \%$ |
| $1.7 \%$ |
| $-4.1 \%$ |
| $2.7 \%$ |
| $-2.8 \%$ |
| $1.1 \%$ |
| $-4.6 \%$ |
|  |
| $-1.1 \%$ |
| $0.0 \%$ |
| $-1.2 \%$ |

## Past trends in aircraft MTOW tonnage (International routes).

No. of MTOW Tons
Commercial International

| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | \% <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | change |


| Average |
| :---: |
| Annual |
| Grow th |

## Australia - Africa

<20 tonnes
20 tonnes and over
Australia - New Zealand
<20 tonnes
20 tonnes and over
Australia - Northeast Asia <20 tonnes

20 tonnes and over
Australia - South Pacific
<20 tonnes
20 tonnes and over
Australia-S-SE Asia/Eur/MEA <20 tonnes
20 tonnes and over
Australia - Transpacific
<20 tonnes
20 tonnes and over
Australia - Undetermined <20 tonnes

20 tonnes and over

Total International (Pax arcrft)
<20 tonnes
20 tonnes and over

| 305,737 | 356,940 16.7\% | 373,015 | 4.5\% | 389,427 4.4\% | 361,109 -7.3\% | 4.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 0.0\% | 0 0.0\% | 0.0\% |
| 305,737 | 356,940 16.7\% | 373,015 | 4.5\% | 389,427 4.4\% | 361,109 -7.3\% | 4.2\% |
| 4,281,532 | 4,259,679 -0.5\% | 4,409,924 | 3.5\% | 4,041,997 -8.3\% | 4,266,850 5.6\% | -0.1\% |
| 1,403 | 1,185-15.5\% | 841 | -29.0\% | $764-9.2 \%$ | 1,627 113.0\% | 3.8\% |
| 4,280,129 | 4,258,494 -0.5\% | 4,409,083 | 3.5\% | 4,041,233 -8.3\% | 4,265,223 5.5\% | -0.1\% |
| 4,671,355 | 4,655,446 -0.3\% | 4,955,510 | 6.4\% | 4,451,344 -10.2\% | 4,427,311 -0.5\% | -1.3\% |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 0.0\% | 0 0.0\% | 0.0\% |
| 4,671,355 | 4,655,446 -0.3\% | 4,955,510 | 6.4\% | 4,451,344-10.2\% | 4,427,311 -0.5\% | -1.3\% |
| 1,158,168 | 1,253,394 8.2\% | 1,064,672 | -15.1\% | 1,073,729 0.9\% | 1,067,403 -0.6\% | -2.0\% |
| 19,764 | 21,395 8.3\% | 18,380 | -14.1\% | 19,083 3.8\% | 19,684 3.2\% | -0.1\% |
| 1,138,404 | 1,231,999 8.2\% | 1,046,293 | -15.1\% | 1,054,646 0.8\% | 1,047,718 -0.7\% | -2.1\% |
| 8,012,510 | 8,981,052 12.1\% | 9,744,846 | 8.5\% | 9,043,879 -7.2\% | 8,670,129 -4.1\% | 2.0\% |
| 3,766 | 18,039 379.0\% | 40,501 | 124.5\% | 39,178-3.3\% | 40,726 4.0\% | 81.3\% |
| 8,008,744 | 8,963,013 11.9\% | 9,704,345 | 8.3\% | 9,004,701 -7.2\% | 8,629,402 -4.2\% | 1.9\% |
| 1,522,494 | 1,824,203 19.8\% | 2,167,063 | 18.8\% | 1,636,505 -24.5\% | 1,583,829 -3.2\% | 1.0\% |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 0.0\% | 0 0.0\% | 0.0\% |
| 1,522,494 | 1,824,203 19.8\% | 2,167,063 | 18.8\% | 1,636,505-24.5\% | 1,583,829 -3.2\% | 1.0\% |
| 365,269 | 309,236 -15.3\% | 286,278 | -7.4\% | 227,065 -20.7\% | 227,875 0.4\% | -11.1\% |
| 14,650 | 11,208-23.5\% | 12,375 | 10.4\% | 10,780-12.9\% | 8,685-19.4\% | -12.3\% |
| 350,619 | 298,027-15.0\% | 273,903 | -8.1\% | 216,285-21.0\% | 219,190 1.3\% | -11.1\% |
| 20,317,066 | 21,639,950 6.5\% | 23,001,308 | 6.3\% | 20,863,945 -9.3\% | 20,604,506 -1.2\% | 0.4\% |
| 39,583 | 51,827 30.9\% | 72,097 | 39.1\% | 69,805 -3.2\% | 70,723 1.3\% | 15.6\% |
| 20,277,483 | 21,588,123 6.5\% | 22,929,211 | 6.2\% | 20,794,140 -9.3\% | 20,533,783 -1.3\% | 0.3\% |

## Past trends in aircraft MTOW tonnage (Other flights).

| No. of MTOW Tons |
| :--- |
| Other |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number |  | | $\%$ |
| :---: |
| change |

Average Annual
Grow th

| Cargo flights |
| :--- |
| Domestic |
| $<20$ tonnes |
| 20 tonnes and over |
| International |
| $<20$ tonnes |
| 20 tonnes and over |
|  |
| Total O-D flights (incl. Cargo) |
| $<20$ tonnes |
| 20 tonnes and over |
| Pure overlfights |
| $<20$ tonnes |
| 20 tonnes and over |
| Non-Commercfial flights |
| $<20$ tonnes |
| 20 tonnes and over |
| Total flights |
| $<20$ tonnes |
| 20 tonnes and over |


| 490,104 | 688,162 | 40.4\% | 589,207 | -14.4\% | 469,634 | -20.3\% | 417,716 | -11.1\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 345,134 | 466,697 | 35.2\% | 372,023 | -20.3\% | 98,284 | -73.6\% | 18,695 | -81.0\% |
| 16,937 | 18,242 | 7.7\% | 9,059 | -50.3\% | 1,829 | -79.8\% | 3,423 | 87.1\% |
| 328,197 | 448,456 | 36.6\% | 362,964 | -19.1\% | 96,454 | -73.4\% | 15,272 | -84.2\% |
| 144,969 | 221,464 | 52.8\% | 217,184 | -1.9\% | 371,350 | 71.0\% | 399,021 | 7.5\% |
| 0 | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |  | 0.0\% |
| 144,969 | 221,464 | 52.8\% | 217,184 | -1.9\% | 371,350 | 71.0\% | 399,021 | 7.5\% |
| 46,616,931 | 48,633,066 | 4.3\% | 51,728,968 | 6.4\% | 46,665,785 | -9.8\% | 45,756,727 | -1.9\% |
| 2,923,774 | 3,184,669 | 8.9\% | 3,382,786 | 6.2\% | 2,957,126 | -12.6\% | 2,938,583 | -0.6\% |
| 43,693,157 | 45,448,396 | 4.0\% | 48,346,182 | 6.4\% | 43,708,658 | -9.6\% | 42,818,144 | -2.0\% |
| 2,656,786 | 3,000,022 | 12.9\% | 2,921,692 | -2.6\% | 3,164,873 | 8.3\% | 3,164,129 | 0.0\% |
| 0 | 0 |  | 0 |  | 0 |  | 0 |  |
| 2,656,786 | 3,000,022 | 12.9\% | 2,921,692 | -2.6\% | 3,164,873 | 8.3\% | 3,164,129 | 0.0\% |
| 1,535,110 | 1,494,115 | -2.7\% | 1,562,625 | 4.6\% | 1,461,541 | -6.5\% | 1,455,032 | -0.4\% |
| 1,535,110 | 1,494,115 | -2.7\% | 1,562,625 | 4.6\% | 1,461,541 | -6.5\% | 1,455,032 | -0.4\% |
| 0 | 0 |  | 0 |  | 0 |  | 0 |  |
| 50,808,827 | 53,127,203 | 4.6\% | 56,213,284 | 5.8\% | 51,292,199 | -8.8\% | 50,375,888 | -1.8\% |
| 4,458,883 | 4,678,784 | 4.9\% | 4,945,411 | 5.7\% | 4,418,667 | -10.7\% | 4,393,615 | -0.6\% |
| 46,349,944 | 48,448,418 | 4.5\% | 51,267,873 | 5.8\% | 46,873,531 | -8.6\% | 45,982,273 | -1.9\% |


|  |
| ---: |
| $-3.9 \%$ |
| $-51.8 \%$ |
| $-32.9 \%$ |
| $-53.6 \%$ |
| $28.8 \%$ |
| $0.0 \%$ |
| $28.8 \%$ |
|  |
| $-0.5 \%$ |
| $0.1 \%$ |
| $-0.5 \%$ |
|  |
| $4.5 \%$ |
| $0.0 \%$ |
| $4.5 \%$ |
|  |
| $-1.3 \%$ |
| $-1.3 \%$ |
| $0.0 \%$ |
|  |
| $-0.2 \%$ |
| $-0.4 \%$ |
| $-0.2 \%$ |

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## Projected trends in aircraft MTOW tonnage (Domestic routes).

| No. of MTOW Tons |
| :--- |
| Commercial Domestic |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | \% change | Number | \% change | Number |  | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number |  | Number | \% change |

Average
Annual
Grow th

| 5,171,646 | 4.9\% | 5,388,899 | 4.2\% | 5,556,518 | 3.1\% | 5,681,465 | 2.2\% | 5,795,257 | 2.0\% | 5,894,296 | 1.7\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6,507 | 0.0\% | 6,404 | -1.6\% | 6,214 | -3.0\% | 5,957 | -4.1\% | 5,671 | -4.8\% | 5,355 | -5.6\% |
| 5,165,139 | 4.9\% | 5,382,495 | 4.2\% | 5,550,304 | 3.1\% | 5,675,508 | 2.3\% | 5,789,586 | 2.0\% | 5,888,941 | 1.7\% |
| 2,897,170 | 2.8\% | 3,001,601 | 3.6\% | 3,061,508 | 2.0\% | 3,099,925 | 1.3\% | 3,136,089 | 1.2\% | 3,183,586 | 1.5\% |
| 8,614 | -2.5\% | 8,414 | -2.3\% | 8,322 | -1.1\% | 8,163 | -1.9\% | 7,991 | -2.1\% | 7,571 | -5.3\% |
| 2,888,557 | 2.8\% | 2,993,187 | 3.6\% | 3,053,186 | 2.0\% | 3,091,762 | 1.3\% | 3,128,098 | 1.2\% | 3,176,014 | 1.5\% |
| 5,729,265 | 7.5\% | 6,115,179 | 6.7\% | 6,432,499 | 5.2\% | 6,679,625 | 3.8\% | 6,924,715 | 3.7\% | 7,063,574 | 2.0\% |
| 1,026,115 | 7.2\% | 1,084,473 | 5.7\% | 1,123,787 | 3.6\% | 1,155,232 | 2.8\% | 1,167,262 | 1.0\% | 1,178,299 | 0.9\% |
| 4,703,149 | 7.6\% | 5,030,706 | 7.0\% | 5,308,712 | 5.5\% | 5,524,393 | 4.1\% | 5,757,454 | 4.2\% | 5,885,276 | 2.2\% |
| 5,747,320 | 3.9\% | 5,984,937 | 4.1\% | 6,186,495 | 3.4\% | 6,335,298 | 2.4\% | 6,460,631 | 2.0\% | 6,561,805 | 1.6\% |
| 374,613 | 3.3\% | 387,536 | 3.4\% | 397,936 | 2.7\% | 404,793 | 1.7\% | 410,033 | 1.3\% | 413,643 | 0.9\% |
| 5,372,706 | 3.9\% | 5,597,401 | 4.2\% | 5,788,559 | 3.4\% | 5,930,505 | 2.5\% | 6,050,598 | 2.0\% | 6,148,162 | 1.6\% |
| 2,947,587 | 6.4\% | 3,139,063 | 6.5\% | 3,302,487 | 5.2\% | 3,434,895 | 4.0\% | 3,557,920 | 3.6\% | 3,667,568 | 3.1\% |
| 367,018 | 5.4\% | 377,812 | 2.9\% | 391,999 | 3.8\% | 404,867 | 3.3\% | 416,418 | 2.9\% | 426,212 | 2.4\% |
| 2,580,568 | 6.6\% | 2,761,251 | 7.0\% | 2,910,488 | 5.4\% | 3,030,028 | 4.1\% | 3,141,502 | 3.7\% | 3,241,355 | 3.2\% |
| 3,551,168 | 5.8\% | 3,749,818 | 5.6\% | 3,927,107 | 4.7\% | 4,076,540 | 3.8\% | 4,221,539 | 3.6\% | 4,358,135 | 3.2\% |
| 1,227,803 | 3.9\% | 1,261,771 | 2.8\% | 1,285,291 | 1.9\% | 1,296,914 | 0.9\% | 1,304,666 | 0.6\% | 1,307,499 | 0.2\% |
| 2,323,365 | 6.8\% | 2,488,047 | 7.1\% | 2,641,816 | 6.2\% | 2,779,626 | 5.2\% | 2,916,873 | 4.9\% | 3,050,636 | 4.6\% |
| 26,044,154 | 5.3\% | 27,379,497 | 5.1\% | 28,466,613 | 4.0\% | 29,307,747 | 3.0\% | 30,096,151 | 2.7\% | 30,728,964 | 2.1\% |
| 3,010,671 | 5.1\% | 3,126,409 | 3.8\% | 3,213,549 | 2.8\% | 3,275,924 | 1.9\% | 3,312,041 | 1.1\% | 3,338,580 | 0.8\% |
| 23,033,484 | 5.3\% | 24,253,088 | 5.3\% | 25,253,065 | 4.1\% | 26,031,822 | 3.1\% | 26,784,110 | 2.9\% | 27,390,383 | 2.3\% |

3.0\%
-3.2\%
3.0\%
2.1\%
-2.5\%
2.1\%
4.8\%
3.5\%
5.1\%
2.9\%
2.2\%
2.9\%
4.8\%
3.4\%
5.0\%
4.4\%
1.7\%
5.8\%
3.7\%
2.6\%
3.8\%

## Projected trends in aircraft MTOW tonnage (International routes).

| No. of MTOW Tons |
| :--- |
| Commercial International |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | \% change | Number | $\%$ <br> change | Number | $\%$ change | Number | \% change | Number | \% change | Number | \% change |


| Average |
| :---: |
| Annual |
| Grow th |


| 388,783 | 7.7\% | 415,993 | 7.0\% | 446,304 | 7.3\% | 481,043 | 7.8\% | 516,839 | 7.4\% | 552,917 | 7.0\% | 7.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0.0\% |
| 388,783 | 7.7\% | 415,993 | 7.0\% | 446,304 | 7.3\% | 481,043 | 7.8\% | 516,839 | 7.4\% | 552,917 | 7.0\% | 7.4\% |
| 4,406,569 | 3.3\% | 4,576,836 | 3.9\% | 4,713,534 | 3.0\% | 4,841,268 | 2.7\% | 4,977,890 | 2.8\% | 5,108,725 | 2.6\% | 3.0\% |
| 1,683 | 3.4\% | 1,748 | 3.9\% | 1,800 | 3.0\% | 1,849 | 2.7\% | 1,901 | 2.8\% | 1,951 | 2.6\% | 3.1\% |
| 4,404,887 | 3.3\% | 4,575,088 | 3.9\% | 4,711,734 | 3.0\% | 4,839,419 | 2.7\% | 4,975,989 | 2.8\% | 5,106,774 | 2.6\% | 3.0\% |
| 4,803,114 | 8.5\% | 5,203,501 | 8.3\% | 5,660,100 | 8.8\% | 6,157,999 | 8.8\% | 6,668,348 | 8.3\% | 7,208,051 | 8.1\% | 8.5\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0.0\% |
| 4,803,114 | 8.5\% | 5,203,501 | 8.3\% | 5,660,100 | 8.8\% | 6,157,999 | 8.8\% | 6,668,348 | 8.3\% | 7,208,051 | 8.1\% | 8.5\% |
| 1,131,318 | 6.0\% | 1,185,325 | 4.8\% | 1,240,001 | 4.6\% | 1,293,811 | 4.3\% | 1,343,917 | 3.9\% | 1,396,294 | 3.9\% | 4.6\% |
| 20,903 | 6.2\% | 22,047 | 5.5\% | 23,064 | 4.6\% | 24,145 | 4.7\% | 25,163 | 4.2\% | 26,230 | 4.2\% | 4.9\% |
| 1,110,415 | 6.0\% | 1,163,278 | 4.8\% | 1,216,936 | 4.6\% | 1,269,666 | 4.3\% | 1,318,754 | 3.9\% | 1,370,064 | 3.9\% | 4.6\% |
| 9,328,879 | 7.6\% | 9,956,868 | 6.7\% | 10,558,433 | 6.0\% | 11,154,931 | 5.6\% | 11,741,366 | 5.3\% | 12,335,876 | 5.1\% | 6.1\% |
| 46,655 | 14.6\% | 52,298 | 12.1\% | 58,113 | 11.1\% | 64,203 | 10.5\% | 70,535 | 9.9\% | 77,213 | 9.5\% | 11.3\% |
| 9,282,225 | 7.6\% | 9,904,570 | 6.7\% | 10,500,320 | 6.0\% | 11,090,728 | 5.6\% | 11,670,832 | 5.2\% | 12,258,662 | 5.0\% | 6.0\% |
| 1,614,945 | 2.0\% | 1,735,799 | 7.5\% | 1,845,068 | 6.3\% | 1,924,623 | 4.3\% | 1,987,224 | 3.3\% | 2,047,811 | 3.0\% | 4.4\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0.0\% |
| 1,614,945 | 2.0\% | 1,735,799 | 7.5\% | 1,845,068 | 6.3\% | 1,924,623 | 4.3\% | 1,987,224 | 3.3\% | 2,047,811 | 3.0\% | 4.4\% |
| 232,622 | 2.1\% | 237,469 | 2.1\% | 242,315 | 2.0\% | 247,161 | 2.0\% | 252,008 | 2.0\% | 256,854 | 1.9\% | 2.0\% |
| 9,447 | 8.8\% | 9,644 | 2.1\% | 9,841 | 2.0\% | 10,037 | 2.0\% | 10,234 | 2.0\% | 10,431 | 1.9\% | 3.1\% |
| 223,175 | 1.8\% | 227,825 | 2.1\% | 232,474 | 2.0\% | 237,124 | 2.0\% | 241,773 | 2.0\% | 246,423 | 1.9\% | 2.0\% |
| 21,906,230 | 6.3\% | 23,311,792 | 6.4\% | 24,705,754 | 6.0\% | 26,100,836 | 5.6\% | 27,487,592 | 5.3\% | 28,906,528 | 5.2\% | 5.8\% |
| 78,687 | 11.3\% | 85,737 | 9.0\% | 92,818 | 8.3\% | 100,234 | 8.0\% | 107,833 | 7.6\% | 115,825 | 7.4\% | 8.6\% |
| 21,827,543 | 6.3\% | 23,226,055 | 6.4\% | 24,612,936 | 6.0\% | 26,000,602 | 5.6\% | 27,379,759 | 5.3\% | 28,790,703 | 5.2\% | 5.8\% |

## Projected trends in aircraft MTOW tonnage (Other flights).



## Past evolution of the average aircraft MTOW tonnage - Domestic routes.

Average MTOW Tons per flight
Commercial Domestic

| FY1998-1999 | FY1999-2000 | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average
Annual
Grow th

| Sydney - Me lbourne |
| :--- |
| $<20$ tonnes |
| 20 tonnes and over |
| Sydney - Bris bane |
| $<20$ tonnes |
| 20 tonnes and over |
| Sydney - Rest of Australia |
| $<20$ tonnes |
| 20 tonnes and over |
| Melbourne - Rest of Australia |
| $<20$ tonnes |
| 20 tonnes and over |
| Bris bane - Rest of Australia |
| $<20$ tonnes |
| 20 tonnes and over |
| Domestic - Rest of Australia |
| $<20$ tonnes |
| 20 tonnes and over |
|  |
| Total Domestic (Pax aircraft) |
| $<20$ tonnes |
| 20 tonnes and over |


| 138 | 134 |  |
| :---: | :---: | :---: |
| 7 | 7 | -3.8\% |
| 143 | 140 | -1.9\% |
| 110 | 109 | -0.5\% |
| 8 | 7 | -4.2\% |
| 119 | 116 | -2.5\% |
| 41 | 41 | -0.5\% |
| 12 | 12 | 3.9\% |
| 85 | 87 | 1.5\% |
| 55 | 54 | -1.9\% |
| 11 | 11 | 1.7\% |
| 75 | 72 | -4.5\% |
| 35 | 35 | -2.2\% |
| 11 | 11 | -2.7\% |
| 61 | 60 | -1.8\% |
| 23 | 21 | -6.0\% |
| 10 | 10 | 0.4\% |
| 45 | 45 | -1.4\% |
| 48 | 47 | -2.8\% |
| 11 | 11 | 1.2\% |
| 83 | 81 | -1.4\% |


|  |  |
| ---: | ---: |
| $\mathbf{1 2 0}$ | $-10.8 \%$ |
| 7 | $1.2 \%$ |
| 124 | $-11.8 \%$ |
| 95 | $-12.6 \%$ |
| 7 | $1.7 \%$ |
| 99 | $-13.9 \%$ |
| 38 | $-6.6 \%$ |
| 13 | $3.5 \%$ |
| 82 | $-5.4 \%$ |
| 51 | $-5.1 \%$ |
| 12 | $0.1 \%$ |
| 65 | $-8.9 \%$ |
| 35 | $\mathbf{0 . 6 \%}$ |
| 11 | $0.6 \%$ |
| 58 | $-3.2 \%$ |
| $\mathbf{2 2}$ | $\mathbf{1 . 9 \%}$ |
| 11 | $1.3 \%$ |
| 46 | $3.2 \%$ |
|  |  |
| 46 | $-1.6 \%$ |
| 11 | $2.2 \%$ |
| 77 | $-5.7 \%$ |


| 134 | 11.7\% | 133 | -0.5\% |
| :---: | :---: | :---: | :---: |
| 7 | -0.9\% | 7 | 5.1\% |
| 137 | 10.8\% | 136 | -0.7\% |
| 98 | 2.8\% | 94 | -3.8\% |
| 8 | 7.0\% | 7 | -8.5\% |
| 102 | 2.5\% | 98 | -3.9\% |
| 43 | 12.7\% | 45 | 4.2\% |
| 14 | 6.8\% | 15 | 7.4\% |
| 91 | 11.5\% | 82 | -10.7\% |
| 58 | 12.0\% | 54 | -5.5\% |
| 12 | 6.2\% | 13 | 2.4\% |
| 74 | 13.6\% | 71 | -4.2\% |
| 40 | 15.1\% | 43 | 6.7\% |
| 11 | 4.5\% | 13 | 12.4\% |
| 66 | 13.1\% | 65 | -0.8\% |
| 21 | -3.7\% | 22 | 4.9\% |
| 11 | 1.0\% | 11 | 2.0\% |
| 46 | 0.1\% | 48 | 4.2\% |
| 50 | 7.8\% | 49 | -1.2\% |
| 12 | 3.8\% | 12 | 4.4\% |
| 84 | 9.1\% | 80 | -4.7\% |


|  |
| ---: | ---: |
| $-0.8 \%$ |
| $0.3 \%$ |
| $-1.2 \%$ |
| $-3.7 \%$ |
| $-1.2 \%$ |
| $-4.7 \%$ |
| $2.2 \%$ |
| $5.4 \%$ |
| $-1.1 \%$ |
| $-0.4 \%$ |
| $2.6 \%$ |
| $-1.4 \%$ |
| $4.8 \%$ |
| $3.5 \%$ |
| $1.6 \%$ |
| $-0.8 \%$ |
| $1.2 \%$ |
| $1.5 \%$ |
|  |
| $0.5 \%$ |
| $2.9 \%$ |
| $-0.8 \%$ | Consultancy

Forecasting

## Past evolution of the average aircraft MTOW tonnage - International routes.

| Average MTOW Tons per flight |
| :--- |
| Commercial International |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number |  | | $\%$ |
| :---: |
| change |


| Australia - Africa |
| :--- |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - New Zealand |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Northeast Asia |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - South Pacific |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - S-SE As ia/Eur/MEA |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Trans pacific |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Undeterm ined |
| $<20$ tonnes |
| 20 tonnes and over |
| Total International (Pax arcrft) |
| $<20$ tonnes |
| 20 tonnes and over |


| 319 | 346 | 8.2\% | 336 | -2.7\% | 347 | 3.2\% | 364 | 5.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 319 | 346 | 8.2\% | 336 | -2.7\% | 347 | 3.2\% | 364 | 5.0\% |
| 187 | 169 | -9.5\% | 157 | -6.9\% | 149 | -5.1\% | 143 | -4.7\% |
| 11 | 10 | -7.9\% | 11 | 9.6\% | 10 | -8.0\% | 11 | 7.9\% |
| 188 | 170 | -9.6\% | 158 | -7.1\% | 150 | -5.0\% | 143 | -4.5\% |
| 290 | 299 | 3.1\% | 311 | 4.0\% | 302 | -2.9\% | 275 | -9.0\% |
| 0 | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 290 | 299 | 3.1\% | 311 | 4.0\% | 302 | -2.9\% | 275 | -9.0\% |
| 119 | 122 | 3.0\% | 106 | -13.5\% | 111 | 5.0\% | 116 | 4.4\% |
| 11 | 11 | 3.2\% | 11 | 0.1\% | 11 | 0.7\% | 12 | 2.2\% |
| 143 | 147 | 2.9\% | 124 | -15.9\% | 132 | 6.4\% | 139 | 5.7\% |
| 266 | 262 | -1.5\% | 250 | -4.9\% | 250 | 0.1\% | 257 | 2.9\% |
| 8 | 10 | 18.4\% | 11 | 14.1\% | 10 | -11.9\% | 11 | 11.6\% |
| 270 | 277 | 2.4\% | 274 | -1.1\% | 279 | 2.0\% | 287 | 2.9\% |
| 395 | 395 | 0.2\% | 396 | 0.2\% | 397 | 0.1\% | 399 | 0.6\% |
| 0 | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 395 | 395 | 0.2\% | 396 | 0.2\% | 397 | 0.1\% | 399 | 0.6\% |
| 86 | 94 | 9.9\% | 92 | -2.1\% | 78 | -15.8\% | 89 | 15.2\% |
| 9 | 8 | -3.9\% | 9 | 1.3\% | 9 | -0.1\% | 9 | 10.2\% |
| 134 | 152 | 12.7\% | 164 | 8.3\% | 129 | -21.1\% | 134 | 3.8\% |
| 231 | 230 | -0.6\% | 224 | -2.6\% | 218 | -2.7\% | 214 | -1.9\% |
| 10 | 10 | 2.7\% | 11 | 6.6\% | 10 | -6.2\% | 11 | 9.5\% |
| 242 | 243 | 0.3\% | 239 | -1.5\% | 234 | -2.0\% | 228 | -2.5\% |


|  |
| ---: |
| $3.3 \%$ |
| $0.0 \%$ |
| $3.3 \%$ |
| $-6.6 \%$ |
| $0.1 \%$ |
| $-6.6 \%$ |
| $-1.3 \%$ |
| $0.0 \%$ |
| $-1.3 \%$ |
| $-0.6 \%$ |
| $1.5 \%$ |
| $-0.7 \%$ |
| $-0.9 \%$ |
| $7.3 \%$ |
| $1.5 \%$ |
| $0.3 \%$ |
| $0.0 \%$ |
| $0.3 \%$ |
| $1.1 \%$ |
| $1.7 \%$ |
| $0.0 \%$ |
|  |
| $-2.0 \%$ |
| $3.0 \%$ |
| $-1.5 \%$ |

## Past evolution of the average aircraft MTOW tonnage - Other flights.

Average MTOW Tons per flight
Other

| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | change |

## Average Annual Grow th

| Cargo flights |
| :--- |
| Domestic |
| $<20$ tonnes |
| 20 tonnes and over |
| International |
| $<20$ tonnes |
| 20 tonnes and over |
|  |
| Total O-D flights (incl. Cargo) |
| $<20$ tonnes |
| 20 tonnes and over |
| Pure overIfights |
| $<20$ tonnes |
| 20 tonnes and over |
| Non-Commercfial flights |
| $<20$ tonnes |
| 20 tonnes and over |
| Total flights |
| $<20$ tonnes |
| 20 tonnes and over |


| 78 | $97 \quad 24.6 \%$ | 99 | 2.5\% | 169 | 69.7\% | 174 | 3.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 61 | 75 21.5\% | 71 | -4.8\% | 61 | -14.7\% | 16 | -74.4\% |
| 18 | 14 -20.2\% | 14 | -0.1\% | 3 | -78.8\% | 3 | 3.3\% |
| 70 | 90 28.4\% | 79 | -12.6\% | 95 | 20.8\% | 156 | 63.3\% |
| 211 | 260 23.2\% | 310 | 19.4\% | 319 | 2.7\% | 334 | 4.9\% |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 211 | 260 23.2\% | 310 | 19.4\% | 319 | 2.7\% | 334 | 4.9\% |
| 74 | 73 -0.9\% | 72 | -1.9\% | 76 | 6.6\% | 76 | -1.0\% |
| 11 | 11 1.1\% | 11 | 2.1\% | 12 | 3.3\% | 12 | 4.4\% |
| 119 | 120 0.6\% | 114 | -4.9\% | 122 | 6.9\% | 117 | -3.7\% |
| 279 | 283 1.7\% | 273 | -3.6\% | 265 | -3.1\% | 263 | -0.7\% |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 279 | 283 1.7\% | 273 | -3.6\% | 265 | -3.1\% | 263 | -0.7\% |
| 3 | $3-0.4 \%$ | 3 | -2.2\% | 3 | 0.2\% | 3 | 1.9\% |
| 3 | $3-0.4 \%$ | 3 | -2.2\% | 3 | 0.2\% | 3 | 1.9\% |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 41 | 42 2.8\% | 42 | -1.8\% | 43 | 2.8\% | 43 | -0.2\% |
| 5 | 5 4.1\% | 5 | -0.3\% | 5 | -1.3\% | 5 | 2.6\% |
| 123 | 124 0.9\% | 118 | -5.1\% | 126 | 7.3\% | 122 | -3.5\% | Forecasting

## Projection of the average MTOW tonnage by flight - Domestic routes.

| Average MTOW Tons per flight |
| :--- |
| Commercial Domestic |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\%$ change | Number | $\%$ change | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\%$ change | Number | \% change | Number | $\%$ change |


| Sydney - Melbour | 133 | 0.2\% | 135 | 0.9\% | 136 | 0.9\% | 137 | 1.1\% | 139 | 1.1\% | 141 | 1.6\% | 1.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <20 tonnes | 7 | 0.5\% | 8 | 0.7\% | 8 | 0.6\% | 8 | 0.6\% | 8 | 0.6\% | 8 | 0.6\% | 0.6\% |
| 20 tonnes and over | 136 | 0.1\% | 137 | 0.8\% | 138 | 0.8\% | 140 | 1.0\% | 141 | 1.0\% | 143 | 1.5\% | 0.9\% |
| Sydney - Brisbane | 93 | -1.1\% | 92 | -1.0\% | 94 | 1.4\% | 94 | 0.7\% | 95 | 0.8\% | 96 | 1.2\% | 0.3\% |
| <20 tonnes | 7 | -2.1\% | 7 | 0.0\% | 7 | 1.4\% | 7 | 1.4\% | 7 | 2.1\% | 8 | 2.0\% | 0.8\% |
| 20 tonnes and over | 97 | -1.2\% | 96 | -1.2\% | 97 | 1.3\% | 97 | 0.6\% | 98 | 0.6\% | 99 | 0.9\% | 0.2\% |
| Sydney - Rest of Australia | 45 | 0.8\% | 46 | 1.5\% | 47 | 1.6\% | 47 | 1.3\% | 48 | 2.0\% | 49 | 1.3\% | 1.4\% |
| <20 tonnes | 15 | 1.0\% | 15 | 1.4\% | 15 | 1.1\% | 15 | 1.1\% | 16 | 1.1\% | 16 | 1.1\% | 1.1\% |
| 20 tonnes and over | 82 | 0.2\% | 82 | 0.6\% | 83 | 0.6\% | 83 | 0.6\% | 84 | 0.6\% | 84 | 0.6\% | 0.6\% |
| Melbourne - Rest of Australia | 55 | 0.9\% | 55 | 0.8\% | 56 | 0.8\% | 56 | 0.8\% | 57 | 0.8\% | 57 | 0.8\% | 0.8\% |
| <20 tonnes | 13 | 0.8\% | 13 | 0.6\% | 13 | 0.6\% | 13 | 0.6\% | 13 | 0.6\% | 13 | 0.6\% | 0.7\% |
| 20 tonnes and over | 72 | 0.8\% | 72 | 0.7\% | 73 | 0.7\% | 73 | 0.7\% | 74 | 0.7\% | 74 | 0.7\% | 0.7\% |
| Brisbane - Rest of Australia | 43 | 0.7\% | 44 | 2.1\% | 45 | 1.4\% | 45 | 1.1\% | 46 | 1.1\% | 46 | 1.1\% | 1.3\% |
| <20 tonnes | 13 | 0.8\% | 13 | 1.0\% | 13 | 1.0\% | 13 | 1.0\% | 13 | 1.0\% | 13 | 1.0\% | 1.0\% |
| 20 tonnes and over | 65 | 0.0\% | 66 | 0.9\% | 66 | 0.8\% | 67 | 0.8\% | 67 | 0.8\% | 68 | 0.8\% | 0.7\% |
| Domestic - Rest of Australia | 22 | 1.3\% | 23 | 2.2\% | 23 | 2.2\% | 24 | 2.2\% | 24 | 2.2\% | 25 | 2.0\% | 2.0\% |
| <20 tonnes | 11 | -0.1\% | 11 | 0.4\% | 11 | 0.4\% | 11 | 0.4\% | 11 | 0.4\% | 11 | 0.4\% | 0.3\% |
| 20 tonnes and over | 49 | 1.2\% | 49 | 1.3\% | 50 | 1.3\% | 51 | 1.1\% | 51 | 1.0\% | 51 | 0.5\% | 1.1\% |
| Total Domestic (Pax aircraft) | 49 | 0.5\% | 50 | 1.1\% | 50 | 1.1\% | 51 | 1.1\% | 51 | 1.2\% | 52 | 1.1\% | 1.0\% |
| <20 tonnes | 12 | 0.6\% | 13 | 1.0\% | 13 | 0.8\% | 13 | 0.9\% | 13 | 0.8\% | 13 | 0.8\% | 0.8\% |
| 20 tonnes and over | 80 | 0.2\% | 80 | 0.4\% | 81 | 0.6\% | 81 | 0.6\% | 82 | 0.5\% | 82 | 0.6\% | 0.5\% |

## Projection of the average MTOW tonnage by flight - International routes.

| Average MTOW Tons per flight |
| :--- |
| Commercial International |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\begin{gathered} \hline \% \\ \text { change } \end{gathered}$ | Number | $\%$ change | Number |  | Number | $\begin{gathered} \% \\ \text { change } \end{gathered}$ | Number | \% change | Number | \% change |

Average
Annual
Growth

|  | -0.2\% |  | -0.5\% |  |  |  |  |  |  |  |  | -0.5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0.0\% |
| 363 | -0.2\% | 361 | -0.5\% | 359 | -0.5\% | 358 | -0.5\% | 356 | -0.5\% | 354 | -0.5\% | -0.5\% |
| 141 | -1.4\% | 139 | -1.0\% | 139 | 0.0\% | 140 | 0.5\% | 141 | 0.6\% | 142 | 0.8\% | -0.1\% |
| 10 | -0.8\% | 10 | 0.0\% | 11 | 0.9\% | 11 | 0.9\% | 11 | 0.9\% | 11 | 0.9\% | 0.5\% |
| 141 | -1.4\% | 140 | -1.0\% | 140 | 0.0\% | 140 | 0.5\% | 141 | 0.6\% | 143 | 0.8\% | -0.1\% |
| 273 | -0.5\% | 273 | -0.3\% | 273 | 0.0\% | 276 | 1.3\% | 278 | 0.5\% | 279 | 0.5\% | 0.2\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0.0\% |
| 273 | -0.5\% | 273 | -0.3\% | 273 | 0.0\% | 276 | 1.3\% | 278 | 0.5\% | 279 | 0.5\% | 0.2\% |
| 116 | 0.5\% | 117 | 0.5\% | 118 | 1.0\% | 119 | 0.9\% | 120 | 1.1\% | 122 | 1.2\% | 0.9\% |
| 12 | 0.3\% | 12 | 0.8\% | 12 | 1.1\% | 12 | 1.1\% | 12 | 1.5\% | 12 | 2.2\% | 1.2\% |
| 140 | 0.6\% | 141 | 0.6\% | 142 | 0.9\% | 143 | 0.9\% | 145 | 1.0\% | 146 | 1.0\% | 0.9\% |
| 259 | 0.6\% | 259 | 0.0\% | 259 | 0.0\% | 259 | 0.2\% | 260 | 0.5\% | 262 | 0.6\% | 0.3\% |
| 11 | 1.1\% | 11 | 0.0\% | 11 | 0.0\% | 11 | 0.0\% | 11 | 0.0\% | 11 | 0.0\% | 0.2\% |
| 291 | 1.3\% | 293 | 0.6\% | 294 | 0.6\% | 297 | 0.9\% | 301 | 1.2\% | 305 | 1.4\% | 1.0\% |
| 399 | 0.0\% | 400 | 0.1\% | 400 | 0.1\% | 403 | 0.7\% | 405 | 0.5\% | 407 | 0.5\% | 0.3\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0.0\% |
| 399 | 0.0\% | 400 | 0.1\% | 400 | 0.1\% | 403 | 0.7\% | 405 | 0.5\% | 407 | 0.5\% | 0.3\% |
| 86 | -3.5\% | 86 | 0.0\% | 86 | 0.0\% | 86 | 0.0\% | 86 | 0.0\% | 86 | 0.0\% | -0.6\% |
| 9 | -5.1\% | 9 | 0.0\% | 9 | 0.0\% | 9 | 0.0\% | 9 | 0.0\% | 9 | 0.0\% | -0.9\% |
| 136 | 1.0\% | 136 | 0.0\% | 136 | 0.0\% | 136 | 0.0\% | 136 | 0.0\% | 136 | 0.0\% | 0.2\% |
| 214 | 0.1\% | 214 | 0.2\% | 216 | 0.6\% | 218 | 1.1\% | 220 | 1.0\% | 222 | 1.1\% | 0.7\% |
| 11 | 0.0\% | 11 | 0.3\% | 11 | 0.4\% | 11 | 0.4\% | 11 | 0.4\% | 11 | 0.5\% | 0.3\% |
| 229 | 0.4\% | 230 | 0.4\% | 232 | 0.8\% | 235 | 1.3\% | 238 | 1.2\% | 241 | 1.3\% | 0.9\% |

28 November 2003

## Projection of the average MTOW tonnage by flight - Other flights.

| Average MTOW Tons per flight Other | FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  | Average Annual Grow th |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | \% change | Number | $\%$ change | Number |  | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ change |  |
|  |  |  | Number change |  |  |  |  |  |  |  |  |  |  |
| Cargo flights | 171 | -1.6\% | 170 | -0.8\% | 169 | -0.8\% | 167 | -0.8\% | 166 | -0.8\% | 165 | -0.6\% | -0.9\% |
| Domestic | 3 | -80.7\% | 3 | 0.0\% | 3 | 0.0\% | 3 | 0.0\% | 3 | 0.0\% | 3 | 0.0\% | -24.0\% |
| <20 tonnes | 3 | -3.0\% | 3 | 0.0\% | 3 | 0.0\% | 3 | 0.0\% | 3 | 0.0\% | 3 | 0.0\% | -0.5\% |
| 20 tonnes and over | 0 | -100.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | -100.0\% |
| International | 335 |  | 337 |  | 339 |  | 341 |  | 343 |  | 346 |  | 0.6\% |
| <20 tonnes | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0.0\% |
| 20 tonnes and over | 335 | 0.2\% | 337 | 0.6\% | 339 | 0.6\% | 341 | 0.6\% | 343 | 0.6\% | 346 | 0.9\% | 0.6\% |
| Total O-D flights | 76 | 0.6\% | 77 | 1.3\% | 78 | 1.6\% | 80 | 1.8\% | 81 | 2.0\% | 83 | 2.0\% | 1.6\% |
| <20 tonnes | 12 | 0.6\% | 12 | 0.9\% | 13 | 0.8\% | 13 | 0.8\% | 13 | 0.7\% | 13 | 0.7\% | 0.7\% |
| 20 tonnes and over | 118 | 0.4\% | 119 | 0.6\% | 120 | 1.1\% | 121 | 1.4\% | 123 | 1.3\% | 125 | 1.5\% | 1.0\% |
| Pure overlfights | 263 | 0.2\% | 264 | 0.4\% | 265 | 0.4\% | 266 | 0.4\% | 268 | 0.7\% | 273 | 1.8\% | 0.6\% |
| <20 tonnes | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0.0\% |
| 20 tonnes and over | 263 | 0.2\% | 264 | 0.4\% | 265 | 0.4\% | 266 | 0.4\% | 268 | 0.7\% | 273 | 1.8\% | 0.6\% |
| Non-Commercfial flights | 2 | -6.2\% | 2 | 0.0\% | 2 | 0.0\% | 2 | 0.0\% | 2 | 0.0\% | 2 | 0.0\% | -1.1\% |
| <20 tonnes | 2 | -6.2\% | 2 | 0.0\% | 2 | 0.0\% | 2 | 0.0\% | 2 | 0.0\% | 2 | 0.0\% | -1.1\% |
| 20 tonnes and over | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0.0\% |
| Total flights | 42 | -0.6\% | 44 | 2.6\% | 44 | 2.0\% | 45 | 1.9\% | 46 | 1.8\% | 47 | 1.8\% | 1.6\% |
| <20 tonnes | 5 | -2.6\% | 5 | 1.4\% | 5 | 0.6\% | 5 | 0.3\% | 5 | -0.1\% | 5 | -0.1\% | -0.1\% |
| 20 tonnes and over | 122 | 0.3\% | 123 | 0.5\% |  | 1.0\% |  | 1.3\% | 127 | 1.2\% | 129 | 1.4\% | 1.0\% |

Projection of passenger denand

## 3

## Projection of average distance

Projection of JITOM ionne-silonetres
Projection of the nunder of charging units
Detailed table constuction and assungitons
Appendix

## Past trends in the average distance flown across the Australian airspace, as shown by the ASA data - Domestic routes.



| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | change |

Average Annual Grow th

| 707 | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 0.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 707 | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 0.0\% |
| 707 | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 0.0\% |
| 747 | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 0.0\% |
| 747 | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 0.0\% |
| 747 | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 0.0\% |
| 679 | 649 | -4.5\% | 676 | 4.1\% | 602 | -10.8\% | 632 | 5.0\% | -1.8\% |
| 438 | 419 | -4.2\% | 382 | -9.0\% | 446 | 16.8\% | 488 | 9.6\% | 2.8\% |
| 730 | 701 | -4.0\% | 755 | 7.6\% | 641 | -15.1\% | 664 | 3.6\% | -2.3\% |
| 1,137 | 1,154 | 1.5\% | 1,164 | 0.9\% | 1,180 | 1.4\% | 1,201 | 1.8\% | 1.4\% |
| 445 | 446 | 0.1\% | 443 | -0.7\% | 462 | 4.3\% | 466 | 0.9\% | 1.1\% |
| 1,184 | 1,200 | 1.4\% | 1,209 | 0.7\% | 1,223 | 1.2\% | 1,253 | 2.4\% | 1.4\% |
| 1,159 | 1,150 | -0.8\% | 1,200 | 4.4\% | 1,260 | 5.0\% | 1,312 | 4.1\% | 3.2\% |
| 423 | 420 | -0.5\% | 413 | -1.6\% | 468 | 13.3\% | 463 | -1.1\% | 2.3\% |
| 1,298 | 1,287 | -0.8\% | 1,340 | 4.1\% | 1,380 | 3.0\% | 1,434 | 3.9\% | 2.5\% |
| 998 | 988 | -1.0\% | 989 | 0.1\% | 990 | 0.0\% | 1,004 | 1.5\% | 0.1\% |
| 374 | 353 | -5.6\% | 352 | -0.2\% | 395 | 12.1\% | 395 | 0.2\% | 1.4\% |
| 1,266 | 1,312 | 3.6\% | 1,313 | 0.1\% | 1,334 | 1.6\% | 1,334 | 0.0\% | 1.3\% |
| 881 | 876 | -0.6\% | 889 | 1.5\% | 892 | 0.4\% | 914 | 2.5\% | 0.9\% |
| 414 | 398 | -4.0\% | 383 | -3.7\% | 432 | 12.7\% | 445 | 3.2\% | 1.8\% |
| 939 | 940 | 0.1\% | 956 | 1.7\% | 951 | -0.5\% | 976 | 2.6\% | 1.0\% |

## Past trends in the average distance flown across the Australian airspace, as shown by the ASA data - International routes.

|  |
| :--- |
| Average Distance per flight <br> Commercial International |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | \% <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |


| Average |
| :---: |
| Annual |
| Grow th |


| Australia - Africa |
| :--- |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - New Zealand |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Northeast Asia |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - South Pacific |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - S-SEAsia/Eur/MEA |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Trans pacific |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Undeterm ined |
| $<20$ tonnes |
| 20 tonnes and over |
|  |
| Total International (Pax arcrft) |
| $<20$ tonnes |
| 20 tonnes and over |


|  |  |  | 4,042 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 0\% |  |  | 0 | 0.0\% |  |  | \% |
| 2,918 | 3,043 | 3\% | 4,042 | 32.8\% | 4,916 | 21.6\% | 4,776 | -29\% | 13.1\% |
| 1,286 | 1,260 | -2.1\% | 1,245 | -1.2\% | 1,275 | 2.4\% | 1,254 | -1.6\% | -0.6\% |
| 1,363 | 1,339 | -1.7\% | 1,197 | -10.6\% | 1,187 | -0.8\% | 1,255 | 5.7\% | -2.0\% |
| 1,286 | 1,260 | -2.1\% | 1,245 | -1.2\% | 1,275 | 2.4\% | 1,254 | -1.6\% | -0.6\% |
| 2,488 | 2,529 | 1.6\% | 2,592 | 2.5\% | 2,527 | -2.5\% | 2,540 | 0.5\% | 0.5\% |
|  | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0.0\% |
| 2,488 | 2,529 | 1.6\% | 2,592 | 2.5\% | 2,527 | -2.5\% | 2,540 | 0.5\% | 0.5\% |
| 1,288 | 1,317 | 2.3\% | 1,341 | 1.8\% | 1,363 | 1.6\% | 1,343 | -1.4\% | 1.1\% |
| 644 | 671 | 4.3\% | 663 | -1.3\% | 667 | 0.6\% | 669 | 0.3\% | 1.0\% |
| 1,299 | 1,328 | 2.3\% | 1,353 | 1.9\% | 1,375 | 1.7\% | 1,356 | -1.4\% | 1.1\% |
| 3,485 | 3,483 | -0.1\% | 3,479 | -0.1\% | 3,557 | 2.2\% | 3,597 | 1.1\% | 0.8\% |
| 729 | 579 | -20.6\% | 540 | -6.8\% | 520 | -3.7\% | 522 | 0.4\% | -8.0\% |
| 3,487 | 3,489 | 0.1\% | 3,491 | 0.1\% | 3,570 | 2.2\% | 3,612 | 1.2\% | 0.9\% |
| 1,239 | 1,310 | 5.7\% | 1,327 | 1.2\% | 1,305 | -1.7\% | 1,314 | 0.7\% | 1.5\% |
| 0 | 0 | 0.0\% |  | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0.0\% |
| 1,239 | 1,310 | 5.7\% | 1,327 | 1.2\% | 1,305 | -1.7\% | 1,314 | 0.7\% | 1.5\% |
| 2,498 | 2,661 | 6.5\% | 2,748 | 3.3\% | 2,757 | 0.3\% | 2,851 | 3.4\% | 3.4\% |
| 565 | 584 | 3.4\% | 468 | -20.0\% | 540 | 15.6\% | 579 | 7.1\% | 0.6\% |
| 2,579 | 2,739 | 6.2\% | 2,851 | 4.1\% | 2,868 | 0.6\% | 2,941 | 2.6\% | 3.3\% |
| 2,473 | 2,512 | 1.6\% | 2,558 | 1.8\% | 2,622 | 2.5\% | 2,605 | -0.7\% | 1.3\% |
| 648 | 636 | -1.9\% | 566 | -10.9\% | 570 | 0.7\% | 586 | 2.8\% | -2.5\% |
| 2,476 | 2,517 | 1.6\% | 2,564 | 1.9\% | 2,629 | 2.5\% | 2,612 | -0.6\% | 1.3\% |

Forecasting

## Past trends in the average distance flown across the Australian airspace, as shown by the ASA data - Other flights.

| Average Distance per flight <br> Other |
| :--- |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average
Annual
Grow th

| Cargo flights <br> Dom es tic <br> $<20$ tonnes <br> 20 tonnes and over <br> International <br> $<20$ tonnes <br> 20 tonnes and over <br>  <br> Total O-D flights (incl. Cargo) <br> $<20$ tonnes <br> 20 tonnes and over <br> Pure overlfights <br> $<20$ tonnes <br> 20 tonnes and over <br> Non-Commercfial flights <br> $<20$ tonnes <br> 20 tonnes and over <br>  <br> Total flights <br> $<20$ tonnes <br> 20 tonnes and over |
| :--- |


| 990 | 1,166 | 17.8\% | 1,326 | 13.6\% | 2,341 | 76.6\% | 2,541 | 8.5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 866 | 900 | 3.9\% | 916 | 1.8\% | 1,396 | 52.4\% | 1,432 | 2.6\% |
| 652 | 637 | -2.3\% | 686 | 7.6\% | 318 | -53.7\% | 325 | 2.4\% |
| 877 | 911 | 3.8\% | 922 | 1.2\% | 1,416 | 53.6\% | 1,680 | 18.6\% |
| 1,285 | 1,728 | 34.5\% | 2,027 | 17.3\% | 2,592 | 27.8\% | 2,593 | 0.1\% |
|  | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 1,285 | 1,728 | 34.5\% | 2,027 | 17.3\% | 2,592 | 27.8\% | 2,593 | 0.1\% |
| 1,576 | 1,608 | 2.1\% | 1,636 | 1.7\% | 1,680 | 2.7\% | 1,690 | 0.6\% |
| 419 | 403 | -3.8\% | 388 | -3.8\% | 435 | 12.2\% | 449 | 3.1\% |
| 1,653 | 1,693 | 2.4\% | 1,723 | 1.8\% | 1,764 | 2.4\% | 1,776 | 0.6\% |
| 3,000 | 3,280 | 9.3\% | 3,265 | -0.5\% | 2,810 | -13.9\% | 2,922 | 4.0\% |
|  | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 3,000 | 3,280 | 9.3\% | 3,265 | -0.5\% | 2,810 | -13.9\% | 2,922 | 4.0\% |
| 238 | 232 | -2.6\% | 219 | -5.3\% | 231 | 5.1\% | 231 | 0.0\% |
| 238 | 232 | -2.6\% | 219 | -5.3\% | 231 | 5.1\% | 231 | 0.0\% |
| 0 |  | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 1,610 | 1,664 | 3.4\% | 1,681 | 1.0\% | 1,708 | 1.6\% | 1,726 | 1.0\% |
| 357 | 348 | -2.3\% | 334 | -4.0\% | 367 | 9.8\% | 376 | 2.5\% |
| 1,730 | 1,791 | 3.5\% | 1,811 | 1.1\% | 1,835 | 1.3\% | 1,854 | 1.1\% |


|  |
| ---: |
| $26.6 \%$ |
| $13.4 \%$ |
| $-16.0 \%$ |
| $17.6 \%$ |
| $19.2 \%$ |
| $0.0 \%$ |
| $19.2 \%$ |
|  |
| $1.8 \%$ |
| $1.7 \%$ |
| $1.8 \%$ |
|  |
| $-0.7 \%$ |
| $0.0 \%$ |
| $-0.7 \%$ |
|  |
| $-0.8 \%$ |
| $-0.8 \%$ |
| $0.0 \%$ |
|  |
| $1.8 \%$ |
| $1.4 \%$ |
| $1.7 \%$ |

## Projection of the average distance flown across the Australian airspace - Domestic routes.

## Average Distance per flight Commercial Domestic

| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\%$ |  | $\%$ |  | \% |  | $\%$ |  | $\%$ | Number | $\%$ |
| Number |  | Number |  | Number |  | Number |  | Number |  | Number |  |

Average

Grow th

| Sydney - Me lbourne |
| :--- |
| $<20$ tonnes |
| 20 tonnes and over |
| Sydney - Bris bane |
| $<20$ tonnes |
| 20 tonnes and over |
| Sydney - Rest of Australia |
| $<20$ tonnes |
| 20 tonnes and over |
| Melbourne - Rest of Australia |
| $<20$ tonnes |
| 20 tonnes and over |
| Brisbane - Rest of Australia |
| $<20$ tonnes |
| 20 tonnes and over |
| Domestic - Rest of Australia |
| $<20$ tonnes |
| 20 tonnes and over |
|  |
| Total Domestic (Pax aircraft) |
| $<20$ tonnes |
| 20 tonnes and over |


| 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% |
| 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% | 707 | 0.0\% |
| 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% |
| 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% |
| 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% | 747 | 0.0\% |
| 638 | 0.8\% | 647 | 1.4\% | 657 | 1.5\% | 669 | 1.9\% | 683 | 2.1\% | 700 | 2.5\% |
| 490 | 0.4\% | 492 | 0.4\% | 494 | 0.4\% | 496 | 0.4\% | 498 | 0.4\% | 500 | 0.4\% |
| 670 | 0.9\% | 680 | 1.5\% | 691 | 1.6\% | 705 | 2.0\% | 720 | 2.1\% | 740 | 2.8\% |
| 1,218 | 1.4\% | 1,232 | 1.2\% | 1,247 | 1.2\% | 1,261 | 1.2\% | 1,276 | 1.2\% | 1,290 | 1.1\% |
| 466 | 0.1\% | 468 | 0.4\% | 470 | 0.4\% | 472 | 0.4\% | 474 | 0.4\% | 476 | 0.4\% |
| 1,270 | 1.4\% | 1,285 | 1.2\% | 1,300 | 1.2\% | 1,315 | 1.2\% | 1,330 | 1.1\% | 1,345 | 1.1\% |
| 1,327 | 1.1\% | 1,340 | 1.0\% | 1,349 | 0.6\% | 1,356 | 0.5\% | 1,363 | 0.5\% | 1,367 | 0.3\% |
| 465 | 0.4\% | 465 | 0.0\% | 465 | 0.0\% | 465 | 0.0\% | 465 | 0.0\% | 465 | 0.0\% |
| 1,450 | 1.1\% | 1,460 | 0.7\% | 1,468 | 0.5\% | 1,475 | 0.5\% | 1,482 | 0.5\% | 1,486 | 0.3\% |
| 1,010 | 0.6\% | 1,020 | 1.0\% | 1,030 | 0.9\% | 1,039 | 0.9\% | 1,049 | 0.9\% | 1,058 | 0.9\% |
| 396 | 0.1\% | 397 | 0.3\% | 398 | 0.3\% | 399 | 0.3\% | 400 | 0.3\% | 401 | 0.3\% |
| 1,335 | 0.1\% | 1,336 | 0.1\% | 1,337 | 0.1\% | 1,338 | 0.1\% | 1,339 | 0.1\% | 1,340 | 0.1\% |
| 920 | 0.7\% | 928 | 0.8\% | 936 | 0.9\% | 945 | 0.9\% | 953 | 0.9\% | 963 | 1.0\% |
| 447 | 0.3\% | 449 | 0.4\% | 450 | 0.4\% | 452 | 0.4\% | 453 | 0.3\% | 455 | 0.3\% |
| 982 | 0.7\% | 990 | 0.8\% | 998 | 0.8\% | 1,007 | 0.9\% | 1,015 | 0.8\% | 1,025 | 1.0\% |

0.0\%
0.0\%
0.0\%
0.0\%
0.0\%
0.0\%
1.7\%
0.4\%
1.8\%
1.2\%
0.4\%
1.2\%
0.7\%
0.1\%
0.6\%
0.9\%
0.2\%
0.1\%
0.9\%
0.3\%
0.8\% onsultancy

28 November 2003

## Projection of the average distance flown across the Australian airspace - International routes.

| Average Distance per flight <br> Commercial International |
| :--- |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 | FY2007-2008 |  | FY2008-2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average
Annual
Grow th

| Australia - Africa |
| :--- |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - New Zealand |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Northe ast Asia |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - South Pacific |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - S-SE Asia/Eur/MEA |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Trans pacific |
| $<20$ tonnes |
| 20 tonnes and over |
| Australia - Undeterm ined |
| $<20$ tonnes |
| 20 tonnes and over |
|  |
| Total International (Pax arcrft) |
| $<20$ tonnes |
| 20 tonnes and over |


|  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{4 , 8 0 0}$ | $\mathbf{0 . 5 \%}$ | $\mathbf{4 , 8 1 0}$ | $\mathbf{0 . 2 \%}$ | $\mathbf{4 , 8 3 0}$ | $\mathbf{0 . 4 \%}$ |
| 0 | $0.0 \%$ | 0 | $0.0 \%$ | 0 | $0.0 \%$ |
| 4,800 | $0.5 \%$ | 4,810 | $0.2 \%$ | 4,830 | $0.4 \%$ |
| $\mathbf{1 , 2 6 0}$ | $\mathbf{0 . 4 \%}$ | $\mathbf{1 , 2 6 5}$ | $\mathbf{0 . 4 \%}$ | $\mathbf{1 , 2 7 0}$ | $\mathbf{0 . 4 \%}$ |
| $\mathbf{1 , 2 6 0}$ | $0.4 \%$ | 1,260 | $0.0 \%$ | 1,260 | $0.0 \%$ |
| 1,260 | $0.4 \%$ | 1,265 | $0.4 \%$ | 1,270 | $0.4 \%$ |
| $\mathbf{2 , 5 4 2}$ | $\mathbf{0 . 1 \%}$ | $\mathbf{2 , 5 4 5}$ | $\mathbf{0 . 1 \%}$ | $\mathbf{2 , 5 4 7}$ | $\mathbf{0 . 1 \%}$ |
| 0 | $0.0 \%$ | 0 | $0.0 \%$ | 0 | $0.0 \%$ |
| 2,542 | $0.1 \%$ | 2,545 | $0.1 \%$ | 2,547 | $0.1 \%$ |
| $\mathbf{1 , 3 4 7}$ | $\mathbf{0 . 3 \%}$ | $\mathbf{1 , 3 5 2}$ | $\mathbf{0 . 4 \%}$ | $\mathbf{1 , 3 5 7}$ | $\mathbf{0 . 4 \%}$ |
| 669 | $0.1 \%$ | 670 | $0.1 \%$ | 672 | $0.3 \%$ |
| 1,360 | $0.3 \%$ | 1,365 | $0.4 \%$ | 1,370 | $0.4 \%$ |
| $\mathbf{3 , 6 0 4}$ | $\mathbf{0 . 2 \%}$ | $\mathbf{3 , 6 1 4}$ | $\mathbf{0 . 3 \%}$ | $\mathbf{3 , 6 2 3}$ | $\mathbf{0 . 3 \%}$ |
| 515 | $-1.3 \%$ | 510 | $-1.0 \%$ | 508 | $-0.4 \%$ |
| 3,620 | $0.2 \%$ | 3,630 | $0.3 \%$ | 3,640 | $0.3 \%$ |
| $\mathbf{1 , 3 1 5}$ | $\mathbf{0 . 1 \%}$ | $\mathbf{1 , 3 1 6}$ | $\mathbf{0 . 1 \%}$ | $\mathbf{1 , 3 1 7}$ | $\mathbf{0 . 1 \%}$ |
| 0 | $0.0 \%$ | 0 | $0.0 \%$ | 0 | $0.0 \%$ |
| $\mathbf{1 , 3 1 5}$ | $0.1 \%$ | $\mathbf{1 , 3 1 6}$ | $0.1 \%$ | $\mathbf{1 , 3 1 7}$ | $0.1 \%$ |
| $\mathbf{2 , 8 5 4}$ | $\mathbf{0 . 1 \%}$ | $\mathbf{2 , 8 5 4}$ | $\mathbf{0 . 0 \%}$ | $\mathbf{2 , 8 5 4}$ | $\mathbf{0 . 0 \%}$ |
| 580 | $0.2 \%$ | 580 | $0.0 \%$ | 580 | $0.0 \%$ |
| 2,950 | $0.3 \%$ | 2,950 | $0.0 \%$ | 2,950 | $0.0 \%$ |
|  |  |  |  |  |  |
| $\mathbf{2 , 6 2 8}$ | $0.9 \%$ | $\mathbf{2 , 6 4 2}$ | $0.5 \%$ | $\mathbf{2 , 6 5 6}$ | $0.5 \%$ |
| 580 | $-1.2 \%$ | 574 | $-0.9 \%$ | 571 | $-0.6 \%$ |
| 2,635 | $0.9 \%$ | 2,649 | $0.5 \%$ | 2,664 | $0.5 \%$ |


| 4,850 | 0.4\% | 4,860 | 0.2\% | 4,870 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 4,850 | 0.4\% | 4,860 | 0.2\% | 4,870 | 0.2\% |
| 1,275 | 0.4\% | 1,280 | 0.4\% | 1,285 | 0.4\% |
| 1,260 | 0.0\% | 1,260 | 0.0\% | 1,260 | 0.0\% |
| 1,275 | 0.4\% | 1,280 | 0.4\% | 1,285 | 0.4\% |
| 2,549 | 0.1\% | 2,551 | 0.1\% | 2,552 | 0.0\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 2,549 | 0.1\% | 2,551 | 0.1\% | 2,552 | 0.0\% |
| 1,362 | 0.4\% | 1,367 | 0.4\% | 1,372 | 0.4\% |
| 674 | 0.3\% | 676 | 0.3\% | 678 | 0.3\% |
| 1,375 | 0.4\% | 1,380 | 0.4\% | 1,385 | 0.4\% |
| 3,632 | 0.3\% | 3,641 | 0.3\% | 3,650 | 0.3\% |
| 506 | -0.4\% | 504 | -0.4\% | 502 | -0.4\% |
| 3,650 | 0.3\% | 3,660 | 0.3\% | 3,670 | 0.3\% |
| 1,318 | 0.1\% | 1,319 | 0.1\% | 1,320 | 0.1\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 1,318 | 0.1\% | 1,319 | 0.1\% | 1,320 | 0.1\% |
| 2,854 | 0.0\% | 2,854 | 0.0\% | 2,854 | 0.0\% |
| 580 | 0.0\% | 580 | 0.0\% | 580 | 0.0\% |
| 2,950 | 0.0\% | 2,950 | 0.0\% | 2,950 | 0.0\% |
| 2,671 | 0.6\% | 2,686 | 0.5\% | 2,699 | 0.5\% |
| 568 | -0.6\% | 565 | -0.5\% | 562 | -0.5\% |
| 2,679 | 0.6\% | 2,694 | 0.5\% | 2,708 | 0.5\% |



## Projection of the average distance flown across the Australian airspace - Other flights.

| Average Distance per flight <br> Other |
| :--- |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\%$ <br> change | Number | $\%$ change | Number | $\%$ change | Number | \% change | Number | \% change | Number | $\%$ change |


| Average |
| :---: |
| Annual |
| Grow th |


| Cargo flights <br> Dom estic <br> $<20$ tonnes <br> 20 tonnes and over <br> International <br> $<20$ tonnes <br> 20 tonnes and over <br> Total O-D flights <br> $<20$ tonnes <br> 20 tonnes and over <br> Pure overlfights <br> $<20$ tonnes <br> 20 tonnes and over <br> Non-Commercfial flights <br> $<20$ tonnes <br> 20 tonnes and over <br> Total flights <br> $<20$ tonnes <br> 20 tonnes and over |
| :--- |


|  | 1.5\% |  | 0.4\% |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,580 | 1.5\% |  |  |  |  |  |  |  | 0.4\% | 2,628 |  |
| 330 | -76.9\% | 335 | 1.5\% | 338 | 0.9\% | 340 | 0.6\% | 342 | 0.6\% | 344 | 0.6\% |
| 330 | 1.5\% | 335 | 1.5\% | 338 | 0.9\% | 340 | 0.6\% | 342 | 0.6\% | 344 | 0.6\% |
| 0 | -100.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 2,600 |  | 2,610 |  | 2,620 |  | 2,630 |  | 2,640 |  | 2,650 |  |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 2,600 | 0.3\% | 2,610 | 0.4\% | 2,620 | 0.4\% | 2,630 | 0.4\% | 2,640 | 0.4\% | 2,650 | 0.4\% |
| 1,708 | 1.1\% | 1,724 | 0.9\% | 1,743 | 1.1\% | 1,766 | 1.3\% | 1,788 | 1.3\% | 1,812 | 1.4\% |
| 450 | 0.3\% | 452 | 0.4\% | 453 | 0.4\% | 455 | 0.4\% | 457 | 0.3\% | 458 | 0.3\% |
| 1,794 | 1.0\% | 1,809 | 0.8\% | 1,828 | 1.0\% | 1,850 | 1.2\% | 1,871 | 1.1\% | 1,895 | 1.3\% |
| 2,920 | -0.1\% | 2,920 | 0.0\% | 2,920 | 0.0\% | 2,920 | 0.0\% | 2,920 | 0.0\% | 2,920 | 0.0\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 2,920 | -0.1\% | 2,920 | 0.0\% | 2,920 | 0.0\% | 2,920 | 0.0\% | 2,920 | 0.0\% | 2,920 | 0.0\% |
| 230 | -0.2\% | 230 | 0.0\% | 229 | -0.4\% | 228 | -0.4\% | 228 | 0.0\% | 227 | -0.4\% |
| 230 | -0.2\% | 230 | 0.0\% | 229 | -0.4\% | 228 | -0.4\% | 228 | 0.0\% | 227 | -0.4\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 1,741 | 0.9\% | 1,755 | 0.8\% | 1,772 | 1.0\% | 1,793 | 1.2\% | 1,814 | 1.1\% | 1,837 | 1.2\% |
| 379 | 0.8\% | 382 | 0.7\% | 383 | 0.3\% | 384 | 0.2\% | 385 | 0.2\% | 385 | 0.1\% |
| 1,869 | 0.8\% | 1,881 | 0.6\% | 1,897 | 0.8\% | 1,917 | 1.1\% | 1,936 | 1.0\% | 1,958 | 1.1\% |


|  |
| :---: |
| $0.6 \%$ |
| $-21.2 \%$ |
| $0.9 \%$ |
| $-100.0 \%$ |
| $0.4 \%$ |
| $0.0 \%$ |
| $0.4 \%$ |
|  |
| $1.2 \%$ |
| $0.3 \%$ |
| $1.1 \%$ |
|  |
| $0.0 \%$ |
| $0.0 \%$ |
| $0.0 \%$ |
|  |
| $-0.3 \%$ |
| $-0.3 \%$ |
| $0.0 \%$ |
|  |
| $1.0 \%$ |
| $0.4 \%$ |
| $0.9 \%$ |
|  |

## 1

## 2

3
4
5
6

## 7

8
Projection of the nunder of charging units
Detailed table construction and assunptions
Appendix

## Past trends in aircraft MTOW tonnes-kilometres - Domestic routes.

| No. of MTOW Ton-kilometres <br> Commercial Domestic (000) |
| :--- |


| FY1998-1999 | FY 1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average Annual Grow th

Sydney - Melbourne
<20 tonnes
20 tonnes and over
Sydney - Brisbane
<20 tonnes
20 tonnes and over
Sydney - Rest of Australia
<20 tonnes
20 tonnes and over
Melbourne - Rest of Australia
<20 tonnes
20 tonnes and over
Brisbane - Rest of Australia
<20 tonnes
20 tonnes and over
Domestic - Rest of Australia
<20 tonnes
20 tonnes and over

Total Domestic (Pax aircraft)
<20 tonnes
20 tonnes and over


## Past trends in aircraft MTOW tonnes-kilometres - International routes.

| No. of MTOW Ton-kilometres <br> Commercial International (000) |
| :--- |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average Annual
Grow th

Australia - Africa
<20 tonnes
20 tonnes and over
Australia - New Zealand <20 tonnes

20 tonnes and over
Australia - Northeast Asia
<20 tonnes
20 tonnes and over
Australia - South Pacific
<20 tonnes
20 tonnes and over
Australia-S-SE Asia/Eur/MEA
<20 tonnes
20 tonnes and over
Australia - Transpacific
<20 tonnes
20 tonnes and over
Australia - Undetermined
<20 tonnes
20 tonnes and over

Total International (Pax arcrft) <20 tonnes

20 tonnes and over


|  |
| ---: |
| $17.9 \%$ |
| $0.0 \%$ |
| $17.9 \%$ |
| $-0.7 \%$ |
| $1.7 \%$ |
| $-0.7 \%$ |
| $-0.8 \%$ |
| $0.0 \%$ |
| $-0.8 \%$ |
| $-1.0 \%$ |
| $0.9 \%$ |
| $-1.0 \%$ |
| $2.8 \%$ |
| $66.8 \%$ |
| $2.8 \%$ |
| $2.5 \%$ |
| $0.0 \%$ |
| $2.5 \%$ |
| $-8.1 \%$ |
| $-11.7 \%$ |
| $-8.1 \%$ |
|  |
| $1.7 \%$ |
| $12.8 \%$ |
| $1.7 \%$ |

## Past trends in aircraft MTOW tonnes-kilometres - Other flights.



## Projected trends in aircraft MTOW tonne-kilometres - Domestic routes.

| No. of MTOW Ton-kilometres Commercial Domestic (000) | FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  | Average <br> Annual Grow th |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | \% change | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\%$ change | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \\ \hline \end{array}$ |  |
| Sydney - Melbourne | 3,656,353 | 4.9\% | 3,809,951 | 4.2\% | 3,928,458 | 3.1\% | 4,016,795 | 2.2\% | 4,097,246 | 2.0\% | 4,167,268 | 1.7\% | 3.0\% |
| <20 tonnes | 4,600 | 0.0\% | 4,527 | -1.6\% | 4,393 | -3.0\% | 4,211 | -4.1\% | 4,009 | -4.8\% | 3,786 | -5.6\% | -3.2\% |
| 20 tonnes and over | 3,651,753 | 4.9\% | 3,805,424 | 4.2\% | 3,924,065 | 3.1\% | 4,012,584 | 2.3\% | 4,093,237 | 2.0\% | 4,163,481 | 1.7\% | 3.0\% |
| Sydney-Brisbane | 2,164,186 | 2.8\% | 2,242,196 | 3.6\% | 2,286,946 | 2.0\% | 2,315,644 | 1.3\% | 2,342,659 | 1.2\% | 2,378,138 | 1.5\% | 2.1\% |
| <20 tonnes | 6,434 | -2.5\% | 6,285 | -2.3\% | 6,216 | -1.1\% | 6,098 | -1.9\% | 5,970 | -2.1\% | 5,656 | -5.3\% | -2.5\% |
| 20 tonnes and over | 2,157,752 | 2.8\% | 2,235,911 | 3.6\% | 2,280,730 | 2.0\% | 2,309,546 | 1.3\% | 2,336,689 | 1.2\% | 2,372,483 | 1.5\% | 2.1\% |
| Sydney - Rest of Australia | 3,653,907 | 8.4\% | 3,954,441 | 8.2\% | 4,223,471 | 6.8\% | 4,467,692 | 5.8\% | 4,726,663 | 5.8\% | 4,944,253 | 4.6\% | 6.6\% |
| <20 tonnes | 502,796 | 7.6\% | 533,561 | 6.1\% | 555,151 | 4.0\% | 572,995 | 3.2\% | 581,296 | 1.4\% | 589,149 | 1.4\% | 3.9\% |
| 20 tonnes and over | 3,151,110 | 8.5\% | 3,420,880 | 8.6\% | 3,668,320 | 7.2\% | 3,894,697 | 6.2\% | 4,145,367 | 6.4\% | 4,355,104 | 5.1\% | 7.0\% |
| Melbourne - Rest of Australia | 6,997,907 | 5.3\% | 7,374,028 | 5.4\% | 7,712,156 | 4.6\% | 7,989,676 | 3.6\% | 8,241,652 | 3.2\% | 8,466,172 | 2.7\% | 4.1\% |
| <20 tonnes | 174,570 | 3.3\% | 181,367 | 3.9\% | 187,030 | 3.1\% | 191,062 | 2.2\% | 194,356 | 1.7\% | 196,894 | 1.3\% | 2.6\% |
| 20 tonnes and over | 6,823,337 | 5.3\% | 7,192,661 | 5.4\% | 7,525,126 | 4.6\% | 7,798,614 | 3.6\% | 8,047,296 | 3.2\% | 8,269,278 | 2.8\% | 4.2\% |
| Brisbane - Rest of Australia | 3,912,487 | 7.7\% | 4,207,109 | 7.5\% | 4,454,876 | 5.9\% | 4,657,554 | 4.5\% | 4,849,340 | 4.1\% | 5,014,843 | 3.4\% | 5.5\% |
| <20 tonnes | 170,664 | 5.8\% | 175,683 | 2.9\% | 182,280 | 3.8\% | 188,263 | 3.3\% | 193,634 | 2.9\% | 198,189 | 2.4\% | 3.5\% |
| 20 tonnes and over | 3,741,824 | 7.7\% | 4,031,427 | 7.7\% | 4,272,596 | 6.0\% | 4,469,291 | 4.6\% | 4,655,705 | 4.2\% | 4,816,654 | 3.5\% | 5.6\% |
| Domestic - Rest of Australia | 3,587,902 | 6.5\% | 3,824,954 | 6.6\% | 4,043,654 | 5.7\% | 4,236,609 | 4.8\% | 4,427,559 | 4.5\% | 4,612,159 | 4.2\% | 5.4\% |
| <20 tonnes | 486,210 | 4.1\% | 500,923 | 3.0\% | 511,546 | 2.1\% | 517,469 | 1.2\% | 521,866 | 0.8\% | 524,307 | 0.5\% | 1.9\% |
| 20 tonnes and over | 3,101,692 | 6.8\% | 3,324,031 | 7.2\% | 3,532,108 | 6.3\% | 3,719,140 | 5.3\% | 3,905,693 | 5.0\% | 4,087,852 | 4.7\% | 5.9\% |
| Total Domestic (Pax aircraft) | 23,972,742 | 6.0\% | 25,412,679 | 6.0\% | 26,649,561 | 4.9\% | 27,683,970 | 3.9\% | 28,685,119 | 3.6\% | 29,582,833 | 3.1\% | 4.6\% |
| <20 tonnes | 1,345,275 | 5.5\% | 1,402,346 | 4.2\% | 1,446,616 | 3.2\% | 1,480,098 | 2.3\% | 1,501,132 | 1.4\% | 1,517,982 | 1.1\% | 2.9\% |
| 20 tonnes and over | 22,627,468 | 6.1\% | 24,010,334 | 6.1\% | 25,202,946 | 5.0\% | 26,203,872 | 4.0\% | 27,183,987 | 3.7\% | 28,064,851 | 3.2\% | 4.7\% |

## Projected trends in aircraft MTOW tonne-kilometres - International routes.

| No. of MTOW Ton-kilometres |
| :--- |
| Commercial International (000) |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | \% change | Number | $\%$ change | Number | $\%$ change | Number | \% change | Number | \% change | Number | $\%$ change |

Average
Annual
Grow th

| 1,866,157 | 8.2\% | 2,000,928 | 7.2\% | 2,155,648 | 7.7\% | 2,333,057 | 8.2\% | 2,511,837 | 7.7\% | 2,692,707 | 7.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 1,866,157 | 8.2\% | 2,000,928 | 7.2\% | 2,155,648 | 7.7\% | 2,333,057 | 8.2\% | 2,511,837 | 7.7\% | 2,692,707 | 7.2\% |
| 5,552,277 | 3.7\% | 5,789,688 | 4.3\% | 5,986,170 | 3.4\% | 6,172,589 | 3.1\% | 6,371,661 | 3.2\% | 6,564,663 | 3.0\% |
| 2,120 | 3.8\% | 2,202 | 3.9\% | 2,268 | 3.0\% | 2,329 | 2.7\% | 2,395 | 2.8\% | 2,458 | 2.6\% |
| 5,550,157 | 3.7\% | 5,787,486 | 4.3\% | 5,983,902 | 3.4\% | 6,170,259 | 3.1\% | 6,369,265 | 3.2\% | 6,562,205 | 3.0\% |
| 12,209,515 | 8.6\% | 13,242,911 | 8.5\% | 14,416,274 | 8.9\% | 15,696,739 | 8.9\% | 17,010,956 | 8.4\% | 18,394,947 | 8.1\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 12,209,515 | 8.6\% | 13,242,911 | 8.5\% | 14,416,274 | 8.9\% | 15,696,739 | 8.9\% | 17,010,956 | 8.4\% | 18,394,947 | 8.1\% |
| 1,524,148 | 6.3\% | 1,602,646 | 5.2\% | 1,682,702 | 5.0\% | 1,762,065 | 4.7\% | 1,836,891 | 4.2\% | 1,915,323 | 4.3\% |
| 13,984 | 6.2\% | 14,772 | 5.6\% | 15,499 | 4.9\% | 16,274 | 5.0\% | 17,010 | 4.5\% | 17,784 | 4.5\% |
| 1,510,164 | 6.3\% | 1,587,874 | 5.1\% | 1,667,203 | 5.0\% | 1,745,791 | 4.7\% | 1,819,881 | 4.2\% | 1,897,539 | 4.3\% |
| 33,625,680 | 7.8\% | 35,980,261 | 7.0\% | 38,250,685 | 6.3\% | 40,513,644 | 5.9\% | 42,750,794 | 5.5\% | 45,028,052 | 5.3\% |
| 24,027 | 13.1\% | 26,672 | 11.0\% | 29,522 | 10.7\% | 32,487 | 10.0\% | 35,550 | 9.4\% | 38,761 | 9.0\% |
| 33,601,653 | 7.8\% | 35,953,589 | 7.0\% | 38,221,163 | 6.3\% | 40,481,157 | 5.9\% | 42,715,244 | 5.5\% | 44,989,291 | 5.3\% |
| 2,123,652 | 2.0\% | 2,284,312 | 7.6\% | 2,429,955 | 6.4\% | 2,536,654 | 4.4\% | 2,621,148 | 3.3\% | 2,703,111 | 3.1\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 2,123,652 | 2.0\% | 2,284,312 | 7.6\% | 2,429,955 | 6.4\% | 2,536,654 | 4.4\% | 2,621,148 | 3.3\% | 2,703,111 | 3.1\% |
| 663,847 | 2.2\% | 677,67 | 2.1\% | 691,50 | 2.0\% | 705,337 | 2.0\% | 719,167 | 2.0\% | 732,997 | 1.9\% |
| 5,479 | 9.0\% | 5,593 | 2.1\% | 5,708 | 2.0\% | 5,822 | 2.0\% | 5,936 | 2.0\% | 6,050 | 1.9\% |
| 658,367 | 2.1\% | 672,083 | 2.1\% | 685,799 | 2.0\% | 699,515 | 2.0\% | 713,231 | 2.0\% | 726,947 | 1.9\% |
| 57,565,277 | 7.3\% | 61,578,423 | 7.0\% | 65,612,941 | 6.6\% | 69,720,083 | 6.3\% | 73,822,454 | 5.9\% | 78,031,800 | 5.7\% |
| 45,611 | 10.0\% | 49,239 | 8.0\% | 52,996 | 7.6\% | 56,912 | 7.4\% | 60,891 | 7.0\% | 65,053 | 6.8\% |
| 57,519,666 | 7.3\% | 61,529,184 | 7.0\% | 65,559,945 | 6.6\% | 69,663,172 | 6.3\% | 73,761,563 | 5.9\% | 77,966,747 | 5.7\% |

7.7\%
$0.0 \%$
$7.7 \%$
$3.5 \%$
$3.1 \%$
$3.5 \%$
$8.6 \%$
$0.0 \%$
$8.6 \%$
$4.9 \%$
$5.1 \%$
$4.9 \%$
$6.3 \%$
$10.5 \%$
$6.3 \%$
$4.5 \%$
$0.0 \%$
$4.5 \%$
$2.0 \%$
$3.1 \%$
$2.0 \%$ Forecasting

## Projected trends in aircraft MTOW tonne-kilometres - Other flights.

| No. of MTOW Ton-kilom etres <br> Other ( 000 ) |
| :--- |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\%$ | Number | $\begin{gathered} \% \\ \text { change } \end{gathered}$ | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\begin{gathered} \% \\ \text { change } \end{gathered}$ | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ |

Average
Annual
Grow th

| Cargo flights |
| :--- |
| Domestic |
| $<20$ tonnes |
| 20 tonnes and over |
| International |
| $<20$ tonnes |
| 20 tonnes and over |
|  |
| Total O-D flights |
| $<20$ tonnes |
| 20 tonnes and over |
|  |
| Pure overlfights |
| $<20$ tonnes |
| 20 tonnes and over |
| Non-Com mercfial flights |
| $<20$ tonnes |
| 20 tonnes and over |
| Total flights |
| $<20$ tonnes |
| 20 tonnes and over |


| 1,092,264 | 2.9\% | 1,158,205 | 6.0\% | 1,228,058 | 6.0\% | 1,302,057 | 6.0\% | 1,380,448 | 6.0\% | 1,467,726 | 6.3\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,206 | -95.5\% | 1,322 | 9.6\% | 1,440 | 9.0\% | 1,565 | 8.6\% | 1,700 | 8.6\% | 1,846 | 8.6\% |
| 1,206 | 8.3\% | 1,322 | 9.6\% | 1,440 | 9.0\% | 1,565 | 8.6\% | 1,700 | 8.6\% | 1,846 | 8.6\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 1,091,058 | 5.4\% | 1,156,883 | 6.0\% | 1,226,618 | 6.0\% | 1,300,492 | 6.0\% | 1,378,748 | 6.0\% | 1,465,879 | 6.3\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 1,091,058 | 5.4\% | 1,156,883 | 6.0\% | 1,226,618 | 6.0\% | 1,300,492 | 6.0\% | 1,378,748 | 6.0\% | 1,465,879 | 6.3\% |
| 82,630,283 | 6.8\% | 88,149,307 | 6.7\% | 93,490,561 | 6.1\% | 98,706,110 | 5.6\% | 103,888,020 | 5.2\% | 109,082,358 | 5.0\% |
| 1,392,091 | 5.6\% | 1,452,907 | 4.4\% | 1,501,052 | 3.3\% | 1,538,574 | 2.5\% | 1,563,722 | 1.6\% | 1,584,881 | 1.4\% |
| 81,238,192 | 6.9\% | 86,696,401 | 6.7\% | 91,989,508 | 6.1\% | 97,167,537 | 5.6\% | 102,324,298 | 5.3\% | 107,497,477 | 5.1\% |
| 9,445,766 | 2.2\% | 9,702,682 | 2.7\% | 9,952,559 | 2.6\% | 10,265,041 | 3.1\% | 10,573,301 | 3.0\% | 10,877,423 | 2.9\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 9,445,766 | 2.2\% | 9,702,682 | 2.7\% | 9,952,559 | 2.6\% | 10,265,041 | 3.1\% | 10,573,301 | 3.0\% | 10,877,423 | 2.9\% |
| 336,331 | 0.3\% | 339,694 | 1.0\% | 344,981 | 1.6\% | 350,344 | 1.6\% | 357,351 | 2.0\% | 362,188 | 1.4\% |
| 336,331 | 0.3\% | 339,694 | 1.0\% | 344,981 | 1.6\% | 350,344 | 1.6\% | 357,351 | 2.0\% | 362,188 | 1.4\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 92,412,379 | 6.3\% | 98,191,683 | 6.3\% | 103,788,101 | 5.7\% | 109,321,496 | 5.3\% | 114,818,672 | 5.0\% | 120,321,969 | 4.8\% |
| 1,728,422 | 4.5\% | 1,792,601 | 3.7\% | 1,846,033 | 3.0\% | 1,888,918 | 2.3\% | 1,921,073 | 1.7\% | 1,947,069 | 1.4\% |
| 90,683,958 | 6.3\% | 96,399,083 | 6.3\% | 101,942,068 | 5.8\% | 107,432,578 | 5.4\% | 112,897,599 | 5.1\% | 118,374,900 | 4.9\% |

Projection of passenger denand
3
4
5
6

## 7

8
Projection of the number of charging units
Detailed table constiruction and assunptions
Appendix

## The construction of charging units.

웅 The charging units have been constructed differently for aircraft with less than 20 tonnes and aircraft of 20 tonnes and over.

를 For aircraft with less than 20 tonnes :
$\checkmark$ Average MTOW tonnes x (distance divided by 100) x number of flights, then divided by the square root of 20.

를 For aircraft with 20 tonnes and over :
$\checkmark$ Square root of average MTOW tonnes x (distance divided by 100) x number of flights.

## Past trends in the number of charging units - domestic routes.

| No. of charging units |
| :--- |
| Commercial Domestic |

Sydney - Melbourne
<20 tonnes
20 tonnes and over
Sydney - Brisbane
<20 tonnes
20 tonnes and over
Sydney - Rest of Australia
<20 tonnes
20 tonnes and over
Melbourne - Rest of Australia <20 tonnes
20 tonnes and over
Bris bane - Rest of Australia
<20 tonnes
20 tonnes and over
Domestic - Rest of Australia
<20 tonnes
20 tonnes and over

Total Domestic (Pax aircraft) <20 tonnes

20 tonnes and over

| FY 1998-1990 | FY 1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

$<20$ tons = MTOW * (Dist/100)
20 tons and over = sqre root of MTOW * (Dist/100)

| 3,291,900 | 3,384,984 | 2.8\% | 3,915,802 | 15.7\% | 3,267,080 -16.6\% | 2,992,178 | -8.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18,613 | 20,340 | 9.3\% | 18,973 | -6.7\% | 11,339 -40.2\% | 10,289 | -9.3\% |
| 3,273,286 | 3,364,644 | 2.8\% | 3,896,828 | 15.8\% | 3,255,740-16.5\% | 2,981,889 | -8.4\% |
| 2,182,170 | 2,180,196 | -0.1\% | 2,883,014 | 32.2\% | 2,359,265 -18.2\% | 2,134,975 | -9.5\% |
| 29,707 | 21,242 | -28.5\% | 22,555 | 6.2\% | 18,404-18.4\% | 14,762 | -19.8\% |
| 2,152,463 | 2,158,954 | 0.3\% | 2,860,459 | 32.5\% | 2,340,861-18.2\% | 2,120,213 | -9.4\% |
| 4,550,199 | 4,501,616 | -1.1\% | 4,749,650 | 5.5\% | 3,803,520 -19.9\% | 4,258,732 | 12.0\% |
| 943,397 | 998,134 | 5.8\% | 1,027,242 | 2.9\% | 1,019,433 -0.8\% | 1,044,619 | 2.5\% |
| 3,606,802 | 3,503,481 | -2.9\% | 3,722,408 | 6.2\% | 2,784,087-25.2\% | 3,214,113 | 15.4\% |
| 7,025,872 | 7,489,715 | 6.6\% | 8,457,215 | 12.9\% | 7,883,970 -6.8\% | 8,063,335 | 2.3\% |
| 332,072 | 331,009 | -0.3\% | 330,457 | -0.2\% | 331,342 0.3\% | 377,701 | 14.0\% |
| 6,693,800 | 7,158,706 | 6.9\% | 8,126,758 | 13.5\% | 7,552,628 -7.1\% | 7,685,634 | 1.8\% |
| 4,003,162 | 4,163,607 | 4.0\% | 4,662,671 | 12.0\% | 4,521,278 -3.0\% | 4,667,207 | 3.2\% |
| 389,029 | 401,529 | 3.2\% | 400,884 | -0.2\% | 385,769 -3.8\% | 360,637 | -6.5\% |
| 3,614,133 | 3,762,078 | 4.1\% | 4,261,787 | 13.3\% | 4,135,509 -3.0\% | 4,306,570 | 4.1\% |
| 5,891,724 | 5,876,616 | -0.3\% | 5,989,561 | 1.9\% | 4,936,446 -17.6\% | 5,229,384 | 5.9\% |
| 943,397 | 998,134 | 5.8\% | 1,027,242 | 2.9\% | 1,019,433 -0.8\% | 1,044,619 | 2.5\% |
| 4,948,327 | 4,878,481 | -1.4\% | 4,962,318 | 1.7\% | 3,917,013 -21.1\% | 4,184,765 | 6.8\% |
| 26,945,027 | 27,596,733 | 2.4\% | 30,657,911 | 11.1\% | 26,771,558-12.7\% | 27,345,811 | 2.1\% |
| 2,656,216 | 2,770,389 | 4.3\% | 2,827,354 | 2.1\% | 2,785,720 -1.5\% | 2,852,627 | 2.4\% |
| 24,288,811 | 24,826,344 | 2.2\% | 27,830,558 | 12.1\% | 23,985,838-13.8\% | 24,493,185 | 2.1\% |

## Past trends in the number of charging units - International routes.

| No. of charging units <br> Commercial International |
| :--- |


| FY1998-1999 | FY1999-2000 | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | change |

## Australia - Africa

$<20$ tonnes
20 tonnes and over
Australia - New Zealand
<20 tonnes
20 tonnes and over
Australia - Northeast Asia
<20 tonnes
20 tonnes and over
Australia - South Pacific
<20 tonnes
20 tonnes and over
Australia-S-SE Asia/Eur/MEA
<20 tonnes
20 tonnes and over
Australia - Transpacific
<20 tonnes
20 tonnes and over
Australia - Undetermined
<20 tonnes
20 tonnes and over

Total International (Pax arcrft) <20 tonnes

20 tonnes and over
<20 tons = MTOW * (Dist/100)

| 499,195 | 584,283 17.0\% | 822,449 | 40.8\% | 1,028,111 | 25.0\% | 903,919 -12.1\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 499,195 | 584,283 17.0\% | 822,449 | 40.8\% | 1,028,111 | 25.0\% | 903,919 | -12.1\% |
| 4,019,883 | 4,119,853 2.5\% | 4,371,921 | 6.1\% | 4,209,174 | -3.7\% | 4,475,545 | 6.3\% |
| 4,274 | 3,549 -17.0\% | 2,252 | -36.5\% | 2,029 | -9.9\% | 4,568 | 125.2\% |
| 4,015,609 | 4,116,304 2.5\% | 4,369,669 | 6.2\% | 4,207,145 | -3.7\% | 4,470,977 | 6.3\% |
| 6,822,881 | 6,807,166 -0.2\% | 7,281,858 | 7.0\% | 6,470,096 | -11.1\% | 6,780,974 | 4.8\% |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 6,822,881 | 6,807,166 -0.2\% | 7,281,858 | 7.0\% | 6,470,096 | -11.1\% | 6,780,974 | 4.8\% |
| 1,264,473 | 1,380,471 9.2\% | 1,299,401 | -5.9\% | 1,292,427 | -0.5\% | 1,233,758 | -4.5\% |
| 28,451 | 32,121 12.9\% | 27,229 | -15.2\% | 28,454 | 4.5\% | 29,431 | 3.4\% |
| 1,236,022 | 1,348,350 9.1\% | 1,272,172 | -5.6\% | 1,263,974 | -0.6\% | 1,204,327 | -4.7\% |
| 16,994,052 | 18,826,629 10.8\% | 20,534,045 | 9.1\% | 19,291,707 | -6.1\% | 18,441,963 | -4.4\% |
| 6,140 | 23,363 280.5\% | 48,881 | 109.2\% | 45,519 | -6.9\% | 47,500 | 4.4\% |
| 16,987,912 | 18,803,265 10.7\% | 20,485,164 | 8.9\% | 19,246,188 | -6.0\% | 18,394,462 | -4.4\% |
| 949,867 | 1,202,406 26.6\% | 1,444,320 | 20.1\% | 1,071,780 | -25.8\% | 1,041,455 | -2.8\% |
| 0 | 0 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 949,867 | 1,202,406 26.6\% | 1,444,320 | 20.1\% | 1,071,780 | -25.8\% | 1,041,455 | -2.8\% |
| 798,280 | 677,692 -15.1\% | 622,475 | -8.1\% | 558,192 | -10.3\% | 567,451 | 1.7\% |
| 18,501 | 14,639 -20.9\% | 12,938 | -11.6\% | 13,023 | 0.7\% | 11,237 | -13.7\% |
| 779,779 | 663,053 -15.0\% | 609,538 | -8.1\% | 545,169 | -10.6\% | 556,214 | 2.0\% |
| 31,348,632 | 33,598,499 7.2\% | 36,376,470 | 8.3\% | 33,921,488 | -6.7\% | 33,445,065 | -1.4\% |
| 57,366 | 73,672 28.4\% | 91,300 | 23.9\% | 89,024 | -2.5\% | 92,736 | 4.2\% |
| 31,291,265 | 33,524,827 7.1\% | 36,285,170 | 8.2\% | 33,832,464 | -6.8\% | 33,352,329 | -1.4\% |


|  |
| ---: |
| $16.0 \%$ |
| $0.0 \%$ |
| $16.0 \%$ |
| $2.7 \%$ |
| $1.7 \%$ |
| $2.7 \%$ |
| $-0.2 \%$ |
| $0.0 \%$ |
| $-0.2 \%$ |
| $-0.6 \%$ |
| $0.9 \%$ |
| $-0.6 \%$ |
| $2.1 \%$ |
| $66.8 \%$ |
| $2.0 \%$ |
| $2.3 \%$ |
| $0.0 \%$ |
| $2.3 \%$ |
| $-8.2 \%$ |
| $-11.7 \%$ |
| $-8.1 \%$ |
|  |
| $1.6 \%$ |
| $12.8 \%$ |
| $1.6 \%$ |

## Past trends in the number of charging units - Other flights.

| No. of charging units <br> Other |
| :--- |


| FY1998-1999 | FY1999-2000 |  | FY2000-2001 |  | FY2001-2002 |  | FY2002-2003 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average Annual Grow th

## <20 tons = MTOW * (Dist/100)

| 496,189 | 693,021 | 39.7\% | 640,235 | -7.6\% | 680,191 | 6.2\% | 588,798 | -13.4\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 367,920 | 455,641 | 23.8\% | 390,279 | -14.3\% | 141,133 | -63.8\% | 23,037 | -83.7\% |
| 24,710 | 25,988 | 5.2\% | 13,892 | -46.5\% | 1,299 | -90.6\% | 2,490 | 91.6\% |
| 343,211 | 429,653 | 25.2\% | 376,387 | -12.4\% | 139,834 | -62.8\% | 20,548 | -85.3\% |
| 128,269 | 237,381 | 85.1\% | 249,956 | 5.3\% | 539,059 | 115.7\% | 565,761 | 5.0\% |
|  | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 128,269 | 237,381 | 85.1\% | 249,956 | 5.3\% | 539,059 | 115.7\% | 565,761 | 5.0\% |
| 58,789,847 | 61,888,254 | 5.3\% | 67,674,616 | 9.3\% | 61,373,238 | -9.3\% | 61,379,674 | 0.0\% |
| 2,738,292 | 2,870,049 | 4.8\% | 2,932,546 | 2.2\% | 2,876,043 | -1.9\% | 2,947,852 | 2.5\% |
| 56,051,555 | 59,018,205 | 5.3\% | 64,742,070 | 9.7\% | 58,497,194 | -9.6\% | 58,431,822 | -0.1\% |
| 4,775,116 | 5,845,465 | 22.4\% | 5,772,124 | -1.3\% | 5,466,446 | -5.3\% | 5,703,975 | 4.3\% |
| 0 | 0 |  | 0 |  | 0 |  | 0 |  |
| 4,775,116 | 5,845,465 | 22.4\% | 5,772,124 | -1.3\% | 5,466,446 | -5.3\% | 5,703,975 | 4.3\% |
| 816,639 | 773,939 | -5.2\% | 766,380 | -1.0\% | 753,645 | -1.7\% | 750,165 | -0.5\% |
| 816,639 | 773,939 | -5.2\% | 766,380 | -1.0\% | 753,645 | -1.7\% | 750,165 | -0.5\% |
| 0 | 0 |  | 0 |  | 0 |  | 0 |  |
| 64,381,602 | 68,507,658 | 6.4\% | 74,213,120 | 8.3\% | 67,593,328 | -8.9\% | 67,833,814 | 0.4\% |
| 3,554,931 | 3,643,989 | 2.5\% | 3,698,926 | 1.5\% | 3,629,689 | -1.9\% | 3,698,017 | 1.9\% |
| 60,826,671 | 64,863,669 | 6.6\% | 70,514,194 | 8.7\% | 63,963,640 | -9.3\% | 64,135,797 | 0.3\% |


|  |
| ---: |
| $4.4 \%$ |
| $-50.0 \%$ |
| $-43.7 \%$ |
| $-50.5 \%$ |
| $44.9 \%$ |
| $0.0 \%$ |
| $44.9 \%$ |
|  |
| $1.1 \%$ |
| $1.9 \%$ |
| $1.0 \%$ |
|  |
| $4.5 \%$ |
| $0.0 \%$ |
| $4.5 \%$ |
|  |
| $-2.1 \%$ |
| $-2.1 \%$ |
| $0.0 \%$ |
|  |
| $1.3 \%$ |
| $1.0 \%$ |
| $1.3 \%$ |

## Projected number of charging units - Domestic routes.

| No. of charging units <br> Commercial Domestic |
| :--- |


Sydney - Me lbourne
<20 tonnes
20 tonnes and over
Sydney - Bris bane
$<20$ tonnes
20 tonnes and over
Sydney - Rest of Australia
<20 tonnes
20 tonnes and over

Melbourne - Rest of Australia <20 tonnes
20 tonnes and over
Brisbane - Rest of Australia <20 tonnes
20 tonnes and over
Domestic - Rest of Australia <20 tonnes
20 tonnes and over
Total Domestic (Pax aircraft) <20 tonnes 20 tonnes and over

| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\begin{gathered} \% \\ \text { change } \end{gathered}$ | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\begin{gathered} \% \\ \text { change } \end{gathered}$ | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\begin{array}{\|c\|} \hline \% \\ \text { change } \end{array}$ | Number | $\begin{gathered} \% \\ \text { change } \end{gathered}$ |

Average Annual Grow th
$<20$ tons $=$ MTOW * (Dist/100)

| 3,137,606 | 4.9\% | 3,256,582 | 3.8\% | 3,344,793 | 2.7\% | 3,402,522 | 1.7\% | 3,453,093 | 1.5\% | 3,485,972 | 1.0\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10,287 | 0.0\% | 10,123 | -1.6\% | 9,824 | -3.0\% | 9,417 | -4.1\% | 8,965 | -4.8\% | 8,466 | -5.6\% |
| 3,127,319 | 4.9\% | 3,246,459 | 3.8\% | 3,334,969 | 2.7\% | 3,393,105 | 1.7\% | 3,444,129 | 1.5\% | 3,477,506 | 1.0\% |
| 2,208,134 | 3.4\% | 2,301,427 | 4.2\% | 2,332,676 | 1.4\% | 2,354,493 | 0.9\% | 2,374,486 | 0.8\% | 2,399,064 | 1.0\% |
| 14,388 | -2.5\% | 14,054 | -2.3\% | 13,900 | -1.1\% | 13,635 | -1.9\% | 13,348 | -2.1\% | 12,647 | -5.3\% |
| 2,193,746 | 3.5\% | 2,287,372 | 4.3\% | 2,318,776 | 1.4\% | 2,340,859 | 1.0\% | 2,361,138 | 0.9\% | 2,386,417 | 1.1\% |
| 4,609,547 | 8.2\% | 4,964,645 | 7.7\% | 5,272,909 | 6.2\% | 5,548,121 | 5.2\% | 5,827,092 | 5.0\% | 6,058,918 | 4.0\% |
| 1,124,287 | 7.6\% | 1,193,078 | 6.1\% | 1,241,355 | 4.0\% | 1,281,255 | 3.2\% | 1,299,818 | 1.4\% | 1,317,378 | 1.4\% |
| 3,485,259 | 8.4\% | 3,771,567 | 8.2\% | 4,031,554 | 6.9\% | 4,266,866 | 5.8\% | 4,527,274 | 6.1\% | 4,741,540 | 4.7\% |
| 8,454,340 | 4.8\% | 8,877,441 | 5.0\% | 9,252,105 | 4.2\% | 9,551,809 | 3.2\% | 9,819,115 | 2.8\% | 10,052,094 | 2.4\% |
| 390,350 | 3.3\% | 405,548 | 3.9\% | 418,211 | 3.1\% | 427,228 | 2.2\% | 434,592 | 1.7\% | 440,269 | 1.3\% |
| 8,063,990 | 4.9\% | 8,471,893 | 5.1\% | 8,833,894 | 4.3\% | 9,124,581 | 3.3\% | 9,384,523 | 2.8\% | 9,611,825 | 2.4\% |
| 5,020,259 | 7.6\% | 5,369,274 | 7.0\% | 5,659,520 | 5.4\% | 5,891,741 | 4.1\% | 6,108,339 | 3.7\% | 6,290,608 | 3.0\% |
| 381,615 | 5.8\% | 392,838 | 2.9\% | 407,590 | 3.8\% | 420,969 | 3.3\% | 432,980 | 2.9\% | 443,163 | 2.4\% |
| 4,638,644 | 7.7\% | 4,976,435 | 7.3\% | 5,251,930 | 5.5\% | 5,470,772 | 4.2\% | 5,675,360 | 3.7\% | 5,847,445 | 3.0\% |
| 5,531,935 | 5.8\% | 5,853,203 | 5.8\% | 6,141,705 | 4.9\% | 6,390,241 | 4.0\% | 6,635,598 | 3.8\% | 6,882,151 | 3.7\% |
| 1,087,199 | 4.1\% | 1,120,098 | 3.0\% | 1,143,851 | 2.1\% | 1,157,095 | 1.2\% | 1,166,929 | 0.8\% | 1,172,387 | 0.5\% |
| 4,444,736 | 6.2\% | 4,733,105 | 6.5\% | 4,997,855 | 5.6\% | 5,233,146 | 4.7\% | 5,468,669 | 4.5\% | 5,709,764 | 4.4\% |
| 28,961,820 | 5.9\% | 30,622,572 | 5.7\% | 32,003,708 | 4.5\% | 33,138,928 | 3.5\% | 34,217,725 | 3.3\% | 35,168,807 | 2.8\% |
| 3,008,126 | 5.5\% | 3,135,740 | 4.2\% | 3,234,731 | 3.2\% | 3,309,599 | 2.3\% | 3,356,632 | 1.4\% | 3,394,310 | 1.1\% |
| 25,953,694 | 6.0\% | 27,486,832 | 5.9\% | 28,768,977 | 4.7\% | 29,829,329 | 3.7\% | 30,861,092 | 3.5\% | 31,774,497 | 3.0\% |

[^1]
## Projected number of charging units - International routes.



| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | \% change | Number | \% change | Number | \% change | Number |  | Number | \% change | Number | \% change |


| <20 tons = MTOW * (Dist/100) |  |  |  | 20 tons and over = sqre root of MTOW * (Dist/100) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 979,056 | 8.3\% | 1,052,535 | 7.5\% | 1,136,933 | 8.0\% | 1,233,788 | 8.5\% | 1,331,898 | 8.0\% | 1,431,658 | 7.5\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 979,056 | 8.3\% | 1,052,535 | 7.5\% | 1,136,933 | 8.0\% | 1,233,788 | 8.5\% | 1,331,898 | 8.0\% | 1,431,658 | 7.5\% |
| 4,675,504 | 4.5\% | 4,900,979 | 4.8\% | 5,067,289 | 3.4\% | 5,211,397 | 2.8\% | 5,362,654 | 2.9\% | 5,502,247 | 2.6\% |
| 4,741 | 3.8\% | 4,924 | 3.9\% | 5,071 | 3.0\% | 5,209 | 2.7\% | 5,356 | 2.8\% | 5,496 | 2.6\% |
| 4,670,763 | 4.5\% | 4,896,055 | 4.8\% | 5,062,218 | 3.4\% | 5,206,188 | 2.8\% | 5,357,298 | 2.9\% | 5,496,751 | 2.6\% |
| 7,383,456 | 8.9\% | 8,021,673 | 8.6\% | 8,732,419 | 8.9\% | 9,445,486 | 8.2\% | 10,211,235 | 8.1\% | 11,015,088 | 7.9\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 7,383,456 | 8.9\% | 8,021,673 | 8.6\% | 8,732,419 | 8.9\% | 9,445,486 | 8.2\% | 10,211,235 | 8.1\% | 11,015,088 | 7.9\% |
| 1,307,623 | 6.0\% | 1,370,823 | 4.8\% | 1,432,684 | 4.5\% | 1,493,878 | 4.3\% | 1,549,596 | 3.7\% | 1,607,835 | 3.8\% |
| 31,269 | 6.2\% | 33,030 | 5.6\% | 34,657 | 4.9\% | 36,389 | 5.0\% | 38,036 | 4.5\% | 39,766 | 4.5\% |
| 1,276,354 | 6.0\% | 1,337,792 | 4.8\% | 1,398,027 | 4.5\% | 1,457,489 | 4.3\% | 1,511,560 | 3.7\% | 1,568,069 | 3.7\% |
| 19,755,248 | 7.1\% | 21,075,000 | 6.7\% | 22,338,164 | 6.0\% | 23,553,938 | 5.4\% | 24,707,418 | 4.9\% | 25,852,218 | 4.6\% |
| 53,726 | 13.1\% | 59,641 | 11.0\% | 66,012 | 10.7\% | 72,643 | 10.0\% | 79,491 | 9.4\% | 86,673 | 9.0\% |
| 19,701,522 | 7.1\% | 21,015,359 | 6.7\% | 22,272,152 | 6.0\% | 23,481,295 | 5.4\% | 24,627,927 | 4.9\% | 25,765,545 | 4.6\% |
| 1,062,536 | 2.0\% | 1,142,207 | 7.5\% | 1,214,274 | 6.3\% | 1,262,883 | 4.0\% | 1,301,735 | 3.1\% | 1,339,150 | 2.9\% |
| 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| 1,062,536 | 2.0\% | 1,142,207 | 7.5\% | 1,214,274 | 6.3\% | 1,262,883 | 4.0\% | 1,301,735 | 3.1\% | 1,339,150 | 2.9\% |
| 577,608 | 1.8\% | 589,642 | 2.1\% | 601,675 | 2.0\% | 613,709 | 2.0\% | 625,742 | 2.0\% | 637,776 | 1.9\% |
| 12,252 | 9.0\% | 12,507 | 2.1\% | 12,762 | 2.0\% | 13,018 | 2.0\% | 13,273 | 2.0\% | 13,528 | 1.9\% |
| 565,356 | 1.6\% | 577,135 | 2.1\% | 588,913 | 2.0\% | 600,691 | 2.0\% | 612,469 | 2.0\% | 624,248 | 1.9\% |
| 35,741,032 | 6.9\% | 38,152,859 | 6.7\% | 40,523,439 | 6.2\% | 42,815,078 | 5.7\% | 45,090,277 | 5.3\% | 47,385,971 | 5.1\% |
| 101,989 | 10.0\% | 110,102 | 8.0\% | 118,503 | 7.6\% | 127,258 | 7.4\% | 136,156 | 7.0\% | 145,463 | 6.8\% |
| 35,639,043 | 6.9\% | 38,042,757 | 6.7\% | 40,404,936 | 6.2\% | 42,687,820 | 5.7\% | 44,954,122 | 5.3\% | 47,240,508 | 5.1\% |

[^2]
## Projected number of charging units - Other flights.

| No. of charging units |
| :--- |
| Other |


| FY2003-2004 |  | FY2004-2005 |  | FY2005-2006 |  | FY2006-2007 |  | FY2007-2008 |  | FY2008-2009 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change | Number | $\%$ <br> change |

Average Annual
Grow th

| 598,804 1.7\% |  | 633,150 | 5.7\% | 669,428 5.7\% |  | 707,755 5.7\% |  | 748,255 5.7\% |  | 792,190 5.9\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 2,696 | -88.3\% | 2,955 | 9.6\% | 3,220 | 9.0\% | 3,499 | 8.6\% | 3,801 | 8.6\% | 4,129 | 8.6\% |
| 2,696 | 8.3\% | 2,955 | 9.6\% | 3,220 | 9.0\% | 3,499 | 8.6\% | 3,801 | 8.6\% | 4,129 | 8.6\% |
| 04 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 596,109 | 5.4\% | 630,194 | 5.7\% | 666,207 | 5.7\% | 704,256 | 5.7\% | 744,454 | 5.7\% | 788,062 | 5.9\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 596,109 | 5.4\% | 630,194 | 5.7\% | 666,207 | 5.7\% | 704,256 | 5.7\% | 744,454 | 5.7\% | 788,062 | 5.9\% |
| 65,301,656 | 6.4\% | 69,408,581 | 6.3\% | 73,196,575 | 5.5\% | 76,661,761 | 4.7\% | 80,056,257 | 4.4\% | 83,346,968 | 4.1\% |
| 3,112,810 | 5.6\% | 3,248,798 | 4.4\% | 3,356,454 | 3.3\% | 3,440,356 | 2.5\% | 3,496,589 | 1.6\% | 3,543,902 | 1.4\% |
| 62,188,846 | 6.4\% | 66,159,783 | 6.4\% | 69,840,121 | 5.6\% | 73,221,405 | 4.8\% | 76,559,668 | 4.6\% | 79,803,066 | 4.2\% |
| 5,822,642 | 2.1\% | 5,970,168 | 2.5\% | 6,112,856 | 2.4\% | 6,293,433 | 3.0\% | 6,459,232 | 2.6\% | 6,586,472 | 2.0\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 5,822,642 | 2.1\% | 5,970,168 | 2.5\% | 6,112,856 | 2.4\% | 6,293,433 | 3.0\% | 6,459,232 | 2.6\% | 6,586,472 | 2.0\% |
| 752,058 | 0.3\% | 759,579 | 1.0\% | 771,402 | 1.6\% | 783,394 | 1.6\% | 799,062 | 2.0\% | 809,877 | 1.4\% |
| 752,058 | 0.3\% | 759,579 | 1.0\% | 771,402 | 1.6\% | 783,394 | 1.6\% | 799,062 | 2.0\% | 809,877 | 1.4\% |
| 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  |
| 71,876,356 | 6.0\% | 76,138,327 | 5.9\% | 80,080,833 | 5.2\% | 83,738,588 | 4.6\% | 87,314,550 | 4.3\% | 90,743,317 | 3.9\% |
| 3,864,868 | 4.5\% | 4,008,377 | 3.7\% | 4,127,856 | 3.0\% | 4,223,750 | 2.3\% | 4,295,650 | 1.7\% | 4,353,779 | 1.4\% |
| 68,011,488 | 6.0\% | 72,129,951 | 6.1\% | 75,952,977 | 5.3\% | 79,514,838 | 4.7\% | 83,018,900 | 4.4\% | 86,389,538 | 4.1\% |

[^3]5.1\% $-24.9 \%$
8.8\%
-100.0\%
5.7\%
0.0\%
5.7\%
5.2\%
3.1\%
5.3\%
2.4\%
0.0\%
2.4\%
1.3\%
1.3\%
0.0\%
5.0\%
2.8\%
5.1\%

3
4
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## 7

8
9
Detailed table construction and assumptions
Introduction and major highlights

> Projection of passenger denand

Projection of averege pessengers per flight
Projection of the sunsber of flights
Projection of sjuch tonnage
Projection of averege olistance
Projection of JJow tonne-silonetres
Projection of the nunder of charging units

Appendix

Important note regarding the construction of the passenger load factors.

요 The construction of seats for each route area was made using an estimated aircraft seating configuration for each aircraft type given in the ASA database.

壁 When comparing the total seat figures with the estimated number of passengers (which came from AVSTAT), for each route area, it gives a ratio that could be easily considered as the passenger load factors.

留 However, in certain cases, the ratio constructed out of these two traffic parameters coming from two different sources, yields a figure which may not be realistic enough to be considered as actual load factors. But it is nevertheless useful to use that ratio as a mathematical link between passenger growth trends and capacity growth trends, in order to reflect to some extent the magnitude of likely improvements airlines could achieve in load factors.

## Important note regarding the construction of the average MTOW tonnes per aircraft.

Fer it is assumed that the evolution of the average MTOW tonnes per flight will follow the same trends as the average number of seats.

뉼 Therefore the following tables will show the same evolution in average tonnes per flight than in average seats per flight.

## Detailed constructions : Sydney - Melbourne route area.

Split in capacity between small and large aircraft.
$\checkmark$ The share of the smaller aircraft category (less than 20 tonnes) was very negligible, with $0.6 \%$ of total seats. It is assumed that this share is going to decline to $0.1 \%$ by 2008-2009.

을 Ratio of passengers over seats.
$\checkmark \quad$ Comparing the constructed seating capacity with traffic figures yields to an estimated load factor of 71\% in 2000-2001 and in 2001-2002, but increased notably in 2002-2003.
$\checkmark$ It is assumed to continue to increase, as demand grows and growth in the number of flights becomes less and less important (due to a very high level of daily flights already achieved in the base year). However, the practical limit for an annual average load factor for that route is $80 \%$.

을 Average aircraft size.
$\checkmark \quad$ The smaller aircraft category experienced a decline in between 1998-1999 and 2002-2003 (from 26.7 seats to $15.2 \%$ ). It is not expected to further decline.
$\checkmark$ The larger aircraft category experienced an increase in the average aircraft size between 2000-2001 and 2002-2003. This trend is expected to continue.

ㅇㅛㅡㄹ Average distance per flight.
$\checkmark$ Since one is talking about a specific city-pair, the distance is not going to vary.

## Detailed constructions : Sydney - Melbourne route area.



| Passengers <br> \% annual change | N/A | N/A | 6,731,806 | $\begin{array}{r} \hline \hline \mathbf{5 , 4 2 1 , 0 7 5} \\ -19.5 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,352,499 \\ -1.3 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,698,118 \\ 6.5 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{6 , 0 1 4 , 4 1 6} \\ 5.6 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 6,241,057 \\ 3.8 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{6 , 4 2 1 , 8 4 9} \\ 2.9 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 6,591,729 \\ 2.6 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{6 , 7 4 6 , 3 4 3} \\ 2.3 \% \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 7,775,047 | 7,989,358 | 9,385,965 | 7,635,810 | 7,052,669 | 7,400,153 | 7,710,790 | 7,950,391 | 8,128,922 | 8,291,483 | 8,432,929 |
| \% annual change |  | 2.8\% | 17.5\% | -18.6\% | -7.6\% | 4.9\% | 4.2\% | 3.1\% | 2.2\% | 2.0\% | 1.7\% |
| on <20 tons aircraft | 42,806 | 45,185 | 26,063 | 15,407 | 13,323 | 13,320 | 13,108 | 12,721 | 12,193 | 11,608 | 10,963 |
| on 20t \& + aircraft | 7,732,241 | 7,944,172 | 9,359,902 | 7,620,403 | 7,039,347 | 7,386,833 | 7,697,681 | 7,937,671 | 8,116,729 | 8,279,875 | 8,421,966 |
| Share of <20 tons aircraft | 0.6\% | 0.6\% | 0.3\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% |
| Ratio of passengers over Seats |  |  | 71.7\% | 71.0\% | 75.9\% | 77.0\% | 78.0\% | 78.5\% | 79.0\% | 79.5\% | 80.0\% |
| Average Seats per flight | 192.8 | 190.2 | 183.2 | 189.3 | 190.5 | 191.0 | 192.6 | 194.3 | 196.5 | 198.7 | 201.9 |
| \% annual change |  | -1.4\% | -3.7\% | 3.3\% | 0.7\% | 0.2\% | 0.9\% | 0.9\% | 1.1\% | 1.1\% | 1.6\% |
| on <20 tons aircraft | 26.7 | 24.8 | 15.5 | 15.2 | 15.2 | 15.3 | 15.4 | 15.5 | 15.6 | 15.7 | 15.8 |
| on 20t \& + aircraft | 199.6 | 197.7 | 188.9 | 193.8 | 194.8 | 195.0 | 196.5 | 198.0 | 200.0 | 202.0 | 205.0 |
| Number of fligh | 40,334 | 42,013 | 51,240 | 40,342 | 37,015 | 38,752 | 40,025 | 40,910 | 41,365 | 41,729 | 41,777 |
| \% annual change |  | 4.2\% | 22.0\% | -21.3\% | -8.2\% | 4.7\% | 3.3\% | 2.2\% | 1.1\% | 0.9\% | 0.1\% |
| on <20 tons aircraft | 1,605 | 1,823 | 1,681 | 1,014 | 875 | 871 | 851 | 821 | 782 | 739 | 694 |
| on 20t \& + aircraft | 38,729 | 40,190 | 49,559 | 39,328 | 36,140 | 37,881 | 39,174 | 40,089 | 40,584 | 40,989 | 41,083 |
| Share of <20 tons aircraft | 4.0\% | 4.3\% | 3.3\% | 2.5\% | 2.4\% | 2.2\% | 2.1\% | 2.0\% | 1.9\% | 1.8\% | 1.7\% |
| Aircraft MTOW tonnes | 5,546,458 | 5,648,222 | 6,142,011 | 5,399,284 | 4,928,672 | 5,171,646 | 5,388,899 | 5,556,518 | 5,681,465 | 5,795,257 | 5,894,296 |
| \% annual change |  | 1.8\% | 8.7\% | -12.1\% | -8.7\% | 4.9\% | 4.2\% | 3.1\% | 2.2\% | 2.0\% | 1.7\% |
| on <20 tons aircraft | 11,774 | 12,866 | 12,002 | 7,173 | 6,508 | 6,507 | 6,404 | 6,214 | 5,957 | 5,671 | 5,355 |
| on 20t \& + aircraft | 5,534,684 | 5,635,356 | 6,130,010 | 5,392,111 | 4,922,164 | 5,165,139 | 5,382,495 | 5,550,304 | 5,675,508 | 5,789,586 | 5,888,941 |
| Share of <20 tons aircraft | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |
| Average MTOW tonnes per flight | 137.5 | 134.4 | 119.9 | 133.8 | 133.2 | 133.5 | 134.6 | 135.8 | 137.3 | 138.9 | 141.1 |
| \% annual change |  | -2.2\% | -10.8\% | 11.7\% | -0.5\% | 0.2\% | 0.9\% | 0.9\% | 1.1\% | 1.1\% | 1.6\% |
| on <20 tons aircraft | 7.3 | 7.1 | 7.1 | 7.1 | 7.4 | 7.5 | 7.5 | 7.6 | 7.6 | 7.7 | 7.7 |
| on 20t \& + aircraft | 142.9 | 140.2 | 123.7 | 137.1 | 136.2 | 136.4 | 137.4 | 138.4 | 139.8 | 141.2 | 143.3 |
| MTOW tonne-kilometres (000) | 3,921,346 | 3,993,293 | 4,342,402 | 3,817,294 | 3,484,571 | 3,656,353 | 3,809,951 | 3,928,458 | 4,016,795 | 4,097,246 | 4,167,268 |
| \% annual change |  | 1.8\% | 8.7\% | -12.1\% | -8.7\% | 4.9\% | 4.2\% | 3.1\% | 2.2\% | 2.0\% | 1.7\% |
| on <20 tons aircraf | 8,324 | 9,097 | 8,485 | 5,071 | 4,601 | 4,600 | 4,527 | 4,393 | 4,211 | 4,009 | 3,786 |
| on 20t \& + aircraft | 3,913,022 | 3,984,197 | 4,333,917 | 3,812,223 | 3,479,970 | 3,651,753 | 3,805,424 | 3,924,065 | 4,012,584 | 4,093,237 | 4,163,481 |
| Share of <20 tons aircraft | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |
| Average Distance per flight | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 |
| \% annual change |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| on <20 tons aircraft | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 |
| on 20t \& + aircraft | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 | 707.0 |

## Detailed constructions : Sydney - Brisbane route area.



## Split in capacity between small and large aircraft.

$\checkmark \quad$ The share of the smaller aircraft category (less than 20 tonnes) was negligible, with $1.1 \%$ of total seats in 1998-1999 and declined to $0.4 \%$ in 2002-2003. It is assumed that this share is going to decline to $0.3 \%$ by 2008-2009.

를 Ratio of passengers over seats.
$\checkmark$ Comparing the constructed seating capacity with traffic figures yields to an estimated load factor ranging between $70 \%$ and $72 \%$ in the past, with no real consistent trend.
$\checkmark$ It is assumed to increase, and reach a level slightly above 80\% by 2008-2009 (slightly higher than for Sydney-Melbourne route since this market has a higher component of leisure travel and is an important market for Virgin Blue).

을 Average aircraft size.
$\checkmark$ The smaller aircraft category experienced a decline in between 1998-1999 and 2002-2003 (from 22 seats to 14). It is not expected to further decline.
$\checkmark$ The larger aircraft category experienced a decline in the past years. The projected evolution of the average aircraft size is based on the assumed continued development of Virgin Blue, with Boeing 737 aircraft. The likely introduction of Qantas's low cost airline, probably with larger aircraft than Virgin Blue, could reverse the trend after 2005-2006.

욜 Average distance per flight.
$\checkmark$ Since one is talking about a specific city-pair, the distance is not going to vary. Consultancy and Forecasting

Detailed constructions : Sydney - Brisbane route area.

| Route: Sydney-Brisbane | History |  |  |  |  | Forecast |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998-1999 | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 | 2003-2004 | 2004-2005 | \|2005-2006 | \|2006-2007 | 2007-2008 | 2008-2009 |


| Passengers <br> \% annual change | N/A | N/A | 4,693,787 | $\begin{array}{r} \hline \hline 3,717,785 \\ -20.8 \% \end{array}$ | $\begin{array}{r} \hline \hline \text { 3,502,613 } \\ -5.8 \% \end{array}$ | $\begin{array}{r} \hline \hline 3,688,943 \\ 5.3 \% \end{array}$ | $\begin{array}{r} \hline \hline 3,872,085 \\ 5.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,000,595 \\ 3.3 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,102,667 \\ 2.6 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,203,005 \\ 2.4 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,293,197 \\ 2.1 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 4,772,626 | 4,814,551 | 6,467,195 | 5,213,177 | 4,720,953 | 4,853,872 | 5,028,682 | 5,128,968 | 5,193,250 | 5,253,756 | 5,333,163 |
| \% annual change |  | 0.9\% | 34.3\% | -19.4\% | -9.4\% | 2.8\% | 3.6\% | 2.0\% | 1.3\% | 1.2\% | 1.5\% |
| on <20 tons aircraft | 51,444 | 42,958 | 29,554 | 22,142 | 17,430 | 16,989 | 16,595 | 16,413 | 16,099 | 15,761 | 14,933 |
| on 20t \& + aircraft | 4,721,182 | 4,771,593 | 6,437,642 | 5,191,035 | 4,703,523 | 4,836,883 | 5,012,087 | 5,112,556 | 5,177,151 | 5,237,995 | 5,318,231 |
| Share of <20 tons aircraft | 1.1\% | 0.9\% | 0.5\% | 0.4\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% |
| Ratio of passengers over Seats |  |  | 72.6\% | 71.3\% | 74.2\% | 76.0\% | 77.0\% | 78.0\% | 79.0\% | 80.0\% | 80.5\% |
| Average Seats per flight | 165.7 | 168.1 | 160.8 | 160.8 | 157.9 | 156.2 | 154.7 | 156.8 | 157.9 | 159.2 | 161.0 |
| \% annual change |  | 1.5\% | -4.4\% | 0.0\% | -1.8\% | -1.1\% | -1.0\% | 1.4\% | 0.7\% | 0.8\% | 1.1\% |
| on <20 tons aircraft | 22.0 | 24.6 | 16.2 | 15.9 | 14.3 | 14.0 | 14.0 | 14.2 | 14.4 | 14.7 | 15.0 |
| on 20t \& + aircraft | 178.4 | 177.5 | 167.6 | 167.3 | 164.0 | 162.0 | 160.0 | 162.0 | 163.0 | 164.0 | 165.5 |
| Number of flig | 28,808 | 28,634 | 40,226 | 32,425 | 29,899 | 31,071 | 32,511 | 32,715 | 32,880 | 33,011 | 33,130 |
| \% annual change |  | -0.6\% | 40.5\% | -19.4\% | -7.8\% | 3.9\% | 4.6\% | 0.6\% | 0.5\% | 0.4\% | 0.4\% |
| on <20 tons aircraft | 2,339 | 1,746 | 1,823 | 1,390 | 1,219 | 1,213 | 1,185 | 1,156 | 1,118 | 1,072 | 996 |
| on 20t \& + aircraft | 26,469 | 26,888 | 38,403 | 31,035 | 28,680 | 29,857 | 31,326 | 31,559 | 31,762 | 31,939 | 32,134 |
| Share of <20 tons aircraft | 8.1\% | 6.1\% | 4.5\% | 4.3\% | 4.1\% | 3.9\% | 3.6\% | 3.5\% | 3.4\% | 3.2\% | 3.0\% |
| Aircraft MTOW tonnes | 3,154,628 | 3,119,329 | 3,831,759 | 3,175,177 | 2,817,752 | 2,897,170 | 3,001,601 | 3,061,508 | 3,099,925 | 3,136,089 | 3,183,586 |
| \% annual change |  | -1.1\% | 22.8\% | -17.1\% | -11.3\% | 2.8\% | 3.6\% | 2.0\% | 1.3\% | 1.2\% | 1.5\% |
| on <20 tons aircraf | 17,785 | 12,717 | 13,503 | 11,018 | 8,838 | 8,614 | 8,414 | 8,322 | 8,163 | 7,991 | 7,571 |
| on 20t \& + aircraft | 3,136,843 | 3,106,612 | 3,818,256 | 3,164,159 | 2,808,915 | 2,888,557 | 2,993,187 | 3,053,186 | 3,091,762 | 3,128,098 | 3,176,014 |
| Share of <20 tons aircraft | 0.6\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% |
| Average MTOW tonnes per flight | 109.5 | 108.9 | 95.3 | 97.9 | 94.2 | 93.2 | 92.3 | 93.6 | 94.3 | 95.0 | 96.1 |
| \% annual change |  | -0.5\% | -12.6\% | 2.8\% | -3.8\% | -1.1\% | -1.0\% | 1.4\% | 0.7\% | 0.8\% | 1.2\% |
| on <20 tons aircraft | 7.6 | 7.3 | 7.4 | 7.9 | 7.2 | 7.1 | 7.1 | 7.2 | 7.3 | 7.5 | 7.6 |
| on 20t \& + aircraft | 118.5 | 115.5 | 99.4 | 102.0 | 97.9 | 96.7 | 95.6 | 96.7 | 97.3 | 97.9 | 98.8 |
| MTOW tonne-kilometres (000) | 2,356,507 | 2,330,139 | 2,862,324 | 2,371,857 | 2,104,861 | 2,164,186 | 2,242,196 | 2,286,946 | 2,315,644 | 2,342,659 | 2,378,138 |
| \% annual change |  | -1.1\% | 22.8\% | -17.1\% | -11.3\% | 2.8\% | 3.6\% | 2.0\% | 1.3\% | 1.2\% | 1.5\% |
| on <20 tons aircraf | 13,285 | 9,500 | 10,087 | 8,230 | 6,602 | 6,434 | 6,285 | 6,216 | 6,098 | 5,970 | 5,656 |
| on 20t \& + aircraft | 2,343,221 | 2,320,639 | 2,852,237 | 2,363,627 | 2,098,259 | 2,157,752 | 2,235,911 | 2,280,730 | 2,309,546 | 2,336,689 | 2,372,483 |
| Share of <20 tons aircraft | 0.6\% | 0.4\% | 0.4\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.2\% |
| Average Distance per flight | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 |
| \% annual change |  | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| on <20 tons aircraft | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 |
| on 20 t \& aircraft | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 | 747.0 |

## Detailed constructions : Sydney - Rest of Australia route area.



## Split in capacity between small and large aircraft.

$\checkmark \quad$ The share of the smaller aircraft category was more important than in the previous route areas, but after an increase recorded in the 1998-2001 period, it declined during two consecutive years. It is forecast to continue declining but moderately.


## Ratio of passengers over seats.

$\checkmark$ The comparison between the constructed seats and the passenger traffic data obtained from ASA suggests that the load factor has been lower than in the previous route areas. We expect an increase in this ratio over the years.


Average aircraft size.
$\checkmark$ For the smaller aircraft category, the average aircraft size increased constantly. This trend is expected to continue. However, we do not expect large increases during the forecast period.
$\checkmark$ For the larger aircraft category, we expect a moderate increase (to a lesser degree as the high density routes of Sydney-Melbourne for example) due to the fact that growth in capacity in that route area will be driven by frequency increases and new routes.

를 Average flight distance
$\checkmark$ For the smaller aircraft category, the average distance increase noticeably since 2000-2001. We expect this trend to continue.
$\checkmark$ For the larger aircraft category, the evolution of the average distance recorded an erratic development. We expect this figure in the future to come back to the levels achieved prior to 2001 events. Fonsultancy and orecasting

## Detailed constructions : Sydney - Rest of Australia route area.



| Passengers \% annual change | N/A | N/A | 5,814,907 | $\begin{array}{r} \hline \hline 4,002,013 \\ -31.2 \% \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 , 1 6 1 , 2 3 0} \\ 29.0 \% \end{array}$ | $\begin{array}{\|r} \hline \hline 5,581,183 \\ 8.1 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,015,541 \\ 7.8 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,387,834 \\ 6.2 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,696,941 \\ 4.8 \% \end{array}$ | $\begin{array}{r} \hline \hline 7,004,519 \\ 4.6 \% \end{array}$ | $\begin{array}{\|r\|} \hline \hline 7,282,214 \\ 4.0 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 10,312,310 | 10,834,080 | 10,847,642 | 9,668,633 | 10,594,395 | 11,390,170 | 12,152,608 | 12,775,668 | 13,261,269 | 13,734,350 | 14,004,258 |
| \% annual change |  | 5.1\% | 0.1\% | -10.9\% | 9.6\% | 7.5\% | 6.7\% | 5.1\% | 3.8\% | 3.6\% | 2.0\% |
| on <20 tons aircraft | 2,312,359 | 2,548,696 | 2,830,927 | 2,369,898 | 2,251,786 | 2,414,716 | 2,552,048 | 2,644,563 | 2,718,560 | 2,746,870 | 2,772,843 |
| on 20t \& + aircraft | 7,999,951 | 8,285,384 | 8,016,715 | 7,298,735 | 8,342,609 | 8,975,454 | 9,600,560 | 10,131,105 | 10,542,709 | 10,987,480 | 11,231,415 |
| Share of <20 tons aircraft | 22.4\% | 23.5\% | 26.1\% | 24.5\% | 21.3\% | 21.2\% | 21.0\% | 20.7\% | 20.5\% | 20.0\% | 19.8\% |
| Ratio of passengers over Seats |  |  | 53.6\% | 41.4\% | 48.7\% | 49.0\% | 49.5\% | 50.0\% | 50.5\% | 51.0\% | 52.0\% |
| Average Seats per flight | 76.8 | 77.7 | 73.2 | 80.5 | 89.3 | 90.0 | 91.3 | 92.7 | 93.9 | 95.7 | 96.9 |
| \% annual change |  | 1.1\% | -5.8\% | 10.1\% | 10.9\% | 0.8\% | 1.5\% | 1.5\% | 1.3\% | 1.9\% | 1.3\% |
| on <20 tons aircraft | 28.6 | 29.7 | 30.2 | 31.8 | 34.6 | 35.0 | 35.5 | 35.9 | 36.3 | 36.7 | 37.1 |
| on 20t \& + aircraft | 149.7 | 154.4 | 147.2 | 160.6 | 155.7 | 156.0 | 157.0 | 158.0 | 159.0 | 160.0 | 161.0 |
| Number of fligh | 134,221 | 139,487 | 148,234 | 120,047 | 118,580 | 126,527 | 133,039 | 137,786 | 141,198 | 143,518 | 144,500 |
| \% annual change |  | 3.9\% | 6.3\% | -19.0\% | -1.2\% | 6.7\% | 5.1\% | 3.6\% | 2.5\% | 1.6\% | 0.7\% |
| on <20 tons aircraft | 80,765 | 85,831 | 93,763 | 74,604 | 64,993 | 68,992 | 71,889 | 73,665 | 74,891 | 74,847 | 74,740 |
| n 20t \& + aircraft | 53,456 | 53,656 | 54,471 | 45,443 | 53,587 | 57,535 | 61,150 | 64,121 | 66,306 | 68,672 | 69,760 |
| Share of <20 tons aircraft | 60.2\% | 61.5\% | 63.3\% | 62.1\% | 54.8\% | 54.5\% | 54.0\% | 53.5\% | 53.0\% | 52.2\% | 51.7\% |
| Aircraft MTOW tonnes | 5,527,107 | 5,714,912 | 5,669,684 | 5,175,581 | 5,328,417 | 5,729,265 | 6,115,179 | 6,432,499 | 6,679,625 | 6,924,715 | 7,063,574 |
| \% annual chan |  | 3.4\% | -0.8\% | -8.7\% | 3.0\% | 7.5\% | 6.7\% | 5.2\% | 3.8\% | 3.7\% | 2.0\% |
| on <20 tons aircraf | 963,568 | 1,064,190 | 1,203,556 | 1,022,989 | 956,879 | 1,026,115 | 1,084,473 | 1,123,787 | 1,155,232 | 1,167,262 | 1,178,299 |
| on 20t \& + aircraft | 4,563,540 | 4,650,721 | 4,466,127 | 4,152,592 | 4,371,538 | 4,703,149 | 5,030,706 | 5,308,712 | 5,524,393 | 5,757,454 | 5,885,276 |
| Share of <20 tons aircraft | 17.4\% | 18.6\% | 21.2\% | 19.8\% | 18.0\% | 17.9\% | 17.7\% | 17.5\% | 17.3\% | 16.9\% | 16.7\% |
| Average MTOW tonnes per flight | 41.2 | 41.0 | 38.2 | 43.1 | 44.9 | 45.3 | 46.0 | 46.7 | 47.3 | 48.2 | 48.9 |
| \% annual change |  | -0.5\% | -6.6\% | 12.7\% | 4.2\% | 0.8\% | 1.5\% | 1.6\% | 1.3\% | 2.0\% | 1.3\% |
| on <20 tons aircraft | 11.9 | 12.4 | 12.8 | 13.7 | 14.7 | 14.9 | 15.1 | 15.3 | 15.4 | 15.6 | 15.8 |
| on 20t \& + aircraft | 85.4 | 86.7 | 82.0 | 91.4 | 81.6 | 81.7 | 82.3 | 82.8 | 83.3 | 83.8 | 84.4 |
| MTOW tonne-kilometres (000) | 3,754,437 | 3,708,130 | 3,829,993 | 3,117,297 | 3,370,178 | 3,653,907 | 3,954,441 | 4,223,471 | 4,467,692 | 4,726,663 | 4,944,253 |
| \% annual change |  | -1.2\% | 3.3\% | -18.6\% | 8.1\% | 8.4\% | 8.2\% | 6.8\% | 5.8\% | 5.8\% | 4.6\% |
| on <20 tons aircraf | 421,900 | 446,379 | 459,397 | 455,904 | 467,168 | 502,796 | 533,561 | 555,151 | 572,995 | 581,296 | 589,149 |
| on 20t \& + aircraft | 3,332,537 | 3,261,751 | 3,370,597 | 2,661,392 | 2,903,010 | 3,151,110 | 3,420,880 | 3,668,320 | 3,894,697 | 4,145,367 | 4,355,104 |
| Share of <20 tons aircraft | 11.2\% | 12.0\% | 12.0\% | 14.6\% | 13.9\% | 13.8\% | 13.5\% | 13.1\% | 12.8\% | 12.3\% | 11.9\% |
| Average Distance per flight | 679.3 | 648.9 | 675.5 | 602.3 | 632.5 | 637.8 | 646.7 | 656.6 | 668.9 | 682.6 | 700.0 |
| \% annual change |  | -4.5\% | 4.1\% | -10.8\% | 5.0\% | 0.8\% | 1.4\% | 1.5\% | 1.9\% | 2.1\% | 2.5\% |
| on <20 tons aircraft | 437.9 | 419.5 | 381.7 | 445.7 | 488.2 | 490.0 | 492.0 | 494.0 | 496.0 | 498.0 | 500.0 |
| on 20t \& + aircraft | 730.3 | 701.3 | 754.7 | 640.9 | 664.1 | 670.0 | 680.0 | 691.0 | 705.0 | 720.0 | 740.0 |

## Detailed constructions : Melbourne - Rest of Australia route area.

요․ Split in capacity between small and large aircraft.
$\checkmark \quad$ The share of the smaller aircraft category has been fairly stable in the last 3 years. We expect this situation to continue with little change in the forecast evolution of this share.

를 Ratio of passengers over seats.
$\checkmark$ Like for the previous route area, we expect this ratio to increase over the years.
를 Average aircraft size.
$\checkmark$ For the smaller aircraft category, the average size was fairly stable in the past. We expect this figure to remain fairly stable.
$\checkmark \quad$ For the larger aircraft category, the past evolution has been erratic. We expect this average figure to increase over the years.

응 Average flight distance
$\checkmark$ For the larger aircraft category, the average distance increased continually in the past. We expect this trend to continue in the future. Forecasting

## Detailed constructions : Melbourne - Rest of Australia route area.

Route : Melbourne-Rest of Aust<br>History<br>Forecast<br>

| Passengers <br> \% annual change | N/A | N/A | 5,503,679 | $\begin{array}{r} \hline \hline 4,484,140 \\ -18.5 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 , 0 7 4 , 9 9 9} \\ 13.2 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 , 4 1 4 , 6 6 9} \\ 6.7 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 , 7 6 3 , 3 5 5} \\ 6.4 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{6 , 0 8 6 , 4 5 4} \\ 5.6 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,364,935 \\ 4.6 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{6 , 6 2 5 , 5 3 1} \\ 4.1 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{6 , 8 6 6 , 0 4 9} \\ 3.6 \% \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 10,187,087 | 10,689,248 | 11,252,090 | 11,088,269 | 11,584,934 | 12,032,598 | 12,529,033 | 12,949,902 | 13,260,282 | 13,521,492 | 13,732,098 |
| \% annual change |  | 4.9\% | 5.3\% | -1.5\% | 4.5\% | 3.9\% | 4.1\% | 3.4\% | 2.4\% | 2.0\% | 1.6\% |
| on <20 tons aircraft | 917,976 | 926,250 | 816,710 | 791,575 | 897,122 | 926,510 | 958,471 | 984,193 | 1,001,151 | 1,014,112 | 1,023,041 |
| on 20t \& + aircraft | 9,269,111 | 9,762,998 | 10,435,380 | 10,296,695 | 10,687,812 | 11,106,088 | 11,570,562 | 11,965,710 | 12,259,131 | 12,507,380 | 12,709,057 |
| Share of <20 tons aircraft | 9.0\% | 8.7\% | 7.3\% | 7.1\% | 7.7\% | 7.7\% | 7.7\% | 7.6\% | 7.6\% | 7.5\% | 7.5\% |
| Ratio of passengers over Seats |  |  | 48.9\% | 40.4\% | 43.8\% | 45.0\% | 46.0\% | 47.0\% | 48.0\% | 49.0\% | 50.0\% |
| Average Seats per flight | 107.5 | 107.6 | 100.3 | 113.2 | 113.8 | 114.9 | 115.8 | 116.8 | 117.7 | 118.6 | 119.6 |
| \% annual change |  | 0.1\% | -6.8\% | 12.9\% | 0.5\% | 0.9\% | 0.8\% | 0.8\% | 0.8\% | 0.8\% | 0.8\% |
| on <20 tons aircraft | 31.1 | 32.0 | 28.1 | 30.1 | 31.0 | 31.2 | 31.4 | 31.6 | 31.8 | 32.0 | 32.2 |
| on 20t \& + aircraft | 142.0 | 138.6 | 125.4 | 143.7 | 146.8 | 148.0 | 149.0 | 150.0 | 151.0 | 152.0 | 153.0 |
| Number of flights | 94,791 | 99,358 | 112,235 | 97,942 | 101,772 | 104,737 | 108,179 | 110,917 | 112,669 | 113,976 | 114,837 |
| \% annual change |  | 4.8\% | 13.0\% | -12.7\% | 3.9\% | 2.9\% | 3.3\% | 2.5\% | 1.6\% | 1.2\% | 0.8\% |
| on <20 tons aircraft | 29,522 | 28,907 | 29,028 | 26,263 | 28,984 | 29,696 | 30,525 | 31,145 | 31,483 | 31,691 | 31,771 |
| on 20 t \& + aircraft | 65,269 | 70,451 | 83,207 | 71,679 | 72,788 | 75,041 | 77,655 | 79,771 | 81,186 | 82,285 | 83,066 |
| Share of <20 tons aircraft | 31.1\% | 29.1\% | 25.9\% | 26.8\% | 28.5\% | 28.4\% | 28.2\% | 28.1\% | 27.9\% | 27.8\% | 27.7\% |
| Aircraft MTOW tonnes | 5,234,175 | 5,381,900 | 5,768,441 | 5,637,162 | 5,533,091 | 5,747,320 | 5,984,937 | 6,186,495 | 6,335,298 | 6,460,631 | 6,561,805 |
| \% annual change |  | 2.8\% | 7.2\% | -2.3\% | -1.8\% | 3.9\% | 4.1\% | 3.4\% | 2.4\% | 2.0\% | 1.6\% |
| on <20 tons aircraft | 333,548 | 332,170 | 333,930 | 320,917 | 362,731 | 374,613 | 387,536 | 397,936 | 404,793 | 410,033 | 413,643 |
| on 20t \& + aircraft | 4,900,627 | 5,049,730 | 5,434,511 | 5,316,245 | 5,170,360 | 5,372,706 | 5,597,401 | 5,788,559 | 5,930,505 | 6,050,598 | 6,148,162 |
| Share of <20 tons aircraft | 6.4\% | 6.2\% | 5.8\% | 5.7\% | 6.6\% | 6.5\% | 6.5\% | 6.4\% | 6.4\% | 6.3\% | 6.3\% |
| Average MTOW tonnes per flight | 55.2 | 54.2 | 51.4 | 57.6 | 54.4 | 54.9 | 55.3 | 55.8 | 56.2 | 56.7 | 57.1 |
| \% annual change |  | -1.9\% | -5.1\% | 12.0\% | -5.5\% | 0.9\% | 0.8\% | 0.8\% | 0.8\% | 0.8\% | 0.8\% |
| on <20 tons aircraft | 11.3 | 11.5 | 11.5 | 12.2 | 12.5 | 12.6 | 12.7 | 12.8 | 12.9 | 12.9 | 13.0 |
| on 20t \& + aircraft | 75.1 | 71.7 | 65.3 | 74.2 | 71.0 | 71.6 | 72.1 | 72.6 | 73.0 | 73.5 | 74.0 |
| MTOW tonne-kilometres (000) | 5,948,735 | 6,208,763 | 6,715,550 | 6,652,542 | 6,646,455 | 6,997,907 | 7,374,028 | 7,712,156 | 7,989,676 | 8,241,652 | 8,466,172 |
| \% annual change |  | 4.4\% | 8.2\% | -0.9\% | -0.1\% | 5.3\% | 5.4\% | 4.6\% | 3.6\% | 3.2\% | 2.7\% |
| on <20 tons aircraft | 148,507 | 148,032 | 147,785 | 148,181 | 168,913 | 174,570 | 181,367 | 187,030 | 191,062 | 194,356 | 196,894 |
| on 20t \& + aircraft | 5,800,228 | 6,060,731 | 6,567,765 | 6,504,361 | 6,477,542 | 6,823,337 | 7,192,661 | 7,525,126 | 7,798,614 | 8,047,296 | 8,269,278 |
| Share of <20 tons aircraft | 2.5\% | 2.4\% | 2.2\% | 2.2\% | 2.5\% | 2.5\% | 2.5\% | 2.4\% | 2.4\% | 2.4\% | 2.3\% |
| Average Distance per flight | 1136.5 | 1153.6 | 1164.2 | 1180.1 | 1201.2 | 1217.6 | 1232.1 | 1246.6 | 1261.1 | 1275.7 | 1290.2 |
| \% annual change |  | 1.5\% | 0.9\% | 1.4\% | 1.8\% | 1.4\% | 1.2\% | 1.2\% | 1.2\% | 1.2\% | 1.1\% |
| on <20 tons aircraft | 445.2 | 445.7 | 442.6 | 461.7 | 465.7 | 466.0 | 468.0 | 470.0 | 472.0 | 474.0 | 476.0 |
| on 20t \& + aircraft | 1,183.6 | 1,200.2 | 1,208.5 | 1,223.5 | 1,252.8 | 1,270.0 | 1,285.0 | 1,300.0 | 1,315.0 | 1,330.0 | 1,345.0 | Forsultancy and

## Detailed constructions : Brisbane - Rest of Australia route area.

䌿 Split in capacity between small and large aircraft.
$\checkmark$ The evolution of the share of the smaller aircraft did not show any specific trend and under these circumstances it is expected not to show big changes in the future.

Ratio of passengers over seats.
$\checkmark$ The comparison of the passengers over the number of seats suggests that there is a lack of coherence between the two sources used, and therefore we can only reflect for future trends a slight improvement in the evolution of this ratio applied to the figure constructed for the base year.

울 Average aircraft size.
$\checkmark$ We do not anticipate a significant change in the average aircraft size for the route area (only a slight increase).

요․ Average flight distance
$\checkmark$ During the past years, the average distance increased continually. This trend is expected to continue.

Air Transport Consultancy and
Forecasting Forecasting

## Detailed constructions : Brisbane - Rest of Australia route area.

| Route : Brisbane-Rest of Austral | History |  |  |  |  | Forecast |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998-1999 | 1999-2000 | 2000-2001 | 2001-2002 | \| 2002-2003 | 2003-2004 | \|2004-2005| | 2005-2006 | \| 2006-2007| | \| 2007-2008 | 2008-2009 |


| Passengers <br> \% annual change | N/A | N/A | 5,315,482 | $\begin{array}{r} \hline \hline 4,868,194 \\ -8.4 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,020,952 \\ 3.1 \% \end{array}$ | $\begin{array}{r} \hline \hline 5,381,284 \\ 7.2 \% \end{array}$ | $\begin{array}{r} \hline \hline 5,753,398 \\ 6.9 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 6,080,826 \\ 5.7 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,355,092 \\ 4.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,614,250 \\ 4.1 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,850,587 \\ 3.6 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 5,214,150 | 5,601,131 | 5,462,802 | 4,655,290 | 5,161,018 | 5,491,106 | 5,841,013 | 6,142,248 | 6,387,027 | 6,614,250 | 6,816,504 |
| \% annual change |  | 7.4\% | -2.5\% | -14.8\% | 10.9\% | 6.4\% | 6.4\% | 5.2\% | 4.0\% | 3.6\% | 3.1\% |
| on <20 tons aircraft | 980,322 | 1,027,453 | 1,019,168 | 812,835 | 807,241 | 851,121 | 876,152 | 909,053 | 938,893 | 965,680 | 988,393 |
| on 20t \& + aircraft | 4,233,829 | 4,573,678 | 4,443,634 | 3,842,455 | 4,353,778 | 4,639,984 | 4,964,861 | 5,233,196 | 5,448,134 | 5,648,569 | 5,828,111 |
| Share of <20 tons aircraft | 18.8\% | 18.3\% | 18.7\% | 17.5\% | 15.6\% | 15.5\% | 15.0\% | 14.8\% | 14.7\% | 14.6\% | 14.5\% |
| Ratio of passengers over Seats |  |  | 97.3\% | 104.6\% | 97.3\% | 98.0\% | 98.5\% | 99.0\% | 99.5\% | 100.0\% | 100.5\% |
| Average Seats per flight | 71.4 | 72.1 | 66.6 | 66.8 | 79.7 | 80.3 | 81.8 | 82.9 | 83.8 | 84.8 | 85.7 |
| \% annual change |  | 1.0\% | -7.6\% | 0.2\% | 19.4\% | 0.7\% | 2.0\% | 1.3\% | 1.1\% | 1.1\% | 1.1\% |
| on <20 tons aircraft | 26.2 | 25.8 | 25.3 | 24.9 | 29.4 | 29.6 | 29.9 | 30.2 | 30.5 | 30.8 | 31.1 |
| on 20 t \& + aircraft | 118.8 | 121.1 | 106.4 | 103.9 | 116.9 | 117.0 | 118.0 | 119.0 | 120.0 | 121.0 | 122.0 |
| Number of flights | 73,030 | 77,640 | 81,967 | 69,697 | 64,731 | 68,412 | 71,378 | 74,078 | 76,184 | 78,036 | 79,553 |
| \% annual change |  | 6.3\% | 5.6\% | -15.0\% | -7.1\% | 5.7\% | 4.3\% | 3.8\% | 2.8\% | 2.4\% | 1.9\% |
| on <20 tons aircraft | 37,391 | 39,884 | 40,218 | 32,700 | 27,501 | 28,754 | 29,303 | 30,101 | 30,783 | 31,353 | 31,781 |
| on 20t \& + aircraft | 35,639 | 37,756 | 41,749 | 36,997 | 37,230 | 39,658 | 42,075 | 43,976 | 45,401 | 46,682 | 47,771 |
| Share of <20 tons aircraft | 51.2\% | 51.4\% | 49.1\% | 46.9\% | 42.5\% | 42.0\% | 41.1\% | 40.6\% | 40.4\% | 40.2\% | 39.9\% |
| Aircraft MTOW tonnes | 2,586,897 | 2,689,201 | 2,855,024 | 2,794,722 | 2,769,488 | 2,947,587 | 3,139,063 | 3,302,487 | 3,434,895 | 3,557,920 | 3,667,568 |
| \% annual change |  | 4.0\% | 6.2\% | -2.1\% | -0.9\% | $6.4 \%$ | 6.5\% | 5.2\% | 4.0\% | 3.6\% | 3.1\% |
| on <20 tons aircraft | 411,718 | 427,264 | 433,630 | 368,344 | 348,096 | 367,018 | 377,812 | 391,999 | 404,867 | 416,418 | 426,212 |
| on 20t \& + aircraft | 2,175,178 | 2,261,936 | 2,421,394 | 2,426,378 | 2,421,392 | 2,580,568 | 2,761,251 | 2,910,488 | 3,030,028 | 3,141,502 | 3,241,355 |
| Share of <20 tons aircraft | 15.9\% | 15.9\% | 15.2\% | 13.2\% | 12.6\% | 12.5\% | 12.0\% | 11.9\% | 11.8\% | 11.7\% | 11.6\% |
| Average MTOW tonnes per fligh | 35.4 | 34.6 | 34.8 | 40.1 | 42.8 | 43.1 | 44.0 | 44.6 | 45.1 | 45.6 | 46.1 |
| \% annual change |  | -2.2\% | 0.6\% | 15.1\% | 6.7\% | 0.7\% | 2.1\% | 1.4\% | 1.1\% | 1.1\% | 1.1\% |
| on <20 tons aircraft | 11.0 | 10.7 | 10.8 | 11.3 | 12.7 | 12.8 | 12.9 | 13.0 | 13.2 | 13.3 | 13.4 |
| on 20t \& + aircraft | 61.0 | 59.9 | 58.0 | 65.6 | 65.0 | 65.1 | 65.6 | 66.2 | 66.7 | 67.3 | 67.9 |
| MTOW tonne-kilometres (000) | 2,997,486 | 3,091,459 | 3,424,929 | 3,521,596 | 3,634,384 | 3,912,487 | 4,207,109 | 4,454,876 | 4,657,554 | 4,849,340 | 5,014,843 |
| \% annual change |  | 3.1\% | 10.8\% | 2.8\% | 3.2\% | 7.7\% | 7.5\% | 5.9\% | 4.5\% | 4.1\% | 3.4\% |
| on <20 tons aircraft | 173,979 | 179,569 | 179,281 | 172,521 | 161,282 | 170,664 | 175,683 | 182,280 | 188,263 | 193,634 | 198,189 |
| on 20t \& + aircraft | 2,823,506 | 2,911,890 | 3,245,648 | 3,349,075 | 3,473,102 | 3,741,824 | 4,031,427 | 4,272,596 | 4,469,291 | 4,655,705 | 4,816,654 |
| Share of <20 tons aircraft | 5.8\% | 5.8\% | 5.2\% | 4.9\% | 4.4\% | 4.4\% | 4.2\% | 4.1\% | 4.0\% | 4.0\% | 4.0\% |
| Average Distance per flight | 1158.7 | 1149.6 | 1199.6 | 1260.1 | 1312.3 | 1327.4 | 1340.2 | 1348.9 | 1356.0 | 1363.0 | 1367.3 |
| \% annual change |  | -0.8\% | 4.4\% | 5.0\% | 4.1\% | 1.1\% | 1.0\% | 0.6\% | 0.5\% | 0.5\% | 0.3\% |
| on <20 tons aircraft | 422.6 | 420.3 | 413.4 | 468.4 | 463.3 | 465.0 | 465.0 | 465.0 | 465.0 | 465.0 | 465.0 |
| on 20t \& + aircraft | 1,298.1 | 1,287.3 | 1,340.4 | 1,380.3 | 1,434.3 | 1,450.0 | 1,460.0 | 1,468.0 | 1,475.0 | 1,482.0 | 1,486.0 |

## Detailed constructions : Domestic - Rest of Australia route area.

- Split in capacity between small and large aircraft.
$\checkmark$ The share of the smaller aircraft category is the highest of all route areas. This is understandable due to the high level of regional airline activity in many secondary airports within the country. Its evolution showed an increase during the first 3 years and then a decline in 2002-2003. We expect this figure to continue declining over the years.

色 Ratio of passengers over seats.
$\checkmark$ The comparison of the passengers over the number of seats suggests that there is a lack of coherence between the two sources used, and therefore we can only reflect for future trends a slight improvement in the evolution of this ratio applied to the figure constructed for the base year.

을 Average aircraft size.
$\checkmark \quad$ For the larger aircraft category, the average number of seats declined during the first 3 years in the past. It is expected to show a slight increase in the future.

를 Average flight distance
$\checkmark$ For the larger aircraft category, the average distance increased moderately in the recent past. We expect this trend to continue. Consultancy and
Forecasting Forecasting

## Detailed constructions : Domestic - Rest of Australia route area.



| Passengers \% annual change | N/A | N/A | 4,041,733 | $\begin{array}{r} \hline \hline 4,648,930 \\ 15.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,438,622 \\ -4.5 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,715,915 \\ 6.2 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,998,360 \\ 6.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 5,254,082 \\ 5.1 \% \end{array}$ | $\begin{array}{r} \hline \hline 5,474,028 \\ 4.2 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,681,806 \\ 3.8 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,871,308 \\ 3.3 \% \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 8,354,848 | 8,512,177 | 7,531,557 | 5,665,370 | 6,077,812 | 6,416,211 | 6,754,541 | 7,052,459 | 7,298,705 | 7,535,551 | 7,756,021 |
| \% annual change |  | 1.9\% | -11.5\% | -24.8\% | 7.3\% | 5.6\% | 5.3\% | 4.4\% | 3.5\% | 3.2\% | 2.9\% |
| on <20 tons aircraft | 2,899,766 | 3,281,029 | 2,949,673 | 2,580,097 | 2,592,928 | 2,694,809 | 2,769,362 | 2,820,983 | 2,846,495 | 2,863,509 | 2,869,728 |
| on 20t \& + aircraft | 5,455,082 | 5,231,148 | 4,581,884 | 3,085,273 | 3,484,884 | 3,721,402 | 3,985,179 | 4,231,475 | 4,452,210 | 4,672,042 | 4,886,293 |
| Share of <20 tons aircraft | 34.7\% | 38.5\% | 39.2\% | 45.5\% | 42.7\% | 42.0\% | 41.0\% | 40.0\% | 39.0\% | 38.0\% | 37.0\% |
| Ratio of passengers over Seats |  |  | 53.7\% | 82.1\% | 73.0\% | 73.5\% | 74.0\% | 74.5\% | 75.0\% | 75.4\% | 75.7\% |
| Average Seats per flight | 50.2 | 48.2 | 42.1 | 37.5 | 39.6 | 40.0 | 40.7 | 41.5 | 42.3 | 43.1 | 43.8 |
| \% annual change |  | -4.0\% | -12.6\% | -11.0\% | 5.7\% | 1.1\% | 1.9\% | 1.9\% | 1.9\% | 1.8\% | 1.7\% |
| on <20 tons aircraft | 26.7 | 27.1 | 23.9 | 23.9 | 23.9 | 23.9 | 24.0 | 24.1 | 24.2 | 24.3 | 24.4 |
| on 20t \& aircraft | 94.0 | 94.1 | 82.4 | 71.4 | 77.1 | 78.0 | 79.0 | 80.0 | 80.9 | 81.7 | 82.1 |
| Number of flights | 166,564 | 176,753 | 178,958 | 151,267 | 153,599 | 160,464 | 165,835 | 169,947 | 172,657 | 175,025 | 177,128 |
| \% annual change |  | 6.1\% | 1.2\% | -15.5\% | 1.5\% | 4.5\% | 3.3\% | 2.5\% | 1.6\% | 1.4\% | 1.2\% |
| on <20 tons aircraft | 108,542 | 121,141 | 123,329 | 108,047 | 108,388 | 112,753 | 115,390 | 117,053 | 117,624 | 117,840 | 117,612 |
| on 20t \& + aircraft | 58,022 | 55,612 | 55,629 | 43,220 | 45,211 | 47,710 | 50,445 | 52,893 | 55,033 | 57,185 | 59,516 |
| Share of <20 tons aircraft | 65.2\% | 68.5\% | 68.9\% | 71.4\% | 70.6\% | 70.3\% | 69.6\% | 68.9\% | 68.1\% | 67.3\% | 66.4\% |
| Aircraft MTOW tonnes | 3,760,497 | 3,751,390 | 3,871,533 | 3,150,280 | 3,357,085 | 3,551,168 | 3,749,818 | 3,927,107 | 4,076,540 | 4,221,539 | 4,358,135 |
| \% annual change |  | -0.2\% | 3.2\% | -18.6\% | 6.6\% | 5.8\% | 5.6\% | 4.7\% | 3.8\% | 3.6\% | 3.2\% |
| on <20 tons aircraft | 1,128,861 | 1,265,392 | 1,305,008 | 1,155,051 | 1,181,384 | 1,227,803 | 1,261,771 | 1,285,291 | 1,296,914 | 1,304,666 | 1,307,499 |
| on 20t \& + aircraft | 2,631,636 | 2,485,998 | 2,566,525 | 1,995,228 | 2,175,701 | 2,323,365 | 2,488,047 | 2,641,816 | 2,779,626 | 2,916,873 | 3,050,636 |
| Share of <20 tons aircraft | 30.0\% | 33.7\% | 33.7\% | 36.7\% | 35.2\% | 34.6\% | 33.6\% | 32.7\% | 31.8\% | 30.9\% | 30.0\% |
| Average MTOW tonnes per flight | 22.6 | 21.2 | 21.6 | 20.8 | 21.9 | 22.1 | 22.6 | 23.1 | 23.6 | 24.1 | 24.6 |
| \% annual change |  | -6.0\% | 1.9\% | -3.7\% | 4.9\% | 1.3\% | 2.2\% | 2.2\% | 2.2\% | 2.2\% | 2.0\% |
| on <20 tons aircraft | 10.4 | 10.4 | 10.6 | 10.7 | 10.9 | 10.9 | 10.9 | 11.0 | 11.0 | 11.1 | 11.1 |
| on 20t \& + aircraft | 45.4 | 44.7 | 46.1 | 46.2 | 48.1 | 48.7 | 49.3 | 49.9 | 50.5 | 51.0 | 51.3 |
| MTOW tonne-kilometres (000) | 3,754,437 | 3,708,130 | 3,829,993 | 3,117,297 | 3,370,178 | 3,587,902 | 3,824,954 | 4,043,654 | 4,236,609 | 4,427,559 | 4,612,159 |
| \% annual change |  | -1.2\% | 3.3\% | -18.6\% | 8.1\% | 6.5\% | 6.6\% | 5.7\% | 4.8\% | 4.5\% | 4.2\% |
| on <20 tons aircraft | 421,900 | 446,379 | 459,397 | 455,904 | 467,168 | 486,210 | 500,923 | 511,546 | 517,469 | 521,866 | 524,307 |
| on 20t \& + aircraft | 3,332,537 | 3,261,751 | 3,370,597 | 2,661,392 | 2,903,010 | 3,101,692 | 3,324,031 | 3,532,108 | 3,719,140 | 3,905,693 | 4,087,852 |
| Share of <20 tons aircraft | 11.2\% | 12.0\% | 12.0\% | 14.6\% | 13.9\% | 13.6\% | 13.1\% | 12.7\% | 12.2\% | 11.8\% | 11.4\% |
| Average Distance per flight | 998.4 | 988.5 | 989.3 | 989.5 | 1003.9 | 1010.3 | 1020.0 | 1029.7 | 1039.3 | 1048.8 | 1058.3 |
| \% annual change |  | -1.0\% | 0.1\% | 0.0\% | 1.5\% | 0.6\% | 1.0\% | 0.9\% | 0.9\% | 0.9\% | 0.9\% |
| on <20 tons aircraft | 373.7 | 352.8 | 352.0 | 394.7 | 395.4 | 396.0 | 397.0 | 398.0 | 399.0 | 400.0 | 401.0 |
| on 20t \& + aircraft | 1,266.3 | 1,312.0 | 1,313.3 | 1,333.9 | 1,334.3 | 1,335.0 | 1,336.0 | 1,337.0 | 1,338.0 | 1,339.0 | 1,340.0 |

## Detailed constructions : Australia - Africa route area.

울 Ratio of passengers over seats.
$\checkmark$ The ratio of passengers over seats showed an improvement in the passenger load factors in the past. This trend is expected to continue in the future.

를 Average aircraft size.
$\checkmark \quad$ The average aircraft size was relatively high due to the predominance of the Boeing 747 on these routes. We expect the new services to be introduced with smaller aircraft such as the Airbus 340 or B777 aircraft.

으․ Average flight distance.
$\checkmark \quad$ The average distance increased in the past. We expect this trend to continue, as more flights are expected to be scheduled out of the East Coast of Australia.

## Detailed constructions : Australia - Africa route area.

| Route : Australia-Africa | History |  |  |  |  | Forecast |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998-1999 | 1999-2000 | \| 2000-2001 | 2001-2002 | \| 2002-2003 | 2003-2004 | 2004-2005 | \|2005-2006 | 2006-2007 | 2007-2008 | 2008-2009 |


| Passengers <br> \% annual change | N/A | N/A | 239,749 | $\begin{array}{r} \hline \hline \mathbf{2 6 5 , 5 0 0} \\ 10.7 \% \end{array}$ | $\begin{array}{r} \hline \hline 251,232 \\ -5.4 \% \end{array}$ | $\begin{array}{r} \hline \hline 272,448 \\ 8.4 \% \end{array}$ | $\begin{array}{r} \hline \hline 295,867 \\ 8.6 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 322,093 \\ 8.9 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 349,680 \\ 8.6 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 378,404 \\ 8.2 \% \end{array}$ | $\begin{array}{r} \hline \hline 407,710 \\ 7.7 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats <br> \% annual change <br> on <20 tons aircraft <br> on 20t \&+ aircraft <br> Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 327,969 \\ 0 \\ 327,969 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 379,480 \\ 15.7 \% \\ 0 \\ 379,480 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 401,035 \\ 5.7 \% \\ 0 \\ 401,035 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 413,449 \\ 3.1 \% \\ 0 \\ 413,449 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 377,694 \\ -8.6 \% \\ 0 \\ 377,694 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 406,639 \\ 7.7 \% \\ 0 \\ 406,639 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 435,099 \\ 7.0 \% \\ 0 \\ 435,099 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 466,802 \\ 7.3 \% \\ 0 \\ 466,802 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 0 3 , 1 3 6} \\ 7.8 \% \\ 0 \\ 503,136 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 540,576 \\ 7.4 \% \\ 0 \\ 540,576 \\ 0.0 \% \end{array}$ | $\begin{array}{r\|} \hline \hline 578,312 \\ 7.0 \% \\ 0 \\ 578,312 \\ 0.0 \% \end{array}$ |
| Ratio of passengers over |  |  | 59.8\% | 64.2\% | 66.5\% | 67.0\% | 68.0\% | 69.0\% | 69.5\% | 70.0\% | 70.5\% |
| Average Seats per flight \% annual change on <20 tons aircraft on 20t \& + aircraft | $\begin{array}{r} \hline 342.7 \\ 0.0 \\ 342.7 \end{array}$ | $\begin{array}{r} \hline 367.4 \\ 7.2 \% \\ 0.0 \\ 367.4 \end{array}$ | $\begin{array}{r} \hline 361.3 \\ -1.7 \% \\ 0.0 \\ 361.3 \end{array}$ | $\begin{array}{r} \hline 368.2 \\ 1.9 \% \\ 0.0 \\ 368.2 \end{array}$ | $\begin{array}{r} \hline 380.7 \\ 3.4 \% \\ 0.0 \\ 380.7 \end{array}$ | $\begin{array}{r} \hline \hline 380.0 \\ -0.2 \% \\ 0.0 \\ 380.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 378.0 \\ -0.5 \% \\ 0.0 \\ 378.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline 376.0 \\ -0.5 \% \\ 0.0 \\ 376.0 \\ \hline \hline \end{array}$ | $\begin{array}{r\|} \hline \hline 374.0 \\ -0.5 \% \\ 0.0 \\ 374.0 \\ \hline \hline \end{array}$ | $\begin{array}{r} \hline \hline 372.0 \\ -0.5 \% \\ 0.0 \\ 372.0 \\ \hline \hline \end{array}$ | $\begin{array}{r} \hline \hline 370.0 \\ -0.5 \% \\ 0.0 \\ 370.0 \\ \hline \hline \end{array}$ |
| Number of flights \% annual change on <20 tons aircraft on 20t \& + aircraft Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 957 \\ 0 \\ 957 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,033 \\ 7.9 \% \\ 0 \\ 1,033 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,110 \\ 7.5 \% \\ 0 \\ 1,110 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,123 \\ 1.2 \% \\ 0 \\ 1,123 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 992 \\ -11.7 \% \\ 0 \\ 992 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline 1,070 \\ 7.9 \% \\ 0 \\ 1,070 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,151 \\ 7.6 \% \\ 0 \\ 1,151 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{1 , 2 4 1} \\ 7.9 \% \\ 0 \\ 1,241 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,345 \\ 8.4 \% \\ 0 \\ 1,345 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,453 \\ 8.0 \% \\ 0 \\ 1,453 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r\|\|} \hline \hline \mathbf{1 , 5 6 3} \\ 7.6 \% \\ 0 \\ 1,563 \\ 0.0 \% \\ \hline \end{array}$ |
| Aircraft MTOW tonnes <br> \% annual change on <20 tons aircraft on 20t \& + aircraft Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 305,737 \\ 0 \\ 305,737 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 356,940 \\ 16.7 \% \\ 0 \\ 356,940 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 373,015 \\ 4.5 \% \\ 0 \\ 373,015 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 389,427 \\ 4.4 \% \\ 0 \\ 389,427 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 361,109 \\ -7.3 \% \\ 0 \\ 361,109 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 388,783 \\ 7.7 \% \\ 0 \\ 388,783 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 415,993 \\ 7.0 \% \\ 0 \\ 415,993 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 446,304 \\ 7.3 \% \\ 0 \\ 446,304 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 481,043 \\ 7.8 \% \\ 0 \\ 481,043 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 516,839 \\ 7.4 \% \\ 0 \\ 516,839 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r\|} \hline \hline \mathbf{5 5 2 , 9 1 7} \\ 7.0 \% \\ 0 \\ 552,917 \\ 0.0 \% \\ \hline \end{array}$ |
| Average MTOW tonnes per flight \% annual change on <20 tons aircraft on 20t \& + aircraft | $\begin{array}{r} \hline 319.5 \\ 0.0 \\ 319.5 \end{array}$ | $\begin{array}{r} \hline 345.5 \\ 8.2 \% \\ 0.0 \\ 345.5 \end{array}$ | $\begin{array}{r} \hline \hline 336.0 \\ -2.7 \% \\ 0.0 \\ 336.0 \end{array}$ | $\begin{array}{r} \hline 346.8 \\ 3.2 \% \\ 0.0 \\ 346.8 \end{array}$ | $\begin{array}{r} \hline 364.0 \\ 5.0 \% \\ 0.0 \\ 364.0 \end{array}$ | $\begin{array}{r} \hline \hline 363.3 \\ -0.2 \% \\ 0.0 \\ 363.3 \end{array}$ | $\begin{array}{r} \hline \hline 361.4 \\ -0.5 \% \\ 0.0 \\ 361.4 \end{array}$ | $\begin{array}{r} \hline \hline 359.5 \\ -0.5 \% \\ 0.0 \\ 359.5 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 357.6 \\ -0.5 \% \\ 0.0 \\ 357.6 \end{array}$ | $\begin{array}{r} \hline \hline 355.7 \\ -0.5 \% \\ 0.0 \\ 355.7 \end{array}$ | $\begin{array}{r} \hline \hline 353.8 \\ -0.5 \% \\ 0.0 \\ 353.8 \\ \hline \end{array}$ |
| MTOW tonne-kilometres (000) \% annual change on <20 tons aircraft on 20t \& aircraft Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 892,254 \\ 0 \\ 892,254 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,086,102 \\ 21.7 \% \\ 0 \\ 1,086,102 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,507,684 \\ 38.8 \% \\ 0 \\ 1,507,684 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,914,534 \\ 27.0 \% \\ 0 \\ 1,914,534 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,724,618 \\ -9.9 \% \\ 0 \\ 1,724,618 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,866,157 \\ 8.2 \% \\ 0 \\ 1,866,157 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 2,000,928 \\ 7.2 \% \\ 0 \\ 2,000,928 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,155,648 \\ 7.7 \% \\ 0 \\ 2,155,648 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,333,057 \\ 8.2 \% \\ 0 \\ 2,333,057 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,511,837 \\ 7.7 \% \\ 0 \\ 2,511,837 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 , 6 9 2 , 7 0 7} \\ 7.2 \% \\ 0 \\ 2,692,707 \\ 0.0 \% \end{array}$ |
| Average Distance per flight \% annual change on <20 tons aircraft on 20t \&+ aircraft | $\begin{array}{r} \hline \hline \mathbf{2 9 1 8 . 4} \\ 0.0 \\ 2,918.4 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 3042.8 \\ 4.3 \% \\ 0.0 \\ 3,042.8 \end{array}$ | $\begin{array}{r} \hline \hline 4041.9 \\ 32.8 \% \\ 0.0 \\ 4,041.9 \end{array}$ | $\begin{array}{r} \hline \hline 4916.3 \\ 21.6 \% \\ 0.0 \\ 4,916.3 \end{array}$ | $\begin{array}{r} \hline \hline 4775.9 \\ -2.9 \% \\ 0.0 \\ 4,775.9 \end{array}$ | $\begin{array}{r} \hline \hline 4800.0 \\ 0.5 \% \\ 0.0 \\ 4,800.0 \end{array}$ | $\begin{array}{r} \hline \hline 4810.0 \\ 0.2 \% \\ 0.0 \\ 4,810.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4830.0 \\ 0.4 \% \\ 0.0 \\ 4,830.0 \end{array}$ | $\begin{array}{r} \hline \hline 4850.0 \\ 0.4 \% \\ 0.0 \\ 4,850.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{4 8 6 0 . 0} \\ 0.2 \% \\ 0.0 \\ 4,860.0 \\ \hline \end{array}$ | $\begin{array}{r\|} \hline \hline 4870.0 \\ 0.2 \% \\ 0.0 \\ 4,870.0 \\ \hline \end{array}$ |

## Detailed constructions : Australia - New Zealand route area.

을 Ratio of passengers over seats.
$\checkmark$ The comparison between seats and passengers shows realistic load factors for such route area. With the expansion of Emirates fifth freedom service on this route area, we expect the load factor to improve only marginally.

를 Average aircraft size.
$\checkmark \quad$ The average aircraft size on this route has decreased continually in the past. We expect this trend to continue for two years, with the development of competition and thereafter it will increase.

을 Average flight distance.
$\checkmark$ We expect the average distance to increase in the future due to more flights out of Western Australia, although they would represent a small portion of the total. Consultancy and
Forecasting

## Detailed constructions : Australia - New Zealand route area.

| Route: Australia-New Zealand | History |  |  |  | Forecast |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998-1999 1999-2000\| | 2000-2001 | 2001-2002\| | 2002-2003 | 2003-2004 | 2004-2005\| | 2005-2006 | 2006-2007\| | 2007-2008 | 2008-2009 |


| Passengers \% annual change | N/A | N/A | 3,553,442 | $\begin{array}{r} \hline \hline 3,461,996 \\ -2.6 \% \end{array}$ | $\begin{array}{r} \hline \hline 3,691,409 \\ 6.6 \% \end{array}$ | $\begin{array}{r} \hline \hline 3,894,437 \\ 5.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,076,029 \\ 4.7 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,229,814 \\ 3.8 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,377,352 \\ 3.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,534,723 \\ 3.6 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,688,641 \\ 3.4 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 5,169,145 | 5,382,057 | 5,750,563 | 5,371,935 | 5,801,471 | 5,991,441 | 6,222,946 | 6,408,809 | 6,582,484 | 6,768,243 | 6,946,135 |
| \% annual chang |  | 4.1\% | 6.8\% | -6.6\% | 8.0\% | 3.3\% | 3.9\% | 3.0\% | 2.7\% | 2.8\% | 2.6\% |
| on <20 tons aircraft | 1,592 | 1,382 | 1,040 | 881 | 1,738 | 1,797 | 1,867 | 1,923 | 1,975 | 2,030 | 2,084 |
| on 20t \& + aircraft | 5,167,554 | 5,380,676 | 5,749,523 | 5,371,054 | 5,799,733 | 5,989,644 | 6,221,079 | 6,406,886 | 6,580,509 | 6,766,213 | 6,944,051 |
| Share of <20 tons aircraft | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Ratio of passengers over Seats |  |  | 61.8\% | 64.4\% | 63.6\% | 65.0\% | 65.5\% | 66.0\% | 66.5\% | 67.0\% | 67.5\% |
| Average Seats per flight | 225.7 | 213 | 205.3 | 198.7 | 193.8 | 191.1 | 189.1 | 189.1 | 190.1 | 191.3 | 192.9 |
| \% annual change |  | -5.3\% | -3.9\% | -3.2\% | -2.5\% | -1.4\% | -1.0\% | 0.0\% | 0.5\% | 0.6\% | 0.8\% |
| on <20 tons aircraf | 12.0 | 11.3 | 13.2 | 11.3 | 11.3 | 11.2 | 11.2 | 11.3 | 11.4 | 11.5 | 11.6 |
| on 20t \& + aircraft | 227.0 | 214.7 | 205.9 | 199.2 | 194.7 | 192.0 | 190.0 | 190.0 | 191.0 | 192.2 | 193.8 |
| Number of fligh | 22,901 | 25,188 | 28,008 | 27,037 | 29,935 | 31,357 | 32,909 | 33,891 | 34,626 | 35,381 | 36,011 |
| \% annual change |  | 10.0\% | 11.2\% | -3.5\% | 10.7\% | 4.7\% | 5.0\% | 3.0\% | 2.2\% | 2.2\% | 1.8\% |
| on <20 tons aircraft | 133 | 122 | 79 | 78 | 154 | 160 | 167 | 170 | 173 | 177 | 180 |
| n 20t \& + aircraft | 22,768 | 25,066 | 27,929 | 26,959 | 29,781 | 31,196 | 32,743 | 33,720 | 34,453 | 35,204 | 35,831 |
| Share of <20 tons aircraft | 0.6\% | 0.5\% | 0.3\% | 0.3\% | 0.5\% | 0.5\% | 0.5\% | 0.5\% | 0.5\% | 0.5\% | 0.5\% |
| Aircraft MTOW tonnes | 4,281,532 | 4,259,679 | 4,409,924 | 4,041,997 | 4,266,850 | 4,406,569 | 4,576,836 | 4,713,534 | 4,841,268 | 4,977,890 | 5,108,725 |
| \% annual change |  | -0.5\% | 3.5\% | -8.3\% | 5.6\% | 3.3\% | 3.9\% | 3.0\% | 2.7\% | 2.8\% | 2.6\% |
| on <20 tons aircraft | 1,403 | 1,185 | 841 | 764 | 1,627 | 1,683 | 1,748 | 1,800 | 1,849 | 1,901 | 1,951 |
| on 20t \& + aircraft | 4,280,129 | 4,258,494 | 4,409,083 | 4,041,233 | 4,265,223 | 4,404,887 | 4,575,088 | 4,711,734 | 4,839,419 | 4,975,989 | 5,106,774 |
| Share of <20 tons aircraft | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Average MTOW tonnes per flight | 187.0 | 169.1 | 157.5 | 149.5 | 142.5 | 140.5 | 139.1 | 139.1 | 139.8 | 140.7 | 141.9 |
| \% annual change |  | -9.5\% | -6.9\% | -5.1\% | -4.7\% | -1.4\% | -1.0\% | 0.0\% | 0.5\% | 0.6\% | 0.8\% |
| on <20 tons aircraft | 10.5 | 9.7 | 10.7 | 9.8 | 10.6 | 10.5 | 10.5 | 10.6 | 10.7 | 10.8 | 10.9 |
| on 20t \& + aircraft | 188.0 | 169.9 | 157.9 | 149.9 | 143.2 | 141.2 | 139.7 | 139.7 | 140.5 | 141.3 | 142.5 |
| MTOW tonne-kilometres (000) | 5,507,673 | 5,366,874 | 5,491,294 | 5,151,919 | 5,352,657 | 5,552,277 | 5,789,688 | 5,986,170 | 6,172,589 | 6,371,661 | 6,564,663 |
| \% annual change |  | -2.6\% | 2.3\% | -6.2\% | 3.9\% | 3.7\% | 4.3\% | 3.4\% | 3.1\% | 3.2\% | 3.0\% |
| on <20 tons aircraf | 1,911 | 1,587 | 1,007 | 907 | 2,043 | 2,120 | 2,202 | 2,268 | 2,329 | 2,395 | 2,458 |
| on 20t \& + aircraft | 5,505,762 | 5,365,287 | 5,490,286 | 5,151,012 | 5,350,615 | 5,550,157 | 5,787,486 | 5,983,902 | 6,170,259 | 6,369,265 | 6,562,205 |
| Share of <20 tons aircraft | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Average Distance per flight | 1286.4 | 1259.9 | 1245.2 | 1274.6 | 1254.5 | 1260.0 | 1265.0 | 1270.0 | 1275.0 | 1280.0 | 1285.0 |
| \% annual change |  | -2.1\% | -1.2\% | 2.4\% | -1.6\% | 0.4\% | 0.4\% | 0.4\% | 0.4\% | 0.4\% | 0.4\% |
| on <20 tons aircraft | 1,362.7 | 1,338.9 | 1,196.9 | 1,187.3 | 1,255.2 | 1,260.0 | 1,260.0 | 1,260.0 | 1,260.0 | 1,260.0 | 1,260.0 |
| on 20t \& + aircraft | 1,286.4 | 1,259.9 | 1,245.2 | 1,274.6 | 1,254.5 | 1,260.0 | 1,265.0 | 1,270.0 | 1,275.0 | 1,280.0 | 1,285.0 |

## Detailed constructions : Australia - Northeast Asia route area.



Ratio of passengers over seats.
$\checkmark$ Despite the SARS crisis in Spring 2003, the load factor derived by comparing seats (from ASA) with passengers (from AVSTAT) for 2002-2003 seems not to be affected. We expect a slight improvement over the years.


Average aircraft size.
$\checkmark$ The average aircraft size declined from a high 334 in 2000-2001 to 304 in 2002-2003. This is probably due to a stronger growth in flights which took place on emerging markets served with aircraft smaller than the Boeing 747. We expect this trend to continue during at least the nest couple of years.

을 Average flight distance.
$\checkmark \quad$ The average distance did not show any significant trends towards an increase or a decrease. We expect this average figure to experience a very negligible increase in the future.

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## Detailed constructions : Australia - Northeast Asia route area.



| Passengers \% annual change | N/A | N/A | 3,666,072 | $\begin{array}{r} \hline \hline \mathbf{3 , 4 4 2 , 5 5 6} \\ -6.1 \% \end{array}$ | $\begin{array}{r} \hline \hline 3,568,547 \\ 3.7 \% \end{array}$ | $\begin{gathered} \hline \hline 3,925,402 \\ 10.0 \% \end{gathered}$ | $\begin{array}{r} \hline \hline 4,310,091 \\ 9.8 \% \end{array}$ | $\begin{array}{r} \hline \hline \text { 4,719,550 } \\ 9.5 \% \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 , 1 6 8 , 7 1 7} \\ 9.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 5,633,902 \\ 9.0 \% \end{array}$ | $\begin{array}{r\|} \hline \hline 6,129,685 \\ 8.8 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats <br> \% annual change on <20 tons aircraft on 20t \&+ aircraft Share of <20 tons aircraft | $\begin{array}{r} \hline \hline \mathbf{5 , 1 4 3 , 0 6 5} \\ 0 \\ 5,143,065 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,087,109 \\ -1.1 \% \\ 0 \\ 5,087,109 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,320,539 \\ 4.6 \% \\ 0 \\ 5,320,539 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,865,100 \\ -8.6 \% \\ 0 \\ 4,865,100 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,889,558 \\ 0.5 \% \\ 0 \\ 4,889,558 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,304,597 \\ 8.5 \% \\ 0 \\ 5,304,597 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 , 7 4 6 , 7 8 9} \\ 8.3 \% \\ 0 \\ 5,746,789 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{6 , 2 5 1 , 0 6 0} \\ 8.8 \% \\ 0 \\ 6,251,060 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 6,800,944 \\ 8.8 \% \\ 0 \\ 6,800,944 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 7,364,577 \\ 8.3 \% \\ 0 \\ 7,364,577 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r\|} \hline \hline 7,960,630 \\ 8.1 \% \\ 0 \\ 7,960,630 \\ 0.0 \% \\ \hline \end{array}$ |
| Ratio of passengers |  |  | 68.9 | 70.8\% | 73.0\% | 74.0\% | 75.0\% | 75.5\% | 76.0\% | 76.5\% | 77.0\% |
| Average Seats per flight \% annual change on <20 tons aircraft on $20 t$ \& aircraft | $\begin{array}{r} \hline 319.5 \\ 0.0 \\ 319.5 \end{array}$ | $\begin{array}{r} \hline \hline 326.9 \\ 2.3 \% \\ 0.0 \\ 326.9 \end{array}$ | $\begin{array}{r} \hline \hline 334.1 \\ 2.2 \% \\ 0.0 \\ 334.1 \end{array}$ | $\begin{array}{r} \hline \hline 330.3 \\ -1.2 \% \\ 0.0 \\ 330.3 \end{array}$ | $\begin{array}{r} \hline \hline 303.6 \\ -8.1 \% \\ 0.0 \\ 303.6 \end{array}$ | $\begin{array}{r} \hline \hline 302.0 \\ -0.5 \% \\ 0.0 \\ 302.0 \end{array}$ | $\begin{array}{r} \hline \hline \hline \mathbf{3 0 1 . 0} \\ -0.3 \% \\ 0.0 \\ 301.0 \end{array}$ | $\begin{array}{r} \hline 301.0 \\ 0.0 \% \\ 0.0 \\ 301.0 \end{array}$ | $\begin{array}{r} \hline 305.0 \\ 1.3 \% \\ 0.0 \\ 305.0 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{3 0 6 . 5} \\ 0.5 \% \\ 0.0 \\ 306.5 \end{array}$ | $\begin{array}{r} \hline 308.0 \\ 0.5 \% \\ 0.0 \\ 308.0 \end{array}$ |
| Number of flights <br> \% annual change on <20 tons aircraft on 20 t \& + aircraft Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 16,096 \\ 0 \\ 16,096 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 15,563 \\ -3.3 \% \\ 0 \\ 15,563 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 15,923 \\ 2.3 \% \\ 0 \\ 15,923 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 14,731 \\ -7.5 \% \\ 0 \\ 14,731 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{1 6 , 1 0 3} \\ 9.3 \% \\ 0 \\ 16,103 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{1 7 , 5 6 5} \\ 9.1 \% \\ 0 \\ 17,565 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 19,092 \\ 8.7 \% \\ 0 \\ 19,092 \\ 0.0 \% \\ \hline \hline \end{array}$ | $\begin{array}{r} \hline \hline 20,768 \\ 8.8 \% \\ 0 \\ 20,768 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 2 , 2 9 8} \\ 7.4 \% \\ 0 \\ 22,298 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 4 , 0 2 8} \\ 7.8 \% \\ 0 \\ 24,028 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r\|} \hline \hline \mathbf{2 5 , 8 4 6} \\ 7.6 \% \\ 0 \\ 25,846 \\ 0.0 \% \\ \hline \end{array}$ |
| Aircraft MTOW tonnes <br> \% annual change <br> on <20 tons aircraft <br> on 20 t \& + aircraft <br> Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 4,671,355 \\ 0 \\ 4,671,355 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,655,446 \\ -0.3 \% \\ 0 \\ 4,655,446 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,955,510 \\ 6.4 \% \\ 0 \\ 4,955,510 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,451,344 \\ -10.2 \% \\ 0 \\ 4,451,344 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline \text { 4,427,311 } \\ -0.5 \% \\ 0 \\ 4,427,311 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,803,114 \\ 8.5 \% \\ 0 \\ 4,803,114 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 5,203,501 \\ 8.3 \% \\ 0 \\ 5,203,501 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 , 6 6 0 , 1 0 0} \\ 8.8 \% \\ 0 \\ 5,660,100 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,157,999 \\ 8.8 \% \\ 0 \\ 6,157,999 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,668,348 \\ 8.3 \% \\ 0 \\ 6,668,348 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 7,208,051 \\ 8.1 \% \\ 0 \\ 7,208,051 \\ 0.0 \% \end{array}$ |
| Average MTOW tonnes per flight \% annual change on <20 tons aircraft on 20t \&+ aircraft | $\begin{array}{r} \hline 290.2 \\ 0.0 \\ 290.2 \end{array}$ | $\begin{array}{r} \hline \hline 299.1 \\ 3.1 \% \\ 0.0 \\ 299.1 \end{array}$ | $\begin{array}{r} \hline \hline 311.2 \\ 4.0 \% \\ 0.0 \\ 311.2 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{3 0 2 . 2} \\ -2.9 \% \\ 0.0 \\ 302.2 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 7 4 . 9} \\ -9.0 \% \\ 0.0 \\ 274.9 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 7 3 . 4} \\ -0.5 \% \\ 0.0 \\ 273.4 \end{array}$ | $\begin{array}{r} \hline \hline 272.5 \\ -0.3 \% \\ 0.0 \\ 272.5 \end{array}$ | $\begin{array}{r} \hline \hline 272.5 \\ 0.0 \% \\ 0.0 \\ 272.5 \end{array}$ | $\begin{array}{r} \hline \hline 276.2 \\ 1.3 \% \\ 0.0 \\ 276.2 \end{array}$ | $\begin{array}{r} \hline 277.5 \\ 0.5 \% \\ 0.0 \\ 277.5 \end{array}$ | 278.9 $0.5 \%$ 0.0 278.9 |
| MTOW tonne-kilometres (000) <br> \% annual change on <20 tons aircraft on 20t \&+ aircraft Share of <20 tons aircraft | $\begin{array}{r} \hline 11,623,323 \\ 0 \\ 11,623,323 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 11,773,357 \\ 1.3 \% \\ 0 \\ 11,773,357 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r} \hline \hline 12,846,178 \\ 9.1 \% \\ 0 \\ 12,846,178 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 11,247,091 \\ -12.4 \% \\ 0 \\ 11,247,091 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline \hline 11,243,686 \\ 0.0 \% \\ 0 \\ 11,243,686 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 12,209,515 \\ 8.6 \% \\ 0 \\ 12,209,515 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 13,242,911 \\ 8.5 \% \\ 0 \\ 13,242,911 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 14,416,274 \\ 8.9 \% \\ 0 \\ 14,416,274 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 15,696,739 \\ 8.9 \% \\ 0 \\ 15,696,739 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 17,010,956 \\ 8.4 \% \\ 0 \\ 17,010,956 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 18,394,947 \\ 8.1 \% \\ 0 \\ 18,394,947 \\ 0.0 \% \\ \hline \end{array}$ |
| Average Distance per flight \% annual change on <20 tons aircraft on 20t \& + aircraft | $\begin{array}{r} \hline \hline \mathbf{2 4 8 8 . 2} \\ \\ 0.0 \\ 2,488.2 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 2 8 . 9} \\ 1.6 \% \\ 0.0 \\ 2,528.9 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 9 2 . 3} \\ 2.5 \% \\ 0.0 \\ 2,592.3 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 2 6 . 7} \\ -2.5 \% \\ 0.0 \\ 2,526.7 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 3 9 . 6} \\ 0.5 \% \\ 0.0 \\ 2,539.6 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 4 2 . 0} \\ 0.1 \% \\ 0.0 \\ 2,542.0 \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 4 5 . 0} \\ 0.1 \% \\ 0.0 \\ 2,545.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 4 7 . 0} \\ 0.1 \% \\ 0.0 \\ 2,547.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 4 9 . 0} \\ 0.1 \% \\ 0.0 \\ 2,549.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 5 1 . 0} \\ 0.1 \% \\ 0.0 \\ 2,551.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 5 5 2 . 0} \\ 0.0 \% \\ 0.0 \\ 2,552.0 \\ \hline \end{array}$ | Consultancy and

## Detailed constructions : Australia - South Pacific route area.

Split in capacity between small and large aircraft.
$\checkmark$ The share of capacity provided on the smaller aircraft category was small and stable around $3 \%$. We expect this figure to remain the same in the future.


## Ratio of passengers over seats.

$\checkmark \quad$ The evolution of the passenger load factors was towards an improvement in the past. We expect this improvement to continue during the forecast period.

룰 Average aircraft size.
$\checkmark \quad$ For the larger aircraft category the past evolution of the average aircraft size was rather erratic. But it is expected that it will increase in the future to come back to levels close to what was achieved in 1999-2000.

욜 Average flight distance.
$\checkmark \quad$ The past evolution of the average distance did not show any significant trend for a decrease or an increase. However, it is expected to show a slight increase during the future. Consultancy and
Forecasting

## Detailed constructions : Australia - South Pacific route area.

| Route : Australia-South Pacific | History |  |  |  |  | Forecast |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998-1999 | 1999-2000 | \| 2000-2001 | 2001-2002 | \| 2002-2003 | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | \| 2007-2008 | 2008-2009 |


| Passengers \% annual change | N/A | N/A | 799,339 | $\begin{array}{r} \hline \hline 855,701 \\ 7.1 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 877,253 \\ 2.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 943,047 \\ 7.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,004,345 \\ 6.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,067,619 \\ 6.3 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,131,676 \\ 6.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,193,918 \\ 5.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,259,584 \\ 5.5 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 1,542,613 | 1,710,223 | 1,531,854 | 1,503,336 | 1,458,604 | 1,545,979 | 1,619,912 | 1,694,633 | 1,768,244 | 1,836,797 | 1,908,460 |
| \% annual chang |  | 10.9\% | -10.4\% | -1.9\% | -3.0\% | 6.0\% | 4.8\% | 4.6\% | 4.3\% | 3.9\% | 3.9\% |
| on <20 tons aircraft | 43,400 | 48,611 | 42,381 | 43,229 | 44,113 | 46,843 | 49,407 | 51,686 | 54,108 | 56,390 | 58,781 |
| on 20t \& + aircraft | 1,499,213 | 1,661,612 | 1,489,473 | 1,460,107 | 1,414,491 | 1,499,136 | 1,570,504 | 1,642,947 | 1,714,136 | 1,780,408 | 1,849,680 |
| Share of <20 tons aircraft | 2.8\% | 2.8\% | 2.8\% | 2.9\% | 3.0\% | 3.0\% | 3.1\% | 3.1\% | 3.1\% | 3.1\% | 3.1\% |
| Ratio of passengers over Seats |  |  | 52.2\% | 56.9\% | 60.1\% | 61.0\% | 62.0\% | 63.0\% | 64.0\% | 65.0\% | 66.0\% |
| Average Seats per flight | 158.1 | 166 | 152.0 | 155.3 | 158.3 | 159.1 | 159.9 | 161.5 | 162.9 | 164.7 | 166.6 |
| \% annual change |  | 5.5\% | -8.8\% | 2.1\% | 1.9\% | 0.5\% | 0.6\% | 1.0\% | 0.9\% | 1.1\% | 1.2\% |
| on <20 tons aircraf | 24.1 | 25.7 | 26.1 | 25.8 | 26.1 | 26.2 | 26.4 | 26.7 | 27.0 | 27.4 | 28.0 |
| on 20t \& + aircraft | 188.5 | 198.7 | 176.2 | 182.4 | 187.9 | 189.0 | 190.2 | 192.0 | 193.7 | 195.7 | 197.7 |
| Number of fligh | 9,757 | 10,256 | 10,075 | 9,681 | 9,217 | 9,720 | 10,129 | 10,493 | 10,853 | 11,156 | 11,455 |
| \% annual change |  | 5.1\% | -1.8\% | -3.9\% | -4.8\% | 5.5\% | 4.2\% | 3.6\% | 3.4\% | 2.8\% | 2.7\% |
| on <20 tons aircraft | 1,803 | 1,892 | 1,624 | 1,674 | 1,689 | 1,788 | 1,871 | 1,936 | 2,004 | 2,058 | 2,099 |
| n 20t \& + aircraft | 7,954 | 8,364 | 8,451 | 8,007 | 7,528 | 7,932 | 8,257 | 8,557 | 8,849 | 9,098 | 9,356 |
| Share of <20 tons aircraft | 18.5\% | 18.4\% | 16.1\% | 17.3\% | 18.3\% | 18.4\% | 18.5\% | 18.4\% | 18.5\% | 18.4\% | 18.3\% |
| Aircraft MTOW tonnes | 1,158,168 | 1,253,394 | 1,064,672 | 1,073,729 | 1,067,403 | 1,131,318 | 1,185,325 | 1,240,001 | 1,293,811 | 1,343,917 | 1,396,294 |
| \% annual change |  | 8.2\% | -15.1\% | 0.9\% | -0.6\% | 6.0\% | 4.8\% | 4.6\% | 4.3\% | 3.9\% | 3.9\% |
| on <20 tons aircraf | 19,764 | 21,395 | 18,380 | 19,083 | 19,684 | 20,903 | 22,047 | 23,064 | 24,145 | 25,163 | 26,230 |
| on 20t \& + aircraft | 1,138,404 | 1,231,999 | 1,046,293 | 1,054,646 | 1,047,718 | 1,110,415 | 1,163,278 | 1,216,936 | 1,269,666 | 1,318,754 | 1,370,064 |
| Share of <20 tons aircraft | 1.7\% | 1.7\% | 1.7\% | 1.8\% | 1.8\% | 1.8\% | 1.9\% | 1.9\% | 1.9\% | 1.9\% | 1.9\% |
| Average MTOW tonnes per flight | 118.7 | 122.2 | 105.7 | 110.9 | 115.8 | 116.4 | 117.0 | 118.2 | 119.2 | 120.5 | 121.9 |
| \% annual change |  | 3.0\% | -13.5\% | 5.0\% | 4.4\% | 0.5\% | 0.5\% | 1.0\% | 0.9\% | 1.1\% | 1.2\% |
| on <20 tons aircraft | 11.0 | 11.3 | 11.3 | 11.4 | 11.7 | 11.7 | 11.8 | 11.9 | 12.0 | 12.2 | 12.5 |
| on 20t \& + aircraft | 143.1 | 147.3 | 123.8 | 131.7 | 139.2 | 140.0 | 140.9 | 142.2 | 143.5 | 145.0 | 146.4 |
| MTOW tonne-kilometres (000) | 1,491,429 | 1,650,808 | 1,427,705 | 1,463,354 | 1,433,942 | 1,524,148 | 1,602,646 | 1,682,702 | 1,762,065 | 1,836,891 | 1,915,323 |
| \% annual change |  | 10.7\% | -13.5\% | 2.5\% | -2.0\% | 6.3\% | 5.2\% | 5.0\% | 4.7\% | 4.2\% | 4.3\% |
| on <20 tons aircraft | 12,724 | 14,365 | 12,177 | 12,725 | 13,162 | 13,984 | 14,772 | 15,499 | 16,274 | 17,010 | 17,784 |
| on 20t \& + aircraft | 1,478,705 | 1,636,443 | 1,415,528 | 1,450,630 | 1,420,780 | 1,510,164 | 1,587,874 | 1,667,203 | 1,745,791 | 1,819,881 | 1,897,539 |
| Share of <20 tons aircraft | 0.9\% | 0.9\% | 0.9\% | 0.9\% | 0.9\% | 0.9\% | 0.9\% | 0.9\% | 0.9\% | 0.9\% | 0.9\% |
| Average Distance per flight | 1287.7 | 1317.1 | 1341.0 | 1362.9 | 1343.4 | 1347.2 | 1352.1 | 1357.0 | 1361.9 | 1366.8 | 1371.7 |
| \% annual change |  | 2.3\% | 1.8\% | 1.6\% | -1.4\% | 0.3\% | 0.4\% | 0.4\% | 0.4\% | 0.4\% | 0.4\% |
| on <20 tons aircraft | 643.8 | 671.4 | 662.5 | 666.8 | 668.7 | 669.0 | 670.0 | 672.0 | 674.0 | 676.0 | 678.0 |
| on 20t \& + aircraft | 1,298.9 | 1,328.3 | 1,352.9 | 1,375.5 | 1,356.1 | 1,360.0 | 1,365.0 | 1,370.0 | 1,375.0 | 1,380.0 | 1,385.0 |

## Detailed constructions : Australia - South/Southeast Asia/Europe/Middle East route area.

르․ Ratio of passengers over seats.
$\checkmark \quad$ The comparison between seats and passengers revealed yields to load factors fairly realistic. We expect this load factor to show only moderate improvements in the future.

畐 Average aircraft size.
$\checkmark \quad$ The average aircraft size increased constantly in the past. We expect this trend to continue in the future.

를 Average flight distance.
$\checkmark$ The average distance increased constantly in the past. We expect this trend to continue in the future.

# Detailed constructions : Australia - South/Southeast Asia/Europe/Middle East route area. 



| Passengers \% annual change | N/A | N/A | 7,264,476 | $\begin{array}{r} \hline \hline 6,998,911 \\ -3.7 \% \end{array}$ | $\begin{array}{r} \hline \hline 6,887,376 \\ -1.6 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 7,472,803 \\ 8.5 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 8,033,263 \\ 7.5 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 8,579,525 \\ 6.8 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 9,128,614 \\ 6.4 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 9,676,331 \\ 6.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline 10,237,559 \\ 5.8 \% \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 8,889,457 | 10,034,491 | 10,938,504 | 10,055,744 | 9,643,053 | 10,378,893 | 11,080,363 | 11,752,774 | 12,419,884 | 13,076,123 | 13,741,689 |
| \% annual change |  | 12.9\% | 9.0\% | -8.1\% | -4.1\% | 7.6\% | 6.8\% | $6.1 \%$ | 5.7\% | 5.3\% | 5.1\% |
| on <20 tons aircraft | 11,405 | 43,930 | 93,062 | 84,532 | 90,601 | 103,789 | 116,344 | 129,281 | 142,829 | 156,913 | 171,771 |
| on 20t \& + aircraft | 8,878,052 | 9,990,561 | 10,845,442 | 9,971,212 | 9,552,452 | 10,275,104 | 10,964,019 | 11,623,493 | 12,277,055 | 12,919,210 | 13,569,918 |
| Share of <20 tons aircraft | 0.1\% | 0.4\% | 0.9\% | 0.8\% | 0.9\% | 1.0\% | 1.1\% | 1.1\% | 1.2\% | 1.2\% | 1.3\% |
| Ratio of passengers over Seats |  |  | 66.4\% | 69.6\% | 71.4\% | 72.0\% | 72.5\% | 73.0\% | 73.5\% | 74.0\% | 74.5\% |
| Average Seats per flight | 295.4 | 293.1 | 280.1 | 277.7 | 285.9 | 287.8 | 287.9 | 287.9 | 288.6 | 290.1 | 291.9 |
| \% annual change |  | -0.8\% | -4.5\% | -0.9\% | 3.0\% | 0.7\% | 0.0\% | 0.0\% | 0.3\% | 0.5\% | 0.6\% |
| on <20 tons aircraft | 25.3 | 24.1 | 26.0 | 21.5 | 24.7 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| on 20t \& + aircraft | 299.5 | 308.2 | 305.7 | 308.9 | 317.8 | 322.0 | 324.0 | 326.0 | 329.0 | 333.0 | 337.5 |
| Number of flights | 30,092 | 34,233 | 39,057 | 36,215 | 33,727 | 36,062 | 38,493 | 40,826 | 43,029 | 45,073 | 47,078 |
| \% annual change |  | 13.8\% | 14.1\% | -7.3\% | -6.9\% | 6.9\% | 6.7\% | 6.1\% | 5.4\% | 4.7\% | 4.4\% |
| on <20 tons aircraft | 450 | 1,821 | 3,584 | 3,936 | 3,665 | 4,152 | 4,654 | 5,171 | 5,713 | 6,277 | 6,871 |
| on 20t \& + aircraft | 29,642 | 32,412 | 35,473 | 32,279 | 30,062 | 31,910 | 33,840 | 35,655 | 37,316 | 38,796 | 40,207 |
| Share of <20 tons aircraft | 1.5\% | 5.3\% | 9.2\% | 10.9\% | 10.9\% | 11.5\% | 12.1\% | 12.7\% | 13.3\% | 13.9\% | 14.6\% |
| Aircraft MTOW tonnes | 8,012,510 | 8,981,052 | 9,744,846 | 9,043,879 | 8,670,129 | 9,328,879 | 9,956,868 | 10,558,433 | 11,154,931 | 11,741,366 | 12,335,876 |
| \% annual change |  | 12.1\% | 8.5\% | -7.2\% | -4.1\% | 7.6\% | 6.7\% | 6.0\% | 5.6\% | 5.3\% | 5.1\% |
| on <20 tons aircraft | 3,766 | 18,039 | 40,501 | 39,178 | 40,726 | 46,655 | 52,298 | 58,113 | 64,203 | 70,535 | 77,213 |
| on 20t \& + aircraft | 8,008,744 | 8,963,013 | 9,704,345 | 9,004,701 | 8,629,402 | 9,282,225 | 9,904,570 | 10,500,320 | 11,090,728 | 11,670,832 | 12,258,662 |
| Share of <20 tons aircraft | 0.0\% | 0.2\% | 0.4\% | 0.4\% | 0.5\% | 0.5\% | 0.5\% | 0.6\% | 0.6\% | 0.6\% | 0.6\% |
| Average MTOW tonnes per flight | 266.3 | 262.4 | 249.5 | 249.7 | 257.1 | 258.7 | 258.7 | 258.6 | 259.2 | 260.5 | 262.0 |
| \% annual change |  | -1.5\% | -4.9\% | 0.1\% | 2.9\% | 0.6\% | 0.0\% | 0.0\% | 0.2\% | 0.5\% | 0.6\% |
| on <20 tons aircraft | 8.4 | 9.9 | 11.3 | 10.0 | 11.1 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 | 11.2 |
| on 20t \& + aircraft | 270.2 | 276.5 | 273.6 | 279.0 | 287.1 | 290.9 | 292.7 | 294.5 | 297.2 | 300.8 | 304.9 |
| MTOW tonne-kilometres (000) | 27,926,156 | 31,278,972 | 33,904,215 | 32,165,793 | 31,186,342 | 33,625,680 | 35,980,261 | 38,250,685 | 40,513,644 | 42,750,794 | 45,028,052 |
| \% annual change |  | 12.0\% | 8.4\% | -5.1\% | -3.0\% | 7.8\% | 7.0\% | 6.3\% | 5.9\% | 5.5\% | 5.3\% |
| on <20 tons aircraft | 2,746 | 10,448 | 21,860 | 20,357 | 21,243 | 24,027 | 26,672 | 29,522 | 32,487 | 35,550 | 38,761 |
| on 20t \& + aircraft | 27,923,410 | 31,268,524 | 33,882,355 | 32,145,436 | 31,165,100 | 33,601,653 | 35,953,589 | 38,221,163 | 40,481,157 | 42,715,244 | 44,989,291 |
| Share of <20 tons aircraft | 0.0\% | 0.0\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |
| Average Distance per flight | 3485.3 | 3482.8 | 3479.2 | 3556.6 | 3597.0 | 3604.5 | 3613.6 | 3622.8 | 3631.9 | 3641.0 | 3650.2 |
| \% annual change |  | -0.1\% | -0.1\% | 2.2\% | 1.1\% | 0.2\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 0.3\% |
| on <20 tons aircraft | 729.1 | 579.2 | 539.7 | 519.6 | 521.6 | 515.0 | 510.0 | 508.0 | 506.0 | 504.0 | 502.0 |
| on 20t \& + aircraft | 3,486.6 | 3,488.6 | 3,491.5 | 3,569.9 | 3,611.5 | 3,620.0 | 3,630.0 | 3,640.0 | 3,650.0 | 3,660.0 | $3,670.0$ |

## Detailed constructions : Australia - Transpacific route area.

를 Ratio of passengers over seats.
$\checkmark$ The construction of this ratio reveals a fairly high load factor, which could be overestimated. However, it is likely that, in reality, this load factor could be higher than the average for the other route areas. In this case we do not expect it to increase in the future.

畐 Average aircraft size.
$\checkmark \quad$ The average aircraft size is high, due to the large predominance of the Boeing 747 aircraft in this route area. We expect it to increase only moderately.

르․ Average flight distance.
$\checkmark \quad$ The average distance has not shown a stable evolution in the past and we expect only a small increase in the future. Fonsultancy and Forecasting

## Detailed constructions : Australia - Transpacific route area.



| Passengers <br> \% annual change | N/A | N/A | 1,655,290 | $\begin{array}{r} \hline \hline 1,383,223 \\ -16.4 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,347,265 \\ -2.6 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,376,256 \\ 2.2 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,479,249 \\ 7.5 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,572,367 \\ 6.3 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,640,165 \\ 4.3 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,693,513 \\ 3.3 \% \end{array}$ | $\begin{array}{r} \hline \hline \text { 1,745,145 } \\ 3.0 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats <br> \% annual change <br> on <20 tons aircraft <br> on 20t \& + aircraft <br> Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 1,539,150 \\ 0 \\ 1,539,150 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,840,233 \\ 19.6 \% \\ 0 \\ 1,840,233 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,185,840 \\ 18.8 \% \\ 0 \\ 2,185,840 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{1 , 6 5 0 , 6 6 0} \\ -24.5 \% \\ 0 \\ 1,650,660 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,587,929 \\ -3.8 \% \\ 0 \\ 1,587,929 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,619,125 \\ 2.0 \% \\ 0 \\ 1,619,125 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,740,293 \\ 7.5 \% \\ 0 \\ 1,740,293 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,849,844 \\ 6.3 \% \\ 0 \\ 1,849,844 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,929,605 \\ 4.3 \% \\ 0 \\ 1,929,605 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 1,992,368 \\ 3.3 \% \\ 0 \\ 1,992,368 \\ 0.0 \% \end{array}$ | $\begin{array}{r\|} \hline \hline 2,053,112 \\ 3.0 \% \\ 0 \\ 2,053,112 \\ 0.0 \% \end{array}$ |
| Ratio of passengers o |  |  | 75.7\% | 83.8\% | 84.8\% | 85.0\% | 85.0\% | 85.0\% | 85.0\% | 85.0\% | 85.0\% |
| Average Seats per flight \% annual change on <20 tons aircraft on 20 t \& + aircraft | $\begin{array}{r} 399.0 \\ 0.0 \\ 399.0 \\ \hline \end{array}$ | $\begin{array}{r} 398.8 \\ -0.1 \% \\ 0.0 \\ 398.8 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 399.7 \\ 0.2 \% \\ 0.0 \\ 399.7 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 400.3 \\ 0.1 \% \\ 0.0 \\ 400.3 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 400.4 \\ 0.0 \% \\ 0.0 \\ 400.4 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 400.5 \\ 0.0 \% \\ 0.0 \\ 400.5 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 401.0 \\ 0.1 \% \\ 0.0 \\ 401.0 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 401.5 \\ 0.1 \% \\ 0.0 \\ 401.5 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 404.5 \\ 0.7 \% \\ 0.0 \\ 404.5 \\ \hline \end{array}$ | 406.5 $0.5 \%$ 0.0 406.5 | $\begin{array}{r} \hline \hline \mathbf{4 0 8 . 5} \\ 0.5 \% \\ 0.0 \\ 408.5 \\ \hline \end{array}$ |
| Number of flights \% annual change on <20 tons aircraft on 20t \& + aircraft Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 3,858 \\ 0 \\ 3,858 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,615 \\ 19.6 \% \\ 0 \\ 4,615 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{5 , 4 6 9} \\ 18.5 \% \\ 0 \\ 5,469 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{4 , 1 2 4} \\ -24.6 \% \\ 0 \\ 4,124 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 3,966 \\ -3.8 \% \\ 0 \\ 3,966 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,043 \\ 1.9 \% \\ 0 \\ 4,043 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,340 \\ 7.3 \% \\ 0 \\ 4,340 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 4,607 \\ 6.2 \% \\ 0 \\ 4,607 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,770 \\ 3.5 \% \\ 0 \\ 4,770 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 4,901 \\ 2.7 \% \\ 0 \\ 4,901 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r}\text { 5,026 } \\ 2.5 \% \\ 0 \\ 5,026 \\ 0.0 \% \\ \hline\end{array}$ |
| Aircraft MTOW tonnes <br> \% annual change on <20 tons aircraft on 20t \& + aircraft Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 1,522,494 \\ 0 \\ 1,522,494 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{1 , 8 2 4 , 2 0 3} \\ 19.8 \% \\ 0 \\ 1,824,203 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,167,063 \\ 18.8 \% \\ 0 \\ 2,167,063 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{1 , 6 3 6 , 5 0 5} \\ -24.5 \% \\ 0 \\ 1,636,505 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,583,829 \\ -3.2 \% \\ 0 \\ 1,583,829 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,614,945 \\ 2.0 \% \\ 0 \\ 1,614,945 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,735,799 \\ 7.5 \% \\ 0 \\ 1,735,799 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{1 , 8 4 5 , 0 6 8} \\ 6.3 \% \\ 0 \\ 1,845,068 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 1,924,623 \\ 4.3 \% \\ 0 \\ 1,924,623 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{1 , 9 8 7 , 2 2 4} \\ 3.3 \% \\ 0 \\ 1,987,224 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,047,811 \\ 3.0 \% \\ 0 \\ 2,047,811 \\ 0.0 \% \\ \hline \end{array}$ |
| Average MTOW tonnes per flight \% annual change on <20 tons aircraft on 20t \& + aircraft | $\begin{array}{r} \hline \hline 394.6 \\ 0.0 \\ 394.6 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 395.3 \\ 0.2 \% \\ 0.0 \\ 395.3 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 396.2 \\ 0.2 \% \\ 0.0 \\ 396.2 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 396.8 \\ 0.1 \% \\ 0.0 \\ 396.8 \end{array}$ | $\begin{array}{r} \hline \hline 399.4 \\ 0.6 \% \\ 0.0 \\ 399.4 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 399.5 \\ 0.0 \% \\ 0.0 \\ 399.5 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 400.0 \\ 0.1 \% \\ 0.0 \\ 400.0 \end{array}$ | $\begin{array}{r} \hline \hline 400.5 \\ 0.1 \% \\ 0.0 \\ 400.5 \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 403.5 \\ 0.7 \% \\ 0.0 \\ 403.5 \\ \hline \end{array}$ | 405.5 $0.5 \%$ 0.0 405.5 | 407.4 $0.5 \%$ 0.0 407.4 |
| MTOW tonne-kilometres (000) <br> \% annual change <br> on <20 tons aircraft <br> on 20 t \& + aircraft <br> Share of <20 tons aircraft | $\begin{array}{r} \hline \hline 1,886,946 \\ 0 \\ 1,886,946 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 2,390,572 \\ 26.7 \% \\ 0 \\ 2,390,572 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,875,049 \\ 20.3 \% \\ 0 \\ 2,875,049 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 , 1 3 5 , 0 3 6} \\ -25.7 \% \\ 0 \\ 2,135,036 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 , 0 8 1 , 2 2 2} \\ -2.5 \% \\ 0 \\ 2,081,222 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 2,123,652 \\ 2.0 \% \\ 0 \\ 2,123,652 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 , 2 8 4 , 3 1 2} \\ 7.6 \% \\ 0 \\ 2,284,312 \\ 0.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,429,955 \\ 6.4 \% \\ 0 \\ 2,429,955 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 2,536,654 \\ 4.4 \% \\ 0 \\ 2,536,654 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 , 6 2 1 , 1 4 8} \\ 3.3 \% \\ 0 \\ 2,621,148 \\ 0.0 \% \end{array}$ | $\begin{array}{r} \hline \hline 2,703,111 \\ 3.1 \% \\ 0 \\ 2,703,111 \\ 0.0 \% \end{array}$ |
| Average Distance per flight \% annual change on <20 tons aircraft on 20 t \& + aircraft | $\begin{array}{r} \hline \hline 1239.4 \\ \\ 0.0 \\ 1,239.4 \end{array}$ | $\begin{array}{r} \hline \hline 1310.5 \\ 5.7 \% \\ 0.0 \\ 1,310.5 \end{array}$ | $\begin{array}{r} \hline \hline 1326.7 \\ 1.2 \% \\ 0.0 \\ 1,326.7 \end{array}$ | $\begin{array}{r} \hline \hline 1304.6 \\ -1.7 \% \\ 0.0 \\ 1,304.6 \end{array}$ | $\begin{array}{r} \hline \hline 1314.0 \\ 0.7 \% \\ 0.0 \\ 1,314.0 \end{array}$ | $\begin{array}{r} \hline \hline 1315.0 \\ 0.1 \% \\ 0.0 \\ 1,315.0 \end{array}$ | $\begin{array}{r} \hline \hline 1316.0 \\ 0.1 \% \\ 0.0 \\ 1,316.0 \end{array}$ | $\begin{array}{r} \hline 1317.0 \\ 0.1 \% \\ 0.0 \\ 1,317.0 \end{array}$ | $\begin{array}{r} \hline \hline 1318.0 \\ 0.1 \% \\ 0.0 \\ 1,318.0 \end{array}$ | $\begin{array}{r} \hline \hline 1319.0 \\ 0.1 \% \\ 0.0 \\ 1,319.0 \end{array}$ | $\begin{array}{r\|} \hline \hline 1320.0 \\ 0.1 \% \\ 0.0 \\ 1,320.0 \end{array}$ |

## Detailed constructions : Pure overflights.

를 Ratio of passengers over seats.
$\checkmark \quad$ Not having actual passenger traffic figures for routes overflying Australia, we assumed a load factor of $70 \%$ in the past that we applied on our estimated number of seats, in order to estimate the passenger traffic volumes for this route area. We expect this load factor to show continuing improvement in the future.

㗊 Average aircraft size.
$\checkmark \quad$ The average aircraft size did not show a clear evolution in the past. We expect it to show a small increase in the future.

응 Average flight distance.
$\checkmark \quad$ The past evolution of the average distance showed an erratic shape. It was assumed that it would remain the same in the future as in the base year. Fonsultancy and Forecasting

## Detailed constructions : Pure overflights.



| Passengers <br> \% annual change | N/A | N/A | 2,178,960 | $\begin{array}{r} \hline \hline 2,371,348 \\ 8.8 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 , 3 1 4 , 4 6 6} \\ -2.4 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,400,000 \\ 3.7 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,500,000 \\ 4.2 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,600,000 \\ 4.0 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline 2,700,000 \\ 3.8 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline \hline \mathbf{2 , 8 0 0 , 0 0 0} \\ 3.7 \% \\ \hline \end{array}$ | $\begin{array}{r\|} \hline \hline 2,900,000 \\ 3.6 \% \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Seats | 2,813,490 | 3,180,661 | 3,112,800 | 3,387,641 | 3,306,380 | 3,380,282 | 3,472,222 | 3,561,644 | 3,673,469 | 3,783,784 | 3,892,617 |
| \% annual change |  | 13.1\% | -2.1\% | 8.8\% | -2.4\% | 2.2\% | 2.7\% | 2.6\% | 3.1\% | 3.0\% | 2.9\% |
| on <20 tons aircraft |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| on 20t \& + aircraft | 2,813,490 | 3,180,661 | 3,112,800 | 3,387,641 | 3,306,380 | 3,380,282 | 3,472,222 | 3,561,644 | 3,673,469 | 3,783,784 | 3,892,617 |
| Share of <20 tons aircraft | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Ratio of passengers over Seats |  |  | 70.0\% | 70.0\% | 70.0\% | 71.0\% | 72.0\% | 73.0\% | 73.5\% | 74.0\% | 74.5\% |
| Average Seats per flight | 295.0 | 300.5 | 290.9 | 283.3 | 274.5 | 275.0 | 276.0 | 277.0 | 278.0 | 280.0 | 285.0 |
| \% annual change |  | 1.9\% | -3.2\% | -2.6\% | -3.1\% | 0.2\% | 0.4\% | 0.4\% | 0.4\% | 0.7\% | 1.8\% |
| on <20 tons aircraft | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| on 20t \& + aircraft | 295.0 | 300.5 | 290.9 | 283.3 | 274.5 | 275.0 | 276.0 | 277.0 | 278.0 | 280.0 | 285.0 |
| Number of flights | 9,538 | 10,586 | 10,700 | 11,958 | 12,045 | 12,292 | 12,581 | 12,858 | 13,214 | 13,514 | 13,658 |
| \% annual change |  | 11.0\% | 1.1\% | 11.8\% | 0.7\% | 2.1\% | 2.3\% | 2.2\% | 2.8\% | 2.3\% | 1.1\% |
| on <20 tons aircraft |  |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20t \& + aircraft | 9,538 | 10,586 | 10,700 | 11,958 | 12,045 | 12,292 | 12,581 | 12,858 | 13,214 | 13,514 | 13,658 |
| Share of <20 tons aircraft | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Aircraft MTOW tonnes | 2,656,786 | 3,000,022 | 2,921,692 | 3,164,873 | 3,164,129 | 3,234,851 | 3,322,836 | 3,408,411 | 3,515,425 | 3,620,993 | 3,725,145 |
| \% annual chang |  | 12.9\% | -2.6\% | 8.3\% | 0.0\% | 2.2\% | 2.7\% | 2.6\% | 3.1\% | 3.0\% | 2.9\% |
| on <20 tons aircraf | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| n 20t \& + aircraft | 2,656,786 | 3,000,022 | 2,921,692 | 3,164,873 | 3,164,129 | 3,234,851 | 3,322,836 | 3,408,411 | 3,515,425 | 3,620,993 | 3,725,145 |
| Share of <20 tons aircraft | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Average MTOW tonnes per flight | 278.5 | 283.4 | 273.1 | 264.7 | 262.7 | 263.2 | 264.1 | 265.1 | 266.0 | 268.0 | 272.7 |
| \% annual change |  | 1.7\% | -3.6\% | -3.1\% | -0.7\% | 0.2\% | 0.4\% | 0.4\% | 0.4\% | 0.7\% | 1.8\% |
| on <20 tons aircraft | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| on 20t \& aircraft | 278.5 | 283.4 | 273.1 | 264.7 | 262.7 | 263.2 | 264.1 | 265.1 | 266.0 | 268.0 | 272.7 |
| MTOW tonne-kilometres (000) | 7,969,546 | 9,840,458 | 9,538,081 | 8,893,115 | 9,244,881 | 9,445,766 | 9,702,682 | 9,952,559 | 10,265,041 | 10,573,301 | 10,877,423 |
| \% annual change |  | 23.5\% | -3.1\% | -6.8\% | 4.0\% | 2.2\% | 2.7\% | 2.6\% | 3.1\% | 3.0\% | 2.9\% |
| on <20 tons aircraf | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| on 20 t \&+ aircraft | 7,969,546 | 9,840,458 | 9,538,081 | 8,893,115 | 9,244,881 | 9,445,766 | 9,702,682 | 9,952,559 | 10,265,041 | 10,573,301 | 10,877,423 |
| Share of <20 tons aircraft | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Average Distance per flight | 2999.7 | 3280.1 | 3264.6 | 2809.9 | 2921.8 | 2920.0 | 2920.0 | 2920.0 | 2920.0 | 2920.0 | 2920.0 |
| \% annual change |  | 9.3\% | -0.5\% | -13.9\% | 4.0\% | -0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| on <20 tons aircraft | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| on 20t \& + aircraft | 2,999.7 | 3,280.1 | 3,264.6 | 2,809.9 | 2,921.8 | 2,920.0 | 2,920.0 | 2,920.0 | 2,920.0 | 2,920.0 | 2,920.0 |

## Comparision between the IATA and ASA constructions of the charging units.

률 A slight difference exists between the construction made by IATA and that made by ASA regarding the charging units.
$\checkmark \quad$ This difference has been fairly consistent throughout the historical years.
$\checkmark \quad$ It could be caused by several reasons :

- IATA has worked on several database extracts given by ASA covering different types of traffic, different periods and IATA made an attempt to pick up from each of these files the relevant information for the aggregation of the data by route area and by flight category.
- Possibly a different method used to compute the charging unit (IATA has applied the formula on an average tonne figure and an average distance, wheras ASA has applied thee formula on each individual flight having its own tonnage and distance indicators.

嬖 The IATA projections have been applied to the base year figure as derived from ASA so that they remains consistant with the way ASA constructed their figures.

## Comparision between the IATA and ASA constructions of the charging units (continued).




| Difference | 96.2\% | 96.1\% | 92.7\% | 93.1\% | 96.2\% |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| International | 31,476,900 | 33,835,880 | 36,626,425 | 34,460,547 | 34,010,826 | 36,337,140 | 38,783,053 | 41,189,647 | 43,519,335 | 45,834,732 | 48,174,032 |
| \% annual change |  | 7.5\% | 8.2\% | -5.9\% | -1.3\% | 6.8\% | 6.7\% | 6.2\% | 5.7\% | 5.3\% | 5.1\% |
| Passenger aircraft | 31,348,632 | 33,598,499 | 36,376,470 | 33,921,488 | 33,445,065 | 35,741,032 | 38,152,859 | 40,523,439 | 42,815,078 | 45,090,277 | 47,385,971 |
| Cargo aircraft | 128,269 | 237,381 | 249,956 | 539,059 | 565,761 | 596,109 | 630,194 | 666,207 | 704,256 | 744,454 | 788,062 |
| Non-Commercial Aircraft | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



## Comparision between the IATA and ASA constructions of the charging units (continued).

| Total domestic + international | 59,606,486 | 62,662,193 | 68,440,996 | 62,126,883 | 62,129,839 | 66,053,714 | 70,168,160 | 73,967,977 | 77,445,155 | 80,855,319 | 84,156,845 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% annual change |  | 5.1\% | 9.2\% | -9.2\% | 0.0\% | 6.3\% | 6.2\% | 5.4\% | 4.7\% | 4.4\% | 4.1\% |
| Passenger aircraft | 58,293,658 | 61,195,233 | 67,034,381 | 60,693,046 | 60,790,876 | 64,702,851 | 68,775,431 | 72,527,147 | 75,954,006 | 79,308,002 | 82,554,778 |
| Cargo aircraft | 496,189 | 693,021 | 640,235 | 680,191 | 588,798 | 598,804 | 633,150 | 669,428 | 707,755 | 748,255 | 792,190 |
| Non-Commercial Aircraft | 816,639 | 773,939 | 766,380 | 753,645 | 750,165 | 752,058 | 759,579 | 771,402 | 783,394 | 799,062 | 809,877 |


| Domestic - ASA Construction | 60,481,987 | 64,140,955 | 68,931,107 | 63,117,238 | 64,032,864 | 68,076,927 | 72,317,397 | 76,233,602 | 79,817,286 |  | 734,554 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Difference | $101.5 \%$ | $102.4 \%$ | $100.7 \%$ | $101.6 \%$ | $103.1 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: |


| Including En-route | 64,381,602 | 68,507,658 | 74,213,120 | 67,593,328 | 67,833,814 | 71,876,356 | 76,138,327 | 80,080,833 | 83,738,588 | 87,314,550 | 90,743,317 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% annual change |  | 6.4\% | 8.3\% | -8.9\% | 0.4\% | 6.0\% | 5.9\% | 5.2\% | 4.6\% | 4.3\% | 3.9\% |
| All aircraft | 64,381,602 | 68,507,658 | 74,213,120 | 67,593,328 | 67,833,814 | 71,876,356 | 76,138,327 | 80,080,833 | 83,738,588 | 87,314,550 | 90,743,317 |


| Domestic - ASA Construction | 60,481,987 | 64,140,955 | 68,931,107 | 63,117,238 | 64,032,864 | 67,848,890 | 71,672,049 | ,593, |  |  | 422,031 |  | 8,674 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Difference | $93.9 \%$ | $93.6 \%$ | $92.9 \%$ | $93.4 \%$ | $94.4 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: |

Projection of passenger denand
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Detailed table constiruction and assunptions
Appendix

List of airports subject to an IATA traffic forecast study in the past.


## Airspaces covered in the projection of flight activity.



## Selected projects undertaken by the IATA forecast team.

## 을 Project Title : Traffic forecast study for the main three South African Airports

 (Johannesburg, Cape Town and Durban)$\checkmark$ Client : Airport Company South Africa
$\checkmark$ Period of Study : December 2002 - April 2003
$\checkmark$ Study Description:This study consisted in projecting the overall demand for air transport to, from and within South Africa and determine how this demand will be spread in the future between airports in the country, taking into account difference in growth between markets, and airline strategies in coping with that growth in demand. Particular focus was given to the examination of prospects for the enhancement of Johannesburg Airport as a hub for the region. These projections were translated into hourly profiles of airline activity (flights, passengers) in view to provide the necessary inputs for the master plan exercise.

을 Project Title : Sydney Airport Development Study
$\checkmark$ Client : Southern Cross Consortium (Hochtief AirPort, Macquarie Bank and Commonwealth Bank of Australia)
$\checkmark$ Period of Study : March 2001 - July 2001, with an extension to March 2002
$\checkmark$ Study Description : This Consortium was a candidate for the acquisition of Sydney Airport (in its privatisation process) and asked IATA to produce a comprehensive traffic forecast study to provide them with relevant inputs for the business plan as well as the master plan. Particular focus was given to the production of a forecast which took into account the current airport runway capacity restrictions and assessed the possible strategies airlines could adopt when the airport reached saturation.

## Selected projects undertaken by the IATA forecast team (continued).

를 Project Title : Projection of airline activity through the Polish airspace
$\checkmark$ Client : PPL (Polish Airports Authorities
$\checkmark$ Period of Study : 2002
$\checkmark$ Study Description : This study consisted in projecting flight activities to/from each airport in Poland as well as through the airspace, taking into account the anticipated growth in passenger traffic between Poland and each foreign countries.

을 Project Title : Quito Airport Traffic Forecast Study
$\checkmark$ Client: AECON Group.
$\checkmark$ Period of Study : 2001
$\checkmark$ Study Description : This Consortium was a candidate for the acquisition of Quito Airport (in its privatisation process) and asked IATA to produce a comprehensive traffic forecast study to provide them with relevant inputs for the business plan as well as the master plan. Particular focus was given to assessing the impact of the construction of a new airport, with less constrains than the current airport (runway length wise and altitude wise), on the development of traffic and airline activity profiles.

## Project Title : Bangalore Traffic Forecast Study

$\checkmark$ Client: Hochtief AirPort
$\checkmark$ Period of Study : Sep 2000 - March 2001
$\checkmark$ Study Description: This airport management company was bidding for the privatisation of Bangalore Airport and asked IATA to provide them with a detailed traffic forecast that would provide them with the inputs required for the business plan as well as the master plan. Particular focus was given to the assessment of airline network development strategies and their impact on the development of international air services out of regional airports in India.


[^0]:    Average Annual Grow th

[^1]:    2.6\%
    $-3.2 \%$
    2.6\%
    2.0\%
    -2.5\%
    2.0\%
    6.1\%
    3.9\%
    6.7\%
    $3.7 \%$
    2.6\%
    3.8\%
    5.1\%
    3.5\%
    5.2\%
    4.7\%
    1.9\%
    5.3\%
    4.3\%
    2.9\%
    4.4\%

[^2]:    8.0\%
    0.0\%
    8.0\%
    $3.5 \%$
    $3.1 \%$
    $3.5 \%$
    8.4\%
    0.0\%
    8.4\%
    4.5\%
    $5.1 \%$
    4.5\%
    5.8\%
    10.5\%
    5.8\%
    4.3\%
    0.0\%
    4.3\%
    2.0\%
    $3.1 \%$
    $1.9 \%$
    6.0\%
    7.8\%
    6.0\%

[^3]:    A significant drop in all-cargo flights on the domestic routes was recorded in the last few years, which suggest that, in the future most of the domestic freight activity will be handled with the belly cargo capacity made available in passenger aircraft.

