

Airports

3. The codes for New Zealand airports and certain Australian, Pacific Island and other international airports that are potentially relevant to the Application are set out in the tables below.

New Zealand

4. The domestic airports flown to by Air New Zealand are listed below.

Code	Airport
AKL	Auckland
BHE	Blenheim
CHC	Christchurch
DUD	Dunedin
GIS	Gisborne
HKK	Hokitika
HLZ	Hamilton
IVC	Invercargill
KAT	Kaitaia
KKE	Kerikeri
NPE	Napier Hawkes Bay
NPL	New Plymouth
NSN	Nelson
PMR	Palmerston North
ROT	Rotorua
TIU	Timaru
TRG	Tauranga
TUO	Taupo
WAG	Wanganui
WHK	Whakatane
WLG	Wellington

Code	Airport
WRE	Whangarei
WSZ	Westport
ZQN	Queenstown

Australian Airports

5. Potentially relevant Australian Airports are listed in the table below.

Code	Airport
ADL	Adelaide
ASP	Alice Springs
AYQ	Ayers Rock Connellan
BNE	Brisbane
CNS	Cairns
CFS	Coffs Harbour
DRW	Darwin
JFM	Fremantle
OOL	Gold Coast Coolangatta
MEL	Melbourne Tullamarine
NTL	Newcastle
PER	Perth
TSV	Townsville
SYD	Sydney

Pacific Islands

6. Potentially relevant Pacific Island airports are listed in the table below.

Code	Airport
APW	Apia
NAN	Nadi
NLK	Norfolk
NOU	Noumea
PPT	Papeete
RAR	Rarotonga
SUV	Suva
TBU	Tongatapu

Other International

7. Those other international airports that are potentially relevant to the Application are listed in the table below.

Code	Airport
BKK	Bangkok
BOM	Bombay
CAN	Guangzhou
CDG	Paris
DPS	Denpasar
FCO	Rome
FRA	Frankfurt
HKG	Hong Kong
HNL	Honolulu
JFK	New York
JKT	Jakarta

<i>Code</i>	<i>Airport</i>
JNB	Johannesburg
KIX	Osaka Kansai
KUL	Kuala Lumpur
LAX	Los Angeles
LGW	London (Gatwick)
LHR	London (Heathrow)
MNL	Manilla
NGO	Nagoya Komaki
NRT	Tokyo Narita
ORD	Chicago
PEK	Beijing
PVG	Shanghai
SEL	Seoul
SFO	San Francisco
SIN	Singapore Changi
TPE	Taipei
YMQ	Montreal
YVR	Vancouver
YYZ	Toronto

Aircraft Description and Availability

1. Introduction

1.1 Aircraft In Use

The Air New Zealand Main Trunk Market is currently serviced by Boeing 767's (Air New Zealand), Boeing 737s (Air New Zealand and Qantas), ATR-72's (Air New Zealand and Origin Pacific), De Havilland Dash 8's (Origin Pacific), and British Aerospace Jetstream 41's. A wide range of turboprop aircraft service the New Zealand provincial routes.

The trans-Tasman Market is currently serviced by Boeing 747s (Air New Zealand, Qantas, Malaysian Airlines and Thai International), Airbus A340's (Aerolineas Argentinas and Lan Chile), McDonnell Douglas (now Boeing) MD-11's (Thai International), Airbus A330's (Garuda), Boeing 767s (Air New Zealand and Qantas), Boeing 757's (Royal Tongan), Boeing 737s (Air New Zealand, Freedom Air, Qantas and Polynesian).

The Asia/Pacific Destinations Market is currently serviced by Boeing 747's (Air New Zealand), Airbus A340's (Air Tahiti Nui), Boeing 767's (Air New Zealand), Boeing 757's (Royal Tongan), Boeing 737's (Air Calin, Air New Zealand, Air Pacific, Air Vanuatu and Polynesian).

The New Zealand–USA market is currently serviced by Boeing 747s (Air New Zealand and Qantas), Boeing 777's (United Airlines). Other International markets are currently served by Boeing B747's (Air New Zealand, Korean Airlines, and Singapore Airlines), Airbus A340's (Aerolineas Argentinas, Cathay Pacific, and Lan Chile) and Boeing B767's (Air New Zealand and EVA Airways).

Details of these aircraft are provided below.

1.2 Aircraft On Order

Air New Zealand currently has Airbus A320's on order for future use. Qantas currently has Airbus A330 and A380 aircraft on order for future use

1.3 Aircraft Availability

The market for aircraft is characterised by an oversupply of aircraft and a lack of willing purchasers. This, along with the increased risk of aircraft being under-utilised for the next two years (affecting the potential returns on investment in aircraft) has impacted the market value of aircraft. For example, it has been estimated that more than 100 single-aisle passenger aircraft suitable for use within New Zealand are currently in storage.

2. Acquisition of Aircraft

Aircraft can be acquired new from the manufacturer, leased from a variety of companies (such as GECAS, Boullioun Aviation and International Lease Finance Corporation (ILFC)) or bought on an active second-hand market. Leasing or purchasing second-hand aircraft is a cost-effective means of acquiring sufficient aircraft.

Leasing aircraft enables airlines to maximise limited capital resources, reduce financial risk and retain the flexibility required to alter services in order to meet operational and passenger needs.

Airlines can lease aircraft on a financial or operational basis, the airline acquiring title to the aircraft in relation to the former only. Operating leases are increasing in popularity, one aircraft leasing firm, Boullioun, estimates that in 1980 only 3% of aircraft was acquired through operating leases, by the end of 2000 this had increased to an estimated 20% and is projected to increase further to 25% by 2008 (www.boullioun.com).

3. Types of Aircraft

Two important characteristics for aircraft are the seats per aircraft and the flying range. The table below indicates this information for typical jet aircraft currently used in New Zealand and/or on order: carrier specific seating configurations may differ and manufacturers produce several different versions of the same aircraft, hence the series identifiers used below (i.e. B737 family of aircraft is now identified as B737-300, B737-700 etc.). (See www.boeing.com and www.airbus.com.)

Aircraft	Typical Seats			Maximum Range
	Single Class	Dual Class	Tri-Class	
B737-300	149	128	N/A	4,175 Km

B737-700	149	126	N/A	6,038 Km
A320	180	135	N/A	5,550 Km
B737-800	184	162	N/A	5,449 Km
B757-200	228	200	N/A	7,222 Km
B767-200ER	255	224	181	12,220 Km
B767-300ER	351	269	218	11,305 Km
A330-300	N/A	335	295	10,400 Km
A340-300	N/A	335	295	13,500 Km
B777-300	N/A	400	306	14,316 Km
MD-11	N/A	410	285	13,230 Km
B747-400	N/A	524	416	13,445 Km
A380	N/A	N/A	555	14,800 Km

Sales methodology and revenue management

1. The goal of an airline's sales activity is to maximise revenue over its available seat kilometres (ASKs) A key means of accomplishing this goal is the pricing and revenue management function. Pricing and revenue management allows the airline to:
 - (a) Spread demand over all flights scheduled during a particular time period (e.g. a day, week, year). This smoothes out the peaking of demand at certain time periods that would occur with a single price.
 - (b) Fill as many seats as possible with passengers paying the highest yield possible (maximise the revenue per ASK from each individual flight).

Definitions

2. Available seat kilometres (ASKs) are calculated by multiplying the number of seats on a flight by the total distance the flight travels. For example, if there are 120 seats on a 500-kilometre flight (approximately the distance from Wellington to Auckland), the available seat kilometres for that flight would be 60,000 ASKs.
3. Yield is the average price a passenger pays for every kilometre he or she travels on an individual flight.
4. Yield is calculated by dividing the total revenue earned by the airline from an individual flight by the passenger kilometres travelled on that flight. In the above example, if 100 passengers travel on the 500-kilometre flight the passenger kilometres travelled for that flight would be 50,000 revenue passenger kilometres (RPKs).
5. Accordingly, if the total revenue earned from that flight was \$15,000, then the yield would be equal to $\$15,000 / 50,000 = \0.3 per kilometre. That is, the airline would earn 30 cents per passenger for every kilometre flown.
6. Revenue per available seat kilometre (RASK) is a measure of the revenue generating performance of a unit of airline capacity. It is calculated by dividing the total revenue earned on a flight by the ASKs flown on that flight. It is a measure that captures both volume of passengers carried and the average yield per passenger.
7. Accordingly, the revenue per ASK on the flight in the above example would be equal to $\$15,000 / 60,000 = \0.25 .

Revenue Management

What is revenue management?

8. Revenue management is the process by which airlines attempt to maximise RASK from each individual flight.
9. Airlines use different fare classes, each with different conditions or rules and a different price, to achieve this goal. Fare classes are not restricted to first class, business class and economy class fares. Even within those broad classifications, airlines offer different classes of fares. Accordingly, not all economy class tickets are sold at the same price. Revenue management is the process by which an airline determines the optimal amount of each class to sell on a given flight.

Revenue management to maximise RASK

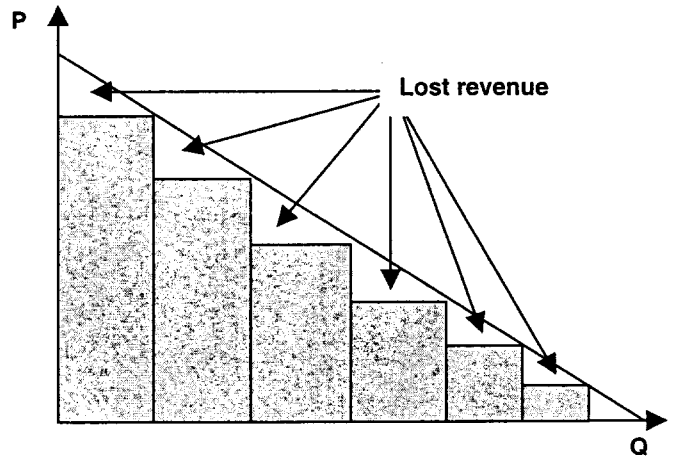
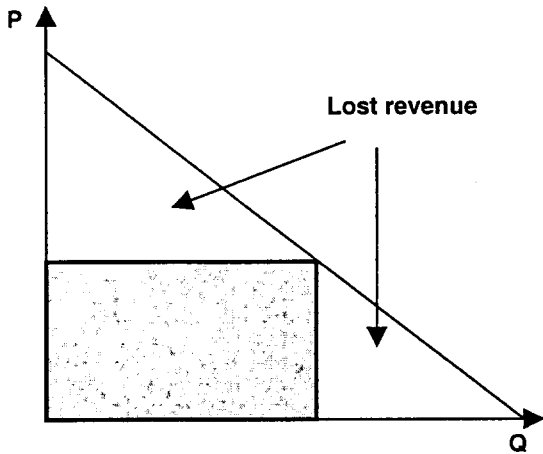
10. Fares on a single flight are set along a continuum of pricing in order to achieve focus on target segments of passengers. At the extremes are:
 - (a) on the one hand the "last minute" passenger (usually business); and
 - (b) on the other hand the most price sensitive passenger (usually leisure).
11. Between these two extremes lie fares of variable amounts and with varying conditions attached.
12. Seats not expected to be needed for sale to higher value passengers are sold in advance to leisure passengers who are more price sensitive or more accepting of qualifying conditions such as advance purchase or a Saturday night stay requirements. Such restrictions fit the travel and booking patterns of leisure passengers, but they are very unattractive for business passengers.
13. From historical data, an airline will know how many high price (business segment) tickets will be sold on a particular flight. For example, an airline will know that most of the tickets on the 7:00 a.m. flight from Wellington to Auckland will be sold to business travellers who are willing to pay a high price. Accordingly, an airline will offer few (if any) tickets in low fare classes for this flight because it knows the travellers using this flight will be less sensitive to price.
14. In contrast, more low fare class tickets will be sold on an off-peak service to induce price sensitive travellers to use those flights.

Revenue management to maximise yield

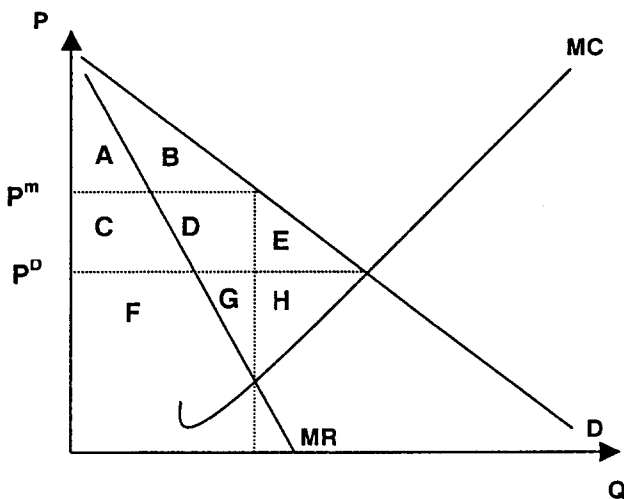
15. Revenue management to maximise yield involves price discrimination. That is, passengers are charged different prices depending on the value they assign to a particular service.
16. Each individual passenger values air travel differently. At one extreme is the passenger who must take a flight regardless of the cost (for example, the business person attending an urgent meeting). At the other extreme is the purely discretionary traveller who will only take a particular flight if the fare offered is the lowest available. Willingness to pay varies between these two extremes.

Benefits of price discrimination

17. The benefit to an airline of charging different passengers different prices is illustrated in the graphs below. The graphs show that an airline can increase its revenue by charging different passengers different prices.



18. In addition, price discrimination is beneficial from a passenger's perspective. Price discrimination allows an airline to offer fares that make air travel possible for those passengers who would not be able to afford to pay a uniform price. Those passengers who are willing to pay a high price cover the airline's fixed costs, which allows the airline to offer fares to price sensitive customers a price that reflects marginal cost.
19. More broadly, price discrimination is beneficial to society from an efficiency perspective because it increases the overall welfare of the economy. This increase in welfare is illustrated in the graph below.



P^m : Single price charged by airline





P^d : Final price internal charged by perfect price discriminating airline

In practice, how do airlines discriminate?

20. Airlines cannot perfectly price discriminate because an airline can not ask a passenger how much he or she values the service. However, an airline can divide passengers into broad groups, where the groups reflect willingness to pay, by offering different classes of fares. Each fare class is subject to different conditions and attracts a different price. In general, the less conditions a class has the more expensive the fare.
21. Typical conditions and rules include, tickets:
 - (a) brought in advance are cheaper than tickets brought on the day;
 - (b) that require a Saturday night stay are cheaper;
 - (c) for travel at off peak times are cheaper;
 - (d) that are not transferable are cheaper; and
 - (e) that are not refundable are cheaper.
22. However, the conditions and rules imposed on fare classes by airlines do not perfectly segregate the market. For example, there is nothing preventing a business passenger with no discretion as to when he or she must travel, accessing a cheaper fare by booking well in advance. For example, business passengers with a regular calendar of out of town meetings may access significantly reduced fares by booking lengthy periods in advance of travel.

Breakdown of Airline Alliances

Member airlines of the four main global groupings

Alliance Name	Establishment Date	Members	
<p>Star Alliance</p>  <p>STAR ALLIANCE</p>	<p>May 1997</p>	<p>Air New Zealand</p> <p>United</p> <p>Lufthansa</p> <p>All Nippon Airways</p> <p>Air Canada</p> <p>SAS</p> <p>Tyrolean Airways</p>	<p>Thai Airways International</p> <p>Singapore Airlines</p> <p>Varig</p> <p>Austrian Airlines</p> <p>Mexicana</p> <p>bmi British Midlands</p> <p>Lauda Air</p>
<p>oneworld</p> 	<p>September 1998</p>	<p>Qantas</p> <p>American Airlines</p> <p>British Airways</p> <p>Iberia</p>	<p>Cathay Pacific</p> <p>Aer Lingus</p> <p>FinnAir</p> <p>Lanchile</p>
<p>SkyTeam</p> 	<p>June 1999</p>	<p>Delta</p> <p>Air France</p> <p>Alitalia</p>	<p>Korean Air</p> <p>CSA Czech Airlines</p> <p>Aeromexico</p>
<p>Wings</p> 	<p>1989</p>	<p>Northwest Airlines</p> <p>Japan Air Systems</p> <p>Malaysia Airlines</p> <p>KLM</p>	<p>KLM Excel</p> <p>Martinair</p> <p>Kenya Airways</p> <p>Surinam Airways</p>

1. At the date of this Application, there are three major global airline alliances⁴:
 - (a) oneworld;
 - (b) Star Alliance; and
 - (c) SkyTeam.
2. A fourth major alliance, Qualifier (whose members included Air Littoral, LOT Polish Airlines, Swiss Air, Brussels Airlines, TAP Air Portugal and Sabena) dissolved in 2001 following the collapse of Swiss Air and Sabena.
3. The Wings grouping is not a formal airline alliance. However, it is considered by some commentators⁵ to be a global grouping because of the strong co-operation between its two founding members, KLM and Northwest, and because membership of Wings has, to date, precluded membership of any other alliance. Credit Suisse First Boston note:

“KLM and Northwest agreed to participate in a far-reaching joint venture in 1989, including common purchasing and a frequent flyer programme. The joint venture was the first to receive US antitrust immunity and the alliance was given the tentative name “Wings”, although it was never formally launched as such”⁶.
4. Accordingly, the Wings grouping includes airlines that co-operate closely. The members of Wings listed in the table above are those airlines that Credit Suisse First Boston list as members of Wings in its paper *Global Airlines*. However, Continental Airlines, which works closely with KLM and Northwest, is sometimes considered to be part of the Wings grouping. There are very strong rumours that Continental Airlines, KLM and Northwest are applying to join Sky Team in December 2002.
5. The three major global alliances and Wings carry 69% of global international passenger traffic and control 43% of international passenger flights worldwide⁷.

⁴ Credit Suisse First Boston, *Global Airlines* (May 2002) 12-15.

⁵ Above Credit Suisse First Boston.

⁶ Above Credit Suisse First Boston, 14.

⁷ Above Credit Suisse First Boston, 3.

Other arrangements

Air New Zealand

6. Air New Zealand has the following arrangements with other airlines:
- (a) An Alliance Agreement with Singapore Airlines, with application network-wide, including for:
- services beyond Singapore to London, Bangkok, Zurich and Manchester;
 - on selected New Zealand domestic services; and
 - on services between New Zealand and Singapore;

Pursuant to her jurisdiction under the Civil Aviation Act, the then Minister of Transport authorised those provisions of the Alliance Agreement concerning the fixing of tariffs, the application of tariffs and the co-ordination of capacity on international routes.

- (b) An Alliance Expansion Agreement with United Airlines, with application network-wide, including for:
- services from New Zealand to major cities in the United States including Los Angeles, Las Vegas, San Diego, San Francisco, Seattle, Portland, Chicago, Denver, New York, Boston, Washington DC, Philadelphia, Miami, Dallas-Fort Worth and Honolulu;
 - on selected New Zealand domestic services;
 - on services between Australia, New Zealand and the United States; and
 - on services between New Zealand, the Pacific Islands and the United States.

The Minister of Transport has authorised those provisions of the Alliance Expansion Agreement concerning the fixing of tariffs, the application of tariffs and the co-ordination of capacity.

- (c) A codeshare agreement with Air Canada for services between:
- Auckland and Toronto; and

- Auckland and Vancouver via Honolulu and Los Angeles;
- (d) A codeshare agreement with Lufthansa for services:
- between Auckland and Frankfurt via Los Angeles and Hong Kong;
 - between Auckland and Munich via Los Angeles and Hong Kong; and
 - beyond Singapore to Frankfurt;
- (e) A codeshare agreement with British Midland on services between
- London Heathrow and Brussels;
 - London Heathrow and Amsterdam; and
 - London Heathrow and seven other United Kingdom cities;
- (f) A codeshare agreement with Mexicana for services between:
- New Zealand and Mexico City; and
 - New Zealand and Guadalajara;
- (g) A codeshare agreement with Japan Airlines on Air New Zealand services between Auckland, Christchurch, and Narita, Kansai and Nagoya;
- (h) A codeshare agreement with Aircalin between Auckland and Noumea on both the New Zealand and Aircalin services;
- (i) A codeshare agreement with EVA between Taipei and Auckland on both Air New Zealand and EVA services.

Qantas

7. British Airways (which owns 25% of Qantas) has an agreement with Qantas whereby Qantas and British Airways co-ordinate various aspects of their networks including scheduling, marketing, sales, freight, pricing and customer services activities.
8. Qantas and British Airways codeshare on a freesell basis on all flights operated by each other. British Airways has an extensive network, throughout Europe and from the United

Kingdom to North America, Caribbean, South America and Asia, as well as operating services to several cities in Africa.

9. Qantas also has a codeshare arrangement with Origin Pacific on the following flights operated by Origin Pacific:
 - between Auckland and Nelson/Rotorua/Palmerston North;
 - between Christchurch and Wellington/Queenstown/Rotorua/Nelson/Dunedin/Palmerston North/Invercargill; and
 - between Wellington and Hamilton/Nelson.
10. In addition to its relationship with British Airways and Origin Pacific, Qantas has the following arrangements with other airlines:
 - (a) A codeshare agreement with Fin Air for services between:
 - Singapore and Bangkok; and
 - Singapore and Helsinki;
 - (b) A codeshare agreement with South African Airways for services between Perth and Johannesburg;
 - (c) A codeshare agreement with Asiana Airlines for services between Sydney and Seoul;
 - (d) A codeshare agreement with Japan Airlines for services between:
 - Brisbane and Tokyo;
 - Brisbane and Osaka; and
 - Sydney and Osaka;
 - (e) A codeshare agreement with Vietnam Airlines for services between:
 - Melbourne and Ho Chi Min City; and
 - Sydney and Ho Chi Min City;

- (f) A codeshare agreement with Eva Airways for services between Brisbane and Taipei;
 - A codeshare agreement with China Eastern Airlines for services between Sydney and Shanghai/Beijing.
- (g) A codeshare agreement with Air Vanuatu for services between Sydney/Brisbane and Port Vila;
- (h) A codeshare agreement with Air Niugini for services between Brisbane/Cairns/Sydney and Port Moresby;
- (i) A codeshare agreement with Air Pacific for services between:
 - Melbourne/Sydney/Brisbane/Los Angeles/Auckland/Honolulu and Nadi; and
 - Sydney and Suva;
- (j) A codeshare agreement with Polynesian Airlines for services between:
 - Sydney and Apia;
 - Auckland and Apia;
 - Auckland and Papeete; and
 - Auckland and Sydney.
- (k) A codeshare agreement with Air Tahiti for services between:
 - Auckland and Papeete; and
 - Los Angeles and Papeete;
- (l) A codeshare agreement with Air Aircalin for services between Sydney/Brisbane and Noumea;
- (m) A codeshare agreement with Norfolk Jet for services between Sydney/Brisbane/Melbourne and Norfolk Island;
- (n) A codeshare agreement with Alaska Airlines for services beyond Los Angeles to Vancouver, Portland, Seattle and Calgary;

- (o) A codeshare agreement with American Airlines for services:
- beyond Los Angeles to Boston, Chicago, Dallas Fort Worth, Las Vegas, Miami, San Francisco, San Jose, Washington, Newark, San Diego, Phoenix, Oakland, Denver and Toronto;
 - beyond Honolulu to San Jose, San Francisco, Los Angeles, Dallas Fort Worth and Chicago.
- (p) A codeshare agreement with Lan Chile for services between Sydney/Auckland and Santiago.