Mapping Australia's Tourism Aviation Priorities (Stage 2)

Final Report

For: Resources, Energy and Tourism

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Table of Contents

Executive Summary

Resources, Energy and Tourism (RET) commissioned the Stage 2 *Mapping Australia's Aviation Tourism Priorities* report to further assist the Federal Government's Tourism Access Working Group's (TAWG) in developing a strategy to position Australia's tourism industry to realise its future growth potential and identify any impediments.

Extensive consultation was undertaken with tourism organisations, airports and airlines as part of this study which maps the potential development of key markets in the medium to long term (i.e. 0-5 years and 5-10 years).

Forecasts produced by the Bureau of Infrastructure, Transport and Regional Economics (BITRE), *Aircraft Movements through Capital City Airports to 2029/30* Report 117, December 2009, and Tourism Forecasting Committee (TFC), *Forecast 2011 Issue 1*, Tourism Research Australia, Canberra, May 2011, both indicate ambitious targets for tourism growth.

However, the analysis in this report suggests that such targets may be achievable given the scope and rapidity of developments taking place in the aviation industry, including:

- Progressive and potentially dynamic market liberalisation in Southeast and Northeast Asia which is opening up new route development and expansion opportunities (e.g. the formation of an ASEAN Single Aviation Market by 2015);
- Substantial aircraft orders, to be delivered over the next 10 years, which will see airline capacity in Asia and the Middle East, in particular, grow considerably;
- Introduction of new, longer range aircraft types which provide an opportunity to establish non-stop services to destinations previously only served as one or two-stops (e.g. the B787 and A350);
- Further development of alliance structures with increased connectivity options; and
- Expansion on short and long haul sectors by Low Cost Carriers (LCCs) with a focus on price-driven stimulation of existing and emerging markets

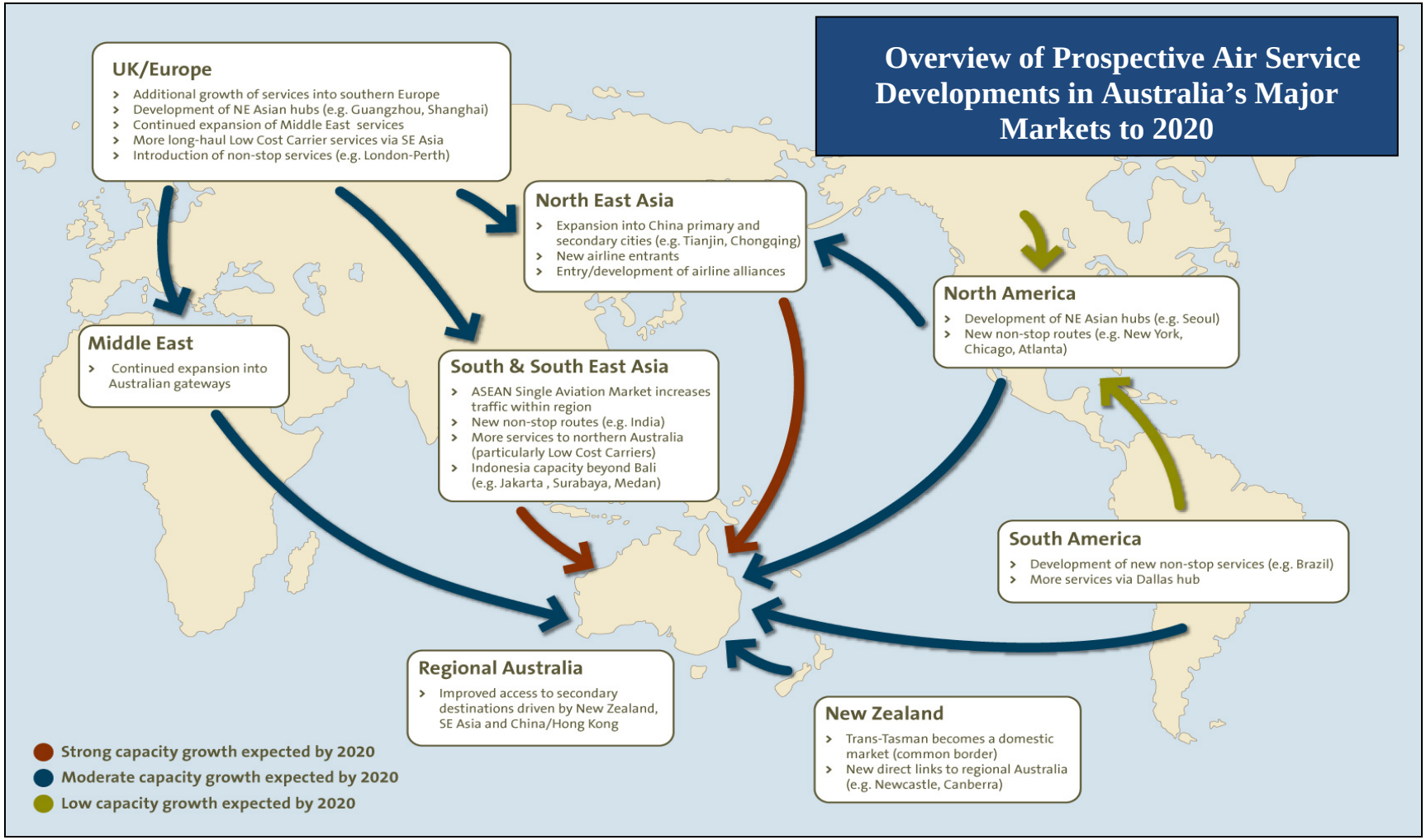
These developments are not merely incremental changes in the way markets are served by airlines. They will present major market development opportunities (for example non-stop access to central hub markets in the US, increased direct access to Asian source markets and lower cost options for travel from Europe to Australia).

While these opportunities offer the prospect of extending Australia's tourism reach into new markets and building existing ones, they also present challenges which need to be addressed:

- Development of a coordinated, strategic approach to markets to secure the long-term commitment of carriers at required service levels, recognising that airlines have many destination options;
- Provision of adequate capacity under bilateral and multilateral agreements to enable airlines to plan ahead and achieve greater route viability;
- Australia needs to offer airlines the prospect of yields at least comparable to alternative destinations in order to attract increasing capacity. This may be achieved through a reduction of additional operational costs and/or the removal of impediments to operating to Australia such as economic and technical regulation or infrastructure limitations. The cost factor may be critical, especially with jet fuel prices at high levels; and
- Offering a competitive tourism product of the appropriate quantity and quality to attract visitors.

The top priorities for tourism to consider in meeting these challenges include:

- Establishing open skies agreements with China and the EU, two of the most important markets in growth terms and potential. China is critical to growth targets, with potential not only to drive inbound development but also to serve as a hub for intercontinental traffic. In our recommendations, we suggest a staged approach to achieving open skies with China with an initial focus on unlimited 3rd and 4th freedom rights;
- Expediting air services negotiations with Indonesia and Malaysia, firstly to obtain additional capacity to assist in service growth to Australia. Indonesia, while previously seen as an outbound market, will offer significant inbound potential as its economy matures; while available capacity for Malaysia's carriers (AirAsia X and Malaysia Airlines) is tightening;
- Developing a strategy to build closer ties with ASEAN as part of a move to an open skies agreement with the region. ASEAN already maintains an open skies agreement with China and has plans to secure similar arrangements with Japan, Korea and India. An agreement with ASEAN would allow Australia to engage with the proposed ASEAN Single Aviation Market and the opportunities it presents;
- Encouraging the harmonisation of passenger processing between Australia and New Zealand with the objective of achieving a common border approach. This has the potential to open up new route options outside the major cities; and
- Supporting a phased approach by airlines to service development, initially through operations via intermediate points, then through a thickening of routes to the stage where non-stop services can be justified.



Based on Scenarios in the Stage 2 Report

Tourism Industry Potential, Current Negotiated Capacity & Utilisation, Forecast Capacity and Aircraft Orders by Market*

Markets	Incremental Growth Contribution to Australia's Tourism Industry Potential 2020	Current negotiated capacity under ASAs (for each country's carriers)	Bilateral Capacity utilised by Foreign Carriers	Bilateral capacity utilised by Australian Carriers	Forecast Seat Capacity to Australia (based on CAPA Consulting Estimates)		No. Australia-capable Aircraft Currently on Order	
			Now	Now	2015	2020	2015	2020
	(% of total)	(wk)	(%)	(%)	('000)	('000)	No.	No.
Canada	3%	3,000 seats	63%	0	6,700 to 7,100	7,900 to 8,800	20	17
China	14%	18,500 seats	78%	11%	30,000 to 32,000	35,000 to 39,000	122	61
France	2%	3 frequencies	66%	0%	n/a	n/a	20	0
Germany	4%	25 frequencies	0%	28%	6,000 to 6,500	6,900 to 7,800	34	0
Hong Kong	2%	70 frequencies	96%	36%	10,300 to 10,800	11,700 to 12,700	49	30
India	4%	6,500 seats	0%	14%	9,400 to 9,900	12,400 to 13,800	62	7
Indonesia	3%	14,800 seats	84%	90%	31,900 to 32,300	36,400 to 37,500	174	34

Ireland	1%	7 frequencies	0%	0%	n/a	n/a	7	2
Japan	5%	79 B767-200 units (19,276 seats)	13%	37%	13,500 to 14,400	14,700 to 16,500	84	23
Korea	5%	8,500 seats	67%	4%	7,300 to 7,900	8,100 to 9,400	48	27
Malaysia	4%	29,100 seats (Australia); 23,500 seats (Malaysia)	80%	0%	15,300 to 16,000	18,300 to 20,000	77	10
New Zealand	7%	Open capacity	n/a	n/a	63,000 to 66,300	68,900 to 75,900	8	3
Singapore	4%	Open capacity	n/a	n/a	15,900 to 16,700	17,500 to 19,400	88	11
South Africa	1%	21 frequencies	33%	33%	4,700 to 4,900	5,400 to 6,000	5	0
Taiwan	1%	6,000 seats	44%	0%	4,000 to 4,300	4,700 to 5,400	9	13
Thailand	1%	45 B747 equivalents (15,750 seats)	81%	35%	18,400 to 18,700	21,400 to 22,100	21	0
United Kingdom	11%	Open capacity	n/a	n/a	29,000 to 30,700	32,200 to 35,900	43	23

USA	9%	Open capacity	n/a	n/a	33,400 to 34,700	38,500 to 41,400	34	56
UAE	3%	126 frequencies	87%	2%	n/a	n/a	146	52
Brazil	1%	14 frequencies	0%	0%	n/a	n/a	41	25
Total	100%						*1,092*	*394*

Note. The above capacity entitlements do not include capacity to regional points under the Regional Package or capacity agreed under the Enhanced Regional Package to Gateway points provided the flights are routed through a regional point. This table was accurate as at June 2011.

*Orders relate to aircraft capable of operating to/from Australia. N/A – not applicable.

Source: Tourism Australia, CAPA Consulting

1. Introduction

Resources, Energy and Tourism (RET) commissioned the Stage 2 *Mapping Australia's Aviation Tourism Priorities* study in conjunction with Tourism Australia to assist in understanding and preparing for the key aviation-related drivers and trends impacting or likely to impact on Australia's visitor markets over the next 10 years.

This study provides a detailed analysis of the issues and potential outcomes influencing the development of international air services which are critical to the achievement of growth targets for Australia's inbound visitor market.

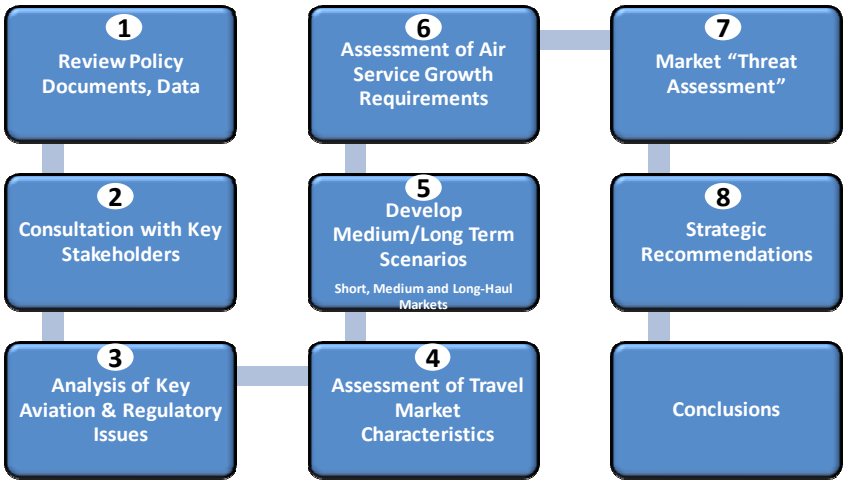
The Stage 2 Study Team developed a framework consistent with the terms of reference to examine the major areas of influence affecting international inbound markets and build future scenarios. These scenarios range from qualified "possible" developments which may be subject to a number of variables and assumptions to more likely outcomes depending on the context.

We have sought through this analysis to generate discussion about the effects of changes taking place on Australia's ability to achieve and service visitor forecasts as prescribed by Tourism Australia and the Tourism Forecasting Committee (TFC). Clearly, the availability of sufficient and well-organised air transport capacity, connectivity between services and network and alliance structures are central to tourism realising its growth ambitions.

The study, which highlights tourism stakeholder's views on international aviation market development, will be available for the Minister for Infrastructure and Transport and Department of Infrastructure and Transport to consider in planning, prioritising and undertaking international air services negotiation.

1.1 Study Structure

The tasks undertaken in developing this report are mapped out in the diagram below:



Consistent with the approach and requirements of the study, the report is divided into two parts incorporating the following sections:

Part I: The Key issues Impacting on Air Service Development

This includes:

- *Section 2* provides a summation of government strategy/policy documents relating to aviation/tourism development;
- *Section 3* analyses the key aviation (airlines, airports) and regulatory issues influencing the medium and long haul development of air services into Australia and its markets; and
- *Section 4* outlines the influence played by travel market factors in air service development.

Part II: Market Development Scenarios & Recommendations

- *Section 5* reviews market forecasts by the Bureau of Infrastructure and Regional Economics (BITRE) and Tourism Forecasting Committee (TFC).
- *Section 6* examines markets by segment, discussing various medium and long term scenarios for each, and the potential implications for aviation capacity and tourism development to Australia;
- *Section 7* considers the air service growth (capacity and flights) required to achieve tourism growth targets by market and the relationship with available capacity under Air Services Agreements;

- *Section 8* assesses the major aviation-related threats, based on the above analysis, to achievement of market growth forecasts; and
- *Section 9* examines and provides recommendations on strategic initiatives which could be introduced to prepare tourism organisations for the anticipated developments in aviation and strengthen Australia's position.

Much of the data utilised for this report is incorporated in the appendices, including historic aviation capacity trends by market; current aircraft fleets and aircraft orders by type by country; and global alliances structures and partnerships between airlines.

1.2 Methodology

Extensive consultation has been undertaken to inform this report through phone and face-to-face interviews with representatives of Tourism Australia, state tourism organisations, industry groups and international airports and airlines. Discussions were conducted in confidence.

A list of consultees is provided in Appendix 1 and a synopsis of the issues raised is given in **Appendix 2**.

In order to conduct the scenarios analysis, the aviation markets are sub-divided under groupings which reflect the type of air service supplied (i.e. short, medium and long haul; non-stop, intermediate stop). This enables the structure of inbound traffic flows to be considered and likely/possible scenarios addressed for the next 5 and 10 years.

These groupings include:

(1) Short-haul; Trans-Tasman (non-stop services from New Zealand and the Pacific).

(2) Medium-Haul, comprising:

   a. Northeast Asia (mix of non-stop and intermediate stopping services from China, Japan, Korea and other Northeast Asian markets);

   b. South and Southeast Asia (includes ASEAN countries and Indian Sub-Continent; mostly non-stop services; some intermediate services from India via Southeast Asia);

   c. The Middle East (also mostly non-stop services; some intermediate services via Southeast Asia).

(3) Long-haul:

   a. Intercontinental from Europe (services with intermediate stops via Asia and the Middle East); and

   b. Trans-Pacific (direct and indirect services from North and Latin America).

There is clearly some overlap between the groupings, for example medium-haul markets in Asia and the Middle East often also serve as connecting points to/from Europe and the UK and therefore provide a dual function both as source markets and intermediaries.

Within each of the groupings, there are specific drivers of change which will influence the development of services. Many of these drivers, however, are common to all markets. These are discussed in the issues overview provided in *Section 3*. They include market liberalisation, the development of airline business models, fleets and alliances and the role played by gateway airports and hubs.

Part I: Key Issues Impacting on Air Services Development

2. Review of Government Strategy Documents

The following provides a brief overview of relevant government strategy documents which have been reviewed by the consultant team.

2.1 The National Aviation Strategy

Australia's international and domestic aviation policy is based on the framework established in the Aviation White Paper, *Flight Path to the Future*, which was released in December 2009. While the terms of reference for the *Mapping Australia's Tourism Aviation Priorities* report proscribes initiatives which extend beyond those in the White

Paper, it is important to understand the scope and rationale for existing policy parameters.

The stated goal of the Federal Government's White Paper is the establishment of "an open and competitive" international aviation market which serves the national interest through tourism, trade and consumers; enables Australian and overseas airlines to expand; and maintains a vibrant Australian-based industry.

Australia's position is underwritten by the competitive disadvantage of geography as an end-market destination and a need to maintain and develop a diverse and sustainable system of air services linking into the world's major markets. International passenger carriage and high-value freight rely on the availability of adequate capacity to accommodate demand and provide for growth.

The Government maintains a policy of ensuring "capacity ahead of demand" to provide for optimum commercial flexibility and regulatory certainty for carriers operating in the Australian market. In practice, open skies has been harder to achieve largely due to constraints often imposed on 5th freedom rights to operate via a destination to third countries. Australia has established an open skies agreement with New Zealand and the US, while there are open capacity arrangements with Singapore and the UK. Development of such an agreement with the EU as a whole is currently impeded by ongoing foreign ownership issues. According to the White Paper, Australia's negotiating priorities focus both on mature and emerging markets and are determined by broader economic concerns, including airline opportunities, tourism and trade. The Government has also expressed a willingness to discuss with like-minded countries opportunities to build agreements which go beyond traditional bilateral arrangements, potentially incorporating enhanced cooperation in areas such as aviation safety and security, competition law and environment protection and expanded prospects for cross-border airline investment and consolidation.

The Government is committed to:

- Incorporate regional package provisions into bilateral agreements which offer:
    - Foreign airlines unlimited access to secondary gateway markets (i.e. those other than Sydney, Brisbane, Melbourne and Perth);
    - Additional beyond rights and improved access to major gateway markets for international flights linked to secondary gateways. This involves services to major gateways not being counted against available capacity (up to a limit), provided the airline operates via or beyond a regional airport.
- Seek fully open arrangements for dedicated cargo services;

- Facilitate opportunities for cross-border airline investments by incorporating principal place of business criteria in bilateral agreements;
- Consider more flexible foreign ownership arrangements for Australian airlines other than Qantas as part of open skies agreements.

However, Australia does not intend to provide cabotage rights (i.e. the rights to operate within the domestic market) unless there are exceptional circumstances or these rights can be traded strategically on a bilateral basis. It remains one of the few countries to provide for 100% foreign ownership of domestic airlines.

Seventh freedom rights, allowing an airline of one country to operate stand-alone services between two foreign countries, will only be considered on a case-by-case basis where it is in the national interest.

Multiple airports serving a single major gateway (e.g. Melbourne and Avalon Airports) are treated as one for the purposes of bilateral agreements. This, however, does not apply to Gold Coast and Brisbane which are seen as serving discrete markets.

The Government also has established a set of principles and processes which apply to the provision of government services at new international airports. Proposals to establish new international gateways will be assessed against the national interest, including regional development, border security, aviation and tourism policy considerations.

2.2 National Tourism Strategy & the Jackson Report

The Government's *National Long-Term Tourism Strategy*, also released in 2009, provides a policy framework for the development of domestic and international tourism.

The Strategy notes that Australia requires a marketing-led approach to develop international priority markets through Tourism Australia and state and territory tourism organisations. Marketing will be conducted through targeted campaigns focusing on significant inbound growth markets, including, China, New Zealand, the UK, the US and India.

The Strategy includes the following initiatives, among others:

- Strengthen Tourism Australia's capacity and functions to incorporate industry development and online distribution;
- Reinvigorate the Tourism Ministers' Council to encourage stronger participation by state and territory governments and industry;

- Maintain whole-of-government links through the Interdepartmental Committee meeting to identify and progress Strategy-related impediments and monitor implementation;
- Broaden and elevate the role of the National Tourism and Aviation Advisory Committee which will be co-chaired by the Ministers for Resources, Energy and Tourism and Infrastructure and Transport;
- Establish a new governance structure for research and development to drive the tourism research agenda;
- Encourage the continued advancement of the National Landscapes program and development of Indigenous tourism products; and
- Review and monitor progress against the Strategy and key industry measurements, setting strategic priorities to drive implementation of the national tourism agenda.

These initiatives were derived from recommendations provided through the Jackson Report, *Informing the National Long-Term Tourism Strategy*, on behalf of the Steering Committee established to deliver a long-term vision for the industry.

According to the report, Australia was failing to recognise significant changes occurring in international markets and capitalise on the opportunities. As a consequence, the nation's share of global tourism had declined by 14% between 1995 and 2008.

The report's recommendations included development of a national research capability focused on tourism industry development; accelerating the online capability of Australia's tourism product; ensuring tourism's access to national and state skills programs; establishing a national tourism scorecard with targets and key performance indicators; improving the case for tourism investment through integrated destination development plans and creation of a national visitation priorities list; recognition of tourism in government planning and approvals processes, taxation and infrastructure investment planning; developing and maintaining long-term product strategies; and establishing a federal ministerial taskforce to review tourism issues and opportunities.

2.3 Mapping Australia's Tourism Aviation Priorities – Stage 1 Report

Table 2.1 summarises the key findings of the Stage One report of the *Mapping Tourism Aviation Priorities* project, provided in October 2010.

Table 2.1: Summary of Findings of Stage 1 Mapping Australia's Aviation Tourism Priorities Report

Country	Total Capacity Entitlements (Per Year)	Capacity & Other Issues	Conclusion	Priority Rating
Canada	312,000 seats	Restricted intermediate rights. Current agreement prevents airlines moving to double daily services	Adequate capacity in ASA; high requirement to review intermediate rights.	Medium
China	1.92m seats	Chinese carriers using significant amount of available capacity. Restrictions on intermediate, beyond rights	China is a top priority market. Both countries moving towards an open skies arrangement	High
France	312 services	Restricted to 3 services per week in each direction; restrictions on intermediate, beyond rights and code sharing	Benefit in discussing intermediate, beyond rights; bilateral may be superseded by EU arrangements	Low-Medium
Germany	2,600 services	No constraints	Ample capacity for airlines from both countries; may be superseded by EU arrangement	Low
Hong Kong	7,280 services	Hong Kong carriers using significant capacity. Cathay to take services to 70 per week cap. Restrictions on beyond rights.	Key market for Australia; desire to see capacity increases and beyond rights relaxed	High
India	676,000 seats	No constraints	Ample capacity available	Low
Indonesia	1.54m seats	Airlines of both countries expected to fully utilise capacity under current arrangements; restrictions on intermediate, beyond rights for Australian airlines	Further discussions with Indonesia required	High
Ireland	728 services	Current capacity not utilised by either party	Ample capacity	Low
Japan	8,216 services	Restricted intermediate, beyond rights; adequate capacity	Current arrangements for intermediate, beyond rights need to be addressed	Medium
Korea	884,000 seats	Restricted intermediate, beyond rights	Adequate capacity exists	Low
Malaysia	2.73m seats	Malaysian carriers using significant amount of available capacity; regional package includes Avalon	Key growth market for Australia; significant hub for Asia, European carriers. Increase in capacity required to allow for further growth	High

New Zealand	Open capacity	No constraints	No restrictions under Single Aviation Market package	n/a
Singapore	Open capacity	Restricted beyond rights; Singapore airlines have no access to Pacific route	Significant hub for Asian, European carriers; no limitations on capacity	n/a
South Africa	1,456 services	No constraints	Existing arrangement adequate	Low
Taiwan	624,000 seats	No constraints	Adequate capacity	Low
Thailand	4,680 services	No constraints	Significant hub for Asian, European connections to Australia; no capacity requirements	Low
United Kingdom	Open capacity	Traffic rights via China and the USA restricted	Accessing intermediate, beyond rights would be welcomed by tourism industry; current ASA may be superseded by EU arrangement	Medium
USA	Open capacity	No constraints	Open skies agreement provides for unlimited capacity, route and traffic rights	n/a

* Capacity entitlements do not include capacity to regional points under the Regional Package or capacity agreed under the Enhanced Regional Package to Gateway points provided the flights are routed through a regional point.

Source: Stage 1 Report, Mapping Australian's Aviation Tourism Priorities

It should be noted that capacity entitlements as shown in the table were current at the time of the report, but subsequently may have changed. The entitlements reflect a total for both Australian and foreign operators.

The Stage 1 report builds on work undertaken by the Tourism Access Working Group's predecessor, the National Tourism and Aviation Advisory Committee.

The document maps the Australian tourism industry's aviation access priorities, and will aid tourism's engagement in bilateral air services negotiations conducted by Infrastructure and Transport. It also identifies market-specific travel patterns and expenditure, dominant airlines on the route (based on market share), the current seat utilisation on the route, and provides forecasts of market growth.

Eighteen markets are examined using information from various sources including Tourism Australia's Strategic Plan 2010-2011, Tourism Forecasting Committee Forecasts,

June 2010, data from the Bureau of Infrastructure, Transport and Regional Economics and International Visitor Surveys.

3. Analysis of Key Market, Regulatory & Aviation Issues

This section discusses the various aviation-related issues which will influence the development of Australia's inbound tourism markets in the medium and long terms (5 years and 10 years).

These include:

(1) Market liberalisation;

(2) Airline business remodelling;

(3) Fleet, capacity and aircraft usage;

(4) Jet fuel prices;

(5) Alliance structures and service connectivity; and

(6) The role of airports (including Australian gateways and offshore hubs).

Constraints to prospective growth are also addressed in a broad context. The impact and implications of these issues for service and capacity provision are considered in market-specific detail through the market scenarios review in **Part II: Section 5**.

3.1 Recent Aviation Capacity Trends

An analysis of growth rates in seat capacity and flight frequencies between Australia and key inbound markets between 2006 and 2011 indicates a very mixed performance compared with that for total international services in those markets. The data underpinning this analysis is provided in **Appendix 3**.

On this basis, Australia has under-performed compared with total international growth in Japan, South Korea, the UK and Singapore. Average annual Australian growth rates exceeded those for all international services in the US, New Zealand and Hong Kong. The Compound Annual Growth Rate (CAGR) for Australia-Malaysia capacity was higher at 9.8% but the growth in flight numbers was slightly down on the 10.4% per annum achieved for all international services from Malaysia.

The best performing market for Australia has been China, where growth in frequencies and seat capacity to Australia has outpaced growth to the total of all other markets by more than five percentage points.

Interestingly, capacity growth rates were particularly strong from the US as the Global Financial Crisis eased in 2009 and 2010 but were quite soft on Australia-Singapore and Australia-UK routes for the same years.

Continuing weakness in the Japan market and the financial problems enveloping Japan Airlines have seen a sharp erosion of capacity in the Australian market. Capacity levels in 2011 were about 41% down on 2006.

Malaysia has proved a robust market for Australia, with high growth levels even during the GFC. The entry of AirAsia X was one factor influencing this growth.

Australia's share of total international capacity for the US has increased from 1.1% in calendar 2006 to 1.4% in 2011; and New Zealand from 60.4% to 61.5%.

3.1.1 Impediments to Aviation Development

Various issues were raised during the consultations which are seen as inhibiting the development of aviation services to Australia. These include, among others:

- Australia's geographical position as an end-of-hemisphere market: Some airlines do not regard Australia as a priority for service development;

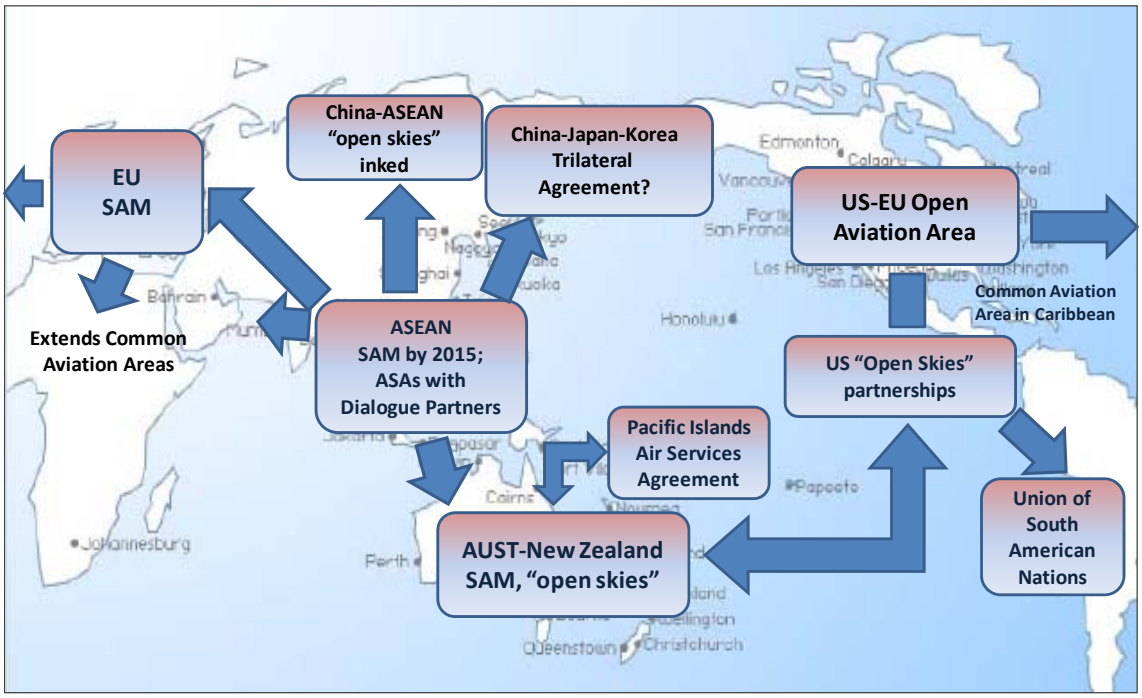
- Increasing competition from other destinations, particularly in Asia: Intra-Asian routes offer an opportunity for airlines to improve aircraft utilisation, whereas Australia has limitations in this regard;
- Capacity constraints on some routes, including China (despite recent increases agreed by the two governments); excess capacity on others (e.g. Australia-New Zealand) which undermines yields;
- Few options exist where the Enhanced Regional Package can be effectively employed;
- The high A$ as reflected in tourism product and infrastructure costs;
- Restricted operational access to a number of key airports (including Sydney) and high airport charges. This is discussed in greater detail later in this section.

3.2 Aviation Regulatory Developments

While the EU and the US have embraced market liberalisation (at least on their own terms), Australia's other major markets have been much slower to adopt more expansive regulatory structures.

In the medium to long term, this situation is expected to change considerably as the pace and scope of liberalisation accelerates, particularly in Asia in response to various economic, trade and market initiatives. Some countries in the Middle East are also offering relatively relaxed aviation access regimes to support the development of their carriers, tourism and the hubbing ambitions of airports within the region.

Figure 3.1: The Changing Regulatory Landscape



Note: SAM=Single Aviation Market; ASAs=Air Services Agreements; ASEAN=Association of South East Asian Nations; EU=European Union

Source: CAPA Consulting

Figure 3.1 depicts the major developments in international regulatory reform (bilateral and plurilateral) and the inter-relationship with global markets. These include developments within ASEAN, ASEAN and external markets, the EU-US, the Pacific Islands Air services Agreement (PIASA) and Australia-New Zealand.

An overview of the Freedoms of the Skies is provided in **Appendix 7**. Bilateral air services agreements typically incorporate liberalised arrangements for the flow of passengers, capacity and aircraft types between markets (i.e. 3rd and 4th freedom rights) but other more liberal forms of access may be less likely. Fifth freedom or beyond rights are mostly offered on a negotiable basis, while 7th freedom and cabotage rights are rarely provided.

Some Low Cost Carriers (LCCs) have effectively gained access to 7th freedom and cabotage rights through minority owned joint ventures in Asia.

Australia's Jetstar, for example, operates out of a Singapore base to other countries in Asia using Singaporean rights and also maintains an operation in Vietnam; and AirAsia has established international/domestic vehicles based in Thailand, Vietnam and Indonesia which access rights from those countries (a similar venture is proposed in the

Philippines). Tiger Airways is following a similar strategy, proposing an international Joint Venture (JV) with Thai Airways in Thailand.

This type of franchised cross-border ownership has brought investment and other benefits to national markets (including service growth and tourism). Similar rights are also available to designated carriers in the EU.

Codesharing arrangements also have pushed the regulatory boundaries by providing indirect market access through partner carriers. As such, this is commonly included in air services agreements.

However, international airlines are still mostly subject to conditions requiring substantial ownership and effective control by nationals of their home country, except where governments have been able to agree on alternative arrangements, for example principal place of business and/or effective regulatory control.

Cabotage or domestic access is also highly unusual though it is allowed for carriers within the EU and for designated operators in Australia and New Zealand under their Single Aviation Market (SAM) and "open skies" agreements.

Over the next 5 or even 10 years, it would be unrealistic to expect wholesale changes to occur in a global context. More likely is the emergence of regional approaches to the removal of national barriers to aviation growth.

The Asia Pacific will be a focus for this liberalisation due to the direct and indirect effects of:

(1) ASEAN's moves to establish a Single Aviation Market by 2015, and its proposed entry into "open skies" agreements with China, Japan and other Dialogue Partners (an agreement with China has already been inked);

(2) Liberalisation of foreign carrier access to mainland China which has seen greater engagement with airlines from other Asian countries;

(3) Development of sub-regional open skies agreements within ASEAN (e.g. the CLMV agreement between Cambodia, Laos, Myanmar and Vietnam; Singapore-Brunei-Thailand's Multilateral Agreement for the Liberalisation of Passenger Air Services (MALPAS); and plurilateral agreements between the Indonesia, Malaysia and Thailand growth triangle; the Brunei, Indonesia, Malaysia and Philippines East ASEAN Growth Area; and

(4) The proposed (but not yet negotiated) trilateral agreement between Japan, Korea and China;

(5) Expansion of bilateral Free Trade Agreements and membership of global and/or regional organisations with a strong competitive charter, including the World Trade Organisation and APEC; and

(6) Market deregulation outside the Asia Pacific, in particular the US-EU Open Skies Agreement and the EU Common Aviation Market. This is encouraging Asian moves to establish a comparative regional aviation bloc to more equitably balance access negotiations.

The corollary of these developments is that a more cohesive shape is forming around the previously fragmented and uneven efforts to achieve a liberalised air transport environment across the region.

3.2.1 ASEAN Emerging as Key Component of Regional Initiatives

Air travel is one of the designated 11 priority sectors for economic integration within ASEAN, and an integral component in the proposed establishment of an ASEAN Economic Community (AEC) which has been brought forward to 2015.

The timeline for the development of the AEC coincides with that for the ASEAN Single Aviation Market (ASAM). ASAM, in turn, has the potential to take the progressive liberalisation of air services within the region to a new level by building on progress achieved with ASEAN's open-skies program.

Liberalisation initiatives in ASEAN have been hampered by the fact that the ASEAN Member States have such diverse levels of economic development, with airlines of varying strengths and competitiveness. National airlines also exert significant influence on their governments' aviation policies.

ASEAN transport ministers recently signed off on the following agreements:

- *ASEAN open skies*: allowing designated airlines of member states to operate and carry traffic from any ASEAN city with an international airport to counterparts in other member states. The agreement, while subject to ratification by the States[1], allows full 3rd, 4th and 5th freedom traffic rights. This is expected to significantly enhance ASEAN's air transport competitiveness, especially in facilitating air travel among ASEAN cities that ultimately support the tourism industry in the region; and
- *Framework with non-ASEAN parties*: ASEAN Transport Ministers have also agreed on a framework for the region to enter similar air services arrangements with non-ASEAN parties, specifically dialogue partners, starting with China. Under this agreement, ASEAN designated airlines will be able to carry traffic from any city with an international airport in their territories to counterparts in China with full third and fourth-freedom traffic rights (5th freedom rights are negotiable). The

[1] This provides an effective opt-out mechanism for ASEAN countries. The agreement applies only to States ratifying it. A minimum of three ratifications is required for the agreement to come into force.

agreement will support the ASEAN-China Free Trade Area and also increase tourist traffic between ASEAN and China.

The above agreement on further liberalisation was reached despite resistance from Indonesia, which insists that only 5 of its 26 international airports currently meet the standards for the Open Sky Policy.

Economic estimates suggest that the move to a Single Aviation Market will drive 26% annual growth in markets within ASEAN. The benefits will extend further through other open skies agreements with China, Japan, Korea and India. As such ASEAN+3 (China, Korea, Japan) or 4 (with India) will become an effective negotiating bloc to redress the competitive disadvantage enjoyed by EU-designated airlines which are able to serve Asia through multiple airports in Europe.

ASEAN's development offers an opportunity for Australia to engage more closely with South-East Asia, and share in the growth by promoting an expansion of passenger and freight linkages.

There is also an inherent threat to Australia's tourism prospects from the establishment of additional competing destinations in Asia.

3.2.2 China the Dominant Influence

China is the single most substantial air market in the Asian region and a major driver of growth for the short to medium term. IATA expects China to become the 8th largest international market in the world by 2014, growing by 10.8% per annum to 82.1 million passengers[2]. Japan and Hong Kong are the only other Asia Pacific markets in the top 10 busiest markets (9th and 10th respectively). China's domestic market is forecast to expand at an even faster rate of 13.9% to 2014.

According to the Civil Aviation Administration of China (CAAC)[3], total passenger volumes grew by 14% per annum to 270 million in 2010 (international and domestic). That number is expected to reach 450 million by 2016, 700 million by 2020 and 1.5 billion by 2030, driven by economic growth, tourism, and increasing urbanization and income levels. The CAAC predicts that the population will average one air trip per year by 2030 – 5 times the current propensity.

Chinese carriers have current orders for 593 new aircraft which will be delivered by 2020. Of these, 58% are narrow-body types which will operate internally and within Asian markets. The other 240 orders are a mix of wide-body and very large aircraft capable of serving Australian and intercontinental markets. Air China has 150 aircraft on order; China Southern 130; China Eastern 86 and Hainan Airlines 52.

[2] IATA Airline Industry Forecast 2010-2014.
[3] Forecast announced by CAAC Director General Li Jiaxiang, December 2010.

Forecast growth is highest on routes between China and Southeast Asia, reflecting benefits flowing from the development of an "open skies" air services agreement between ASEAN and China (ASEAN's first with a "Dialogue Partner").

Table 3.2: No. Weekly Return Flights between China and its Bilateral Partners and % Share of Total China Market

To China from	No. Weekly Flights	% China Total	Air services relationship
Hong Kong	819	17.7	SAR agreement
South Korea	678	14.6	Agreement allows shuttles to selected airports, open skies for Shandong region; may join trilateral alliance with China, Japan
Japan	654	14.1	Chinese domestic airports open to shuttle traffic; may be part of trilateral alliance with Korea, China
Taiwan	370	8.0	Limited direct services
Singapore	275	5.9	Liberal bilateral; multilateral ASEAN agreement
US	204	4.4	Liberal bilateral agreement but not open skies
Thailand	194	4.2	Very liberal bilateral; multilateral ASEAN agreement
Malaysia	152	3.3	
Macau	114	2.5	SAR agreement
Vietnam	106	2.3	Liberal 3rd,4th and 5th freedom access
Russia	101	2.2	Strong bilateral agreement
Germany	94	2.0	Bilateral agreement; also EU open skies negotiations
UAE	67	1.4	Relatively open agreement
Australia	63	1.4	Recent increase in capacity; discussing open skies agreement
Philippines	62	1.3	Bilateral; ASEAN multilateral agreements
France	53	1.1	Bilateral agreements
Canada	46	1.0	
Netherlands	43	0.9	
India	42	0.9	Limited agreement
Cambodia	37	0.8	Broad bilateral agreements; ASEAN multilateral agreement
Indonesia	32	0.7	
UK	30	0.6	Bilateral agreement; also EU open skies negotiations
Myanmar	28	0.6	Broad bilateral agreements; ASEAN multilateral agreement
Laos	22	0.5	

Qatar	18	0.4	Limited agreement
Bangladesh	11	0.2	Limited agreement
Pakistan	11	0.2	Limited agreement
Iran	10	0.2	Limited agreement
New Zealand	8	0.2	Liberal bilateral ASA; open skies on cargo
Brunei	4	0.1	Limited access
Sri Lanka	3	0.1	Limited agreement
Other	287	6.2	
Total	*4640*	*100.0*	

Source: SRS Analyser

Table 3.2 provides a breakdown of non-stop and one-stop weekly flights in each direction between China and its bilateral partners, as of May 2011, and relative market shares in terms of movements.

More than half the movements relate to China's four Northeast Asian neighbours - Hong Kong, Korea, Japan and Taiwan. Some 20% of flights originate in ASEAN countries.

The US is the most important market outside of Asia with 4.4% of flights. Australia accounts for a relatively modest 1.4% of China's 4,640 weekly flights.

One future development to consider is the much talked-about "trilateral" aviation market between China, Japan and Korea. The Korean Government and carriers have been its most avid proponents. Traffic between Korea and China has grown at 11.1% per annum between 2001 and 2009. However, China and Japan remain cautious about the "trilateral" open skies proposal.

Looking forward, there could be significant implications for ASEAN carriers if the proposed trilateral becomes a reality. China, Japan and Korea could possibly become (or come close to being) a single aviation bloc in their own right. This would enable their carriers to operate multiple hubs within the region, similar to what the European carriers can now do within the EU. Individual carriers in China, Japan and Korea could thus end up having increased network coverage, compared to their counterparts in ASEAN that remain restricted to their individual markets.

International access to China will continue to liberalise over the next 10 years, with Australian and Chinese carriers responding to growing demand for VFR and leisure travel between the countries by lifting capacity and serving a greater range of destinations. The recently renegotiated Australia-China Air Services Agreement will deliver an additional 4,000 weekly seats in 2011 and 2012 (albeit less than either the tourism industry or airports desired).

Australia ideally would like to secure an open skies arrangement with China, complementing a similar arrangement for air freight struck in 2004. However, there are currently some sticking points over provision of unlimited access to 5th freedom rights through China.

3.2.3 Further Liberalisation of the New Zealand Market

Australia and New Zealand are expected to move over time towards the establishment of common border arrangements. While this will initially be limited to streamlined processing of arrivals and departures for nationals from both countries, the potential for a fully integrated EU-style system may be plausible in the medium term.

New Zealand represents a high volume (but low yield) inbound market which is largely served as an extension of the Australian domestic market. Common border arrangements have the potential to:

- Expand access points to Australia from New Zealand, building traffic volumes at non-metropolitan airports; and
- Assist regional tourism by encouraging development of secondary markets (i.e. New Zealand to Newcastle or Canberra).

One downside is the potential loss of airport duty-free income from visiting New Zealanders (as has occurred within the EU).

3.2.4 Ownership Reforms

Most Air Services Agreements (ASAs) are subject to the traditional "substantial ownership and effective control" provisions. This means, in effect, that nationally-designated international carriers have to be at least 51% owned and controlled by national interests.

However, governments are increasingly recognising reform moves to establish a more flexible regime underpinned by place of incorporation and principal place of business criteria which seek to shift the focus from equity to the country where the carrier is based and maintains regulatory oversight. Principal place of business criteria or a modified version thereof has been negotiated in 32 of Australia's 70 bilateral ASAs.

Such an approach is consistent with international initiatives by the International Air Transport Association (IATA) and the International Civil Aviation Organisation. Given the bilateral nature of ASAs, adoption of these provisions requires reciprocity and approval from both sides. IATA's *Agenda for Freedom* initiative calls for countries to unilaterally waive ownership and control and traffic rights clauses within Air Services Agreements (ASAs) on a conditional, reciprocal basis with other countries. The objective is to remove restrictions which preclude commercial freedoms, such as market access and the ability

to consolidate businesses. The EU and 10 other countries, including the US, Malaysia, Singapore and the UAE have signed or endorsed the policy principles of the initiative.

In Australia, the Federal Government has adhered to a 49% limit of foreign ownership for Qantas, however, the White Paper policy indicates it may in some circumstances allow higher levels of foreign ownership in other airlines on a case-by-case basis.

According to the Government, the latter (i.e. foreign ownership above 50%) may be considered if: (1) it is part of a comprehensive bilateral open skies agreement; (2) there are "demonstrable" economic benefits for Australia; and (3) equivalent opportunities are available for Australian airlines in the markets of the trading partner.

In theory, this may create opportunities for:

- Foreign investors (or an airline) to majority own an international airline based in Australia (other than Qantas) which can access Australian air rights; and/or
- Existing Australian-designated airlines to enter into cross-border equity partnerships with other carriers.

Realistically, the former is not likely to occur as the level of political and commercial opposition from home-grown carriers would be considerable.

The "substantial ownership/effective control" provisions do not apply to the Tasman. The open skies ASA with New Zealand requires airlines to be effectively controlled by Australian nationals, and to be incorporated and have their place of business in Australia.

The issue is further complicated by the Single Aviation Market (SAM) designation criteria, also in place for the Tasman, which needs to be satisfied if airlines from either country want to operate in the other's domestic market. This criteria requires, among other things, that carriers to be at least 50% owned and effectively controlled by nationals from Australia and/or New Zealand[4].

The prospect of Australian carriers acquiring or merging with other airlines in the region is distinctly possible. Qantas has in the past considered alliances with Singapore Airlines and Malaysia Airlines, but with little success as the issue of control inevitably intervened.

We note that attitudes towards foreign cross-border ownership are softening generally, as indicated by EU regulations, the US-EU Open Skies relationship and proposals within ASEAN to provide for the establishment of an "ASEAN carrier" owned by interests from one or more of the member states.

[4] SAM-designated carriers also need to have Australian and/or NZ nationals comprising at least two-thirds of their board members and the chairperson; and a head office and operational base in Australia or NZ.

The more relaxed approach reflects an overall need for airline consolidation to improve very poor returns and the fragile financial state of a number of operators.

In tourism terms, an increased potential for airline consolidation is likely to have both positive and negative implications. While it may provide for more economic operations and improved capital structures for longer term viability of services, there is also the likelihood of service and capacity rationalisation on overlapping routes.

3.3 Airline-Focused Issues

3.3.1 Further Evolution of the Business Model

The structure and effectiveness of the business model operated by airlines defines their strategy for international markets and economic performance, including operating margins and returns.

Given the capital intensive nature of commercial aviation, much of the focus for traditional operators in recent years has been on restructuring to reduce costs and achieve profitable outcomes. LCCs emerged largely in response to these requirements.

LCCs in their various forms have made, and will continue to make, substantial inroads into the Australian and Asia Pacific markets. Fleets operated by LCCs currently account for 35% of the active fleet in India, 41% in Southeast Asia and 44% in Australia and New Zealand. However, the penetration of LCCs in East Asia is substantially smaller at 4.8%, reflecting constraints on LCC establishment and operation in China and high structural costs in Japan.

The 48 LCCs serving the Asia Pacific as a whole have 706 aircraft in operation (mostly narrow-bodied A320s or B737s), or 19.5% of the total regional fleet. This percentage will increase sharply as the ASEAN single aviation market develops from 2015 and China adopts a more relaxed approach to LCCs.

In the medium and long terms, there may not be another “sea change” in operating structures (as with the introduction of LCCs) but other iterations will occur:

- Further development of long-haul LCCs which will drive growth levels on intercontinental routes (e.g. AirAsia X and Jetstar);
- Establishment of more “hybrid” operations which blend a mix of economy and premium-type products with an LCC cost structure (e.g. Virgin Blue’s “New World Carrier” model, Lion Air and Cebu Pacific);
- More dual brand airline structures targeting different market segments, particularly in the Asia Pacific (e.g. Qantas and Jetstar); and
- An expansion of cross-border Joint Ventures (similar to the AirAsia and Jetstar groups).

Full scale mergers between airlines have proved untenable under national and competition laws, particularly on routes where carrier services overlap or there is a diminution of service (e.g. Qantas/Air New Zealand). There are also concerns about loss of sovereignty and foreign control of national carriers. In the medium term, this situation is unlikely to change.

However, over 10 years there is potential for carriers within aviation blocs, for example ASEAN, to merge by capitalising on more relaxed ownership regulations. Australian carrier investment in foreign airlines (i.e. in Asia) may occur as part of an expanded commercial relationship, but it is difficult to see control being ceded under any equity arrangement. The most likely proposition is in an Australia-New Zealand context such as Virgin Australia/Air New Zealand (Air NZ). We note that the New Zealand Government is currently considering selling down its shareholding in Air NZ.

Any merger carries with it the prospect of service rationalisation, subject to conditions applied by competition regulators. There also may be benefits streaming from enhanced market reach and coordination of schedules with improved connectivity.

The impact of these developments on inbound capacity will vary, but they have the potential to strengthen airline viability and support routes which are currently unsustainable or marginal. The latter could see the development of gateways to additional secondary tourism markets in Australia.

There may also be negative repercussions for full service carriers from the introduction of more intensive and effective competition and fare pricing on certain routes. This may or may not lead to a rationalisation of services or, in a worse case, wholesale withdrawal from a market.

3.3.2 Expansion of Long-Haul LCCs

The spread of the low cost long-haul model appears inevitable as the bilateral foundations to allow operators to both enter the market and operate services as designated national carriers are largely in place, for example:

- Air Asia X (a designated Malaysian carrier under Malaysia's bilateral ASAs with the UK, Australia, the Middle East and China);
- Air Arabia (a designated United Arab Emirates carrier under UAE/Brazil bilateral ASAs); and
- Jetstar International (a designated Australian carrier under a number of Australian bilateral agreeements).

Jetstar clearly has plans to emulate AirAsia X by operating through its Singapore hub to the European market. Singapore Airlines has also flagged a long-haul LCC

development. AirAsia X, meanwhile, currently operates to Gold Coast, Melbourne and Perth and is still hoping to gain Malaysian Government approval to fly to Sydney.

The further development of long-haul LCCs with an attractive low-fare product has the potential to diminish the returns, and in some cases overall route viability, of established premium operators which previously dominated intercontinental markets.

Qantas's strategic approach in operating dual brands with Jetstar is seen both as a reflection of the challenges ahead and also a vehicle to drive down costs within the group. Jetstar is expected to further establish its brand in Asian markets directly through services out of Australia (China, Japan) and those channelled through Singapore, and indirectly through its joint ventures in Singapore (Jetstar Asia) and Vietnam (Jetstar Pacific).

Two long haul A330-200s initially have been based in Singapore. The attraction for Jetstar is two-fold: (1) it can take advantage of Singapore's lower labour costs; and (2) 70% of revenue on flights out of Singapore relate to Singapore point-of-origin sales.

3.3.3 Development of Hybrid LCCs

Virgin Australia is transitioning under its Game Change Program into a mixed LCC and full service operator. The airline's business model has changed considerably since its launch in 2000 as a basic LCC, with the introduction of premium product, long-haul services and different aircraft types.

The strategy is multi-faced with a focus on repositioning the airline in the market place by:

- Increasing Virgin's share of corporate and government traffic from 10-15% to 20%, reducing its dependence on the lower yield leisure market;
- Improving access to growth markets through:
    - Consolidation of international operations Pacific Blue and V Australia through the creation of a single Virgin Australia brand across the network and two key international hubs in Abu Dhabi and Los Angeles; and
    - Establishment of strong strategic alliances which extend market reach without requiring capital commitment (e.g. Air New Zealand, Delta Air Lines and Etihad Airways);

As part of this strategy, Virgin's long-haul arm V Australia (now Virgin Australia) has dropped non-performing services to South Africa, Fiji and Phuket in Thailand, and increased frequencies to the US. The withdrawal of Pacific Blue from NZ's domestic market was also triggered by significant losses there.

Virgin is introducing A330s with a business class from the second half of 2011, upgrading and expanding its airport lounges and revamping its Velocity frequent flyer program as part of the tactical approach to challenge Qantas's long-held dominance of the corporate market.

Other examples of hybrid LCCs with a mixed product include Lion Airlines, now the largest operator in Indonesia, and Cebu Pacific of the Philippines.

3.3.4 Impact of Fleet Growth and New Aircraft Types

The expansion and restructuring of airline fleets globally and regionally, with the introduction of new aircraft types, will influence network structures and the development of markets and inbound tourism in the medium and long term. **Appendices 4** and **5** profile current fleets and future aircraft orders by country for the major markets.

Most carriers directly or indirectly serving the Australian market are undertaking re-fleeting programs to capitalise on strengthening market conditions and the impending availability of new aircraft types with extended range and payload capabilities and improved operating economics.

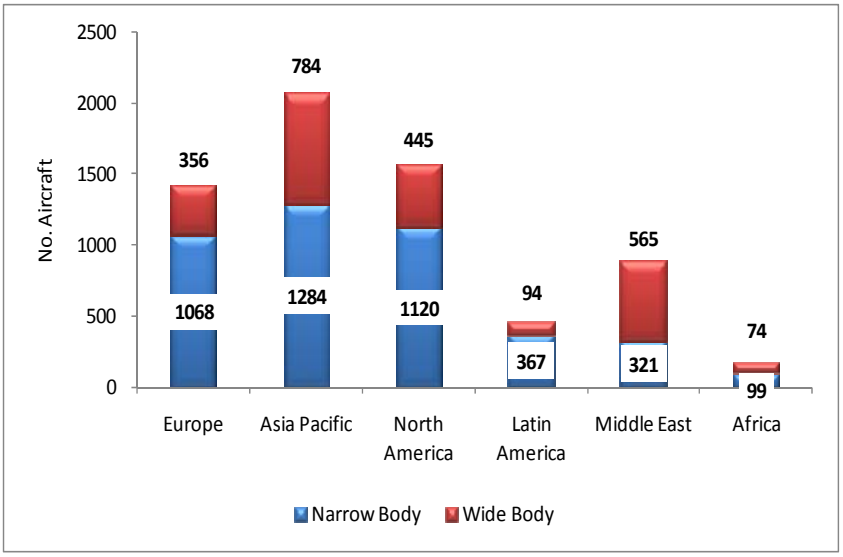
Some of these programs have been brought forward as a counter to pressures imposed by escalating fuel prices which appear unlikely to abate for the foreseeable future.

The introduction of new aircraft types with greater fuel efficiency such as the B787 and A350 from 2012/13 has the potential to provide airlines with entry to new markets; increase direct service options; and establish access to a more diverse mix of gateways within existing markets. As well, airlines are continuing to build capacity in long-haul intercontinental markets through the use of high capacity A380s and stretched versions of the B747.

The scale of outstanding aircraft orders underlines the growth focus in the market. At April 2011, Boeing and Airbus had outstanding orders for 7,273 aircraft globally, equivalent to 7 years of production at current rates.

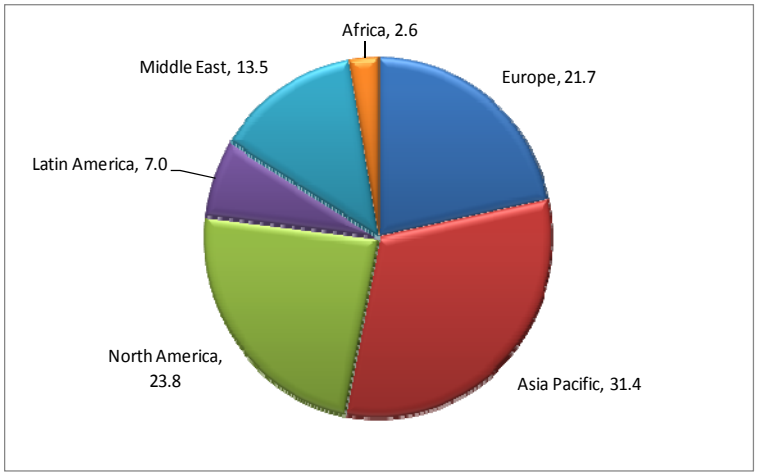
As **Figures 3.2 and 3.3** show, demand is the greatest in the Asia Pacific which accounts for almost one-third of the total orders.

Figure 3.2: Current Unfilled Jet Orders by Type and Region (April 2011)



Source: Boeing, Airbus

Figure 3.3: Unfilled Orders as a Percentage of Total by Region



Source: Boeing, Airbus

The Asia Pacific presently has unfilled orders with Boeing and Airbus for 2,085 new aircraft. These orders reflect current known fleet development programs and should be delivered between 2010 and 2020.

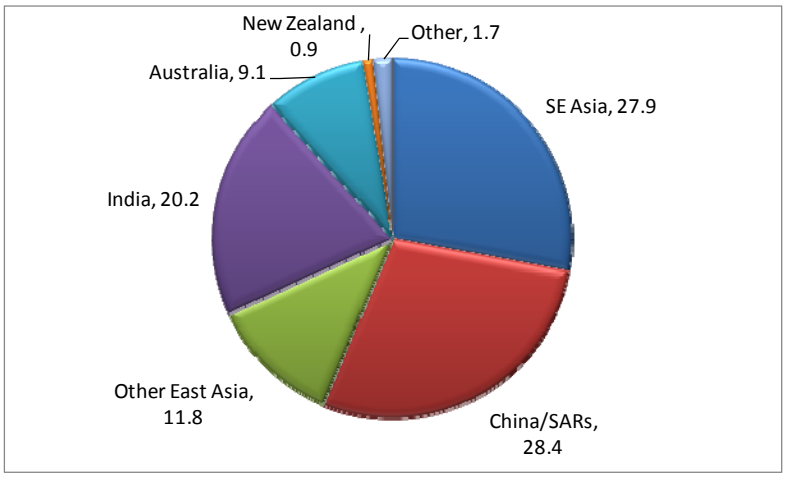
LCCs account for 31% of the orders. Over the next 5-10 years, the region's LCCs will take delivery of 752 new aircraft. As a consequence, there is a heavy emphasis on narrow-bodied jets which comprise 60.1% of the total.

The emphasis on narrow-body aircraft for future growth is consistent with expansion of LCCs across South and Southeast Asia, including India, the Philippines, Singapore, Thailand and Indonesia.

Some 22% of the regional requirement for new aircraft will represent replacements for older aircraft. This is only half of the global replacement rate, indicating the need for substantial additional capacity to accommodate market growth. The other 39.9% of orders are a mix of wide-body aircraft for operation on regional and intercontinental routes. Some 4% of these wide-bodies are Very Large Jets (i.e. the A380 or B747-8).

As **Figure 3.4** shows, China will acquire 28.4% of the aircraft currently on order; Southeast Asia 27.9%; and India 20.2%.

Figure 3.4: Percentage Breakdown of Current Aircraft Orders in the Asia Pacific by Market

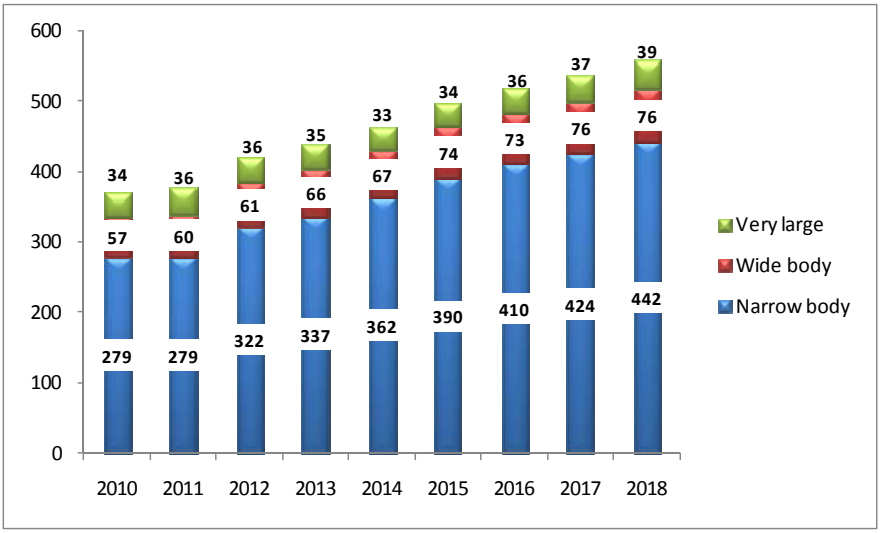


Source: Boeing, Airbus, CAPA Consulting Analysis

Other East Asia (Japan, Korea and Taiwan) will take 11.8% of the total. Australia's orders account for a 9.1% share.

The major Australian carriers (Qantas, Jetstar, Virgin Australia and Tiger Airways Australia) have existing orders for 190 new aircraft (including jets and turboprops) for delivery to 2018 and a further 112 options and purchase rights which can be exercised to accelerate expansion rates. About half of these orders will replace ageing aircraft in the fleet.

Figure 3.5: Expected Development of the Australian Major Airline Fleet by Type, 2010-2018



Source: CAPA Consulting Analysis

Figure 3.5 shows the impact of the planned changes in the fleets of the major airlines net of replacements by aircraft type for the period to 2018.

The national fleets of the four carriers will increase at an Average Annual Rate of 5.6% per annum, rising from 370 in 2010 to 557 in 2018.

The main drivers of that demand will be the LCCs (including Virgin Australia), with Average Annual Growth in their fleets of 9% during this period, as opposed to 2.7% for the mainline operations of Qantas.

3.3.4.1 Introduction of New Aircraft Types

The Asia Pacific holds the most orders of any region for the B787 (295 orders or 35% of the world's total) and 26% of current orders for the A350. The spread of orders for these and other new aircraft types, including the A350 and A320neo, are detailed by market in tables in **Appendix 5**.

Airlines taking delivery of these aircraft over the next 5 years are based in India, Singapore, Vietnam, Thailand and Malaysia; Japan, Hong Kong, Korea, Taiwan; Australia and New Zealand. The first B787 is due for delivery to All Nippon Airways in the third quarter of 2011 after repeated delays, while the A350 is scheduled to enter service in 2013.

In an Australian context, the impact of the B787 is likely to be greatest on international routes. Jetstar's initial deliveries will be a mix of 8 B787-8s and 7 longer range B787-9s (the latter by 2015/15). All are likely to be deployed on international routes with a small number based offshore. Jetstar ultimately intends to focus on the

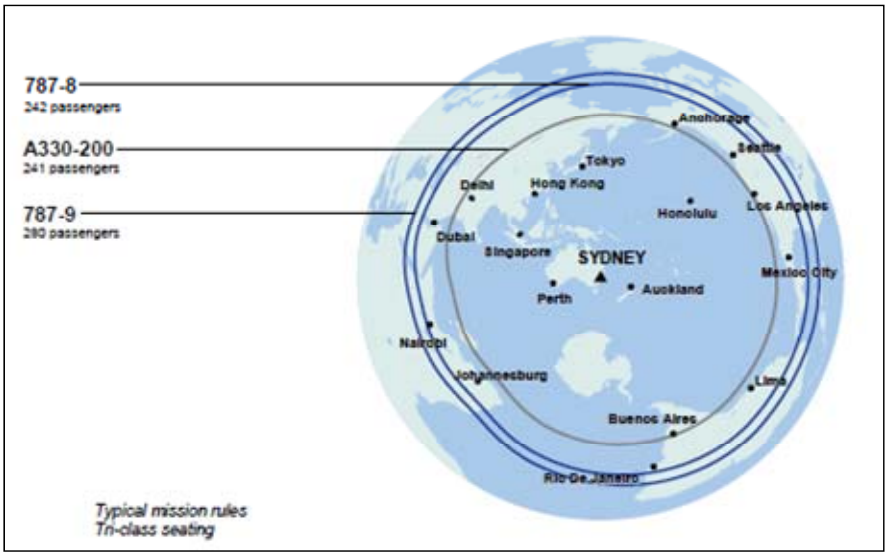
B787-9, with B787-8s progressively switched to Qantas mainline for both international and some domestic services, particularly on routes with higher volumes.

Jetstar has indicated that a number of these aircraft will be based in Singapore, with onward linkages to north Asian and southern European markets. This would provide the airline with a competitive long-haul option similar to AirAsia X.

While the B787-8 does not have the range to service London or northern Europe without a second stop, the aircraft could be used out of Singapore to Athens or Rome without attracting a significant payload penalty. The B787-8 has a range of 14,200-15,200kms with a full payload in two classes, significantly more than the A330-200's 13,430kms. Its range is only slightly shorter than the B787-9, which can fly 14,800-15,750kms with a larger loading capacity (280 passengers).

Figure 3.6 shows the markets which can be reached from Sydney with the B787s and the A330-200s which are currently operating by Jetstar mostly on Asian routes.

Figure 3.6: B787 Range from Sydney Compared with A330



Source: Boeing

The A350 is designed to compete with the B787 and B777, and will be a mid-sized jet (270-350 seats) with an equally long range capability. Two-thirds of the 148 aircraft presently on order will be delivered to carriers in Northeast Asia (55 of them to Chinese operators).

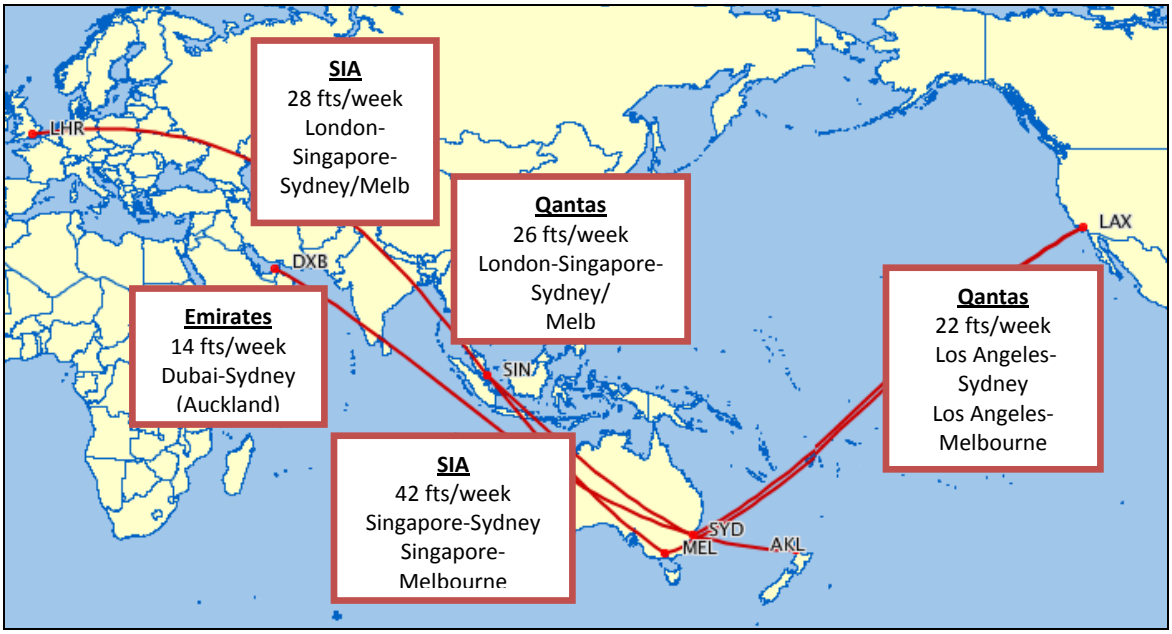
Development of aircraft with longer range capabilities will influence the airports served, for example, airlines currently operating through intermediate points such as Singapore or Hong Kong may elect to bypass these hubs en route to Europe. They also create new market opportunities. Qantas, for example, could feasibly serve other parts

of South America non-stop with the longer range B787s (e.g. Brazil); the airline's present B747-400ERs would take a payload penalty on a similar routing.

In the higher capacity category, the Asia Pacific will receive a further 57 A380s in the medium term, including 11 to Qantas. There are also orders for 36 B747-800s, which have an extended range to the B747-400s.

Currently, only three airlines operate A380s in the Australian market – Qantas, Emirates and Singapore Airlines – on routes through the major hubs of Singapore, Dubai and Los Angeles to the UK/Europe and North American markets (**Figure 3.7**).

Figure 3.7: Existing A380 Operators and Routes Served in the Australian Market



Source: SRS Analyser

Various developments are also taking place in the narrow-body segment which will provide a greater capability for LCCs, for example, to operate from Southeast Asia into the Australian market.

Airbus is offering a modified version of the A320, the A320 New Engine Option (known as A320neo), from 2015 and plans to sell 4,000 units over 15 years. The A320neo's targeted 16% lower fuel costs and improved maintenance overheads will be highly attractive to operators, especially if fuel prices escalate further. The A320neo will be able to fly 950kms more than the existing model (an 18% better range) or carry an extra 2 tonnes of payload.

Boeing is also considering a replacement for the B737NG, or a re-engined version, for introduction in 2016 following the B787. This will be slightly larger than the current B737NG, enabling its costs to be spread over more seats, and offer fuel economies

similar to the A320neo. As such, it has the potential to improve the economic viability of routes which are currently marginal and extend the range of the aircraft.

3.4 Fuel Price Volatility

Fuel represents a substantial proportion of airline operating costs. Therefore, the sharp increases experienced recently heavily influence the strategic approach to route development, particularly on long-haul routes by:

- Deterring or limiting expansion, especially on marginal intercontinental routes with already significant yield pressures through competition;
- Encouraging greater use of alliances with connecting services, as opposed to own-operated services, to reduce the fuel-related risk exposure and cost; and
- Accelerating the introduction of more economic aircraft types and retirement of older aircraft.

While revenue trends and profitability have become more positive for the airlines, fuel costs have re-emerged as a threat with the return of better economic conditions (coupled with recent upheavals in the Middle East).

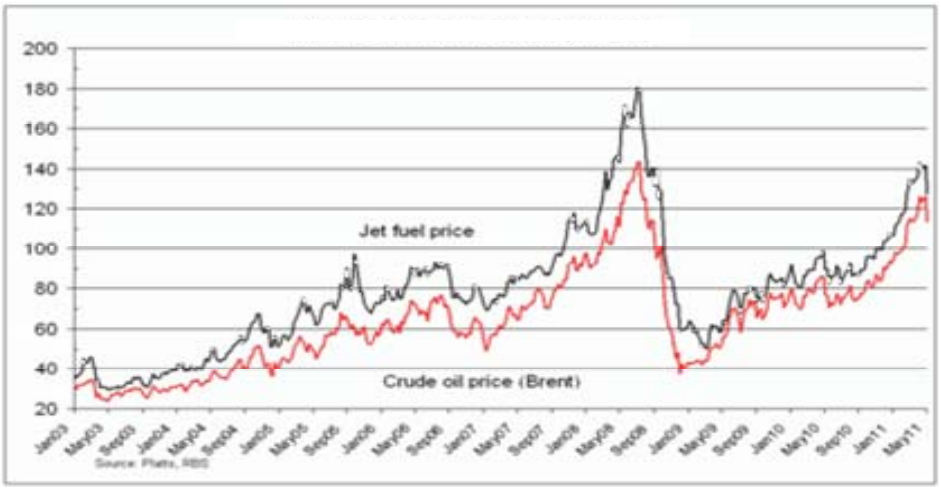
Historically, fuel expenses have ranged between 10% and 15% of airline operating costs, were manageable and relatively constant. Since 2003 this ratio has more than doubled as the average price of jet fuel per barrel rose to US$180 in 2008. When based on a sample of 45 major global passenger airlines, fuel represented about 32.3% of the total operating cost[5].

As of May 2011, the jet fuel price had risen to US$127 per barrel – 39% more than a year earlier – with premiums (the refining margin or spread between crude oil and jet fuel) reaching the highest level since 2008. This was slightly down on the previous month, but most airlines have responded to the increase over the past 12 months by reintroducing ticket surcharges and revising hedging programs.

Figure 3.8 shows the upward trend in fuel prices which has gathered pace in recent months due to northern winter demand and Middle East instability.

[5] International Air Transport Association, Economic Analysis.

Figure 3.8: Jet Fuel and Crude Oil Price Trends

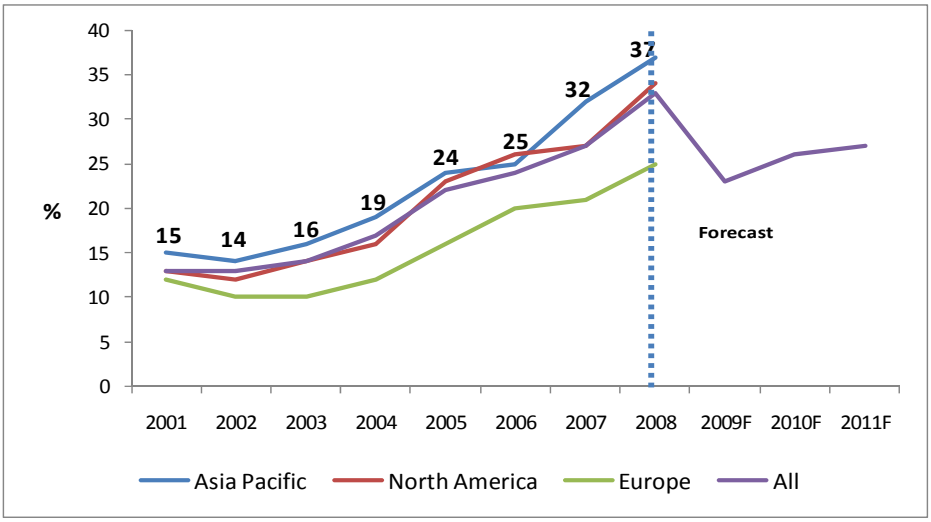


Source: Platts

The rise in the jet fuel prices and a widening in the refinery margin between crude oil and jet fuel due largely to capacity constraints at refineries added an extra US$34.5 billion to the industry's fuel costs in 2008.

This margin narrowed in 2009 due to an easing of these constraints. While the increase in cost and flow on effects has been a major problem for airlines, it is the price volatility that makes jet fuel such a critical issue in the airline business mix.

Figure 3.9: Percentage Share of Airline Operating Costs by Region and Global, 2001-2011F



Source: IATA

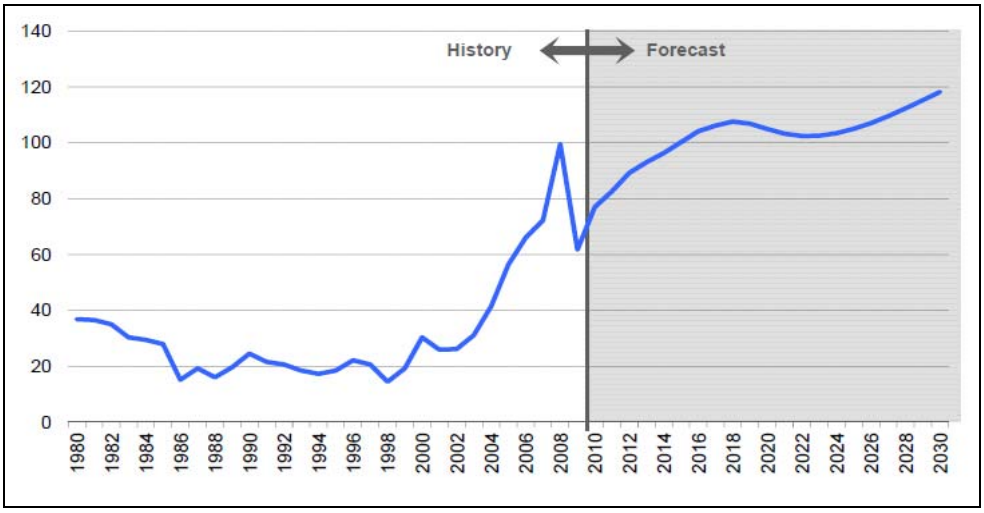
The steady climb in fuel prices as a percentage of airline operating costs to the 2008 peak is shown in **Figure 3.9**, as well as regional variations.

Asia Pacific carriers were the worst affected in a relative sense, rising to 37% from 15% in 2001, due to the fact that their overall costs were much lower than North America and European operators. This underlines the disproportionate impact that fuel prices have on the region's airlines, despite active hedging programs. The LCCs were even more severely affected by increasing fuel prices, with fuel costs rising to 50%-60% of their total operating costs.

Fuel prices eased off during the GFC as demand declined. However, further increases are expected in 2011 and beyond as economic conditions improve and airlines scale up fleet expansion.

Figure 3.10 depicts the expected oil price trend to 2030, as published by Airbus in its Global Market Forecast 2010-2029. On this basis, oil prices were expected to return to the 2008 peak levels by 2016, and continue to rise above US$100 per barrel. However, recent trends suggest that the price spike has been reached much earlier than expected and may be well in excess of the Airbus/HIS prediction.

Figure 3.10: Historic and Forecast Oil Prices (US$ per barrel)



Source: EIA, HIS Global Insight (November 2010), Airbus

The development of cheaper biofuels is expected to have a limited effect on aviation over the next 10 years. The CSIRO's recent report, *Sustainable Aviation Fuel Road Map*, indicates a more likely scenario is that Australian and New Zealand airlines will source 5% of their jet fuel requirements from bio-stock by 2020, rising to 40% by 2050.

However, rising carbon-based jet fuel prices and demands for a reduced carbon footprint by regulators could well accelerate usage by airlines of biofuels as they become more widely available.

3.5 Migration to Alliance Structures; Need for Service Connectivity

Australia's international tourism markets are served directly and/or indirectly through a broad range of alliance structures and commercial partnerships, comprising:

- Global systems (Star Alliance, oneworld and SkyTeam), offering coverage through member carriers of major markets;
- Joint service, codesharing and blocked space relationships; and
- Interline arrangements (mostly commercial partnerships which involve agreed fare rates and terms for on-carriage of passengers and freight).

These structures enhance market penetration and diversity and often enable airlines to maintain profitable off-line linkages, thereby avoiding requirements to commit aircraft and capacity to particular routes. As such, alliances offer an economic solution to network development which generates revenue at marginal cost.

While cooperative arrangements are subject to oversight by competition regulators, codesharing and interline connections are generally compatible with air services agreements as they deliver mutual benefits for both marketing and operating carriers.

In the medium and longer terms, the scope and value of commercial linkages between airlines will continue to develop and may even accelerate as jet fuel prices escalate and competition intensifies.

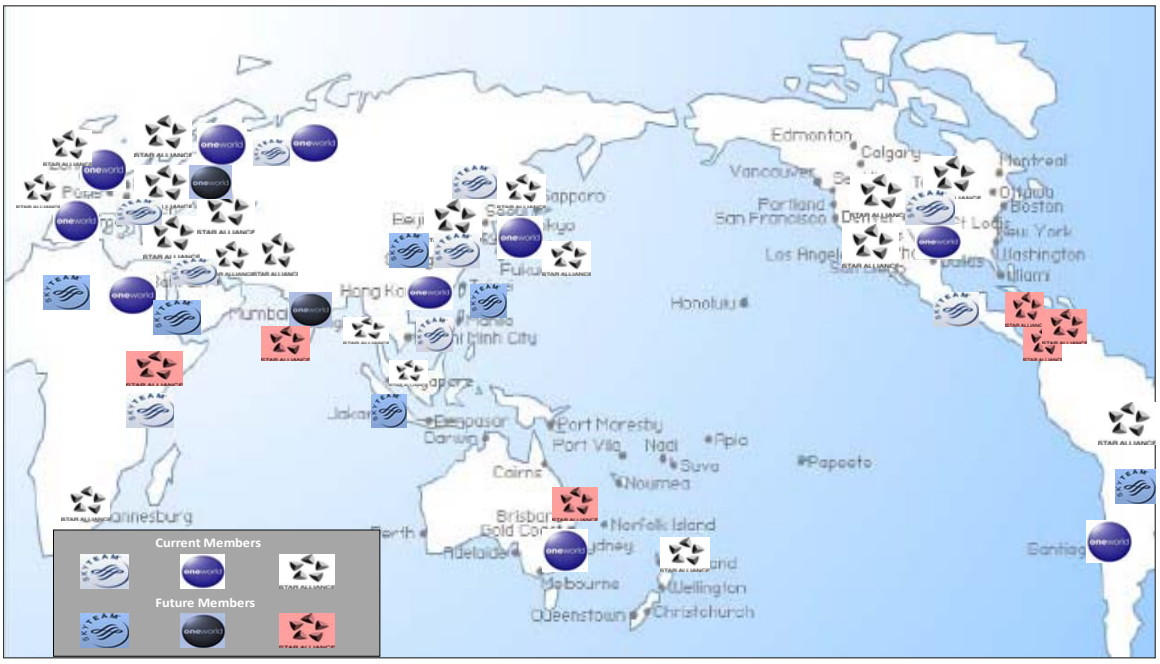
These traditionally have been the domain of full service operators, however increasing numbers of Low Cost Carriers are expected to migrate to alliances as their operating, product and distribution models become more complex.

Virgin Australia is one example of an evolving "hybrid" LCC which has entered into a chain of international partnership arrangements through its full service subsidiary V Australia.

This has extended its accessible markets to Europe through Etihad Airways and through Delta Air Lines, as well as strengthening the group's trans-Tasman links through Air New Zealand. The relationships also provide its partners with broad access to the Australian domestic market.

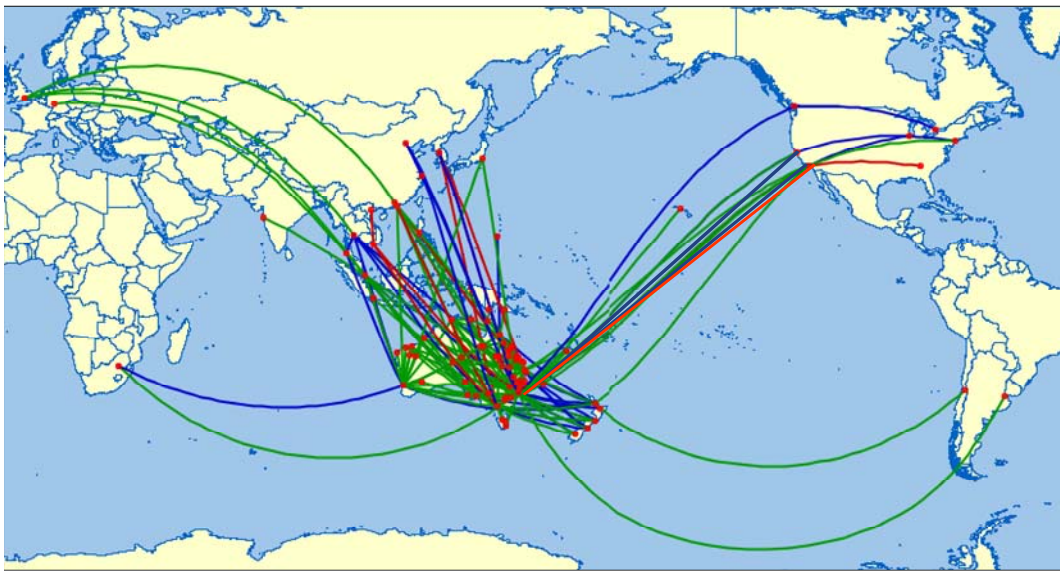
As Virgin's strategy sees it transition into a premium hybrid, the carrier is expected to join one or other of the global alliances, possibly SkyTeam, to counter the competitive strength of Qantas and offer more international service options for its customer base.

Figure 3.11: Map of Current and Future Global Alliance Members



Source: Star Alliance, SkyTeam, oneworld

Figure 3.12: Direct Routes Operated by the Global Alliance Airlines into Australia



Note: oneworld services are shown in green; SkyTeam in red; and Star Alliance in blue. The chart only covers non-stop or one-stop services operating the same flight code.

Source: SRS Analyser

As **Figures 3.11** and **3.12** show, member airlines of the three global alliances provide coverage of most of the major tourism markets for Australia in Europe, Asia, North America and Latin America.

Star Alliance is particularly strong in Europe and the Americas (half of its 27 members are in the EU). A further 4 carriers are set to join the alliance. SkyTeam is the next largest with 13 members (6 more due to join in 2011 and 2012); while oneworld is the smallest of the global alliances with 12 members but is well represented in most markets (two more will join in 2011/12).

The shares of total Australian international seats held by oneworld, Star Alliance and SkyTeam are depicted in **Figure 3.13**. oneworld, underpinned by Qantas, is still the dominant alliance though its share has declined from 36.8% in 2006 to 28.3% in 2011 (consistent with Qantas's own weakening position).

Figure 3.13: Percentage Shares held by Global Alliances of Annual Seats into/out of Australia

	2006	2007	2008	2009	2010	2011
oneworld	36.8	37.1	36.0	31.4	29.1	28.3
Star Alliance	24.5	24.3	25.4	23.4	22.1	21.4
SkyTeam	1.0	1.3	1.7	2.0	3.5	4.9

Note: 2011 data is based on forward airline schedules.

Source: SRS Analyser

Star Alliance carriers have also lost ground, with SkyTeam the only one of the alliances to increase its share from the relatively small base. This reflects the growth in membership of SkyTeam with the entry of China Southern.

The overall seat share of the alliances in the Australian market has diminished in recent years from 62% in 2006 to 55% in 2011. This trend is likely to be reversed in the next few years as other carriers represented in the market join, for example Garuda (2012), China Eastern/Shanghai Airlines (2011), China Airlines (2011) and Aerolineas (2012). Air India is the Star Alliance's only proposed addition with potential Australian

links, while oneworld's member-elect Kingfisher Airlines is still to activate plans to operate here.

Global and bilateral partnerships play a significant role, in particular, in accessing the UK/European market. Only three EU airlines serve Australia directly (Virgin Atlantic, British Airways (BA) and Air Austral[6]). However, other off-line carriers including Lufthansa, Air France-KLM, Swiss, Finnair and SAS maintain indirect links with the Australian market through Asian codeshare partners.

The oneworld decline shown in **Figure 3.13** reflects in part the loss of market share by Joint Services Agreement (JSA) partners Qantas and BA. The JSA covers all routes between Australia and Europe and has approval to continue at least until 2015. However the Qantas/BA position has been eroded by changes to the dynamics of the Australia-Europe market with:

- Further development of services through Middle East hubs (Dubai, Abu Dhabi and Doha) which are extending to North and South America; and
- The expansion of low cost long-haul operations to Europe by AirAsia X and Jetstar (through Kuala Lumpur and Singapore).

This trend is likely to continue with the establishment of new hubs by the major Chinese carriers between China and Europe, including Guangzhou and Shanghai.

The growth of the hub markets will further strengthen hub-based airlines operating 6th freedom services between Australia and Europe (Emirates, Etihad and Qatar Airways in the Middle East; Singapore Airlines, Malaysia Airlines (MAS), Thai Airways, Korean Air and Cathay Pacific in Asia).

Other service options are being facilitated through the introduction in the next five years of improved technology through more efficient, longer range aircraft (e.g. the B787-900 and A350).

Codeshare partnerships also enable airlines serving the Australian market to extend their reach and access inbound traffic from markets outside their networks. These airline to airline relationships, for the most part, align with global alliance commitments. However, in markets where particular alliances are not represented, carriers often enter into codesharing arrangements with other operators.

Qantas, for example, codeshares with SkyTeam members Air France/KLM on Asia-Paris services and Vietnam Airlines on Australia-Vietnam; and Star Alliance carrier Asiana on Australia-Korea routes.

[6] European airlines which have withdrawn from direct services to the Australian market include Lufthansa, KLM Royal Dutch Airlines, Austrian Airlines, Alitalia, Olympic Airways, UTA French Airlines (now Air France), AOM French Airlines and JAT Yugoslav.

The inter-relationships between airlines in Asia, Australasia, Europe, the Middle East and the Americas are mapped in **Appendix 5**.

Alliances therefore have an increasing role to play in the medium-long term in interlinking international markets with Australia, both through the expanding global memberships (especially in Asia) and one-to-one partnerships between carriers. The twin pressures of rising operating costs and heightened competition will see longer haul operators, in particular, seek alliance solutions with enhanced connectivity to secure a market presence.

3.6 Infrastructure: The Role of Airports

In this section, we examined the role of International and domestic hubs in supporting the development of air services to Australia, and in distributing traffic through the Australian system.

3.6.1 Function of International Hubs

The development of a hub airport can bring substantial economic and social benefits. Successful airports attract air services which in turn generate revenue and employment, for example through spending on local businesses and tourist facilities and services supporting airlines and airports. A rough estimate of 1,100 direct jobs per one million passengers is often cited, with a greater level of indirect employment generated.

An airport that offers convenient, frequent and cost effective air services will attract business travellers and can be a key determining factor in the decision as to where to locate corporate and regional headquarters, distribution centres, manufacturing plants and service companies. This in turn attracts foreign direct investment, as well as conventions and trade fairs.

The types of airlines servicing an airport, for example the proportion of full service versus low cost carriers, will influence the mix of business and leisure visitors.

For the consumer, a hub airport provides a broader range of travel options in terms of choice of flights and destinations, frequency of services, flexibility in re-scheduling and a lowering of the ancillary costs related to travel such as the time and cost of an overnight stay. A hub airport also provides the ability to connect small communities to the global marketplace.

Hub airport role models include:

- Amsterdam Schiphol Airport - one of the best connecting hubs in Europe;
- Singapore Changi Airport - the leading hub in Southeast Asia; and
- Dubai International Airport – the rapidly expanding hub for the Middle East which has overtaken Changi in terms of passenger traffic, and will be complemented by

Al Maktoum (Dubai World Central) International Airport when it opens to passenger services in 2012.

3.6.2 Key Components of a Successful Hub

A number of factors contribute to the success of a hub airport. Some of these factors such as the strength of the main carrier at the airport, the regulatory environment and the quality of the airport's infrastructure, operations and service can be enhanced over time if they are not already of an appropriate standard. Other factors such as the size of the airport's catchment population are largely fixed. The key factors are:

- *A strong and competitive home carrier*

  A hub must have at least one strong airline that has extensive third/fourth freedom operations to cities all around it. With such operations, the airline is then able to bring sufficient "feed" into its hub-and-spoke model.

  As an example, Singapore Airlines connects Australia and New Zealand to Europe, India and China through its hub at Changi Airport by having extensive point-to-point third/fourth freedom operations to all these destinations. It then becomes a simple matter of scheduling a flight arriving from Australia (i.e. a Singapore Airlines fourth freedom operation) conveniently close to another flight leaving for Europe (i.e. a third freedom operation). In between the flights, the transiting passenger is kept occupied at a comfortable airport, contributing to the local economy by spending on meals and duty-free purchases. Passengers can also be attracted to spend a few days on stopover, contributing to the country's tourism earnings.

  As the purpose of the hub is to provide frequent and convenient one-stop connections to medium-sized and smaller destinations that cannot support direct air services, in addition to a robust home carrier, the hub is strengthened by attracting sufficient carriers to offer a broader, more comprehensive route network.

  In the Asia-Pacific region, the main carrier transports between 30 to 50% of an airport's passengers. Qantas carries around 35% to 40% of Sydney Airport's passengers. In Europe and the US, this figure is usually significantly higher.

- *A supportive regulatory environment*

  Successful hubs need supportive aviation and other government policy. Policy needs to consider not only broader national socioeconomic factors but also global marketplace dynamics, the economics of airline operations and the long term impact of policy decisions on the local community, business, industry, environment and consumer behaviour. A supportive regulatory environment encourages competitive air services and allows the airport to capture traffic, and

is generally achieved through deregulation of air traffic (local and international), liberalisation of traffic rights, equitable slot allocation and limited ownership restrictions.

- *Efficient Airport Infrastructure*

  Highly developed infrastructure is required to support a hub airport's volumes of traffic and effective strategic planning and timely development is required to keep pace with competitive hubs. Major airport infrastructure developments take time and planning for additional capacity needs to take place early. In the short term, better use of existing capacity through more efficient airspace and airport procedures may provide some additional capacity. Infrastructure needs include:

  - Sufficient slots and runways, taxiways, aircraft parking areas, and passenger and cargo terminals to meet demand;
  - Airport airspace, landside and airside capacity sufficient to ensure the smooth flow of aircraft and passengers and with the potential for expansion for future capacity increases;
  - Well connected domestic and international terminals allowing ease of transit between the two;
  - Services and facilities for passengers of an appropriate level of quality, tailored to the type of passengers using the airport (this has the added benefit of maximising non-aeronautical revenue for the airport.); and
  - Efficient and effective transport infrastructure to/from and around the airport to maximise the airport's population catchment area.

- *Effective Airport Operations*

  Successful hub airports allow airlines to operate in a time and cost effective manner and passengers to connect to flights in a timely manner with minimal disruption. To achieve these goals hub airports must demonstrate operational efficiency, adopt streamlined processes and implement state of the art technology. In addition to the processes controlled by the airport company, legislated requirements such as customs and immigration and security clearances must not disrupt the flow of traffic.

  Airports also need to be flexible and competitive in their fee and incentive arrangements to attract new carriers and encourage retention and growth by existing carriers. Efficient and competitively priced airport services need to be provided such as ground handling, catering and fuel supply. Preferably these services will be open to third party suppliers to provide competitive pricing and high quality service.

- *Geographic and demographic factors*

  A successful hub airport needs a large local population in the airport's catchment area with the economic means to travel, providing critical mass for the airport. Local passengers provide the core traffic while connecting passengers provide the volume to increase frequencies and the number of cities served from the hub. By way of example, since 60% of passengers at a US hub are typically connecting, it takes only 40% local passengers to support a decent-sized flight. A non-hub airport will support such a service with 80 - 90% local passengers and 10 - 20% connecting passengers. The threshold for service from a non-hub city is consequently much higher than for a hub city and the frequencies that can be supported much lower.

3.6.3 Current Global Hubs

The tables below show the level of international connectivity for the top hub five airports in the key regions of Asia, the Middle East, Europe and North America.

Table 3.3: Top Five Asian Airports for Connectivity (Weekly Flights April 2011)

ASIA	South America	Europe	Africa	Middle East	Asia	Australasia	North America	TOTAL
Hong Kong, HK		162	17	40	2,133	122	121	2,595
Singapore, SG		161	9	44	2,144	221	14	2,593
Bangkok, TH		214	32	106	1,549	73	7	1,981
Seoul, KR		101		30	1,427	34	180	1,772
Kuala Lumpur, MY		56	5	80	1,376	94		1,611

Note: Domestic flights have been excluded from the total by region

Source: SRS Analyser

These "mid-hemisphere" hubs are experiencing increasing competitive pressure from Dubai and, to a lesser extent, Doha and Abu Dhabi in the Middle East. Dubai has overtaken Singapore Changi airport in terms of passenger numbers, handling 47 million passengers in 2010 compared to Changi's 42 million. While the current Dubai International Airport continues to expand and develop, the new Dubai World Central Al Maktoum International Airport opened for cargo operations during 2010 and is expected to start passenger operations in 2012.

When completed in 2012 the airport will be the largest in the world with five runways, four terminal buildings and capacity for the 160 million passengers and 12 million tonnes of cargo forecast by 2030.

Table 3.4: Top Five Middle Eastern Airports for Connectivity (Weekly Flights April 2011)

MIDDLE EAST	South America	Europe	Africa	Middle East	Asia	Australasia	North America	TOTAL
Dubai, AE	7	451	238	877	894	35	66	2,568
Doha, QA	7	209	98	532	320	7	21	1,194
Abu Dhabi, AE		143	48	323	294	21	17	846
Jeddah, SA		89	222	341	119		4	775
Bahrain, BH		66	30	517	152			765

Note: Domestic flights have been excluded from the total by region

Source: SRS Analyser

Table 3.5: Top Five European Airports for Connectivity (Weekly Flights April 2011)

EUROPE	Central America	Caribbean	South America	Europe	Africa	Middle East	Asia	North America	TOTAL
London-Heathrow, EN, GB		5	27	2,541	209	276	382	746	4,186
Paris-De Gaulle, FR		16	74	2,900	317	180	220	335	4,042
Amsterdam, NL	6	19	24	3,170	114	83	156	258	3,830
Frankfurt, DE		22	39	2,765	131	172	273	320	3,722
Munich, DE		4	5	2,463	40	66	93	111	2,782

Note: Domestic flights have been excluded from the total by region

Source: SRS Analyser

The European hubs are well established and "mature". Compared to the Asian hubs for example, the European hubs serve a much larger proportion of longer haul markets outside the European region. Over 82% of Hong Kong and Singapore's weekly flights are to destinations within Asia. In contrast, 61% of Heathrow's international flights are to destinations within Europe.

Table 3.6: Top Five North American Airports for Connectivity (Weekly Flights April 2011)

NORTH AMERICA	Central America	Caribbean	South America	Europe	Africa	Middle East	Asia	Australasia	North America	TOTAL
New York-JFK, NY, US	23	282	97	545	30	66	90		179	1,312
Newark, NJ, US	29	90	21	383		21	56		375	975
Chicago-O'Hare, IL, US	7	14	7	233		12	88		525	886
Los Angeles, CA, US	56		13	122		19	173	91	404	878
Houston-Intercontinental, T	135	24	56	82		21	7		544	869

Note: Domestic flights have been excluded from the total by region

Source: SRS Analyser

Los Angeles is currently the only North American hub of connectivity significance to the Australian market. However, the recent commencement of direct services to Dallas by Qantas will see a shift in this dominance. In the future, new aircraft types with longer range will allow a wider range of US cities to be served by non-stop flights to and from Australia.

3.6.4 Future Global Hubs

Over the next 10 years, the existing global hubs are likely to remain major hubs. However, the longer term outlook is likely to see some important changes to hub structures which will affect the traffic flows of travellers to Australia.

The most likely scenario involves the growth of hubs in Northeast Asia as home carriers strengthen and air service regulation is gradually liberalised.

An increasing number of European travellers to Australia hub through these points rather than through the current hubs in the Middle East and Southeast Asia. In the case of North American travellers, Northeast Asian hubs will provide an alternative to hubbing through Los Angeles, or through Southeast Asia for travellers to Perth.

Key Northeast Asian airports which are likely to develop into major hubs include:

- Seoul Incheon – already a major airport in its own right, but heavily dominated by Asian connecting traffic; and
- In China, Beijing, Shanghai and potentially Guangzhou – all experiencing massive growth.

In Southeast Asia, there is potential for airports such as Jakarta and Ho Chi Minh City to develop into alternative hubs. Both face significant issues in achieving hub status. Jakarta faces substantial capacity issues which will require considerable investment and time to resolve.

The Vietnamese Government has aspirations to develop a regional hub and is open to foreign investment to fund new airport development. However, the propensity of the local population to travel is low and will take some time to develop.

The table below shows the current levels of connecting traffic for these potential hubs.

Table 3.7: Potential Future Asian Hubs (Weekly Flights April 2011)

ASIA	South America	Europe	Africa	Middle East	Asia	Australasia	North America	TOTAL
Seoul, KR		101		30	1,427	34	180	1,772
Shanghai, CN	7	125		21	880	27	77	1,137
Beijing, CN		173	4	42	546	7	92	864
Jakarta, ID				77	504	23		604
Ho Chi Minh City, VN		14		4	434	15		467
Guangzhou, CN	2	16	3	28	349	27	7	432

Note: Domestic flights have been excluded from the total by region

Source: SRS Analyser

Sydney Airport's role as Australia's major international gateway and feeder of domestic services is likely to continue over the next ten years. However, issues surrounding slot availability at required times may see carriers seeking alternative ports for entry into Australia. Melbourne and Brisbane airports are the most likely airports to benefit from operating constraints at Sydney Airport.

Australia's position as an "end of hemisphere" country means it is not well placed to act as a global hub. However, there is potential for Sydney, and to a lesser extent other eastern seaboard airports, to act as a hub for traffic between South American and Asia once direct South American services are established.

Although the need for a second Sydney airport is under review by Government, the significant lead time required for such a major infrastructure development will mean that any new airport approved will not impact on the period up to 2020.

3.6.5 Australian Gateways

Australia's international gateways serve a dual function as entry and exit points for international services and dispersal points for traffic connecting to domestic and regional destinations.

Table 3.8 shows the Australian city of arrival and departure for New Zealand visitors to Australia in 2010. This shows that Sydney is the largest arrival city accounting for 37% of New Zealand visitor arrivals. Melbourne and Brisbane are also major airports for this market accounting for 23% and 26% of arrivals respectively. The Gold Coast accounts for around 9% of arrivals and departures.

Table 3.8: Share of Arrivals and Departures by City for New Zealand Visitors, 2010

	Arrival City								
Departure City	**Adelaide**	**Brisbane**	**Cairns**	**Darwin**	**Melbourne**	**Gold Coast**	**Perth**	**Sydney**	**Total**
Adelaide	0.9%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.1%	**1.2%**
Brisbane	0.0%	22.6%	0.3%	0.0%	0.8%	0.8%	0.2%	1.8%	**26.4%**
Cairns	0.0%	0.4%	1.2%	0.0%	0.0%	0.0%	0.0%	0.2%	**1.7%**
Darwin	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.2%**
Melbourne	0.3%	0.4%	0.0%	0.0%	20.0%	0.1%	0.2%	1.5%	**22.4%**
Gold Coast	0.0%	1.1%	0.0%	0.0%	0.1%	7.3%	0.0%	0.3%	**8.9%**
Perth	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	2.2%	0.2%	**2.6%**
Sydney	0.2%	1.0%	0.1%	0.1%	1.6%	0.2%	0.4%	33.0%	**36.5%**
Total	**1.4%**	**25.7%**	**1.6%**	**0.1%**	**22.8%**	**8.4%**	**2.9%**	**37.1%**	**100.0%**

Source: Based on IVS Data

Table 3.9 shows the Australian city of arrival and departure for South and Southeast Asian visitors to Australia in 2010. Sydney and Melbourne each accounts for 31% of arrivals and departures from this region. Perth also has a significant share (around 20%) with Brisbane at around 9%.

Table 3.9: Share of Arrivals and Departures by City for South & SE Asian Visitors, 2010

	Arrival City								
Departure City	**Adelaide**	**Brisbane**	**Cairns**	**Darwin**	**Melbourne**	**Gold Coast**	**Perth**	**Sydney**	**Total**
Adelaide	2.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	0.1%	**2.5%**
Brisbane	0.1%	7.2%	0.0%	0.1%	0.5%	0.0%	0.1%	1.2%	**9.2%**
Cairns	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.2%**
Darwin	0.0%	0.1%	0.2%	1.7%	0.1%	0.0%	0.0%	0.1%	**2.2%**
Melbourne	0.3%	0.5%	0.0%	0.1%	27.4%	0.1%	0.2%	1.9%	**30.5%**
Gold Coast	0.0%	0.1%	0.0%	0.0%	0.4%	2.9%	0.0%	0.0%	**3.4%**
Perth	0.2%	0.3%	0.0%	0.0%	0.4%	0.0%	19.4%	0.7%	**20.9%**
Sydney	0.3%	0.7%	0.1%	0.1%	2.4%	0.1%	0.4%	27.0%	**31.1%**
Total	**3.0%**	**9.0%**	**0.5%**	**2.0%**	**31.3%**	**3.1%**	**20.2%**	**31.0%**	**100.0%**

Source: Based on IVS Data

Note: due to the decimal rounding of the figures, actual figures may vary slightly.

Table 3.10 shows the Australian city of arrival and departure for Northeast Asian visitors to Australia in 2010. Sydney is the major arrival and departure city accounting for almost half the visitors. Melbourne and Brisbane each have shares of around 15% to 17%.

Table 3.10: Share of Arrivals and Departures by City for NE Asian Visitors, 2010

	Arrival City								
Departure City	**Adelaide**	**Brisbane**	**Cairns**	**Darwin**	**Melbourne**	**Gold Coast**	**Perth**	**Sydney**	**Total**
Adelaide	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	**1.0%**
Brisbane	0.1%	10.1%	0.2%	0.0%	1.6%	0.1%	0.0%	5.2%	**17.4%**
Cairns	0.0%	0.1%	6.1%	0.0%	0.1%	0.6%	0.1%	0.4%	**7.5%**
Darwin	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	**0.3%**
Melbourne	0.7%	0.6%	0.2%	0.0%	12.7%	0.2%	0.1%	2.6%	**17.1%**
Gold Coast	0.0%	0.2%	1.0%	0.0%	0.1%	4.4%	0.0%	0.7%	**6.4%**
Perth	0.0%	0.1%	0.1%	0.0%	0.2%	0.0%	3.6%	0.5%	**4.4%**
Sydney	0.1%	4.2%	0.8%	0.0%	2.5%	0.8%	0.3%	37.3%	**45.9%**
Total	**1.7%**	**15.3%**	**8.5%**	**0.2%**	**17.1%**	**6.2%**	**4.2%**	**46.7%**	**100.0%**

Source: Based on IVS Data

Table 3.11 shows the Australian city of arrival and departure for North American visitors to Australia in 2010. It is not surprising to find that Sydney is currently the dominant city.

Table 3.11: Share of Arrivals and Departures by City for North American Visitors, 2010

	Arrival City								
Departure City	**Adelaide**	**Brisbane**	**Cairns**	**Darwin**	**Melbourne**	**Gold Coast**	**Perth**	**Sydney**	**Total**
Adelaide	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	**0.3%**
Brisbane	0.0%	7.0%	0.2%	0.0%	0.8%	0.0%	0.1%	3.4%	**11.5%**
Cairns	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	**0.7%**
Darwin	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%	**0.5%**
Melbourne	0.1%	0.6%	0.1%	0.0%	9.0%	0.1%	0.1%	4.6%	**14.6%**
Gold Coast	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	**0.3%**
Perth	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	1.4%	0.5%	**2.2%**
Sydney	0.1%	4.1%	0.8%	0.7%	5.3%	0.1%	0.9%	57.8%	**69.9%**
Total	**0.4%**	**11.9%**	**1.6%**	**0.9%**	**15.2%**	**0.5%**	**2.6%**	**67.0%**	**100.0%**

Source: Based on IVS Data

Note: due to the decimal rounding of the figures, actual figures may vary slightly.

3.6.6 Capacity Constraints on Growth

The aviation industry depends heavily on the supply of adequate airport infrastructure to support growth, requiring significant capital outlay.

Capacity constraints represent a significant barrier to growth in air services and governments are increasingly allowing foreign investment to help provide the funding to enable airport infrastructure to be developed.

The difficulty faced by airport owners and operators, and their airline customers, is that demand for air services can change rapidly by a significant amount. However, airport construction and redevelopment is a time consuming task.

Therefore demand and supply are often misaligned unless strategic planning for infrastructure development pre-empts increasing passenger and cargo throughput.

This conundrum is not limited to airports. Air navigation service providers (ANSPs) are also faced with requiring capital for infrastructure, and in particular technological changes. ANSPs also have the challenge of attracting and retaining skilled air traffic controllers. Lack of forward planning by ANSPs can lead to airspace congestion, inhibiting an airport's growth prospects.

Perhaps the most serious example of an airport struggling to cope with increasing demand is Jakarta Soekarno-Hatta International Airport which has been handling almost double its design capacity in recent years. A number of Indian airports also suffer from congestion as airport modernisation programmes to provide upgraded infrastructure have failed to keep pace with increasing demand. Even where expansion of existing airports and construction of new airports is planned, delays in commencing the projects often means that insufficient capacity has been allowed for compared to growth forecasts.

Regulatory issues can also prevent an airport reaching its full growth potential. Governments are often reluctant to award fifth freedom rights to carriers where these carriers will compete more effectively than the home carrier. The confidence to award more fifth freedom rights to other carriers typically arises when the local carrier becomes sufficiently competitive as a sixth freedom carrier.

4. Travel Market Factors Impacting on Service Development

This section focuses on characteristics of the various visitor markets that have an impact on airline profitability and/or service viability.

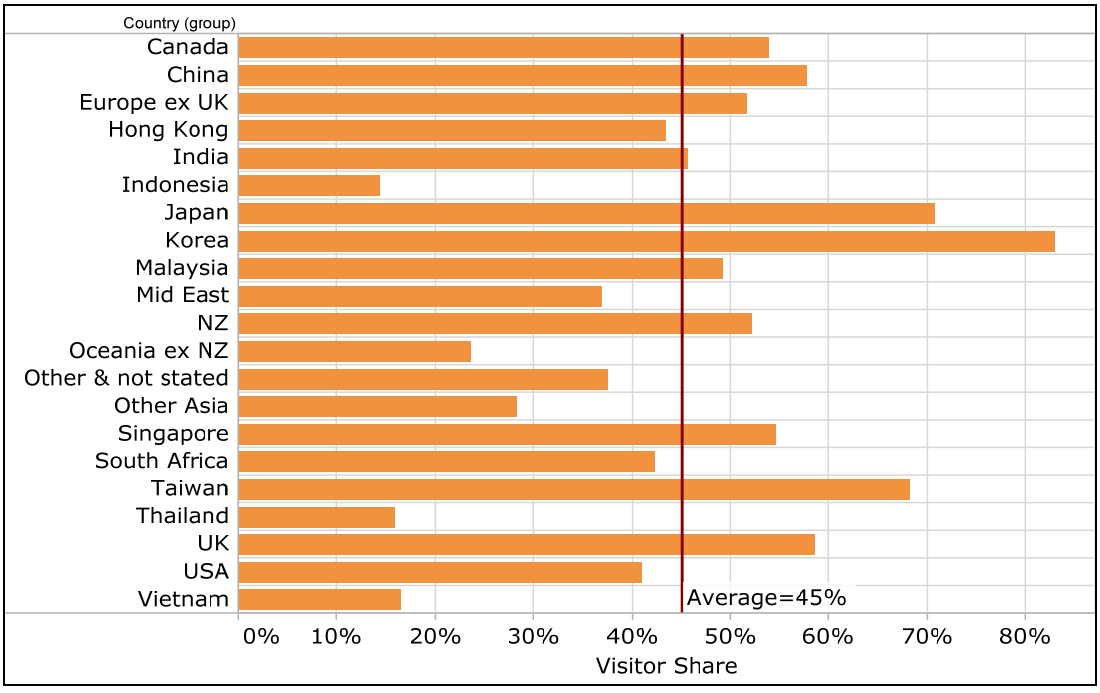
These include:

- Inbound/outbound travel mix;
- Purpose of travel (business, Visiting Friends and Relatives (VFR), leisure);
- Travel types (i.e. Group/Non-Group);
- Average length of stay; and
- Seasonality issues.

4.1 Inbound/Outbound Travel Mix

An important element in determining potential profitability of a route is the balance of visitors and residents (**Figure 3.1**). As shown visitor share is very low on a number of routes such as Thailand, Indonesia and Vietnam. On the other hand visitor share is relatively high for Japan, Korea and Taiwan.

Figure 4.1: Visitor Share of Country Pairs for All Purposes of Travel, 2010



Source: Based on IVS Data

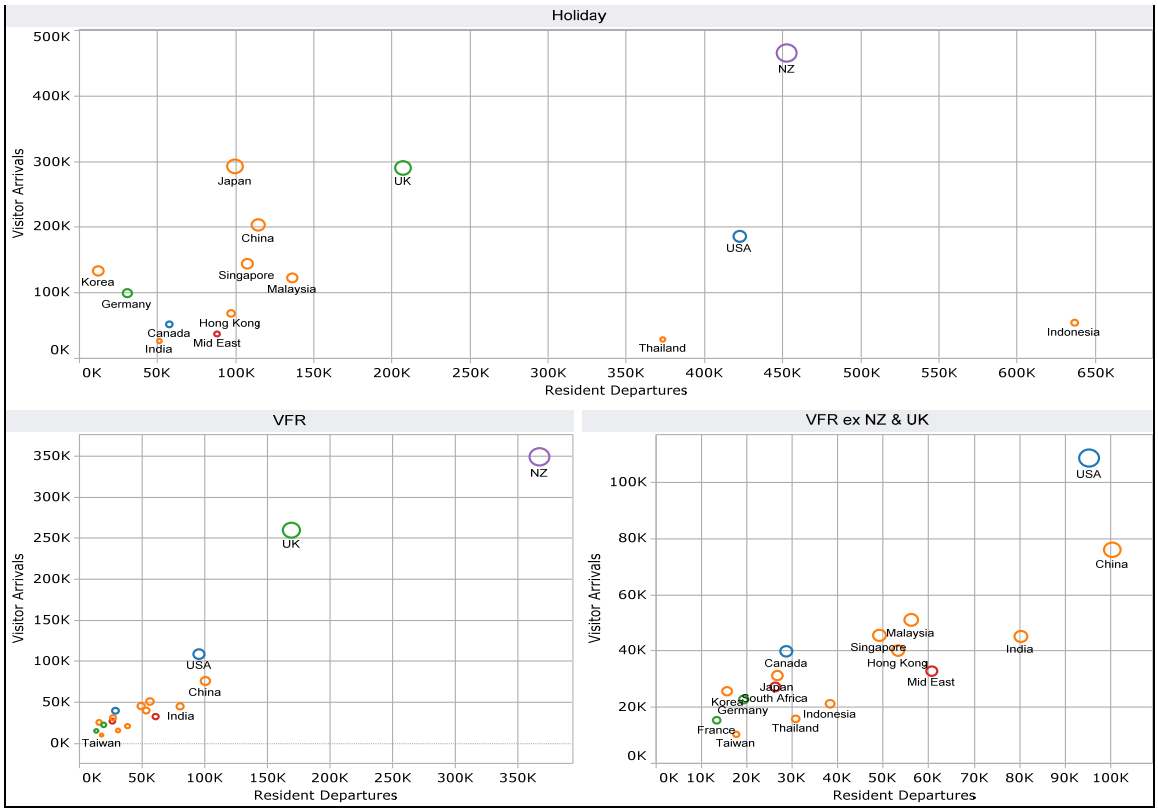
4.2 Travel Purpose

Travel purpose has an impact on issues such as airlines yield (business travellers tend to generate higher yields for airlines), airfare sensitivity and seasonality. In the scatter charts shown for 2010 below:

- Australian resident departure numbers are shown (on the horizontal axis) for each purpose by main destination.
- Overseas visitor arrivals are shown (on the vertical axis) for each travel purpose.

Figure 4.2 shows scatter charts for holiday and VFR travel.

Figure 4.2: Visitors and Residents by Holiday and VFR Travel Purposes, 2010



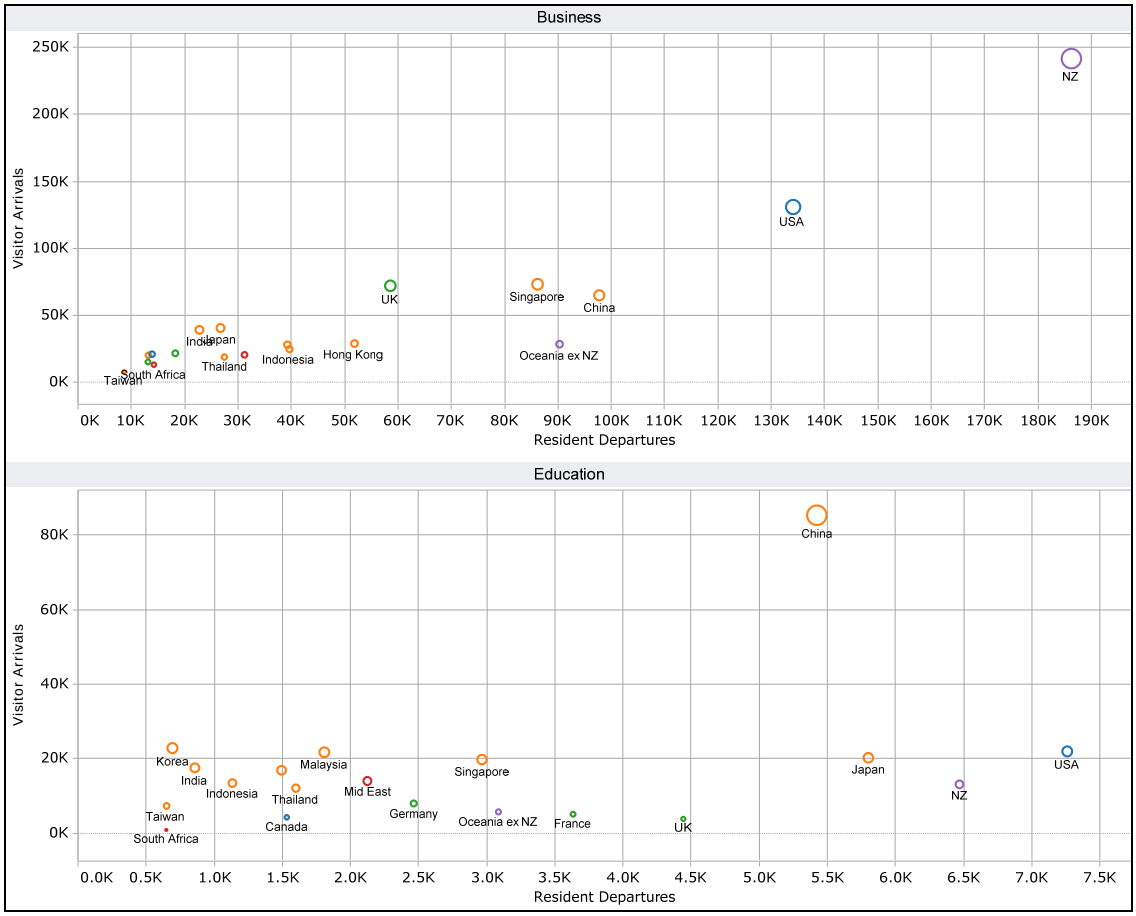
Source: Based on ABS Data

Figure 4.3 shows scatter charts for business and education:

- The major holiday markets are New Zealand, Japan, UK and China with China having the largest growth potential.

- New Zealand and the UK are overwhelmingly ahead of the other markets in terms of travel for VFR (both for visitors and residents). The USA, China and a number of other Asian markets have reasonably large VFR components.
- As mentioned above, business is an important travel purpose for airlines seeking higher yields. New Zealand and the USA dominate business travel. Of the remaining markets Japan and India rank highly followed by a number of Asian markets.
- China dominates the markets for travel for education purposes.

Figure 4.3: Visitors and Residents by Business and Education Travel Purposes, 2010



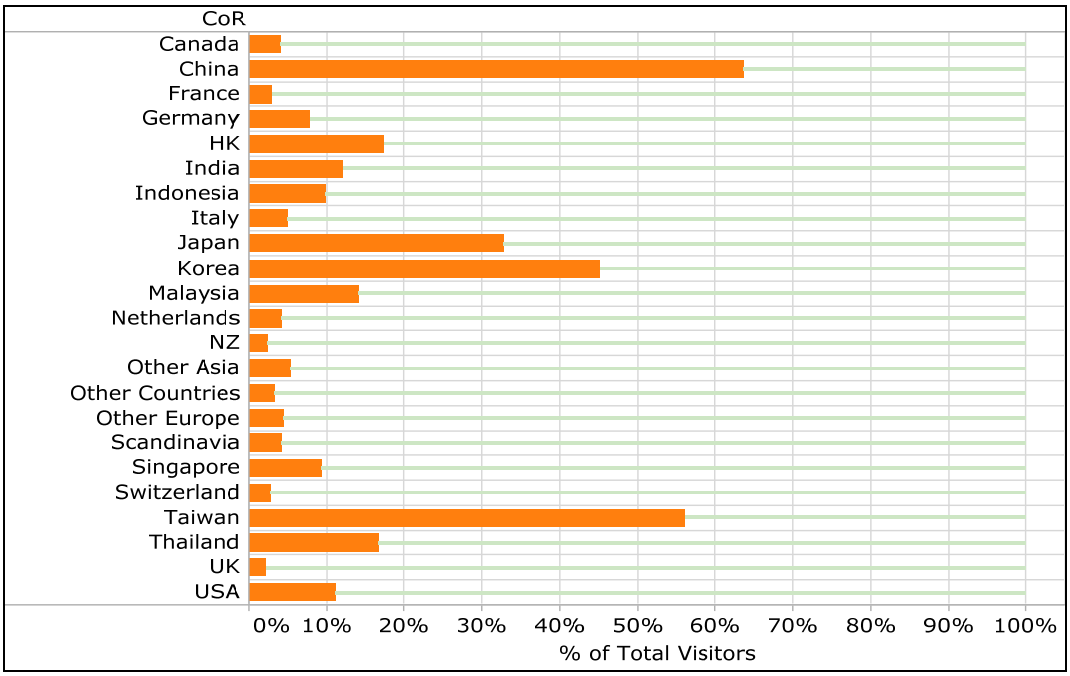
Source: Based on ABS Data

4.3 Group/Non-Group Travel

Generally the expectation would be that lower airline yields would be associated with markets having a high proportion of visitors travelling in Groups.

The Group/Non Group mix of holiday makers is shown for each market in **Figure 4.4**. Note that Group shares are highest for China, Taiwan, Japan, Hong Kong, Thailand and Malaysia.

Figure 4.4: Group Travel Share of Total Visitors for Holiday



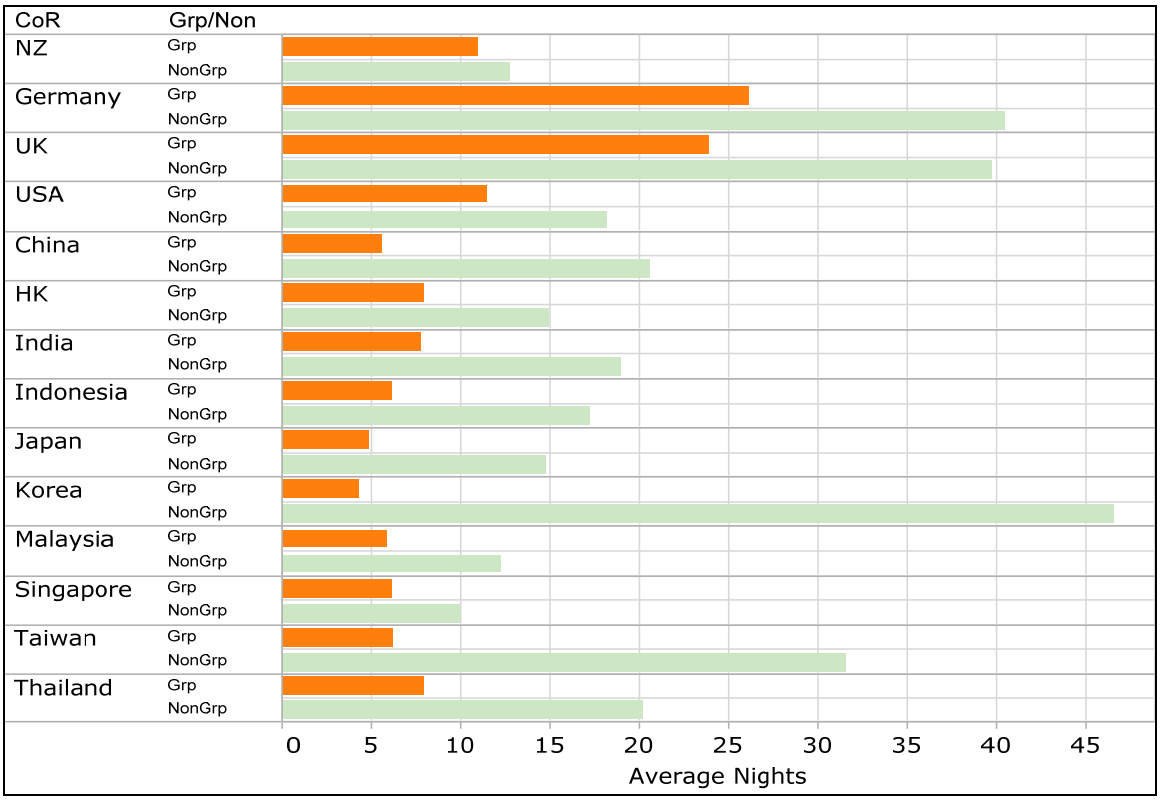
Source: Based on IVS Data

4.4 Average Stay for Tourists

In addition to the number of visitors, the average number of nights per tourist is also important. This is important because it contributes to the value of the tourist from an economic perspective but it also has a large impact on dispersion.

Figure 4.5 shows the Group and Non-Group average stay for holiday makers from major markets visiting Australia.

Figure 4.5: Group and Non-Group Average Nights Stay for Holiday Visitors, 2010



Source: Based on IVS Data

4.5 Issues of Seasonality

Table 4.1 provides seasonal indices calculated for major visitor markets to Australia, the aggregate indices for the visitor markets and aggregate indices for Australian resident departures.

The indices represent the ratio of the seasonal expectation for a month relative to an average month. For example, for New Zealand July is the peak month with a ratio 16% above the average expectation. February is the low point in the year, reaching only 71% of an average month.

The UK and European markets have the highest seasonal characteristics with a strong desire to travel in the Northern Winter period.

Of the nearer markets China exhibits the strongest seasonal characteristics with its very high Chinese New Year outcome.

Table 4.1: Seasonality Indices for Major Visitor Markets

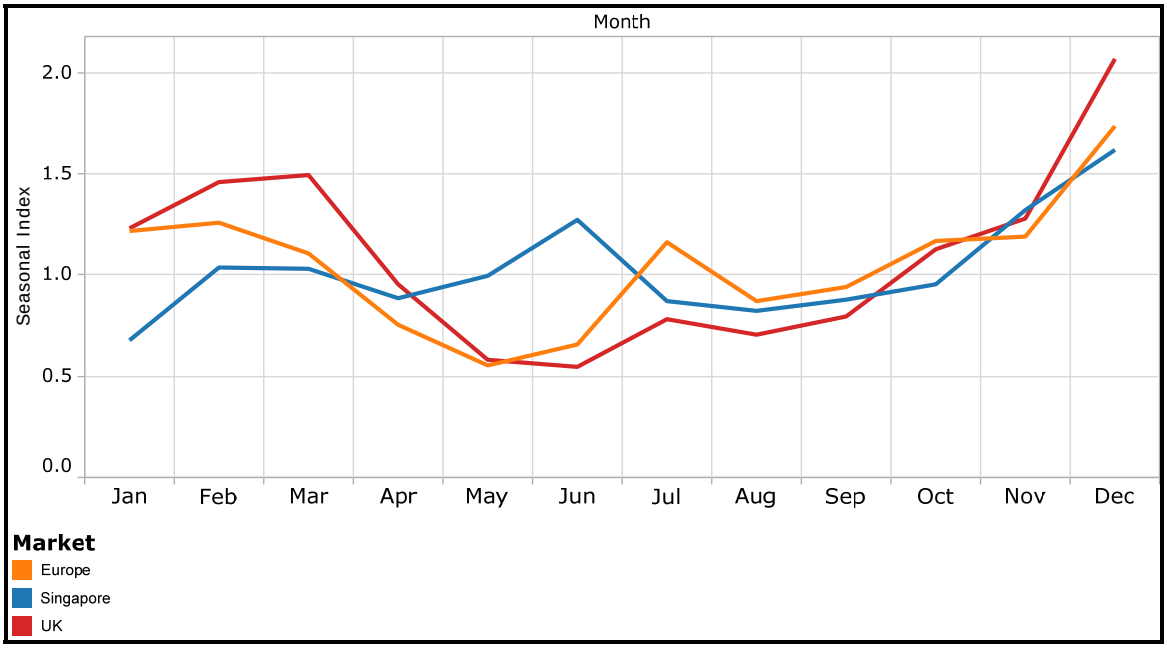
Visitor Markets	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Short Haul												
NZ	0.75	0.71	0.90	1.04	0.94	1.01	1.16	1.06	1.21	1.16	0.98	1.08
Oceania	1.23	0.93	0.91	0.94	0.93	0.83	0.99	0.83	0.97	0.97	1.03	1.45
NE Asia												
China	1.38	1.86	1.00	0.95	0.68	0.57	1.13	0.85	0.72	0.79	1.04	1.02
Hong Kong	0.95	1.32	1.04	1.07	0.71	0.87	1.25	0.96	0.79	0.92	0.84	1.28
Japan	0.89	1.13	1.21	0.83	0.75	0.73	1.03	1.28	1.05	0.98	1.05	1.07
Korea	1.38	1.02	0.96	0.90	0.85	0.83	1.14	0.96	0.79	0.96	1.06	1.15
Taiwan	1.05	1.22	0.97	1.01	0.91	0.96	1.34	1.09	0.86	0.90	0.81	0.89
Sth SE Asia												
India	0.84	1.07	1.06	1.03	1.32	1.03	0.92	0.89	0.82	0.87	0.98	1.16
Indonesia	0.76	1.08	0.94	0.83	0.75	1.12	1.20	0.80	1.24	0.99	0.77	1.52
Malaysia	0.67	1.26	0.96	0.93	1.18	0.83	0.88	0.93	0.98	0.91	1.15	1.32
Singapore	0.66	1.01	1.00	0.86	0.96	1.24	0.85	0.80	0.85	0.93	1.28	1.57
Thailand	0.76	0.90	1.15	1.61	0.95	0.79	1.08	0.95	0.87	1.14	0.76	1.03
Vietnam	0.88	1.39	1.05	0.90	0.78	0.95	1.13	0.89	0.82	1.02	0.95	1.24
Other												
Mid East	0.97	1.12	0.95	0.81	0.62	0.91	1.80	0.94	0.88	0.85	0.87	1.27
Canada	1.29	1.38	1.26	0.84	0.68	0.57	0.89	0.69	0.77	1.01	1.13	1.49
USA	0.94	1.17	1.11	0.89	0.81	1.06	1.19	0.89	0.79	0.94	1.01	1.19
Europe	1.16	1.20	1.06	0.71	0.52	0.62	1.10	0.83	0.89	1.11	1.13	1.66
UK	1.13	1.35	1.38	0.88	0.54	0.50	0.72	0.65	0.73	1.04	1.18	1.91
Total	**0.97**	**1.11**	**1.06**	**0.92**	**0.78**	**0.83**	**1.06**	**0.92**	**0.93**	**1.02**	**1.05**	**1.34**
Residents	**0.87**	**0.74**	**0.94**	**0.97**	**0.98**	**1.12**	**1.03**	**0.98**	**1.20**	**0.95**	**0.91**	**1.31**

Source: Based on ABS Data

The challenge for airlines in marketing to visitor markets, and particularly when hubbing is involved, is shown in **Figure 4.6**.

The chart shows the seasonal indices for UK, Europe (excluding UK) and Singapore. Singapore is a major hub for traffic from UK and Europe to Australia. However the end of year peak for the longer haul markets coincides with the Singapore market. The higher yielding traffic, generally shorter haul traffic, can in these circumstances 'crowd out' the longer haul UK/Europe traffic.

Figure 4.6: Seasonality Indices for Visitor Markets from UK, Europe and Singapore



Source: Based on ABS Data

Part II: Market Development Scenarios & Recommendations

5. Review of Capacity and Traffic Forecasts

The Stage 2 Study Team has also examined the two major published sources of future passengers:

- Bureau of Infrastructure, Transport and Regional Economics (BITRE), *Aircraft Movements through Capital City Airports to 2029/30* Report 117, December 2009.
- Tourism Forecasting Committee (TFC), *Forecast 2011 Issue 1*, Tourism Research Australia, Canberra, May 2011.

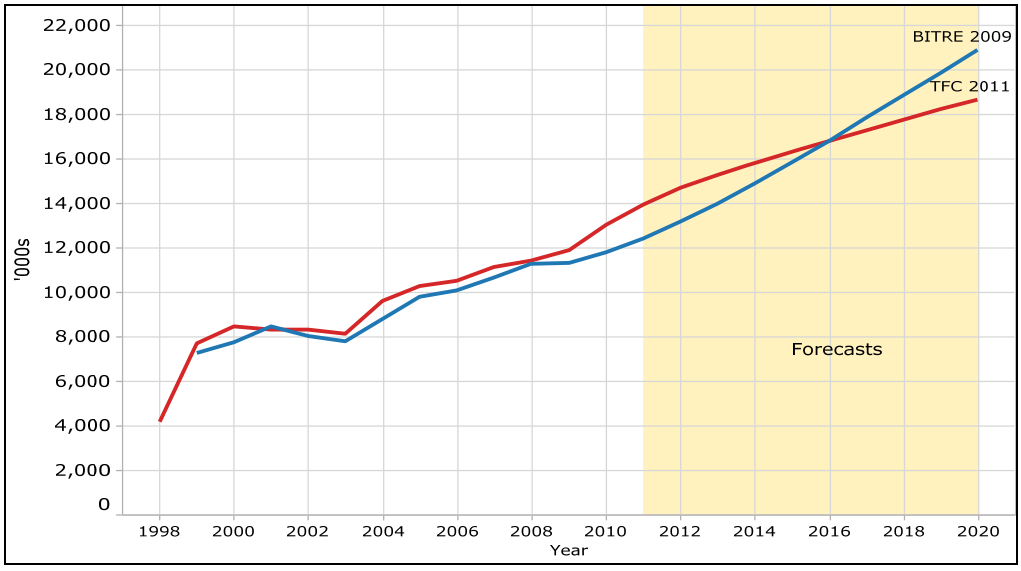
The published BITRE report included international passenger and aircraft movement forecasts for Australia's capital city airports.

The international passenger movements were developed using separate forecasting models for overseas visitors (arrivals and departures) and Australian residents travelling overseas (again arrivals and departures). Whilst the international visitor and resident forecasts are aggregated in the BITRE report the separate forecasts were provided to the Study Team and are reviewed here.

The TFC forecasts are published for international visitors by market and travel purpose and for Australian resident departures by selected markets.

Figure 5.1 compares the BITRE and TFC forecasts in aggregate. To facilitate this comparison the total forecasts for BITRE are halved to create one-way movements to compare with TFC.

Figure 5.1: BITRE Actual Pax to 2008/09, Forecasts to 2020; TFC Actuals to 2010, Forecasts to 2020



Notes: BITRE forecasts for years end June 30 each year and the TFC for year end 31 December.

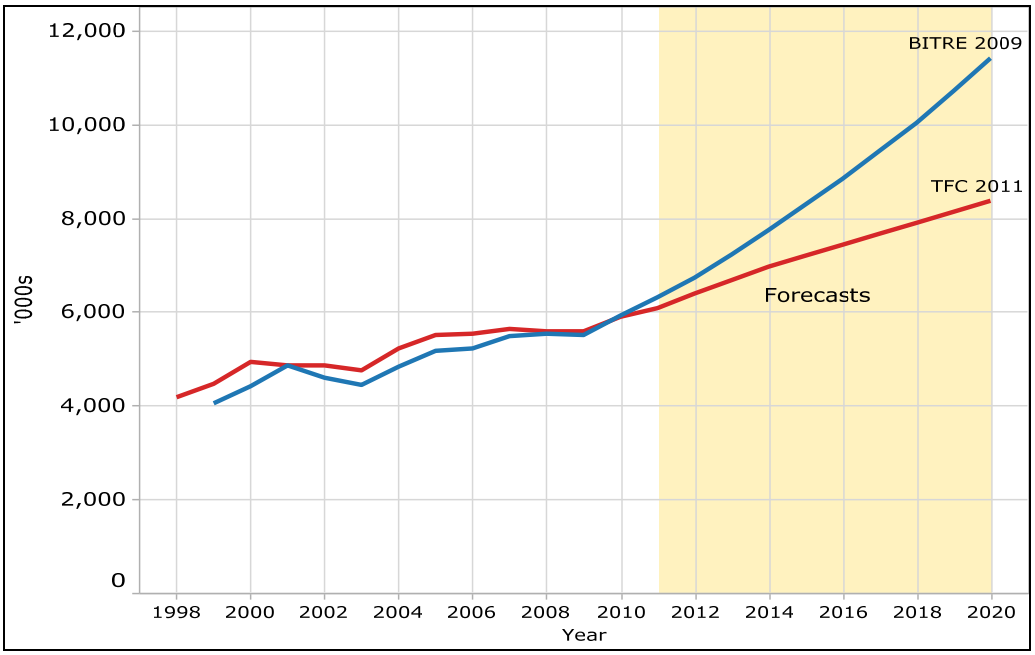
Source: TFC and BITRE forecasts.

Note that whilst the short term trajectory for each forecast varies – TFC's is higher for the first few years of the forecasting period by 2015/16 - the two are similar (at around 16.7 million) before a longer term divergence with the TFC growth rate slowing relative to the BITRE. By 2019-20 the BITRE is forecasting around 20.8 million visitor arrivals and resident departures (41.7 million passenger movements) compared to 18.6 million for the TFC.

Figure 5.2 compares the visitor forecasts for each forecaster. Notwithstanding some issues of comparability between the BITRE and TFC data it is clear that the two diverge in their visitor forecasts.

By 2015/16 the BITRE is 19% above the TFC and by 2019/20 the difference is 36%. In 2019/20 the BITRE forecasts 11.4 million visitor arrivals (22.8 million visitor movements divided by 2) with the TFC forecasting 8.4 million visitors in 2020.

Figure 5.2: BITRE Actual Visitors to 2008/09, Forecasts to 2020; TFC Actuals to 2010, Forecasts to 2020

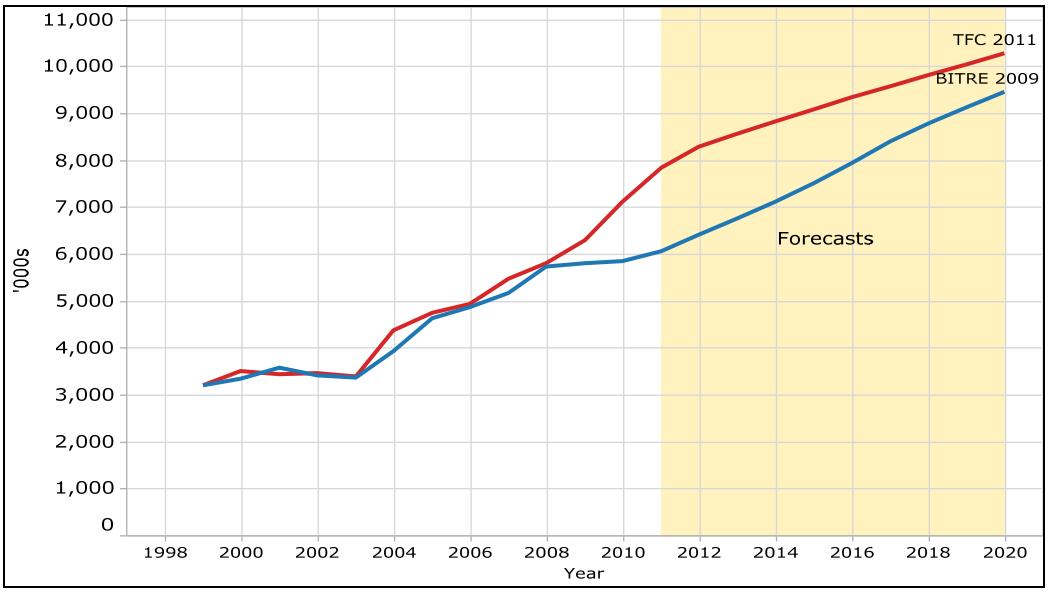


Notes: BITRE forecasts for years end June 30 each year and the TFC for year end 31 December.

Source: TFC and BITRE forecasts.

Figure 5.3 compares the Australian resident forecasts for each forecaster. A clear divergence exists between the two forecasters with respect to their forecasts for overseas travel by Australian residents. The variation between them peaks in the near term at around 23% and decreases to 8% by 2019/20.

Figure 5.3: BITRE Actual Australian Resident Travel to 2008/09, Forecasts to 2020; TFC Actuals to 2010, Forecasts to 2020



Notes: BITRE forecasts for years end June 30 each year and the TFC for year end 31 December.

Source: TFC and BITRE forecasts.

BITRE also produced forecasts of aircraft movements. Achievement of the BITRE forecasts (visitor and resident) by 2019/20 requires an increase from around 186 international return flights per day in 2008/09 to 233 in 2014/15 and to 293 by 2019/20. This is a Compound Annual Growth Rate (CAGR) of 3.8% over the first six years to 2014/15 and then 4.6% for the period from 2014/15 to 2019/20.

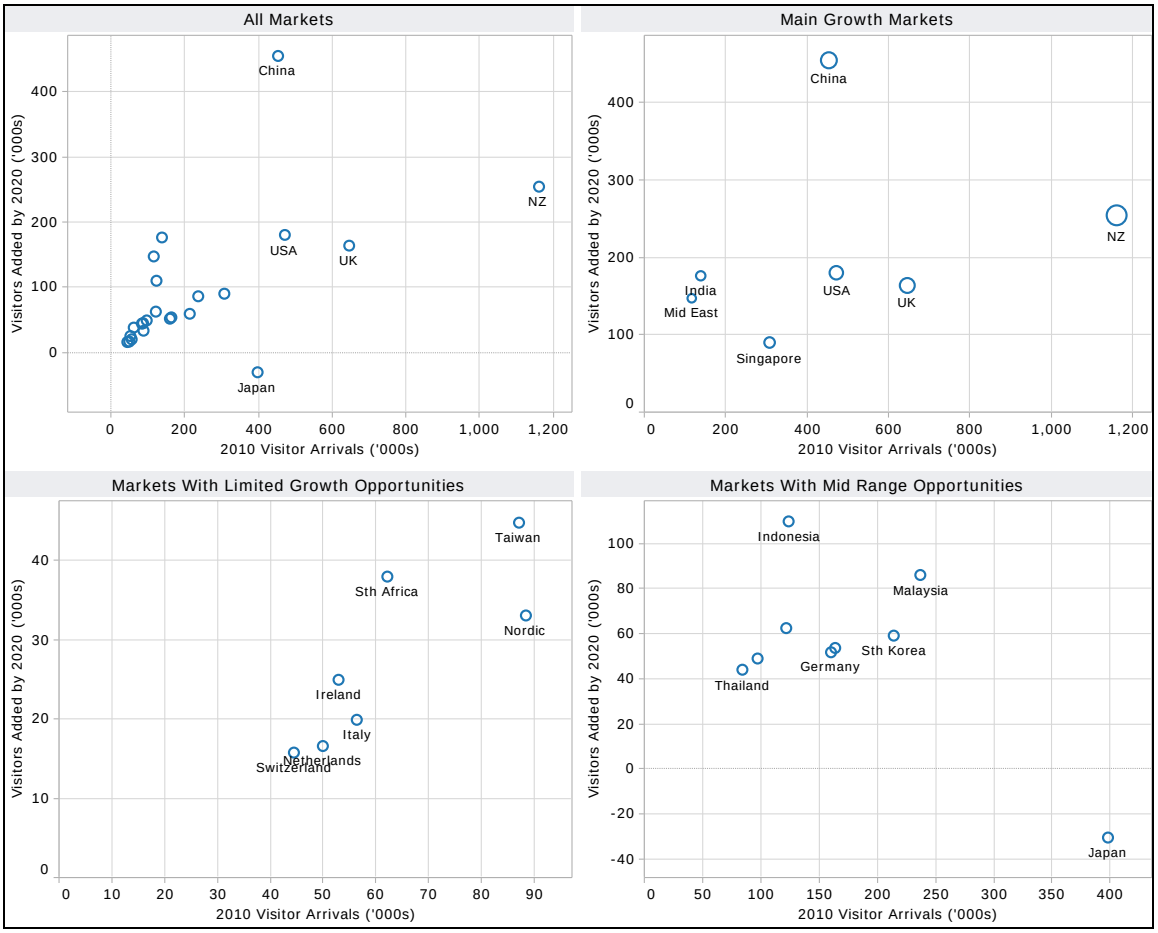
This compares to a CAGR of 4.9% over the past decade. However an additional 75 daily flights were added between 2000 and 2010 compared to the 102 additional flights per day implied by the BITRE forecasts.

5.1 International Markets Driving TFC 2020 Forecasts

From a growth perspective the main markets are those forecast to generate the largest increase in visitors over the decade to 2020.

Figure 5.4 below classifies the markets by their forecast growth over the next decade.

Figure 5.4: Markets by Growth in Number of Additional Visitors to Australia 2010 to 2020



Source: Based on TFC Forecasts

Each chart shows:

- The number of visitor arrivals in 2010 (in the latest TFC forecast document) on the horizontal axis.
- The additional visitors forecast for each market from 2010 to 2020.

The chart in the upper left quadrant shows all the markets. Markets are then classified as follows:

- Main growth opportunities: The chart on the upper right hand side shows that China is the largest growth market with an additional 455,000 visitors by 2020. Other markets shown include New Zealand, USA, India, UK, Middle East and Singapore.
- Mid-Range Opportunities: Shown in the bottom right quadrant these markets are forecast to contribute between 40,000 and 125,000 additional visitors over and

above their 2010 level. Japan is added in this chart because of its large current size. However, it is forecast to provide fewer visitors in 2020 than in 2010 (368,000 in 2020 compared to 398,000 in 2010. Note that the TFC expects Japanese visitor numbers to Australia to fall by 26.5% in 2011 due to the impact of the earthquake, tsunami and nuclear crisis.

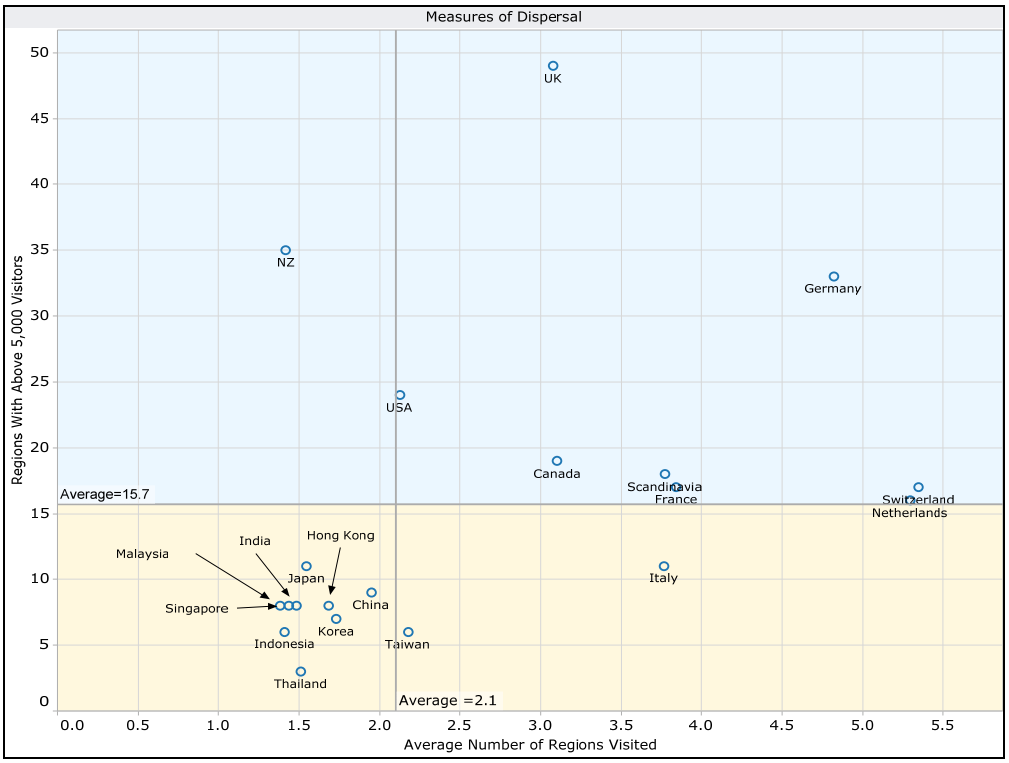
- Lower Range Opportunities: Shown in the bottom left quadrant, these markets each contribute less than 45,000 additional visitors over the 2010 to 2020 period. This category includes a number of European countries, Taiwan and South Africa.

5.2 Markets Central to Distribution across Australia

A second perspective in determining the significance of markets is their importance in regional dispersion. This has been determined by assessing the importance of markets for different parts of Australia.

Figure 5.5 shows the dispersal characteristics for each market on two axes.

Figure 5.5: Dispersal Characteristics of Markets: Number of Regions With Greater than 5,000 Visitors (Vertical Axis) & Average Numbers of Regions Visited per Visitor (Horizontal Axis), 2010



Source: Based on IVS Data

- The vertical axis shows the number of tourist regions across Australia that received at least 5,000 visitors in 2010 from each market. Note the average number of tourist regions receiving above 5,000 visitors was 15.
- The horizontal market shows the number of regions visited by each visitor during their trip to Australia. Note the average number of tourist regions visited by each visitor in 2010 was 2.1.

It is clear from the chart that currently the most important markets from a dispersal viewpoint are the longer haul markets from UK, Europe, North America and from New Zealand. The Asian markets visit fewer regions on average during their stay and have a lower dispersal pattern than average.

6. Market Development Scenarios

This section provides an overview of current airline services and discusses prospective medium and long term scenarios for each of the following market categories:

- Short-Haul (New Zealand)
- Medium-Haul:
  - Northeast Asia (China/Hong Kong, Japan, Korea and Taiwan)
  - South and Southeast Asia (ASEAN region and India)
  - Middle East (UAE, Qatar).
- Long-Haul:
  - UK/Europe (UK, Germany and France)
  - Americas (US, Canada and South America)

The key inbound markets within the broader groupings above, as identified in the TFC, BITRE and Tourism Australia forecasts and through consultation for this project, are also reviewed.

The range of scenarios presented combine current knowledge and information about airline strategy and other aviation issues with extrapolated outcomes for 0-5 years and 6-10 year periods. The developments identified represent, in some cases, a likely scenario and in others a more speculative one.

Certain assumptions are made about aviation market conditions, including a stable economic and operational environment and continuation of growth trends anticipated by forecasters.

In considering the scope of influences and issues, the Stage 2 Study Team takes into account the impact of regulatory issues; aircraft types and usage; airline types (i.e. full service, low cost); alliances; market development; hub usage; key airlines; and impediments.

At the conclusion of each market scenario section, a brief assessment is provided of the capacity to reach growth targets given the dynamics affecting or likely to affect air travel.

6.1 The Tasman Market

There are really two categories in this segment, New Zealand and the Pacific Islands:

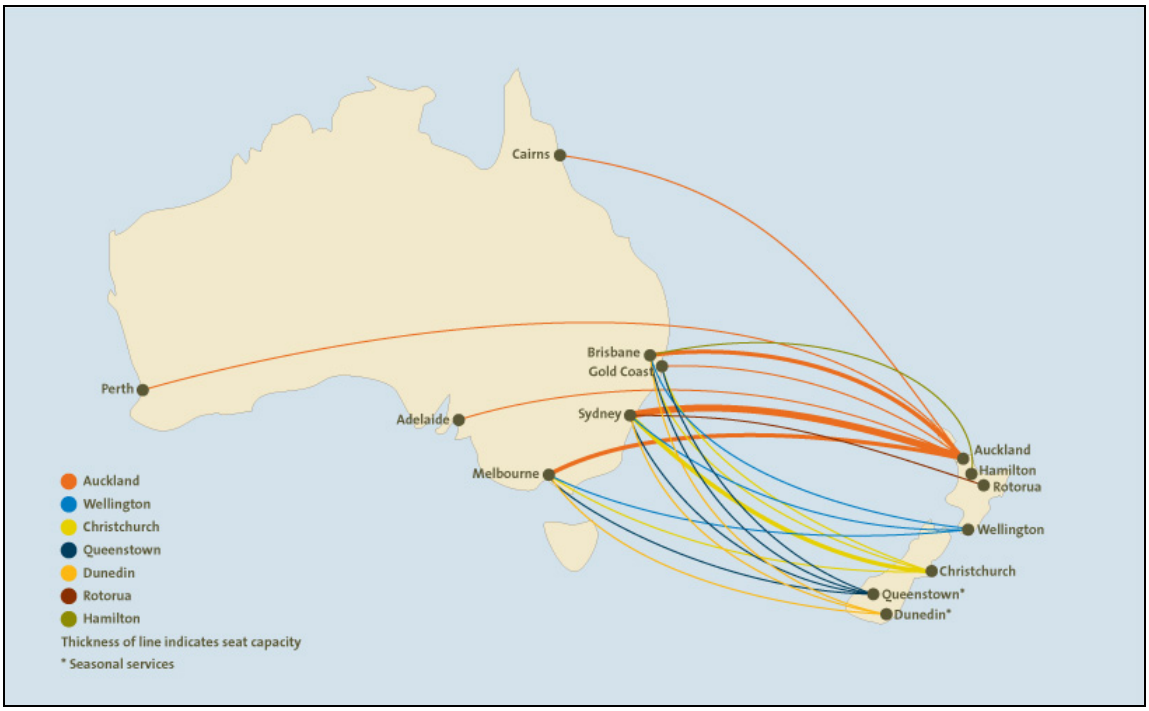
- New Zealand is a relatively high frequency market with a mix of visitors and residents and travel purposes.
- The Pacific Islands are either service routes or holiday routes with a heavy reliance on Australian outbound traffic.

Given that the Pacific islands are mostly outbound markets, we have focused on the Australia-New Zealand market.

6.1.1 Overview of Current Airline Services

The current air services operated between Australia and New Zealand are shown in **Figure 6.1**.

Figure 6.1: Air Services between Australia and New Zealand



Note: Source: Tourism Australia

Table 6.1 lists the airline shares of New Zealand visitors carried to Australia in 2010. Air New Zealand is the dominant carrier with almost 48% of passenger share, followed by the Qantas Group (Qantas mainline and Jetstar) with 24.3%.

Table 6.1: Share of Carriage of Visitors to Australia from New Zealand by Airline, 2010

Airlines	Share of New Zealand Visitors
Air New Zealand	47.8%
Qantas Airways	15.7%
Jetstar Airways	8.6%
Pacific Blue	15.4%
Emirates Airline	8.2%
Other	4.3%
Sum	**100.0%**

Source: Department of Immigration and Citizenship

Table 6.2 provides a snapshot of current weekly capacity limits under the Air Services Agreement with New Zealand, utilization of that capacity share by Australian and New Zealand carriers and current orders for Australia-capable aircraft. The ASA with New Zealand allows for open capacity.

Table 6.2: Snapshot of ASA Utilisation, Australia-Capable Aircraft Orders for the New Zealand Market

	Country	Total Negotiated Weekly Capacity (both countries)	% Allowance Utilised by Carriers		Total Orders Australia-Capable Aircraft		ASA Requirements
			Australia	Foreign	2011-15	2016-20	
Tasman	New Zealand	Open capacity	n/a	n/a	8	3	No constraints

Source: Airlines, SRS Analyser

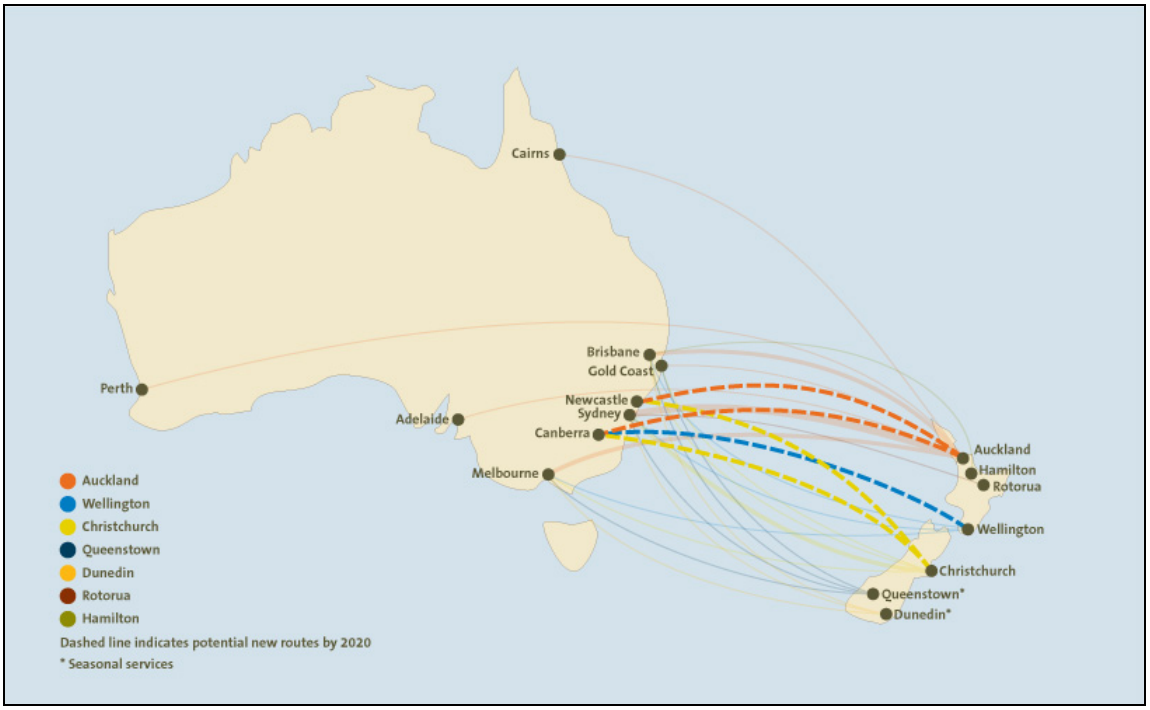
6.1.2 Medium and Long Term Scenarios

Table 6.3: Summary of Medium and Long Term Scenarios, New Zealand

TFC Forecasts to 2020	2010-2015	2015-2020
Forecast Arrivals Growth (%)	2.6	1.4
Resident Departures Growth (%)	3.0	2.2
Development Scenarios		
	Medium term	**Long Term**
Regulatory Environment	Relaxation/simplification of border controls, eg single point of entry processing	Common border, Trans-Tasman effectively a domestic route
Aircraft Type/Usage	Streamlined product on Australian and New Zealand legacy carriers (e.g. higher density seating, no-frills inflight product) to compete with LCCs	Expanded usage of new, more economic aircraft types
Airline Type	Entry of more LCCs	Long-haul LCCs using Trans-Tasman as an extension sector
Alliances	Bedding down of Virgin Australia/Air New Zealand alliance in conjunction with Virgin's Etihad partnership and future alliance partners, improved offering for corporate and loyalty programme customers	
Market Development	Growth in Trans-Tasman market as New Zealand economy recovers	Increase in non-stop flights to ports beyond east coast Australia
	Establishment direct services to Australian regional cities (e.g. Newcastle, Canberra)	Triangulation of Australia-New Zealand markets (more dual destination pairing)
Hub Usage	Continued use of east coast capital cities as key dispersal points to regional airports, but growing direct services to regional centres	Development of regional hubs outside major cities (e.g. Newcastle, Canberra)
Key Airlines	Air New Zealand, Qantas, Jetstar, Virgin Australia (Pacific Blue), Emirates	Air New Zealand/Virgin Australia, Qantas/Jetstar, Emirates, Etihad
Growth Impediments	Slot constraints at Sydney Airport	Excess capacity on Tasman
	Carbon emissions trading scheme	Route profitability constrained
	Weakness of New Zealand dollar vs Australian dollar	Inconsistencies of Australian and New Zealand visa requirements for foreign visitors
	Threat of rising fuel costs	Possible introduction of curfews at more Australian airports (e.g. Brisbane)

The figure below illustrates potential new routes which could be operating between Australia and New Zealand, consistent with the scenarios.

Figure 6.2: Potential New Routes between Australia and New Zealand



Source: CAPA Consulting

Medium Term Scenarios

New Zealand expects to experience continued subdued economic conditions as the country recovers and rebuilds following the Christchurch earthquakes. New Zealand Treasury has downgraded economic growth forecasts for 2011 to 1%, but expects rebuilding work in the Canterbury region to help drive improved economic growth in 2012. Data released to April 2011 shows a rebound in business confidence and supports ongoing gradual recovery.

The earthquake and resulting economic downturn has had an impact on tourism with short term capacity cuts by Trans-Tasman carriers. However, these services should be reinstated within six to 12 months and stable growth in tourism is expected in the medium term.

New Zealand has a small population of 4.4 million with the growth rate forecast by Statistics New Zealand to slow from the current level of 1.3% to 0.6% by 2031. However, the country has relatively high per capita incomes and high propensity to travel. The Trans-Tasman market has a large volume of leisure travellers (including VFR) and as a result is vulnerable to macroeconomic conditions.

Air New Zealand estimates that almost 84% of their New Zealand to Australia traffic is leisure. It is a mature market, but with a high rate of repeat visitation, with growth prospects in the medium term likely to be moderate.

The main development for the tourism and aviation markets in the medium term is a move towards a common border between Australia and New Zealand. This is most likely to be achieved by way of a phased approach with the simplification and harmonisation of border control processes in the medium term, with a longer term goal of achieving a common border.

Airlines and airports are supportive, citing the reduction in costs and therefore the ability to reduce airfares with a corresponding stimulation of the air travel and tourism markets and broader economic benefits for both countries. Regulatory authorities are naturally more cautious as there will be costs involved in standardising practices and national security issues to consider

A first step may be to move to single point processing. Possibilities include a system similar to that operating in Canada where United States border agency officials are positioned in Canadian ports to process passengers on flights to the United States. Australian and New Zealand nationals could also be treated as domestic travellers with continued full international processing for other nationalities. A further option is to harmonise processes, practices and systems so that authority can be delegated to the other countries border officials.

In the meantime, there is a need to find a cost effective solution for Customs, Immigration and Quarantine (CIQ) at regional airports so that Australia's larger regional airports, such as Newcastle Airport, can begin to service Trans-Tasman flights.

This will provide broader dispersal of travellers to regional centres as carriers, probably LCCs, introduce point-to-point services to Australia's larger regional airports. (In 2010, 86% of arrivals from New Zealand were to Sydney, Melbourne or Brisbane.)

In the medium term, legacy carriers will come under increasing route profitability pressure given the high level of competition from low cost carriers. This will drive legacy carriers to seek cost saving and revenue enhancement initiatives such as those introduced recently by Air New Zealand to increase seat densities and streamline in-flight product.

Foreign carriers will continue to service Trans-Tasman routes as extension sectors to increase aircraft utilisation during east coast Australia layovers. We would also expect to see the introduction of one or more additional low cost carriers to Trans-Tasman routes.

The short to medium term will see the bedding down of the Virgin Australia and Air New Zealand partnership. This will be enhanced by Virgin's existing partnership with

Etihad and stated intention to enter into interline and code-share agreements with other global carriers to expand its network.

There may be some consolidation of the two carriers' Trans-Tasman services in the short term but access to the broader Australian domestic network and international feed will support Trans-Tasman capacity increases. In addition, the relationship will provide a better offering for corporate and loyalty programme customers.

Potential impediments to medium term growth prospects include:

- Shock conditions such as further natural disasters or economic downturns which will dampen demand;
- Continued weakness of the New Zealand dollar relative to the Australian dollar, making Australia a relatively high cost destination;
- High fuel prices and the impact on airfares/fuel surcharges;
- Airport constraints such as slot availability, particularly at Sydney Airport; and
- The costs to airlines and passengers of the carbon emissions trading scheme.

Long Term Scenarios

The main development for the New Zealand market in the longer term is the implementation of a full common border between Australia and New Zealand with Trans-Tasman services effectively operated as domestic routes.

In addition to the simplification and harmonisation of processes and practices outlined above, there will need to be consistency in the two countries' visa requirements for foreign visitors.

Entry of new long haul carriers, including long haul low cost carriers, to the Australian and New Zealand markets may see these carriers using the Trans-Tasman as an extension sector to increase aircraft utilisation, further increasing the competitiveness of the market.

In the longer term, direct links will be introduced to more regional destinations in Australia, most likely by LCCs. An increase in non-stop flights between New Zealand and ports beyond east coast Australia such as Adelaide and Perth is also likely. These routes are currently often costly and time-consuming one-stop services.

New aircraft types will allow more cost effective operation of Trans-Tasman routes and routes beyond the east coast of Australia, however, most carriers will have this advantage.

In addition to those applicable to the medium term, potential impediments to longer term growth of aviation and tourism include:

- An inability to harmonise visa requirements and border control processes, with a resulting failure to achieve a full common border between Australia and New Zealand therefore dampening aviation and tourism growth potential;
- A squeeze on profitability for carriers on Trans-Tasman routes as they become increasingly competitive and LCCs increase market share; and
- The possible introduction of curfews at more Australian ports which would impose restrictions on the operations of carriers, particularly LCCs who want back-of-clock flying.

6.1.3 Assessment

The growth potential for the Trans-Tasman market is assessed as moderate in both the medium and longer term. While it is a mature market, there will continue to be capacity added to these routes and the resulting price competition will stimulate demand. Liberalisation of border controls will allow cost reductions for airlines and passengers, and the opening up of regional airports in Australia to Trans-Tasman services will provide a broader range of direct services for visitors. The TFC forecasts show annual average growth in visitor arrivals of 2.6% in the medium term (2010 to 2015) and of 2.8% in resident outbound travel. In the longer term (2015 to 2020) the TFC estimates that growth in visitor arrivals will ease to 1.4% and resident outbound travel to 2.2%. In the absence of any unforeseen shocks to the aviation market, these forecasts have the potential to be exceeded given the market stimulation factors outlined above.

6.2 Medium-Haul Markets

There are three sub-categories for this market grouping:

- Northeast Asia (China, Korea, Japan and Taiwan);
- South and Southeast Asia (India and ASEAN countries); and
- The Middle East (UAE, Qatar).

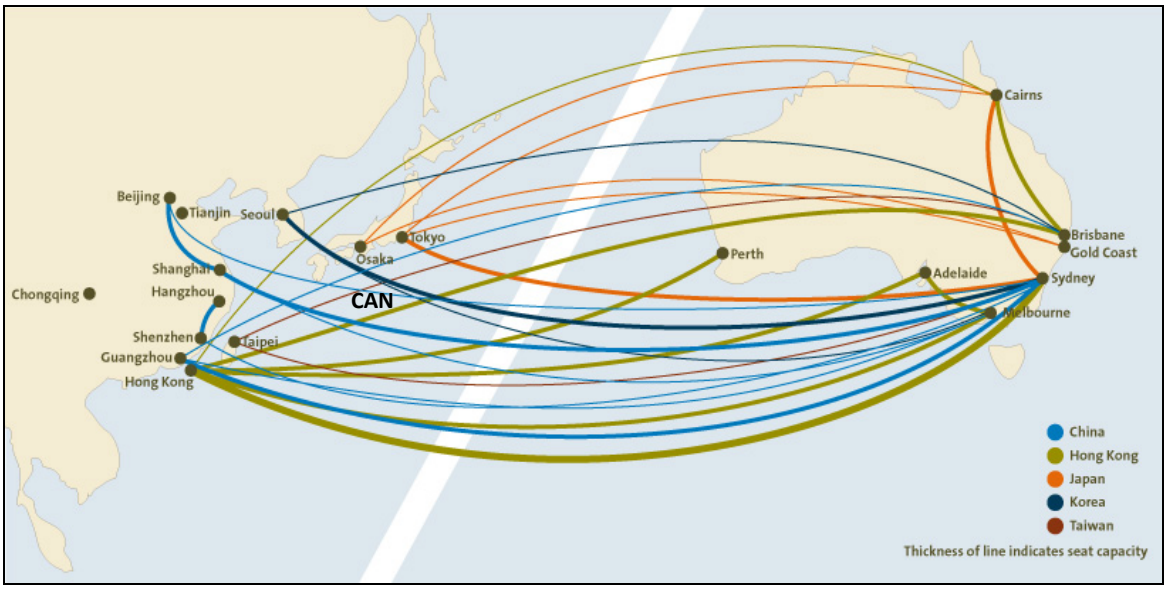
These are markets which currently are either: largely directly served and via a single gateway, e.g. Hong Kong, Singapore; or directly served but via a number of gateways e.g. China; or largely indirectly served, e.g. India.

6.2.1 Northeast Asia

6.2.1.1 Overview of Current Airline Services

Current non-stop and one-stop air services operated by airlines between Australia and Northeast Asia are depicted in **Figure 6.3**.

Figure 6.3: Air Services between Australia and Northeast Asia



Source: Tourism Australia

Table 6.4 below shows the airline shares of Northeast Asian visitor markets carried to Australia in 2010.

Note: Australasian airlines carry just over one-quarter of Chinese visitors (and much of Qantas' carriage is via Hong Kong). Some 61% of Chinese carriage is via Chinese and other Northeast Asian airlines.

Table 6.4: Share of Carriage of Visitors to Australia from NE Asia by Airline, 2010

	NE Asian Visitor Markets					
	China	**Japan**	**Korea**	**Hong Kong**	**Taiwan**	**Sum**
Australasian Carriers						
Qantas	17.2%	16.4%	8.9%	27.8%	6.5%	16.2%
Jetstar	1.6%	42.9%	3.4%	0.8%	2.9%	14.3%
V Australia	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%
Air NZ	1.7%	0.5%	5.2%	0.5%	0.7%	1.7%
Pacific Blue	5.5%	0.2%	1.5%	0.6%	1.0%	2.3%
Sum	**26.1%**	**60.0%**	**19.1%**	**29.7%**	**11.2%**	**34.5%**
NE Asian						
Japan Airlines	0.2%	20.9%	2.5%	0.0%	0.0%	6.8%
Asiana Airlines	0.2%	0.2%	23.4%	0.0%	0.0%	3.9%
Korean Air	1.2%	1.4%	35.6%	0.2%	0.1%	6.7%
Air China	12.8%	0.1%	0.1%	0.1%	0.1%	4.5%
China Eastern Airlines	11.8%	0.1%	0.1%	0.1%	0.2%	4.1%
China Southern Airlines	13.9%	0.0%	0.4%	0.1%	0.1%	4.9%
China Airlines	0.3%	0.6%	0.3%	0.4%	46.7%	3.5%
EVA Air	0.1%	0.0%	0.2%	0.0%	12.9%	0.9%
Cathay Pacific	20.2%	4.1%	9.8%	52.5%	14.1%	17.3%
Sum	**60.7%**	**27.4%**	**72.4%**	**53.4%**	**74.2%**	**52.6%**
Other						
SE Asian Airlines	9.4%	7.5%	5.9%	8.8%	13.0%	8.4%
European	0.8%	0.0%	0.4%	6.9%	0.0%	1.2%
Mid East	1.5%	0.1%	1.6%	0.3%	0.4%	0.9%
Nth American	0.1%	2.8%	0.1%	0.1%	0.0%	0.9%
Other	1.4%	2.2%	0.5%	0.8%	1.2%	1.5%
Sum	**13.2%**	**12.6%**	**8.5%**	**16.9%**	**14.6%**	**12.9%**
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Federal Department of Immigration and Citizenship

Table 6.5 provides a snapshot of current weekly capacity limits under the Air Services Agreement with Northeast Asian countries, utilization of that capacity share by Australian and Northeast Asian carriers and current orders for Australia-capable aircraft.

In the case of Northeast Asia, the orders include only wide-bodied aircraft.

Table 6.5: Snapshot of ASA Utilisation, Australia-Capable Aircraft Orders for the Northeast Asian Market

	Country	Total Negotiated Weekly Capacity (both countries)	% Allowance Utilised by Carriers		Total Orders Australia-Capable Aircraft		ASA Requirements
			Australia	Foreign	2011-15	2016-20	
Northeast Asia	Japan	158 B767-200 units (38,552 seats)	35	14	84	23	Low demand; capacity adequate
	Korea	17,000 seats	0	68	48	27	Adequate capacity is available
	China	37,000	10	72	122	61	High priority as Chinese carriers growing rapidly
	Hong Kong	140 frequencies	33	79	49	30	Hong Kong carriers approaching limit
	Taiwan	12,000 seats	0	26	5	0	Adequate capacity is available

Source: SRS Analyser, CAPA Consulting

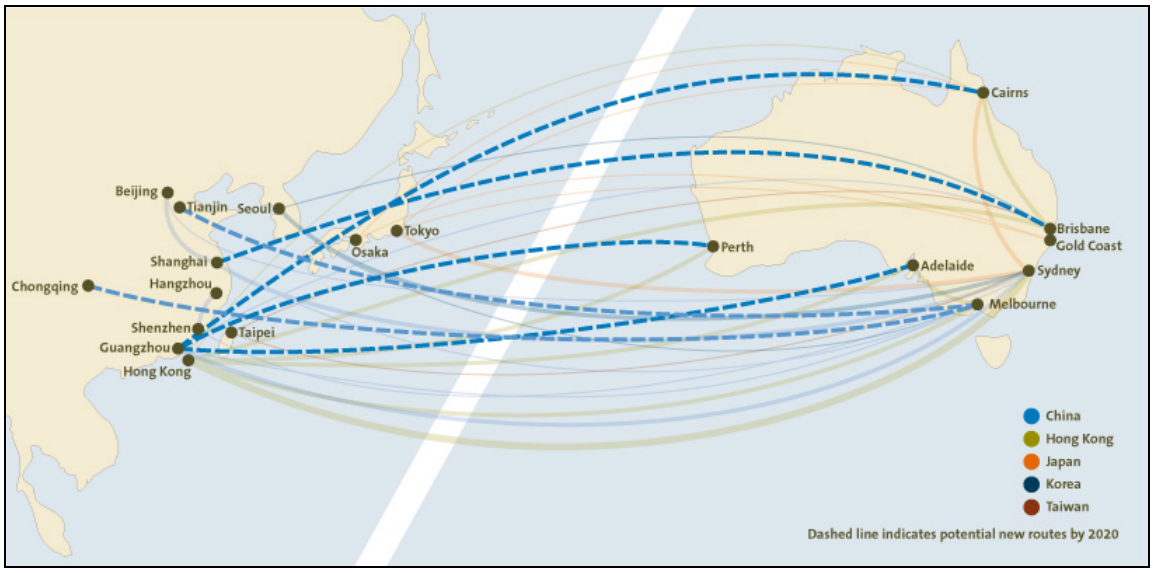
6.2.1.2 Medium and Long Term Scenarios

Table 6.6: Summary of Medium and Long Term Aviation Scenarios, North East Asia

TFC Forecasts to 2020		2010-2015	2015-2020
China	Forecast Arrivals Growth (%)	11.6	3.0
	Resident Departures Growth (%)	7.9	3.3
Hong Kong	Forecast Arrivals Growth (%)	3.0	2.7
	Resident Departures Growth (%)	3.3	2.3
Korea	Forecast Arrivals Growth (%)	3.0	1.9
	Resident Departures Growth (%)	n/a	n/a
Japan	Forecast Arrivals Growth (%)	-2.7	1.2
	Resident Departures Growth (%)	n/a	n/a
Taiwan	Forecast Arrivals Growth (%)	4.8	3.7
	Resident Departures Growth (%)	n/a	n/a
Development Scenarios			
		Medium Term	**Long Term**
Regulatory Environment		Continued impasse on 5th freedom access for Australian carriers via China	Potential for tri-lateral ageement between China, Japan and South Korea
		Australia-China open skies; new "kangaroo route" via Northeast Asia developed	Some relaxation expected, Northeast carriers may seek access over Australia to South America
Aircraft Type/Usage		B787s, A350s introduced; more A380s (replacing older B747-400s)	Larger aircraft types used for hubbing opportunities but extensive penetration of direct services using B787/A350 aircraft.
Airline Type		Expansion of long-haul LCCs; pressure on yields of full service operators	Entry of more LCCs as they move up to larger aircraft; may be excess capacity on some routes
Alliances		Establishment of SkyTeam linkageswith China Southern to Europe vis Guangzhou, China Eastern via Shanghai with Air France	Increased connections between Australia and Northeast Asia using alliances where demand cannot support individual airlines
Market Development		Robust Chinese growth, slow recovery of Japan market.	Expansion of direct services to/from Northeast Asian cities. Strong growth potential from Korea.
		Introduction of non-stop Guangzhou-Adelaide service	Non-stop services between Australia and Chinese regional cities (e.g. Shenzhen, Tianjin and Chongqing)
		Development of non-stop LCC services between Australia and Guangzhou, Shanghai	Reintroduction of Australian carrier services to Korea
		All Nippon Airways resumes services to Australia	Establishment of additional direct services to Australian destinations from China, including Cairns
Hub Usage		Expansion of Incheon, Korea, as Europe/US hub; focus maintained on Hong Kong, Southeast Asia as dispersal point to China	Dynamic growth in Northeast Asian hubs serving Europe but also North American traffic.
Key Airlines		Cathay Pacific, Qantas (Hong Kong); Chinese airlines, Qantas, Cathay (China); Korean Air, Asiana (Korea); China Airlines, EVA (Taiwan); Qantas, Jetstar, Japan Airlines (Japan)	Chinese airlines (including Hainan), Qantas/Jetstar, Cathay (China; ANA, Qantas/Jetstar (Japan; Korean Air, Asiana, Jetstar (Korea); China Airlines, EVA (Taiwan); Cathay, Qantas (Hong Kong)
Growth Impediments		Slot constraints at intermediate, end destinations (e.g. Shanghai, Beijing)	Likely to change as new hubs open
		Restricted airspace access	Higher operating costs for Chinese airlines
		Threat of rising fuel costs	

The figure below illustrates potential new routes which could be operated between Australia and Northeast Asia, consistent with the scenarios.

Figure 6.4: Potential New Routes between Australia and Northeast Asia



Source: CAPA Consulting

Medium Term Scenarios

Northeast Asia is a region of great contrast in aviation terms between the low traffic growth and high volatility of Japan; re-emergence of Korea and, to a lesser extent, Taiwan; continuing importance of Hong Kong as a hub and destination; and robust expansion of mainland China.

The key medium term aviation dynamics for Northeast Asia result from:

- The growth in the Chinese travel market allied with strong growth in Chinese airlines;
- Development of international alliances with greater connectivity, particularly in China;
- The continuing slow recovery in the Japanese market coupled with the restructuring of Japan Airlines (JAL);
- Increased penetration by LCCs. The introduction of LCCs from Northeast Asia to Australia has been limited to Jetstar operating to Japan and Southeast Asian operators (e.g. AirAsia X via Kuala Lumpur to China, Japan, Korea and Taiwan). However it is reasonable to expect the development of longer haul Northeast Asian LCCs in the medium term.

Historically, Northeast Asian markets have produced mixed inbound trends for Australia. At various times, Korea and Taiwan showed significant volume growth, albeit with poor yields.

Japan, similarly, has been in decline for the past decade and seems unlikely to improve substantially in the medium term, especially with JAL's slow rehabilitation following its emergence from bankruptcy protection earlier in 2011. However, it remains an important visitor market for Australia.

Current problems with natural disasters compound the demographic and economic problems already confronting Japan. The growing LCC interest in Japan and increasing Australian outbound interest should stabilise the market and even facilitate modest inbound growth into the medium term.

Jetstar, now the dominant airline on Australia-Japan routes, is expected to further develop its market position. There may also be potential for All Nippon Airways to capitalise on the upheaval at JAL to resume services either in its own right or as a Northeast Asian partner to Virgin Australia.

South Korea is currently seeing a resumption of interest in Australia as a tourism destination. While no Australian carriers directly serve the market, Qantas maintains a code-sharing relationship with Asiana Airlines on Sydney-Seoul. Incheon Airport's continuing growth as an intercontinental hub, and re-fleeting plans by Korean Air and Asiana, are also expected to drive the further development of capacity to/from Australia.

In the case of South Korea, previous strong levels of growth (in the early 1990s) occurred at a time when Qantas was participating in the market. A stronger Australian carrier presence may be necessary before growth of any scale can again resume. Low yield is another barrier to this entry. However, the growth of LCCs may facilitate entry and growth in this market.

Taiwan may be another opportunity for re-entry by Australian carriers, but it remains a relatively sensitive proposition given Australia's increasing engagement with China.

China clearly offers the most tangible value of any Northeast Asian market in the medium term and beyond, with the TFC's latest forecasts predicting that inbound visitation will eclipse all markets other than New Zealand by 2013. All four of China's largest airlines – Air China, China Southern, China Eastern and Hainan Airlines – presently serve the Australian market.

While Chinese growth is likely to remain strong, there are issues that may threaten ongoing capacity increases necessary to achieve targets. These include:

- Restricted airspace access. Only 20% of Chinese airspace is open to commercial operations (the rest is under control of the military). With almost 600 new aircraft

being delivered over the next 5-10 years, non-military movements are expected to increase sharply which will require more expansive access to airspace;

- Outdated air traffic management practices and equipment, which is being progressively upgraded to accommodation traffic growth, but may limit expansion within the Chinese market;
- Increasing congestion due to inadequate airport infrastructure. The Chinese Government's 2011-2015 Plan requires the construction of 56 new airports and upgrading of 45 existing ones;
- Slot constraints at Shanghai and Beijing Airports;
- Maintaining adequate available capacity under Australia's Air Services Agreement with China; and
- Heavy visitor loadings on flights and the high proportion of visitors travelling in organised groups. These factors challenge the Chinese airlines from a yield perspective and discourage capacity growth by Australian airlines.

Hong Kong continues to grow with strong origin-destination traffic support and increasingly as a hub for mainland Chinese traffic. Cathay Pacific, through its Dragonair subsidiary and equity relationship with Air China, has been particularly effective in this area.

While recent capacity increases agreed under the ASA have eased growth pressures on the Australia-China corridor, the significant expansion planned by the major Chinese airlines is expected to rapidly absorb available seats. In these circumstances, it will be critical for Australia and China to expedite negotiations either for a substantial addition in capacity, or preferably an open skies arrangement. The latter is currently subject to agreement on unlimited 5th freedom rights through China, which would provide opportunities for Australian carrier to extend services to the UK/Europe.

As discussed in the section on UK/Europe market scenarios, Chinese airlines are also interested in establishing 6th freedom services linking the EU and North America with Australian markets, probably via Guangzhou and/or Shanghai.

This is likely to be facilitated by the entry of China Southern and China Eastern into the SkyTeam global alliance, consolidating links from the US and Europe through fellow members Delta Airlines and Air France.

Under such a scenario, Guangzhou and Shanghai would complement Hong Kong as international passenger and freight hubs in the Pearl River Delta region.

We anticipate that China Southern, which is based in Guangzhou, will establish services into Adelaide in the medium term, possibly becoming the first airline to take up the enhanced regional package.

Long Term Scenarios

The long-term scenario for Northeast Asia is likely to be influenced by:

- Development of a "trilateral" market alliance between China, Japan and Korea, possibly in conjunction with ASEAN. Regardless of this development we expect that Korean airlines will become increasingly sophisticated and aggressive in seeking growth opportunities;
- Further liberalisation of international access to China;
- A strong push by Chinese airlines to grow their networks and Chinese airports to increase their share of hub traffic;
- The likely growth in Northeast Asian hubs (e.g. Guangzhou, Shanghai and Seoul) not just connecting Europe to Australasia but also North America. This will lead to a growth in traffic to Australia, facilitate additional direct connections between Northeast Asian and Australian ports (including some secondary destinations); and
- Significant market penetration and growth by LCCs.

The transformation of markets, airlines and airports in Northeast Asia in the 5-10 year timeframe may be one of the most dynamic "game-changers" in the Australian international aviation environment.

This has implications for growth rates from Northeast Asian markets as well as that from Europe and North America. In this environment, the growth prospects would be positive from China and South Korea in particular.

Australian carriers have a relatively small market share of passengers from Korea and Taiwan, as noted previously. While Taiwan may be considered to have modest prospects over the next decade, Korea is likely to have much stronger growth credentials.

Given the relatively thin yields from Korea, Taiwan and perhaps China, it seems more likely that these markets will be served by LCCs from within and outside of Northeast Asia (including those from Australia). The region's LCCs previously have focused on shorter haul sectors out of Japan and Korea. However, in the longer term there is likely to be a move to long-haul LCC operations, emulating development in Australia and Southeast Asia.

China will continue to be the central driver of traffic growth and opportunity. It is expected that by 2020, direct services will be established beyond the major cities to other high population centres such as Chongqing, Shenzhen and Tianjin. This will be partially a product of demographic changes within those catchments, but also a reflection of increasing difficulties in gaining access to Shanghai and Beijing.

We assume that Australia will have secured an open skies arrangement with China by this period, and more relaxed 5th freedom arrangements with Hong Kong. This is expected to facilitate the establishment of additional direct services to Australian destinations, including Cairns.

However, access to Hong Kong may be under pressure at this stage due to a requirement for additional runway capacity[7].

The continuing development of 6th freedom services by Cathay Pacific and the Chinese carriers will be facilitated by deliveries of longer range B787s and A350s and high capacity A380s.

China, Japan and Korea should each have open skies agreements with ASEAN by 2015-2020 which will promote air travel growth between and beyond these markets. It is possible that the proposed trilateral alliance between Northeast Asian countries may also be a reality by then, though realistically there are some political, cultural and historic hurdles to overcome.

Such an agreement is expected to stimulate air service development and traffic levels within Northeast Asia, and potentially may divert tourism demand from other markets (e.g. Australia).

6.2.1.3 Assessment

Northeast Asia, in particular China, will be critical to the achievement of Australia's visitor growth targets, particularly over the next 5 years. While Japan remains an important contributor, China is likely to drive inbound demand from the region as its carriers undertake rapid fleet and alliance development and engage to a greater extent in surrounding regional and intercontinental markets. The only proviso will be that adequate capacity is available through the Australia-China ASA to realise the market's potential.

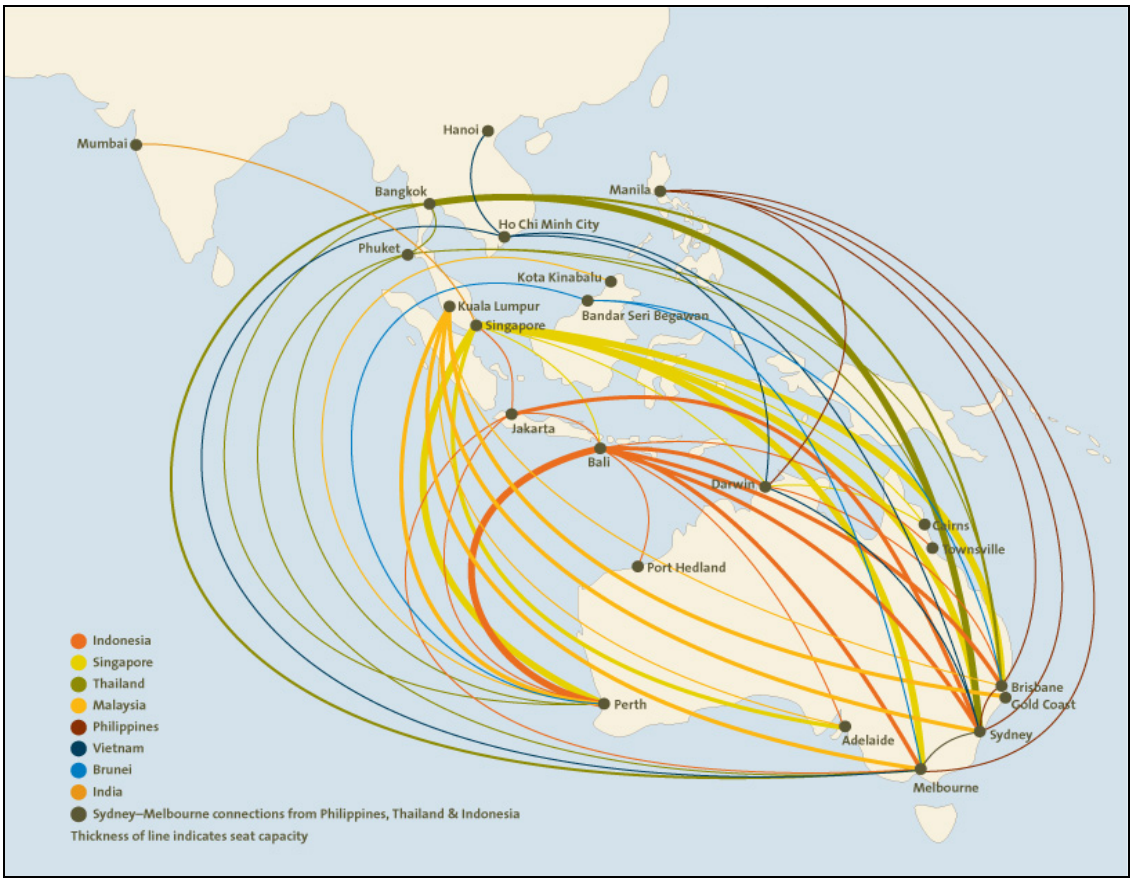
6.2.2 South and Southeast Asia

6.2.2.1 Overview of Current Airline Services

Figure 6.5 charts non-stop services and one-stop services using the same flight code between Australia and Southeast Asia and Australia-India.

[7] We note recent comments by Cathay Pacific Chief Executive John Slosar that Hong Kong would require a third runway in 7-9 years to accommodate growth.

Figure 6.5: Air Services between Australia and Southeast Asia/South Asia



Source: Tourism Australia

The breakdown of airline **s**hares of Southeast Asian visitor markets carried to Australia in 2010 is shown in **Table 6.7**. Australasian airlines carry around 19% of SE Asian visitors with the SE Asian airlines themselves dominant.

Note that the Southeast Asian airlines (and in particular Singapore Airlines, Thai Airways and Malaysia Airlines) carry much of the Indian traffic via their home ports.

Table 6.7: Share of Carriage of Visitors to Australia from South and Southeast Asia by Airline, 2010

	Southeast Asian Visitor Markets						
	India	Malaysia	Singapore	Indonesia	Thailand	Vietnam	Sum
Australasian							
Qantas Airways	14.8%	2.8%	21.2%	19.3%	3.5%	2.0%	12.9%
Jetstar Airways	1.8%	1.8%	4.9%	8.7%	7.0%	6.7%	4.4%
Air New Zealand	1.1%	0.6%	1.6%	0.5%	0.9%	0.6%	1.0%
Pacific Blue	0.8%	0.8%	0.2%	2.9%	0.6%	0.3%	0.9%
Sum	**18.5%**	**6.0%**	**27.9%**	**31.4%**	**12.0%**	**9.6%**	**19.2%**
SE Asian							
Garuda Indonesia	0.1%	0.1%	0.1%	36.7%	0.1%	0.0%	5.0%
Indonesia AirAsia	0.1%	0.1%	0.0%	3.4%	0.0%	0.0%	0.5%
AirAsia X	1.6%	46.6%	0.6%	3.6%	2.7%	1.8%	13.1%
Malaysia Airlines	15.6%	28.7%	0.6%	1.4%	0.8%	1.6%	10.2%
Jetstar Asia Airways	0.0%	0.0%	0.3%	0.0%	0.0%	0.1%	0.1%
Singapore Airlines	29.2%	10.9%	55.2%	20.0%	5.4%	12.9%	29.1%
Thai Airways International	21.2%	0.3%	0.2%	0.1%	65.3%	4.3%	9.4%
Vietnam Airlines	0.0%	0.0%	0.0%	0.0%	0.0%	59.7%	2.4%
Philippine Airlines	0.0%	0.0%	0.0%	0.0%	0.2%	0.9%	0.1%
Royal Brunei Airlines	0.0%	1.5%	0.1%	0.2%	0.5%	2.8%	0.6%
Sum	**67.8%**	**88.2%**	**57.1%**	**65.4%**	**75.0%**	**84.1%**	**70.5%**
Other							
NE Asia	6.1%	0.2%	0.4%	0.4%	0.8%	2.7%	1.2%
Mid East	6.1%	3.7%	8.3%	1.1%	3.7%	0.7%	5.1%
Other	1.5%	1.9%	6.3%	1.7%	8.5%	2.9%	4.0%
Sum	**13.7%**	**5.8%**	**15.0%**	**3.2%**	**13.0%**	**6.3%**	**10.3%**
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Department of Immigration and Citizenship

Table 6.8 provides a snapshot of current weekly capacity limits under the Air Services Agreement with South and Southeast Asian countries, utilization of that capacity share by Australian and South and Southeast Asian carriers and current orders for Australia-capable aircraft.

In the case of South and Southeast Asia, the orders include only wide-bodied aircraft for India, Malaysia and Thailand, and narrow and wide-bodied aircraft for Indonesia and Singapore.

Table 6.8: Snapshot of ASA Utilisation, Australia-Capable Aircraft Orders for the South and Southeast Asian Market

	Country	Total Negotiated Weekly Capacity (both countries)	% Allowance Utilised by Carriers		Total Orders Australia-Capable Aircraft		ASA Requirements
			Australia	Foreign	2011-15	2016-20	
South east Asia	Singapore	Open capacity	n/a	n/a	88	11	Restricted beyond rights
	Indonesia	29,600 seats	79	85	174	34	Further discussion a high priority
	Philippines	8,000 seats	76	85	24	0	Tightening for Philippine airlines
	Thailand	90 B747 Equivalents (31,500 seats)	39	94	21	0	Tightening for Thai carriers
	Malaysia	52,600 seats	0	80	77	10	Tightening for Malaysian carriers
	Vietnam	28 frequencies	28	71	6	20	Adequate
South Asia	India	13,000 seats	14	0	62	7	Capacity ample

Utilisation as of May 2011

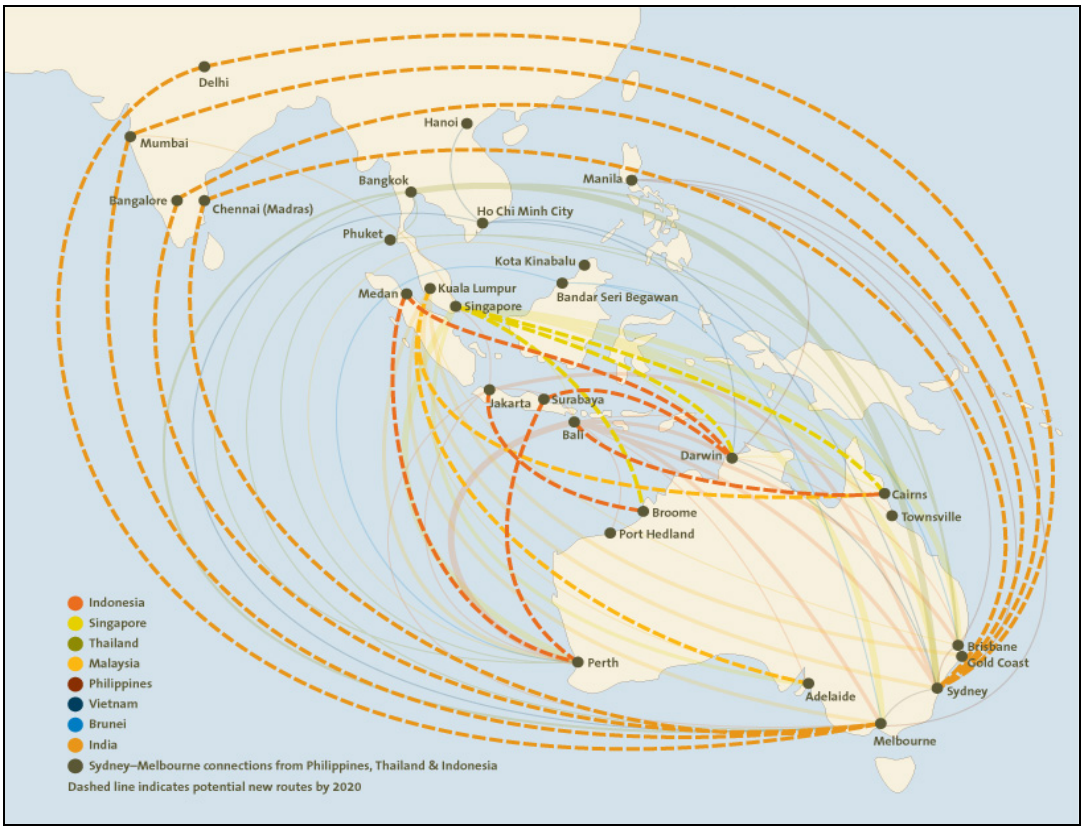
Source: SRS Analyser, CAPA Consulting

6.2.2.2 Medium and Long Term Scenarios

Table 6.9: Summary of Medium and Long Term Aviation Scenarios, South and Southeast Asia

TFC Forecasts to 2020		2010-2015	2015-2020
Singapore	Forecast Arrivals Growth (%)	3.1	2.1
	Resident Departures Growth (%)	3.7	1.8
Malaysia	Forecast Arrivals Growth (%)	3.8	2.5
	Resident Departures Growth (%)	7.5	4.6
Indonesia	Forecast Arrivals Growth (%)	7.8	5.4
	Resident Departures Growth (%)	8.5	2.2
Thailand	Forecast Arrivals Growth (%)	4.2	4.4
	Resident Departures Growth (%)	4.8	2.4
Development Scenarios			
		Medium Term	**Long Term**
Regulatory Environment		Development of ASEAN Single Aviation Market (2015)	ASEAN forms Asian aviation "bloc" with China, Korea and Japan; extends open skies partnerships to India, EU
		ASEAN establishes open skies with Korea and Japan	Australia negotiates open skies relationship with ASEAN; opens 5th freedom access to Singapore on Pacific
		Ongoing protection by Malaysia, Indonesia of national carriers	Introduction of cross-border ownership for designated airlines within ASEAN (similar to EU)
			Open skies agreement reached with India
Aircraft Type/Usage		Introduction of longer range A320neo provides extended route opportunities, particularly for LCCs	LCCs access larger aircraft types with greater range capability (e.g. B787s)
Airline Type		LCCs dominate fleet/service growth; increase in long-haul LCCs (e.g. Singapore)	Market incursions by more "hybrid" LCCs offering premium product; impact on full service carrier yield
Alliances		Jetstar expands footprint in SE Asia; new alliance/JV opportunities	Airline consolidation within ASEAN; reflects relaxed cross-border ownership
		Further development of Other LCC JVs (ThaiTiger in Thailand; AirAsia in Vietnam, the Philippines)	Singapore Airlines (+Tiger+SilkAir) assumes greater role within ASEAN
Market Development		Expansion of inbound travel demand from Indonesia, Malaysia, driven by LCCs	Traffic growth surges within Southeast Asia due to liberalisation, higher income levels and mobility; development of new inbound markets
		Intra-Asian markets step up competition	Greater connectivity between ASEAN and its bilateral partners; service diversity
		Non-stop services introduced between Australia and India	Increased access to Indian market; secondary cities outside Mumbai, Delhi
		AirAsia X expands Australian destinations (e.g. Adelaide); secures access to Sydney	Expansion of Indonesian city pairs (Perth-Surabaya, Darwin-Surabaya, Perth-Medan, Darwin-Medan)
		More Indonesian LCCs target Australian destinations (e.g. Cairns, Broome)	Extension of direct India-Australia services to other Indian cities (e.g. Chennai, Bangalore, Delhi)
Hub Usage		Development of strategic hub links between Singapore and other hubs	Singapore becomes central hub for ASEAN
		Congestion issues hamper hub development (e.g. Jakarta, Kuala Lumpur)	Emergence of new regional hubs (Ho Chi Minh, Manila/Clark International Airport)
Key Airlines		Garuda, Jetstar, Virgin Australia, Qantas, Singapore Airlines (Indonesia); Qantas, Jetstar, Singapore Airlines (Singapore); Thai Airways, Qantas (Thailand); AirAsia X, Malaysian Airlines, Qantas (Malaysia)	Qantas/Jetstar, Virgin Australia, Garuda, Lion Airlines, Indonesia AirAsia (Indonesia); AirAsia X, MAS, Qantas (Malaysia); Singapore Airlines, Jetstar, Qantas (Singapore); Thai Airways, Jetstar, Qantas (Thailand)
Growth Impediments		Increased competition from Asian destinations; LCC intra-Asian focus	Excess capacity on some routes; weakens yields
		Limited seat availability (esp. during peak seasons)	Congestion problems, slot availability at key regional airports as fleet expansion is realised
		Inadequate airport infrastructure in some Asian countries (e.g. Indonesia)	Slow airport infrastructure development; volatile airline profitability in India
		Weak profit margins on non-stop Australia-India routes; Indian preference for one-stop shopping	
		Residual regulatory constraints	

The figure below illustrates potential new routes which could be operated between Australia and the Middle East, consistent with the scenarios.



Source: Tourism Australia

Medium Term Scenarios

Three key developments will influence prospects for the medium term in Southeast Asia:

(1) Formation of more regional Joint Ventures and aggressive fleet growth and service expansion by the region's LCCs, which will acquire some 300 new aircraft under current programs;

(2) Establishment of the ASEAN Single Aviation Market (ASAM), scheduled for 2015. This will see a full liberalisation of air transport markets for designated carriers to, from and beyond the participating member states; and

(3) ASEAN's introduction of an open skies partnership with China (followed by Japan, Korea, India and the EU). In effect, ASEAN could form the nucleus of a very

powerful Asian aviation bloc with a rapidly-emerging travel market offering the highest traffic growth rates of any world region.

The implications for Australia's inbound tourism outlook are likely to be significant, with potential access to sizeable new markets in Southeast Asia balanced against increasing competition from regional destinations.

For the purposes of this report, it is assumed that ASEAN meets its 2015 deadline for achieving the ASAM. It is noted that the ASAM's formation is not a fait accomplit, with Indonesia, in particular, equivocating over the adequacy of its airport infrastructure to cope with the anticipated traffic growth.

The 10 member states have signed an agreement to proceed to unlimited 3rd, 4th and 5th freedom rights between international airports within ASEAN. However, this will only be implemented among the states which agree to ratify it.

Under the current staged program, designated ASEAN carriers will secure open 5th freedom access within the ASEAN region by June 2013 provided that only one of the cities served is a capital city. The latter is designed to encourage the development of services to secondary international airports, thereby spreading the economic benefits of an open skies environment. It would also relieve the pressures on major capital city gateways in Southeast Asia.

The full liberalisation of the ASEAN market under ASAM is expected to generate substantial growth in traffic (25%+ per annum), with much of the focus on intra-Asian routes. Further impetus will be provided by ASEAN's progressive development of open skies partnerships with external partners which provide for open 3rd and 4th freedom rights (5th freedom rights are negotiable), beginning with its recently concluded China agreement. Korea and Japan are also expected to join the open skies structure with ASEAN, providing an effective platform for an Asian aviation bloc to rival that of the EU and US.

Airlines with a significant exposure to the ASEAN market will benefit most from the developments, including the region's national operators Singapore Airlines, Thai Airways, Malaysia Airlines and (to a lesser extent) Garuda. LCCs will be major players through their established intra-regional systems and capacity to stimulate growth in low income environments.

Qantas has positioned itself to capitalise on the ASEAN developments through part-owned Jetstar Asia in Singapore and Vietnam's Jetstar Pacific, both of which are designated carriers qualifying for international traffic rights in their respective countries.

Other LCCs are adopting similar models, including Malaysia's AirAsia with operations in Indonesia, Thailand, Vietnam and the Philippines; and Singapore's Tiger Airways

through a minority-held venture with Thai Airways in Thailand and commercial alliance with SEAir in the Philippines.

AirAsia, Tiger and Indonesia's largest operator Lion Air will take delivery of massive orders respectively for 86 A320s, 44 A320s and 138 B737-900s in the medium term to strengthen their market shares and expand services. Jetstar is also doubling its fleet (Australia and Asia) by 2015. The acquisitions will entrench the domination of LCCs in Southeast Asia with 19 operators presently controlling 321 aircraft or 38% of the region's total fleet.

All but 10 of AirAsia's A320s will be in service by 2016. The airline is expected to convert these to longer range A320neos which would potentially provide access to the Australian market from Kuala Lumpur. The narrow-bodied aircraft flown by most of Southeast Asia's LCCs do not have the range capability to serve Australian destinations other than Darwin or Perth, Broome or Cairns. This significantly limits Australia's ability to extract tourism benefits from the nearest Asian market.

However, the emergence of Indonesia as a more substantial inbound prospect may provide opportunities if sufficient capacity is available. While Garuda recently increased services out of Jakarta, many Indonesians are forced to travel via Singapore or Kuala Lumpur because of the capacity situation.

Airport congestion at Jakarta is expected to worsen considerably in the medium term, with no infrastructure upgrade planned for at least five years. This jeopardises both Indonesia's ability to participate in ASEAN liberalisation and allow additional air access to the Greater Jakarta market which has shown substantial and growing demand for overseas travel (business and leisure). Nearby Surabaya Airport has taken much of the overspill from Jakarta, but it too faces excess capacity and overcrowding.

Until the airport problems are resolved, Indonesia – more particularly Bali – is likely to remain a predominantly outbound market for Australians. It continues to be one of the few international markets for Australia where there is a shortfall of capacity over demand.

While congestion issues at Jakarta, Manila and Kuala Lumpur airports impact on growth prospects, Singapore is expected to enhance its hub role through the establishment of strategic relationships with other hubs in the region and the addition of 10 new airline customers by 2015.

LCC growth will apply further pressure to the more vulnerable national carriers, including Garuda Indonesia, Philippine Airlines and MAS which have seen their market shares decline in recent years. In these circumstances, it seems unlikely that the Malaysian Government will allow AirAsia X to extend operations into key MAS international markets, including Sydney. MAS will not have access to additional aircraft to increase capacity in the important Australian market until 2013.

AirAsia X's fleet expansion has also been curtailed until its Initial Public Offering, now expected in 2012. As a consequence, the airline's focus has turned to the Middle East and North Asia and further development of the Australian market may be placed on hold until Sydney becomes available.

India: Development of Non-Stop Services

India clearly has massive inbound potential, particularly with the increasing expatriate population in Australia, a high take-up of educational tourism and cultural and trade ties. However, this has not been reflected in demand for air services which historically have seen several unsuccessful attempts to establish direct linkages.

The key medium issues for India revolve around the establishment of direct, non-stop services to Australia. Current services by Qantas to Mumbai are relatively light at three return flights per week and operate via Singapore; and its code-share arrangement with Jet Airways from Delhi is via Singapore. Other carriers serving the market, including Malaysia Airlines, Singapore Airlines, Thai and Cathay Pacific also operate through their respective hubs.

While Air India has flagged the introduction of direct services, and Kingfisher Airlines maintains an office in Sydney, nothing has yet eventuated due largely to the uncertainty of returns on non-stop operations and Indian preference for a shopping stopover en route to Australia.

Financial problems with loss-making Air India and Kingfisher have also limited their capacity to expand onto new routes. While Kingfisher is expecting positive earnings for 2011/12 after heavy earlier losses, Jet Airways has consistently maintained profitability and is probably best placed of the Indian carriers for growth.

The establishment of non-stop services during this period assumes that appropriate tourism products are developed in Australia to satisfy the requirement of the Indian market.

Outbound growth from India will continue to escalate and inbound visitation, according to the World Travel and Tourism Council, will be the highest of any market for the 10 years to 2018. This suggests that two-way volumes and loads between Australia and India should be strong enough to support direct non-stop services to a number of destinations.

China, Southeast Asia (particularly Singapore), the US, UK and the Middle East all compete increasingly with Australia for Indian tourists. However, Australia also has strong VFR and educational tourism linkages with this country.

Long Term Scenarios

The full realisation of the ASAM, coordinated liberalisation with ASEAN's other Asian partners and an increasing travel propensity in emerging markets will give rise to opportunities for inbound tourism if Australia can effectively engage with the Southeast Asian region.

Conversely, if Australia sits outside the ASEAN open skies regime, the benefits are more likely to be concentrated on Southeast Asian carriers and their tourism sectors to the possible detriment of Australia.

ASEAN is expected to establish a network of open skies relationships with all of its major markets and trading partners, adding India and the EU to previous agreements with China, Japan and Korea. This scenario is clearly longer term, given the complexity of air services negotiations, but its achievement would build an innovative platform for unlimited services between and perhaps beyond participating regions.

Australia is one of ASEAN's Dialogue Partners. Given ASEAN's overall importance and proximity to Australia, an open skies agreement with ASEAN should be viewed as a priority. This, however, also raises a question as to whether Australia would agree to open 5th freedom rights which is currently built into the Australian open skies model[8]. Such a move ostensibly would allow Singapore Airlines to take up services on the South Pacific route – something that is currently withheld from the airline. This assumes, of course, that SIA would still be interested in doing so.

The upside of any agreement is that presumably it would lead to Australian carriers securing unlimited 5th freedom access beyond ASEAN countries. At present, these rights are restricted out of Singapore and not available under the Vietnam ASA, for example.

The ASAM is likely to focus air service development within the region on intra-Asian routes and destinations, with the expansion of medium to long haul services directed to the region's open skies partners.

Competition for Australia from Asian tourism destinations will only intensify as a result, particularly for emerging travel markets such as Indonesia, the Philippines and Vietnam. With a substantial build-up of available capacity by the region's carriers, air fares are expected to be sharply-priced.

Another outcome of the ASAM will be the greater potential for consolidation among the region's airlines. The liberalisation agreement provides for ASEAN carriers to be substantially owned and effectively controlled by one or more ASEAN member states or nationals as long as effective regulatory control resides in the designating country where the airline is incorporated and has its principal place of business. While this is still

[8] ASEAN's open skies agreement model with external partners incorporates open 3rd and 4th freedom rights, but 5th freedom rights are negotiable.

"subject to acceptance" by other states, it provides a fresh opportunity for cross-border ownership within ASEAN.

The ownership clause, albeit highly qualified, could facilitate mergers between struggling airlines or acquisitions by some of the major operators of smaller carriers in the region. Singapore Airlines, for example, could strengthen its role within Southeast Asia through investment in other operators.

ASAM aside, it is likely that governments will pursue more private sector solutions for their national carriers in a market that is over-served and offers diminishing returns, despite the anticipated high growth in traffic. This may see the development of equity alliances which build carrier viability and connectivity with external markets, with consequent benefits for inbound tourism markets.

Relatively undeveloped international markets in Southeast Asia are expected to emerge as inbound prospects in the longer term. Indonesia's huge population base and growing middle class should underpin its potential as a visitor source, particularly given the close proximity to Australia (accessible by LCCs/narrow-body jets).

Subject to improvements to airport infrastructure, the potential exists for Australian tourism to tap into Indonesian destinations beyond Jakarta and Denpasar, including Surabaya and Medan.

A recapitalised Garuda may offer service expansion opportunities, but more likely the key Indonesia player will be Lion Air with its fleet of B737-900s and a hybrid LCC structure providing a business and economy product option. Lion Air has previously shown interest in establishing Australian services, and should be in a position to do so following further deliveries of aircraft and an IPO in 2012 or 2013.

Indonesia AirAsia is another strong prospect which already maintains services in Australia. The airline interlinks with other AirAsia brands, providing a flow of LCC traffic through southern Asia.

ASAM's formation will see the establishment of designated ASAM hubs in Southeast Asia – Jakarta is one; Surabaya another. Clark International Airport is being developed as the international hub for the Philippines; while Ho Chi Minh City Airport will serve as Vietnam's designated ASAM hub. These secondary hubs will serve as gateways for their domestic markets and as hubs for the flow of regional traffic.

The development of new airports and/or upgrading of existing ones should ease some of the congestion pressures impacting on Southeast Asia in the medium term. As noted, Jakarta is being expanded and Vietnam plans new international airports at Ho Chi Minh and Hanoi.

In the longer term, it is anticipated that non-stop services between Australia and India will be sustained and extended beyond Mumbai and Delhi to cover other cities

with high population bases and increasing affluence. These may include Kolkata, Chennai, Bangalore and Hyderabad.

It is envisaged that India will become a much more substantial contributor to inbound tourism over the 10-year period, particularly as income levels and the propensity to travel grow. Its growth is expected to encourage Australia to negotiate an open skies arrangement which complements developments with ASEAN and Northeast Asian markets. This, in turn, will create a conducive environment for airlines to build route development programs around Australian destinations.

There is likely to be an expansion in non-stop routes, linking a broader range of Indian destinations to cities with more substantial economic growth such as Chennai and Bangalore as well as Mumbai and Delhi. These services are expected to run in conjunction with continuing one-stop services via Singapore to the Australian market.

As operational demand escalates, pressures will be imposed for a further upgrading of India's airport infrastructure. New international airports at Mumbai (Navi Mumbai) and Delhi should be fully operational, but some secondary gateways may have reached or exceeded their design capacity.

Infrastructure constraints and continuing concerns about the viability of Indian carriers could slow the further development of international air services. While India maintains an aggressive improvements program for its airports, implementation has often been subject to delays associated with capital funding.

India's airlines are also likely to face manpower shortages, particularly with pilots and maintenance engineers, which may see service development curtailed. If the government proceeds with its plans to halt the employment of foreign pilots post 2013, pressures in terms of local training and recruitment could well slow the take-up of new aircraft.

6.2.2.3 Assessment

ASEAN's formation of a Single Aviation Market and its development of an open skies network with neighbouring Asian markets[9] presents a significant opportunity for Australia to build a productive tourism alliance. While Southeast Asia as a whole and its expanding system of LCCs represent a short-term prospect, Indonesia is emerging as a potentially substantial inbound market as its economy strengthens. In the longer term, India will gain in importance as its airlines establish in the Australian market.

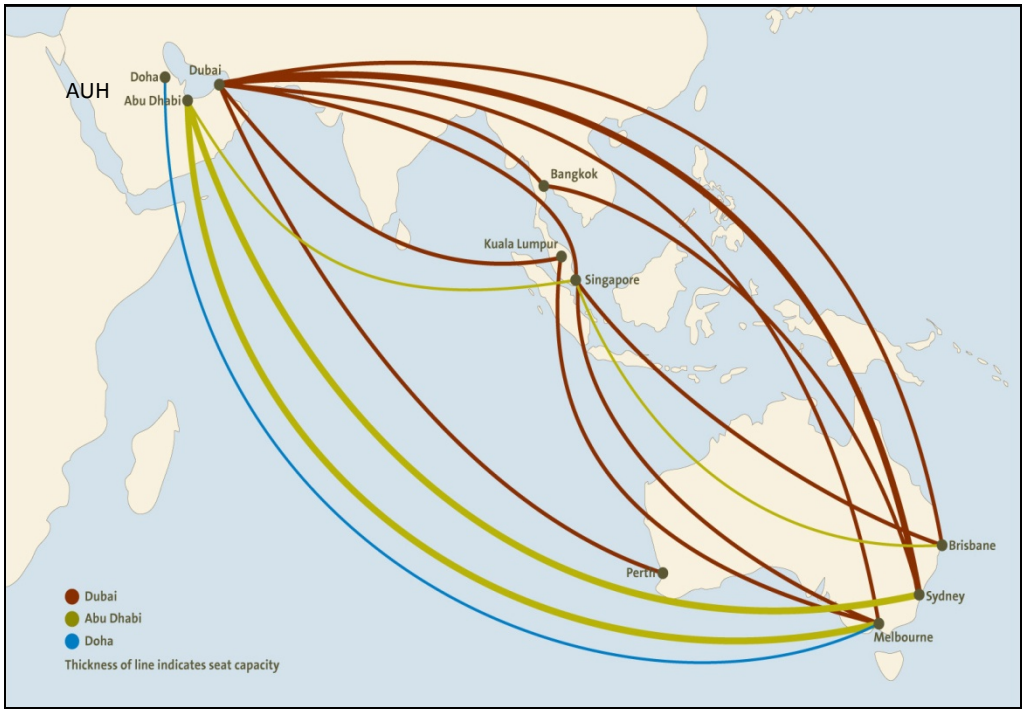
[9] ASEAN's agreement with it neighbouring markets is open third/fourth freedoms.

6.2.3 The Middle East

6.2.3.1 Overview of Current Airline Services

The current routes operated by airlines between Australia and the Middle East are depicted in **Figure 6.7**.

Figure 6.7: Air Services between Australia and the Middle East



Source: Tourism Australia

The breakdown of airline shares of the Middle East visitor market carried to Australia in 2010 is shown in **Table 6.10**. Australasian airlines carry less than 10% of Middle East visitors. The Middle East airlines themselves are dominant.

Table 6.10: Share of Carriage of Visitors to Australia from Middle East by Airline, 2010

Airlines	Share of Middle Eastern Visitors to Aust
Australasian Airlines	
Qantas Airways	4.3%
Jetstar Airways	1.7%
Air New Zealand	1.8%
Pacific Blue	1.5%
Sum	**9.3%**
Mid East Airlines	
Emirates	45.9%
Etihad	17.7%
Qatar Airways	4.3%
Sum	**67.9%**
Other Airlines	
Cathay Pacific	5.6%
Malaysia Airlines	2.0%
Singapore Airlines	5.8%
Thai Airways International	4.5%
Other	4.9%
Sum	**22.8**
Total	**100.0%**

Source: Department of Immigration and Citizenship

Table 6.11 provides a snapshot of current weekly capacity limits under the Air Services Agreement with Middle East countries, utilization of that capacity share by Australian and Middle East carriers and current orders for Australia-capable aircraft. In the case of Middle East, the orders include only wide-bodied aircraft.

Table 6.11: Snapshot of ASA Utilisation, Australia-Capable Aircraft Orders - Middle East Market [10]

	Country	Total negotiated weekly capacity	% Allowance used by Carriers	% Allowance used by Carriers	Total Orders - Australia-capable aircraft	Total Orders - Australia-capable aircraft	ASA Requirements
			Australia	Foreign	2011 - 2015	2016 - 2020	
Middle East	UAE-	294 services	5	84	146	52	Tightening for UAE Airlines
	Quatar	28 frequencies	0	50	28	8	Adequate capacity available

[10] Source: SRS Analyser, CAPA Consulting. This deals only with capacity to the Australian gateways (Sydney, Melbourne, Brisbane and Perth) and does not include capacity to regional points under the Regional Package or capacity agreed under the Enhanced Regional Package to Gateway points provided the flights are routed through a regional point.

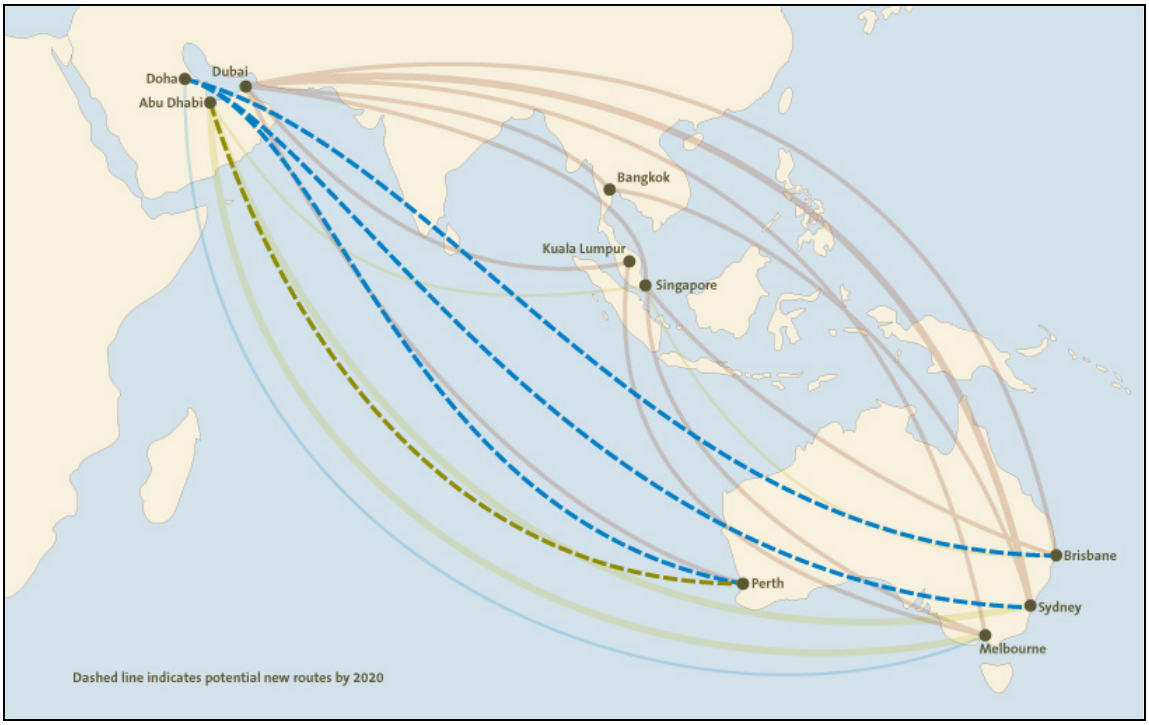
6.2.3.2 Medium and Long Term Scenarios

Table 6.12: Summary of Medium and Long Term Aviation Scenarios for the Middle East

TFC Forecasts to 2020	2010-2015	2015-2020
Forecast Arrivals Growth (%)	8.1	8.9
Resident Departures Growth (%)	n/a	n/a
Development Scenarios		
	Medium Term	**Long Term**
Regulatory Environment	Continuing pressure on available capacity as Middle East carriers expand fleets	Open skies agreement with UAE
Aircraft Type/Usage	B787s, A350s introduced; more A380s (replacing older B747-400s).	May represent a threat as bypassing of hubs may take place
Airline Type	Full service carriers dominate market with wide-body aircraft	Entry of more LCCs as they move up to larger, longer range aircraft
Alliances	Expansion by Virgin Australia/Etihad + other partners; Virgin enters global alliance	
Market Development	Focus largely on Australia-Europe market	Middle East markets seen as having growth potential in 5 to 10 year time frame
	Increased services to Doha from Australian cities as Qatar Airways takes delivery of more aircraft	Abu Dhabi-Perth flights introduced by Etihad/Virgin Australia
	Continued expansion of existing services between Australia and Dubai, Abu Dhabi	
Hub Usage	Further expansion of three Middle East hubs (Dubai, Abu Dhabi, Doha)	Growth in Northeast Asian hubs likely to threaten Middle East hub traffic. Middle East airlines likely to need to rely on more Origin-Destination traffic
Key Airlines	Emirates, Etihad, Qatar Airways	Emirates, Etihad, Qatar Airways, Virgin Australia
Growth Impediments	Limited available capacity between Australia and the Middle East	Risk of excess capacity on corridors to Europe as Middle East carriers expand
	Impact of higher fuel costs on long-haul operations	

The figure below illustrates potential new routes which could be operated between Australia and the Middle East, consistent with the scenarios.

Figure 6.8: Potential New Routes between Australia and the Middle East



Source: CAPA Consulting

Medium Term Scenarios

The importance of the Middle East to the Australian market is in its role as a hub, directing traffic from the UK and Europe to Australia. Visitors from the Middle East are a relatively small proportion of Australia's inbound tourists and will continue to be so in the medium and longer term despite the high growth rates forecast by the TFC of over 8% average growth per year up to 2020.

In the medium term aircraft orders suggested a continued growth in market share for Middle Eastern airlines. The UAE carriers Emirates and Etihad have significant widebody aircraft orders in place, as does Qatar. This suggests further development of services through the Middle East hubs of Dubai, Abu Dhabi and Doha, drawing traffic from not only the UK and Europe but increasingly North Africa, to Australia.

While there is no guarantee as to Australia's share of this additional capacity, indications are that Middle Eastern carriers are eager to increase services to Australia. As an example, Emirates intend to increase services to Australia to 70 inbound flights a week from October 2011 and have openly discussed an intention to increase this to 100 flights per week.

However, regulatory constraints may be an impediment to the level of growth of Middle Eastern carriers. In the example of Emirates quoted above, the current rights for UAE designated airlines based in Dubai allow 84 services per week. (Additional services are allowed provided they operate via another point in Australia which is not Sydney, Melbourne, Brisbane or Perth.)

A further impediment to the growth potential of Middle Eastern carriers is the ability of Sydney Airport to provide slots at appropriate times. Should curfews be introduced at other Australian airports, such as Brisbane, there may be further constraints on growth.

The expansion of the Etihad – Virgin Australia relationship will be a key dynamic in the medium term. The arrangement will provide a broader network with ease of connectivity for travellers beyond the main Australian ports serviced by the Middle Eastern carriers.

The Middle East's importance to outbound resident travel from Australia again lies in its role as a hub to the UK, Europe and North Africa. Growth in the Middle East as a tourism destination for Australian residents is likely to be subdued given the travel time involved and the perceived lack of tourist attractions in the area.

Long Term Scenarios

The key impediment to growth in the medium term is the ability of air service agreements to keep pace with the significant growth in the capacity of the Middle Eastern carriers. However, in the longer term an open skies arrangement with the UAE is likely.

While most of the growth is likely to occur on the key Sydney, Melbourne and Brisbane routes, an Abu Dhabi – Perth service is a possibility for the Etihad/Virgin Australia pairing.

As the longhaul low cost carrier business model develops and expands and these carriers take delivery of larger, longer range aircraft, it is likely that they will seek new longer haul markets to service. Thus, in the longer term we may see Middle Eastern low cost carriers looking further afield to markets such as Australia.

Threats to continuing Middle Eastern airline growth in the longer term include:

- New longer range aircraft types may lead to by-passing of the Middle East hubs;
- LCCs armed with new aircraft types may well attack both the through-traffic from Europe and the Middle East OD traffic; and
- Growth in Northeast Asian traffic will add a relatively new hub competitor to that developed in the Middle East.

6.2.3.3 Assessment

The TFC forecasts annual average growth in arrivals from the Middle East of 8.1% in the medium term and 8.9% in the longer term. (No forecasts of resident departures are provided.) Given the level of capacity being added by Middle Eastern carriers, these targets should be achievable. However exceeding the targets is likely to be difficult given the relatively small populations of the wealthier Middle Eastern countries such as the UAE, and the relatively low propensity to travel of the more highly populated countries.

The key impediment to achieving the forecasts is the ability of air service agreements to provide sufficient capacity for Middle Eastern carriers' growth plans.

6.3 Long-Haul Markets

For the longer haul markets there are two sub-categories:

- The UK and Europe, characterised by high volume, a mix of residents and visitor travels and a mix of visitor travel purposes. There are strong historical airline connections with Qantas and competition from intermediate airlines.
- The Americas.

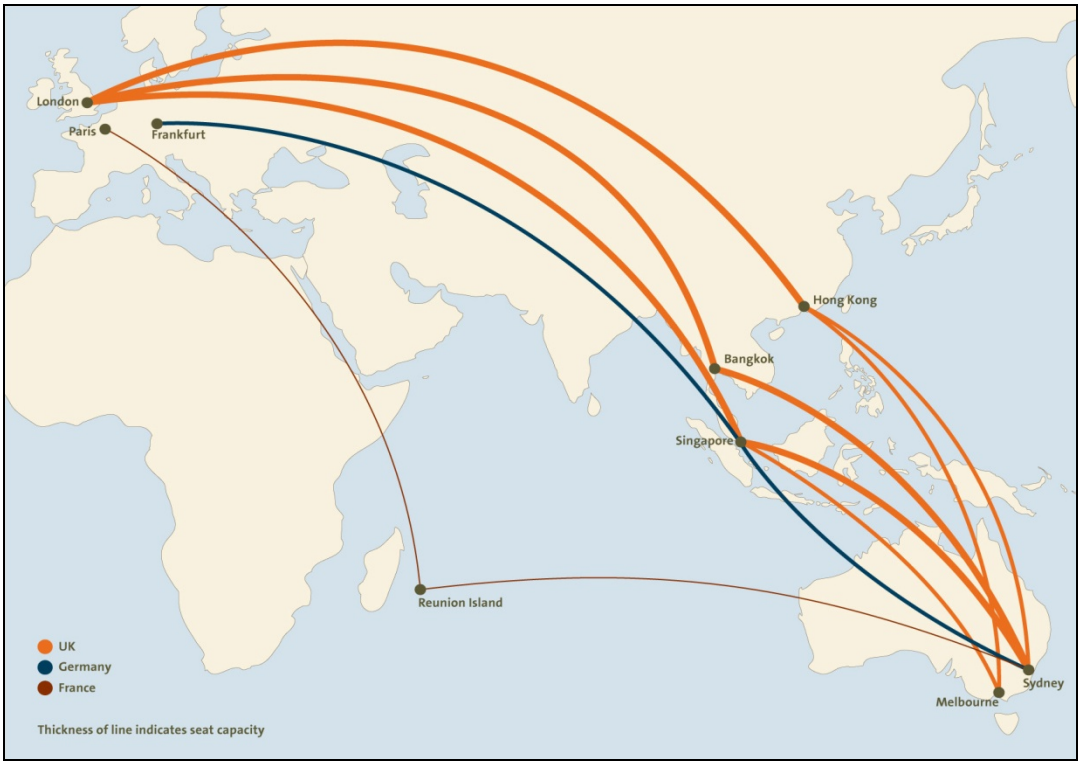
Both of these markets are heavily reliant on hubs.

6.3.1 Australia-UK/Europe

6.3.1.1 Overview of Current Airline Services

Air services between Australia and Europe offering the same flight code from origin to destination are depicted in **Figure 6.9**. This does not include services via the Middle East or other parts of Asia.

Figure 6.9: Air Services between Australia and the UK/Europe



Source: Tourism Australia

Table 6.13 below shows the airlines carrying visitors from UK/Europe to Australia. For the UK just over 40% of visitors are carried by Australasian or UK airlines.

The Middle Eastern airlines account for 26.5% of UK/European visitors and Southeast Asian airlines account for 21% with Northeast Asian airlines accounting for a relatively low 10.3%.

Table 6.13: Share of Carriage of Visitors to Australia from UK and Europe by Airline, 2010

	UK	Germany	France	Italy	Switzerland	Nordic	Other Europe
Australasian/UK Carriers:							
Qantas	26.6%	29.7%	25.3%	17.4%	12.1%	22.2%	20.5%
Jetstar	4.0%	6.6%	6.5%	4.2%	5.5%	6.8%	5.2%
British Airways	5.5%	1.3%	3.4%	1.7%	1.7%	3.8%	2.9%
Virgin Atlantic	2.1%	0.1%	0.2%	0.1%	0.2%	0.5%	0.5%
Air NZ	2.5%	2.7%	1.9%	1.2%	3.1%	3.9%	2.6%
(incl.Pacific Blue)	1.5%	2.1%	2.0%	1.6%	1.8%	2.0%	2.0%
Sum	**42.2%**	**42.5%**	**39.2%**	**26.2%**	**24.4%**	**39.3%**	**33.7%**
Carriers From:							
Other Europe	0.0%	0.1%	4.3%	0.2%	0.2%	0.0%	0.2%
Middle East	25.8%	26.9%	26.8%	45.3%	35.2%	13.9%	26.8%
SE Asia	20.8%	18.5%	15.1%	14.6%	33.3%	30.2%	22.7%
NE Asia	9.1%	9.7%	11.8%	10.5%	4.0%	14.0%	14.1%
Other	2.1%	2.3%	2.8%	3.2%	2.9%	2.6%	2.5%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Department of Immigration and Citizenship

Table 6.14 provides a snapshot of current weekly capacity limits under the Air Services Agreement with UK and European countries, utilization of that capacity share by Australian and UK/European carriers and current orders for Australia-capable aircraft. In the case of UK/Europe, the orders include only wide-bodied aircraft.

Table 6.14: Snapshot of ASA Utilisation, Australia-Capable Aircraft Orders for the UK/Europe Market

	Country	Total Negotiated Weekly Capacity (both countries)	% Allowance Utilised by Carriers		Total Orders Australia-Capable Aircraft		ASA Requirements
			Australia	Foreign	2011-15	2016-20	
UK/Europe	UK	Open capacity	n/a	n/a	43	23	Negotiations required on intermediate, beyond rights
	Ireland	14 frequencies	0	0	7	2	Adequate capacity available
	Germany	50 frequencies	28	0	34	0	Adequate capacity available

	Italy	14 frequencies	0	0	8	10	Adequate capacity available
	France*	6 frequencies	0	67	20	0	Limited capacity available

Source: SRS Analyser, CAPA Consulting/

6.3.1.2 Medium and Long Term Scenarios

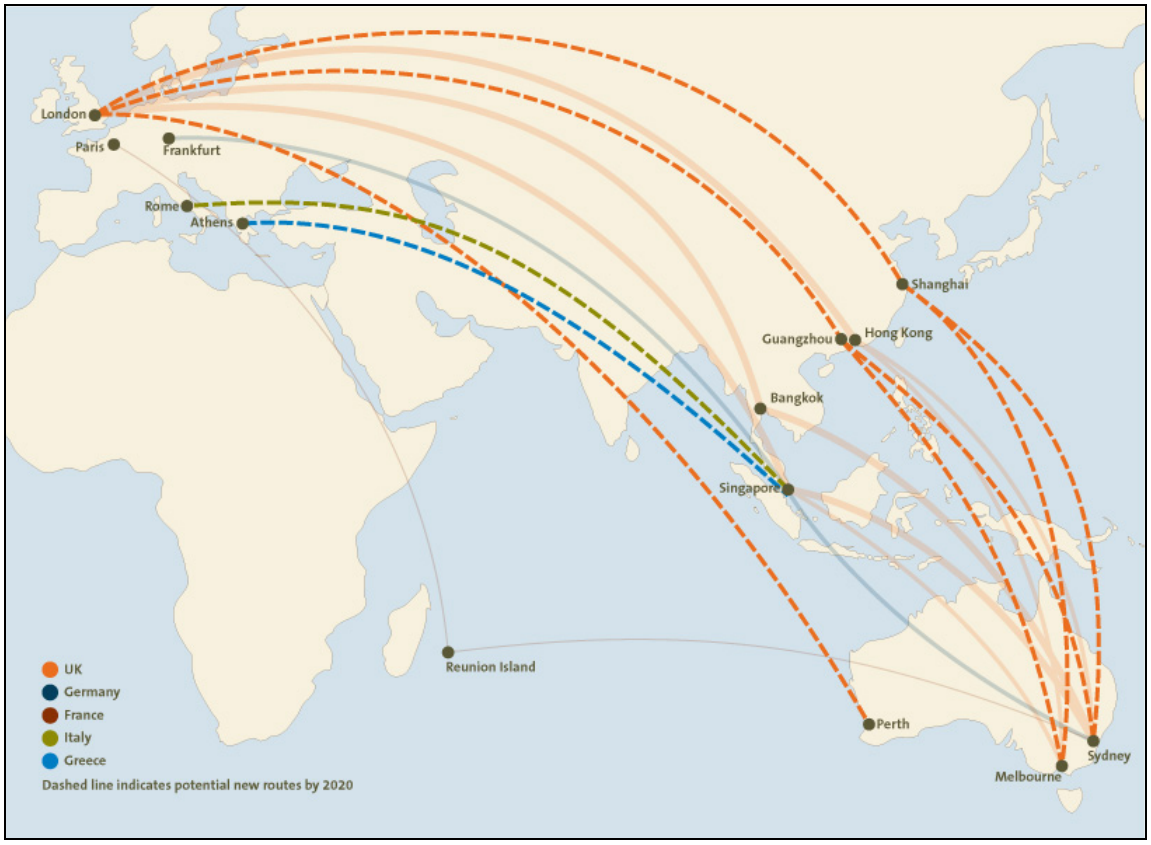
Table 6.15: Summary of Medium and Long Term Aviation Scenarios, UK and Europe

TFC Forecasts to 2020		2010-2015	2015-2020
UK	Forecast Arrivals Growth (%)	2.2	2.4
	Resident Departures Growth (%)	3.1	1.7
Germany	Forecast Arrivals Growth (%)	3.1	2.5
	Resident Departures Growth (%)	n/a	n/a
France	Forecast Arrivals Growth (%)	4.0	4.3
	Resident Departures Growth (%)	n/a	n/a
Development Scenarios			
		Medium Term	**Long Term**
Regulatory Environment		Impasse over Australia-EU "open skies"; agree to staged development of market	EU-Australia achieve open skies
		Continuing limitations for Australian carriers on access to UK/Europe via China	Australia-China open skies; 5th freedom services via China to Europe established
		Further pressure for additional capacity to the Middle East	Qantas builds equity relationship with Asian carrier; increases market penetration
Aircraft Type/Usage		Expanded usage of A380s in hub markets (i.e. via SE Asia, Middle East)	Long range B787-900s, A350s introduced; more A380s
		Jetstar launches B787-800 services out of Singapore to European cities	
Airline Type		Growth of long-haul LCCs; pressure on yields of full service operators	Entry of more LCCs as they move up to larger aircraft; may be excess capacity on some routes
Alliances		Expansion by Virgin Australia/Etihad + other partners; Virgin enters global alliance	Qantas breaks away from BA Joint Services Agreement; combines network structure with Jetstar
		Establishment of SkyTeam linkages to Europe vis Guangzhou, Shanghai with Air France	Withdrawal of remaining European airlines from Australia (better prospects in other markets); expanded partnerships with Asian/Australian carriers
Market Development		Capacity expansion by Middle East carriers through Gulf hubs; supported by Virgin Australia/Etihad	Development of Eastern European market via China, SE Asia (e.g. Russia)

	Establishment of direct LCC services to Europe from Singapore hub (e.g. Rome, Athens)	Opportunity for non-stop services (e.g. using B787-900s from Perth); enhanced premium product
	Introduction of new "kangaroo route" via China to Europe	
Hub Usage	Development of Northeast Asian hubs (e.g. China, Korea)	Intensified hub competition as intermediate carriers increase capacity (especially China, Middle East)
	Further expansion of Middle East hubs	Qantas establishes Shanghai hub connected to Europe
	Change in SE Asian hub dynamics (e.g. LCC services to Europe from Singapore, Kuala Lumpur)	Ho Chi Minh emerges as alternative hub, linkages between Vietnam Airlines/Air France
		Development of secondary hubs in Europe (as congestion worsens at major hubs)
Key Airlines	Jetstar, AirAsia X, Emirates, Etihad, Qatar Airways, Qantas/BA, Singapore Airlines, Air China, China Southern, China Eastern	
Growth Impediments	Slot constraints at intermediate, end destinations	Yield dilution on long-haul sectors
	Impact of EU emissions trading regime from 2012	Market subject to excess capacity
	Regulatory limitations restrict growth; may constrain Jetstar's Singapore plans	Increased competition from Asian tourist destinations
	Threat of rising fuel costs	Congestion at major European airports

The figure below illustrates potential new route which could be operated between Australia and UK/Europe, consistent with the scenarios.

Figure 6.10: Potential New Routes between Australia and UK/Europe



Source: CAPA Consulting

Medium Term Scenarios

Air service provision in the Australia-UK/Europe market will be characterised during this period by significant changes in network structures, hub usage and airline operations in an evolving regulatory environment. These will impact to a greater or lesser degree on market growth projections.

While aggressive fleet development programs will see a considerable expansion in available capacity for the major 6th freedom operators serving Australia, much of this is likely to be directed to higher growth markets in North and Southeast Asia, Europe and the Americas.

The Australia-UK/Europe market will be subject to increasing competitive pressures from:

- The Middle East carriers, Emirates, Etihad and Qatar Airways which all offer one-stop travel options to/from a wide range of European destinations. Their further growth in the Australian market, however, is not a "given" as it will depend on

the provision of additional capacity under Air Services Agreements with UAE and Qatar[11];

- Virgin Australia, through its joint services partnership with Etihad and interline connections with other carriers;
- Chinese airlines, developing 6th freedom operations to Europe through Shanghai, Guangzhou and Beijing; and
- Emergent long-haul Low Cost Carriers. These include Singapore's proposed new LCC, Jetstar and AirAsia X which, subject to the resolution of capacity constraints at Kuala Lumpur Airport, is targeting further growth to Europe and Australia.

Emirates, Etihad and Qatar are expected to gain an increasing foothold in the Europe-Australia market through non-stop and one-stop services as they take delivery of 150 wide-body aircraft over the next 5 years, including more A380s[12]. Emirates will further expand its EU presence with the introduction of services to Geneva and Copenhagen during 2011.

While Emirates plans to return its third daily Sydney service in October 2011[13], it will still operate 70 inbound flights to Australia each week – 14 fewer than the 84 permissible services between Dubai and Australian gateway destinations under the existing ASA. The airline has stated its intention to grow to 100 weekly services.

The development of the Virgin Australia-Etihad-Air New Zealand alliance recreates in another form the tripartite partnership in the late 1990s between Air New Zealand, Singapore Airlines and Ansett. The latter was seen as a vehicle to combat the strength of the Qantas/British Airways Joint Services Agreement on "kangaroo routes" to Europe. It delivers for Virgin access to Europe via Abu Dhabi and Etihad's growing European network.

Virgin's growing network of interline and other partnerships with European carriers outside of oneworld (i.e. Qantas/BA) will add another dimension to the inbound market and provide for greater market penetration. In effect, the airline is progressively building a network of relationships to fill the considerable gap left by the loss of Ansett International and its Star Alliance links.

The approach adopted by Virgin reduces the risk and capital exposure of serving the highly competitive European market directly.

[11] Current utilisation levels of available capacity by UAE carriers are already tight.
[12] Emirates has 75 more A380s on order, which will bring its fleet to 90 A380 aircraft; Etihad has 10 A380s on order.
[13] The B777-200LR aircraft currently used for the third daily flight between Dubai and Sydney is being transferred to the Dubai-Los Angeles route to strengthen capacity there.

Intermediate carriers enjoy significant advantages in terms of more efficient aircraft utilisation, service connectivity and fare pricing. The "mid hemisphere" location of their hubs enables them to serve a greater mix of markets. Added to this, the Asian airlines, in particular, operate with comparatively low labour costs.

AirAsia X's presence in the UK/Europe market with a lower-priced but highly competitive premium product is expected to establish a new market paradigm which may progressively weaken the yields of the traditional "kangaroo route" operators.

Singapore Airlines has also announced plans to establish a medium to long-haul LCC based in Singapore, as a counter to AirAsia X and Jetstar. The introduction of the new carrier is expected in 2012. This will add another competitive dynamic to the market into Europe (and possibly the US and other parts of Asia). As well, it will consolidate Singapore's position as a hub in Asia.

In the medium term, Jetstar is expected to:

- Initiate LCC services to southern European cities such as Athens, Milan and Rome from Singapore. Jetstar has two A330-200s based in Singapore which are capable of operating non-stop to southern Europe. These services could be extended later to northern Europe (Munich, Brussels) once it takes delivery of the first B787-800s from 2013;
- Build on its secondary links with the UK/Europe market through oneworld affiliation, its parent Qantas, British Airways and interline agreements with airlines such as Air France-KLM and Finnair;
- Distribute European traffic via Singapore to Australian destinations. This may create options for the airline to direct this traffic to regional or non-gateway markets which presently cannot be served economically with higher capacity aircraft.

The establishment of own-operated services based in Singapore effectively gives Jetstar Asia (and the Qantas Group) a 6th freedom presence as it would presumably use Singapore rights through minority-held Jetstar Asia to access European destinations.

Dispersal of European tourists to northern Australia, in particular, historically has proved difficult. However, A320 linkages could be offered to say Darwin or Broome from Singapore. The reach of LCCs into the topside of Australia could be extended further through the addition of the A320neo or upgraded B737NG which offers a range capability to serve Cairns[14], for example, and other destinations such as Mackay and Townsville.

[14] The present A320 can only serve Cairns in one direction due to prevailing winds. Hence, Jetstar's A321 services from Singapore to Cairns operate via Darwin.

The prospect of Jetstar or Jetstar Asia exploiting available rights to Europe out of Singapore is dependent on regulatory approvals both from Singapore and the EU; and the EU accepting Jetstar as a Singapore-designated carrier, given its effective control by an Australian group.

Another issue for carriers serving long-haul routes to Europe will be the introduction of the emissions trading regime by the EU from 2012 (airlines will be levied according to their carbon output on sectors before entering the EU). This will impact on the cost competitiveness of affected airlines, particularly LCCs.

Congestion at the major airports in Europe is also likely to emerge as a limiting factor to service development. Current demand already exceeds capacity at many times of day at London Heathrow, Gatwick, Paris Orly and Frankfurt, among others. Improved slot coordination, allocation and planning should relieve some of the problems, but pressures are likely to intensify with the EU anticipating aircraft movement growth of 5% per annum in European airspace.

Heathrow access in the past has been a significant barrier to development of the UK market (and connecting ports in other parts of Europe). However, the focus on Heathrow as the main market gateway appears to be changing with 65% of UK-originating traffic to Australia now using other British airports[15]. This is due to the expansion of UK gateway destinations by the Middle East carriers, in particular.

While Australia maintains an open capacity arrangement with the UK, the establishment of an open skies agreement with the EU as a whole is a priority for the medium term. This would assist in the development of Australian carrier services beyond China, for example, and other intermediate ports.

Negotiations between Australia and the EU are presently at an impasse. However, the two sides may agree to a staged approach for an agreement, beginning say with open 3rd and 4th freedom access.

As noted earlier, China may be a more difficult proposition as it requires both governments (China and Australia) to agree to an “open skies” arrangement, including unlimited access to 5th freedom services beyond China to Europe. Qantas is interested in serving Paris and the UK through a Shanghai hub.

In the meantime, Chinese airlines are expected to establish their own “kangaroo route” services to Europe via Guangzhou and Shanghai. The entry of China Southern and China Eastern into the SkyTeam alliance is expected to see the development of greater connectivity with Europe. While the major Chinese airlines will have adequate aircraft capacity to service the Australia-Europe market, their ability to do so may be hindered by slot constraints and limited transit capabilities at the key airports in China.

[15] Information provided by Emirates for this study.

The combination of rising fuel costs and diluted yields may also restrict the development of the Australia-Europe market, deterring some airlines from expanding or establishing direct services. This is only likely to intensify the reliance of operators on partnership arrangements to access the Australian market rather than committing aircraft to a relatively tough market.

While much of the distribution task for the UK/Europe market is met by travel operators, reflecting the higher age demographic of visitors, the direct involvement of LCCs has the potential to tap into a younger, more Internet-friendly segment of the market.

Online bookings account for a substantial percentage of sales on short-haul sectors within the EU and on the Atlantic. The introduction of long-haul LCCs may see an accelerated shift away from travel agencies and other intermediate providers to the Internet. The opportunity for Europeans to book tickets on an LCC through to an Australian destination is likely to be an attractive option.

Long Term Scenarios

While the medium term could be viewed as a transitional phase for the Australia-UK/Europe market, the longer term is likely to see more dramatic developments which provide impetus for inbound growth and service diversity.

The intermediate hubs will continue to be important components of the market infrastructure, with competition between them intensifying as their home carriers complete re-fleeting programs.

Based on the scale of planned aircraft acquisitions, there is likely to be a further shift towards the Middle East and China as connecting points to Europe with the Asian hubs still significant centres for transit traffic.

Australia is expected to conclude open skies arrangements both with the EU and China which will expand service options, enabling Australian carriers to proceed with the introduction of 5th freedom services to Europe via China.

This, in turn, may see the more effective development of inbound markets from eastern Europe, including the Russian Federation, and northern European markets. We note that the Russian Federation currently is a mostly untapped source market, accounting for only 13,600 visitors in the year to February 2011 (36th out of the 39 countries listed).

Aeroflot, the Russian national carrier, is a member of SkyTeam and codeshares with fellow member China Southern Airlines to Guangzhou. As China Southern builds its “kangaroo route” capability and fleet capacity, there is potential to develop improved connectivity with the Russian market.

As Qantas takes delivery of its remaining A380s, and other carriers introduce similar aircraft, there is likely to be substantial excess capacity in the Australia-Europe market focused on high-density routes through the major hubs. In the case of Qantas, this focus is likely to be maintained on London with the UK continuing to be a significant inbound market for Australia.

This influx of capacity will apply further pressure to yields as competition increases, adding to the difficulties experienced as a consequence of LCC entry to the long-haul market. While the benefits for tourism may be tangible with lower fares and greater seat availability, the longer term sustainability of some services is likely to be called into question.

The weakening of yields in the market coupled with more competition and likely higher service costs[16] may hasten moves to establish more competitive (and innovative) route structures between Australia and Europe:

- Qantas, for example, may (or may not) unwind its long-held Joint Services Agreement with BA to concentrate on one-stop rather than two-stop services to European destinations. In these circumstances, the development of Jetstar services through Singapore and a new China hub, together with partnerships with other European carriers, may provide a more attractive market proposition. It should be noted, however, that any future decision on the Qantas-BA relationship is complicated by the interwoven nature of their joint services to Europe and their involvement as founding members of oneworld.
- The availability of longer range B787-900s may offer an opportunity for full service carriers to introduce a new premium-based option through the establishment of non-stop services between Australian cities and London (e.g. Perth-London). Qantas will receive its first B787-900s from 2015.

The severity of market conditions could also see the remaining European carriers withdraw from Australian services. Only three directly serve Australia, including BA, Virgin Atlantic and Air Austral. Without the JSA, BA is unlikely to find it economic to continue services in the market. Virgin Atlantic may remain, however, given the brand relationship with Virgin Australia.

Other hubs may emerge in Asia as the region's carriers enter into alliances with European operators. Ho Chi Minh Airport, in Vietnam, is expected to develop through Vietnam Airlines' relationship with Air France-KLM and the SkyTeam alliance.

[16] Due to the EU emissions trading scheme and higher aircraft fuel costs.

6.3.1.3 Assessment

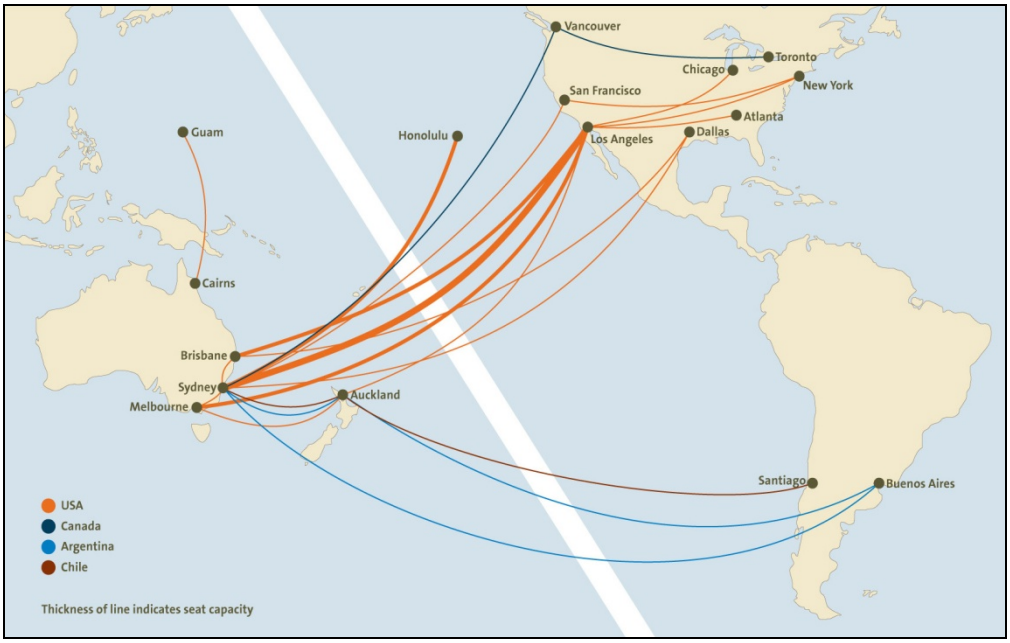
The aviation dynamics influencing the UK/Europe market indicate that the relatively moderate growth targeted may understate its potential. This growth will reflect: the further development of Middle East hubs and the fleets of its carriers; establishment of more long-haul LCCs in the Australia-Europe market; and the expansion of Chinese operators on an alternate "kangaroo route" via southern China. Freeing up restrictions on 5th freedom rights through intermediate points will be central to fully capitalising on these developments.

6.3.2 The Americas

6.3.2.1 Overview of Current Airline Services

Air services currently operated non-stop and one-stop using the same flight code all the way through between Australia and North and South America are depicted in **Figure 6.6**. Guam has been included as it is a US territory.

Figure 6.11: Air Services between Australia and the Americas



Source: Tourism Australia

Table 6.6 shows the airlines carrying visitors from the Americas to Australia. For the US, 56% of visitors are carried by Australasian airlines. North American airlines account for one-third of visitors with relatively small shares carried by South American and other airlines.

Table 6.16: Share of Carriage of Visitors to Australia from North and South America by Airline, 2010

	North and South American Visitor Markets					
	USA	**Canada**	**Argentina**	**Brazil**	**Chile**	**Total**
Australasian						
Qantas	37.3%	16.9%	51.2%	33.1%	23.7%	33.5%
V Australia	7.8%	2.4%	0.3%	0.6%	0.6%	6.2%
Jetstar	2.4%	3.2%	3.6%	6.7%	5.7%	2.8%
Air NZ	7.1%	10.6%	2.4%	2.9%	3.1%	7.4%
Pacific Blue	1.5%	2.4%	1.8%	3.1%	2.6%	1.8%
Sum	**56.2%**	**35.5%**	**59.3%**	**46.4%**	**35.6%**	**51.7%**
Nth American						
Continental Airlines	0.4%	0.0%	0.0%	0.0%	0.0%	0.3%
Delta Air Lines	8.9%	2.3%	0.1%	0.2%	0.0%	7.0%
Hawaiian Airlines	0.8%	0.2%	0.0%	0.0%	0.0%	0.6%
United Airlines	22.6%	11.9%	0.1%	0.8%	0.0%	19.0%
Air Canada	0.3%	33.8%	0.0%	0.0%	0.1%	6.7%
Sum	**33.0%**	**48.1%**	**0.2%**	**1.0%**	**0.1%**	**33.6%**
Sth American						
Aerolíneas Argentinas	0.1%	0.2%	27.7%	9.1%	6.0%	1.0%
LAN Airlines	0.2%	0.1%	6.0%	20.7%	43.0%	1.8%
Transbrasil	0.1%	0.1%	0.0%	0.2%	0.1%	0.1%
Sum	**0.4%**	**0.4%**	**33.7%**	**30.0%**	**49.1%**	**2.8%**
Others						
Mid East	1.7%	2.2%	1.3%	11.9%	2.9%	2.2%
Europe	0.4%	0.5%	0.7%	0.5%	1.5%	0.5%
NE Asian	2.1%	5.5%	1.1%	0.8%	3.3%	2.7%
SE Asian	3.6%	4.7%	2.8%	4.8%	6.6%	3.9%
Others	2.8%	3.2%	1.0%	4.6%	0.9%	2.9%
Sum	**10.5%**	**16.0%**	**6.7%**	**22.6%**	**15.2%**	**12.1%**
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Department of Immigration and Citizenship

Table 6.17 provides a snapshot of current weekly capacity limits under the Air Services Agreement with North and South American countries, utilization of that capacity share by North and South American carriers and current orders for Australia-capable aircraft. In the case of the Americas, the orders include only wide-bodied aircraft.

Table 6.17: Snapshot of ASA Utilisation, Australia-Capable Aircraft Orders for the Americas Market

	Country	Total Negotiated Weekly Capacity	% Allowance Utilised by Carriers		Total Orders Australia-Capable Aircraft		ASA Requirements
			Australia	Foreign	2011-15	2016-20	
North America	US	Open capacity	n/a	n/a	34	56	No constraints
	Canada	6,000 seats	0	63	20	17	Adequate
Latin America	Argentina	3,542 seats	67	0	0	0	Adequate
	Chile	4,000 seats	0	84	50	39	Tight for Lan Airlines
	Brazil	28 frequencies	0	0	41	25	Adequate
	Mexico	8 frequencies	0	0	11	8	Adequate

Source: SRS Analyser, CAPA Consulting

6.3.2.2 Medium and Long Term Scenarios

Table 6.18: Summary of Medium and Long Term Scenarios for the US & Canada

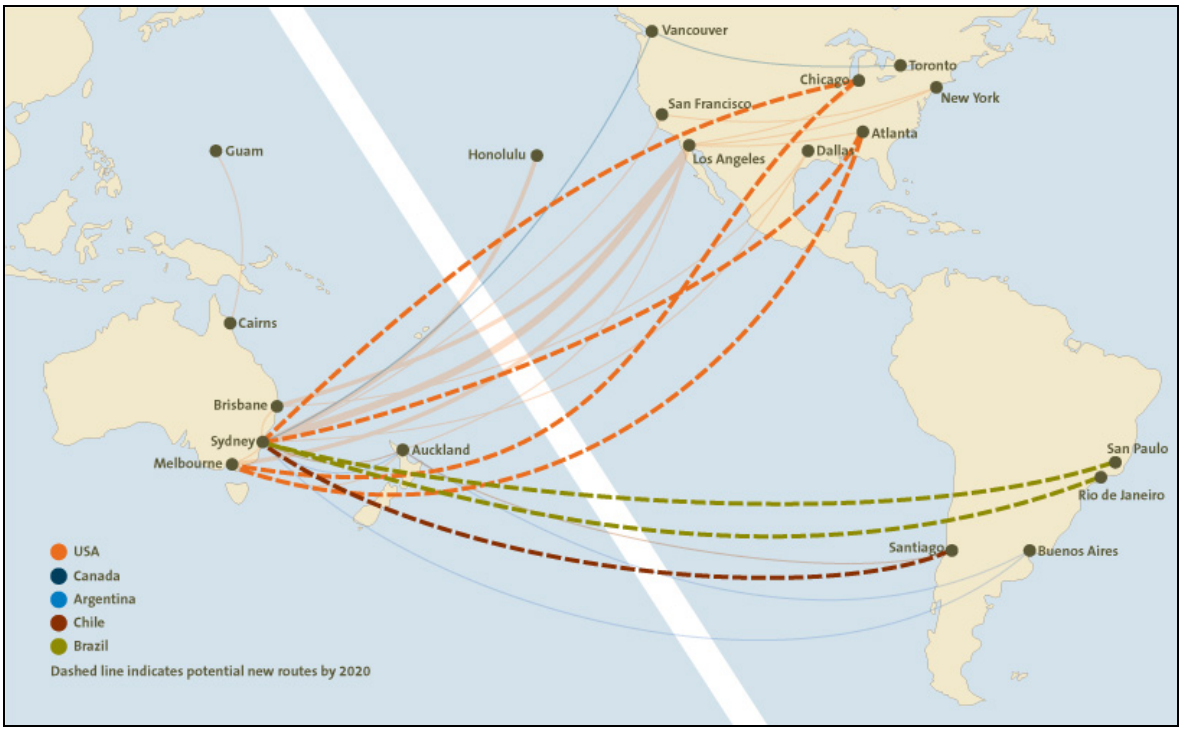
TFC Forecasts to 2020	2010-2015	2015-2020
Forecast Arrivals Growth (%)	3.4	3.2
Resident Departures Growth (%)	6.1	2.7
Development Scenarios		
	Medium Term	**Long Term**
Regulatory Environment	Open Capacity on Trans Pacific	Assume opening up of 3rd country access
	Limitations on 3rd country airlines	
	Restricted intermedia rights to Canada	
Aircraft Type/Usage	B787s, A350s introduced; more A380s (replacing older B747-400s)	Expanded usage of new, more economic types out of intermediate hubs
Airline Type	Expansion of long-haul LCCs; pressure on yields of full service operators	Entry of more LCCs as they move up to larger aircraft; may lead to excess capacity on some routes
Alliances	Expansion by Virgin Group + Delta; development of Qantas/American Air joint services	Emergence of stronger alliances, perhaps changes in existing alliance relationships
	United/Continental merger	
Market Development	Opening of new North American hubs e.g. Dallas/Ft Worth, Atlanta. Reduction in share for LAX and traditional market approach.	Emergence of flights from across US through new hubs.
	Greater dispersal through US and interconnecting markets (Canada, Latin America)	Expansion of direct services to/from US cities (e.g. non-stop Sydney/Melbourne-Atlanta and Chicago with long-range B787-9s)
	Rationalisation of operators due to weakening yields	Establishment of Singapore Airlines services via Australia to US
Hub Usage	Development of Northeast Asian hubs (e.g. China, Korea)	Northeast and other Asian hubs for entry from USA ports to Australian ports.
	Increases in Southeast Asian hub activity to counter Northeast Asian developments	
Key Airlines	Qantas, Jetstar, United, American Air, Delta, Virgin	Increasing activity by NE and SE Asian airlines.
Growth Impediments	Slot constraints at intermediate, end destinations	Likely to change as new hubs open
	Available rights for Canadian operators to increase to double daily	Excess capacity on Pacific routes
	Impact of carbon tax regimes	Congestion at US hubs
	Threat of rising fuel costs	

Table 6.19: Summary of Medium and Long Term Scenarios for South America

TFC Forecasts to 2020	2010-2015	2015-2020
Forecast Arrivals Growth (%)	n/a	n/a
Resident Departures Growth (%)	n/a	n/a
Development Scenarios		
	Medium Term	**Long Term**
Regulatory Environment	Technical regulatory issues likely to slow growth of direct services	Change over time as new aircraft are approved and operate
	Limited bilateral impediments	Likely open skies agreements
Aircraft Type/Usage	B787s, A350s introduced; more A380s (replacing older B747-400s)	Expanded usage of new, more economic types out of cities in South America
Airline Type	Mostly full-service carriers; development of links via the Middle East	Long-haul LCCs may emerge in market
Alliances	Continued growth in airline partnerships, including possible TAM-LAN alliance and Qantas-LAN/TAM	New era as more routes are opened and Australian hub opportunities emerge
Market Development	Modest growth of additional non-stop services (e.g. introduction of Sydney-Sao Paolo service)	Increase in non-stop services to Brazil, Chile with B787-9s (may include Rio de Janiero)
Hub Usage	Increased use of Dallas and other USA hubs	Likely growth in South American hubs but also direct services to Australia with hubbing in Australia to Asia
Key Airlines	North American airlines, TAM, LAN, Aerolineas Argentinas, Qantas	LAN, Qantas, Aerolineas, North American airlines
Growth Impediments	Limited available capacity; additional ASAs required in South America	Restricted market access in some countries
	Protection of national carriers (e.g. Aerolineas)	
	Infrastructure constraints on usage of Sao Paolo's international airport	

The figure below illustrates potential new routes to be operated to the Americas market by 2020, consistent with the scenarios.

Figure 6.12: Potential New Routes to the Americas by 2020



Source: CAPA Consulting

Medium Term Scenarios

The medium term key aviation dynamics for the US result from:

- The introduction of new longer range aircraft types such as the B787 and A350, although their major impacts will be felt in the longer term;
- Opening of new hub opportunities within the US. The use by Qantas of a Dallas hub is a major step in this direction; and
- The entry of new airlines onto current trans-Pacific routes.

From Australia's viewpoint the additional US hub (Dallas) provides the opportunity for a deeper penetration into the USA than was previously possible. It also bypasses growing congestion at the traditional Los Angeles hub.

The main USA/Australia route has been a two airline route for much of its history. The entry of new airlines should generate additional growth opportunities although it also threatens the yield on the routes and raises the question of sustainability.

The route may also face entry by long-haul LCCs. As a result, competitive pressure may lead to a carrier exiting the route.

Airline alliances and relationships will continue to develop and be a key to the sustainable operation of US/Australia routes. These include Virgin Australia's alliance with Delta, the United/Continental merger and the longer standing Qantas/American Airlines partnership as part of the broader oneworld alliance.

Canada-Australia capacity may be an issue for Air Canada in particular as the current air services agreement would not allow the carrier to increase services to double daily operations if demand supported this. There are no restrictions on US capacity. Currently the passenger traffic between Australia and South America is limited and sparsely divided between a few routes. There is some hubbing over the USA. Many of the medium term aviation factors for Central and South America are developmental with the main pay-off considered likely in the medium to longer term.

These developments include:

- The entry of new longer range aircraft types which will allow an increasing number of non-stop services;
- Developing relationships between Australian and South American carriers, for example Qantas' relationship with Chile's LAN Airlines which is planning to merge with Brazil's TAM if the Chilean antitrust tribunal grants approval;
- The growth in South American economies and the middle class, increasing the propensity to travel of these populations; and
- The increasing links between South American resource providers and China.

This last point has the potential to allow eastern seaboard airports in Australia (most likely Sydney assuming no capacity constraints) to act as hubs for traffic between South America and Asia.

However, infrastructure constraints at some South American airports require addressing to enable growth potential to be achieved. As an example Sao Paulo's Guarulhos International Airport, the busiest airport in Brazil, has both runway and terminal capacity constraints and suffers congestion issues. As a result, aircraft movements are restricted to 45 per hour. While Australia's bilateral agreement with Brazil allows for 14 services per week, only half of these may be operated to Sao Paulo.

While the Brazilian government is considering privatisation and the construction of a second international airport for Sao Paulo, this will not resolve capacity constraints in the medium term.

Long Term Scenarios

The key aviation dynamics for the US in the longer term result from:

- The rapid growth in delivery of the longer range B787s and A350s into the five to 10 year time frame will allow a broader range of US destinations to be serviced with non-stop flights. In addition, new aircraft deliveries will allow Jetstar to enter the US mainland market.
- Entry of long-haul low cost carriers to the market adding capacity to the routes and putting pressure on the profitability of full service carriers on the Pacific routes. There is also the potential in the longer term for approval to be given to Singapore Airlines to operate services between Australia and the US.
- The opening of additional hub opportunities within the US and over Asia. The development of potential Northeast Asia hubs could have very significant impacts on US growth potential. This offers the opportunity of an alternative to the standard Los Angeles/Sydney/Melbourne approach which could be replaced by a range of options from within the US to Asian hubs and then directly into Australian cities.

The key aviation dynamics for Central and South America in the longer term result from:

- Further strengthening of the economies of Latin American countries and an increasing propensity to travel;
- The development of new non-stop routes to Brazil, Argentina and Chile based on the use of the new longer range aircraft types; and
- The prospect for using Australian cities as hubs for the connection from South America to Asia. Routes between Australia and South America could be thickened with this Asia/South America traffic.

6.3.2.3 Assessment

TFC forecasts for the US show moderate annual average growth in visitor arrivals. The increasing competitiveness of the route should allow the forecasts to be met however exceeding the targets may be impeded by the relative cost of Australia as a tourist destination. Outbound resident departures are forecast to grow by an average of 6.1% up to 2015, reflecting the strength of the Australian dollar and the relatively lower cost of overseas travel. In the longer term, this growth rate is expected to fall back to 2.7% which appears low. There are no TFC forecasts for the Latin American markets. In the medium term these are likely to experience slow growth as carriers receive deliveries of new, longer range aircraft types and establish services. The main growth potential is in the longer term as the economies of Latin American countries strengthen carriers commit to appropriate levels of capacity.

7. Assessment of Air Service Requirements to Achieve Market Growth Targets

The Team has prepared forecast capacity reviews for the following markets:

- Canada
- China
- Germany
- Hong Kong
- India
- Indonesia
- Japan
- Korea
- Malaysia
- New Zealand
- Singapore
- South Africa
- Taiwan
- Thailand
- United Kingdom
- USA

It is important to note that the capacity estimation is based on TFC forecasts and is therefore by country pairs (Australia and each specific country). The outcome is a demand for capacity based on origin/destination.

The illustrations shown in the following pages for each of these markets show:

- *Top Left Quadrant* - The TFC forecasts for visitors from the market and forecasts for the numbers of Australians travelling to the market as a main destination.
- *Top Right Quadrant* – The TFC forecasts for visitor arrivals by travel purpose.
- *Bottom Left Quadrant* - The projected number of weekly one-way passengers calculated from the TFC forecasts. Note that these are based on adding TFC forecasts for visitor arrivals and resident departures (where resident departure forecasts are not available TFC aggregate or regional growth rates have been used for the resident departure forecasts). There is also a version which builds in 'stretch' growth beyond the TFC forecasts for visitor numbers. This stretch assumes a 10% increase in visitor numbers over and above the TFC forecasts by 2015 and 20% by 2020. This chart also shows the numbers of seats required to serve these passengers. The seats are determined by dividing the passengers by an assumed passenger seat factor. Note that the bars show the additional seats required (over and above 2010) to meet the 'stretch' passenger demand. It is important to note that this analysis is based on country-pair data (Australia and the specific market).
- *Bottom Right Quadrant* - The average number of weekly one way flights necessary to meet the projected passenger demand. The flight numbers are determined by dividing the seat numbers by an average aircraft size. Note that the bars show the additional flights required (over and above 2010) to meet the 'stretch' passenger demand.

Table 7.1 below shows the average seats per flight and passenger seat factor for each market in 2010. The table also shows the assumed average seats per flight and passenger seat factor used to determine the required seats and flights in the future. The average number of seats per flight for 2010 was grown by 10% during the projection period to allow for an increase in aircraft size as the market grows. Germany was the exception with average seats maintained at 401. If passenger seat factors were above 80% in 2010 they were maintained at this level. For markets with average passenger seat factors below 80%, seat factors were increased by 2.5 percentage points.

Note that where capacity limits are specified in the relevant Air Services Agreement it has been shown on the relevant charts (seat capacity or flights per week).

Summary of Conclusions Regarding 'Available Capacity' by Market:

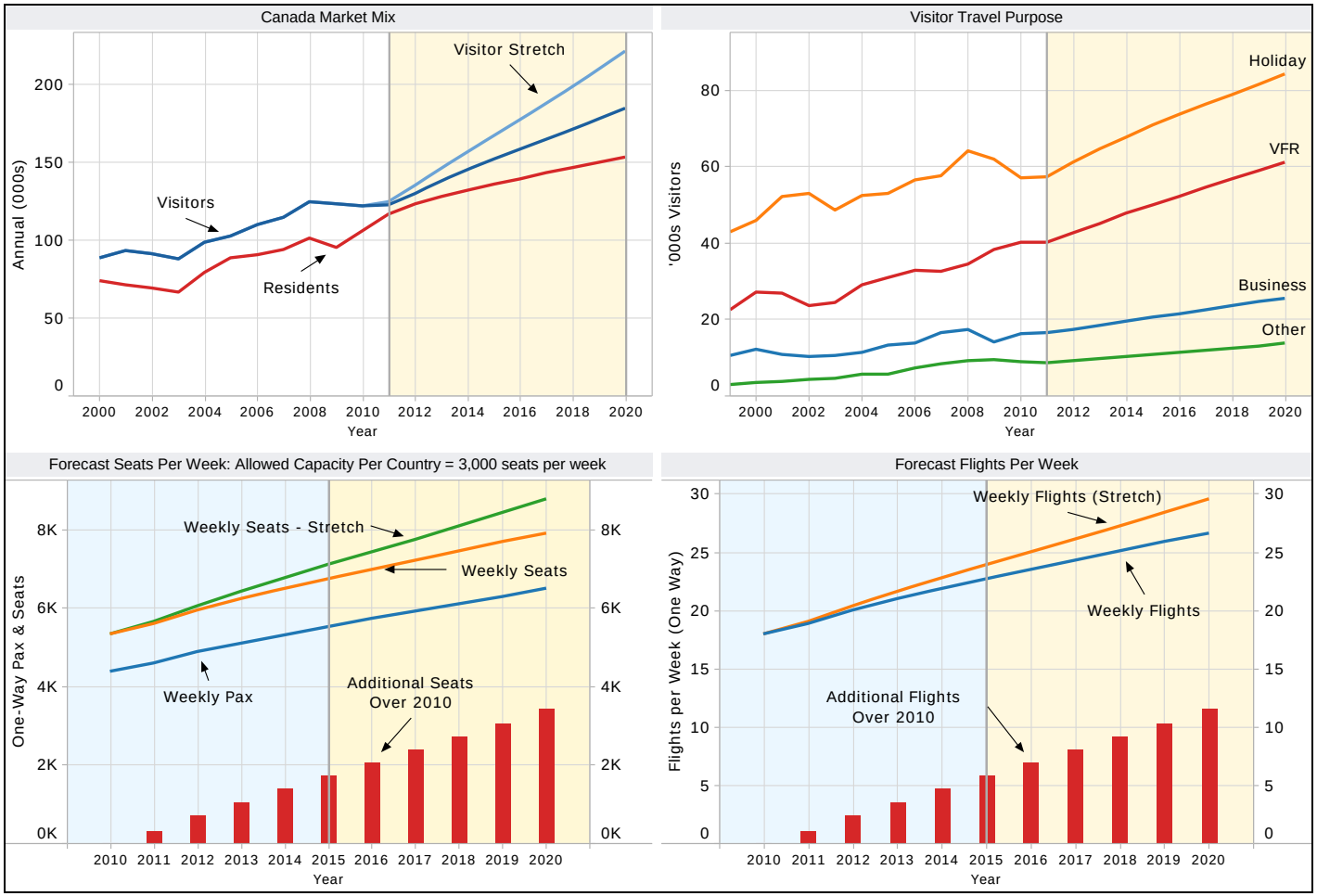
- A number of markets do not have specified capacity limits. These include USA, UK, Singapore and New Zealand.
- A number of markets have sufficient available capacity where capacity is fully utilized by both sides of the agreement. However in a number of cases a substantial part of the entitlement is unutilized by one side of the agreement. This includes China, Malaysia, Korea, Taiwan and Canada.
- In the case of a number of markets such as China, Indonesia and Malaysia there is evidence of a need for additional capacity in the near term.

Table 7.1: Base Year (2010) and Assumptions for Average Seats Per Flight and Passenger Seat Factors

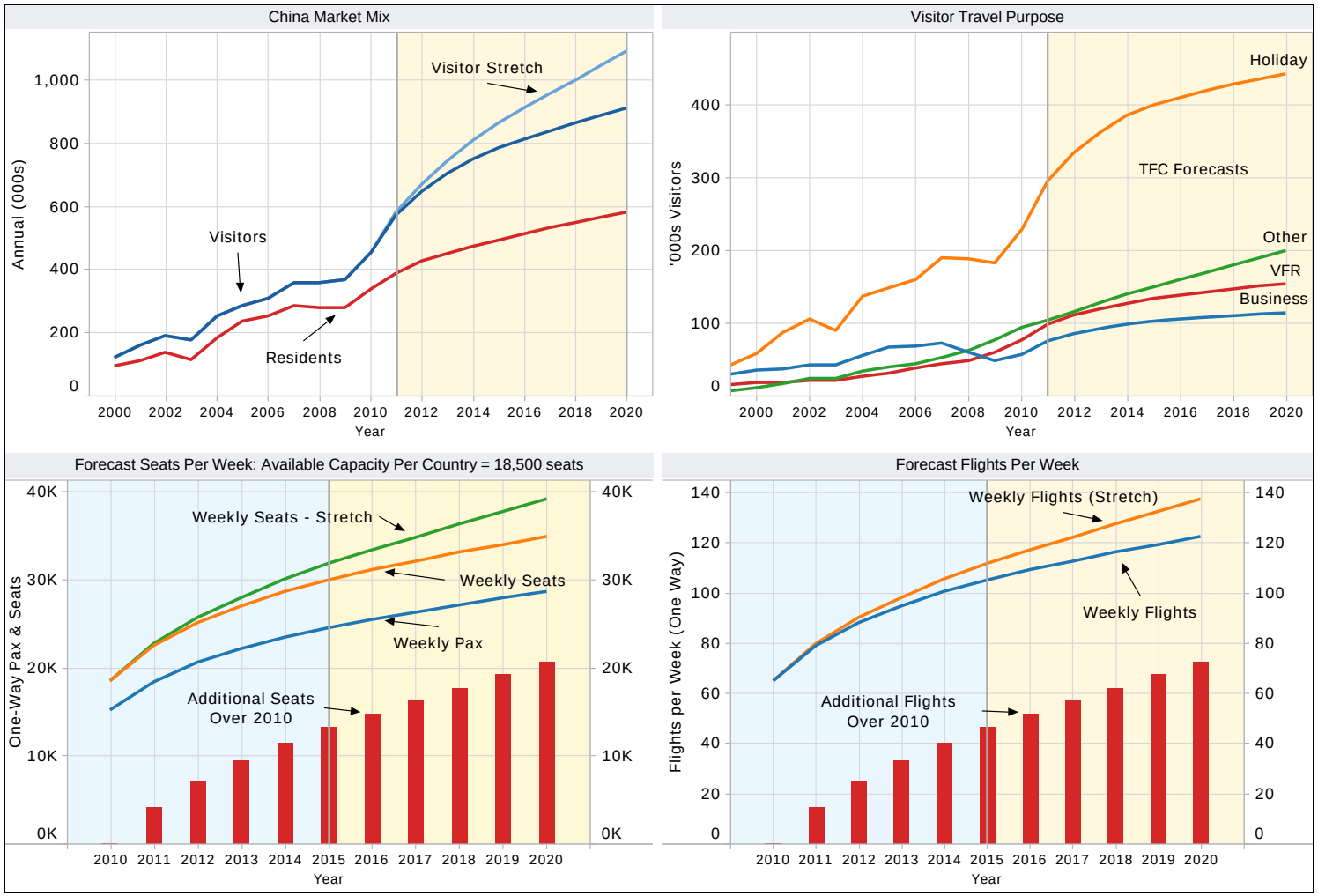
Country:	Base Year 2010		Assumptions for Period to 2020	
	Average Seats per Flight	Average Seat Factor	Average Seats per Flight	Average Seat Factor
Canada	270	81.7%	297	82%
China	259	79.6%	285	82%
Germany	401	88.6%	441	89%
Hong Kong (SAR)	267	79.5%	294	82%
India	296	85.6%	326	86%
Indonesia	201	75.1%	221	78%
Japan	284	76.5%	312	79%
Korea	269	77.2%	296	80%
Malaysia	319	77.4%	351	80%
New Zealand	182	75.6%	200	78%
Singapore	276	78.9%	304	81%
South Africa	323	71.1%	355	74%
Taiwan	290	75.1%	319	78%
Thailand	303	67.4%	333	70%
UK	340	83.0%	374	83%
USA	311	84.8%	342	85%

Source: BITRE, Consulting Team

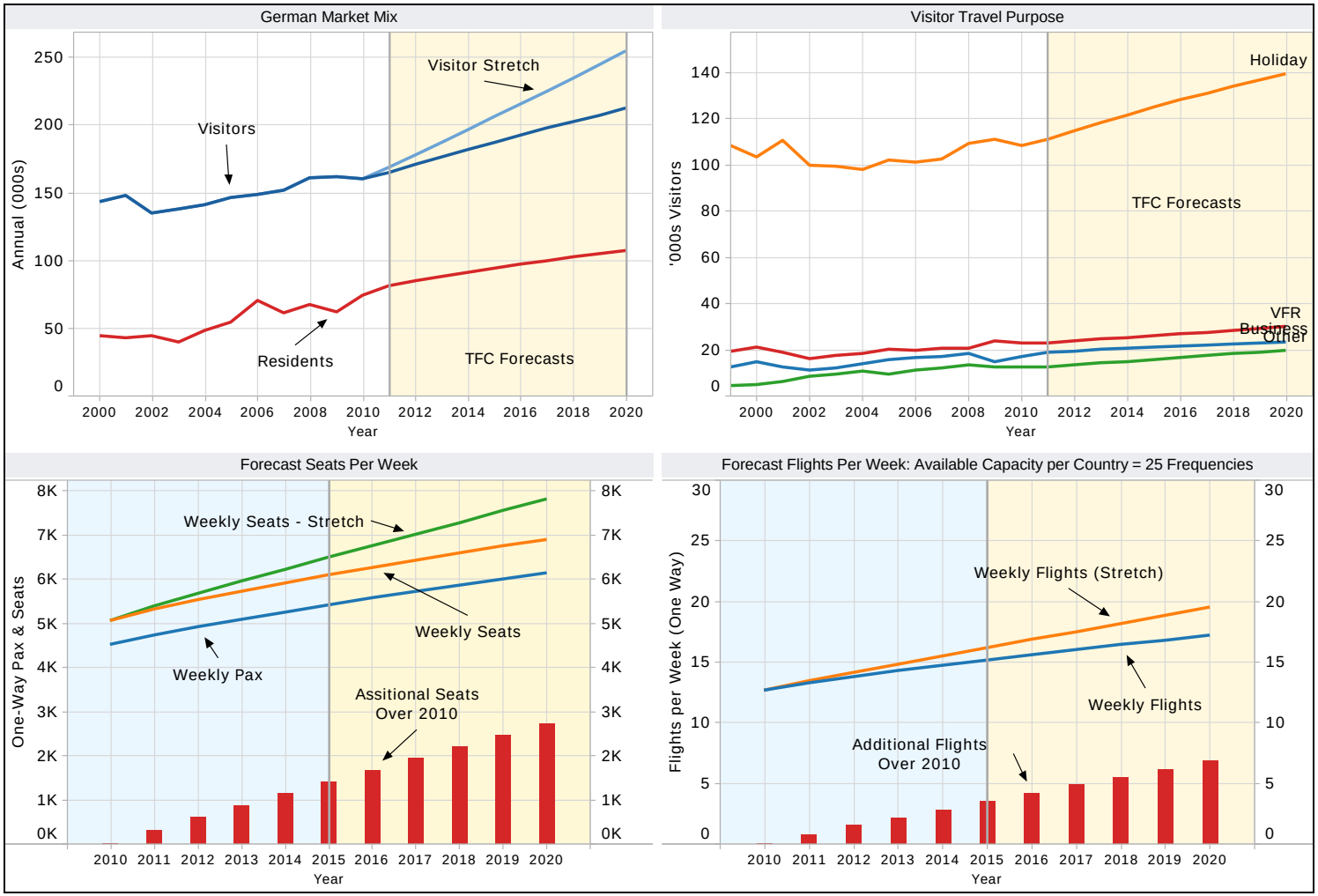
Canada


Canada Market Mix
Annual (000s)
Visitor Stretch
Visitors
Residents
Year
Visitor Travel Purpose
'000s Visitors
Holiday
VFR
Business
Other
Year
Forecast Seats Per Week: Allowed Capacity Per Country = 3,000 seats per week
One-Way Pax & Seats
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
Year
Forecast Flights Per Week
Flights per Week (One Way)
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
Year

China


China Market Mix
Annual (000s)
1,000
800
600
400
200
0
Visitor Stretch
Visitors
Residents
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Visitor Travel Purpose
'000s Visitors
400
300
200
100
0
Holiday
TFC Forecasts
Other
VFR
Business
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Forecast Seats Per Week: Available Capacity Per Country = 18,500 seats
One-Way Pax & Seats
40K
30K
20K
10K
0K
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats
Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year
Forecast Flights Per Week
Flights per Week (One Way)
140
120
100
80
60
40
20
0
Weekly Flights (Stretch)
Weekly Flights
Additional Flights
Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year

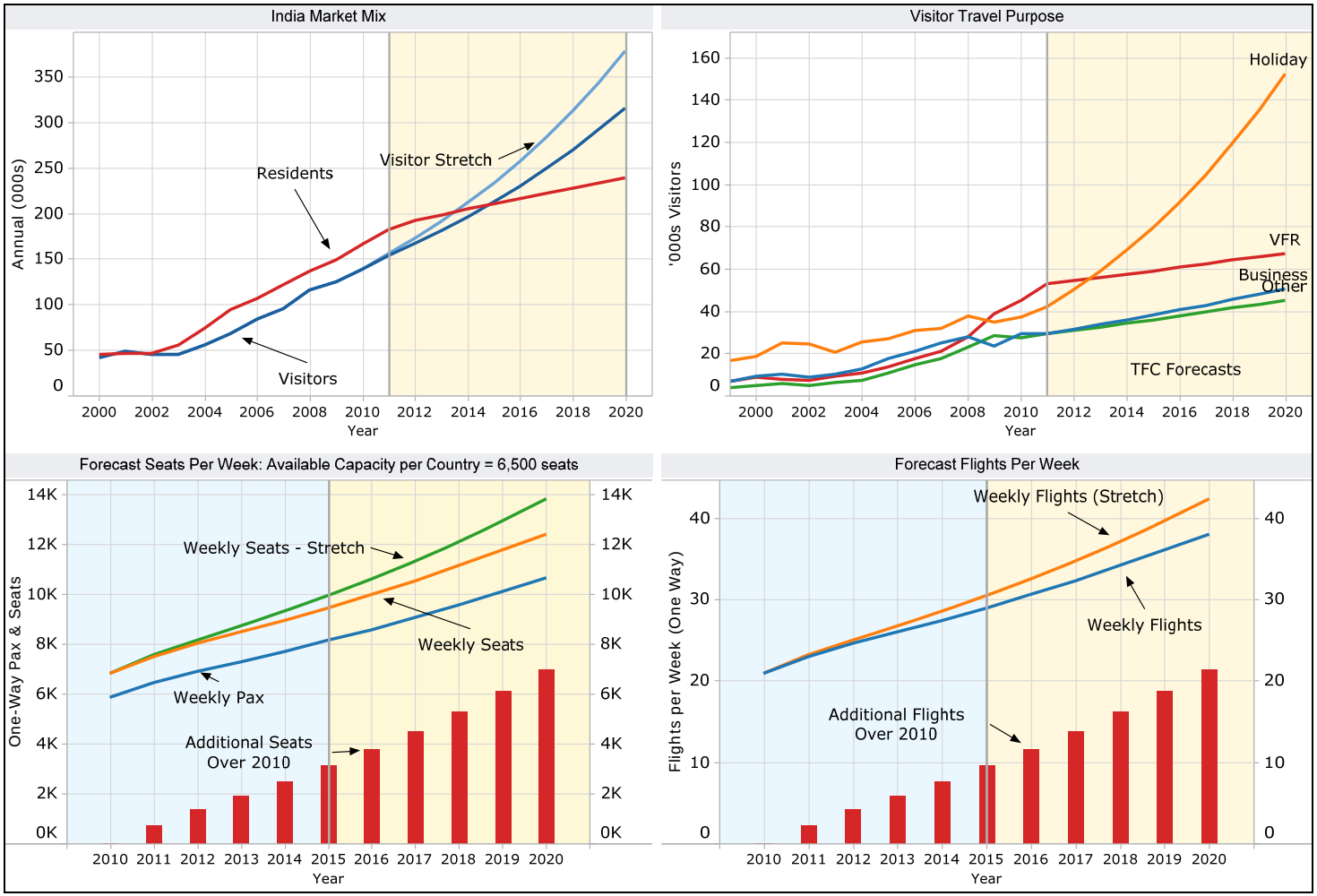
Germany


German Market Mix
Annual (000s)
Visitors
Visitor Stretch
Residents
TFC Forecasts
Year
Visitor Travel Purpose
'000s Visitors
Holiday
TFC Forecasts
VFR
Business
Other
Year
Forecast Seats Per Week
One-Way Pax & Seats
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Assitional Seats
Over 2010
Year
Forecast Flights Per Week: Available Capacity per Country = 25 Frequencies
Flights per Week (One Way)
Weekly Flights (Stretch)
Weekly Flights
Additional Flights
Over 2010
Year

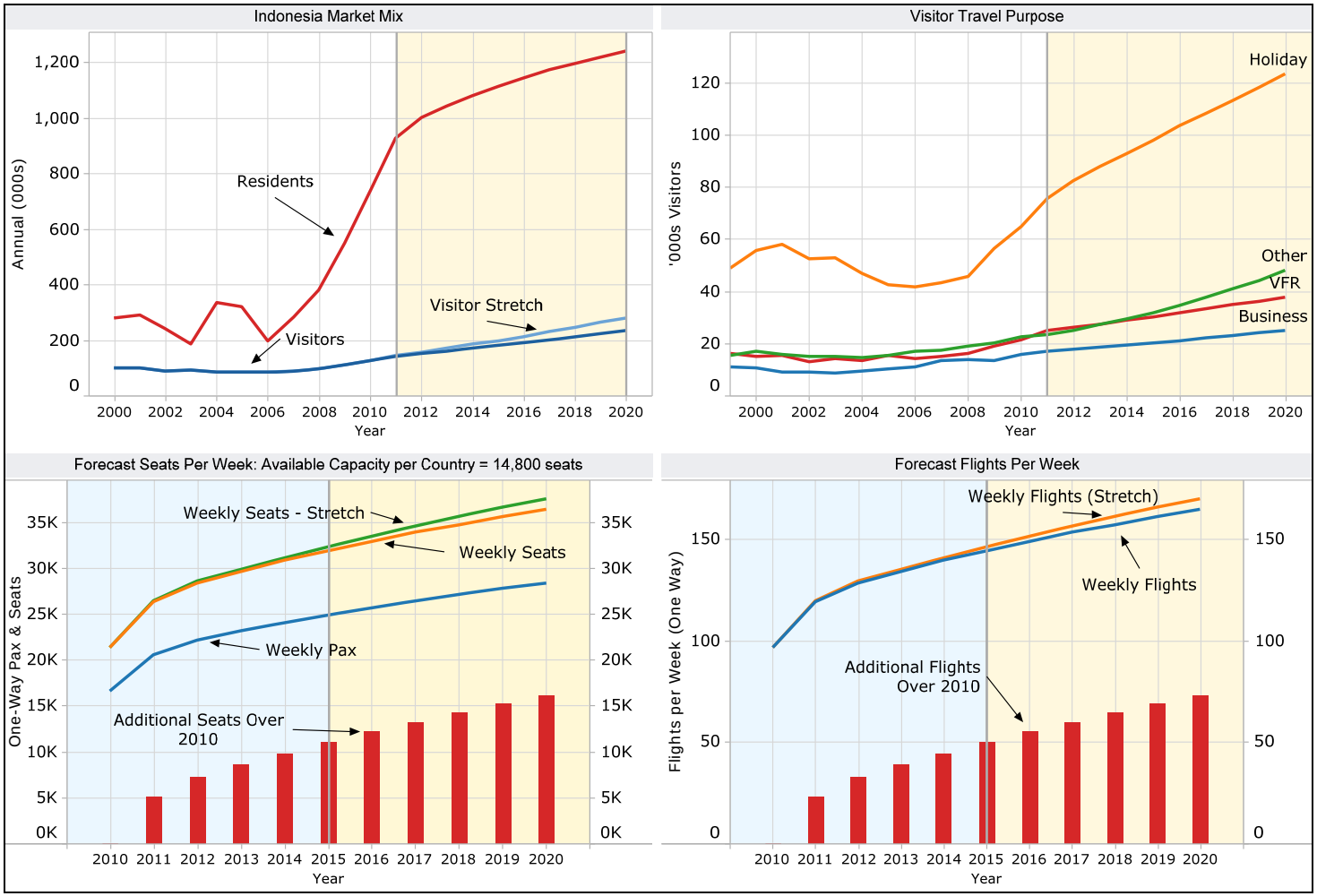
Hong Kong


Hong Kong Market Mix
Residents
Visitor Stretch
Visitors
Annual (000s)
Year
Visitor Travel Purpose
Holiday
VFR
Business
Other
'000s Visitors
Year
Forecast Seats Per Week
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
One-Way Pax & Seats
Year
Forecast Flights Per Week: Available Capacity per Country = 70 Frequencies
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
Flights per Week (One Way)
Year

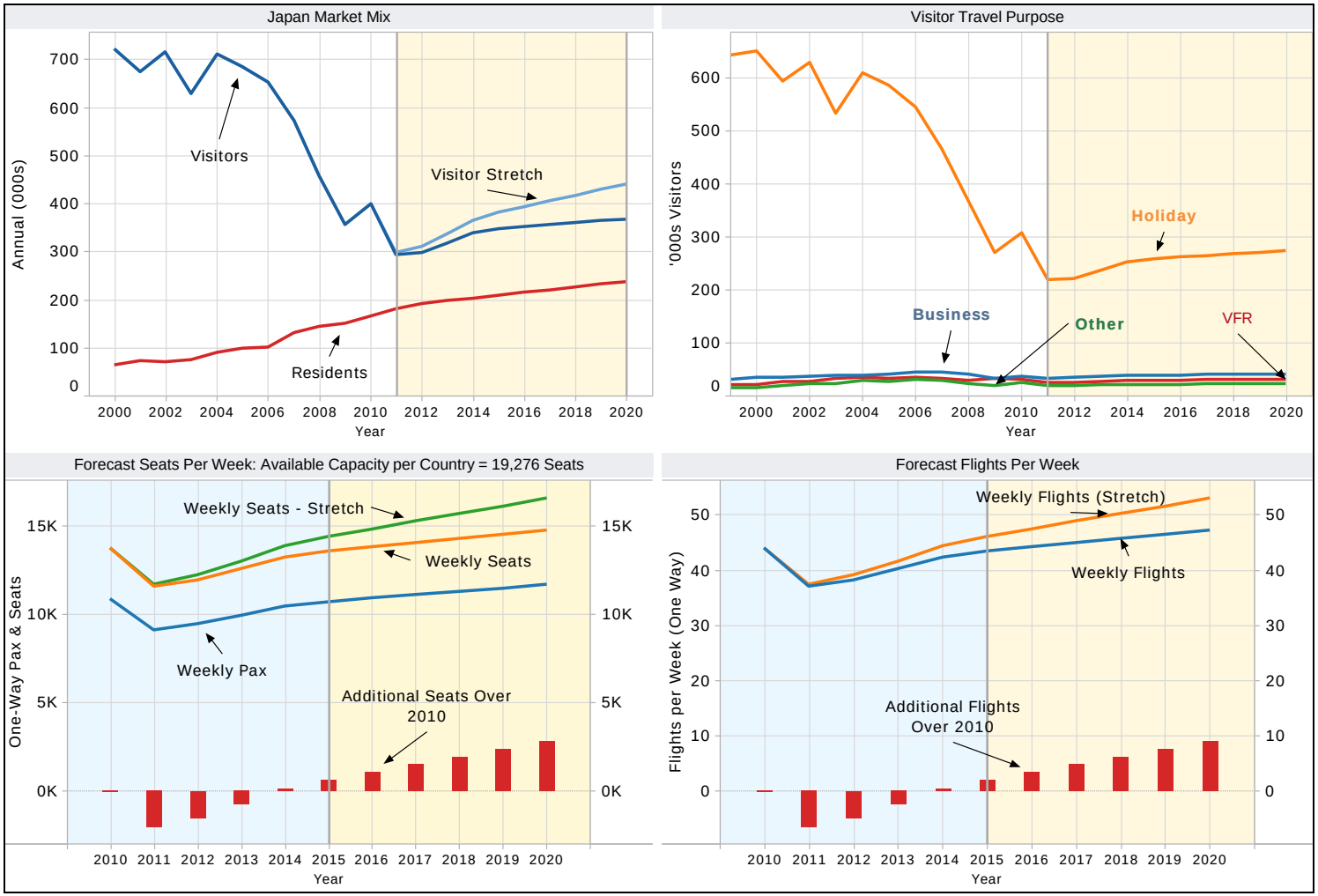
India


India Market Mix
Annual (000s)
Residents
Visitor Stretch
Visitors
Year
Visitor Travel Purpose
'000s Visitors
Holiday
VFR
Business
Other
TFC Forecasts
Year
Forecast Seats Per Week: Available Capacity per Country = 6,500 seats
One-Way Pax & Seats
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
Year
Forecast Flights Per Week
Flights per Week (One Way)
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
Year

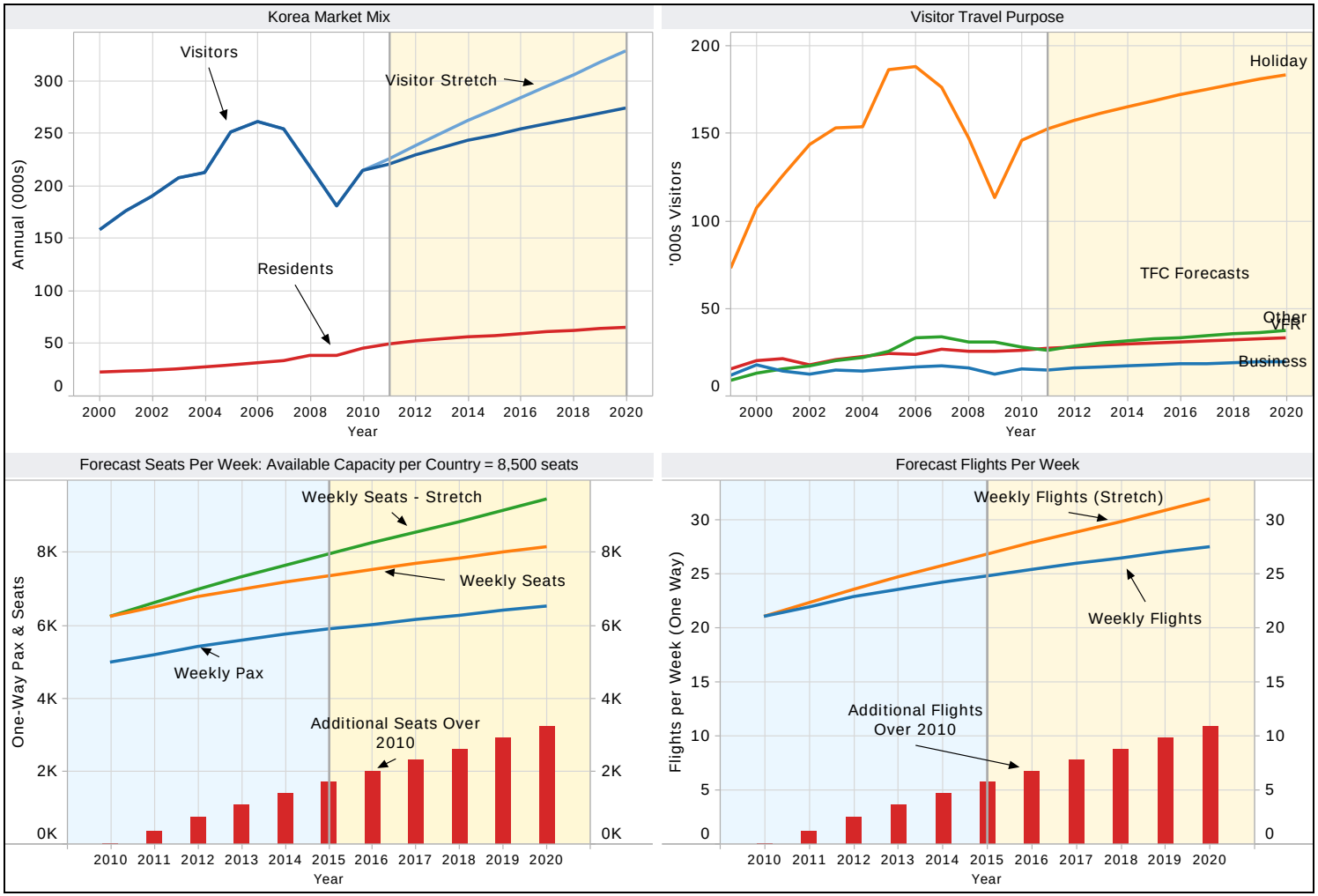
Indonesia


Indonesia Market Mix
Annual (000s)
1,200
1,000
800
600
400
200
0
Residents
Visitor Stretch
Visitors
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Visitor Travel Purpose
'000s Visitors
120
100
80
60
40
20
0
Holiday
Other
VFR
Business
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Forecast Seats Per Week: Available Capacity per Country = 14,800 seats
One-Way Pax & Seats
35K
30K
25K
20K
15K
10K
5K
0K
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year
Forecast Flights Per Week
Flights per Week (One Way)
150
100
50
0
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year

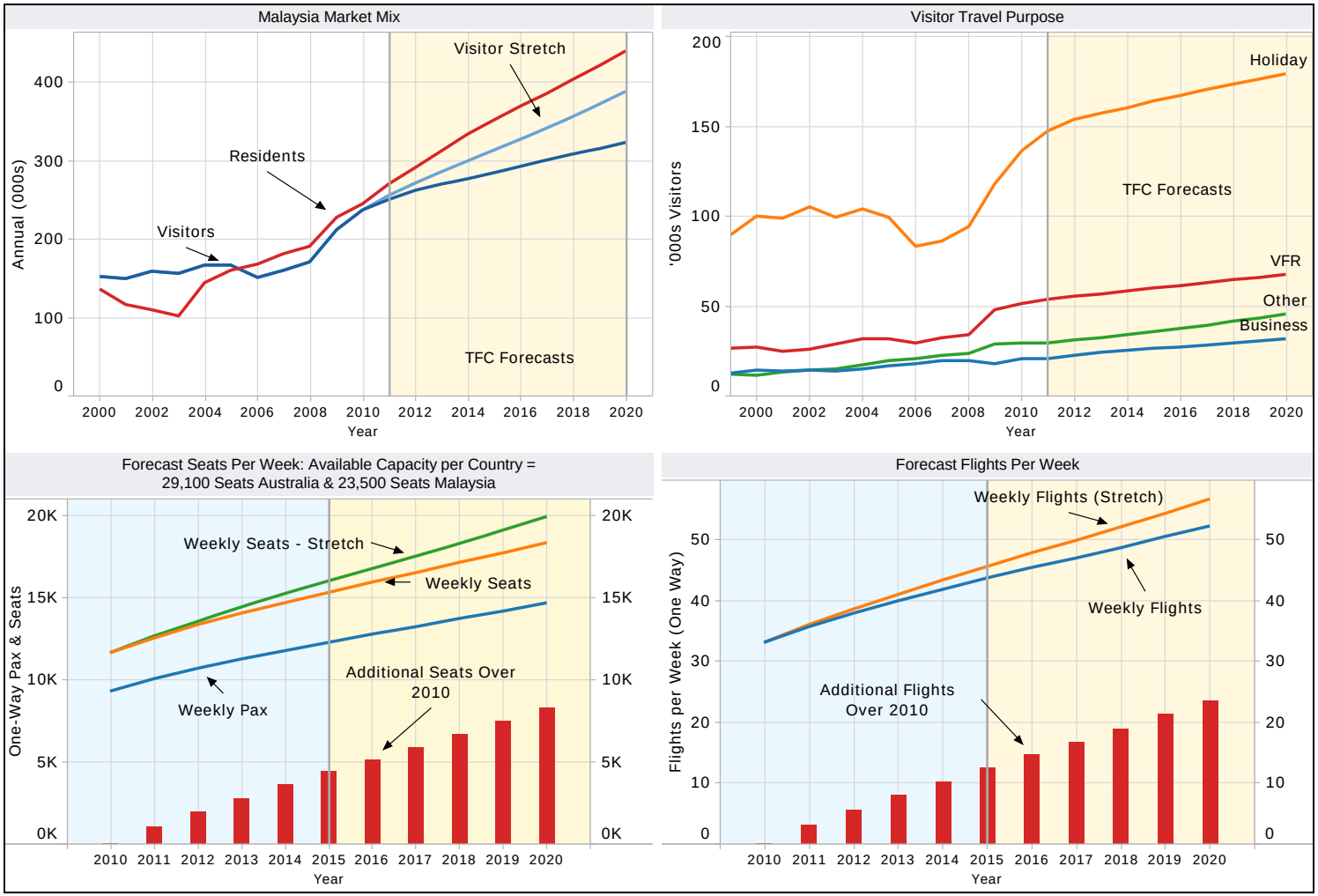
Japan


Japan Market Mix
Annual (000s)
Visitors
Visitor Stretch
Residents
Year
Visitor Travel Purpose
'000s Visitors
Holiday
Business
Other
VFR
Year
Forecast Seats Per Week: Available Capacity per Country = 19,276 Seats
One-Way Pax & Seats
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
Year
Forecast Flights Per Week
Flights per Week (One Way)
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
Year

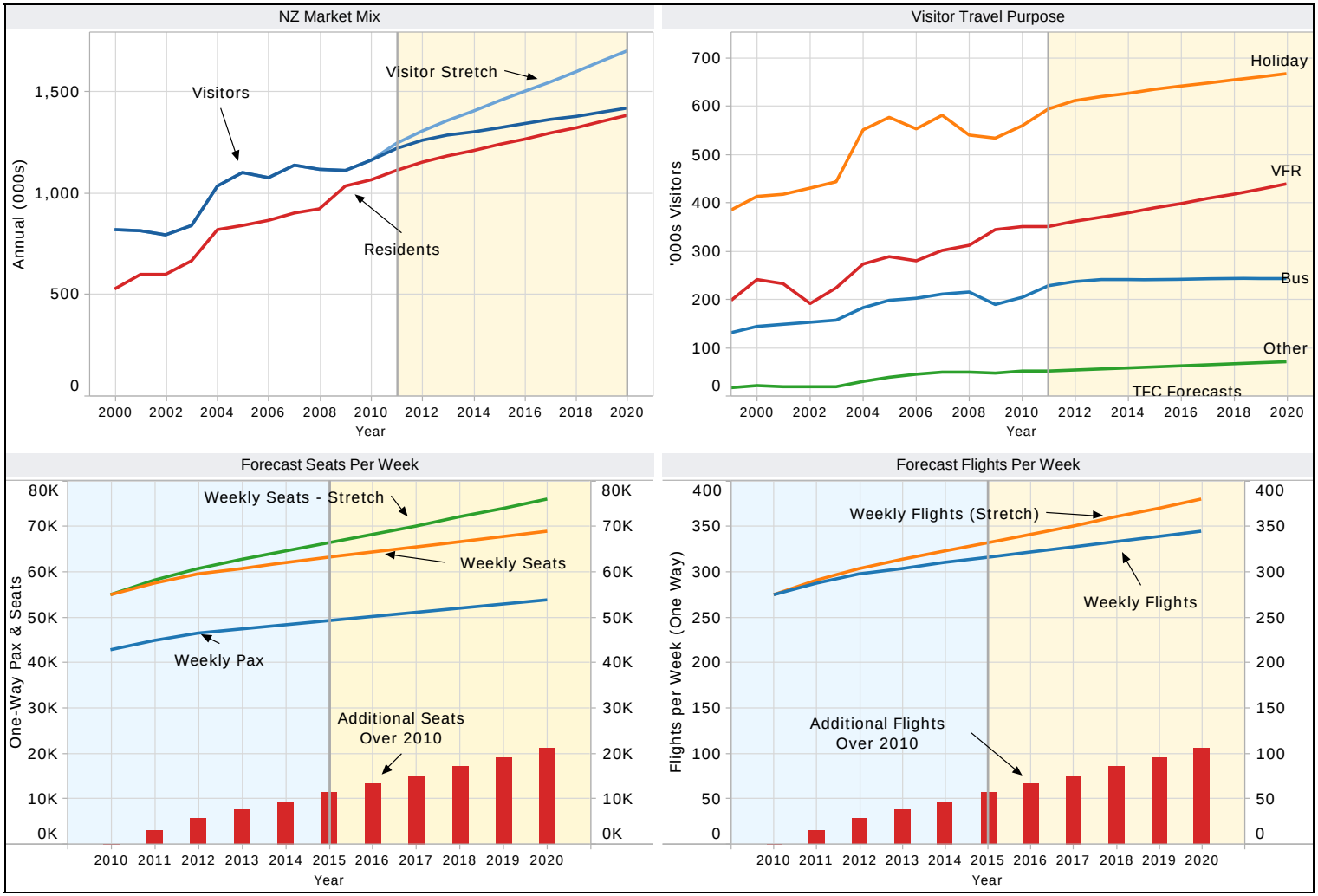
South Korea


Korea Market Mix
Visitors
Visitor Stretch
Residents
Annual (000s)
Year
Visitor Travel Purpose
Holiday
TFC Forecasts
Other
VFR
Business
'000s Visitors
Year
Forecast Seats Per Week: Available Capacity per Country = 8,500 seats
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
One-Way Pax & Seats
Year
Forecast Flights Per Week
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
Flights per Week (One Way)
Year

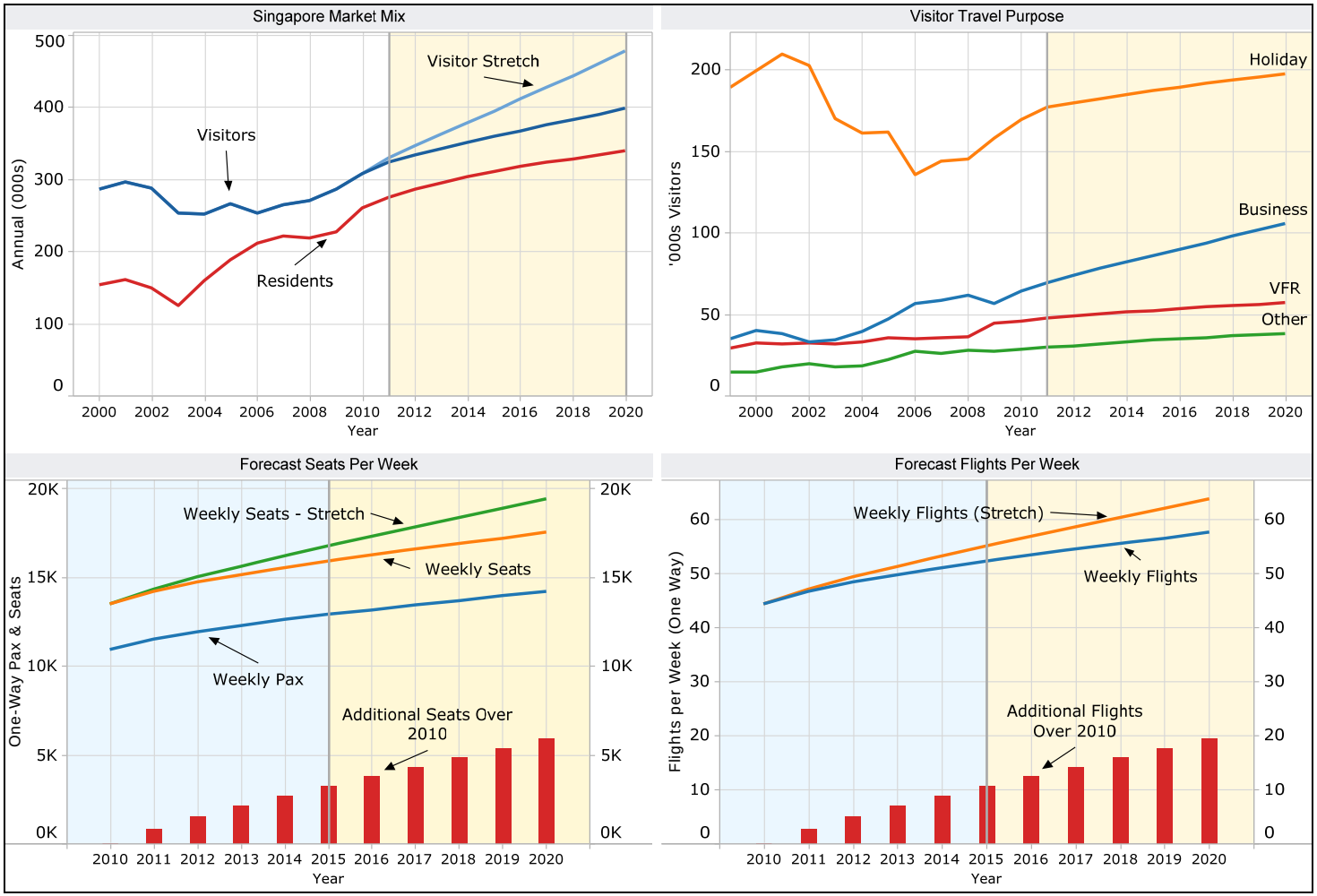
Malaysia


Malaysia Market Mix
Annual (000s)
Visitor Stretch
Residents
Visitors
TFC Forecasts
Year
Visitor Travel Purpose
'000s Visitors
Holiday
TFC Forecasts
VFR
Other
Business
Year
Forecast Seats Per Week: Available Capacity per Country =
29,100 Seats Australia & 23,500 Seats Malaysia
One-Way Pax & Seats
Weekly Seats - Stretch
Weekly Seats
Additional Seats Over
2010
Weekly Pax
Year
Forecast Flights Per Week
Flights per Week (One Way)
Weekly Flights (Stretch)
Weekly Flights
Additional Flights
Over 2010
Year

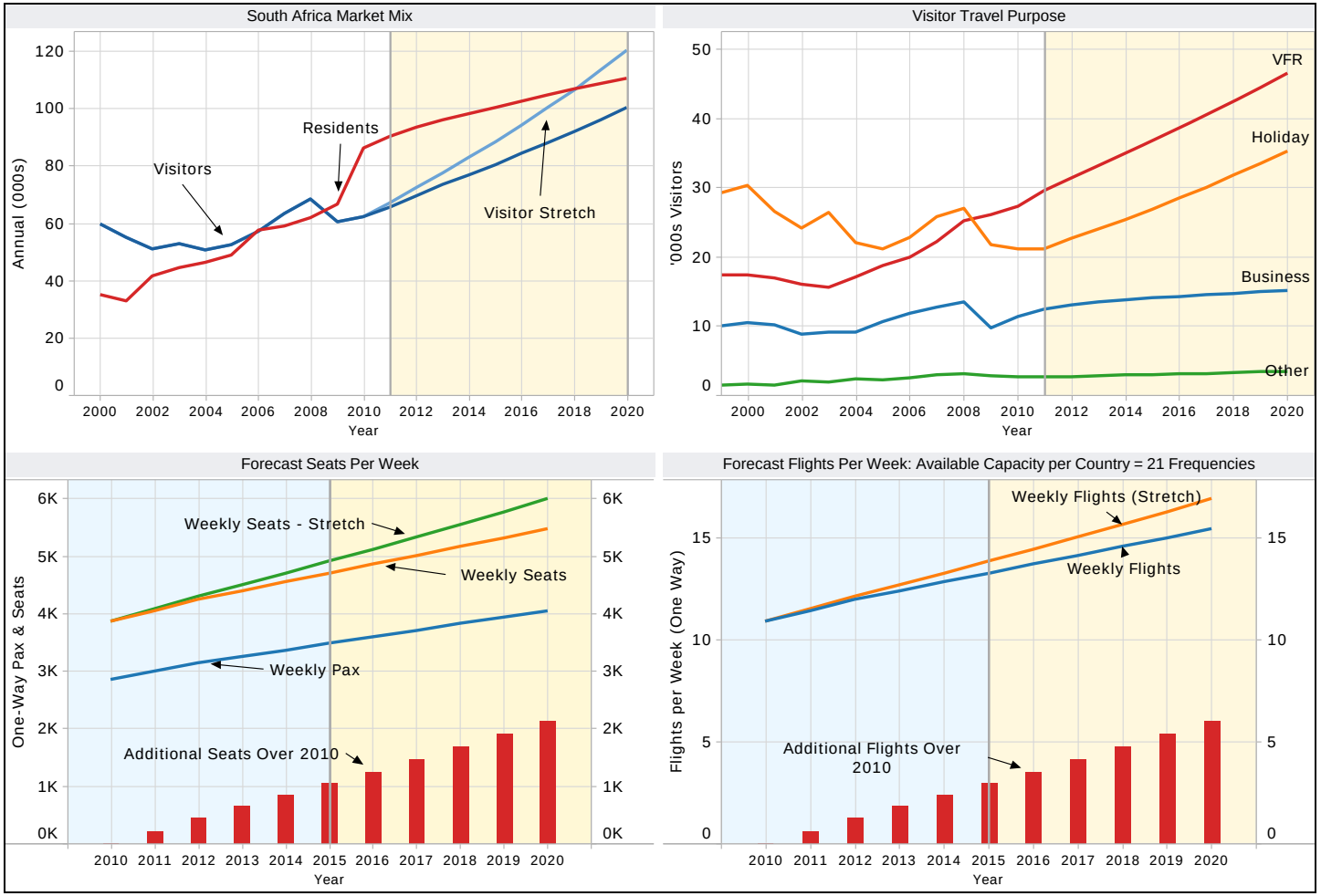
New Zealand


NZ Market Mix
Annual (000s)
1,500
1,000
500
0
Visitors
Visitor Stretch
Residents
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Visitor Travel Purpose
'000s Visitors
700
600
500
400
300
200
100
0
Holiday
VFR
Bus
Other
TFC Forecasts
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Forecast Seats Per Week
One-Way Pax & Seats
80K
70K
60K
50K
40K
30K
20K
10K
0K
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats
Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year
Forecast Flights Per Week
Flights per Week (One Way)
400
350
300
250
200
150
100
50
0
Weekly Flights (Stretch)
Weekly Flights
Additional Flights
Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year

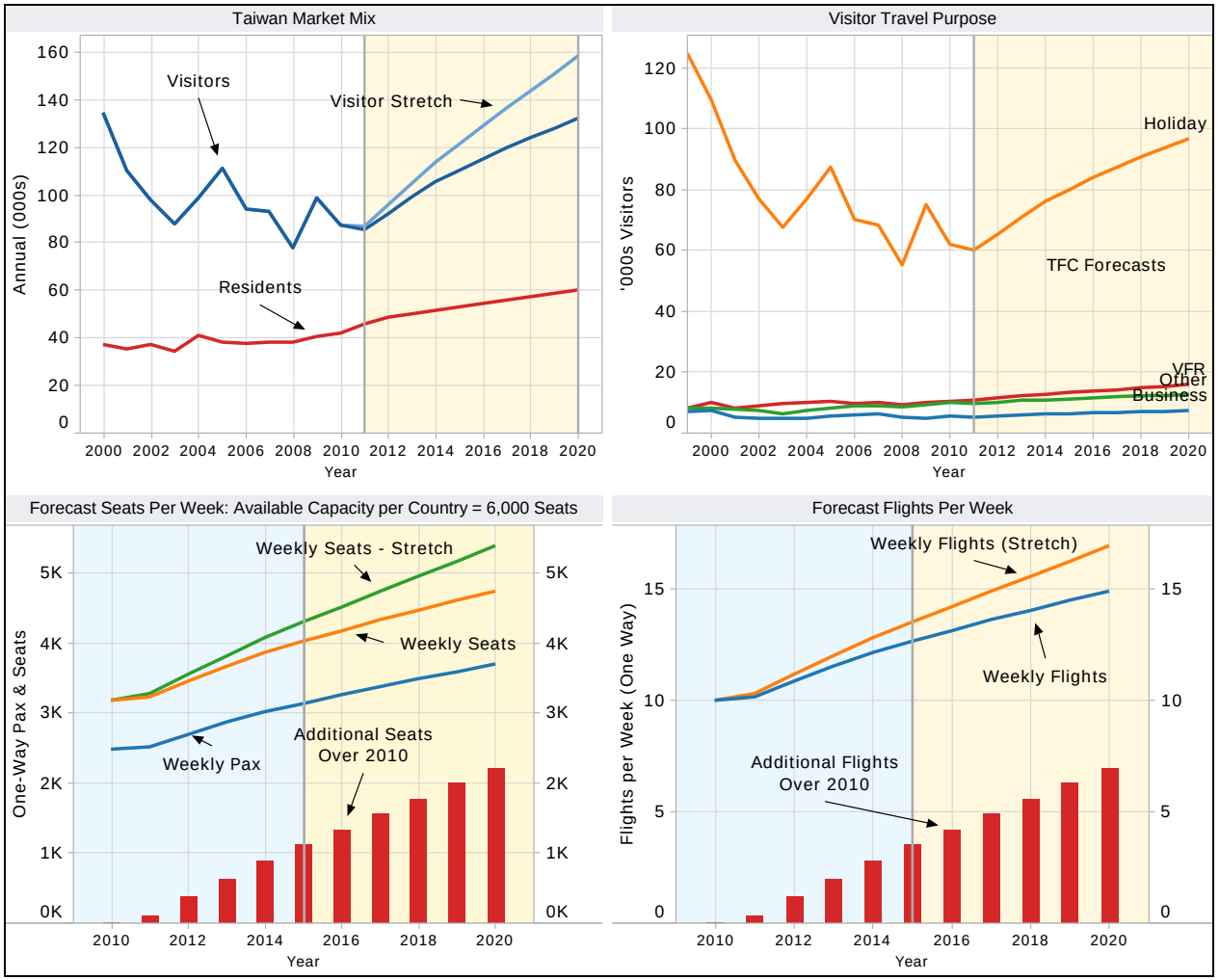
Singapore


Singapore Market Mix
Annual (000s)
Visitors
Visitor Stretch
Residents
Year
Visitor Travel Purpose
'000s Visitors
Holiday
Business
VFR
Other
Year
Forecast Seats Per Week
One-Way Pax & Seats
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
Year
Forecast Flights Per Week
Flights per Week (One Way)
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
Year

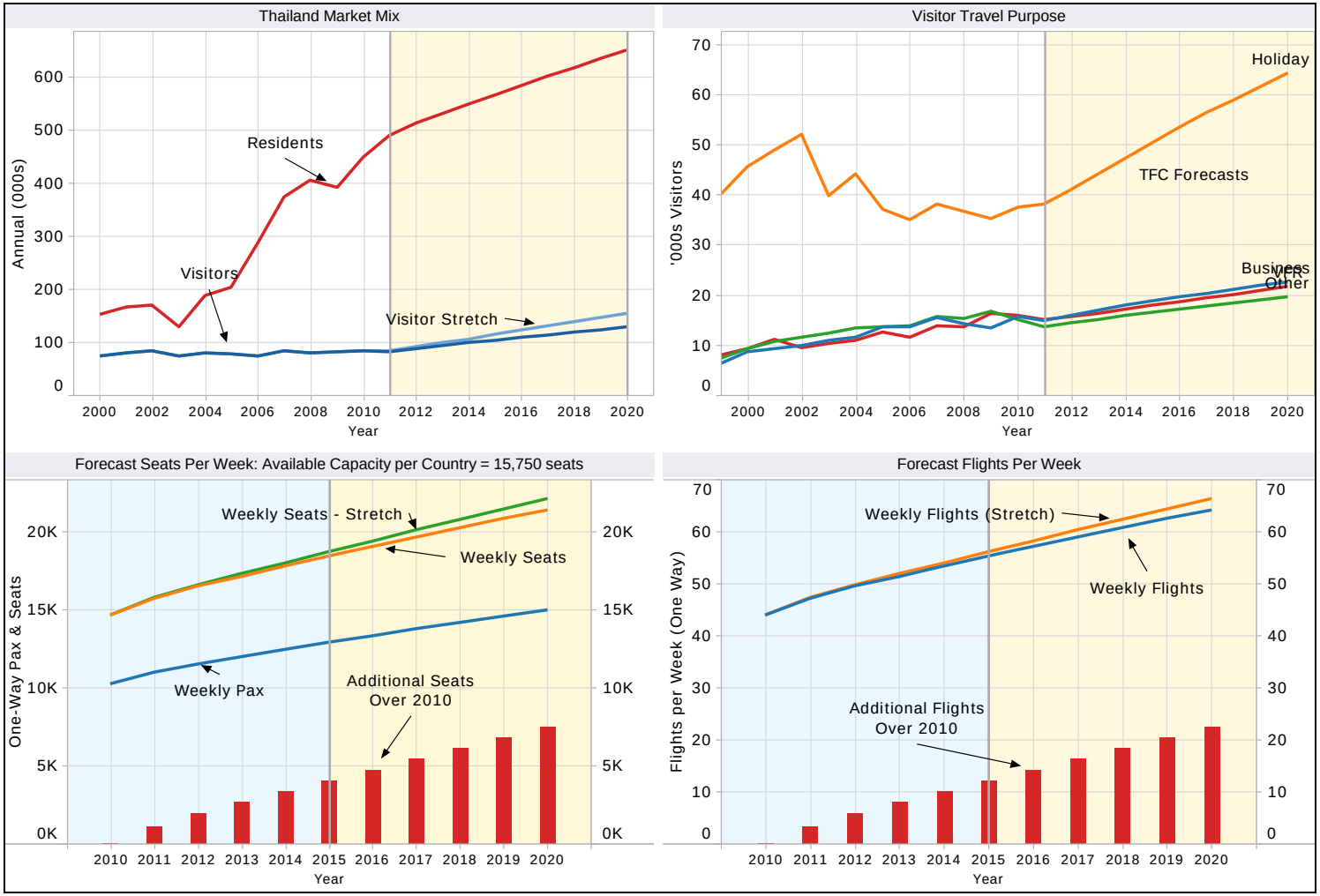
South Africa



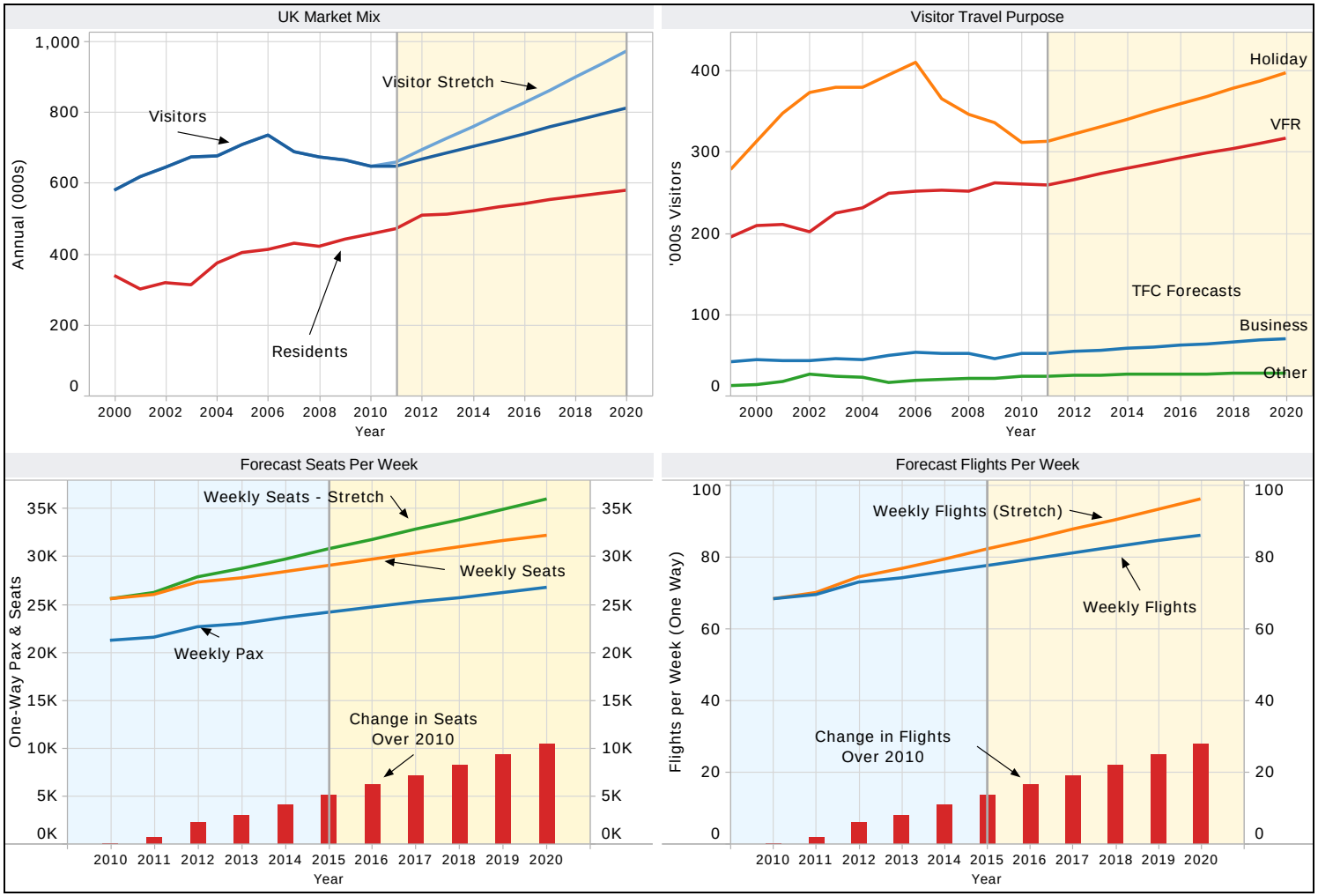
Taiwan


Taiwan Market Mix
Annual (000s)
Visitors
Visitor Stretch
Residents
Year
Visitor Travel Purpose
'000s Visitors
Holiday
TFC Forecasts
VFR
Other
Business
Year
Forecast Seats Per Week: Available Capacity per Country = 6,000 Seats
One-Way Pax & Seats
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
Year
Forecast Flights Per Week
Flights per Week (One Way)
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
Year

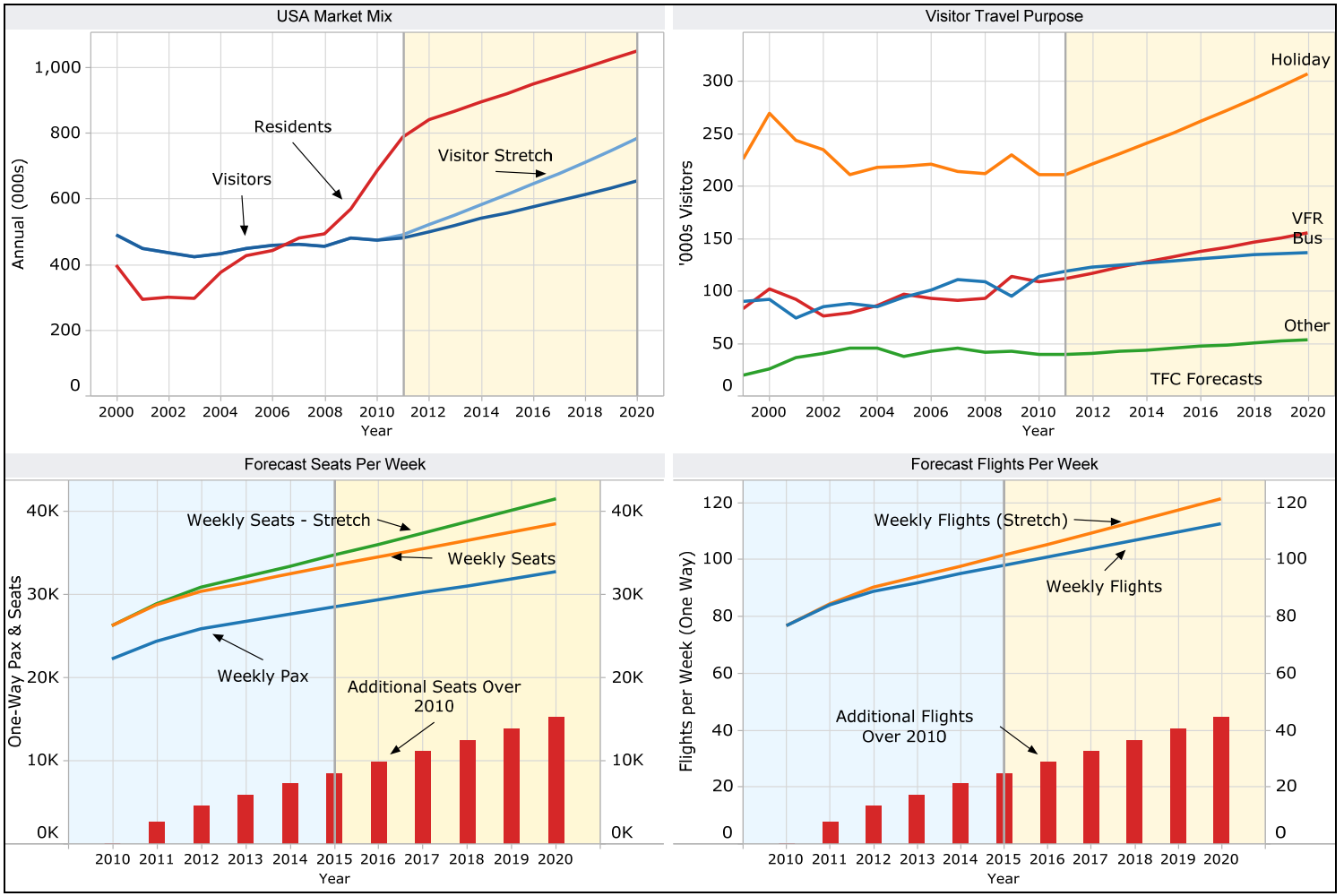
Thailand


Thailand Market Mix
Annual (000s)
Residents
Visitors
Visitor Stretch
Year
Visitor Travel Purpose
'000s Visitors
Holiday
TFC Forecasts
Business
VFR
Other
Year
Forecast Seats Per Week: Available Capacity per Country = 15,750 seats
One-Way Pax & Seats
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
Year
Forecast Flights Per Week
Flights per Week (One Way)
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
Year

UK


UK Market Mix
Annual (000s)
1,000
800
600
400
200
0
Visitors
Visitor Stretch
Residents
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Visitor Travel Purpose
'000s Visitors
400
300
200
100
0
Holiday
VFR
TFC Forecasts
Business
Other
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Forecast Seats Per Week
One-Way Pax & Seats
35K
30K
25K
20K
15K
10K
5K
0K
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Change in Seats
Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year
Forecast Flights Per Week
Flights per Week (One Way)
100
80
60
40
20
0
Weekly Flights (Stretch)
Weekly Flights
Change in Flights
Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year

USA


USA Market Mix
Annual (000s)
1,000
800
600
400
200
0
Residents
Visitors
Visitor Stretch
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Visitor Travel Purpose
'000s Visitors
300
250
200
150
100
50
0
Holiday
VFR
Bus
Other
TFC Forecasts
2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020
Year
Forecast Seats Per Week
One-Way Pax & Seats
40K
30K
20K
10K
0K
Weekly Seats - Stretch
Weekly Seats
Weekly Pax
Additional Seats Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year
Forecast Flights Per Week
Flights per Week (One Way)
120
100
80
60
40
20
0
Weekly Flights (Stretch)
Weekly Flights
Additional Flights Over 2010
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
Year

8. Aviation-Related Threats to Growth Forecasts

There are a number of factors that represent risks or that could act as impediments to the achievement of stretch targets from major markets. These factors are listed below.

Jet Fuel Prices

As presented earlier in this report, fuel has been a highly volatile cost factor confronting airlines in recent years. At the significantly above-trend levels of recent years it can act as a general drag on overall economic growth. Fuel prices also have a number of impacts specific to the airline sector, namely:

- Converting marginal airline routes to loss making routes and reducing profitability on all routes.
- Forcing airlines to increase fares which can suppress demand particularly on leisure routes.
- Encouraging airlines to retire older fuel inefficient aircraft and accelerate the delivery of modern, more efficient aircraft types.

In a more general sense the airlines, airframe and engine manufacturers and government support-services providers (such as airways management entities) are all working on ways to improve fuel efficiency. However the fuel costs as a proportion of total costs have grown from around 13% to 14% in 2002 and 2003 to 33% in 2008 and to around 28% to 29% at present.

As discussed in **Section 3.4**, the development of cheaper biofuels is expected to have a limited effect on aviation over the next 10 years, but will become increasingly important between 2020 and 2050. However, rising carbon-based jet fuel prices and demands for a reduced carbon footprint by regulators could well accelerate usage by airlines of biofuels as they become more widely available.

Policy Responses to Global Warming

Governments worldwide are edging towards policies designed to constrain growth in carbon outputs. These are likely to, eventually, lead to a global carbon trading scheme. In the absence of a global scheme many governments are acting unilaterally.

In Australia's case, the Federal Government has announced a move to introduce a carbon tax. The details of this tax are still to be released but it is likely to be applied to the domestic aviation sector and not to Australian international services.

However, the policies designed to slow or reduce carbon are likely to have a disproportionate impact on long-haul airline sectors in particular. This means that

Australia and New Zealand's international air services (and the Pacific as a whole) will feel the impact disproportionately because most of the airline routes to these countries are long haul.

Australian Dollar Exchange Rates

The impact of the high value of the Australian dollar against visitor market currencies is well known - Australia becomes an expensive destination relative to many competing destinations. This adds to the perception of an Australian holiday as comparatively expensive given higher airfares (than for many shorter haul destinations) and the longer time period that must be committed to an Australian holiday.

The high Australia dollar also raises issues with respect to airline yields. The yield or value of Australian residents travelling on a foreign airline increases when repatriated into the airline's home currency. This increases the desire to see seats allocated to Australian outbound rather than inbound travellers. Similarly, the yields for inbound travellers for Australian airlines can fall. These airline factors increase the challenge of growing inbound markets in the face of a strong Australian dollar.

The high Australian dollar results from high commodity prices and the differential between Australia's and foreign interest rates. The former influence (high commodity prices) is likely to prevail in the medium term as China and India continue to grow their demand for commodities.

While Australia's economy outperforms many of those in Europe and North America, its interest rates are likely to remain higher.

Thus it appears reasonable to assume that the strong Australian dollar will prevail for a couple of years at least before we see a turnaround.

A recent study undertaken by Tourism Australia and Tourism Research Australia into the impact and implications of exchange rates on Australian tourism indicates that exchange rates have a relatively modest and short term influence on destination choice and travel purchases. The greater impact is on the affordability of overseas travel for Australians and the strength of the Australian dollar in recent years has seen an increasing number of Australians choosing to holiday overseas rather than domestically.

Significance of Home Carriers for Inbound Marketing

Many of those contacted in the course of this study have expressed concern that Australia may, in its aviation bilateral trading process, be placing too high a value on what Australian carriers value relative to the larger "prize" of stimulating inbound visitors.

While this is a legitimate concern, the consulting team has found that the marketing benefit of having a home carrier in a foreign market cannot be ignored. Whilst further

work is being undertaken on this issue, encouraging home airlines to enter or stay in foreign markets is likely to be an important part of a visitor growth strategy for key markets. This indicates that the withdrawal of the home airline is a cause of concern.

The withdrawal of Qantas from markets such as Korea, Taiwan and Malaysia has led to a one-sided capacity situation where Australia is dependent on foreign carriers to service the markets. The foreign carrier's commitment to the market is based on the commercial viability of the market. There is a need to encourage Australian carriers to participate in inbound growth markets to facilitate growth in tourism for Australia.

Increased Competition can Challenge Sustainable Air Services

As more airlines enter a route, incursions are made by LCCs and as new hubs emerge, there may be a number of negative impacts for all airlines concerned:

- Higher yielding business traffic may be spread thinly amongst a larger number of airlines;
- Airlines may find it difficult to maintain loads without lowering yields; and
- Routes may become less profitable for all airlines operating on the route.

Impediments to Regional Dispersal

During the consultation process for this study many indicated that it was imperative that airlines operate commercially and not operate to ports they did not see as potentially profitable. For this reason the preference was to improve domestic connections to profitable international services rather than to force airlines to operate to less desirable (commercially) Australian destinations.

A significant challenge in the context of international to domestic connections was the absence of strong airline alliances in Australia other than Qantas through oneworld. The Star Alliance has a number of airlines operating to Australia but no domestic alliance. SkyTeam is also limited in Australia. The strong need for Australian destinations without direct air services is for code shared flights so that the destinations are visible in Global Distribution Systems.

Another point often raised during consultation is that a key impediment to dispersal is the high costs for government-provided aviation services that result from location-specific charges to regional airports.

Airport Infrastructure

Airport capacity issues inside and outside Australia can act as a barrier to growth. Externally we need to take a "portfolio" approach to airport growth and development. This suggests a need to expand reliance to a larger number of hub airports operating to and within key growth markets.

9. Strategic Recommendations

This section provides recommended actions which can be undertaken by government and/or tourism organisations to improve Australia's aviation readiness for forecast tourism arrival volumes and aviation-related initiatives to assist market development.

In particular, we focus on impediment and market development issues identified through the analysis in this report and consultations.

9.1 General Market Development

While the overall focus of market development should be on the establishment of direct non-stop services where possible, it is recognised that a staged process needs to be adopted on routes where such services cannot be justified by airlines in economic terms (e.g. where demand for point-to-point services is low, such as Australia-India, or where the yield mix is not satisfactory).

As discussed in this report, the cycle of aircraft orders and deliveries is critical to understanding forward demand for capacity and the supply capabilities of airlines. Planning for the deployment of new aircraft takes place well before delivery, and this presents an opportunity for tourism organisations to influence the process.

It is recommended that a database should be established of orders and delivery schedules by airline by market to enable governments and tourism bodies to monitor developments and plan marketing and airline targeting accordingly. Some proprietary software is available to generate this information on a dynamic basis. We note that order books and delivery schedules are constantly being adjusted for market conditions.

9.2 Regulatory Policy

Australia's regulatory policy has often produced conflicting outcomes for airlines and inbound tourism. On the one hand, moves towards open skies agreements on a reciprocal basis and the provision of capacity ahead of demand are desirable objectives.

But Federal Government's definition of open skies (i.e. unrestricted 3rd, 4th and 5th freedom rights) has proved challenging for some bilateral partners, including major growth prospect China, which have baulked at the 5th freedom requirements. As a consequence, Australia has only two open skies agreements in place – with New Zealand and the US. Singapore, while offering open capacity arrangements, also imposes limitations on 5th freedom access, as does Indonesia in relation to rights beyond Jakarta to Singapore and Hong Kong.

In general, the 5th freedom issue arises where a country's own carriers are exploiting or plan to develop routes through intermediate hubs (e.g. China, Singapore and Hong Kong). As such, the ability to secure open skies on Australia's present terms appears unlikely.

However, in the case of Asian markets, in particular, the focus should be on the further development of non-stop services with a priority given to removing controls on 3rd/4th freedom passenger operations.

It is recommended that consideration should be given to Australia developing a "mini-open skies" model which provides for a phased approach to opening up markets. In the first instant, this would involve negotiating unlimited capacity and frequency on services between countries; with a commitment to pursue 5th freedom rights at a later stage.

While it may be argued that the above cedes leverage in negotiating a more complete open skies package, it has the potential to eliminate an existing impediment to service growth and bring forward development of key Asian sectors, including China.

Another approach could be to emulate the Filipino "pocket open skies" strategy which offers unrestricted frequency, capacity and aircraft type to all international airports in the Philippines other than Manila's congested Ninoy Aquino International Airport. While reciprocity is not a prerequisite of the offer, the government reserves the right to cancel air rights if reciprocity is not provided.

In an Australian context, liberalised arrangements could be offered for all airports other than Sydney, for example.

It is recommended that further consideration be given to the potential benefits for inbound tourism and air service development offered by a similar "pocket open skies" approach to that of the Philippines (i.e. providing open access to all airports other than Sydney Airport)

A further issue arises in relation to ensuring certainty for carriers investing in route development to Australia. A number of airports raised concerns in this study about provision of adequate capacity for airlines to plan at least two years ahead.

This seems reasonable given the certainty required by operators to develop new markets over a planning window. There is also a deterrent factor for airlines in committing to routes if available capacity is limited or rationed.

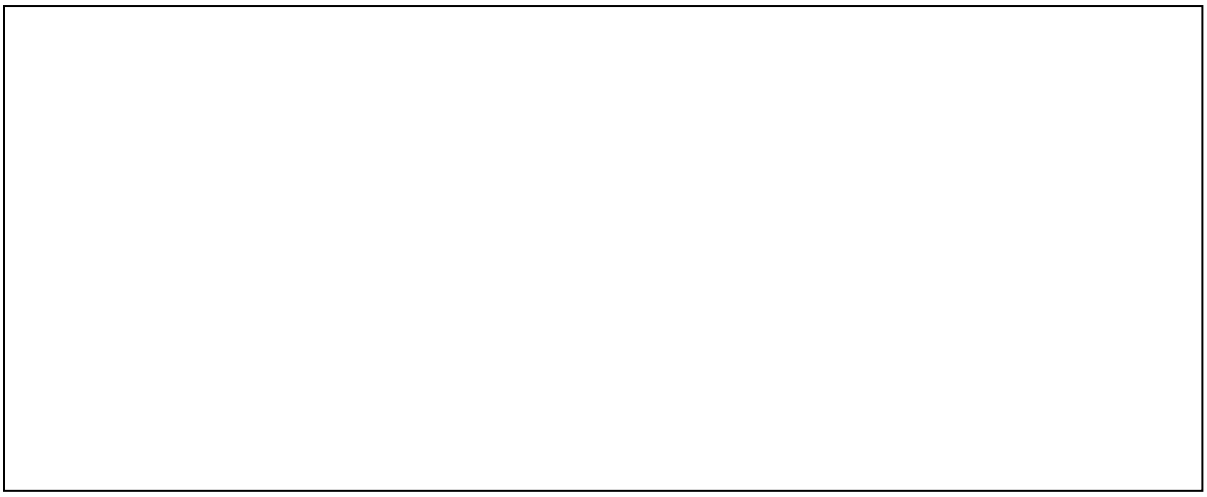
In order to address this issue, it is recommended that governments should seek to negotiate adequate capacity to support the development of routes by airlines for at least two years.

9.3 Priority Markets

A number of markets have been identified as priorities for Air Services negotiations on the basis of industry and tourism requirements. These include China, the EU and Indonesia and Brazil. Australia has already entered into discussions with China and the EU on expanded agreements, and is seeking talks with Indonesia.

On a multilateral basis, closer air services relations with **ASEAN** will be critical as this will provide significant opportunities as the region moves towards a Single Aviation Market and Economic Community by 2015.

ASEAN's importance increases further with the prospect that it will establish a network of open skies arrangements with surrounding markets in Northeast and South Asia as well as the EU.



The value of building an open skies infrastructure with ASEAN will come in more broadly accessing its emerging markets, and encouraging the growth in inbound tourism opportunities from such countries as Indonesia.

New Zealand remains an important source market for inbound tourists, and a key part of its development will relate to facilitating the flow of traffic between the countries and addressing regulatory and cost impediments to improving service and destinational diversity.

The benefits include cost efficiencies for governments and airlines and both cost and time savings for passengers. The resulting lower airfares should stimulate demand for travel and there will be flow-on effects for the broader economy.

9.4 Airport Infrastructure

The infrastructure-related impediments to air services mostly relate to access to appropriate numbers and timings for take-off and landing slots at origin and/or destination airports.

While little influence can be exerted by tourism organisations for the upgrading and expansion of airport capacity, efforts should be made to ensure that sufficient access is provided to alternate points both in Australia and overseas should slots be an issue for operators at a particular airport.

It is recommended that a wide a range of airport access points is made available to airlines to and from Australia, and actively promoted, to encourage the development of direct services.

One other issue which can impact on an airline's decision to operate a particular route is the provision of incentivised arrangements, including marketing support and funding and/or rebates at airports. Australia has established a pro-competitive airports system through its privatisation program for the major airports. However, there may be opportunities for federal and state tourism organisations and airports to work together on a cohesive approach to air service establishment.

It is recommended that opportunities be explored for a coordinated approach at a national level to the provision of incentives to encourage service development that is deemed to have broad benefits for Australia's tourism.

10. Conclusions

The influences on the future development of airline services catering to the inbound market to Australia are wide-ranging and subject to significant change, depending on economic, demographic and industry-specific conditions. As such, the outlook for the next 5 and 10 years is dynamic and volatile, as this report demonstrates.

Airlines require certainty of market access (through regulation and airport infrastructure); sufficient volumes in both directions; and an economic mix of passengers as pre-conditions to establish viable, sustainable services. The extent and nature of competition, availability of right-sized aircraft and operating cost pressures are balanced against the relative performance of alternate route options.

These commercial complexities dictate whether a route is served: directly, point-to-point with no stop; indirectly via network systems through intermediate points or partnerships with other carriers; or not at all. Overall profitability is paramount to ensure ongoing services and expansion.

This report underlined various aspects currently impacting, or likely to impact, on the development of airline services to Australia. These included:

- The important, albeit diminishing role of the national airline Qantas, and increasing value of Virgin Australia, in serving the international visitor market;
- Greater usage of alliances and intermediate hubs to drive traffic growth, particularly in long-haul markets;
- Continuing emergence of China and regulatory reforms pending in Southeast and possibly Northeast Asia which may do much to free up regional restrictions on air travel;
- Further evolution of the influential LCCs, including entry into long-haul markets and penetration of the premium segment.

Qantas and its oneworld linkages historically have sustained this increasingly diverse market, but competition from foreign operators has seen its position diluted despite the growing strategic presence of Jetstar.

Extensive changes are taking place in the traditional core markets for Qantas:

- Aggressive Middle East carriers have made inroads into Australia-UK/Europe market to add to competitive pressures flowing from lower cost Asian operators, including long-haul LCC AirAsia X. In the future, this is likely to extend to the major Chinese operators which are building product standards and joining global alliances. Virgin's partnership with Etihad through Abu Dhabi presents another challenge;

- The North American market has become saturated with 6 airlines directly competing for passengers on Australia-US routes. At the same time, market structures are evolving with the establishment of direct services into hubs beyond Los Angeles and development of joint services between Virgin and Delta Air.
- In medium-haul Australia-Asia markets, expansive fleet growth and introduction of new aircraft types by full service operators and LCCs is expected to increase service options with potential for flights to some regional destinations. However, the proposed ASEAN Single Aviation Market in 2015 could see competition from Asian leisure destinations escalate, while providing opportunities for growth. India is one of a number of high population markets which should begin to realise its potential over the medium term, encouraging more direct services to the Australian market.
- The dense Australia-New Zealand short-haul market is also transitioning to more flexible passenger arrangements, with a prospect for services to spread beyond the capital cities to regional destinations.

Scenarios associated with the above developments are discussed in this report. While future opportunities exist for expanding inbound tourism from such markets as Latin America and closer to home in Indonesia, there are also aviation-related risks to achieving either the BITRE or TFC forecasts.

These include: the erosion of airline yields brought about by heavy competition, low cost premium offerings and excess capacity in some markets (e.g. the trans-Pacific); impasses over open skies arrangements with key markets, e.g. the EU and China; fuel price volatility; high A$ exchange rates; and the effects of emissions trading/carbon tax imposts.

Appendix 1: Consultation Program

During the course of this project the following stakeholders were interviewed in person or by telephone or email.

Tourism Organisations

Organisation	Name	Title
Tourism Australia	Andrew McEvoy	Managing Director
	Frances-Anne Keeler	Executive General Manager Marketing Operations
	Johnny Nee	Regional General Manager North Asia
	Kaz Hori	Regional General Manager Japan
	Maggie White	Regional General Manager South/Southeast Asia & Gulf
	Jenny Aitken	General Manager New Zealand
	Rodney Harrex	Regional General Manager UK & Northern Europe
	Daryl Hudson	Regional General Manager Americas
Tourism NSW	John Bates	General Manager Strategy
	Alan McGuigan	Tourism Planning and Policy Specialist
Tourism Queensland	Mark Kelso	Director Market Access and Economics
Tourism Victoria	Robert O'Brien	Director Aviation and Tourism Investment Attraction
Tourism South Australia	Joanne Podoliak	General Manager Destination Marketing
Tourism Northern Territory	Justin Vaughan	Acting Executive Director Strategic Services and Director Aviation
Tourism Western Australia	Eugene Law	Aviation Director

Tourism Tasmania	Rowan Sproule	Director Strategy and Operational Performance
Tourism ACT	Simone Shepherd	General Manager
Tourism & Transport Forum	Jon Stewart	Aviation Public Affairs Officer
Australian Tourism Export Council	Gary O'Riordan	Deputy Managing Director

Government Departments

Organisation	Name	Title
Department of Infrastructure and Transport	Stephen Borthwick	General Manager Aviation Industry Policy Branch, Aviation and Airports
	Sam Lucas	Director, Air Services Negotiations, Aviation and Airports
Department of Resources, Energy and Tourism	Helen Cox	General Manager Market Competitiveness Branch, Tourism Division
	Sean Jenner	Assistant Manager Tourism, Transport and Infrastructure Section
	Danielle Green	Assistant Manager Tourism, Transport and Infrastructure Section

Airlines

Organisation	Name	Title
Qantas Airways Group	Robert Wood	Head of Government and International Relations
Virgin Australia Group	Jane McKeon	Group Executive Government Relations
Air New Zealand	Cam Wallace	General Manager Australia
Singapore Airlines	Subhas Menon	Regional Vice President South West Pacific

Emirates	Barry Brown	Vice President, Australasia
United Airlines	Alison Espley	General Manager, Australia and New Zealand
China Southern	Bill Bryant	Manager Corporate Affairs and Marketing

Airports

Organisation	Name	Title
Sydney	Russell Balding	Chief Executive Officer
	Hans Mitterlechner	Head of Aviation Business Development
Melbourne	Chris Woodruff	Chief Executive Officer
	Carl Jones	Airline Business Manager
	Jennifer Dean	Assistant Airline Business Manager
Brisbane	Cam McPhee	General Manager Aviation Business Development
Perth	Brian Krause	Director Strategy and Operational Performance
Hobart	Kathryn McCann	Manager Business Development
Darwin (Northern Territory Airports)	Jim Parashos	Director Airline & Airport Services
Cairns	Robert Evans	General Manager Aviation Business Development
Newcastle	David Nye	Manager Aviation Business Development

Appendix 2: Synopsis of Consultation

The following synopsis summarises the key points raised in during consultation with stakeholders.

Tourism Bodies

1. Major Target Tourism/Aviation Markets

- Up to five years:
  - North Asia – China #1, South Korea; Taiwan reduced focus
  - South Asia – India (but may be more a five year + market)
  - Southeast Asia – Indonesia, Malaysia
  - United States – new Qantas Dallas service should assist and further destinations likely as new aircraft types provide greater range
  - Traditional markets still important– United Kingdom, Europe, United States, New Zealand, Singapore, Japan, Hong Kong + Middle East for on-carriage
- Over five years:
  - Continued North Asia (China, South Korea), India
  - Southeast Asia – Indonesia, potentially Vietnam
  - South America – Brazil
  - Eastern Europe
- Market strengths – large populations in developing Asia with growing middle class and good source of students
- Market weaknesses – strong Australian dollar, natural disasters (Japan, New Zealand)

2. Impediments to Market Development

- Bilaterals – beyond rights may be holding us back; access to Europe via China needed; capacity constraints on some routes; enhanced regional package not attractive
- Lack of direct services to/from India; Indian carrier viability, lack of funds for expansion to Australia; concern over profitability of India-Australia routes
- Airport pricing model – regional airports penalised by Airservices pricing model
- ADS scheme has not changed with the times
- Significant tourism product investment/development in Asia and Europe but not in Australia; product quality variable; shortage of hotel accommodation in some cities
- Strong Australian dollar and high fuel prices (escalating fuel surcharges); high hotel prices plus high airfares to get to Australia makes us a less competitive destination

- Boeing 787 production delays
- Chinese market complex and highly regulated
- Carbon tax and other environmental levies; airport charges both in Australia and overseas - UK air passenger duty is a significant cost
- Capacity issues at Sydney Airport; curfews restricting operations at some airports
- Slot availability at foreign ports (e.g. none at Haneda) and airport capacity constraints for potential new routes (e.g. India, Jakarta)
- Airline focus on eastern seaboard capital cities
- Ownership of regional airports by councils/private interests – limited investment in infrastructure, high landing/parking charges
- Lack of funding for attracting new carriers and to encourage existing carriers to expand services; need for some funding to be allocated to outbound promotion

3. Development Options/Opportunities

- Regulatory – access to Europe via China; common border arrangements with New Zealand; ensure access is granted to airlines with significant fleet expansion plans; additional access for Japan, India (direct)
- Investment in tourism infrastructure and training
- Take advantage of rapidly growing social media for marketing opportunities
- Improved regional benefits package that provides real incentive for airlines to fly to regional ports
- Tourism Australia marketing funding to provide assistance to attracting air services to non-Sydney/Melbourne/Brisbane ports

Airlines

1. Major Target Tourism/Aviation Markets

- Up to five years:
  - North Asia - China, South Korea
  - South and Southeast Asia – India, Indonesia
  - United States
  - Europe
  - New Zealand
  - Singapore as an on-carriage port
- Over five years:
  - Japan as economy rebounds
  - South America – Brazil; potential for Australia to serve as a hub to Asia?
  - Eastern Europe

- Market strengths – market maturity (United States, Europe, New Zealand); economic strength of Asian developing nations; growing wealthy middle class; foreign investment in Australia increasing

2. Impediments to Market Development

- Regulatory – 5th freedom rights for China; lack of EU open skies agreement; rights for codeshare routes out of partners' hubs; access to Trans-Pacific route; CIQ requirements on Trans-Tasman routes; poor air service agreement coverage of South America; regional package not seen as beneficial; lack of capacity growth potential in UAE agreements
- Third party charges too high – government and airport taxes and charges constrain ability to stimulate market
- Ability to compete effectively with incumbent carriers when entering new markets, particularly those with lower cost base (e.g. China's carriers)
- Challenge balancing inbound and outbound where new destinations not yet popular with Australian travellers (e.g. South Korea)
- Lack of slot availability at required times at Beijing, Shanghai, Guangzhou – complex and non-transparent slot allocation process
- Distribution in Chinese market as local GDS gives preference to local carriers
- Operational constraints – on Pacific route, lack of flexibility (eg curfew) or issues such as poor weather (eg fog) makes this a complex route for airline network managers
- Aircraft technology – need new aircraft types (e.g. B787) to provide greater range and open up route possibilities
- Longhaul routes such as Pacific are low yield and high cost to operate. Rely on high load factors. Sustainability an issue
- EU carbon tax regime from 2012 will add significant cost and will disadvantage Australian carriers (carriers levied on sector length before entering EU)
- Sydney Airport constraints – slots (particularly at peak hours) and curfew
- Strong Australian dollar and rising fuel prices – Australia is a relatively expensive destination, aviation fuel pricing is high in global terms and Sydney fuel supply monopoly is an issue
- Poor quality tourism infrastructure/product and lack of investment; lack of MICE facilities; hotel room occupancy rates (and therefore prices) too high in some cities; lack of activity in cities after hours (e.g. shops closing by 6pm)
- Lack of new attractions to attract repeat visitors
- Lack of skilled tourism labour force and poor customer service standards

3. Development Options/Opportunities

- Greater transparency behind air service agreement negotiation particularly relating to ensuring needs/wants of Australian carriers, prioritisation and

attempts to remove impediments

- Incentive framework for investment in tourism infrastructure (e.g. tax concessions or capital investment allowances) to improve returns and ensure ongoing renewal takes place
- More co-ordinated approach to marketing Australia overseas rather than each state promoting itself
- More marketing funds for tourism
- Government assistance for upskilling the tourism labour force

Airports

1. Major Target Tourism/Aviation Markets

- Up to five years:
  - China a priority for airports
  - Other North Asia – South Korea, Taiwan
  - Southeast Asia – Indonesia, Malaysia, Philippines and traditional on-carriage points for Australian traffic such as Singapore, Hong Kong, Bangkok
  - South Asia – India (but may be a longer term proposition)
  - Some airports targeting growth in Japan market even though others forecast declines
  - Trans-Tasman services - increased capacity on existing routes and new services for regional airports
  - Further North America as access improves, opportunities for hubbing through Northeast Asia
  - Mature United Kingdom/Europe still important markets in volume terms although growth levels not as significant as other newer markets
  - Middle East important for on-carriage to Australia but not as tourism source markets
- Over five years:
  - Continued focus on growing markets identified above
  - Return of Japan as a growth market
  - Southeast Asia services for regional airports
  - South America
  - Eastern Europe
- Market strengths – proximity of Asian markets, high propensity to travel of a number of markets, large populations, emerging wealthy middle class in developing nations

- Market weaknesses – weak currencies versus the Australian dollar, awareness of specific destination product, language barriers and slow growth in internet use and capabilities for some countries (e.g. China)

2. Impediments to Market Development

- Bilateral negotiations – Australia has little to offer in the way of beyond rights; capacity constraints in some bilateral (Middle East, Indonesia, Malaysia cited as examples); three to four services a week not meaningful capacity for airlines
- Competition for Chinese market from global destinations
- Recent shocks in some important markets – Japan, New Zealand natural disasters and economic impact
- Distribution and airport access issues in China
- Capacity constraints at high volume ports, risk of curfew imposition
- High passenger movement charges
- Australia's visa requirements for Chinese visitors seen as being "anti-competitive" compared to other countries
- Regional airport package – not seen as a benefit; Government's propensity to negotiate additional capacity cancels out benefits for regional ports
- Current border control regime does not allow regional airports to access international services easily. CIQ infrastructure requirements for regional airports may prove costly
- Some regional airports require costly infrastructure upgrades (in addition to CIQ) to attract international services – terminals, runways
- Constraints on expansion/operations for joint user (civil and military) airports
- Airline risk appetite for committing aircraft to new routes
- Local tourism infrastructure/product needs additional investment to expand and improve, long lead time required for these developments, store opening hours too restrictive for tourists
- Australia an expensive destination, not seen as "value-for-money", customer service standards low

3. Development Options/Opportunities

- Bilateral negotiations need to take account of airline strategic planning cycle – airlines plan capacity two or more years ahead so bilaterals need to allow for capacity availability for aggressive airline planning; needs to be done on a market by market basis accounting for inbound/outbound growth; provide capacity for daily services upfront
- Single point of entry processing on Trans-Tasman; common border
- State government support/investment for development of regional markets for aviation and tourism and not just focus on capital city development

Government Departments

1. Major Target Tourism/Aviation Markets

- Up to five years:
  - China
  - India
  - Mature markets – United Kingdom, Europe

2. Impediments to Market Development

- Resistance to 5th freedom access by China, Vietnam; some limitations by Singapore (related to Australia's refusal to provide Pacific access) and Indonesia (Indonesia-Singapore)
- EU open skies negotiations – EU requires Australia to change foreign ownership limits as EU open skies agreements provide for no restrictions on airline investment
- Pacific market not sustainable – excess capacity, low yields
- Difficult market conditions in Japan
- Need rights for extra Bali capacity
- Availability of airport slots at required times in foreign ports (China, Frankfurt) and at Sydney Airport
- Australia's geographic position as an end destination makes it vulnerable to service rationalisation/withdrawal
- Tourism infrastructure – lack of quality accommodation in some cities, ground transport linkages inefficient, tourism product quality
- Not a cost competitive destination, strength of Australian dollar
- Lack of cohesive federal, state policy on tourism (National Tourism Strategy has seen greater engagement with stakeholders)

3. Development Options/Opportunities

- Enhanced awareness of regional package
- Greater capacity rights for China services
- Capitalise on technology – digital, social media
- Mutual recognition of skills between states, consolidation of tourism marketing
- Direct involvement of tourism in local government planning

Appendix 3: Australia's Share of Capacity by Market

Table A3.1: Australia's Percentage Share of Total International Capacity by Market and Changes in Seat Capacity and Flights, 2006-2011

Year	Market	No. Flights	% Total	% Change (YOY)	No.Seats	% Total	% Change (YOY)
Short-Haul: New Zealand							
2006	NZ-Australia	37,312	*65.7*		7,681,820	*60.4*	
	NZ-All	56,789	*100.0*		12,723,802	*100.0*	
2007	NZ-Australia	36,386	*66.4*	*-2.5*	7,300,831	*60.0*	*-5.0*
	NZ-All	54,828	*100.0*	*-3.5*	12,172,199	*100.0*	*-4.3*
2008	NZ-Australia	37,853	*66.4*	*4.0*	7,564,300	*59.9*	*3.6*
	NZ-All	57,004	*100.0*	*4.0*	12,625,331	*100.0*	*3.7*
2009	NZ-Australia	39,760	*68.9*	*5.0*	7,706,944	*62.3*	*1.9*
	NZ-All	57,688	*100.0*	*1.2*	12,367,940	*100.0*	*-2.0*
2010	NZ-Australia	40,358	*68.8*	*1.5*	7,699,758	*62.1*	*-0.1*
	NZ-All	58,681	*100.0*	*1.7*	12,406,619	*100.0*	*0.3*
2011	NZ-Australia	42,383	*67.8*	*5.0*	8,486,607	*61.5*	*10.2*
	NZ-All	62,504	*100.0*	*6.5*	13,803,053	*100.0*	*11.3*
CAGR 2006-11 (%)	NZ-Australia	*2.15*			*1.67*		
	NZ-All	*1.61*			*1.37*		
Medium-Haul: Southeast Asia							
Singapore							
2006	Singapore-Australia	18,243	*9.3*		5,960,660	*12.3*	
	Singapore-Asia	153,134	*78.9*		34,731,672	*73.0*	
	Singapore-All	196,203	*100.0*		48,433,513	*100.0*	
2007	Singapore-Australia	17,853	*8.8*	*-2.1*	5,663,541	*11.5*	*-5.0*
	Singapore-Asia	159,639	*77.9*	*4.2*	35,949,937	*71.8*	*3.5*
	Singapore-All	202,295	*100.0*	*3.1*	49,219,809	*100.0*	*1.6*
2008	Singapore-Australia	20,201	*9.4*	*13.2*	6,343,993	*12.2*	*12.0*
	Singapore-Asia	167,485	*79.7*	*4.9*	37,262,791	*71.8*	*3.7*
	Singapore-All	214,975	*100.0*	*6.3*	51,863,468	*100.0*	*5.4*
2009	Singapore-Australia	19,299	*8.6*	*-4.5*	6,034,002	*11.6*	*-4.9*
	Singapore-Asia	179,518	*79.7*	*7.2*	37,655,128	*72.7*	*1.1*
	Singapore-All	225,207	*100.0*	*4.8*	51,800,483	*100.0*	*-0.1*
2010	Singapore-Australia	19,558	*8.0*	*1.3*	6,062,950	*11.0*	*0.5*
	Singapore-Asia	198,845	*81.5*	*10.8*	41,314,206	*74.6*	*9.7*
	Singapore-All	244,128	*100.0*	*8.4*	55,364,380	*100.0*	*6.9*
2011	Singapore-Australia	19,749	*7.2*	*1.0*	6,408,588	*10.4*	*5.7*
	Singapore-Asia	226,728	*82.4*	*14.0*	46,228,152	*75.3*	*11.9*
	Singapore-All	275,205	*100.0*	*12.7*	61,415,666	*100.0*	*10.9*
CAGR 2006-11 (%)	Singapore-Australia	*1.33*			*1.21*		
	Singapore-Asia	*6.76*			*4.88*		
	Singapore-All	*5.80*			*4.04*		
Malaysia							
2006	Malaysia-Australia	5,442	*2.5*		1,675,764	*3.9*	
	Malaysia-All	119,948	*100.0*		25,471,669	*100.0*	
2007	Malaysia-Australia	4,754	*3.7*	*-12.6*	1,469,708	*5.3*	*-12.3*
	Malaysia-All	129,848	*100.0*	*-40.2*	27,501,445	*100.0*	*8.0*
2008	Malaysia-Australia	5,137	*3.4*	*8.1*	1,595,670	*5.2*	*8.6*
	Malaysia-All	149,194	*100.0*	*14.9*	30,660,312	*100.0*	*11.5*
2009	Malaysia-Australia	5,980	*3.4*	*16.4*	1,905,270	*5.5*	*19.4*
	Malaysia-All	174,077	*100.0*	*16.7*	34,630,522	*100.0*	*12.9*
2010	Malaysia-Australia	7,710	*4.0*	*28.9*	2,594,452	*6.9*	*36.2*
	Malaysia-All	192,596	*100.0*	*10.6*	37,852,317	*100.0*	*9.3*
2011	Malaysia-Australia	8,943	*4.1*	*16.0*	2,934,048	*6.9*	*13.1*
	Malaysia-All	217,185	*100.0*	*12.8*	42,625,343	*100.0*	*12.6*
CAGR 2006-11 (%)	Malaysia-Australia	*8.63*			*9.78*		
	Malaysia-All	*10.40*			*8.96*		

Year	Market	No. Flights	% Total	% Change (YOY)	No. Seats	% Total	% Change (YOY)
Medium-Haul: Northeast Asia							
China							
2006	China-Australia	2,846	0.2%		796,853	0.3%	
	China-All	1,707,191			268,096,602		
2007	China-Australia	2,989	0.2%	5.0%	810,674	0.3%	1.7%
	China-All	1,908,176		11.8%	299,696,220		11.8%
2008	China-Australia	3,429	0.2%	14.7%	948,436	0.3%	17.0%
	China-All	2,004,375		5.0%	317,365,384		5.9%
2009	China-Australia	3,474	0.1%	1.3%	927,455	0.3%	-2.2%
	China-All	2,335,869		16.5%	365,275,319		15.1%
2010	China-Australia	4,343	0.2%	25.0%	1,196,943	0.3%	29.1%
	China-All	2,577,105		10.3%	406,181,769		11.2%
2011	China-Australia	6,214	0.2%	43.1%	1,717,713	0.4%	43.5%
	China-All	2,769,097		7.4%	439,624,946		8.2%
CAGR 2006-11 (%)	China-Australia	13.9%			13.7%		
	China-All	8.4%			8.6%		
South Korea							
2006	South Korea-Australia	1,830	0.6%		572,672	0.8%	
	South Korea-All	300,347			67,413,206		
2007	South Korea-Australia	2,034	0.6%	11.1%	651,092	0.9%	13.7%
	South Korea-All	330,669		10.1%	72,868,472		8.1%
2008	South Korea-Australia	2,166	0.6%	6.5%	675,235	0.9%	3.7%
	South Korea-All	345,712		4.5%	74,321,115		2.0%
2009	South Korea-Australia	2,149	0.6%	-0.8%	657,038	0.9%	-2.7%
	South Korea-All	348,910		0.9%	73,432,019		-1.2%
2010	South Korea-Australia	2,175	0.6%	1.2%	659,252	0.9%	0.3%
	South Korea-All	361,860		3.7%	75,517,108		2.8%
2011	South Korea-Australia	2,243	0.6%	3.1%	663,977	0.8%	0.7%
	South Korea-All	392,119		8.4%	83,027,897		9.9%
CAGR 2006-11 (%)	South Korea-Australia	3.5%			2.5%		
	South Korea-All	4.5%			3.5%		
Japan							
2006	Japan-Australia	6,950	0.7%		2,108,291	1.0%	
	Japan-All	956,917			215,289,817		
2007	Japan-Australia	6,622	0.6%	-4.7%	1,945,796	0.9%	-7.7%
	Japan-All	1,030,188		7.7%	220,626,713		2.5%
2008	Japan-Australia	5,784	0.5%	-12.7%	1,738,412	0.8%	-10.7%
	Japan-All	1,057,349		2.6%	218,089,734		-1.1%
2009	Japan-Australia	4,392	0.4%	-24.1%	1,332,653	0.6%	-23.3%
	Japan-All	1,047,091		-1.0%	211,680,602		-2.9%
2010	Japan-Australia	4,668	0.4%	6.3%	1,426,810	0.7%	7.1%
	Japan-All	1,059,475		1.2%	209,354,621		-1.1%
2011	Japan-Australia	3,727	0.3%	-20.2%	1,231,827	0.6%	-13.7%
	Japan-All	1,078,687		1.8%	207,163,097		-1.0%
CAGR 2006-11 (%)	Japan-Australia	-9.9%			-8.6%		
	Japan-All	2.0%			-0.6%		
Hong Kong							
2006	Hong Kong-Australia	8,491	3.3%		2,706,745	4.4%	
	Hong Kong-All	254,059			61,280,486		
2007	Hong Kong-Australia	8,639	3.3%	1.7%	2,730,489	4.3%	0.9%
	Hong Kong-All	263,771		3.8%	63,340,531		3.4%
2008	Hong Kong-Australia	10,009	3.8%	15.9%	3,192,232	4.9%	16.9%
	Hong Kong-All	260,875		-1.1%	65,747,328		3.8%
2009	Hong Kong-Australia	9,739	4.1%	-2.7%	3,099,650	5.0%	-2.9%
	Hong Kong-All	239,141		-8.3%	62,109,666		-5.5%
2010	Hong Kong-Australia	9,791	4.0%	0.5%	3,128,955	4.9%	0.9%
	Hong Kong-All	246,704		3.2%	63,873,604		2.8%
2011	Hong Kong-Australia	10,331	3.7%	5.5%	3,331,602	4.7%	6.5%
	Hong Kong-All	277,260		12.4%	71,288,761		11.6%
CAGR 2006-11 (%)	Hong Kong-Australia	3.3%			3.5%		
	Hong Kong-All	1.5%			2.6%		

Year	Market	No. Flights	% Total	% Change (YOY)	No. Seats	% Total	% Change (YOY)
Long-Haul: UK and the US							
UK							
2006	UK-Australia	5,272	*0.4*		1,927,214	*0.8*	
	UK Asia	51,937	*3.9*		16,152,102	*7.5*	
	UK-All	1,320,440	*100.0*		216,381,409	*100.0*	
2007	UK-Australia	5,104	*0.4*	*-3.2*	1,801,092	*0.8*	*-6.5*
	UK-Asia	52,332	*3.8*	*0.8*	16,167,100	*7.0*	*0.1*
	UK-All	1,394,754	*100.0*	*0.9*	229,430,069	*100.0*	*6.0*
2008	UK-Australia	5,111	*0.4*	*0.1*	1,808,042	*0.7*	*0.4*
	UK-Asia	51,407	*3.5*	*-1.8*	15,945,297	*6.5*	*-1.4*
	UK-All	1,455,138	*100.0*	*4.3*	246,122,925	*100.0*	*7.3*
2009	UK-Australia	4,887	*0.4*	*-4.4*	1,758,720	*0.8*	*-2.7*
	UK-Asia	47,907	*3.6*	*-6.8*	14,719,272	*6.4*	*-7.7*
	UK-All	1,340,652	*100.0*	*-7.9*	229,026,706	*100.0*	*-6.9*
2010	UK-Australia	4,813	*0.4*	*-1.5*	1,754,158	*0.8*	*-0.3*
	UK-Asia	48,955	*3.7*	*2.2*	14,804,349	*6.5*	*0.6*
	UK-All	1,331,005	*100.0*	*-0.7*	227,173,156	*100.0*	*-0.8*
2011	UK-Australia	5,026	*0.4*	*4.4*	1,839,802	*0.8*	*4.9*
	UK-Asia	51,399	*3.7*	*5.0*	15,436,877	*6.5*	*4.3*
	UK-All	1,382,732	*100.0*	*3.9*	236,891,299	*100.0*	*4.3*
CAGR 2006-11 (%)	UK-Australia	*-0.79*			*-0.77*		
	UK-Asia	*-0.17*			*-0.75*		
	UK-All	*0.77*			*1.52*		
US							
2006	US-Australia	6,863	*0.5*		2,322,952	*1.1*	
	US-All	1,338,517	*100.0*		202,998,534	*100.0*	
2007	US-Australia	7,048	*0.5*	*2.7*	2,390,913	*1.1*	*2.9*
	US-All	1,380,828	*100.0*	*3.2*	210,808,276	*100.0*	*3.8*
2008	US-Australia	6,560	*0.5*	*-6.9*	2,288,096	*1.1*	*-4.3*
	US-All	1,386,839	*100.0*	*0.4*	214,590,243	*100.0*	*1.8*
2009	US-Australia	7,404	*0.6*	*12.9*	2,584,275	*1.3*	*12.9*
	US-All	1,303,936	*100.0*	*-6.0*	201,205,095	*100.0*	*-6.2*
2010	US-Australia	8,058	*0.6*	*8.8*	2,793,658	*1.4*	*8.1*
	US-All	1,334,927	*100.0*	*2.4*	206,736,648	*100.0*	*2.7*
2011	US-Australia	8,597	*0.6*	*6.7*	2,976,422	*1.4*	*6.5*
	US-All	1,357,914	*100.0*	*1.7*	215,925,185	*100.0*	*4.4*
CAGR 2006-11 (%)	US-Australia	*3.83*			*4.22*		
	US-All	*0.24*			*1.03*		

Note: Capacity and frequencies shown for 2011 are based on forward schedules.

Source: SRS Analyser

Note that the data produced by SRS Analyser applies only to non-stop and one-stop services with the same flight codes, and therefore excludes services involving a change of flights.

Appendix 4: Current Airline Fleets by Market

The following tables list current active jet aircraft fleets by type by country and region, as of April 2011. These cover Boeing and Airbus jets but do not include other aircraft types or turboprop aircraft.

Table A4.1: Current Jet Fleets of Asia Pacific Airlines by Type by Country

Region	Country	Airbus					Boeing				
		A319/20/21	A300/10	A330-2/3	A340-2/3/5/6	A380-8	B737-3/4/NG	B757-2	B767-2/3	B777-2/3	B747-3/4
South Asia	Bangladesh		3				2		2	1	1
	India	151	15	17			135	4		23	5
	Nepal							2			
	Sri Lanka	4		5	5				1		
	Pakistan	5	13				18			9	5
	Sub-total	*160*	*31*	*22*	*5*		*155*	*6*	*3*	*33*	*11*
% Global Fleet		*3.5*	*5.2*	*2.9*	*1.4*	*0*	*2.9*	*0.6*	*0.3*	*3.6*	*1.4*
SE Asia	Indonesia	10	2	11			176				5
	Brunei	4						5	3		
	Malaysia	99		21	2		56			17	13
	Philippines	43		8	4		5			2	5
	Myanmar	2	2								
	Thailand	9	14	20	10		17		2	23	27
	Singapore	46		19	5	11				66	20
	Vietnam	34		10			5			10	
	Sub-total	*247*	*18*	*89*	*21*	*11*	*259*	*5*	*5*	*118*	*70*
% Global Fleet		*5.5*	*3.0*	*11.6*	*5.7*	*24.4*	*4.9*	*0.5*	*0.6*	*12.9*	*8.7*
East Asia	China/SARs	530	43	103	40		738	30	13	15	30
	South Korea	29	8	33			57		8	39	44
	Japan	34	22				126		102	95	6
	Taiwan			18	6		10			15	58
	Sub-total	*593*	*73*	*154*	*46*		*931*	*30*	*123*	*164*	*138*
% Global Fleet		*13.1*	*12.3*	*20.1*	*12.5*	*0.0*	*17.5*	*3.2*	*14.3*	*17.9*	*17.2*
Oceania	PNG							1	2		
	Tahiti				5						
	Vanuatu						2				
	N. Caledonia	1		2							
	Fiji						3		1		2
	New Zealand	14					41		5	11	6
	Australia	60		27		9	104		27	5	26
	Sub-total	*75*		*29*	*5*	*9*	*150*	*1*	*35*	*16*	*34*
% Global Fleet		*1.7*	*0.0*	*3.8*	*1.4*	*20.0*	*2.8*	*0.1*	*4.1*	*1.7*	*4.2*
Total Asia Pacific		*1075*	*122*	*294*	*77*	*20*	*1495*	*42*	*166*	*331*	*253*
% Global Fleet		*23.7*	*20.5*	*38.3*	*20.9*	*44.4*	*28.0*	*4.5*	*19.3*	*36.1*	*31.5*

Source: Airbus, Boeing

Table A4.2: Current Middle East Jet Fleets by Type by Country

Region	Country	Airbus					Boeing				
		A319/20/21	A300/10	A330-2/3	A340-2/3/5/6	A380-8	B737-3/4/NG	B757-2	B767-2/3	B777-2/3	B747-3/4
Middle East	Algeria			5			19		3		
	Bahrain	22		10							2
	Egypt	25	4	8	3		20			10	
	Jordan	13	6	4	2		7		5		
	Kuwait	9	8		5					2	1
	Lebanon	11		4			1				
	Morocco	7					43	1	5		1
	Oman			6			15				
	Qatar	30	3	29	4					21	1
	UAE	51		48	39	15	27			94	14
	Saudi Arabia	36		8			8	4	3	24	
	Tunisia	27	3				7				
	Yemen	3	3								
Total Middle East		*234*	*27*	*122*	*53*	*15*	*147*	*5*	*16*	*151*	*19*
% Global Fleet		*5.2*	*4.5*	*15.9*	*14.4*	*33.3*	*2.8*	*0.5*	*1.9*	*16.5*	*2.4*

Source: Airbus, Boeing

Table A4.3: Current Jet Fleets for Selected European Airlines

Airline	Airbus					Boeing						
	A319/20/21	A300/10	A330-2/3	A340-2/3/5/6	A380	B717	B737-3/4/NG	MD80/90	B757-2	B767-2/3	B777-2/3	B747-3/4
British Airways	87						19			21	49	57
Virgin Atlantic			2	25								12
Lufthansa	119		15	50	6		63					30
Air France	143			16	4						60	13
KLM			11				47				20	22
SAS	12		4	6			77					
Air Austral							2				6	
Swiss	35		14	15			1				13	
Turkish Air	54		13	9			66			30	18	
Iberia				36								
Aeroflot	72		10									
Alitalia	93									5	10	
Total	*450*		*59*	*157*	*10*		*275*			*51*	*166*	*134*
% Global Total	*9.9*		*7.7*	*42.5*	*22.2*		*5.2*			*5.9*	*18.1*	*16.7*

Source: Airbus, Boeing

Table A4.4: Current North American and Latin America Jet Fleets for Selected Airlines by Type

Airline	Airbus					Boeing						
	A319/20/21	A300/10	A330-2/3	A340-2/3/5/6	A380-8	B717	B737-3/4/NG	MD80/90	B757-2	B767-2/3	B777-2/3	B747-3/4
United Airlines	152						44		133			24
Delta Air Lines	126		32				83	147	186	92	17	
Continental							193		26		24	12
American Air							152	221		73	47	
Hawaiian Air						15				18		
Air Canada	63		8							30	18	
Total	*341*		*40*			*15*	*472*	*368*	*345*	*213*	*106*	*36*
% Global Total	*7.5*		*5.2*			*11.7*	*10.0*	*48.5*	*42.5*	*34.2*	*11.9*	*2.5*
Air Canada	83		3							30	18	
Aerolineas				7			28	3				3
LAN Air	55			5						22		
TAM	120		18	2						3	4	
Aeromexico							40			7	4	
Total	*258*		*21*	*14*			*68*	*3*		*62*	*26*	*3*
% Global Total	*5.7*		*2.7*				*1.4*	*0.4*		*10.0*	*2.9*	*0.2*

Source: Airbus, Boeing

Appendix 5: Unfilled Jet Aircraft Orders by Market

The following tables provide outstanding aircraft orders by type by country and region, as of April 2011. These focus on Airbus and Boeing orders for current and new jet aircraft types, and do not include regional aircraft orders with other manufacturers or turboprop aircraft orders.

Table A5.1: Unfilled Jet Aircraft Orders by Type for Asia Pacific Carriers

Region	Country	Airbus						Boeing				
		Existing Types			New Types			Existing Types			New Types	
		A319/20/21	A330	A340	A320neo	A350	A380	B737NG	B767-3ER	B777	B787	B747-8
South Asia	Bangladesh							2		4	4	
	India	133	15		150	5	5	71		5	37	
	Pakistan	13										
	Sub-total	*146*	*15*	*0*	*150*	*5*	*5*	*73*		*9*	*41*	
% Global Orders		*6.3*	*4.2*	*0.0*	*45.2*	*0.9*	*2.5*	*3.4*	*0.0*	*3.1*	*4.9*	*0.0*
SE Asia	Indonesia	43	6					146		10		
	Malaysia	86	39			10	6	31				
	Philippines	18								4		
	Thailand		7			4	6					
	Singapore	51				20	8	8		8	20	
	Vietnam	26				10					16	
	Sub-total	*224*	*52*		*0*	*44*	*20*	*185*		*22*	*36*	
% Global Orders		*9.7*	*14.7*	*0.0*	*0.0*	*7.7*	*10.1*	*8.6*	*0.0*	*7.7*	*4.3*	*0.0*
East Asia	China/SARs	196	73			55	5	148		47	59	10
	South Korea		2			30	16	9		13	10	12
	Japan							21	9	5	90	14
	Taiwan					14				1		
	Sub-total	*196*	*75*		*0*	*99*	*21*	*178*	*9*	*66*	*159*	*36*
% Global Orders		*8.5*	*21.2*	*0*	*0*	*17.3*	*10.6*	*8.2*	*17.0*	*23.1*	*19.0*	*33.0*
Oceania	PNG										1	
	Fiji											
	New Zealand	10								2	8	
	Australia	44					11	85			50	
	Sub-total	*54*	*8*		*0*		*11*	*85*		*2*	*59*	
% Global Orders		*2.3*	*2.3*	*0*	*0*	*0.0*	*5.5*	*3.9*	*0.0*	*0.7*	*7.1*	*0.0*
Total Asia Pacific		*620*	*150*	*0*	*150*	*148*	*57*	*521*	*9*	*99*	*295*	*36*
% Global Orders		*25.8*	*42.4*	*0.0*	*45.2*	*25.9*	*28.6*	*24.1*	*17.0*	*34.6*	*35.3*	*33.0*

Source: Airbus, Boeing

Table A5.2: Unfilled Jet Aircraft Orders for the Middle East

Region	Country	Airbus						Boeing				
		Existing Types			New Types			Existing Types			New Types	
		A319/20/21	A330	A340	A320neo	A350	A380	B737NG	B767-3ER	B777	B787	B747-8
Middle East	Algeria							6				
	Bahrain										24	
	Egypt							5				
	Iraq							30			10	
	Jordan										7	
	Kuwait	4						1			14	
	Morocco							9			4	
	Oman		1					6				
	Qatar	15				80	5			10	30	
	Tunisia							11		6		
	UAE	99	23			95	85	72		67	36	15
	Saudi Arabia	13								12	8	
	Yemen	10				10						
Total Middle East		*141*	*24*		*0*	*185*	*90*	*140*		*95*	*133*	*15*
% Global Orders		*5.9*	*6.8*	*0.0*	*0.0*	*32.4*	*45.2*	*6.5*	*0.0*	*33.2*	*15.9*	*13.8*

Source: Airbus, Boeing

Table A5.3: Unfilled Jet Aircraft Orders by Type for Selected Carriers in North and Latin America

Region	Airline	Airbus						Boeing				
		Existing Types			New Types			Existing Types			New Types	
		A319/20/21	A330	A340	A320neo	A350	A380	B737NG	B767-3ER	B777	B787	B747-8
US	United										25	
	Delta Air										18	
	American							54			9	63
	Continental							48			25	73
Canada	Air Canada										37	
Latin America	LAN Air								9	2	26	37
	TAM				22					8		8
	Aeromexico							10			2	12
Total					22			112	9	10	142	193
% Global Orders					6.6			5.2	17.0	3.5	17.0	

Source: Airbus, Boeing

Table A5.4: Unfilled Jet Orders by Type for Selected European Airlines

Region	Airline	Airbus						Boeing				
		Existing Types			New Types			Existing Types			New Types	
		A319/20/21	A330	A340	A320neo	A350	A380	B737NG	B767-3ER	B777	B787	B747-8
UK	British Airways						12			3	24	
	Virgin Atlantic		8				6				15	
Europe	Lufthansa		3		33		9					20
	Air France	14					8			11		
	KLM		4					9		2		
	SAS							17				
	Air Austral						2			2		
	Turkish Air	31	2					35		3		
	Swiss	6	5									
	Iberia	15	16									
	Aeroflot	14	11			22				8	22	
	Alitalia	22	7			12						
Total		102	56		33	34	37	26	0	21	39	86
	% Global Orders	4.2	15.8		9.9	9.6	18.6	1.2		7.3	4.7	78.9

Source: Airbus, Boeing

Appendix 6: Global Alliance and Codeshare Arrangements for Key Carriers

The table below maps current partnership arrangements involving key carriers in Asia, Europe, the Middle East, the Americas and Australasia.

Table A6.1: Commercial Partnerships with Airlines by Market

	Airline	Global Alliance	Codeshare Partners by Market				
			Europe	Americas	Pacific	Asia	Middle East/Africa
China	**China Eastern**	SkyTeam (2011)	Air France, Alitalia	American Airlines (ends May 31), Aeromexico, Delta Air	Qantas	All Nippon Airways, Asiana, Cathay Pacific, China Airlines, China Southern, Shanghai Airlines, Japan Airlines, Korean Air	None
	China Southern	SkyTeam	None	None	None	Asiana, Cathay Pacific, China Air, China Eastern, Dragonair, Garuda, JAL, MAS, Pakistan International	None
	Air China	Star Alliance	Alitalia, Austrian Air, British Airways, EVA Air, Finnair, LOT, Lufthansa, SAS, Swiss,TAP Portugal, Turkish Air, Virgin Atlantic	Air Canada, United Air, US Airways, TAM, Avianca	Air New Zealand	Air Macau, ANA, Asiana, Cathay, Dragonair, Shandong Air	Egyptair, El Al, Ethiopian
	Hainan Airlines	oneworld (possible)	Malev, Brussels Airlines, Air Berlin, Aerosivit	None	None	Hong Kong Air, Hong Kong Express, Garuda	None
	Shanghai Airlines	SkyTeam (2011)	None	None	None	China Eastern, China United Air, Korean Air, Sichuan Air	None
	Shenzhen Airlines	None	None	None	None	ANA, Asiana, EVA Airways	
	Cathay Pacific	oneworld	British Airways, Finnair	American Air, LAN, Westjet, Alaska Air	Qantas, Air Pacific	Air China, Dragonair, Vietnam Airlines ,Japan Airlines, MAS, PAL	None
Japan	**Japan Airlines**	oneworld	British Airways, Finnair, Iberia, Malev, Air France, Alitalia,	American Air, Aeromexico	Qantas, Jetstar, Air Tahiti Nui, Air New Zealand	Cathay Pacific, China Air, China Eastern, China Southern, Korean Air, Thai Air, Vietnam Air	Emirates, Royal Jordanian
	ANA	Star Alliance	Austrian Air, bmi, LOT, Lufthansa, Swiss, TAP, Turkish Air, Virgin Atlantic	Air Canada, Continental, TAM, US Airways	None	Air China, Air Japan, Air Macau, Asiana, EVA, MAS, Shanghai Air, Shenzhen Air, SIA, Thai Air	Etihad Air, Qatar Airways, Egyptair
Korea	**Korean Air**	SkyTeam	Uzbekistan Air	Alaska Air, Hawaiian Air	Aircalin	Air Macau, China Air, China Eastern, Garuda, JAL, MAS, Shanghai Air, Xiamen Air	Emirates
	Asiana	Star Alliance	bmi, LOT, Turkish Air	Air Canada, Continental Air, United, US Airways	Qantas, Air New Zealand	Air Busan, Air China, ANA, China Eastern, China Southern, Shanghai Air, Shenzhen Air, Singapore Air, Thai Air	South African Air, Qatar Airways, Egyptair

	Airline	Global Alliance	Codeshare Partners by Market				
			Europe	Americas	Pacific	Asia	Middle East/Africa
Taiwan	China Airlines	SkyTeam (2011)	Alitalia, Czech Air	Delta Air, Westjet	None	China Eastern, China Southern, Garuda, JAL, Korean Air, Thai Air, Vietnam Air, Xiamen	None
	EVA Air	Star Alliance (possible)		American Air, Air Canada, Continental, US Airways	Qantas	ANA, Bangkok Air, Air China, Shenzhen Air, Shandong Air	None
Southeast Asia	Singapore Airlines	Star Alliance	Aer Lingus, Virgin Atlantic, Lufthansa, Austrian Air, bmi	United Air, US Airways, Air Canada	Air New Zealand	ANA, Garuda, MAS, SilkAir, Air China, Asiana	
	Thai Airways	Star Alliance	Lufthansa, Austrian Air, bmi	United Air, Air Canada, US Airways	Air New Zealand	ANA, Asiana, Bangkok Airways, Nok Air, China Air, China Eastern, JAL, MAS, Royal Brunei	Emirates, Ethiopian, Gulf Air, El Al, Air Madagascar
	Garuda	SkyTeam (2012)	KLM, Turkish Air	Aeromexico, Delta Air	Qantas, Virgin Blue	China Air, China Southern, Hainan, Korean Air, MAS, PAL, Royal Brunei, SilkAir, SIA, Vietnam Air	Emirates, Gulf Air, Qatar Airways, Saudi Arabian Air
	Philippine Air	None	None	None	None	Cathay Pacific, Garuda, Kingfisher Air, MAS	Emirates, Etihad Air, Qatar Airways, Gulf Air
	Vietnam Air	SkyTeam	Air France, Alitalia, Czech Air, KLM	Delta Air	Qantas	Cathay Pacific, Cambodia Angkor Air, China Air, China Southern, Garuda, JAL, Korean air, PAL, Lao Airlines	None
	Malaysia Air	None	Alitalia, Austrian Air, bmi, KLM, Swiss, Turkish Air	Continental Air	Virgin Blue	ANA, Cathay Pacific, China Southern, Dragonair, Garuda, Jet Airways, Korean Air, Myanmar Air, PAL, Royal Brunei, SilkAir, SIA, SriLankan Air, Thai Air	Egyptair, Gulf Air, Oman Air, Royal Jordanian, South African Air
	Jetstar Asia	None	Finnair	American Air, LAN	Jetstar Air, Qantas	Cathay Pacific, JAL, Jetstar Pacific, Myanmar Air, Valuair	None
South Asia	Air India	Star Alliance (2011)	Aeroflot, Austrian Air, bmi, Lufthansa, Turkish Air	None	None	GMG Air	Gulf Air, Air Mauritius, Ethiopian Air, Kuwait Air, South African Air
	Jet Airways	None	Alitalia, Brussels Air	Air Canada, American Air, United Air	Qantas	ANA, JetLite, MAS	Etihad Air, Gulf Air, Kenya Air
	Kingfisher Air	oneworld (2011)	British Airways	American Air	None	PAL	None
	Pakistan Int.	None	Aerosivit, Turkish Air	None	None	China Southern, Thai Air	None
	SriLankan Air	None	bmi	None	None	MAS, Mihin Lanka	Etihad Air

	Airline	Global Alliance	Codeshare Partners by Market				
			Europe	Americas	Pacific	Asia	Middle East/Africa
Australasia	Qantas	oneworld	British Airways (joint services), Air France, Malev, Air Malta	American Air, Alaska Air	Aircalin, Air Vanuatu, Airnorth, Air Pacific, Air Tahiti Nui, Air Niugini, Polynesian	Asiana, JAL, EVA Air, China Eastern, Garuda, Jet Airways, Vietnam Air	Gulf Air, Kenya Air
	Jetstar	oneworld affiliate	None	None	Qantas	Jetstar Asia, Jetstar Pacific	None
	Virgin Blue	None	None	Delta Air, United Air	Air New Zealand, Skywest	None (interline agreements with Vietnam air, Garuda	Etihad Air
	Air New Zealand	Star Alliance	Virgin Atlantic, Lufthansa, Austrian Air	United Air	Virgin Blue, Aircalin, Air Pacific, Air Vanuatu, Air Rarotonga, Air Tahiti Nui	ANA, JAL, Air India	Etihad Air
Americas	United Air	Star Alliance	Lufthansa, Austrian Air, bmi, Aer Lingus	Hawaiian Air, TACA, Avianca	Air New Zealand	ANA, Air China, Jet Airways, Thai Air, SIA, Asiana	Emirates, Qatar Air
	Delta Air	SkyTeam	Air France, KLM, Olympic Air	Gol, Avianca, Alaska Air, American Eagle	Virgin Blue (V Australia)	China Air, Korean Air, Garuda	Royal Air Maroc, Air Nigeria
	American Air	oneworld	British Airways, Air Berlin, Iberia	Alaska Air, Hawaiian Air, Gol, Westjet	Qantas, Jetstar, Air Tahiti Nui, Air New Zealand	EVA Air, China Eastern, Jet Air	Gulf Air, El Al, Etihad
	Air Canada	Star Alliance	Austrian Air, Lufthansa, bmi, Brussels Air, LOT, SAS, Spanair, Swiss, TAP	United Air, Continental, TAM, Avianca	Air New Zealand	Air China, ANA, Asiana, Jet Airways, SIA, Thai Air	Middle East Airlines
	Aeromexico	SkyTeam	Air France, KLM	Copa, Gol, LAN, Delta Air	None	Korean Air, China Eastern, China Southern, JAL	El Al
	LAN Air	oneworld	British Airways, Finnair, Iberia, Malev	Aeromexico, Alaska Air, American Air, Jet Blue, TAM, Copa Air	Qantas	JAL, Korean Air	Royal Jordanian
Middle East/ Africa	Emirates	None	Air Malta, Aer Lingus	Continental Air	Virgin Blue (V Australia)	JAL, Jet Air, Korean Air, PAL, Thai Air	Oman Air, Royal Air Maroc, South African
	Qatar Air	None	bmi, Lufthansa, TAROM	United Air, US Airways, Air Canada	None	ANA, Asiana, MAS, PAL	Middle East Airlines
	Etihad Air	None	Air Astana, Air Malta, Alitalia, bmi, Brussels Air, Cyprus Air, flybe, Malev, Olympic air, s7 Air, Turkish Air, Ukraine Int.	American Air	Virgin Blue (V Australia/Pacific Blue), Air New Zealand	ANA, Asiana, Bangkok Air, MAS, SriLankan Air, Jet Air	Yemenia, Middle East Air, Royal Air Maroc
	Gulf Air	None	bmi, KLM	American Air	Qantas	Air India, Biman Bangladesh, Garuda, Jet Air, MAS, PAL, Thai Air	Saudi Arabian Air, Royal Jordanian, Oman Air, Ethiopian Air, Egyptair
	South African Air	Star Alliance	SAS, TAP, Virgin Atlantic	JetBlue	Qantas	MAS	El Al, Emirates, LAM Mozambique, Saudi Arabian Air

	Airline	Global Alliance	Codeshare Partners by Market				
			Europe	Americas	Pacific	Asia	Middle East/Africa
Europe	British Airways	oneworld	Flybe, Loganair, Iberia, Spanair, Aer Lingus	American Air, Westjet	Qantas	Cathay Pacific	None
	Lufthansa	Star Alliance	Austrian Air, Air Malta, Air Moldova, Jat Air, Luxair, SAS	United Air, JetBlue, Mexicana, Avianca	None	SIA, Thai Air, Air India	Qatar Airways
	Air France-KLM	SkyTeam	Aeroflot, Air Europa, Alitalia, Czech Air, KLM, TAROM	Delta Air, Aeromexico	Qantas	Vietnam Air, Korean Air, China Southern	None
	Turkish Air	Star Alliance	Aegean Air, Air Malta, Austrian Air, Croatia Air, LOT, Lufthansa, North Cyprus Air, Swiss, TAP, Spanair	United Air, US Airways	None	Air China, Air India, ANA, Asiana, Garuda, MAS, Pakistan Int., SIA, Thai Air	Egpytair, Etihad Air, Ethiopian Air, Royal Air Maroc, Syrian Air

Table A6.2: Membership of Global Alliances

Alliance	Current Members	Home Country	Affiliates	Future Members	Possible Members
oneworld (12 members)	American Airlines	US	American Eagle, Executive Airlines, American Connection, Chautauqua Air	Kingfisher Airlines (India, 2011)	Aer Lingus (Ireland)
	British Airways	UK	BA Cityflyer, Comair, Sun-Air	Air Berlin (Germany, 2012)	Gol Transportes (Brazil)
	Cathay Pacific	Hong Kong	Dragonair		Hainan Airlines (China)
	Finnair	Finland			
	Iberia	Spain	Iberia Regional, Air Nostrum		
	Japan Air	Japan	J-Air, JAL Express, Japan Transocean Air		
	LAN	Chile	LAN Argentina, LAN Ecuador, LAN Express, LAN Peru		
	Malev	Hungary			
	Mexicana	Mexico			
	Qantas	Australia	Jetconnect, Qantaslink, Jetstar		
	Royal Jordanian	Jordan			
	S7 Airlines	Russia	Globus Airlines		
SkyTeam (13 members)	Aeroflot	Russia	Donavia, Nordavia	Aerolineas (Argentina, 2012)	Aer Lingus (Ireland)
	Aeromexico	Mexico	Aermexico Connect, Aeromexico Travel	China Air (Taiwan, 2011)	Air Algerie (Algeria)
	Air Europa	Spain		China Eastern/Shanghai Airlines (China, 2011)	Gol Transportes (Brazil)
	Air France	France	Brit Air, CityJet, Regional	Garuda (Indonesia, 2012)	Jet Airways (India)
	Alitalia	Italy	Alitalia Express, Air One CityLiner	Middle East Airlines (Lebanon, 2012)	Malaysia Airlines (Malaysia)
	China Southern	China		Saudi Arabian Air (Saudi Arabia, 2012)	Uzbekistan Air (Uzbekistan)
	Czech Air	Czech Republic			Olympic Air (Greece)
	Delta Air	US	Delta Connection, Delta Shuttle		Virgin Atlantic (UK)
	Kenya Airways	Kenya			Virgin Blue (Australia)
	KLM	Netherlands	KLM Cityhopper		
	Korean Air	Korea			
	TAROM	Romania			
	Vietnam Air	Vietnam			

Alliance	Current Members	Home Country	Affiliates	Future Members	Possible Members
Star Alliance (27 members)	Lufthansa	Germany	Lufthansa Italia, Lufthansa Regional, Air Dolomiti, Augsburg Air, Contact Air, Eurowings, Lufthansa CityLine	Air India (India, 2011)	EVA Air (Taiwan)
	Adria Airlines	Slovenia		Ethiopian Air (Ethiopia, 2011)	Air Malta (Malta)
	Aegean Air	Greece		Avianca (Colombia, 2012)	
	Air Canada	Canada	Air Canada Jazz, Air Canada Jetz, Air Georgian	Copa Air (Panama, 2012)	
	Air China	China		TACA Air (El Salvador, 2012)	
	Air New Zealand	New Zealand	Air New Zealand Link, Air Nelson, Eagle Airways, Mount Cook Airlines		
	ANA	Japan	Air Japan, Air Nippon, ANA Wings, Air Nippon Network		
	Asiana	Korea			
	Austrian Air	Austria	Tyrolean Airways, Lauda Air		
	Blue 1	Finland			
	bmi	UK	bmi regional		
	Brussels Airlines	Belgium			
	Continental Air	US	Continental Connection, Cape Air, Colgan Air, Gulfstream, Continental Express, Chatauqua Air, ExpressJet		
	Croatia Air	Croatia			
	Egyptair	Egypt	Egyptair Express		
	LOT	Poland	EuroLOT		
	SAS	Scandanavia			
	SIA	Singapore			
	South African Air	South africa	Airlink, South African Express		
	Spanair	Spain			
	Swiss	Switzerland	Swis European Airlines		
	TAM	Brazil	Pantanal Linhas, TAM Air (Paraguay)		
	TAP	Portugal	Portugalia, PGA Express		
	Thai Air	Thailand	Nok Air, Thai Tiger		
	Turkish Air	Turkey	North Cyprus Air		
	United	US	United Express		
	US Airways	US	US Airways Express		

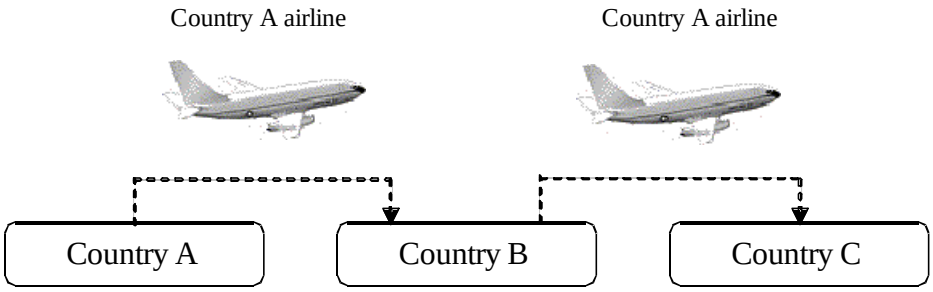
Source: oneworld, Star Alliance, SkyTeam

Appendix 7: Freedoms of the Skies

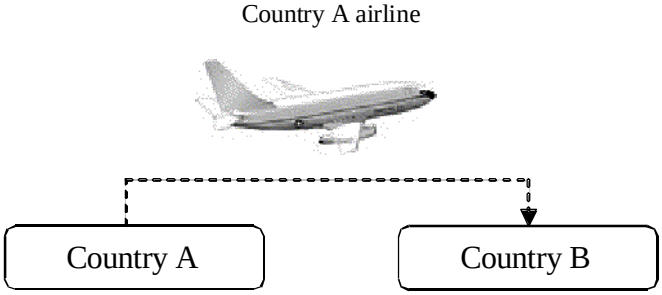
The following are definitions of the Aviation Freedoms of the Air:

First Freedom: The right to fly across the territory/airspace of another State (Country B) without landing.

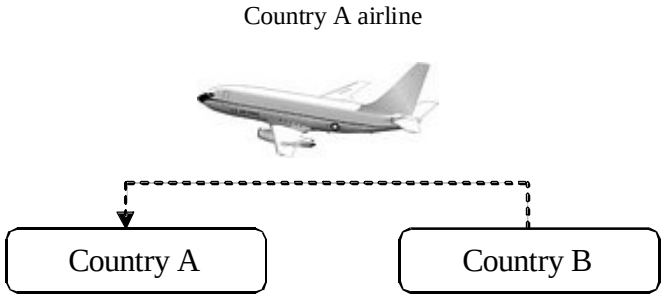
Second Freedom: The right to land in another State for non-traffic purposes (e.g. emergency repairs).



Third Freedom: The right to deliver traffic into another State.

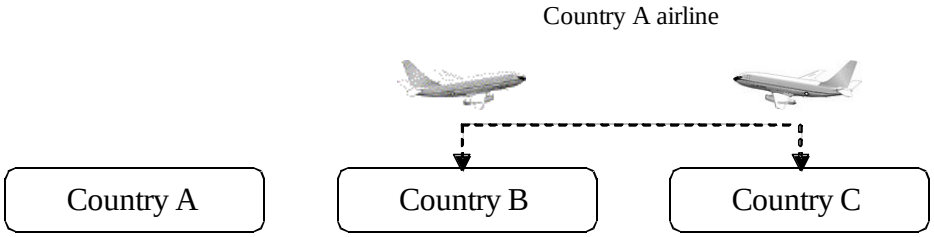


Fourth Freedom: The right to pick up traffic from another State.

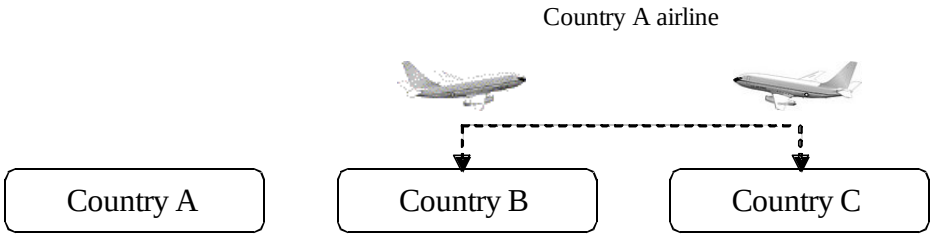


Fifth Freedom:

The right to carry traffic between two other states (e.g. a Country A flight originating in Country A can pick up passengers in Country B and take them on to Country C). Fifth Freedom rights can be in the form of either intermediate or beyond rights. For example: Country A – Country C ASA: Fifth freedom rights between Country A and Country C, enable Country A to use Country B as an intermediate point.

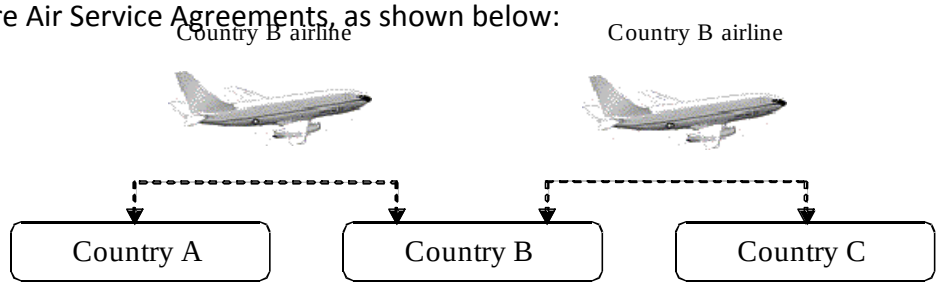


Country A – Country B ASA: Fifth freedom rights between Country A and Country B, enable Country A to use the Country C as a beyond point.



Sixth Freedom *[17]:

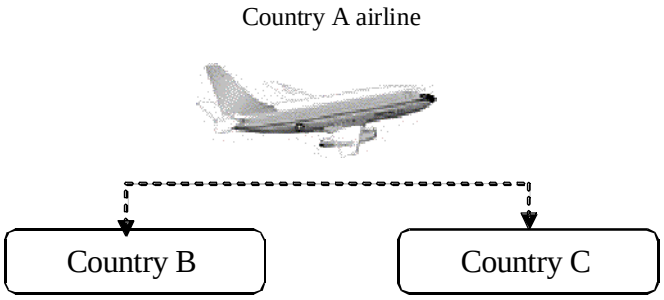
The right to carry traffic between two other States via the home State, allowing the flight to originate and terminate in foreign States. For example a Country B flight originating in Country A can pick up traffic from Country A and then take them to Country C via Country B. This freedom arises out of the combination of the terms of two or more Air Service Agreements, as shown below:



Sixth freedom rights arise through Country B having separate Air Service Agreements with both Country A and Country C, which they use to combine services.

Seventh Freedom *:

The right to operate a stand alone operation between two foreign States by an airline from Country A (e.g. Country A operates a service from Country B to Country C, without originating or terminating in Country A).

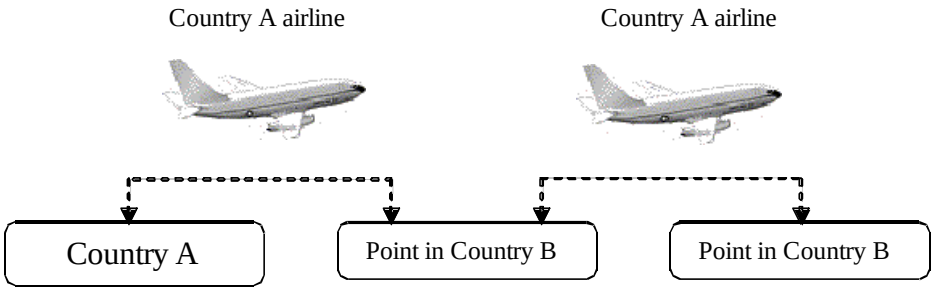


Eighth Freedom *:

The right to transport intra-state traffic within a foreign state on a service that either originates or terminates within Country A (e.g. A Country A flight that originates in

[17] * These freedoms are not recognised by the Chicago Convention. However such a right can be included within bilateral agreements between nations.

Country A, then lands in Country B and continues to another point in Country B). This freedom is also known as “consecutive cabotage”.



*Ninth Freedom**:

The right to transport intra-state traffic entirely within the territory of a foreign State (e.g. Country A provides a service originating in Country B and terminating at another point in Country B). This freedom is also known as "stand alone" cabotage.

The right or privilege of transporting cabotage traffic of the granting State on a service performed entirely within the territory of the granting State (also known as a Ninth Freedom Right or "stand alone" cabotage).