Asia-Pacific
Economic Cooperation

Liberalisation of Air Services in the APEC Region, 1995-2005

APEC Transportation Working Group

And

The Australian Department of Transport and Regional Services

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Executive Summary

The Centre for Asia Pacific Aviation (CAPA) has conducted this analysis for the APEC Secretariat to determine the progress achieved by the Asia Pacific Economic Co-operation (APEC) and its 21 member economies in the liberalisation of air services between 1995 and 2005.

Specifically, the report examines the extent to which the region as a whole and individual economies have moved towards targets set under the Eight Options for More Competitive Air Services with Fair and Equitable Opportunity, agreed by APEC leaders in 1994.

CAPA has based this analysis on information accumulated through a data model developed in conjunction with the Australian Department of Transport and Regional Services, which supervised this project for the APEC Secretariat. This comprises a review of: (1) particular performance indicators relating to GDP, seat capacity and flight frequencies (by APEC economy and hub airport), inbound/outbound travel activity, passenger and freight traffic, airport infrastructure and service scope on a region-wide and economy specific basis; and (2) regulatory developments, including the structure of Air Service Agreements (ASAs) held by the APEC economies, as of 2005.

Conclusions were drawn from the data and other information as to progress achieved by the APEC economies with the Eight Options programme at three time intervals, 1995, 2000 (i.e. the last year before the events of September 11) and 2005. The outcomes were impacted to an extent by the limited availability of information, particularly for historic ASAs, and the poor response to a recent survey of economies by the APEC Transportation Working Group (TPT-WG). This affects some economies more than others.

However, certain trends could be derived which provide firm indications of relative performance by APEC economies and areas where liberalisation progress has been achieved or is lacking.

On the whole, it appears that growth has taken place with highly uneven degrees of liberalisation across individual economies as regards the Eight Options. In general, the APEC economies are moving toward more liberal provisions within their ASAs with each other, but with different speeds and priorities.

Background: Global & Regional Developments

The report has been prepared against a background of largely modest and piecemeal liberalisation through selective relaxations of bilateral agreements and the development of “open skies” agreements which still incorporate restrictions in areas such as ownership and control and access by third party carriers.

In the Asia Pacific, air services liberalisation has been pursued with limited but encouraging success under the auspices of APEC and other multilateral fora. APEC’s TPT-WG developed the Eight Options programme, which identifies key areas to be addressed by APEC economies, including air carrier ownership and control, doing business matters, air freight, multiple airline designation, charter services, cooperative arrangements between airlines and market access. These items have been prioritised, based on ease of implementation.

Through APEC, five economies established the Multilateral Agreement on the Liberalisation of International Air Transportation (MALIAT) with the objective of advancing liberalisation within the region under a multinational umbrella. MALIAT has so far failed to attract widespread participation.

Another Asia-based liberalisation initiative is being pursued through the Association of Southeast Asian Nations (ASEAN). However, its progress has been hampered by the diverse levels of economic development of ASEAN member states, with airlines of varying strengths and competitiveness. Other sub-regional agreements have been established such as the Multilateral Agreement for the Liberalistion of Air Passenger Services (MALPAS) between Singapore, Thailand and Brunei.

No multilateral agreement exists in Northeast Asia between economically powerful China, Korea and Japan, though Korea has expressed interest in developing a trilateral model.

As the multilateral instruments do not enjoy broad acceptance, air services arrangements between Asia Pacific states are still governed by bilateral agreements. In general, agreements between APEC economies remain largely restrictive, with limitations typically applied to origin-destination pairs, frequency, capacity and designation and other aspects, despite increased 3rd/4th freedom access.

The Operating Environment 1995-2005

Airline traffic growth was essentially robust, consistent with economic conditions, in the 10 years to 2005, with total scheduled traffic (in tonne-kilometres performed) rising by an average of 5.2% per annum and cargo traffic by 5.5%. By any measure, however, this was a period of tumultuous change and disruption to aviation activity flowing from the intervention of external events such as the Asian Financial Crisis of 1997-98, the 9/11 attacks in the US, Afghanistan and the Gulf war in Iraq and SARS in 2003.

These events distorted the performance indicators used in this analysis with consequent impact on GDP trends, foreign exchange rates, growth in traffic, capacity and frequency, and airline profitability. The scale of impact was often uneven depending on geography and market resilience, but generally there were implications which either slowed air service development or changed its direction. In the US, for example, many of the larger carriers bore the brunt of the 9/11-related downturn and subsequent increased competition from low-cost operators which led to enforced restructuring and, in some cases, moves to Chapter 11 bankruptcy protection. This, together with ongoing security concerns, retarded their development and that of the major alliances in which they were involved.

The world's airlines also encountered severe cost pressures from increases in jet fuel prices to record levels. While this has recently relented, there may be a prospect of a return to high prices in future.

Review of Progress with the Eight Options

Performance Indicators

CAPA's review of performance indicators for the 1995 to 2005 period is qualified in that outcomes were clearly distorted by the various crises and other effects on market and industry trends and developments. As such, it is difficult to draw definitive conclusions in relation to liberalisation progress.

However, prima facie, there have been discernible improvements in certain areas which strongly imply greater liberalisation of markets within the APEC region. The analysis found that:

- GDP growth was relatively robust, exceeding the global average over the 10 years. It gathered pace from the first to the second half of the period, with the development of China, the Russian Federation and other economies;
- The number of bilateral agreements between APEC economies increased substantially, driven in part by greater international access to China;
- There had been strong growth in seats, frequencies and the spread of city pairs served between APEC airports and other airports/economies within the region, and the number of airlines operating into and out of these airports.
- Capacity trends between APEC economies were more moderate but still relatively buoyant, Seat growth on services between APEC economies was only half the rate between APEC and non-APEC economies;
- Levels of passenger and freight growth were particularly strong at the regional hub airports, including Hong Kong and Incheon in Korea. Much of that passenger growth was being driven out of regions less affected by 9/11. These Asian hubs also profited from their development as freight transfer centres;
- The high growth in inbound and outbound travel achieved by APEC economies in relation to the world as a whole was another positive sign for market liberalisation. This was consistent with the expansion in services, capacity and access points;
- APEC economies have invested in the provision of additional airport infrastructure to service international growth, as indicated by the increases in primary airports, particularly in Asia during 2000-2005. Despite that, considerably more expansion is likely to be required to accommodate the high levels of traffic growth anticipated for the years ahead.

Based on this, it can reasonably be concluded that greater liberalisation in accord with the Eight Options facilitated the development of service levels across the APEC region between 1995 and 2005. A major factor was China's increasing involvement and influence in the region's aviation sector. This was particularly noticeable during the second half of the 10-year period.

Regulatory Analysis

Direct comparisons between the structure of ASAs between 1995 and 2005 were not possible due to limitations on available historic data. CAPA assessed progress by analysing the 310 ASAs between APEC economies using TPT-WG surveys, ICAO and other information sources to build a picture of the extent of achievement by the economies of different components targeted by the Eight Options, as of 2005.

This analysis found that:

- Less than 20% of ASAs held by APEC economies incorporated open route schedules for passengers;
- More than half the agreements (54.8%) adopted open 3rd and 4th freedom capacity for passengers, but only 27% provided these rights specifically for freight;

- Most economies still enforce limitations on 5th freedom access both for passengers and freight; Open 5th freedom access was provided in only 27.4% of ASAs for passengers and 26% for freight;
- Little progress has been made in freeing up more expansive rights. Among the APEC economies, 7th freedom rights were available in only 2.4% of ASAs for passengers and 11.3% for freight. Similarly, cabotage was only available in 2 ASAs;
- Cooperative provisions are generally included in ASAs which enable home carriers to capitalise on partnership structures in a cost effective manner;
- Multiple designation of carriers is widely accepted across the APEC region;
- Traditional ownership-and-control provisions have been retained in most APEC-related ASAs;
- Some limited headway has been made in liberalising tariff provisions and filing requirements, though most economies have not reached APEC targets in this regard;
- Airfreight is subject to restrictions in the majority of agreements;
- APEC economies continue to restrict charter access in their ASAs; and
- Restrictions on airline business activities have become more relaxed generally.

From this analysis, CAPA concluded that much of the growth, as reflected by the performance indicators, was induced by relaxations in multiple designation, codesharing, charter services, and improved market access. Market access, in turn, was enhance by increased 3rd/4th freedom capacity on existing routes; new 3rd/4th freedom routes (eg China); and the growth of low-cost carriers taking advantage of these relaxations.

Beyond that, 5th freedom rights remain restricted, accounting for a smaller proportion of the growth in seat capacity, frequency and city pair connections; while 7th freedom relaxation is virtually non-existent (except in relation to all-cargo flights on specific routes).

A further examination of individual APEC economies indicated that liberalisation progress correlates generally to the size of GDP. There is even a closer relationship between an economy's GDP and the extent of seat capacity offered.

Impediments to Further Liberalisation

There are a number of emergent industry and government policy related issues which have the potential to constrain further liberalisation. These include tightening airport capacity; skills shortages experienced by the airlines; further pressures associated with fuel pricing; restructuring and consolidation; and advances in aircraft technology. The impacts vary, but each has the capacity to slow or redirect expansion.

From a policy perspective, there is a general reluctance to relax ownership and control provisions due to the prospective risk to bilateral agreements and nationalistic sentiments. The former is particularly intractable as it depends on reciprocity by other governments. A multinational solution appears to be the only effective remedy. However, there has been little political appetite for instruments such as MALIAT. As well, a number of economies continue to protect their designated carriers, and competition legislation is inhibiting the ability of airlines to consolidate and strengthen their competitive positions.

The restrictive nature of ASAs involving APEC economies with 5th freedom and 7th freedom access either limited or denied could leave their airlines at a significant competitive disadvantage as more economies within the APEC region accept the EU's horizontal mandate. While EU carriers conceivably could establish multiple bases within Europe to service destinations in APEC economies, APEC carriers (especially those in Asia) would remain single-hub network operators without an ability to operate in a commensurate manner. Continuing constraints on foreign ownership also would mean APEC airlines were deprived of access to offshore capital, in contrast to their European counterparts which can consolidate across EU borders.

Development of Future Strategy

The multiplicity of aviation regulatory policies within the diverse mix of economies comprising the APEC region inevitably gives rise to complications in addressing harmonisation and the pace of change. This analysis demonstrates that some economies have been more successful than others in approaching the Eight Options targets. CAPA has identified a number of priorities which may assist the further development of APEC's programme in future:

(1) Establishment of a two-tier approach for APEC economies – one with more ambitious targets for the more advanced, developed economies; the other for less developed economies at an earlier stage in development;

(2) An increased focus on ownership reform and the operational efficiencies and benefits it may bring to the airline industry, especially as it faces restructuring and other challenges. This could include the abolition of "effective control" provisions as an interim measure;

(3) Greater relaxation of restrictions on 5th freedom access, to realise improved competition and growth prospects;

(4) Accelerated facilitation of airfreight, including unlimited access for all-cargo operations (as in MALIAT). This would also capitalise on China's decision to open up its freight market; and

(5) Maintenance of incremental development of other areas of the Eight Options (especially further 3rd/4th access, establishment of double disapproval tariffs, more expansive codesharing rights).

Conclusions

This study found that the APEC region had achieved reasonable levels of market growth in largely adverse circumstances, and some selective progress towards the Eight Options Goals between 1995 and 2005. This progress was not evenly distributed and, generally, was more substantial in APEC economies with relatively mature markets and developed economies.

There were many reasons for the varied performances, not least the challenging industry and market conditions which characterised the period under review. During this period, priorities turned from liberalisation opportunities to more insular and protective regulatory settings in some cases. China's emergence has played a significant role in the process, both as a platform for more expansive international development by its own carriers and as a deregulating force providing greater access to its own high growth market for foreign operators. The liberalisation path was also assisted by the participation of a number of economies in plurilateral structures such as MALIAT, ASEAN and the Andean Pact.

1 Introduction

The Centre for Asia Pacific Aviation (CAPA) has undertaken this analysis of the progress achieved by member economies of the Asia Pacific Economic Co-operation (APEC) in relation to air service liberalisation for the APEC Secretariat, under the oversight of the Australian Department of Transport and Regional Services (DOTARS).

The report provides a quantitative and qualitative review of relevant developments in the 21 APEC economies from 1995 to 2005, in regard to the progressive removal of restrictions on passenger and freight transport under the agenda agreed by APEC leaders in 1994 in Bogor, Indonesia.

The Bogor statement set as its broad vision objectives:

- The development of free and open trade and investment in the Asia Pacific region by 2010 for industrialised economies, and by 2020 for developing economies;
- Progressive reduction of barriers to trade and investment to enable the free movement of goods and services within APEC's member economies;
- The establishment of co-operative solutions to meet the challenges of a rapidly changing regional and global economy; and
- Support for an expanding world economy and multilateral system.

These objectives are reflected in an aviation context in the reform program established by APEC, known as the Eight Options for More Competitive Air Services with Fair and Equitable Opportunity (referred to hereafter as the Eight Options).

The Eight Options identifies specific areas where APEC economies should address liberalisation, namely: (1) airline ownership and control; (2) tariffs; (3) ways of doing business; (4) air freight; (5) airline designation; (6) charter services; (7) airlines' cooperative arrangements; and (8) market access. The various options have been prioritised under three categories, i.e. high, medium and low priority, based on the ease of implementation for each of the options.

The report is structured as follows:

Section 2: Study Methodology & Sources, describes CAPA's approach to the study, its limitations and the sources used;

Section 3: Background to the Study, entails a review of global air service liberalisation developments and regional initiatives, including APEC;

Section 4: The Operating Environment, 1995-2005, discusses airline and market-related issues impacting on the study period;

Section 5: Review of Progress with the Eight Options 1995-2005, examines the APEC goals and analyses conducted by CAPA of key performance indicators and regulatory development by APEC economies for 1995,2000 and 2005, and deficiencies identified through the study.

- In this section, CAPA determines within the limitations of available data the progress made towards APEC's aviation liberalisation goals by charting and analysing key indicators of growth trends in passenger and freight flows, service coverage, seat capacity and flight frequencies during the 10-year period.

- These trends are qualified by economic, air industry and market issues, and country-specific factors. Clearly, some APEC members have been more successful than others in pursuing the Eight Options. The report also underscores the immense importance of the major markets, in particular the US and China, in influencing the pace and pattern of change
- A number of barriers to the facilitation of a liberalised aviation environment within APEC still need to be addressed. This situation is borne out in the report by an examination of the status of bilateral Air Service Agreement structures across the APEC region as of 2005, based on survey returns provided by a number of APEC member economies and other information.;

Section 6: Impediments to Further Liberalisation, explores the main industry and government policy issues which stand in the way of further liberalisation;

Section 7: Development of Future Strategy, recommends priority areas for APEC to address and how this may be achieved; and

Section 8: Conclusions, sums up the findings of the study.

The *Appendices*, provide: a list of sources used for the report; overview of the Freedoms of the Air; methodology used for a ranking of liberalisation progress for APEC economies; supporting data for the study analysis; and individual reports on each of the 21 economies.

1.1 Objectives of the Study

The Terms of Reference for this review required CAPA to:

- Determine progress on the liberalisation of air services in the APEC region between 1995 and 2005 on the basis of agreed indicators;
- Identify barriers and gaps where there is scope for further progress; and
- Indicate where efforts should be focused in future to order to achieve the Bogor goals and further areas targeted under the Eight Options, taking into consideration variations between member economies, their economic and trade performance, geographic positions and maturity of their aviation industries.

In order to determine the progress achieved with the Eight Options, CAPA was initially retained by DOTARS to develop a project methodology and gather data on primary and secondary indicators as the basis for an analysis of changes taking place at three time intervals, 1995, 2000 and 2005. The model adopted for the study is discussed later in the report.

CAPA constructed and agreed with DOTARS an approach to the project, and proceeded to identify sources for the information required and any gaps in data availability. Between August and October, data was collated by the team in accordance with the collection model.

A brief report and Powerpoint presentation outlining the project strategy were prepared by CAPA and presented by DOTARS to the Transportation Working Group at a meeting in Vancouver, Canada, on 5-8 September 2006.

2 Study Methodology & Sources

As noted, CAPA developed a data collection model in the initial phase of the review project. This was approved by DOTARS, and comprised defined regulatory and performance indicators in matrix form at three time intervals:

- 1995: the base year for the study;
- 2000: the last year before the September 11, 2001, terrorist attacks which disrupted historic aviation trends and, in many cases, the approach to liberalisation due to subsequent airline restructuring and an increased focus on security; and
- 2005: the end year for the study.

Spreadsheets were prepared covering each of the 21 APEC economies and the APEC region as a whole for the three years. Data was collected as it related to air passenger and freight services and bilateral agreements between APEC member economies (but not outside the region).

The model is essentially supply-based. It includes different strands of data by economy relating to: (1) national statistics on national GDP, airport infrastructure and inbound/outbound travel volumes; (2) the structure of bilateral agreements (APEC economy-APEC economy); and (3) performance data on a, economy-to-economy, hub airport-APEC economy and APEC hub airport-hub airport basis.

Figure 1: Data Model for APEC Liberalisation Project

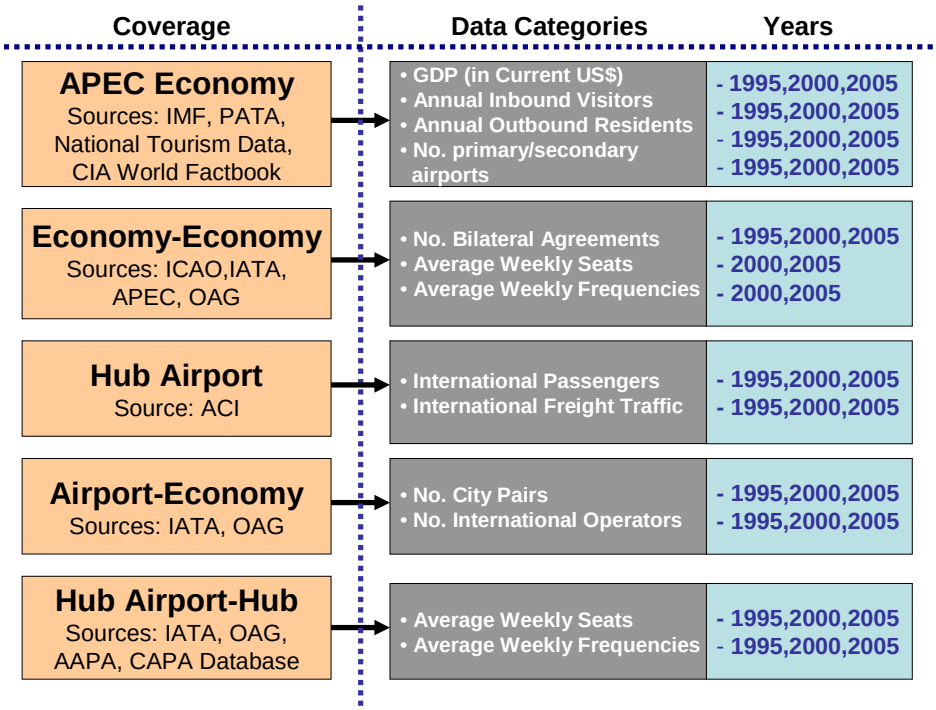

Figure 1 shows the data components for each category of performance data, the sources and the years for which this data was available. This information has been assembled in tables with percentage growth levels between the three years.

CAPA undertook the following process to build its performance data model:

- Data on average weekly seats and flight frequencies offered between APEC economies and between the hub airports of APEC economies was sourced from the analytical databases of the International Air Transport Association (IATA)/SRS) and Official Airline Guides (OAG). Data from outside the APEC region was excluded from the gathering process to provide as "pure" a figure as possible. However, for comparative purposes, seats/frequency data was also collected for services between APEC economies and non-APEC economies.

  (The IATA/SRS database provides capacity and frequency for non-stop flights on a sector-by-sector basis. This can lead to some distortions. For example, the capacity and frequency of a Qantas service between Australia and Canada via the US is counted in Australia's total for the Australia-US leg and in that of the US for the US-Canada sector even though it is an Australia-originating flight. The seat and frequency information provided by IATA and OAG represents an average taken over a full year. In this way, CAPA accounts for seasonal differences or changes in services over a particular year. It should be noted that historic economy-economy capacity and frequency data was only available through the databases for 2000 and 2005, and not for 1995.)

- CAPA selected one "hub airport" for each APEC economy on the basis that such airports serve as the major international gateways for that country. For example, Sydney was selected for Australia, Jakarta for Indonesia, Mexico City for Mexico, Beijing for China and Tokyo for Japan. Vancouver and Los Angeles Airports were designated as hubs for Canada and the US for the purposes of the analysis as they are the largest airports serving the Asia Pacific region. The identity of each hub airport is provided in *Appendix 4: Reports on APEC Economies*.

- The output of the IATA and OAG databases was then aggregated for each economy and its APEC bilateral partner to provide total seats and frequencies both by APEC economy and that country's hub airport.

- Average weekly seats and frequencies between APEC economies and other APEC economies were compared with seats/frequencies data collected for services between APEC economies and all countries for 2000 and 2005. This enabled CAPA to determine differentials in growth rates and changes in the ratio between APEC-APEC seats/frequencies and APEC-All countries seats/frequencies.

- Numbers of city pairs and international operators were also counted on a hub airport to APEC economy basis to indicate the growth in service coverage and supply for the three time intervals.

- For each APEC economy, numbers of primary and secondary airports were collected for the three years using historic CIA World Factbook data. The trends seen with this data indicate responses to market growth in terms of infrastructure. Primary airports were regarded as those with paved runways of 2,400 metres or more (i.e. capable of supporting medium-large jet operations), while secondary airports were those with paved runways of 1,500 metres to 2,400 metres (capable of supporting smaller jets and turboprops).

- To arrive at a region-wide total for APEC, the individual economy and hub airport data, city pairs and operators were aggregated by category and percentage growth calculated for between 1995 and 2000 and 2000-2005.

The various data components in the model and their relative growth rates between the three years provided reference indicators for CAPA to ascertain the pace of development in international air services on an economy-to-economy and APEC-wide basis.

- At a macro level, data on GDP (at current levels expressed in US dollars) was sourced from the International Monetary Fund for each APEC economy; and annual data on inbound visitors/outbound residents was collated by APEC economy as an indication of demand (this was largely sourced from the Pacific Asia Travel Association (PATA).

  GDP growth is the most significant economic indicator influencing air travel growth. CAPA also examined particular industry and market factors affecting development (for example, most Asian economies were severely impacted by the financial crises of 1997-98, while the emergence of SARS in 2003 also undermined traffic flows, especially in China, *Hong Kong, China*, Singapore and Canada).

- Other demand indicators were provided by changes in international freight and passenger volumes which were obtained from Airports Council International and assembled for each APEC airport for the three years.

2.1 The Approach to Changes in Bilateral ASA Structures

CAPA also assessed the development of bilateral Air Service Agreements (ASAs) between APEC economies, and the nature of those agreements, by accessing the annual APEC surveys, a CD-ROM of the International Civil Aviation Organisation's (ICAO) Register of Air Services Agreements 2004 and national government websites.

Ideally this would have been achieved by comparing the changes in coverage from 1995 to 2005 of each component of the Eight Options. However, the survey material either was largely incomplete for many APEC economies, or the quality of returns was inconsistent and variable. This made quantitative comparisons between the three years meaningless, and required modification to the proposed model for this project.

The 2005-6 APEC surveys produced returns from 14 of the 21 economies, with considerably more detail than the previous survey round in 2000 due to the restructuring of the process to focus on matrices consistent with the Eight Options. The 2000 surveys provided some qualitative material (again the returns were not complete in terms of economy coverage), but inadequate quantitative data for comparative purposes.

There were still deficiencies in the data supplied by a number of economies for 2005. For example, the Philippines contained no quantitative information; *Hong Kong, China* stated policy strategy did not provide numbers in certain areas; Peru only included the US agreement; and Russia did not quantify application to ASAs by economy in 6 of the 8 categories.

CAPA investigated other sources for this information, much of which is contained in extra bilateral agenda (this is not normally publicly available). ICAO was approached, for example, about provision of 1995 ASAs (similar to the 2004 CD-ROM supplied by DOTARS), but was unable to comply.

The ICAO CD-ROM for 2004 also contained some discrepancies compared with the returns of reporting economies to the APEC survey which needed to be reconciled through the data gathering process. To the extent possible, CAPA has relied on the survey material for data on the ASAs.

Where this was not available, the ICAO CD-ROM or other supplementary sources, including government websites and the Centre's own archival library have been accessed with varying success.

CAPA has sought to provide as accurate a picture as possible within the limitations of available information. However, the use of multiple sources for this information may have given rise to some discrepancies.

Information on ASA-related developments is provided in the form of a "status report" for each APEC member economy. These reports are provided in tabular form in this report and offer a snapshot of that economy's progress, as of 2005, in implementing specific areas of the Eight Options.

From this, CAPA has been able to derive specific areas where further development is required to further progress the Eight Options. The qualitative information flowing from the surveys and other sources available to CAPA has been incorporated in a discussion of progress for each economy and APEC as a whole.

2.2 Data Deficiencies

As articulated in the proposal for this project, the ability of CAPA to incorporate the various elements prescribed for its data model was relative to the availability of information, particularly through the APEC surveys but also in other areas. A scarcity of good information in some component areas has, by necessity, required alterations to the model adopted for this report.

We have compensated for the non-availability of airport-related capacity and frequency data for 1995 through our database sources (as noted, neither OAG nor IATA/SRS retain data through their systems beyond a 5-year history) by manually accessing airline schedules for the designated hub airports for that year. This was time-consuming but has provided greater ballast to the study by generating comparative growth over the full 10 years.

By incorporating a range of other performance indicators, as discussed in 2.1, the picture for the APEC region becomes clearer.

Through the data collection process, CAPA also encountered difficulties in obtaining credible base data in a number of other areas due either to its non-availability or the availability of inconsistent data from varying sources. To the extent possible, we have reconciled data outputs to accommodate any of these inconsistencies.

Aside from issues associated with the bilateral agreements, CAPA was unable to access certain data for inbound and outbound travel in a number of economies. Indonesia, Viet Nam, Brunei and Peru, for example, do not provide regular statistics (especially for outbound resident travel). Some of this missing data was obtained by scanning national statistical databases and archival sources. Similarly, data on numbers of freight operators and available access points was not available for the three years. In order to maintain the integrity of the model, these items and other incomplete categories have either been removed or indicated in tables as "not available".

3 Background to the Study

3.1 Overview of Global Air Service Liberalisation Developments

In the last ten years, various initiatives have been taken in the Asia-Pacific region to further liberalise the air transport industry. In some instances, multilateral agreements have been signed among like-minded economies. However, as detailed in this section, these multilateral agreements have generally not met with enthusiastic response from economies or their carriers. What has been more common is for economies to embark on *bilateral* negotiations to free up governmental rules over matters such as route access and frequency, airline designation and ownership and control.[1]

3.1.1 From 1944 to the Present: Bilateralism and "Open Skies"

In the aftermath of World War II, the international community chose a bilateral air services framework in preference to a multilateral model. Thus, air rights were to be exchanged on a strictly bilateral and reciprocal basis. The landmark bilateral agreement (the so-called Bermuda I agreement of 1946) between the US and the UK soon became the standard model for thousands of subsequent bilateral air services agreements. In particular, Bermuda I's standard clause on "ownership and control" became a common feature of bilateral agreements, limiting the airlines designated under an agreement to those that are substantially owned and effectively controlled by the two state parties to the agreement or their nationals.

With few exceptions, governments have typically treated this clause as allowing them to reject the designation of an airline by the other party if the airline is not at least 51% owned by that other party or its nationals. This has the effect of reserving the bulk of benefits to the nationals of the two contracting states. At the same time, some economies may maintain, under domestic law, even more stringent ownership and control criteria. Other Bermuda-style features in a typical bilateral agreement include restrictions on capacity, frequency, designation, tariffs, fifth-freedom rights and cabotage rights.

From such established norms, the aviation industry in many states has been liberalised, if at all, largely through modest and piecemeal relaxations to the bilateral model. The most common mode of such relaxation has been the "open skies" agreement. The modern "open skies" template began with the US-Netherlands agreement in 1992, and is today the hallmark of US aviation policy with other countries.[2] In general, the "open skies" model has not gone far enough to abolish critical barriers like minimum ownership and control requirements, prohibitions against cabotage traffic and restrictions on access by third party carriers. Such restrictions persist today in the majority of bilateral air service agreements (ASAs), even those which profess to be "open skies" in nature.

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[1] For details, see Alan Khee-Jin Tan, *Liberalising Aviation in the Asia-Pacific Region: The Impact of the EU Horizontal Mandate*, XXXI Air & Space Law 432 (2006).

[2] As of October 2006, there are 78 countries which have what the US deems "open skies" agreements with it, see US Department of State, Open Skies Partners, http://www.state.gov/e/eb/rls/othr/2006/22281.htm (last accessed 15 November 2006). In Asia and the Pacific, such agreements are in existence with Singapore, Chile, Peru, Canada, Taiwan, New Zealand, Brunei, Malaysia, South Korea, Sri Lanka, Samoa, Tonga, Cook Islands, Indonesia, India, Maldives and Thailand. All are APEC economies except Sri Lanka, Samoa, Tonga, Cook Islands, Maldives and India. Thus, the US has open skies agreements with 11 APEC economies. While falling short of what may be termed open-skies, liberalized accords have been signed with Viet Nam and Hong Kong. A cargo-only open skies agreement has been reached with Australia.

Outside the world of aviation, the liberalisation of trade in goods and services has been pursued at multilateral fora such as the World Trade Organisation (WTO). At the WTO, the liberalisation of air traffic rights is specifically excluded from the WTO's principal multilateral regime for trade in services, the General Agreement on Trade in Services (GATS). Indeed, GATS is applicable only to three limited sectors in the provision of air services – aircraft repair and maintenance services, the sale and marketing of transport services and computer reservation systems (CRS) services.

The liberalisation of air services, as it relates to traffic rights, has thus had to proceed on a far less ambitious scale along regional and bilateral lines. Some of these initiatives at the Asia-Pacific level will be analysed in the following section. While the US was pursuing an "open skies" model with its trading partners, the International Civil Aviation Organisation (ICAO) had, in the meantime, proposed a new test to replace the traditional ownership and control requirement. Under this proposal, states wishing to accept broadened criteria for market access could authorise access for a designated foreign air carrier which has its principal place of business and permanent residence in the territory of the designating State; and has and maintains a strong link to that designating State.

Thus, as long as an airline has a principal place of business in State A and has strong links with it (e.g. it is incorporated in State A and is subject to its regulatory, safety and security oversight regimes), it should have no problems being designated by State A to fly to and from State B (*and* being accepted by State B for this purpose), *even if* it should be majority-owned and effectively controlled by nationals of State C. In essence, this far-reaching provision would have completely abolished the traditional ownership requirement, and even done away with the effective control (i.e. *commercial* control) rule in favour of an effective *regulatory* control rule.

The principal place of business/strong links clause appeared in the form of a model clause which was approved at the Fifth ICAO Worldwide Air Transport Conference in 2003. However, the model clause has not been extensively accepted and incorporated into bilateral ASAs. Hence, the traditional ownership and control requirements are still dominant, including in the Asia-Pacific region.

3.1.2 Recent Developments: The US-EU Aviation Relationship

The liberalisation of aviation markets in the Asia-Pacific (or anywhere else in the world, for that matter), cannot be adequately understood without appreciating the dynamics of the relationship between the US and the EU, the world's top two aviation markets. In the 1990s, the US had signed a series of bilateral "open skies" agreements with individual EU countries, beginning with the Netherlands in 1992. Liberal 3rd/4th and 5th freedom access for US airlines was guaranteed, in exchange for European airlines' greater access into more US cities. However, the agreements stopped short of liberalising foreign ownership of US and European airlines and providing for domestic cabotage.

The proliferation of "open skies" agreements between the US and individual European states greatly unsettled the European Commission (EC), which thought that Europe was placed at a disadvantage by not negotiating as a bloc. In the late 1990s, the EC began challenging the individual member states' bilateral agreements before the European Court of Justice (ECJ). In its November 2002 decision, the ECJ agreed that certain provisions in the bilateral agreements limited the community carriers' freedom of establishment that was guaranteed under the EC Treaty.

This meant that under the US-German agreement, for example, only airlines which were substantially owned and effectively controlled by German (or US) interests could ply routes between the two countries. The other EU airlines could not enjoy access, nor could they merge with or own more than 49% of German airlines under the existing nationality clause.

Eventually, the EU member states approved a mandate for the Commission to resume negotiations with the US on a transatlantic air services agreement for an open aviation area. In November 2005, the US and EU agreed on the text of a first-phase enhanced open skies agreement. The EU stated that successful completion of the agreement depended on an acceptable final rule in the US Department of Transportation (DOT) proceeding that would have allowed greater opportunities for foreign nationals to invest in US airlines. With DOT's withdrawal of its proposed rule change under pressure from some members of the US Congress, the US-EU agreement is in jeopardy, but the US and EU are continuing to meet to assess the situation.

In the meantime, following the ECJ's decision in 2002, the EU Council of Ministers had also given the EC a mandate to negotiate new agreements with all other third countries with which individual EU member states have existing bilateral agreements. This "horizontal mandate" is a limited one, seeking only to replace the nationality clause with a community carrier designation clause guaranteeing the freedom of establishment of EU carriers. Such a clause would allow any Community airline to be designated under member state/third country bilateral agreements, and will enable any EU airline to fly to the third countries from any point in the EU (in effect, seventh freedom rights). It also ensures that existing traffic rights are protected even if individual EU airlines merge (as exemplified by the Air France-KLM and Lufthansa-Swiss arrangements).

The next section will discuss the impact of the above developments on APEC economies and their respective carriers.

3.2 Regional Initiatives in the Asia Pacific

3.2.1 APEC and MALIAT

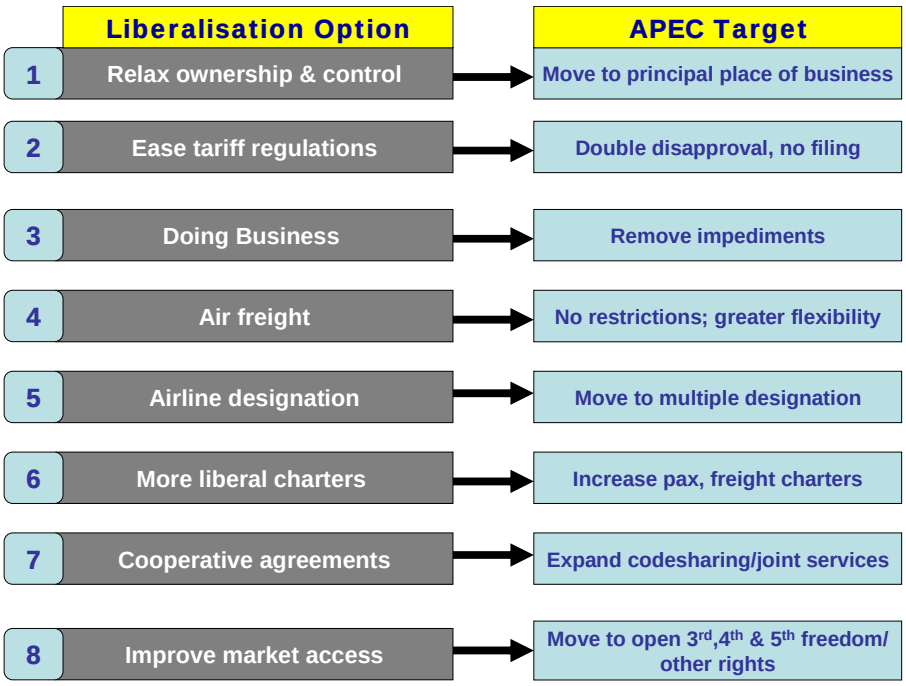
At the Asia-Pacific level, air services liberalisation has been pursued, with limited but encouraging success, under the auspices of APEC and other multilateral fora. APEC's Transportation Working Group (TPT-WG) is the lead forum that deals with the liberalisation of transportation services. In 1995, the APEC Transportation Ministers' Meeting had created a special Air Services Group as part of the TPT-WG to deal specifically with air services.

The TPT-WG's primary goal is to facilitate transport liberalisation within the wider framework of the so-called Bogor Goals of trade liberalisation and facilitation as well as economic and technical assistance in all modes of transportation. In the aviation field, discussions have centred around policy goals laid out in a document known as the Roadmap for Trade Liberalisation and Facilitation as well as Economic and Technical Assistance in all Modes of Transportation towards meeting the Bogor Goals. In particular, the TPT-WG Air Services Group has developed the Eight Options programme.

The Eight Options identify the key areas that APEC member economies might consider liberalising in the aviation market, namely air carrier ownership and control, tariffs, doing business matters, air freight, multiple airline designation, charter services, airlines' cooperative arrangements and market access.

The Eight Options and their respective goals for APEC economies are illustrated below.

The Eight Options and Goals



The Eight Options for More Competitive Air Services with Fair and Equitable Opportunity

The Eight Options, as endorsed by APEC Transport Ministers in 1997 and APEC leaders in 1999, with the priority allocated to each, are as follows:

Option 1: Ownership & Control (medium priority)

"*...that APEC economies give consideration to relaxing the ownership and control requirements when considering designation made by partners under bilateral air services arrangements on a case-by-case basis.*"

Option 2: Tariffs (medium priority)

"*...that APEC economies support the removal or progressive easing off tariff regulations through the bilateral air services arrangements where this promotes competitive pricing to the benefit of consumers. A double disapproval regime could be considered.*"

Option 3: Doing Business (high priority)

"*...that APEC economies work towards removing impediments to "doing business" matters whether under bilateral agreements or in domestic laws and by-laws.*"

Option 4: Air Freight (medium priority)

"*...that APEC economies progressively remove restrictions in the operations of air freight services while ensuring that fair and equitable opportunity for the economies involved.*"

Option 5: Designation (high priority)

"...that APEC economies include, as appropriate, multiple airline designation in their bilateral air services agreements."

Option 6: Charters (medium priority)

"...that APEC economies allow and facilitate the operation of both passenger and freight ad hoc charter services which supplement or complement scheduled services, having regard to the principle of reciprocity, as appropriate."

Option 7: Cooperative Arrangements (high priority)

"...that APEC economies facilitate cooperative arrangements such as code-sharing including third-country code-share and code-share over domestic sectors, joint operations and block space arrangements, where it can be shown to be of benefit to consumers and airline (s), and where there are not anti-competitive effects."

Option 8: Market Access (medium priority)

"...*that APEC economies take and approach to progressively achieve more liberalised market access under their bilateral air services arrangements."*

These options have been prioritised under three categories - high, medium and low priority - based on the ease of implementation for each of the options. The most contentious aspects are those assigned medium priority, reflecting the longer period of time required for member economies to reach agreement on their implementation. Most member economies had indicated, for example, that they still required their national airlines to be substantially owned and effectively controlled by their own nationals, and that the substantial ownership and effective control clause was prevalent in most of their bilateral ASAs with one another as well as with other economies.[3]

In this regard, the TPT-WG Air Services Group has long acknowledged ICAO's recommendation to replace the traditional ownership and control requirement with the new principal place of business/strong links criterion. In practice, however, APEC has had to recognise that the bilateral model with its traditional ownership and control requirement would remain dominant in the near future. This was because many member economies could not accept the relaxation of ownership and control, much less the replacement of the bilateral system with a multilateral equivalent. Consequently, APEC has only been able to take modest steps in facilitating like-minded states which are prepared to liberalise early to undertake arrangements among themselves to do so, either bilaterally or multilaterally, in any or all of the eight option areas. Such agreements would then be open to other economies to come on board at their own pace.

It was in this vein that an agreement for the liberalisation of air services was inked in May 2001 under APEC auspices, bringing together five APEC economies – the US, Brunei, Chile, New Zealand and Singapore.

[3] This was the result of a survey conducted in January 1998 by the TPTPT-WG (see http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/Steering-Committees/Competitive/air-services-group/apec-air-services-group.htm (last accessed 15 November 2006). The situation is largely unaltered today.

The agreement - the Multilateral Agreement on the Liberalization of International Air Transportation (MALIAT)[4] - builds upon the existing liberal open skies bilaterals that the signatories already had with each other.

Thus, its key features include an open route schedule, open traffic rights including seventh-freedom services (for cargo only), fifth-freedom passenger services, open capacity and frequency, operational flexibility (including change of gauge, aircraft type, co-terminalisation and intermodal rights), unlimited multiple designation of airlines, unlimited code-sharing (including third-country code sharing), open pricing and a minimal tariff filing regime, as well as standard provisions on safety and security.

What is ground-breaking is MALIAT's provision eliminating the requirement for airlines to be substantially owned by either the state or nationals of the designating country. Thus, MALIAT opens up airlines to greater foreign ownership beyond the customary maximum of 49% in place in most countries. However, the airline must still remain effectively controlled by interests in the designating country and be incorporated and have its principal place of business in the territory of the designating country. This latter requirement preserves some form of tangible connection between the airline and its designating country.

Here, MALIAT did not go as far as the ICAO Model clause, which understood effective control to be only regulatory in nature (e.g. over safety and security), and not economic. An optional Protocol was also appended to MALIAT which provided for parties to exchange seventh freedom passenger and cabotage rights. This allows for willing state parties to extend liberalization to new, previously-closed areas. In 2004, MALIAT was amended to allow for accession on a cargo-only basis.

Despite (or more accurately, *because of*) its far-reaching provisions, the Agreement (and even less so, the Protocol) has failed to attract widespread participation. To date, MALIAT has received the ratifications of only four more countries - Samoa, Tonga, Cook Islands and Peru, on top of the original five.[5] In the meantime, the Protocol to MALIAT only has four parties - Brunei, New Zealand, Chile and Singapore.

Most economies have been unwilling to open up their air services markets on anything other than a strict bilateral basis with their trading partners. Often, their positions are dictated by the interests of their dominant national airline(s), which see bilaterals as a means of restricting competition to only themselves and the airlines of the bilateral partner. A multilateral arrangement would mean opening up routes to a number of third country airlines to the possible detriment of the national airlines. For instance, MALIAT liberalises 5th-freedom routes, which would allow an airline from any state party to service points between two other state parties.[6] There would also be objections to MALIAT's relaxation of the ownership and control clause, since this permits better-capitalised airlines from other state parties to fly to and from the home country.

[4] Even though MALIAT was created as an APEC initiative, it is open to non-APEC economies as well (Samoa, Tonga and Cook Islands being cases in point).

[5] Even then, Peru withdrew in 2003, citing unfair advantages for neighbouring Chile's airlines.

[6] Thus, flights between States A and B (traditionally reserved to their own airlines) would have to be open unconditionally to airlines from State C conducting C-A-B (and return) fifth-freedom flights. Such objections should be viewed in the context of the larger trade and tourism benefits that liberalized flights (i.e. mounted by the airlines of State C) may bring to the home market of States A and B.

These features of MALIAT are at once the most progressive liberalising features of the agreement and the biggest source of resistance to its widespread acceptance. At the same time, many economies in the APEC region are only beginning to contemplate open skies bilateral agreements with the US, and do not possibly want to pre-empt the outcomes of those negotiations by joining MALIAT.

There are also states which may be willing to grant the US the concessions it requires, but not the same to other MALIAT parties. For all these reasons, MALIAT's impact remains limited.

3.2.2 ASEAN Initiatives

On their part, the 10 member states of the Association of Southeast Asian Nations (ASEAN) have had several years' worth of negotiations to liberalise the air transport sector in their region.

Air travel is one of the designated 11 priority sectors for economic integration within ASEAN. The idea for an ASEAN-wide "open skies" regime was first mooted by the ASEAN leaders' fifth summit in Bangkok in 1995. An Open Sky Policy was included as an area of cooperation in the Plan of Action for Transport and Communications (1994-1996). At the same time, a Framework Agreement on Services (FAS) had been adopted to liberalise trade in services beyond the commitments undertaken in GATS.

In March 1996, the ASEAN Transport Ministers' (ATM) first meeting identified the need to cooperate on the "Development of a Competitive Air Services Policy which may be a gradual step towards an Open Sky Policy in ASEAN". Since then, the concept of progressive liberalisation of air transport has been reaffirmed by successive ATMs and numerous policy documents, including the Hanoi Plan of Action's Transport Action Agenda, the Successor Plan of Action in Transport 1999-2004, the ASEAN Memorandum of Understanding on Air Freight Services and the Roadmap for ASEAN Competitive Air Services Policy. In November 2004, building on all these efforts, the 10th ATM adopted an Action Plan for ASEAN Air Transport Integration and Liberalisation 2005-2015, together with its companion Roadmap for Integration of Air Travel Sector. Both instruments lay down a 2015 date for achieving an ASEAN Multilateral Agreement on Air Services, effectively an "open skies" regime for the entire ASEAN region. Within this broad objective, specific goals and deadlines have been identified, including:

(1) For air freight (cargo) services, significant liberalisation by 2006, and full liberalisation by 2008;

(2) For scheduled passenger services,

- unlimited 3rd and 4th freedom flights for all designated points within ASEAN sub-regions by 2005, and for at least two designated points in each country between the ASEAN sub-regions by 2006;
- unlimited 5th freedom traffic between designated points within the ASEAN sub-regions by 2006 and at least two designated points in each country between the ASEAN sub-regions by 2008;
- unlimited 3rd and 4th freedom flights between the capital cities by 2008;[7]

[7] There has been a proposal (made at the 2005 meeting in Laos) to extend this relaxation to any pair of two cities, and not just capital cities, and to bring the date forward to 2007.

- unlimited 5th freedom flights for the capital cities by 2010.

These are ambitious commitments. Liberalisation initiatives in ASEAN continue to be 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.

Among the 10 member states, Singapore, Thailand and Brunei have been the key drivers of the so-called ASEAN 2+X formula, which allows for pairs or smaller groups of like-minded economies to liberalise earlier between themselves and for others to follow suit when they are ready to do so.

Pursuant to this concept, the Governments of Singapore, Brunei and Thailand concluded a multilateral agreement in December 2004 that liberalised passenger air services between these economies.[8] This agreement – known as the Multilateral Agreement for the Liberalization of Air Passenger Services (hereinafter MALPAS) - was adopted just ten months after a similar agreement among the same three economies was inked for the liberalization of cargo services.[9] In addition to MALPAS, several other limited plurilateral agreements exist. On 4 December 2003, Cambodia, Laos, Myanmar and Viet Nam (CLMV) signed a Multilateral Agreement on Air Services, pursuant to the four economies' earlier Sub-regional Air Transport Cooperation Agreement adopted in Ho Chi Minh City in January 1998. The CLMV Agreement provides for unlimited capacity and traffic rights among the four economies, including 5th-freedom flights. Limited "open-skies" agreements are also in place to spur growth within sub-regions linking neighbouring economies, including the Indonesia, Malaysia and Thailand Growth Triangle (IMT-GT) and the Brunei, Indonesia, Malaysia and Philippines East ASEAN Growth Area (BIMP-EAGA).

The achievements of MALPAS are modest - it reinstates the traditional and more restrictive "substantial ownership and effective control" rule. Thus, a state party can designate as many airlines as it wishes to fly to the other state parties as long as substantial ownership and effective control remain vested in the designating state, its nationals or both. As far as ownership and control are concerned, the MALPAS provisions do not go beyond what is already commonly found in bilateral agreements. In practical terms, however, the willingness of Singapore and Thailand to accept foreign Joint Venture Low Cost Carrier (LCC) structures, such as Thai AirAsia and Jetstar Asia (both of which are minority owned and controlled by non-national carriers), represents a *de facto* relaxation of the ownership and control regime. The only difference is that this approach is not enshrined by specific policy and remains arbitrary and open to *ad hoc* restrictions (for example, the US refusal to accept a similar designation for another JV, Virgin Nigeria).

In relation to traffic rights, MALPAS also falls short of MALIAT's ambitious reach. Only 3rd and 4th freedom rights are offered freely, with no restrictions on capacity, frequency, route and aircraft type. 5th freedom rights are not accorded, much less 7th freedom and cabotage rights. Notably, Thailand chose to negotiate a new limited agreement with Singapore and Brunei, instead of acceding to the broader MALIAT. Under the latter,

[8] Multilateral Agreement for the Liberalization of Air Passenger Services, adopted in Bangkok, 27 December 2004.

[9] Multilateral Agreement on the Full Liberalisation of All Cargo Air Services, adopted 25 February 2004. Brunei, Singapore and Thailand were the original signatories, with Cambodia joining later.

Thailand would have had to offer airlines from Singapore and Brunei 5th freedom traffic between Bangkok and points in the US.

It appears unlikely that MALIAT will sign up new adherents soon, particularly among the bigger economies. The modest MALPAS model may thus be the only realistic multilateral mode of liberalising in the short-term. To the extent that ASEAN is committed to liberalising 3rd/4th freedom routes between all ASEAN capital cities, there is reasonable optimism that more states will accede to MALPAS in the near future. In effect, MALPAS is specifically designed to jump start the ASEAN liberalisation timetable.

At the same time, the 2008 deadline for the capital-city relaxation is fast approaching. Liberalisation moves between Singapore and Malaysia, however, continue to be influenced by the duopoly of Singapore Airlines and Malaysia Airlines on the lucrative Singapore-Kuala Lumpur route.[10] In recent months, though, there have been signals that Malaysia and Singapore may finally be considering the liberalisation of this route, particularly for established low-cost carriers from both economies. The Malaysian Ministry of Transport is reportedly looking into the matter and is due to present its report soon. On its part, the Philippines has recently allowed Singapore-based Tiger Airways a more permanent 5th-freedom right to fly from Singapore to Macao through Manila (Clark Air Base).[11] Meanwhile, Indonesia is still prohibiting low-cost carriers from launching new flights to its major cities, including Jakarta and Bali.

3.2.3 Northeast Asia

The dynamics in North-east Asia revolves around a smaller number of states, but each with significant economic and aero-political might – China, Japan and South Korea. Taken together, they account for a significant proportion of aviation traffic in the Asia-Pacific. No multilateral agreement exists as yet to govern air services among the three economies. Aviation relations are essentially bilateral in nature with traditional restrictions on ownership and control, capacity, 5th and 7th freedom rights and cabotage by foreign carriers.

Of the three, Korea is the keenest to embark on air services liberalisation along a trilateral model, given its desire to develop Incheon Airport as a regional logistics hub, and the fact that it has the smallest domestic market among the three economies. In recent months, Korea has been actively leading efforts to bring about a trilateral co-operative mechanism for the region, with the eventual aim being a unified air transport market among the three economies.

An international symposium has recently been held on the topic,[12] though it appears that significant progress is still some years away. Japan is maintaining its position that favours liberalisation on a strictly bilateral and reciprocal basis. This is also the position with regard to Japan's bilateral ASA with the US, which it has traditionally viewed to be one-sided, particularly as regards slots controlled by US airlines at Narita Airport.

[10] The existing Singapore-Malaysia bilateral agreement limits the flights between Singapore and Kuala Lumpur to the two national airlines. Even though a number of successful low-cost carriers exist in Singapore and Malaysia, none are permitted to fly between both economies. A handful of foreign carriers such as Japan Airlines, Garuda and SriLankan exercise limited fifth-freedom rights between the two cities.
[11] The permission had hitherto been granted over short periods of time, renewable each time it lapsed.
[12] 1st International Symposium on Liberalizing Air Transport in Northeast Asia, 9 June 2006, Incheon, Republic of Korea.

Meanwhile, China is showing signs of liberalising, and given the enormous size of its domestic market and staggering growth rates, will no doubt profoundly shape the future of aero-political relations in the region and beyond.

However, it remains cautious about multilateral liberalisation as its airlines and airports are still in the process of being reorganized and restructured.

For now, the liberalisation that has taken place in Northeast Asia is entirely bilateral in nature. Some of its relevant features are analysed below under the bilateral heading.

3.2.4 The South Pacific – PIASA

In the South Pacific region, a multilateral agreement known as the Pacific Islands Air Services Agreement (PIASA) is proposed to accelerate the pace of aviation liberalisation in the region. The agreement aims to relax the restrictions that are in place in a region characterised by low population density, huge distances and relatively high air ticket prices. PIASA is not yet in force – 8 states have signed it, 2 have ratified, but 6 have not signed it.

The biggest opponent of PIASA is Fiji, by the far the biggest economy in the grouping. Fiji prefers to continue with bilateral relationships, and is primarily concerned that PIASA's provision for Australia and New Zealand to become eventual parties through accession will diminish its status and international air carrier (Air Pacific). Like MALIAT, therefore, the impact of PIASA is limited, and most airlines in the region are of the view that it will not provide any additional benefits that cannot be provided by bilateral arrangements. There is also the widespread view that unless Fiji (and French Polynesia) become parties, PIASA will have no impact at all.

3.2.5 Bilateral Relaxations

Since the multilateral instruments do not enjoy widespread acceptance, air services arrangements between Asia-Pacific states are still governed largely by bilateral agreements. Several Asia-Pacific states already have "open skies" agreements with the US,[13] with more likely to follow suit. At the same time, some economies have begun negotiating agreements with the European Commission pursuant to the latter's "horizontal mandate" to review aviation agreements with third countries. To date, the EU has initialled new agreements with the following APEC economies: Chile, Singapore, New Zealand, Australia and Malaysia. Among the APEC economies, the effort to liberalize has been much slower. In general, bilateral agreements remain largely restrictive. While 3rd/4th freedom flights have been increased over time, there is typically a ceiling on the number of origin-departure pairs, frequency, capacity and number of designated airlines, as well as prohibitions on third country code-sharing, 7th freedom and cabotage.

In a few cases, the new "place of business" formula has been adopted in place of substantial ownership. Examples include the Singapore-UAE, New Zealand-Chinese Taipei and New Zealand-Macau bilateral agreements.

For most other bilaterals, however, the familiar "substantial ownership and effective control" restriction is firmly in place, along with prohibitions on 7th freedom and cabotage rights. Overall, the only discernible progress is in relation to unrestricted (or "open" or highly relaxed) 3rd and 4th freedom rights between pairs of cities. Such 3rd/4th freedom

[13] *See* note 2, above.

relaxations are in place, for instance, for Singapore-Thailand, Singapore-Australia, Singapore-*Hong Kong, China*, Malaysia-*Hong Kong, China*, Thailand-*Hong Kong, China*, Thailand-Korea, Thailand-China and Korea-Viet Nam.

Some of the more traditionally restrictive states have also started to liberalise 3rd/4th freedom routes. For instance, an arrangement is in place between India and the ten ASEAN states to allow designated airlines from these economies to run daily flights to selected cities in India, including the major metropolitan centres of Delhi, Mumbai, Kolkata and Chennai.

As for 5th freedom rights, several economies such as Thailand and Singapore have relaxed such routes for airlines from third states for some years now. Garuda Indonesia, for instance, enjoys 5th freedom traffic out of Singapore to Shanghai and Beijing, as do Thai Airways through Singapore to Jakarta, and Singapore Airlines through Bangkok to Tokyo and Osaka. In addition, several Southeast Asian carriers like Singapore Airlines enjoy fifth freedom trans-Pacific traffic out of Northeast Asian points to the US (e.g. Seoul-Vancouver, Seoul-San Francisco, Taipei-Los Angeles, Hong Kong-Los Angeles).

However, 5th freedom rights are typically *quid pro quo* exchanges, negotiated on a bilateral basis for similar rights granted by the other countries. On the whole, 5th freedom rights remain a precious commodity held out for intense bargaining and trading, while seventh freedom rights and cabotage are not even on the negotiating table for most economies.

China has agreed with other member economies such as Thailand, Singapore, the U.S., Australia, New Zealand to liberalise progressively the cargo and passenger 5th freedom traffic rights, besides unilaterally opening the 3rd, 4th and 5th freedom traffic rights in Hainan Province. In general, the policy towards cargo is more liberal - China continues to encourage foreign joint ventures to set up all-cargo carriers in China. Transhipments hubs with 5th and 7th freedoms are allowed to set up by Fedex in Guangzhou and UPS in Shanghai.

The bilateral situation among the Northeast Asian states is worth noting. Under the Korea-China bilateral agreement signed in 1994 (and revised 5 times since), there has been some relaxation of 3rd/4th freedom routes, even though there are still strict limits or caps.[14] Only one designated carrier from each country is allowed on a given route, except routes with more than 10 flights a week. Limited 5th freedom rights for Chinese carriers through Korea to one point in North America are allowed, though these are not currently exercised. There are also reciprocal rights for Korean carriers through China to one point in Europe. Similarly, China has relaxed 3rd/4th freedom rights with Japan. From 188 weekly flights operated by both carriers in 1999, the number of weekly flights has increased to 555.

In general, however, flights between Japan and China remain limited relative to the size of the two giant economies and the potential number of travelers that could be flying between them.

As between Korea and Japan, the bilateral agreement signed in 1967 (and revised more than 20 times since then) places strict limits on third/fourth freedom flights, even though the number of weekly flights has increased from 281 in 1999 to 439 in 2005.

[14] The information on Northeast Asia in this section has been gleaned primarily from papers presented at the 1st International Symposium on Liberalizing Air Transport in Northeast Asia, 9 June 2006, Incheon, Republic of Korea.

Again, 5th freedom is restricted - Korean Air can fly beyond Tokyo to Honolulu and Los Angeles (these are in use), and beyond Osaka to Taipei, Hong Kong, Ho Chi Minh City and Bangkok (these are not in use). In turn, Japanese carriers can fly beyond Seoul and Pusan to any other destination (these are not in use).

Overall, the small number of 5th freedom opportunities and the conditions that come with their use (passenger restrictions etc.) mean that they are seldom commercially viable.

The China-US relationship is also worth noting. Ever since a new bilateral agreement was inked in July 2004, flights have increased significantly. Weekly services have already gone up from 54 to 249 (of which 121 are passenger flights). The July 2004 agreement provides that the liberalised conditions will come into place in stages up to 2010. It envisages no restrictions on destination cities on either side (compared to 12 US and 5 Chinese cities under the 1999 agreement). As for designation, a total of 9 airlines can be designated by each side, though this is to be done incrementally each year. This is an improvement over the 4 designated airlines on each side under the 1999 agreement. Code-sharing is also now allowed.

As between Australia and New Zealand, a highly-developed single aviation market has been in existence since an agreement was signed in 1996. The agreement practically abolishes all restrictions on air services across the Tasman Sea, with both Australian and New Zealand airlines allowed to operate practically unlimited frequencies and capacities both ways. In recent months, authorities from both economies have even agreed on a unified air operators' certificate that will be mutually recognized by both sides. Australia and New Zealand also allow 100% foreign ownership of a domestic airline. The Australian-New Zealand aviation liberalization model is thus the most advanced between two economies in the Asia-Pacific, but remains an exception to the norm.

4 The Operating Environment 1995-2005

In reviewing liberalisation progress among APEC economies, it is important to understand the context in which these developments have taken place in relation to the economic, market and airline industry environment pertaining to the period 1995 to 2005.

Sectoral trends and airline performance are closely aligned to the health or otherwise of national and international economies and, as such, are subject to cyclical corrections from time to time as GDP rises or falls.

Thus, robust economic growth generally will give rise to increased expenditure on air travel and freight transport which in turn drives demand for services and capacity levels. Conversely, market downturns usually coincide with weak GDP performance or recessions. In this "down-cycle" scenario, excess capacity often appears which impacts on airline yields and profitability, and either constrains service growth or encourages rationalisation.

According to ICAO, in its Annual Report 2006, total scheduled airline traffic (as measured in tonne-kilometres performed) increased by an average 5.2% per annum and freight by 5.5% per annum between 1995 and 2005. The passenger growth rate equated to 1.4 times average GDP for that period[15].

The airlines of North America and Europe accounted for 65% of traffic in 1995, but this had declined to 62.9% 10 years later due in part to the growth of Asia-Pacific traffic (from 24.8% to 26%). Other regions also grew from 10% to 11.1%.

In 2005, there were 902 scheduled air carriers worldwide, including 663 operators of dedicated passenger services, 74 operating both passenger and all-freight services, and 91 all-freight airlines. Over the 10 years, the size of the global jet fleet rose 32% from 13,784 aircraft in 1995 to 18,246 aircraft in 2005.

Liberalisation of ASAs was a common theme of regulatory developments during this period. By December 2005, 118 "open skies" agreements providing full market access without restrictions on designations, route rights, capacity, frequencies, codesharing and tariffs, had been concluded among 85 states (about 65% involved developing economies). There were also 11 regional or plurilateral agreements (as discussed in the previous sections).

4.1 From Crisis to Crisis

By any measure, the 1995-2005 period under examination was characterised by unusually tumultuous change and disruption to aviation activity and global and regional markets due to the intervention of major external events.

The flow-on effects of these events, in effect, distort the performance indicators used in this analysis as they impacted - sometimes very significantly - on GDP trends, foreign exchange rates, and growth trends in traffic, capacity and frequency, and airline profitability. The scale of impact was often uneven depending on geography and market resilience, but generally there were implications which either slowed air service development or refocused its direction.

[15] World Bank estimate of 3.6% average growth 1995-2005. The Asia-Pacific GDP growth average was 4.6%, North America 3.2%, Latin America 2.8%, the Middle East 4.3% and Europe 2.4%.

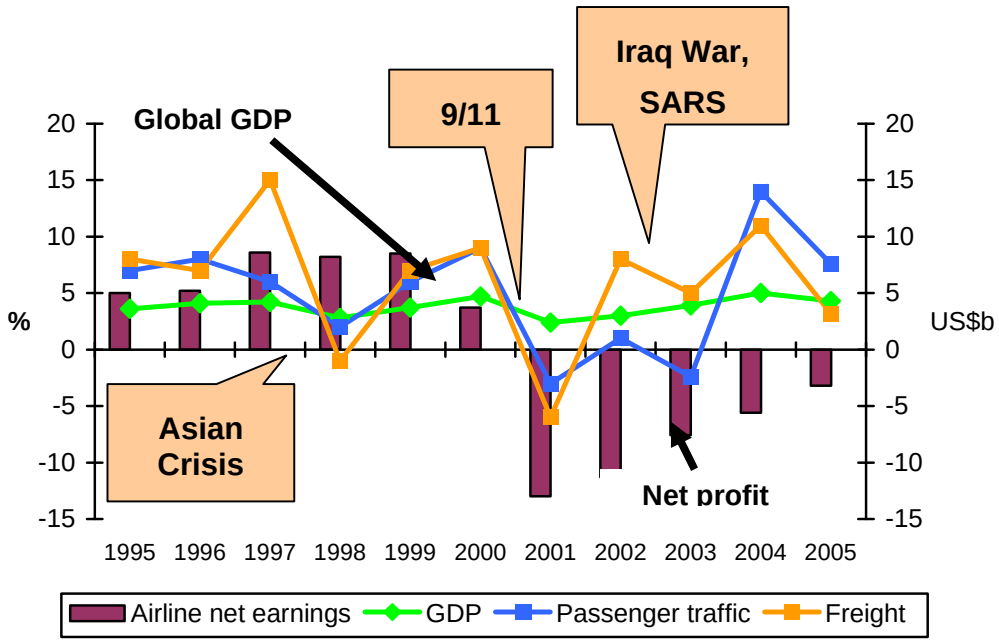
As a consequence, progress towards greater liberalisation was interrupted and, in some cases, limited by increased concerns about border security and other factors.

In order of occurrence, the most significant events affecting air travel during the period under review were:

- The Asian Financial Crisis of 1997-98;
- Terrorist attacks in New York on September 11, 2001;
- Afghanistan and the Gulf War in Iraq;
- Other incidences of terrorism in Southeast Asia, including Bali, Indonesia, in 2002 and 2004; and
- The outbreak of SARS (Severe Acute Respiratory Syndrome) in 2003.

Figure 2 below charts the impact of these events on global GDP trends, international passenger and freight traffic growth and net international airline profitability. In all, the massive disruption to aviation trends related to September 11, subsequent conflicts in Afghanistan and Iraq, and SARS cost the commercial airline industry an estimated 2-3 years of positive growth.

Figure 2: Impact of External "Shocks" on GDP, International Scheduled Passenger and Freight Growth and Airline Profitability, 1995-2005



Source: International Air Travel Association, IMF

The airline industry was generally buoyant during the mid 1990s as global GDP remained relatively strong at 3-4% growth per annum, with volumes of airfreight, in particular, strengthened by the positive economic climate.

4.1.1 The Asian Financial Crisis

In 1997-98, the first of the external “shocks” occurred with the Asian monetary and financial crisis.

This had a substantial impact with world GDP slowing to 2-3% as many of the previously overheated economies in the Asian region, including Korea, Thailand and Indonesia, experienced recession. In these volatile conditions, with local currencies devaluing sharply, passenger traffic on international routes eased to 2% and freight dipped below the line to negative 1% as more expensive imports to the Asian region diminished and higher value exports suffered from increased business overheads and a scarcity of raw materials.

Airlines in the most severely-affected countries were also confronted by escalating input costs due to the rise in US dollar-based expenses such as aircraft, spare parts and jet fuel. This and an accompanying slump in tourism markets applied pressure to many Asian carriers, leading to restructuring and bringing forward cost containment programmes. The enforced changes which took place placed the region in a much stronger position to meet subsequent challenges confronting the industry. However, airline profitability generally remained solid, largely because of relatively buoyant conditions for US carriers at that stage. This situation changed dramatically several years later.

4.1.2 September 11 and Beyond

The September 11 terrorist attacks in 2001 had an even more extensive and prolonged impact on aviation, compounding problems already being experienced as economic conditions deteriorated and key markets exhibited declining or negative growth rates. The US had been in recession since March of that year, while the other two super-economies, Japan and Germany, were showing little or no growth.

September 11 not only had an immediate effect on markets, but also had a profound influence on government policy and industry strategy in the ensuing years:

- International passenger traffic fell by 3% in 2001, for the first time since the 1991 Gulf War and airfreight volumes declined by 6%. Passenger numbers did not return to pre 9/11 levels until 2004;
- Capacity levels did not grow at all globally in 2001, and fell by 2% in the following year as airlines withdrew services and grounded aircraft. In the US, some 25% of capacity was taken out of service as traffic almost halved;
- The international airlines collectively lost US$13 million in that year – a situation exacerbated by high fuel costs - and an estimated US$43.6 billion in total between 2001 and 2005 after being profitable in each of the preceding eight years.
- US airlines, in particular, bore the brunt of the downturn. Many of the larger operators had been in a weak financial position before the attacks with increasing levels of debt, high labor costs and declining returns on investment. As Low-Cost Carriers vigorously added capacity on domestic routes, network operators switched their focus to international sectors. The international share of total seats flown by these operators grew from 12% in May 2001 to 15.2% in May 2005. During the same period, annual available seats on LCCs increased by 24% to 226 million.

The severe problems encountered by the major North American operators substantially slowed their development, and led to enforced restructuring and rationalisation of non-performing services. In the US, United Airlines, US Airways, Hawaiian Airlines, Delta and Northwest Airlines were all placed under Chapter 11 bankruptcy protection between 2000 and 2005; while Air Canada also entered bankruptcy protection under Canada's laws. United, Hawaiian, Air Canada and US Airways emerged from Chapter 11 in more viable forms during this period after restructuring their debt and legacy cost bases.

However, the uncertainty over the futures of these airlines retarded their development during these years; and destabilised the global alliances, given that United and Air Canada are key members of the Star Alliance and Delta is the US representative and founder member of SkyTeam. In a recent review of the period following 9/11, IATA noted that airline yields fell by 25% in the US during the following five years; and 15% internationally. International passenger traffic increased by 37% between 2000 and 2005, almost twice the rate of growth in capacity of 19%.

4.1.3 SARS and Iraq

The shock-and-recovery cycle experienced by the aviation industry entered a new phase during 2003 with the advent of SARS which coincided with concerns over the war in Iraq. SARS directly impacted China, Taiwan, Singapore and Canada, and caused sharp reductions to international traffic on sectors to and through Asia from Europe and the North America.

This negative effect was exaggerated by ongoing security concerns, but generally was short-lived and limited to the first half of that year, with a relatively rapid recovery especially among Asian nations, in the second half of 2003 and 2004.

Asian and North American international traffic was worst affected. At the peak of SARS in April 2003, traffic in these markets declined by 41.3% and 22% respectively. However, both had returned to positive growth by October-November, 2003. Traffic flows on the North Pacific and Asia-Europe were down 9% and 8% for the year.

International passenger traffic overall declined by 2.4% in 2003. Asia experienced a 9.4% fall in traffic, and 3.5% drop in capacity (according to the Association of Asia Pacific Airlines (AAPA), this was the equivalent of three years' growth), while North American traffic was down 7.2%. The cost to Asian countries associated with the consequent decline in business travel and tourists to the region was estimated at US$12.3 billion[16]. In contrast to the passenger trends, airfreight increased by 4.3% in 2003, bolstered by intra-Asian trade, particularly to and from mainland China. This emphasised the role of cargo carriage as an important alternative revenue source for airlines during times of market crisis.

4.2 The Fuel Hike

Passenger and freight traffic growth bounced back from SARS and Iraq in 2004 with 14% and 11% growth respectively, before returning closer to historic growth levels in 2005 of 7.6% and 3.2%. However, a surge in oil prices, and consequently jet fuel, since 2003-04 has imposed further pressures on airline costs and offset benefits achieved through improved productivity and other internal efficiencies.

[16] Asia Development Bank estimates

Jet fuel increased by 49% in 2005 over the previous year, though the impact on unit costs was moderated to an extent by capacity containment and fuel and currency hedging programmes.

4.3 Impact of Low-Cost Carriers

The changes to travel patterns, and emergence of increasing LCC-based competition on point-to-point sectors, saw an acceleration in non-stop frequencies from the late 1990s. This trend continued to gather momentum, particularly in short-haul markets, between 2000 and 2005.

This was accompanied by a fall in average aircraft sizes, which suggests that air travel growth during this period had been driven by an expansion in service frequency rather than increases in the number of available seats per aircraft. This was consistent with the proliferation of LCCs operating smaller single aisle aircraft on high frequency services in Europe, the US and parts of Asia.

5 Review of Progress with the Eight Options 1995-2005

In this section, CAPA reviews and analyses the progress achieved by APEC economies in adoption of the Eight Options from two inter-related standpoints:

(1) Performance indicators - largely secondary growth indicators associated with growth of service capacity and frequency, and spread (as detailed in the Study Methodology); and

(2) Regulatory development – an analysis of the structure of APEC economy ASAs, as of 2005 which shows the extent to which the Eight Options are in place.

5.1 Performance Indicators

This analysis is based on the raft of indicators of economic and air travel performance, as summed up in Table 1. This presents aggregated results for the APEC region as a whole by drawing together individual outcomes for APEC member economies (economy-by-economy analyses are provided in Appendix 4).

Table 1: Summary of Analysis of Aggregated Performance Indicators for APEC Economies, 1995-2005

Data Category	Year	Total	% Change
APEC Economies			
GDP (US$ billion)	**1995**	1,6753.1	
	2000	1,9392.9	**15.8**
	2005	2,5093.7	**29.4**
% Change	**95-05**		**49.8**
Inbound Visitors	**1995**	193,743,872	
	2000	268,283,374	**38.5**
	2005	307,858,953	**14.8**
% Change	**95-05**		**58.9**
Outbound Resident Travel	**1995**	175,152,601	
	2000	256,884,011	**46.7**
	2005	288,172,013	**12.2**
% Change	**95-05**		**64.5**
No. Airports (Primary)	**1995**	999	
	2000	1,036	**3.7**
	2005	1,138	**9.8**
% Change	**95-05**		**13.9**
No. Airports (Secondary)	**1995**	1,987	
	2000	2,141	**7.8**
	2005	2,282	**6.6**
% Change	**95-05**		**14.8**
APEC Economy-APEC Economy			
Average seats/week	**2000**	4,165,952	
	2005	4,830,029	**15.9**
Average flights/week	**2000**	22,259	
	2005	27,063	**21.6**

No. Bilateral Agreements	**1995**	217	
	2000	247	**13.8**
	2005	310	**25.5**
% Change	**95-05**		**43.5**
No. Plurilateral Agreements	**1995**	2	
	2000	2	**0.0**
	2005	7	
APEC Economy-All Countries			
Average seats/week	**2000**	6,185,415	
	2005	7,481,560	**21.0**
Average flights/week	**2000**	33,365	
	2005	41,134	**23.3**
APEC Economy-Non APEC Economies			
Average seats/week	**2000**	2,035,828	
	2005	2,670,965	**31.2**
Average flights/week	**2000**	11,148	
	2005	14,133	**26.8**
APEC Hub Airport-APEC Economy			
No. City Pairs	**1995**	472	
	2000	495	**4.9**
	2005	636	**28.5**
% Change	**95-05**		**34.7**
No. Airlines	**1995**	711	
	2000	658	**-7.5**
	2005	775	**17.8**
% Change	**95-05**		**9.0**
APEC Hub Airport-APEC Hub Airport			
Average seats/week	**1995**	1,508,195	
	2000	1,585,338	**5.1**
	2005	2,013,606	**27.0**
% Change	**95-05**		**33.5**
Average flights/week	**1995**	4,966	
	2000	5,614	**13.0**
	2005	7,329	**30.5**
% Change	**95-05**		**47.6**
APEC Hub Airport-All Countries			
International Passengers	**1995**	164,561,808	
	2000	227,493,694	**38.2**
	2005	277,759,619	**22.1**
% Change	**95-05**		**68.8**
International Freight	**1995**	8,899,667	
	2000	12,687,539	**42.6**
	2005	16,268,182	**28.2**
% Change	**95-05**		**82.8**

Sources: International Monetary Fund (IMF), IATA/SRS, OAG, ACI, CIA Factbook, PATA

5.1.1 Economic Growth

At a macro level, the GDP growth of APEC economies gathered momentum from the first to the second half of the 10-year period due largely to the dampening effects of the Asian financial crisis in 1997-98 (Thailand, Indonesia and Korea all produced negative growth between 1995 and 2000 of 27%, 25.9% and 1% respectively) and the more recent rapid growth of China, the Russian Federation and other developing economies.

China's economy expanded by 64% in the first five years, increasing to 86.4% between 2000 and 2005. Its share of the total APEC economy grew from 4.3% in 1995 to 8.9% in 2005 to become the third largest economy in the region. GDP in 2005, in current US$, was 206.5% higher than that in 1995.

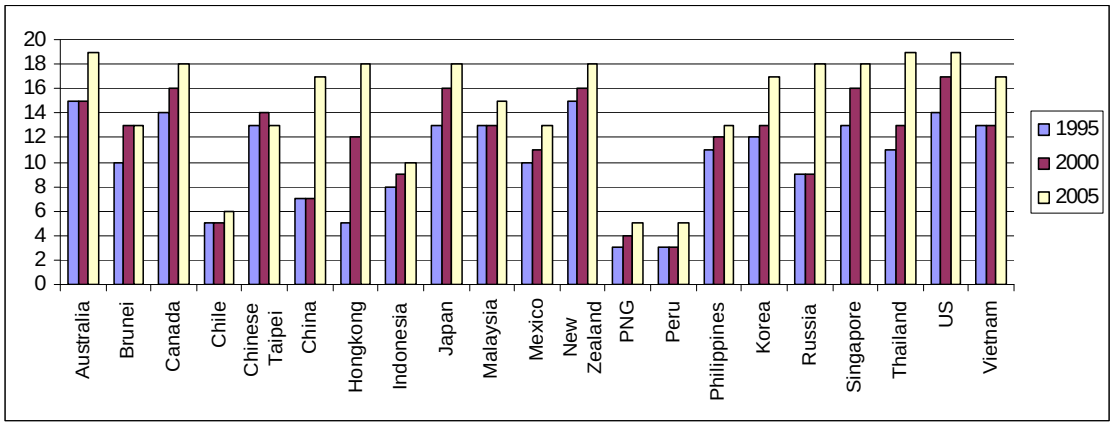
The Japanese economy, by contrast, shrank from 31% of the APEC total at the beginning of the period to 18% in 2005; while the US increased its share by 5.5% to account for almost half of the region's GDP in 2005.

As a whole, APEC-related GDP climbed by 15.8% in the first five years – an average annual growth of 3.2%, slightly below the global average for the 10 years of 3.6%. However, the region's economy strengthened to achieve well above average annual growth of 5.9% between 2000 and 2005 (an increase for the five years of 29.4%). Over the 10 years, APEC regional GDP exceeded the global average with a 49.8% rise (an average annual increase of 4.9% per annum).

5.1.2 Bilateral Agreements

Between 1995 and 2005, there has been a significant expansion of bilateral Air Services Agreements (ASAs) between APEC economies. The number of ASAs held with other APEC economies has risen by 42.8% from 217 in 1995 to 310 10 years later (Figure 3). This was especially the case during the 2000-2005 period when 63 of the additional 93 agreements were struck.

Figure 3: Comparison of Number of Bilateral Agreements by APEC Economies with other APEC Economies, 1995-2005



Source: APEC TPT-WG Surveys, ICAO

The extent of ASA coverage for the period increased from an average of 10.3 agreements per economy to 14.8. More than half of the APEC membership held ASAs with 17 or more APEC bilateral partners by the end of 2005.

Hong Kong, China and China, in particular, have expanded their ASA relationships from 5 and 7 in 1995 to 18 and 17 in 2005; while the Russian Federation has doubled its coverage to 18 during that period.

These trends suggest that the APEC liberalisation programme has encouraged greater engagement between APEC economies in relation to air services. CAPA analyses the components of these agreements later in the report, and assesses progress towards the Eight Options targets.

5.1.3 Capacity & Frequency Indicators

Movements in airline seat capacity and flight frequency generally align with traffic demand, which in turn is both facilitated by and stimulated by market liberalisation. For example, the annual growth rate for capacity for 1995-2005 of 5% is little different from the 5.2% growth rate for passenger traffic.

As such, changes in seat capacity are a reliable indicator of air travel demand. It should be noted that the air service policies of most economies seek to supply capacity ahead of demand, which sometimes means that market growth can lag capacity.

The utilisation of available capacity is also influenced by airline specific issues such as capital and fleet availability and competition, as well as market demand.

APEC Economy-Economy

As noted earlier, the OAG and IATA databases accessed by CAPA for this analysis do not provide historic capacity and frequency data beyond five years[17]. However, the data used in this analysis does focus on trends prevalent in the key 2000-2005 period when all of the 21 economies were APEC members[18] and were in the process of addressing the prioritised Eight Options programme, as endorsed by APEC Leaders in 1999.

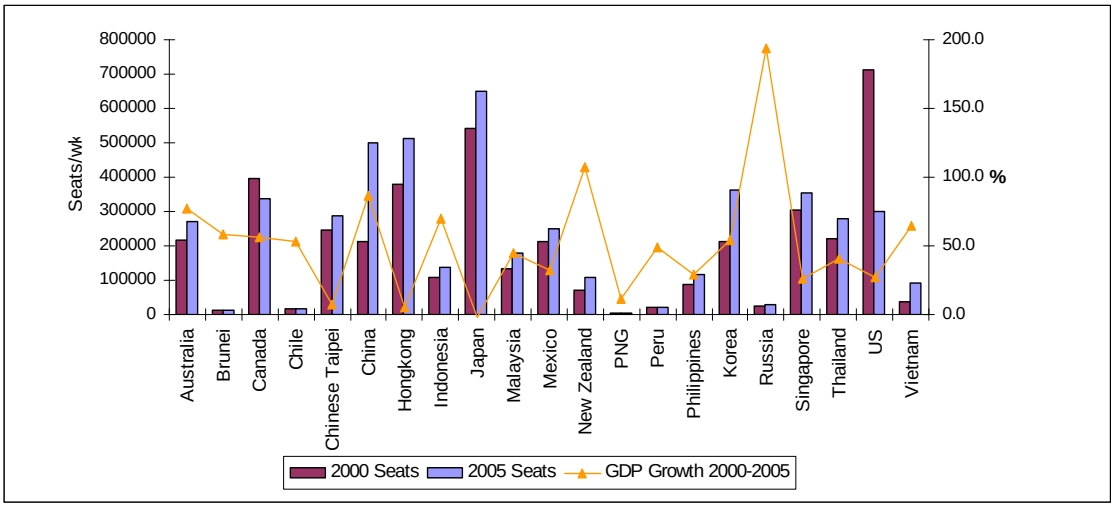
Figure 4 shows the distribution by APEC economy of average weekly seats for routes between APEC economies for 2000-2005 (this does not include routes outside the APEC region). Seat capacity grew by 15.9% between those years, compared to a rise in international capacity globally for the same period of 18.4%[19] and between APEC economies and all countries of 21%.

[17] It should also be noted that the IATA and OAG databases provided seat capacity and frequency by sector. This means that the seats/flights on 5th freedom services are recognised as two sectors and counted as such.

[18] Viet Nam, the Russian Federation and Peru did not join APEC until 1998.

[19] ICAO statistics are based on Available Seat Kilometres for international scheduled airline services (i.e. available seats multiplied by the distance travelled). The inclusion of a distance component can distort outcomes, but trends are generally similar to that with airline seats.

Figure 4: Comparison of Average Weekly Seat Capacity between APEC Economies with Percentage Growth in GDP by Economy, 2000-2005



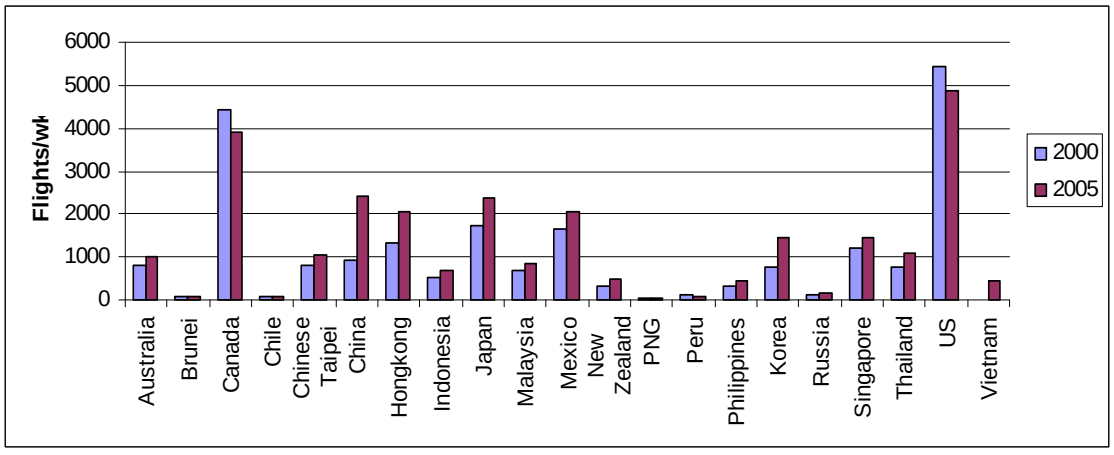
Source: IATA/SRS, OAG, IMF, CAPA

CAPA also ascertained developments in average weekly flights from one APEC economy to another by economy, as shown in Figure 5. Flight frequencies expanded by 21.6% to 27,000 from 2000 to 2005.

The greater rate of increase in flights over seats reflects increased usage of high frequency, smaller gauge aircraft, mostly by emergent Low Cost Carriers (LCCs). This is evidenced by a 4.6% reduction in average seats per aircraft between 2000 and 2005.

All but 6 APEC economies (the US, Canada, Brunei, Chinese Taipei, Peru and Papua New Guinea) experienced increases over the five years to 2005, ranging from 18% for Russia through to 161% for China. There was no movement in flight numbers for Brunei.

Figure 5: Comparison of Flight Frequencies between APEC Economies by Economy, 2000-2005



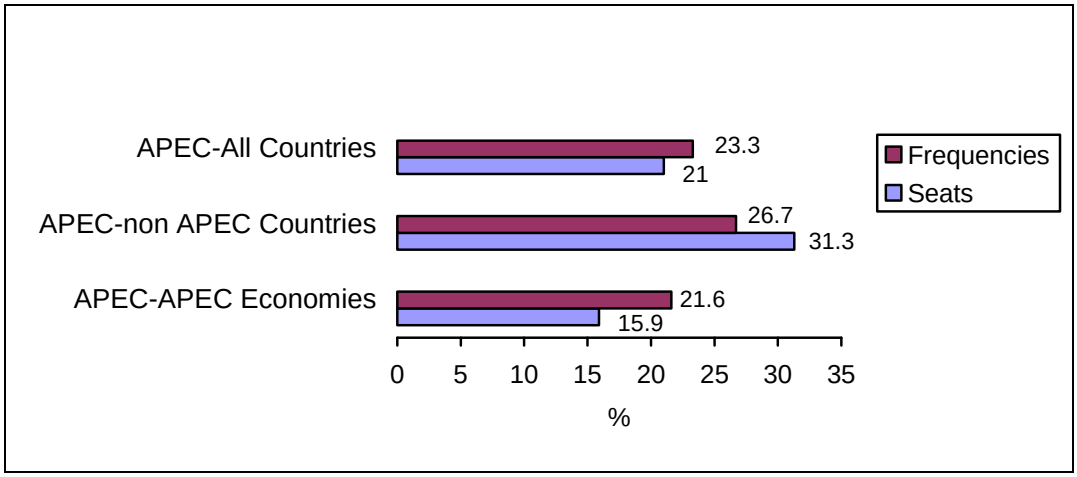
Source: IATA/SRS, OAG

The differential between the seat capacity growth for the APEC-APEC grouping and the global rate for the period suggests that the APEC-APEC segment has under-performed, despite generally strong GDP levels and burgeoning service growth from China.

As a further indication of this, the APEC-APEC segment's share of total seats between APEC economies and all countries has declined from 67.1% in 2000 to 64.3% in 2005, and frequencies from 66.6% to 65.6%. Average weekly seat capacity and frequency levels for routes between APEC economies and non-APEC economies were also calculated to provide a comparison. These mostly relate to services to Europe and the Middle East.

This showed that seats had increased by 31.3% on routes linking APEC economies with countries outside APEC, almost twice the APEC-APEC rate, and flight numbers by 26.7% (see Figure 6). The higher growth on APEC-non APEC routes may be explained, in part, by the significant growth in better yielding premium traffic on Europe-Asia services since 2000. On an indexed basis, this traffic has increased by 60 points to 2005, three times that of Pacific and North Atlantic routes.[20] Premium business on services within Asia has been flat for the 2000-2005 period.

Figure 6: Comparison of Percentage Change in Average Weekly Seats and Frequencies, APEC Economies to APEC, non-APEC and All Routes, 2000-2005



Source: IATA/SRS, OAG

There are other mitigating factors for this differential, however. The most significant was the sharp decline in the performance of US carriers, due to a combination of issues discussed in the preceding section, including the impact of 9/11, the Gulf War, damaging domestic competition and the rash of Chapter 11 bankruptcies.

From 2000 to 2005, US seats and frequencies fell by 57.5% and 10.6%. As a consequence, the US share of APEC-APEC seats and frequencies fell from 17.9% in 2000 - by far the largest of the APEC economies - to 6.4% in 2005 (the 7th largest).

[20] Indexed data analysis of world traffic flows by IATA

The decline in seats between the US and other APEC economies was substantially greater than the 3.3% negative growth in seats between the US and all countries, indicating that much of the rationalisation of services focused on Canada and the longer haul sectors in the North Pacific.

Cross-border services to Canada accounted for 46% of APEC-related traffic from the US in 2005 (and the US for 87% of Canada's APEC-related seats). Between 2000 and 2005, seat capacity offered in the US for the Canadian market fell by 15.1%. Canada's performance was also adversely affected by the events in the US and the move to bankruptcy protection at home by its flag carrier Air Canada. Canada's seat capacity to APEC economies fell by 14.6% between the two years, resulting in a 2.8% fall in its share of the region's air market.

The significance of the US "factor" to overall APEC performance is emphasised if US seats are excised from the equation for either year. On that basis, seat numbers on APEC-APEC sectors would have increased by 31.1% between 2000 and 2005, in line with the performance of APEC-non APEC routes.

APEC Hub Airport-Hub Airport

CAPA also analysed capacity and frequency trends between APEC hub airports and other APEC hub airports. The performance of one major international airport for each of the 21 economies between 1995 and 2005 was reviewed. Where multiple large airports existed, CAPA designated one as the "hub" (for example, Sydney was chosen for Australia; Beijing for China, Bangkok for Thailand, Jakarta for Indonesia, Los Angeles for the US and Vancouver for Canada).

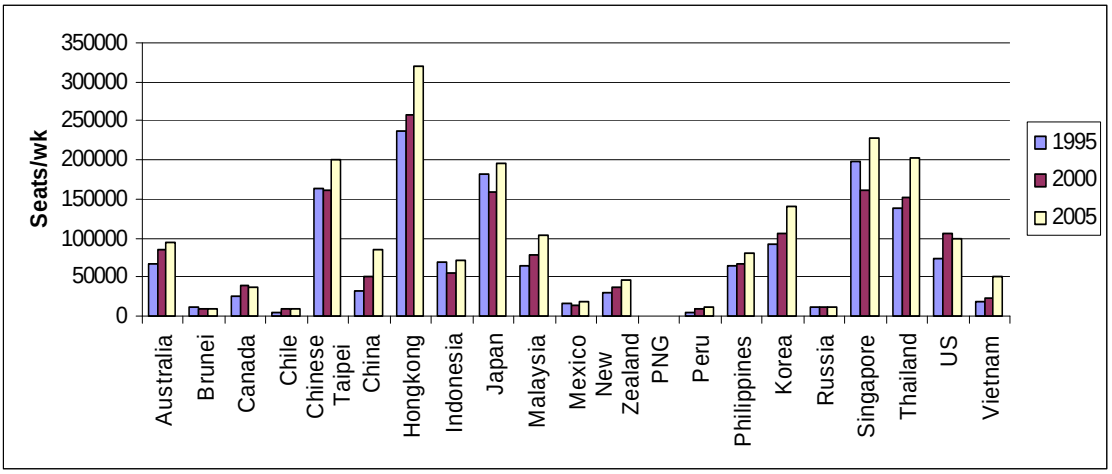
Most if not all of the airports selected handled a substantial share of APEC-related traffic for their particular economy, and were therefore seen as being representative.

While the IATA and OAG databases again only supplied five-year data, data for 1995 was generated through a manual examination of airline schedules for that year.

Consistent with the GDP trend, airline seat capacity and flight frequencies between APEC hub airports, as a weekly average, grew more strongly in the second half of the period - by 5.1% and 13% between 1995 and 2000 and 27% and 30.5% from 2000 to 2005 (Figures 7 and 8).

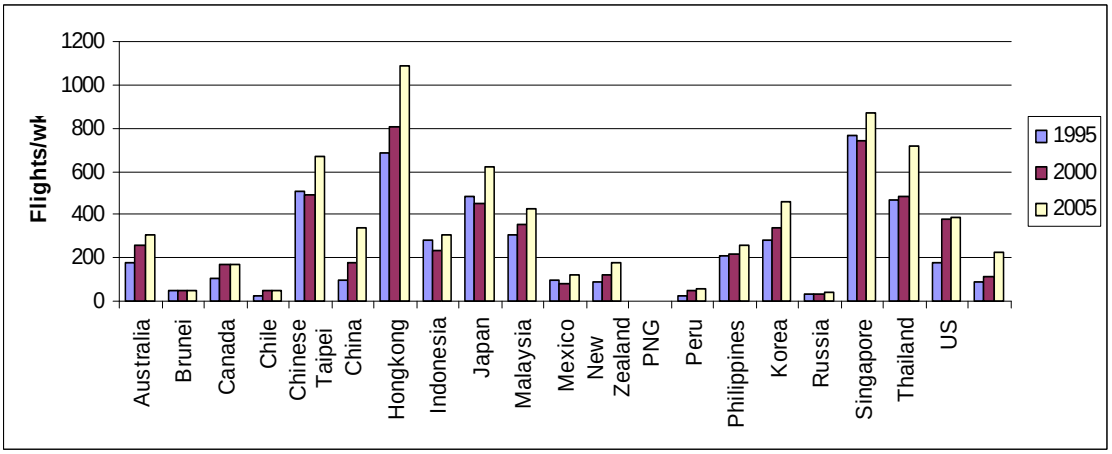
Taken over the 10 years, seats offered between APEC hub airports increased by 33.5% and frequencies by 47.6% from 1995 to 2005. This is broadly in line with the 46.7% growth in international capacity globally for the same period.

Figure 7: Comparison of Seat Capacity between APEC Hub Airports by Economy, 1995-2005



Source: IATA/SRS, OAG

Figure 8: Comparison of Flight Frequencies between APEC Hub Airports by Economy, 1995-2005



Source: IATA/SRS, OAG

As noted, the higher rate of growth in frequencies probably reflects the introduction of LCC shuttle services, particularly in Southeast Asia and Canada, and moves to more economic, smaller gauge aircraft. On an APEC economy-APEC economy basis, the number of seats per aircraft fell by 4.6% between 2000 and 2005.

The most significant hubs in terms of capacity were Hong Kong, Singapore, Narita (Japan), Taipei and Bangkok. Beijing's share of APEC-APEC hub-based seats doubled to 4.2% between 1995 and 2005, while Narita's share of total seats reduced by three points to 9.8%. Frequencies generally grew at a faster rate than capacity as airlines moved to smaller gauge aircraft on some routes (Los Angeles, for example, saw capacity grow by 34% and frequencies by three times that rate).

As would be expected, growth in seat numbers over the 10 years was substantial at the traditional Asian hubs of Bangkok, Hong Kong and Kuala Lumpur despite the effects of the Asian financial crisis, terrorist attacks in neighbouring Indonesia and the impact of SARS in 2003 (45.9%, 35.2% and 58% respectively). Seats at Singapore's Changi Airport also grew by 15.4% between 1995 and 2005.

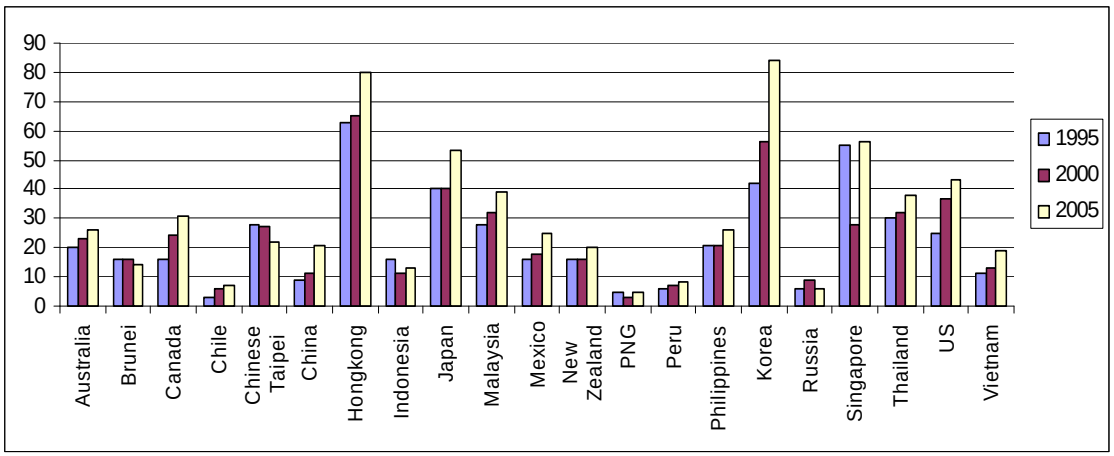
Singapore was one of the few airports to experience a downturn between 1995 and 2000, partly because of competitive pressures from other Southeast and Northeast Asian hubs. Los Angeles and Vancouver Airports, on the other hand, were the only ones to see a reduction in seats during the 2000-05 period (as a consequence of 9/11 and the ensuing financial problems for North American carriers).

However, in sheer percentage terms, one of the most significant movers during the 10-year period was Beijing, which saw a 158.2% increase in seats to APEC hub airports. In 2005, Beijing was the second busiest airport in Asia. Ho Chi Minh City (up 164.8%), Lima (up 103.7%) and Santiago (up 98.5%), also achieved substantial growth, albeit off a relatively low base.

5.1.4 City Pairs

The capacity and frequency trends were further borne out by the growth in the number of city pairs served between APEC hub airports and APEC economies (Figure 9). These increased between the first and second halves of the 10-year period from 4.9% growth to 28.5%. Between 1995 and 2005, the APEC-APEC city pairs covered rose by 34.7% in total from 472 to 636.

Figure 9: Comparison of Numbers of City Pairs Served between APEC Hub Airports and APEC Economies, 1995, 2000 and 2005



Source: IATA/SRS, OAG

This reflected a number of issues, including:

(1) Considerable expansion of access to China and points served within that market, particularly for other Northeast Asian economies. Between 1995 and 2005, Hong Kong Airport increased the number of Chinese cities served from 23 in 1995 to 41 in 2005; Korea from 1 to 24; and Japan (Narita) from 3 to 10;

(2) Consolidation and subsequent growth of the three major Chinese airline groupings, Air China, China Southern and China Eastern, during 2000-2005. As a consequence, the number of cities in APEC economies served out of Beijing expanded from 9 in 1995 to 21 in 2005;

(3) China's accession to the World Trade Organisation in 2001 which encouraged greater participation in global markets, including trade in goods and services; and

(4) Airport expansion in Northeast Asia:

- The establishment of Incheon International Airport in Korea as a major Asian hub from its opening in 2001. The expanse of city pairs served out of Korea to APEC economies doubled to 84 between 1995 and 2005, placing it ahead of *Hong Kong, China* in terms of city pair numbers within APEC; and
- Development of the new airport at *Hong Kong, China*, which opened in 1998. This saw further growth in Hong Kong's hub operations, with the number of city pairs served rising by 23% from 65 to 80 between 2000 and 2005.

5.1.5 Primary and Secondary Airports

The growth in primary and secondary airports across the APEC region from 1995 to 2005 has been substantial, consistent with capacity requirements. Primary airports are categorised for this report as those with runways of 2,400 metres or more and, as such, capable of accommodating international-sized jets, while secondary airports operate shorter runways of between 1,500 metres and 2,400 metres.

CAPA's analysis covered both military and civil airports. It found that the number of primary airports region-wide increased by 13.9% from 999 in 1995 to 1,138 in 2005; and secondary airports by 14.8% to 2,282. Reflecting the relative sizes of their aviation markets, the US, China and Russia, between them, accounted for 74% of the region's primary airports and a similar percentage of secondary airports in 2005.

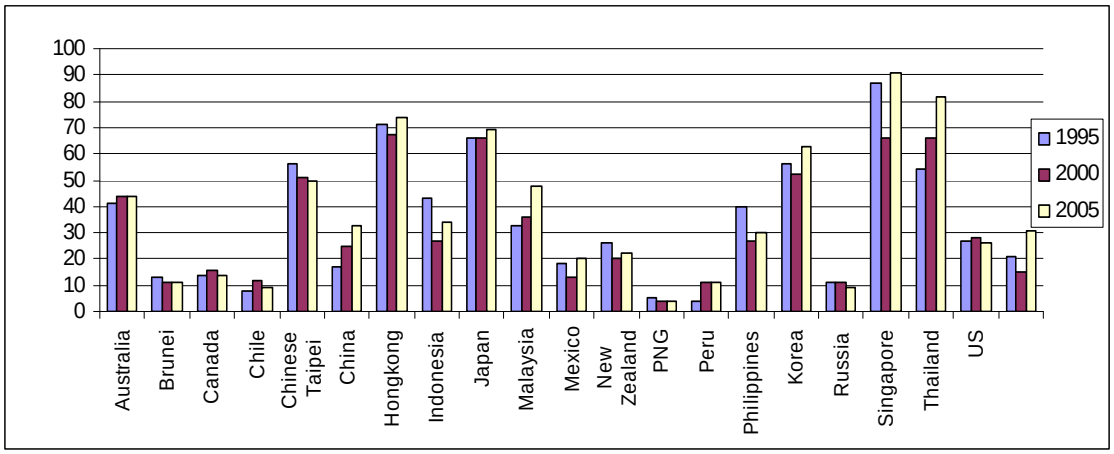
However, China exhibited by far the highest growth – from 86 primary airports in 1995 to 174 10 years later. The massive development of its airport infrastructure has provided for continuing significant expansion of international and regional access and market growth.

5.1.6 International Airlines

The number of international airlines operating between APEC hub airports and APEC economies grew moderately by 9% to 775 between 1995 and 2005, though this was uneven between the two halves of the period (Figure 10). This suggests that capacity/frequency growth was achieved more by existing airlines increasing services than by new airlines entering markets.

Negative growth of 6% was achieved in the first five years, largely as a consequence of economic crises affecting a number of Southeast Asian economies (Jakarta Airport, for example, saw a 37% reduction in carriers and Manila a 33% reduction during that period).

Figure 10: Comparison of Numbers of International Airlines serving between APEC Hub Airports and APEC Economies, 1995-2005



Source: OAG, IATA

However, airline numbers recovered strongly during the 2000-2005 period with 16% growth, headed by Beijing, Kuala Lumpur and Bangkok Airports. The range of carriers served by Beijing from APEC economies increased from 17 in 1995 to 33 in 2005.

5.1.7 Inbound/Outbound Travel Volumes

The trends in inbound and outbound tourism provide a barometer to air service demand and levels of liberalisation. Tourism is important in varying degrees to the economies of many Asian economies, as well as Australia, New Zealand, and North and South America. As such, the sector's requirements for new or additional airline capacity to accommodate travel demand are often given priority by governments and drive negotiations on expanded ASAs.

CAPA's analysis of international inbound arrivals and outbound resident travel volumes for APEC economies indicate substantially higher growth for the region on an aggregated basis than for the world in total (Figure 11).

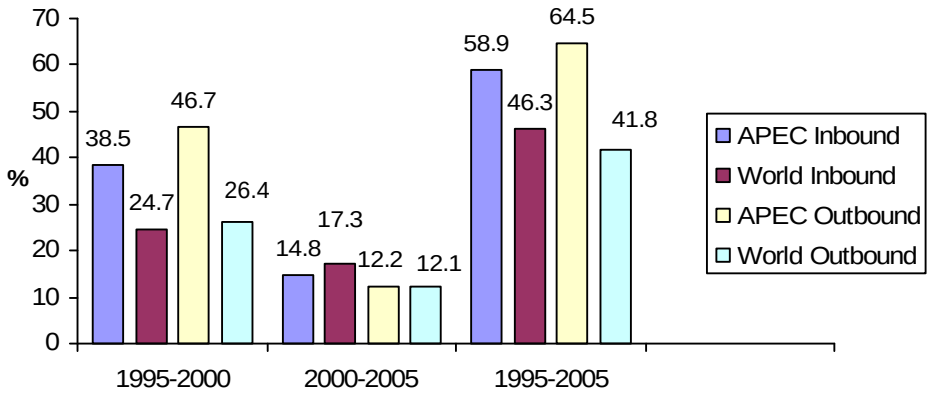
Between 1995 and 2005, the number of inbound visitors to APEC economies grew by 58.9%, compared to global growth of 46.3%. The initial five years of this period, in particular, achieved very high growth of 38.5% for arrivals and 46.7% for resident travel - 13.8 points and 13.3 points above the figures worldwide.

These growth levels eased significantly between 2000 and 2005 as 9/11, SARS and other "shocks" impacted on tourism flows. Despite the direct effects of these events on many countries, including the major APEC economies of the US, Canada and Japan, the APEC region continued to out-perform other geographic areas. SARS alone caused tourism arrivals to fall by 9% in Northeast Asia and 14% in Southeast Asia in 2003.

As a consequence, APEC's share of world inbound arrivals increased from 35.1% to 38.1% from 1995 to 2005[21]; and its share of the outbound travel market increased from 32.5% to 37.7%[22].

[21] The 2005 share would have been even higher had the inbound arrival statistics for Russia, Peru and Brunei been available for that year.

Figure11: Comparison of Percentage Growth of World Inbound, Outbound Travel Volumes with APEC, 1995-2005



Source: World Tourism Organisation, Pacific Asia Travel Association

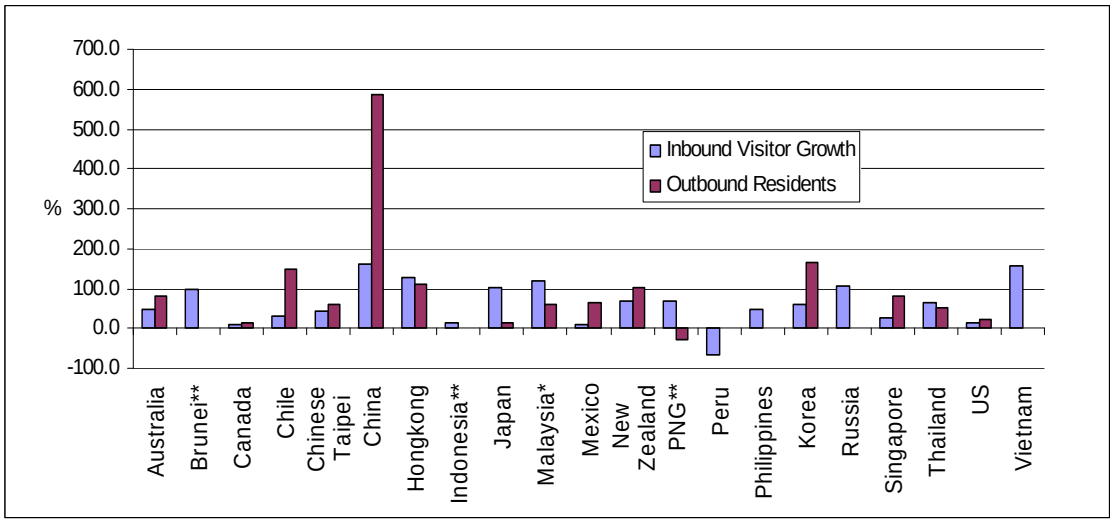
Figure 12 provides a breakdown of inbound and outbound growth by APEC economy between 1995 and 2005. Not surprisingly, this growth is headed by China with its inbound tourism levels rising 159.3% over the 10 years. In 2005, it accounted for 39.1% of total APEC arrivals. Outbound travel by Chinese residents grew at an even faster rate from 4.5 million in 1995 to 31 million in 2005.

The emergence of China as a tourism force was driven by the combination of growing prosperity with enhanced levels of discretionary expenditure for travel; WTO entry; air service liberalisation, with increases in direct flights; and the establishment and expansion of destinations with Approved Destination Status for visits by outbound Chinese tour groups (now extended to more than 100 countries).

The passage of Chinese nationals in the triangle between Chinese Taipei, *Hong Kong, China* and mainland China is responsible for much of the tourism growth in that part of the region (Hong Kong-Taipei is still the world's busiest international city pair air route). In 2005, 83% of arrivals to China involved nationals from Chinese Taipei, *Hong Kong, China* or Macau. Similarly 66% of arrivals to *Hong Kong, China* and 92% of the Special Administrative Region's outbound resident trips relate to China and Macau. The China-based growth saw a 129% increase in arrivals to *Hong Kong, China* between 1995 and 2005. Korea's outbound travel volumes also grew by 163% over the 10 years, due largely to expanded access to China.

[22] Outbound resident travel statistics were not available for 1995 and 2000 for Peru and Viet Nam; for 2000 and 2005 for Indonesia; and for 1995 and 2005 for Russia. Had these been included, the APEC share would have been considerably larger.

Figure 12: Comparison of Growth by APEC Economy in Inbound Visitors, Outbound Resident Travel, 1995-2005^



*Data for January-September 2005

**Estimate by American Express, Travel and Tourism in the APEC Region.

^Inbound data for Brunei, Peru and Russia compares 2000 with 1995. 2005 data was not available for these economies; No outbound data was available for Brunei, Peru, Russia or Viet Nam.

Source: Pacific Asia Travel Association, American Express, Government/tourism authority websites

As demonstrated by China, the Hong Kong Special Administrative Region and Korea, travel across shared borders generates a substantial proportion of tourism within the APEC region. Some 30.1 million of the 33 million Malaysian residents engaging in international outbound travel in 2005 flew or took land transport to neighbouring Singapore. Similarly, 76.5% of inbound arrivals to Canada in 2005 were from the US and 48% of arrivals to the US originated in Canada or Mexico.

Tourism levels in Indonesia, Malaysia and Thailand, in particular, have benefited from more relaxed approaches to aviation regulation. Indonesia and Malaysia, for example, signed an expansive ASA in 2003 providing for up to 30 daily B737 services on primary routes and 14 on secondary routes between the economies. There are exceptions, however. Access to Kuala Lumpur-Singapore air services remains restrictive[23], though this may change in the near future. This is one of the few major sectors where LCCs have not penetrated due largely to the Malaysian Government's protection of Malaysia Airlines while it is undertaking restructuring.

Viet Nam has also adopted a more liberal attitude to air service provision, with improved ASAs negotiated for passengers and freight with Chinese Taipei in 2002; with Canada in 2003 and with the US in the same year (the latter providing for direct services and unlimited codesharing).

[23] Under the existing ASA between Malaysia and Singapore, only two airlines, Malaysia Airlines and Singapore Airlines, are allowed to operate between Kuala Lumpur and Singapore. AirAsia has repeatedly requested access to the route. Another LCC, Tiger Airways, has also express interest. This situation was recently reviewed by the governments concerned.

Arrivals to Viet Nam grew by 156.6% between 1995 and 2005, though off a low base (Viet Nam still accounted for only 1.1% of total APEC arrivals in 2005).

According to the World Tourism Organisation, seven APEC economies were among those with the highest average annual growth rate for international tourism arrivals for 1995-2005. These include Viet Nam (9.2% per annum), China (8.5%), Malaysia (8.6%), Japan (7%), New Zealand (5.8%) and Korea (5%).

5.1.8 International Passenger & Freight Volumes

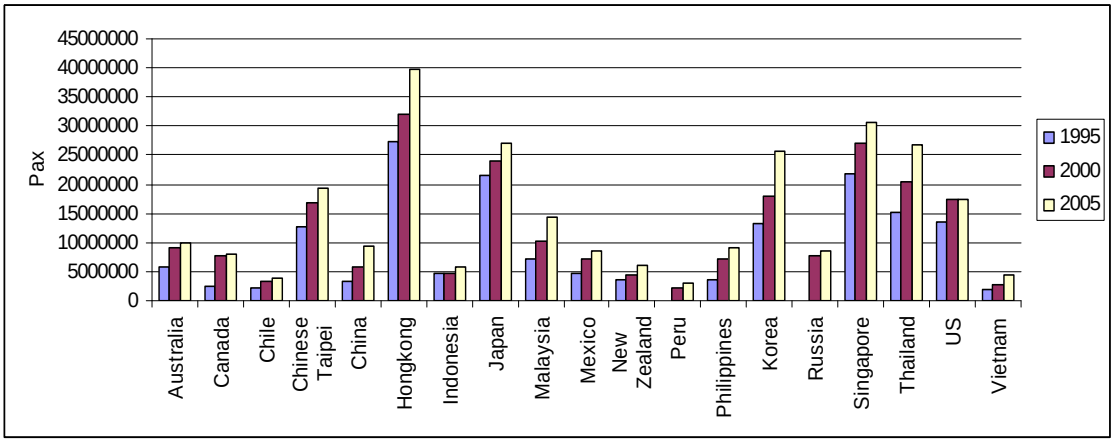
CAPA also reviewed annual international passenger and freight volumes for the hub airports of APEC economies for the three years, and ascertained the percentage growth between 1995, 2000 and 2005[24]. It should be noted that airport statistics for Brunei and Papua New Guinea were not available, and some 1995 data for Peru, Russia and Mexico was missing. However, the non-availability of this data should not greatly distort the outcomes.

International passenger numbers increased by 68.8%, and international airfreight by 82.8%, for the APEC airports in aggregate over the 10 years. This compares with increases of 70.8% in passenger numbers and 66.2% in freight on a global basis between 1995 and 2005.

While passenger growth was generally consistent with world trends, APEC airports were substantially stronger in the freight area. This reflects the robust economic and trade conditions within the region, in particular with China and its accession to the WTO; initiatives to expand freight handling capability; and more aggressive moves to deregulate cargo services on a bilateral and multilateral basis.

The results by APEC economy (hub airport) are shown in Figures 13 and 14. Consistent with the outcome of the capacity/frequency analysis for the hub airports, the traditional Asian hubs of Bangkok, Hong Kong, Singapore, Seoul, Taipei and Narita (Tokyo) continued to dominate the region's passenger traffic, accounting for 60.9% of the APEC total.

Figure 13: International Passengers by APEC Hub Airport, 1995-2005*

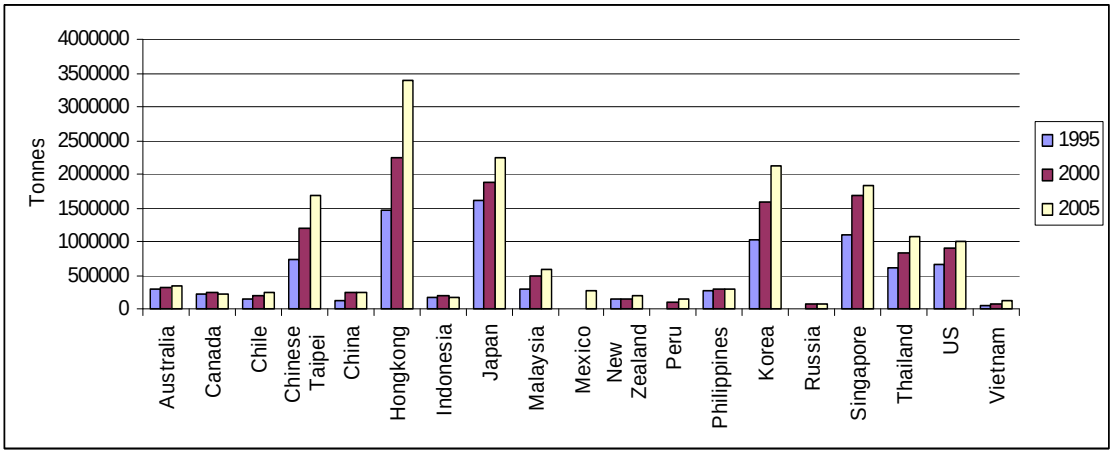


*No statistics were available for the following: Brunei, and Papua New Guinea for any year; and 1995 passenger figures for Peru and Russia.

[24] The analysis covers international passenger and freight traffic between APEC airports and all countries.

Source: Airport Council International

Figure 14: International Airfreight Volumes by APEC Hub Airport, 1995-2005*



*No statistics were available for the following: Brunei, and Papua New Guinea for any year; 1995 data for Russia; and 1995 and 2000 data for Mexico.

Source: Airports Council International

However, their cumulative share has reduced by seven percentage points from 1995 levels as Kuala Lumpur, Manila, Vancouver and Beijing Airports, among others, increased their market penetration. Vancouver traffic rose by 211% between 1995 and 2005, Beijing by 190% and Manila by 159%. The developments with airfreight followed a similar pattern to the international passenger flow. Hong Kong dominated with a tonnage growth of 133% between 1995 and 2005 to lift its share of APEC hub airport freight from 16.4% to 20.9%. This can be attributed to its proximity and function as the major international gateway to the production centres of the Pearl River Delta; the expansion of air services generally into mainland China; and initiatives by the Hong Kong Airport Authority to build freight capacity and facilities, and to streamline processing of transfer cargo.

Chinese Taipei achieved the next most significant gains, with a 130% growth in annual tonnage. Its share of total APEC freight has climbed from 8.3% to 10.4% over the 10-year period. This underscores its development as a sorting and distribution centre for high value products and express freight linking markets in North America and Northeast and Southeast Asia.

The expansion in Korea's freight capacity through the introduction of Incheon International Airport (which assumed the major airport role from Seoul Kimpo Airport), and associated development by Korean Air of its cargo operations, has seen its share increase from 11.4% to 13% with a 109% growth in tonnage from 1995 to 2005.

The high freight growth of these airports contrasts with the relatively moderate performance of Tokyo Narita Airport. Freight throughput at Narita rose by 39% but its overall share of APEC tonnages has declined from 18% in 1995 to 13.7% in 2005. This reflects, in part, the increase in direct flights to China and other parts of Asia by US and Canadian carriers which previously used Narita as a hub for distribution to these economies. The fact that the expansion freight tonnages seen at the hub airports between 1995 and 2005 exceeded that for passengers by 14 percentage points apparently indicates a greater emphasis given by APEC economies on liberalisation of cargo rights as a stimulus to trade and economic wealth.

5.1.9 Assessment of Performance Indicators

The overall picture provided by the preceding analysis of performance indicators for APEC economies clearly is distorted by the impact of major external events on market and industry trends and developments and the pace of liberalisation. It is therefore difficult to drawn definitive conclusions in relation to liberalisation progress based on such an inconsistent operating environment.

However, prima facie, there have been discernible improvements in certain areas which strongly imply greater liberalisation of markets within the APEC region, namely:

(1) A substantial increase in the number of bilateral agreements between APEC economies which gathered momentum during the second half of the 10-year period, driven in part by greater international access to China;

(2) The significant growth in the spread of city pairs served between APEC airports and economies within the region, and the number of airlines operating into and out of these airports. This suggests improved market access generally, capitalising on benefits provided by; the development of new primary and secondary access points (eg Guangzhou in southern China); expansion of airport capacity in Northeast Asia, in particular; and solid traffic growth justifying airline development of routes;

(3) Strong growth in seats and frequencies between the hub airports, especially between 2000 and 2005. Given the adverse operating conditions during this period, this trend indicates both the gains made through service development and the increasingly resilient nature of the APEC market as the high growth out of Northeast Asia offset the decline in North America;

(4) The success of the traditional hub airports, *Hong Kong, China* in particular, and emergence of new hubs such as Incheon in Korea in terms of international passenger and freight growth supports this premise. Much of that passenger growth was being driven out of regions less affected by 9/11, which gives the 6th freedom hubs a distinct advantage in being able to “feed” off unaffected markets. These Asian hubs also profited from their development as freight transfer centres, especially when passenger traffic levels were in decline due to SARS, for example;

(5) The high level of growth in inbound and outbound travel achieved by APEC economies in relation to the world as a whole was another positive sign for market liberalisation. This was consistent with the expansion in services, capacity and access points;

(6) Investment by APEC economies in the provision of additional airport infrastructure to service the international growth, as indicated by the increases in primary airports, particularly in Asia during 2000-2005. Despite that, considerably more expansion is likely to be required to accommodate the high levels of traffic growth anticipated for the years ahead.

Capacity trends between APEC economies were more moderate, suggesting a greater concentration of seats on hub airports during the relatively brief periods affected by external events.

The fact that APEC-APEC growth was only half the rate between APEC and non-APEC economies indicates a redeployment of services away from non-performing economies (eg the US and Canada post 9/11 and effects of the economic slow-down in Japan) to more buoyant markets in Europe especially.

Based on the above, it can reasonably be concluded that liberalisation played a substantial role in the development of service levels across the APEC region between 1995 and 2005. A major factor in this was China's increasing involvement and influence in the region's aviation sector. This was particularly noticeable during the second half of the 10-year period, although the benefits were not evenly spread.

5.2 Regulatory Development

The nature and structure of the 310 bilateral ASAs between APEC economies is examined in this section, using available information. As noted earlier in this report, the limitations on available historic data in relation to the development of ASAs has precluded direct comparisons between 1995, 2000 and 2005. Given these constraints, CAPA has focused its analysis in this regard on 2005, the only one of the three years for which credible information can be accessed.

This analysis is based on the most recent survey returns to the APEC Transportation Working Group, which involved responses of varying quality from 14 APEC economies. Gaps in information and economy coverage have been filled, where possible, by drawing from ICAO's Register of Air Services Agreements 2004[25], government websites or CAPA's own database and archival material.

The findings from the analyses in 5.2.1 and 5.2.2 are discussed in greater depth in 5.2.3, which also identifies specific deficiencies in achievement of the Eight Options.

5.2.1 Analysis of ASAs

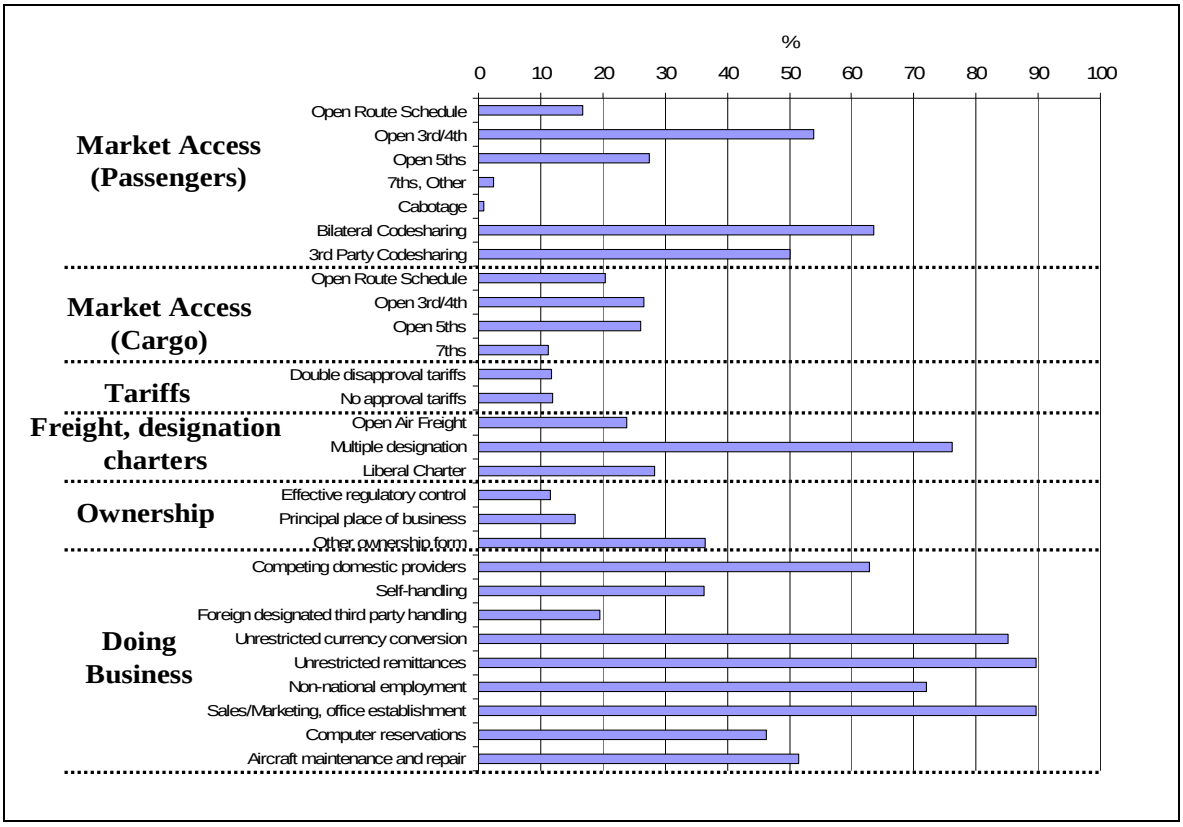
This analysis indicates in percentage terms the take-up of various components in bilateral agreements between APEC economies, as of 2005. The number of economies for which information was available on particular components varies. To compensate for this, CAPA has aggregated the number of times each component appears in the ASAs for which information is available and divided it by the number of bilateral agreements to which it applies. The result is then expressed as a percentage.

For example, information on "open 3rd,4ths (passengers)" was provided for all 21 APEC economies (and therefore a total of 310 bilateral agreements). As this element applied to 167 of these agreements, this number was divided by 310 and expressed as a percentage (53.9%). If, as in most cases, fewer than 21 economies had information available on a particular item, then the number of ASAs was adjusted downwards to reflect the total for those economies. By using this methodology, the percentages related to the actual number of economies/ASAs for which particular information was available.

The outcome of this analysis is shown in Figure 16. These components covered generally reflect the targets of the Eight Options in relation to: market access (passenger and cargo); tariffs; airfreight; airline designation; charters; airline ownership; and "doing business", as it relates to ground handling, maintenance and other activities.

[25] In using the ICAO CD-ROM, some discrepancies were noted between the information provided and the data from the APEC TPT-WG survey returns. Where this occurred, CAPA has relied on the APEC TPT-WG surveys which are more recent and were provided directly by governments. In relation to the 7 economies not providing returns, CAPA has had to use other sources. This may lead to differences between data though CAPA has sought to reconcile these to the extent that this is possible.

Figure 16: Regulatory Status Report for APEC Economies - Percentage of ASAs Incorporating Eight Options Items, 2005



Source: APEC TPT-WG Surveys, ICAO

Figure 16 essentially indicates the level of achievement of specific liberalisation goals by APEC economies as a whole within the limitations of available data and information, as of 2005. As such, it does not reflect progress made between 1995 and 2005. This analysis relies more on secondary performance indicators for that purpose.

Despite the incompleteness of ASA-related information and marked variation between the numbers of economies providing that information, the analysis is considered to be broadly representative. It involves information collected for an average of 15 of the 21 economies. A more detailed coverage of the various ASA components is provided in a table in Appendix 3 – Supporting Data.

Based on this analysis:

- Less than 20% of ASAs incorporated open route schedules for passengers (16.8%) and 20.4% for freight. However, the vast majority – 77.1% of passenger ASAs - still apply route restrictions;
- More than half the agreements (53.9%) adopted open 3rd and 4th freedom capacity for passengers, but only 26.6% provided these rights specifically for freight. This is consistent with the policies of many APEC economies which seek to progressively liberalise point-to-point capacity for passengers, and to have more relatively open 5th and 7th freedom rights for cargo. It is also consistent with the growth in city pairs, capacity and frequency, as discussed in the preceding section on performance indicators;

- Most economies enforce limitations on 5th freedom access both for passengers and freight. Open 5th freedom access was provided in only 27.4% of ASAs for passengers and 26% for freight. This, however, does not tell the whole story as a further 152 ASAs involving 13 APEC economies (72% of the ASAs covered for those economies) provided for 5th freedom access on a restricted basis. While comparisons with previous years are not available, this high percentage suggests that 5th freedom access, open or otherwise, has become a relatively common component of ASAs;
- Little progress has been made in freeing up more expansive rights. Among the APEC economies, 7th freedom rights were available in only 2.4% of ASAs for passengers and 11.3% for freight. Similarly, cabotage was only available in 2 ASAs (Brunei and New Zealand);
- Cooperative provisions are generally included in ASAs which enable home carriers to capitalise on partnership structures in a cost effective manner. Most agreements incorporate bilateral codesharing (63.6%) and 50% provide for third country codesharing;
- Multiple designation of carriers is widely accepted across the APEC region (76.1% of agreements). This is consistent with the expansion in numbers of international airlines operating within the APEC region, and reflects the adoptions by governments of pro-competitive policies for air service development which optimise pricing and service outcomes;
- Traditional ownership-and-control provisions are maintained in most APEC-related ASAs (65.1%), with the APEC target of principal place of business adopted for a relatively small percentage (15.6%) and effective regulatory control (11.5%).

  Some derivatives have also been introduced, including those combining place of incorporation and place of business or principal place of business and effective control. These presently comprise a small number of ASAs, mostly relating to Chinese Taipei (substantial ownership/effective regulatory control) and New Zealand (principal place of business and place of incorporation/effective control). APEC economies predominantly resist moves to allow substantial ownership by non-nationals, chiefly because of the potential impact it may have on their home carrier under some bilaterals;
- Some limited headway has been made in liberalising tariff provisions and filing requirements, though most economies have not reached APEC targets in this regard. Double disapproval tariff arrangements are available in only 11.7% of ASAs while a further 11.9% require no approval at all. By contrast, 52.8% of agreements still incorporate double approval requirements;
- Airfreight regulations have been relaxed somewhat with 23.9% of the ASAs covered providing no restrictions, but the majority (60.7%) are still subject to some form of limitation. Despite that, levels of freight tonnage growth into and out of APEC economies have been high. This indicates that the restrictions applied do not significantly impede the flow of freight;
- APEC economies continue to restrict charter access in their ASAs. Liberal charter arrangements are provided in only 28.4% of agreements. This may reflect the relatively limited demand for charter services within the region, or the fact that charter operators can often gain access outside of ASAs through application to the relevant governments; and

- Restrictions on airline business activities have become more relaxed generally within ASAs[26]. There are virtually no restrictions on currency conversion and remittances (85%-90% of ASA allow this); more than 60% of agreements allow for competing domestic ground handlers (though only 19.6% provide for foreign third party handlers and 36.3% for self-handling) and non-national employment; and 89.6% provide for unrestricted sales and marketing and office establishment. Some progress also has been made in the areas of computer reservations and aircraft maintenance and repair, though 46%-52% of ASAs still limit these activities.

5.2.2 Liberalisation Rankings of Economies

In order to assess the progress of individual APEC economies, CAPA further examined the extent of their liberalisation of air services (as per the Eight Options) in relation to GDP levels and the level of capacity provided both in terms of APEC-APEC seats and between APEC and All Countries. This ranking of economies demonstrates in a general rather than scientific sense the alignment of economic and industry factors with liberalisation progress.

A "progress quotient" was established for each of the 21 economies by calculating the percentage of ASAs specific to each economy to which each of the following 8 key liberalisation components apply:

- For passengers - open 3rd/4th freedom access, open 5th freedom access and bilateral codesharing;
- For freight - open 3/4th freedom access, open 5th freedom access, open 7th freedom access;
- Multiple designation; and
- Liberal charters.

These components provide a broad picture of the level of market access provided. The component-related percentages were then calculated as an overall average for each economy, and the economies were ranked from 1 (the highest percentage, and therefore most liberal) to 21 (the lowest percentage and least liberal) on that basis. The picture presented here is a composite measure of all 8 liberalisation components. CAPA has assumed – for ease of tabulation - that each of these components carries equal weighting in measuring liberalisation. As discussed elsewhere, this may not be true across all economies, as open 5th freedom is typically considered "more liberal" than open 3rd/4th. Similar rankings were applied to the economies on the basis of 2005 GDP (in current US$), and the shares held of APEC-APEC airline seats and APEC-All Countries seats to ascertain whether there was any correlation between these factors.

[26] Information on "Doing Business" was provided by 14 APEC economies through their TPT-WG Survey returns for 2005.

The outcome of this analysis is shown in the table below.

Table 2: Liberalisation Ranking of APEC Economies

Economy	Liberalisation	Ranking	GDP Ranking (US$)	Ranking APEC-APEC Seats	Ranking APEC-All Countries Seats
US	67.1	1	1	7	1
Singapore	46.5	2	14	5	5
New Zealand	42.8	3	16	15	16
Australia	40.1	4	8	10	11
Japan	35.4	5	2	1	2
Mexico*	34.1	6	6	11	10
Viet Nam	33.7	7	19	16	17
Russia	33.3	8	7	17	13
Chile	33.3	9	15	19	18
Brunei	32.7	10	20	20	20
Malaysia*	32.5	11	13	12	12
Thailand	32.3	12	12	9	7
Indonesia*	31.3	13	10	13	14
Korea	30.9	14	5	4	8
Canada	30.9	14	4	6	6
Hong Kong, China*	29.4	16	11	2	4
Philippines	26.0	17	17	14	15
Chinese Taipei	25.9	18	9	8	9
China	25.0	19	3	3	3
PNG*	35.0	20	21	21	21
Peru*	20.0	21	18	18	19

*The liberalisation rating for these 8 economies is distorted by the non-availability of information on 2 or more of the 8 ASA components.

It should be noted that the findings may be misleading for a number of economies in terms of the "liberalisation quotient" due to limited availability of detailed ASA-related data. These include Brunei, Indonesia, Papua New Guinea, Mexico, Malaysia, the Philippines and Peru and, to an extent, *Hong Kong, China*. In some cases, this situation may inflate or reduce the ranking of these economies.

With about half of the APEC economies, there is an apparent correlation between liberalisation progress as indicated by the "quotient" and the size of GDP. This suggests that the more developed economies are more advanced in their application of market liberalisation.

GDP is only one of a number of influential factors. Geographic position and service structure also affect the nature and rate of liberalisation. For example, the second highest ranking Singapore and mid-ranking Malaysia and Thailand, operate intercontinental and regional hub airports and, as such, encourage the development of 3rd/4th freedom services, in particular (i.e. servicing as a 6th freedom hubs) and 5th freedom services which use intermediate ports. *Hong Kong, China* and Chinese Taipei also fit this category, though are further down the rankings because of their restrictive approaches to 5th freedom passenger access. These economies, together with Singapore and Thailand, also operate strong carriers with extensive route networks.

Korea, by contrast, maintains a strong hub airport with liberal access for passengers but its overall ranking is diminished by the greater restrictions imposed on freight operations (due in part to the strength of Korean Air's cargo services).

China's regulatory regime is progressively easing, but it is still in the relatively early stages of liberalisation. Viet Nam is similar, but its ranking is enhanced by its more liberal ASAs relating to codesharing, designation and charters. While Japan also remains tightly regulated in terms of 3rd/4th and 5th freedom access, this is offset by its expansive operation of codesharing, charters and multiple designation.

However, the top-ranking US offers relatively open access through its network of "open skies" agreements, MALIAT and other reasonably liberal bilateral arrangements. Australia and New Zealand, both end markets, also sit within the leading five economies in terms of the liberalisation quotient.

While there is some variation in the relationship between GDP and the extent of regulation, the analysis shows that a much closer correlation exists between the size of the economy and capacity provided on APEC-APEC services and services between APEC and All Countries. This does not necessarily equate with greater deregulatory progress (as measured by the quotient), though we note that it appears to be the case for the US, Singapore, Australia, Mexico, Viet Nam, Chile, Brunei, Malaysia, Papua New Guinea, Peru, Chinese Taipei, China, the Philippines, Indonesia, Canada and New Zealand.

5.2.3 Discussion of the Study Findings & Progress Deficiencies

The foregoing analysis of performance indicators reveals significant aggregated growth over the period 1995-2005 within the APEC economies, as assessed by seat capacity, flight frequency, city pair link-ups, numbers of airports and international airlines, numbers of inbound and outbound passengers, passenger and freight volumes and numbers of bilateral agreements.

Here, it is important to establish the extent of linkage (if any) between such growth and the specific liberalisation policies adopted by APEC governments (in any or all of the Eight Options areas).

On the whole, it appears that growth (in the areas reflected by the performance indicators) has taken place amid a generally buoyant economy with healthy GDP increases, but with highly uneven degrees of liberalisation across individual economies as regards the Eight Options. In general, the APEC economies are moving toward more liberal provisions within their ASAs with each other,[27] but with different speeds and priorities.

As stated above, much of the growth can be linked in varying degrees to such developments as relaxations in multiple designation (Option 5), charter services (Option 6), freight (Option 4), co-operative agreements such as code-sharing (Option 7) and improved market access (Option 8) - but least of all to relaxations in ownership and control (Option 1).

[27] This was the conclusion of discussions at TPTPT-WG, see e.g. New Methodology Survey on Air Services Liberalisation – Analyses of Outcomes (2006/TPT-WG-28/AEG-SRV/002), available at http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/Archives/tpt-wg28/Aviation/2006_TPT-WG-28_AEG-SRV_002.doc (last accessed 15 November 2006).

In turn, much of the liberalisation in market access has been a result of the following factors:

(1) increased 3rd/4th freedom capacity for existing routes;

(2) new 3rd/4th freedom routes (particularly into Chinese cities) and

(3) the growth of low-cost carriers taking advantage of relaxations in (i) and (ii).

Beyond that, 5th freedom rights remain restricted, accounting for a smaller proportion of the growth in seat capacity, frequency and city-pair connections.[28] On its part, 7th freedom relaxation remains virtually non-existent (save in relation to all-cargo flights for specified routes).

From 1998 to 2001, the TPT-WG had made several attempts to solicit individual reports from APEC economies on the extent to which liberalisation for the Eight Options had been undertaken.[29] By TPT-WG's own assessment, many of these reports are uneven and lacking in details. Thus, useful comparisons across the region are difficult to attempt. A number of the latest reports, elicited in 2005, suffer similarly from lack of details on progress (as noted in this report).

CAPA has drawn from all these available reports wherever relevant, and provided an assessment as to how progress has (or has not) been discernible. For purposes of identifying government policy impediments to further liberalisation, it is useful to classify the issues according to the Eight Options again.

Option 1: Relaxing Ownership and Control

A survey conducted in January 1998 by the TPT-WG showed that most APEC economies required their airlines to be substantially owned and effectively controlled by their own nationals, and that with regard to their bilateral partners, the substantial ownership and effective control clause remained prevalent in most ASAs. In this regard, TPT-WG had noted the ICAO Air Transport Regulation Panel's recommendation of June 1997 to the effect that the principal place of business criterion be used in place of the traditional ownership and control requirement.[30] ICAO had observed that a principal place of business criterion with relaxed ownership requirements would encourage more foreign capital infusion for home country carriers, thereby relieving difficulties for economies with small capital markets.

Despite the intrinsic merits of these arguments, the situation has remained largely unaltered. Responding to surveys in 2000, a majority of 14 economies maintained the primacy of the traditional ownership and control requirements, though several professed an interest in considering alternative criteria.[31] The situation today is broadly similar.

[28] It is estimated that there are twice the number of ASAs with restricted 5th freedom rights than there are ASAs with open 5th freedom rights, see 2005 Regulatory Status Report Table.

[29] See the matrix of reports found at http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/Steering-Committees/Competitive/air-services-group/matrix.htm, presenting the situation circa 2000 (last accessed 15 November 2006).

[30] New Methodology Survey on Air Services Liberalisation – Analyses of Outcomes (2006/TPT-WG-28/AEG-SRV/002).

[31] See Synopses of Submissions by Coordinating Economies on each of the Eight Recommendations on More Competitive Air Services, available at http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/shepherd-page/tpTPT-WG-18-final-papers/PLEN11B.html (last accessed 15 November 2006).

As noted earlier, relatively few economies have actually reflected the principal place of business criterion in their bilateral agreements. From the responses to the 2005 survey, it is estimated that 142 ASAs contain the ownership and control requirements, while only 34 reflect the principal place of business criterion[32]. The exceptions include the contracting parties to MALIAT vis-à-vis each other (New Zealand, Singapore, Brunei, Chile and the US). One of the keenest adherents to the new principal place of business criterion is New Zealand, which has inserted it into bilaterals with Australia, Chinese Taipei, Malaysia, Mexico and Peru. Other bilaterals which reflect the new formula include the Australia-Brunei and Australia-Singapore agreements. Viet Nam has also indicated that it is actively replacing the old criterion with the new one, and has begun doing this with *Hong Kong, China*.

The reasons for the slow take-up are manifold. These include:

(1) Guarding against flags of convenience;

(2) Ensuring no prejudice to current bilateral and commercial relationships with those economies that are as yet unwilling to commit to such provisions;

(3) Ensuring proper authorisation for and control over safety and security matters; and

(4) Political discomfort with foreign entities owning more than a majority stake in a home carrier.

The biggest (perceived) impediments would be (1) and (4). Factor (2) is essentially a wait-and-see attitude, contingent on others agreeing first.

In these circumstances, it can be concluded that little of the growth (as assessed by the performance indicators above) can be linked to the replacement of the traditional ownership and control requirement by the principal place of business criterion.

Indeed, there have been virtually no new airlines created whose link to their designating state is established through principal place of business, as opposed to traditional majority ownership by nationals. Hence, the promise of foreign capital being infused into a home economy's carrier (beyond 49%) remains unfulfilled. One notable development is the creation of cross-border joint venture low-cost carriers such as Thai AirAsia, Indonesia AirAsia and Jetstar Asia. These were created in Thailand, Indonesia and Singapore respectively, involving carriers which are effectively controlled by foreign interests (AirAsia of Malaysia in the first two instances, and Qantas in the third), but whose ownership structures remain faithful to majority local shareholding. These represent a *de facto* relaxation of the ownership and control regime.

In practice, the aircraft used on Thai AirAsia's and Indonesia AirAsia's routes are the same as those in AirAsia's fleets, and the three entities are indistinguishable in terms of route integration and aircraft utilisation. At the same time, this arrangement allows (Thai) AirAsia to be designated by Thailand under the Thailand-Singapore ASA (thereby allowing for the Singapore-Bangkok service), even though AirAsia cannot fly from Malaysia to Singapore. As noted above, this approach is not enshrined by specific policy and remains arbitrary and open to *ad hoc* restrictions.

[32] A further 44 ASAs offer effective regulatory control and/or a combination of criteria. Information about the ownership provisions of the remaining 102 ASAs was either incomplete or not available.

Another LCC, Tiger Airways (partly owned by Singapore Airlines), is in the process of establishing a similar joint venture structure with Southeast Asian Airlines (SEAir) in the Philippines. SEAir plans to operate both international and domestic flights out of Clark Airport (outside Manila), using the Tiger brand.

Instances of relaxation have also been seen with economies like China which previously had very restrictive ownership requirements. China has now increased the ceiling for foreign investment in Chinese airlines to 49%. Economies like the US and Canada still maintain a maximum of 25% for foreign voting stock. At the other end of the spectrum, Australia and New Zealand allow for 100% foreign ownership in domestic airlines (though this does not extent to international airlines).

Overall, the ownership and control issue registers as perhaps the most difficult one to progress. Economies need to be persuaded as to the benefits of alternative criteria, with sufficient safeguards in place to ensure that national interests are not compromised. The LCC joint venture model is interesting in that it approaches the issue from the other end – that is ceding effective control, but retaining majority ownership. The challenge now is to devise a means for economies to consider ceding majority ownership following the ceding of control. However, economies which are willing to do this face a considerable uncertainty, namely whether other partner economies are willing to accept the designation of an airline with less than 50% local ownership. Replacing the traditional ownership formula will thus entail the active amendment of individual ASAs. As difficult as this may be, it is more likely to succeed than to embark on a multilateral agreement to do so, as difficulties with MALIAT have shown.

One possible way forward which has been suggested is for joint ownership of airlines operating solely on routes between APEC economies.[33] A carrier could have its place of incorporation and principal place of business in one APEC economy and be effectively controlled there, but be owned jointly by nationals (including airlines) of that economy (perhaps even to the tune of less than 50%) and one or more other APEC economies. Joint ownership might have benefits such as attracting capital, accessing wider management and operational expertise, achieving cost savings through joint purchasing and providing traffic feed within a grouping of airlines.

Option 2: Easing Tariff Regulations

In 2000, double approval remained the most common form of tariff approval, according to 16 reporting economies.[34]

The reasons cited included prevention of anti-competitive behaviour by carriers, protection of consumer interests and development of the domestic airline industry. By 2005, there has been discernible progress among some economies in easing tariff regulations and moving towards a double disapproval and “no filing” policy (including also electronic filing of tariffs). These have the benefits of allowing flexibility to respond to market changes and to promote competitive pricing.

Many modern ASAs reflect this trend, and consistent adherents include Australia, Brunei, Canada, Chile, New Zealand, Korea, Malaysia, Thailand, Singapore and the US. These economies typically insert double disapproval as between themselves.

[33] http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/shepherd-page/tpTPT-WG-18-final-papers/PLEN11B.html.
[34] Ibid.

Other economies like Indonesia[35] and Viet Nam have, by their own reporting, indicated a gradual move toward considering double disapproval. On the other hand, there are economies which still subscribe strongly to double approval. China, as of 2000, was still using double approval as its dominant approach.[36] By 2005, the situation was largely unaltered, with only one of its ASAs reflecting double disapproval.

Overall, there is a trend toward using double disapproval, even though double approval remains more common.

Indeed, according to respondents to the 2005 survey, the number of ASAs with double disapproval is smaller (31) than those retaining double approval (113). One way to promote greater take-up of double disapproval is to introduce safeguard provisions, such as circumstances under which home economy authorities can intervene (even where double disapproval has been recognised). This includes the need to prevent unreasonable discriminatory prices or practices, and to protect home carriers from artificially low prices of competitors arising from direct or indirect governmental subsidies.

Option 3: Doing Business

Minimising restrictions and discriminatory practices on "doing business" have also seen some progress since 1995.

Many modern ASAs have either abolished or minimised restrictions on ground handling arrangements, currency conversion and remittance of earnings, employment of non-national personnel, sale and marketing of air services products and access to computer reservation systems. Often, these are conditioned upon reciprocity by the bilateral partner. The trend is for APEC economies to adopt a more liberal approach to ground handling with the most common ASA provisions permitting competition between domestic providers, allowing foreign airlines to perform their own ground-handling and even outright provision of ground transport services by foreign entities. Examples of foreign provision include the Swissport operation at Singapore Changi Airport, which became the third ground handler at the airport in 2006. One of the other handlers, CIAS, has become a subsidiary of Dnata, a member of Dubai's Emirates group of companies. The 2004 amended ASA between the US and China is another significant example of recent liberalisation of doing-business rights.

As reported by respondents to the 2005 survey, the majority of ASAs (145) provide for competing domestic ground handlers, though 73 permit self-handling and 32 permit foreign-designated third party handling.

At the same time, a great majority of ASAs have abolished restrictions on currency conversion, remittances and employment of non-nationals. As pointed out by the TPT-WG, a clear trend is the use of doing business clauses in ASAs to facilitate more co-operative arrangements between airlines (thus, this is related to Option 7). Home country carriers are expanding codeshare (including third country code shares) and other arrangements to extend their networks and distribution channels without bearing the risk of operating their own services and in circumstances where the route rights are difficult to obtain.

[35] http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/Steering-Committees/Competitive/air-services-group/air/traiff/tariff-indonesia.doc (4 September 2000).

[36] http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/Steering-Committees/Competitive/air-services-group/air/traiff/tariff-china.doc (dated 28 July 2000).

It also recognises that restricting codeshare to 3rd and 4th freedom carriers may result in some markets not being served.[37] At the same time, it is clear that the growth of airline alliances, code share and other forms of cooperation is a market response to the limitations of the bilateral system and ownership and control provisions. If anything, this should signal a more fundamental need to reassess the underlying limitations.

Overall, though, relaxations on doing business are at best, facilitative liberalising factors. By themselves, they are unlikely to account for any growth in the aviation industry, as measured by the relevant performance indicators.

Option 4: Air Freight

Progress in this area has been mixed, but with encouraging signs pointing toward liberalisation. Several economies have embarked on providing additional flexibility and capacity for air freight services in ASAs between themselves and other APEC economies, but usually on specific routes and on all-cargo flights only. The situation is thus highly dependent on specific bilateral arrangements. The multilateral MALIAT arrangement providing for 7th freedom access for all-cargo flights is in place among the contracting states.

As for bilateral arrangements, unrestricted all-cargo services for specified routes are in place between several economies, including: Australia-Brunei, Australia-Chile, Australia-New Zealand (with 7th freedom rights), Australia-Korea, Australia-China, and Australia-US. A number of other economies, including Indonesia, are also considering relaxation for all-cargo services.

Notable developments in the air freight sector have occurred in China, where joint venture schemes for freight carriers are now allowed. However, efforts to find foreign investors for Chinese cargo carriers have encountered some difficulties (for example, Korean Air's plans for a joint venture with Okay Airlines fell through, while Singapore Airlines' venture with Great Wall Airlines had to halt flights in 2006 after it was hit with US sanctions for allegedly flying missile parts to Iran). China has also allowed the use of Haikou (Hainan Island) and Nanjing for specified 5th freedom cargo flights by foreign carriers. Haikou was designated in 2003 as a pilot project for opening up 3rd/4th and 5th freedom flights for both passengers and cargo. At the same time, it must be noted that bilaterally, China has open freight agreements with some APEC economies, while liberalizing gradually freight agreement by bilateral negotiation with other economies.

Overall, there are encouraging signs of a trend towards liberalising air freight operations, particularly if done on a reciprocal basis.

While restrictions persist in many agreements, a growing number of economies have open freight arrangements with their APEC partners. These entail features like unrestricted capacity, routing, traffic rights at intermediate and beyond points, aircraft type, designation and 5th and 7th freedom services. Typically, capacity provisions for freight are separated from the more sensitive passenger capacity issues. Some economies do not separate cargo and passenger capacity unless the bilateral partner insists on doing so.

[37] New Methodology Survey on Air Services Liberalisation - Analysis of Outcomes(2006/tpt-wg-28/aeg-srv/002), http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/Archives/tpt-wg28/Aviation/2006_TPT-WG-28_AEG-SRV_002.doc (last accessed 15 November 2006).

From the limited responses to the 2005 survey, the following picture emerges: 56 ASAs have open route schedules for freight, while 115 remain restricted. Open 3rd/4th arrangements are generally as common as open 5ths (74 to 66), while restricted 5ths are still very common (106). Significantly, as many as 25 ASAs have 7th freedom provisions.

In general, 3rd/4th freedom relaxations are the norm, with even 5th freedom relaxations being increasingly common. Seventh freedom all-cargo flights are also recognised, as long as there is perceived reciprocal benefit. Overall, the situation with freight is much more liberalised than with passengers, with 5th and even 7th freedom rights being granted. The US, Singapore and New Zealand have even effected amendments to the MALIAT agreement to allow accession on an all-cargo basis only, signifying confidence that this may be more immediately palatable to other economies (though this move elicited strong opposition from Japan).

Option 5: Multiple Airline Designation

This has been one area with a high discernible level of progress. It has become the norm for ASAs between APEC economies to have multiple designation clauses, allowing more than one carrier from each party to operate and compete on specified routes. From the 2005 survey responses, it appears that 236 ASAs have multiple designation, with only 55 maintaining restrictions.

This factor, together with increased capacity and frequency for point-to-point 3rd/4th freedom routes, has been the main impetus for the growth in air traffic between APEC economies (in terms of the performance indicators identified above).

One driver for multiple designations has been the establishment of second airlines (including low cost carriers) in many economies which previously had only one major international carrier, such as Korea, Thailand, Indonesia, Malaysia, Singapore, Viet Nam and Australia. The one significant limitation is that multiple designation is allowed by some economies only for certain specified routes with a minimum frequency of weekly flights. Another difficulty is the distribution of limited capacity entitlements of routes among several airlines.

Option 6: Charter Services

The operation of international charter services (for both passengers and freight) has been liberalised to some extent in certain APEC economies, notably Australia, Japan, New Zealand, Singapore and the US. New Zealand's liberal agreements with Australia and Malaysia, for instance, contain relaxations for non-scheduled air services. Some economies maintain conditions, such as Indonesia which only allows point-to-point charter services with no involvement of third parties. In other cases, there is a tendency for economies to allow charter services on a reciprocal or case-by-case basis, particularly when these are 3rd/4th freedom flights which complement/supplement scheduled services, as opposed to competing with them.

Charter services are also encouraged on undeveloped routes (for example, to seasonal holiday destinations) not served by scheduled services.

For those economies which have signed open skies agreements with each other, passenger and/or freight charters are not distinguished from scheduled passenger and/or freight services.

Typically, open skies arrangements permit designated airlines to provide charter passenger and/or freight services with unrestricted routes, capacity, 5th freedom traffic rights at intermediate points and beyond points, aircraft type and designation of airlines. Where open skies arrangements do not exist, the tendency is for economies to liberalise capacity, route rights and aircraft type, but not 5th and 7th freedom traffic rights.

Option 7: Cooperative Arrangements

The progress is encouraging with respect to cooperative arrangements such as codesharing (including third-country and domestic code-sharing) and alliances. Codesharing has increasingly become a norm, particularly on a 3rd/4th freedom basis. Codesharing by third countries or undesignated carriers are less common, and range from fully flexible (for example, without capacity constraints for the non-operating partner) to highly restrictive. Flexible third country code-sharing arrangements are found in a variety of ASAs, including the following: Australia-Thailand, Brunei-Thailand, Australia-Viet Nam, Australia-China, Australia-Russia, Australia-Singapore, Australia-Korea and Australia-Mexico. From the 2005 survey responses, 166 ASAs permit bilateral code-sharing, with 130 of these recognising the third-country variety.In general, APEC economies have continued to recognise the benefits of airline co-operative arrangements, particularly code-sharing and alliances.

Of the 21 APEC economies, 9 (Brunei, Chinese Taipei, China[38], Indonesia, Malaysia, Papua New Guinea, Peru, Philippines and Viet Nam) do not have carriers which are part of the three largest airline alliances – Star, SkyTeam and OneWorld. The main benefit of such arrangements is the ability to expand networks without incurring costs to operate additional aircraft. Other arrangements such as blocked space arrangements, joint operations and wet leasing are rarer, and are not typically preferred. Common conditions for codesharing include: the airline(s) involved must hold the underlying route rights; the airlines must meet international safety standards; and where permitted, in the case of third countries, the latter must also authorise codesharing on its portion of the specified routes. Some economies require filing of co-operative arrangements for prior approval, while others merely require filing for information purposes. Impediments to further growth in cooperative arrangements include concerns in some economies that unrestricted codeshare rights pose a competitive threat to their national airline(s). At the same time, such arrangements may be anti-competitive (and misleading) from the consumer perspective, and may have to be regulated closely by competition and consumer protection authorities.

Option 8: Market Access

As stated earlier, liberalised market access is most evident in increased capacity on point-to-point 3rd/4th freedom routes. Most of the ASAs (or amendments thereto in the past 10 years) have typically added increased frequency between specified points, in tandem with provisions such as multiple designation, code-sharing and liberalised doing business rights. Unrestricted or highly liberalised 3rd/4th freedom capacity is in place between several pairs of economies, e.g. Singapore-Australia, Singapore-Thailand, Singapore-*Hong Kong, China*, Malaysia-*Hong Kong, China*, Thailand-*Hong Kong, China*, Thailand-Korea, Thailand-China and Korea-Viet Nam and Australia-New Zealand, as well as between the US and its open skies partners.

[38] China Southern has entered into a Memorandum of Understanding with the SkyTeam Alliance, and is expected to join in 2007. Air China has been invited to join the Star Alliance, and China Eastern is considering oneworld membership.

Open 3rd/4th provisions are found in 170 ASAs region-wide. For other ASAs, substantial conditions or limitations as to route, capacity and frequency may be in place, such as the Australian-Korean ASA which provides for unrestricted 3rd/4th capacity, frequency and aircraft type to and from all Australian points, with the major exceptions of Sydney, Melbourne, Brisbane and Perth under Australia's Regional Package. This initiative, introduced in 1999 as part of the Australian Government policy statement on international air services, was designed to provide open access to regional destinations. It has subsequently been incorporated in more than 20 ASAs negotiated by Australia.

As noted elsewhere in this report, the US and China signed an amended ASA in 2004 allowing for phased-in liberalisation that more than quadruples the number of weekly flights and increases the number of airlines operating between the two economies. While 3rd/4th freedom routes have seen wide relaxation, 5th freedom routes are generally still restricted, and subject to intense quid pro quo bargaining.

Restricted 5th freedom arrangements outnumber open 5ths by two to one. A strict policy of reciprocity and equal benefit is thus applied. This is typically the approach favoured by economies which do not yet have an open-skies policy with partner economies. It is a common occurrence for fairly liberal economies like Australia, Malaysia, *Hong Kong, China* and Thailand to have very flexible 3rd/4th freedom policies, but highly restrictive 5th freedom conditions.

Seventh freedom rights are even rarer (an exception is the agreement between the MALIAT Protocol parties), and if present, they are predominantly for all-cargo operations. Consecutive and stand-alone cabotage (8th and 9th freedoms) are virtually unknown.

6 Impediments to Further Liberalisation

There are a number of emergent issues which have the potential to constrain further liberalisation by APEC economies, or influence its future direction. These can be broadly categorised as: (1) airline-related operational/industry issues; and (2) government-related regulatory and policy issues.

6.1 Key Industry Issues

The maintenance of an operating environment for airlines and airports which is conducive to growth is an important factor in structuring and driving liberalisation. In this section, CAPA discusses current and likely future issues which will impact on this situation.

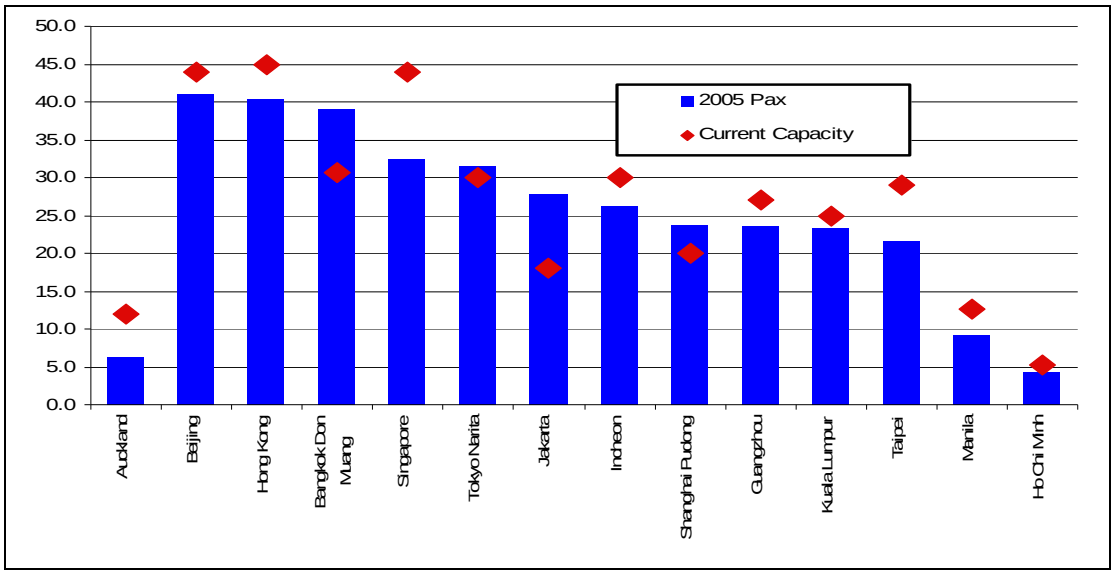
6.1.1 Tightening Airport Capacity

The high traffic growth anticipated for Asia, in particular, over the next five years will be a defining trend for APEC-related liberalisation. It will impose significant pressure on available airport infrastructure and capacity, including access to take-off and landing slots.

While governments are responding with a massive investment in additional capacity at 17 Asian airports (increasing total capacity by 290 million passengers), much of this expanded infrastructure will not be available until 2007-2012. The implications for liberalisation are that constraints may need to be placed on access to certain major gateways until they can accommodate further traffic development. Governments may also seek to redirect through ASAs new traffic to other secondary airports.

Figure 17 shows that at least four airports in the region are currently operating above capacity (one of these is Bangkok which recently alleviated the situation with the opening of the New Bangkok International Airport).

Figure 17: Comparison of 2005 Passenger Volumes with Capacity at Selected Airports in the APEC region



Source: ACI, CAPA

Given the forecast growth expected for Asia, the timing for expansion plans will be critical. According to the International Air Transport Association (IATA), Asia is predicted to grow by 222 million passengers between now and 2010 to take over from the US domestic market as the largest world market with a 27% share of traffic. Aligned with this, airlines in this region have moved to increase their fleets with current orders for 1,051 aircraft, mostly for delivery in 2007-12.

China's two largest gateways, Shanghai and Beijing, are being redeveloped as part of a US$17 billion programme of upgrading of the country's airports over the next five years. This will expand capacity at Shanghai and Beijing by 40 million passengers and 35 million passengers respectively to handle the expected extra traffic generated by the 2008 Olympic Games. Despite that, a second international airport may be needed for Beijing by 2010.

In other APEC economies, there are plans for Kuala Lumpur Airport to double capacity, while Tokyo's Narita Airport is being increased by 53%, Singapore by 45% and Hong Kong by 22%.

6.1.2 Skills Shortages

The ability of airlines to capitalise on growth opportunities arising from liberalisation may be limited by shortages of employees in skilled areas, particularly pilots, cabin crew and maintenance engineers.

China's demand is greatest of the APEC economies, reflecting its extremely robust industry and economic growth. Some 47% of aircraft orders (493 aircraft) for the whole of Asia have been placed by Chinese carriers. CAPA estimates that this, in turn, will create a need for 4,372 pilots and 12,325 maintenance engineers by 2010. These estimates are conservative, given that they do not account for employee attrition and additional orders beyond those presently known. One other recent estimate, for example, suggest that China's present 11,000-strong workforce of pilots may need to double in the next five years. Boeing has also predicted that 55,000 pilots may be required there by 2020.

A further 5,380 pilots are likely to be required in other parts of North and Southeast Asia for the same period. Southeast Asia is expected to account for 45% of this demand as LCCs continue to expand and incumbent full-service operators fulfill large fleet orders. The situation will not be as acute in the US where some 15,000 pilots are still on furlough and can be brought back into the workforce.

Few Asian airlines will be able to sustain this growth from existing or even expanded training resources. Retaining existing pilots has also become a problem, particularly in China and Southeast Asia where new entrants have been taking pilots from incumbent carriers. The CAAC, for example, has brought into effect a regulation that means pilots can only transfer from one airline to another if agreement is reached between the employers and a fee paid. As a consequence, a number of Chinese airlines are turning to foreign pilots. Recent hirings have involved captains and first officers from Europe, South America, Taiwan, *Hong Kong, China* and Australia. Pressure is also being applied to international regulations. ICAO, for example, has adopted a new worldwide standard moving the mandatory retirement ages for pilots from 60 to 65 subject to six monthly medicals and the second pilot on board being below the age of 60. While the US, France and a number of other countries are opposing this, it has the potential to relieve pilot shortages.

The corollary of the shortages is that it may be more feasible for airlines to develop alliances, outsource or even consolidate through merger than to pursue fleet growth in their own right and the inevitable labour-related problems that brings. There is also the risk that operators will be forced to decelerate their growth plans.

6.1.3 Further Pressure from Jet Fuel Prices Likely

The outlook for fuel prices suggests that relief from the record highs seen earlier this year may be short-lived. Average jet fuel spot rates have fallen by 21% since August this year. However, OPEC has indicated it will intervene and reduce production to ensure there is no further decline in prices.

Jet fuel expenditure as climbed progressively over the past 10 years from US$60 billion annually to more than US$120 billion[39]. As a consequence, fuel as a percentage of operating costs has risen from 5%-10% to 25%-27%, offsetting significant gains in labour productivity and fuel efficiency achieved during this period.

Figure 16: Movement in Jet Fuel Prices Compared to Crude Oil Rates (US$), 2003-2006

Source: IATA, Platts

With prices expected to return to higher levels later in 2007, fuel will continue to negatively impact profitability for the short to medium term at least (IATA estimates that the 2006 fuel price average of US$82 per barrel will add US$23 billion to worldwide airline costs). Asia and Oceania have been worse-affected by the prices than other regions, with current rates some 14% above that of one year ago compared to 0.7% for North America and a global average of 4.9%.

Fuel and currency hedging has eased some of this impact, as has the acquisition of more fuel efficient aircraft types. However, the pricing situation will: (1) continue to impose pressures on cost containment programmes; and (2) encourage some carriers to reduce flying, particularly on longer haul routes.

[39] IATA estimates

In regard to liberalisation, there is also a risk that the debilitating effects of high fuel prices on airlines may retard progress. Indonesia's Transport Minister Hatta Rajasa stated in May 2005 that the price issue had imposed significant pressures on the country's airlines and "we would not like to see our airlines being subject to additional competitive pressures for the time being".[40]

6.1.4 Restructuring, Consolidation Trends

The prevailing operational environment remains volatile in the airline industry, with a number of operators in the US still in Chapter 11 and others in Asia and elsewhere in the midst of restructuring.

While national carriers are undergoing rebuilding, governments seem less likely to endorse market liberalisation. The Indonesian Government, for example, blocked access by foreign LCCs to Jakarta and other destinations while Garuda is being restructured. Similarly, the Malaysian Government has adopted a cautious approach to new entry to the Singapore-Kuala Lumpur route until the completion of Malaysian Airlines' latest reconstruction.

Thus, the prospects for further liberalisation relate directly to the financial well-being of flag carriers in certain countries and impediments can occur where this is not the case. Given the cost pressures applied by fuel prices and other issues, such approaches may become more prevalent in future.

There is also a belief generally that a competitive threshold has been reached in many markets in terms of operator numbers, and that consolidation is necessary to stabilise market conditions.

However, ownership-and-control regulations and competition legislation have made it difficult for the types of mergers seen within the EU (Lufthansa-SWISS; Air France-KLM) to take place in APEC economies. The US is also seeing the beginning of a consolidation phase with the US Airways-America West merger, US Airways pursuing a hostile take-over of Delta Air Lines and Continental Airlines considering merger options. In 2003 and 2006, Qantas and Air New Zealand made two unsuccessful attempts to establish a cooperative partnership. Both proposals faced strong opposition from competition authorities due to the anticipated impact on consumer pricing and service levels.

As a consequence of the legislated barriers, carriers often cannot undertake a much-needed rationalisation of excess capacity and have to contend with less economic options. This has seen a preference for airlines in this region to codeshare only on routes where they complement rather than compete with each other. Otherwise, they risk contravening consumer-based anti-trust laws.

6.1.5 Advances in Aircraft Technology

The introduction of new, more economic aircraft types with specific range or size attributes is more likely to direct the focus of liberalisation rather than impede its progress.

[40] Statement of May 31, 2005, released by the Ministry of Culture and Tourism of the Republic of Indonesia.

The 550-seat A380, for example, will concentrate higher capacity on slot constrained airports, in effect accommodating market growth without expanding frequencies. As such, it will largely replace the B747-400 on intercontinental sectors and operate in a similar manner with intermediate stops where available to build loads.

Given that current international ASAs are founded mostly on B747 or B767 equivalent capacity, capacity allocation may need to be expanded through a renegotiation of bilateral agreements on routes where the A380 operates. However, the A380 is unlikely to service airports other than major gateways, thereby focusing higher levels of traffic on origin and destination airports.

The smaller, ultra-long range aircraft, such as the B787-800, A340-500, B777-300ER and the B777-200LR, have a different modus operandi. These so-called "hub-busting" aircraft types can operate point-to-point over large distances to a spread of destinations which presently cannot be served non-stop. There is the potential, therefore, to fragment exist hub-based routes and open up new routes, dispersing traffic over a wider range of destinations. Such services, generally, will have a strong business travel base and yield orientation, and in contrast to the A380 their focus will be on frequency rather than capacity.

6.2 Government Policy Issues

Invariably, government policy on issues such as ownership and control, protection for national airlines, national security considerations and competition legislation will have a profound effect on the direction and pace of liberalisation. To varying extents, these factors are themselves the products of domestic politics, entailing various interest groups seeking to influence their respective governments' policy choices.

6.2.1 Reluctance to Relax Ownership and Control

This report has discussed the impediments arising in relation to ownership and control provisions in ASAs, and the relatively slow process of reform among APEC economies in this area. Mostly, these relate to concerns about: (1) the risk of existing bilateral and commercial relationships being compromised with other economies: and (2) the political ramifications of foreign entities acquiring majority holdings in home carriers.

(1) is particularly intractable, as it depends very much on reciprocity by other governments. The second factor often arises from nationalistic sentiments for flag carrier(s), the common belief being that such carriers, in order to retain their national character, must not be majority-owned by foreigners. In tandem, these factors cause governments to be fearful that should majority local shareholding be abolished, their flag carriers may cease to be recognised as such by their bilateral partners and may no longer be allowed to fly to other countries. Negotiating bilaterally with selected partners may not be satisfactory, as the designated carrier would still fall foul of the nationality criterion in bilateral agreements with other countries.

A multilateral solution appears to be the only effective remedy. However, as detailed earlier, there has been little political appetite for instruments such as MALIAT.

Consequently, no major existing international airline in APEC has been recapitalised to reflect majority foreign shareholding. Neither have there been new airlines whose link to their designating state is established through principal place of business or effective control, as opposed to traditional majority ownership by nationals.

6.2.2 Domestic Strategic Factors

Apart from fears that other governments may not recognise a home carrier, impediments to relaxing ownership and control may arise from domestic strategic factors. In the US and other countries, domestic laws restrict foreign ownership and control of national carriers. Pursuant to the US Civil Reserve Air Fleet policy, selected aircraft from US airlines are contractually committed to support military activities in times of emergency. This argument is often used to rule out greater foreign participation in ownership and control of US carriers.

At the same time, the US and other economies maintains restrictions on cabotage as well as preferential policies for their carriers such as the US Fly America programme. These arise not only from national security considerations, but also pressure from pilots' and airline workers' unions which fear for their jobs and wages should foreign airlines and entities obtain greater ownership and control of national carriers. In 2006, the US Department of Transportation (DOT) proposed relaxing the notion of "control" to give foreign investors more say in strategic commercial decisions affecting US carriers, while continuing to limit foreign ownership of voting stock to 25%. Most recently, the DOT, under Congressional pressure, withdrew the proposed rule change.

6.2.3 Continuing Protection for National Carriers

The issue of ownership and control is inextricably linked to the common instinct among governments to favour their national airlines and to protect them from foreign competition. Often this arises from domestic political pressure in the form of labour unions seeking to protect jobs and wages, politicians' nationalistic sentiment for the home carriers as well as intense lobbying by the carriers themselves. In some instances, excessive protection has led to persistent subsidies and bail-outs for struggling flag carriers, which simply forestall much-needed restructuring and consolidation in the industry. The result is typically overcapacity in routes, operational inefficiencies and reduced competitiveness.

Overall, governments (and their carriers) still subscribe to the rationale that route rights negotiated under a bilateral ASA belong exclusively to the two negotiating countries and/or their nationals. There is also the fear that unilateral relaxation of the ownership and control requirement would permit better-capitalised (i.e. foreign-capitalised) airlines from other countries to fly to and from the home country, to the detriment of the national carrier.

In many economies, government policies are often dictated by the wishes of the dominant national airline(s), whose interests may be elevated to the national interest. Here, other interests such as consumer welfare (i.e. low prices) and tourism benefits often get overridden. The national carrier classically sees the bilateral arrangement as being favourable, since this effectively restricts competition on a route to themselves and the bilateral partner's carrier(s). Even as regards the bilateral partner, strict reciprocity is often demanded when exchanging increased capacity for 3rd/4th freedom rights.

At the same time, third party competitors can be kept at bay, which would not be possible if a multilateral arrangement were entered into. Indeed, the central feature of a multilateral like MALIAT is that it allows third party carriers to service points between two other state parties on a 5th freedom basis.

Protection for incumbent national airlines takes many forms from restrictive access, designation, tariff and ownership-control provisions to more subtle approaches such as programmes requiring government officials to purchase travel on national airlines. In some cases, government policies restrict the operation of low-cost carriers on certain lucrative routes. For instance, the Malaysian Government's cautious stance on revising its bilateral ASA with Singapore and on opening up the Kuala Lumpur-Singapore route to low cost carriers is believed to arise from Malaysia Airlines' interest in keeping this route closed.[41] Similarly, Indonesia has established a moratorium on foreign low-cost carriers flying into its major cities, a move believed to stem from the desire to protect Garuda.

6.2.4 Effects of Competition Policy

The enactment of competition or antitrust legislation in several economies has also has made it difficult for carriers to merge or consolidate operations. Thus, even if two economies are prepared to relax ownership and control restrictions in a mutual fashion, the resulting entity created by one airline buying an equity stake in another may still fall foul of competition laws. Thus, the prospect of an Air France-KLM-type arrangement is unlikely within the APEC region, at least in the near future.

Even less ambitious tie-ups like the proposed Qantas-Air New Zealand joint services arrangement have been rejected by competition authorities on the basis that the consumer detriment in terms of reduces services and likely higher fares outweighs any benefit from the partnership. As noted earlier, legislated barriers prevent carriers from undertaking much-needed rationalisation of excess capacity. This explains why limits are applied to the codesharing and alliance arrangements.

The conflict between aviation liberalisation leading to consolidation and competition policy is difficult for governments to resolve, as the benefits from the former inevitably will result either in diminished competition, service rationalisation (to achieve cost reductions) and/or a strengthening of market power. Without consolidation, however, the financial/capital positions of some carriers may be harmed with consequent increased pressures to reduce service levels and limit growth opportunities. Again, consumers lose out.

6.2.5 The Impact of Global Liberalisation Trends

In light of the restrictions currently in place among APEC economies, one should appreciate the ramifications of the increasingly liberal arrangements that these economies are signing with the US and the EU. In particular, there could be consequences for their carriers if more of the APEC region's economies accept the EU's horizontal mandate. Most APEC economies have been approached by the EU in this regard, including the US, Russian Federation, Canada, China, Malaysia and Australia, but only Singapore, New Zealand and Chile have signed horizontal agreements to date.

Some economies may feel that there is no incentive for them to accept the EU's request, as doing so would only lead to new EU competing carriers on a particular route with no increased access into Europe for third country carriers.

[41] This policy is reportedly being reviewed by the Malaysian Government.

In any event, increased access may not be an adequate incentive if the relevant routes already face over-capacity or if third country carriers are not interested, for whatever reason, to increase services into the EU.[42]

Even those economies which have accepted the horizontal mandate like Singapore and New Zealand have insisted on "free-rider" conditions. These are to protect against "back-door" entry by carriers from EU states with whom the third states have no or restrictive bilateral relationships.

Looking to the future, the implications for the APEC region could be significant. If more and more economies in the region accept the horizontal mandate, it would mean that increasingly, more EU carriers may be able to launch flights from any number of EU points to a number of destinations (assuming there is also an increase in capacity, which may not always be the case). With time, the stronger EU airlines may conceivably establish multiple European bases (located outside their home country) to conduct what were formerly prohibited 7th freedom flights.

Yet, because APEC economies have not traded seventh-freedom rights (or even 5th freedoms on a large scale) among themselves, their airlines will continue to operate only 3rd/4th (and limited 5th) freedom flights out of their own home bases. In other words, their airlines will remain single-hub carriers operating single-hub networks, unable to retaliate with an equivalent "spray" of flights to Europe from multiple bases within the APEC region.

At the same time, what is also a likely scenario is that the EU carriers will consolidate operations either through closer co-operative arrangements or even outright mergers. This is already being evidenced by the Air-France and Lufthansa-Swiss arrangements. What is at issue here is the stronger competitive position that leaner, stronger-capitalised and eventually merged EU carriers will enjoy vis-à-vis their Asian counterparts.

For their part, most APEC carriers will not be able to enjoy the benefits of foreign equity infusions (beyond 49%) or of an outright merger with other carriers. This is again due to the classic foreign ownership and control restrictions which APEC economies maintain for their airlines.

At the same time, APEC economies are likely to continue denying each other's carriers full 7th freedom rights to fly to third economies. Taken together, these restrictions on foreign capital and 7th freedom rights may substantially curb the growth and expansion opportunities of Asian carriers vis-à-vis the EU carriers.

[42] For details, *see* Tan, note 1.

7 Development of Future Strategy

The multiplicity of aviation regulatory policies within the diverse mix of economies which comprise the APEC region inevitably gives rise to complications in addressing harmonisation and the pace of change.

This study demonstrates that some economies have been more successful than others in adopting the identified targets of the Eight Options, and that development has been greatest where the resistance is least, namely with the "soft options" such as codesharing and multiple designation. Both of these areas were deemed to be high priorities by APEC and, to that extent, progress has been encouraging though unevenly distributed across the region.

The more advanced economies are generally those where international aviation is at a relatively mature stage and the underpinning economy is well-developed. There are also economy and airline specific issues relating to geography and market type, and participation or otherwise in expanded bilateral or plurilateral agreements.

Liberalisation, for example, is often more attractive for economies highly dependent on tourism with a consequent requirement to optimise air service provision from source markets. Limitations on foreign investment and infrastructure, however, may impede development. Similarly, weaknesses associated with the incumbent flag carrier can encourage governments to be more cautious and pursue incremental approaches to liberalisation rather than wholesale deregulation which may further jeopardise the competitiveness and indeed viability of the national airline. Conversely, economies with relatively stronger airlines have shown greater willingness to liberalise.

A Two-Tier System for APEC

In recognition of these inherent differences between member economies, APEC could consider inviting economies to align into two groups – one for the more advanced, developed economies, and the other for the less developed economies. Each would be set targets under the Eight Options which reflect their stage of development. Thus, instead of simply ranking the Eight Options in terms of priority, it may be time for APEC economies to rank themselves in terms of readiness for liberalisation.

The first group of economies, for example, may be given more ambitious objectives such as proceeding to open 5ths and 7ths, double disapproval tariffs and ownership reforms; while the second group would focus on more achievable targets (open 3rd/4ths, liberal charters, codesharing, multiple designation and doing business). Through this approach, progress would be more aligned to aviation/economic development and other economy specific factors. It may be that economies should have to be invited to "rank" themselves within either of the two groups, as they would be best suited to assess their own level of preparedness. At the same time, this may be more politically acceptable, with greater likelihood of economies "buying into" commitments that they voluntarily identify with.

International aviation continues to be a volatile sector which is highly exposed to economic and industry cycles, as well as external events capable of disrupting market development.

Overlaying this are a number of current issues which will impact on operators and markets for the foreseeable future.

These include the outcomes of restructuring moves, the likelihood of a return to higher fuel prices, an exacerbation of skilled staff shortages and intense competition from merged competitor airlines (particularly in the EU), all of which will increasingly influence airline strategy and may encourage moves towards alliances and consolidation.

Priority 1: Ownership Reform

APEC's future approach to liberalisation needs to reflect these realities and constraints, particularly requirements for carriers to achieve further operational efficiencies and to access capital resources. In this context, moving to an ownership criteria offering enhanced flexibility should be a priority.

As noted, reforms to the traditional substantial ownership-effective control formula for bilateral ASAs have been slow in materialising for various reasons. Very few economies have moved to the principal place of business criterion targeted under the Eight Options. It is clear that the substantial ownership provision, in particular, is still embraced by most economies as part of the "national interest" argument. However, recent developments with some low-cost airlines in Asia in forming cross-border Joint Ventures have indicated that some economies are more than prepared to cede the question of effective control if majority national ownership remains in place.

This report has discussed the establishment by airline ventures based in Thailand and Indonesia which are minority owned and controlled by Malaysia's AirAsia, but are able to access the domestic and international rights of those economies. Other examples include Jetstar Asia which operates out of Singapore under the control of Qantas; and Tiger Airways' planned Joint Venture in the Philippines. Outside the APEC region, similar ownership structures have been established by Australia's Virgin Blue which operates Polynesian Blue, a 49% owned (but Virgin controlled) joint venture based in Samoa; and Britain's Virgin Group which holds 49% of Virgin Nigeria, and operates it as the country's flag carrier (this arrangement has not been accepted by the US, however). Before the collapse of the Ansett group in 2001, Ansett International was 49% owned and controlled by Air New Zealand with the other 51% held by two Australian institutions to preserve bilateral rights.

Several precedents, therefore, exist for the "effective control" provision to be removed from bilateral agreements. Such a move may prove to be a more workable interim reform to ownership structures than the more drastic – and, in many cases, less politically palatable – option of abandoning substantial ownership/effective control altogether. This approach recognises that the enforcement of effective control is already being progressively eroded anyway by airline initiatives, much in the same way as codesharing was established to overcome the strictures imposed on route access under the bilateral system.

APEC can retain as its ultimate target the adoption of principal place of business. There will continue to be a migration towards this by some economies, but the "half-way house" option of removal of effective control may provide a more achievable pathway.

A more radical, and no doubt more contentious, solution is that flagged to the TPT-WG of joint ownership of airlines operating solely on routes between APEC economies.[43]

[43] http://www.apec-tpTPT-WG.org.cn/TPT/tpt-main/shepherd-page/tpTPT-WG-18-final-papers/PLEN11B.html. This proposal involved a carrier having its place of incorporation and principal place of business in one APEC economy and being effectively controlled there, but be owned jointly by

Achieving a multi-national ownership structure is complicated, however, and still needs to satisfy bilateral partners outside the region.

While the concept of establishing a common pool of equity across borders has been effected in the EU through the Air France-KLM merger and Lufthansa's acquisition of SWISS, both of these developments have had to provide for an orderly phased transition to protect the international rights held with bilateral partners outside the EU[44]. Lufthansa, for example, has moved from 11% to 49% ownership and, subject to the approval through SWISS's bilateral agreements, on to 100%.

The Single Aviation Market (SAM) Agreement between Australia and New Zealand is a very liberal structure and provides access to SAM for airlines owned, and with effective board control, by nationals from either or both economies. However, Australian and New Zealand international airlines serving routes outside of SAM still have to be majority owned and effectively controlled by their respective nationals.

Ownership (and indeed other) reforms ideally would be realised through a multilateral structure such as MALIAT. This seems unlikely, however, given the limited participation of economies.

Priority 2: Open 5th Freedom Access

The greater liberalisation of 5th freedom rights (and eventually 7th freedom) has the potential to bring substantial benefits to operators and APEC economies, especially those which are developing hubbing capabilities. It could also assist in countering any adverse impacts on Asia's carriers, in particular, arising from the spread of the EU's horizontal agreement.

As noted in this report, restrictions on 5ths apply in most ASAs and progress towards freeing up these rights has been limited. While the removal of restrictions on 5ths presents a challenge to some national carriers, it can produce more competition on routes with positive consequences for consumer pricing, encourage market diversity, generate additional capacity to service tourism markets and improve the flow of passengers and freight across the region. In short, such a move offers significant economic benefits which also assists the development of airport infrastructure. Obviously, bilateral relaxation of 5th freedom rights will have to be done on a reciprocal basis, with benefits for both sides. However, economies can be encouraged to view such negotiations from a broader perspective, so that other rights can be exchanged for 5th freedom rights. These would include 3rd/4th, freight and multiple designation rights.

Priority 3: Accelerated Facilitation of Airfreight

Freight liberalisation generally has proceeded slowly in the APEC region, partly because of its links with passenger services which provide substantial belly-hold space for air cargo.

nationals (including airlines) of that economy (perhaps even to the tune of less than 50%) and one or more other APEC economies.

[44] Under the Air France-KLM arrangement, the Dutch Government and other Dutch interests will continue to hold 51% of the voting rights in KLM until 2007 to ensure maintenance of existing agreements. 100% of the economic rights for KLM and Air France reside in a joint Air France-KLM holding company (this company is 81% owned by Air France shareholders and 19% by the Dutch)

Given its overall importance in serving export-import trade and goods transfer, in particular within Asia and between Asia and the US, CAPA believes progress in this area should be given a high priority. This could be achieved by encouraging unlimited access for all-cargo operations within bilateral agreements.

MALIAT has already made provision for this (including accession on an all-cargo basis only), as has ASEAN. Unilateral drivers will also be important, as can be seen from China's decision to progressively open up its huge cargo market on a 3rd/4th as well as 5th freedom basis.

Priority 4: Maintain Progress in other Areas

Further incremental development of the other elements of the Eight Options should continue, with a focus on:

(1) further opening 3rd/4th access;

(2) the establishment of double disapproval tariffs;

(3) unrestricted "doing business" activities;

(4) more liberal codesharing arrangements, including encouragement for joint services; and

(5) expanded charter access.

Additional progress in the above areas will apply pressure for changes to the more complex issues. The liberalisation of these aspects ultimately will reach a critical mass where economies will find it desirable for the consistency of policy to remove restrictions.

8 Conclusions

CAPA's study of the progress achieved by APEC economies between 1995 and 2005 has underlined the varied performance of the different economies in adoption of the Eight Options targets. There are many reasons for this, not least the extraordinarily volatile industry and market conditions where priorities turned from liberalisation opportunities to more insular and protective regulatory settings in some cases.

The disruption to normal market conditions caused by the Asian Financial Crisis in 1997-98, the 9/11 terrorist attacks in 2001, the Gulf conflict and SARS, conspired to slow or impede development of the Eight Options programme through the 10-year period. Liberalisation, in effect, took second place to concerns over national carrier viability in North America, parts of Asia and elsewhere, border security and the containment of spiralling fuel costs.

Despite that, this analysis of performance indicators and regulatory development indicates that the APEC region has been able to achieve reasonable levels of market growth in largely adverse circumstances - and some selective progress towards the Eight Options goals. This progress has not been evenly distributed and, generally, is more substantial in APEC economies with relatively mature aviation markets and developed economies.

The liberalisation path has been assisted by the participation of a number of economies in plurilateral structures such as MALIAT and the Andean Pact, as well as "open skies" agreements and sub-regional initiatives (for example, the Australia-New Zealand Single Aviation Market and the tripartite agreement between Singapore, Thailand and Brunei). Mostly though, changes were effected through bilateral agreements.

China played a significant role in the process, both as a platform for more expansive international development by its own carriers and as a deregulating force providing greater access to its own high growth market for foreign operators. The US was also influential through its network of "open skies" agreements and as a founder member of MALIAT.

The analysis found that:

- During the period under review, there has been a considerable increase in: the number of bilateral agreements between APEC economies; the spread of city pairs operated within the region; numbers of international airlines serving APEC-related routes; and seat capacity and frequencies between hub airports, especially between 2000 and 2005. Capacity growth between APEC economies was more moderate, but still relatively buoyant, consistent with healthy GDP growth.
- Much of the growth achieved can be linked to a relaxation of restrictions on designation, freight, charters, codesharing and enhanced market access. The latter has seen increased 3rd/4th freedom capacity and new routes (especially into Chinese cities) and the growth of low-cost carriers.
- Beyond that, 5th freedom rights remain restricted, accounting for a smaller proportion of the growth in seat capacity, frequency and city-pair connections, while 7th freedom relaxation remains virtually non-existent (other than for all-cargo flights on specified routes). Little progress has been achieved to date in moving to more liberal ownership and control provisions. Traditional criteria still operates in most bilateral agreements within APEC.

On the whole, it appears that growth has taken place with highly uneven degrees of liberalisation across individual economies as regards the Eight Options. In general, the APEC economies are moving toward more liberal provisions within their ASAs with each other, but with different speeds and priorities.

The further development of the Eight Options faces a number of impediments which are likely to impact to varying degrees on the nature and pace of liberalisation. These include, among others, airline restructuring; a resumption of higher fuel prices; shortages of skilled workers, particularly pilots and engineers; and inadequate airport capacity to accommodate future growth. APEC economies have invested in the provision of additional airport infrastructure to service the international growth, as indicated by the increases in primary airports, particularly in Asia during 2000-2005. Despite that, considerably more expansion is likely to be required to accommodate the high levels of traffic growth anticipated for the years ahead. As well, some governments continue to apply policies that retard liberalisation. There is a general reluctance to relax ownership and control regulations for fear of jeopardising bilateral agreements with other APEC economies. Protectionism of national carriers is also prevalent. In some instances, excessive protection has led to persistent subsidies and bail-outs for struggling flag carriers, which simply forestall much-needed restructuring and consolidation in the industry. Attempts to consolidate have also been frustrated by the application of competition policy which sometimes prevents development of joint services or establishment of partnerships offering enhanced market prospects.

Consolidation is often desirable as a means of strengthening the long-term sustainability of air service provision, and easing pressures associated with excess capacity and damaging competition. However, it can only proceed if the legislative and regulatory processes permit. Harmonisation of regulatory structures is inevitably difficult to achieve in a grouping as diverse as APEC. This is borne out by the variation in progress between the economies. One means of resolving that may be to divide the region between the developed economies (i.e. those with established, mature aviation markets and a strong GDP) and developing economies (generally smaller, relatively immature markets); and focus their Eight Options priorities accordingly in a manner more appropriate to their stage of development. This could done on a voluntary basis recognising the “achievable” levels of liberalisation possible within the circumstances of particular economies.

In relation to future strategy, CAPA recommends that APEC should:

(1) Establish a dual approach to the Eight Options programme by differentiating targets between developed and developing economies;

(2) Designate the achievement of reforms to ownership regulations as a high priority, and consider the introduction of an interim target of removing effective control provisions from bilateral agreements;

(3) Encourage more aggressive adoption of open 5th freedom rights (on a reciprocal basis), as a means of conferring greater economic/tourism benefits and building competition;

(4) Accelerate the removal of restrictions on all-cargo services to enhance the flow of trade across the region; and

(5) Continue incremental development of other aspects of the Eight Options with the objective of achieving greater progress with liberalisation of market access, tariffs, charters and business activities.

Appendix 1: Report Sources

- *International Air Transport Association (IATA),* Index of World Traffic Flows, Annual Reports
- *International Civil Aviation Organisation (ICAO),* Database of Air Service Agreements 2004
- *ICAO Annual Reports*
- *Association of Asia Pacific Airlines*, Annual Statistics
- *World Trade Organisation*
- *Airports Council International*, Data on International Passengers & Freight
- *International Monetary Fund/World Bank*, GDP Statistics
- *Australian Bureau of Transport and Regional Economics*
- *Official Airline Guide*, Database of Capacity & Asia Pacific/World Schedules
- *IATA/SRS Analyser*, Database of Capacity & Frequency
- *Organisation for Economic Co-operations and Development*
- *Centre for Asia Pacific Aviation*

  - Monthly Essential China

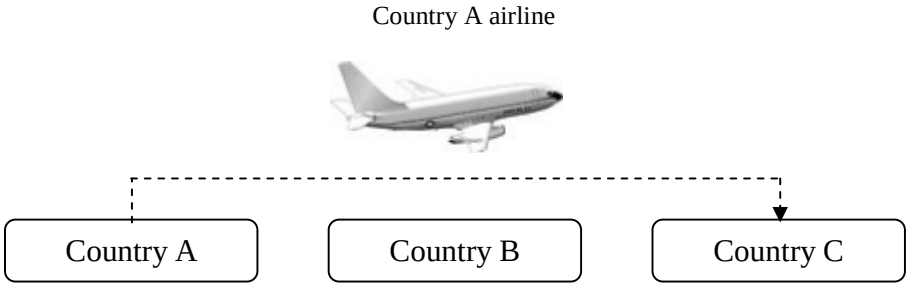
  - Bilateral Agreements 2002-2005

  - Airports Database
- *APEC Transportation Working Group*, Air Service Liberalisation Surveys 2000 and 2005
- *Australian Department of Transport and Regional Sevices*
- *Pacific Asia Travel Association* (PATA), Data on Inbound/Outbound Statistics
- *CIA World Factbooks*, Airports Data
- *InterVISTAS*, The Economic Impact of Air Service Liberalisation, InterVISTAS
- *US Bureau of Economic and Business Affairs*, Open Skies Agreements
- *Professor Alan Tan*, Liberalising Aviation in the Asia-Pacific Region: The Impact of the EU Horizontal Mandate, XXXI Air & Space Law 432 (2006).
- *Asian Development Bank*
- *American Express*, Travel & Tourism in the APEC Region

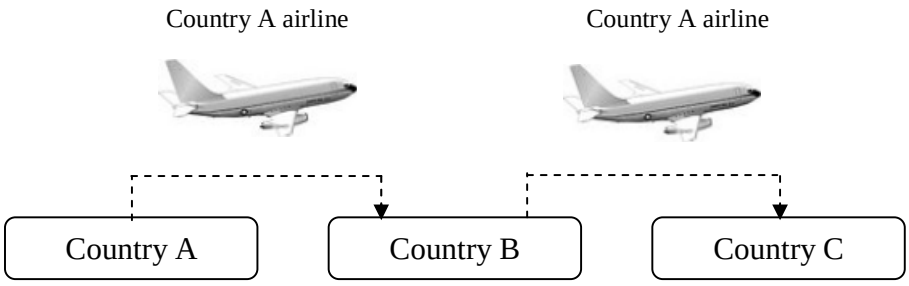
Appendix 2: Freedoms of the Air

The following are definitions of the Aviation Freedoms of the Air:

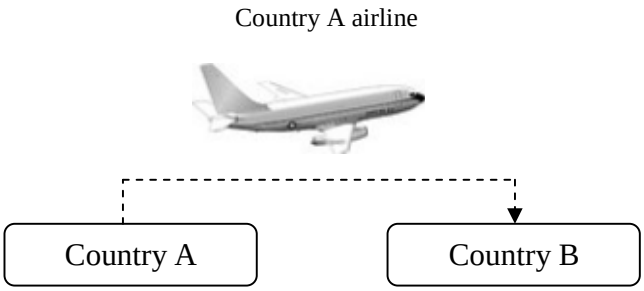
First Freedom: The right to fly across the territory/airspace of another State (Country B) without landing.



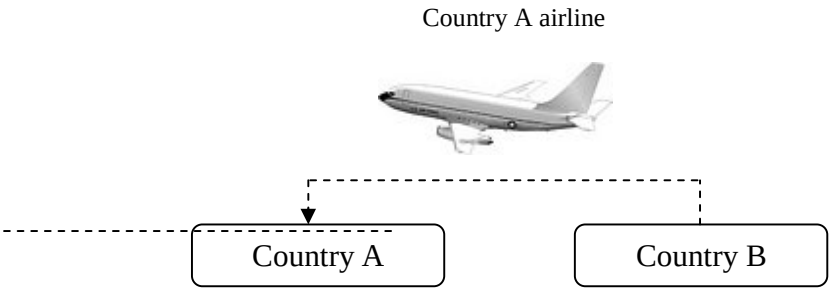
Second Freedom: The right to land in another State for non-traffic purposes (e.g. emergency repairs).



Third Freedom: The right to deliver traffic into another State.

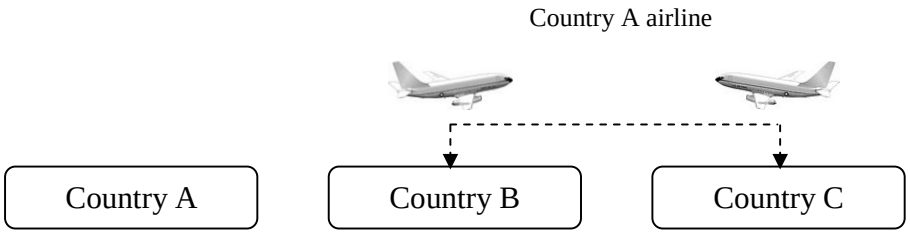


Fourth Freedom: The right to pick up traffic from another State.

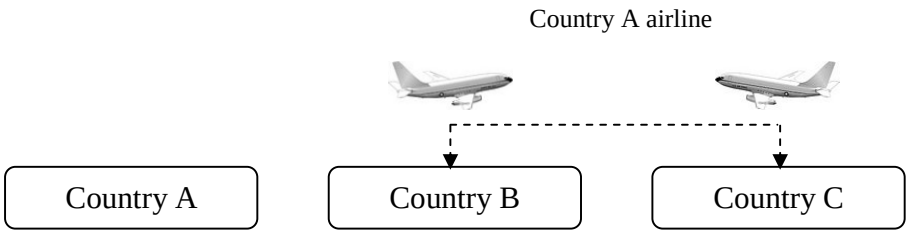


Fifth Freedom:

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.

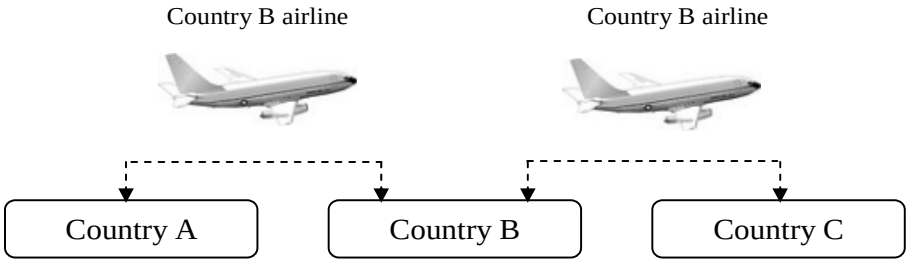


Country A – Country B ASA: Fifth freedom rights between Country A and Country B, enable Country A to use the Country C as a beyond point.



Sixth Freedom *[45]:

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:

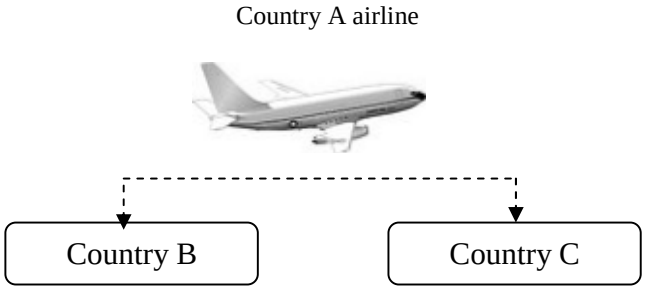


Sixth freedom rights arise through Country B having separate Air Service Agreements with both Country A and Country C, which they use to combine services.

[45] * These freedoms are not recognised by the Chicago Convention. However such a right can be included within bilateral agreements between nations.

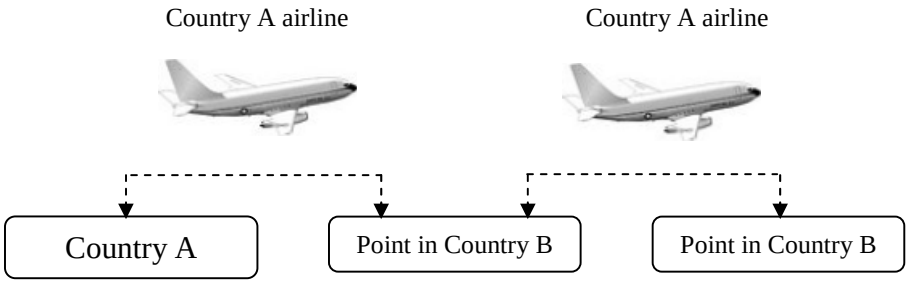
Seventh Freedom *:

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 *:

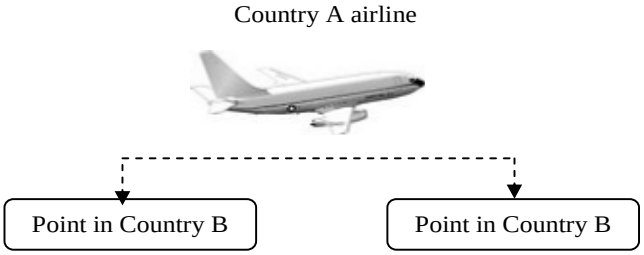
The right to transport intra-state traffic within a foreign state on a service that either originates or terminates within Country A (e.g. A Country A flight that originates in Country A, then lands in Country B and continues to another point in Country B). This freedom is also known as “consecutive 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).



Appendix 3: Methodology for Liberalisation Rankings

The Centre developed the following methodology for the ranking of APEC economies discussed in Section 5.2.2.

The liberalisation criteria applied was based on the extent to which certain factors were adopted by the 21 economies in their Air Service Agreements with other APEC economies. This criteria was defined in relatively broad terms focusing onareas where restrictions have been removed or liberal clauses introduced consistent with the objectives of the Eight Options, namely:

- Open 3rd/4th and 5th freedom rights for passenger services and freight;
- Bilateral codesharing for passenger services;
- 7th freedom access for freight;
- Multiple designation; and
- Liberal charters.

In all, eight components of ASAs normally associated with liberalisation progress were compared on the basis of information provided by the economies in their responses to the 2005 surveys conducted by APEC and ICAO data. These components were regarded as key progress indicators, particularly in relation to market access and diversity for passenger services and freight.

Importantly, CAPA focused on areas where reasonably complete information was available for all APEC economies. Even by doing this, the outcome may have been misleading for a number of economies where information was especially thin.

Other factors such as “Doing Business”, ownership and tariffs were excluded from the ranking process due to the inconsistent and limited information available. Given that a number of economies did not provide this data or offered it on an incomplete basis, like-for-like comparisons could not be made for all economies and its inclusion in our view would have unduly distorted the overall outcome.

In developing rankings, CAPA calculated the percentage of ASAs held by the various APEC economies with other economies for each of the eight components. The different percentages were averaged for each economy to provide a “liberalisation quotient”. This quotient is provided in the report as a guide to progress achieved but, as emphasised, is only accurate within the scope of information provided or available.

Weightings could have been applied to each of the components examined to reflect the degree of difficulty in achievement (for example, open 5th and 7th freedom rights are generally harder to accomplish than say 3rd/4th freedom access). However, this was not seen as appropriate, given that the intention of the exercise was to provide an overall picture of liberalisation development.

Appendix 4: APEC Progress Analysis – Supporting Data

The following tables contain the base data collected by CAPA for this report:

Table 3: Shares of Average Weekly Capacity and Frequency, APEC Economy-APEC Economy, 1995-2005

APEC Country	APEC Country-APEC Country										
	Capacity					Frequency					
	2000	% Total	2005	% Total	%00-05	2000	% Total		2005	% Total	%00-05
Australia	218395	5.5	271460	5.7	24.3	815	4.4		1016	4.2	24.7
Brunei	13940	0.4	13554	0.3	-2.8	82	0.4		82	0.3	0.0
Canada	394225	9.9	336725	7.1	-14.6	4421	23.8		3891	16.1	-12.0
Chile	16021	0.4	16820	0.4	5.0	83	0.4		77	0.3	-7.2
Chinese Taipei	244045	6.1	286248	6.0	17.3	815	4.4		1034	4.3	26.9
China	212951	5.4	501150	10.6	135.3	930	5.0		2432	10.1	161.5
Hongkong	377107	9.5	512742	10.8	36.0	1325	7.1		2045	8.5	54.4
Indonesia	109157	2.7	138449	2.9	26.8	512	2.8		683	2.8	33.4
Japan	541507	13.6	649971	13.7	20.0	1746	9.4		2360	9.8	35.2
Malaysia	134458	3.4	180802	3.8	34.5	665	3.6		864	3.6	29.9
Mexico	212869	5.4	247939	5.2	16.5	1636	8.8		2068	8.6	26.4
New Zealand	72486	1.8	109653	2.3	51.3	313	1.7		482	2.0	54.0
PNG	3239	0.1	3283	0.1	1.4	31	0.2		21	0.1	-32.3
Peru	19393	0.5	22260	0.5	14.8	101	0.5		100	0.4	-1.0
Philippines	89394	2.2	116671	2.5	30.5	311	1.7		451	1.9	45.0
Korea	211315	5.3	363942	7.7	72.2	767	4.1		1438	6.0	87.5
Russia	23441	0.6	29923	0.6	27.7	125	0.7		148	0.6	18.4
Singapore	302923	7.6	354061	7.5	16.9	1212	6.5		1470	6.1	21.2
Thailand	205926	5.2	279759	5.9	35.9	710	3.8		1095	4.5	54.2
US	710663	17.9	301761	6.4	-57.5	5433	29.2		4856	20.1	-10.6
Vietnam	36133	0.9	92857	2.0	157.0	184	1.0		451	1.9	145.1
Total	*4149586.5*	*100*	*4830028.5*	*100*		*22216.5*	*100*		*27063*	*100.0*	
% Change			*16.4*						*21.8*		

Source: IATA/SRS,OAG

Table 4: Shares of Average Weekly Capacity and Frequency, APEC Hub Airport-Hub Airport, 1995-2005

APEC Country	APEC Hub Airport-Hub Airport													
	Capacity							Frequency						
	1995	% Total	2000	% Total	2005	% Total	% 95-05	1995	% Total	2000	% Total	2005	% Total	% 95-05
Australia	67245	4.5	84264	5.3	94789	4.7	41.0	174	3.5	255	4.5	308	4.2	77.0
Brunei	11130	0.7	9336	0.6	8463	0.4	-24.0	52	1.0	51	0.9	50	0.7	-3.8
Canada	26426	1.8	38338	2.4	36299	1.8	37.4	106	2.1	166	3.0	173	2.4	63.2
Chile	5065	0.3	8254	0.5	10054	0.5	98.5	21	0.4	46	0.8	46	0.6	119.0
Chinese Taipei	162754	10.8	160066	10.1	201157	10.0	23.6	508	10.2	493	8.8	669	9.1	31.7
China	32805	2.2	51013	3.2	84708	4.2	158.2	99	2.0	181	3.2	339	4.6	242.4
Hongkong	236516	15.7	258809	16.3	319726	15.9	35.2	684	13.8	807	14.4	1084	14.8	58.5
Indonesia	68289	4.5	55644	3.5	71016	3.5	4.0	284	5.7	235	4.2	309	4.2	8.8
Japan	181968	12.1	159189	10.0	196508	9.8	8.0	480	9.7	453	8.1	619	8.4	29.0
Malaysia	65167	4.3	77777	4.9	103422	5.1	58.7	308	6.2	354	6.3	424	5.8	37.7
Mexico	16425	1.1	14081	0.9	17950	0.9	9.3	97	2.0	84	1.5	118	1.6	21.6
New Zealand	30688	2.0	35844	2.3	47034	2.3	53.3	89	1.8	123	2.2	175	2.4	96.6
PNG	848	0.1	537	0.0	920	0.0	8.5	4	0.1	3	0.1	4	0.1	0.0
Peru	5583	0.4	8883	0.6	11374	0.6	103.7	28	0.6	50	0.9	53	0.7	89.3
Philippines	65359	4.3	65991	4.2	79709	4.0	22.0	211	4.2	218	3.9	255	3.5	20.9
Korea	91298	6.1	105728	6.7	140468	7.0	53.9	283	5.7	339	6.0	461	6.3	62.9
Russia	12436	0.8	11087	0.7	11001	0.5	-11.5	33	0.7	31	0.6	43	0.6	30.3
Singapore	197383	13.1	160066	10.1	227745	11.3	15.4	768	15.5	743	13.2	870	11.9	13.3
Thailand	138265	9.2	152262	9.6	201788	10.0	45.9	465	9.4	487	8.7	720	9.8	54.8
US	73287	4.9	104906	6.6	98485	4.9	34.4	180	3.6	382	6.8	387	5.3	115.0
Vietnam	19258	1.3	23264	1.5	50993	2.5	164.8	92	1.9	113	2.0	222	3.0	141.3
Total	*1508195*	*100*	*1585338*	*100*	*2013606*	*100*	33.5	*4966*	*100*	*5614*	*100*	*7329*	*100*	47.6
% Change			*5.1*		*27.0*					*13.0*		*30.5*		

Source: IATA/SRS, OAG

Table 5: Average Weekly Capacity and Frequencies APEC Economy to APEC Economy and non-APEC Country, 2000-2005

APEC Country	Seats		Frequencies	
	2000	2005	2000	2005
Australia	228,057	290838	866	1113
Brunei	15811	16063	91	92
Canada	474340	444163	4502	4534
Chile	53150	58655	323	312
Chinese Taipei	269710	324813	953	1255
China	261546	588759	1158	2819
Hongkong	415773	556644	1454	2155
Indonesia	113228	148892	523	713
Japan	627833	728911	2010	2616
Malaysia	167030	237320	773	1070
Mexico	244970	296822	1824	2309
New Zealand	82713	122424	366	558
PNG	3868	3419	35	23
Peru	41257	51350	246	271
Philippines	98247	126915	334	478
Korea	218219	383599	786	1496
Russia	163745	233872	1214	1690
Singapore	385115	447612	1507	1765
Thailand	314503	416649	1157	1648
US	1965242	1900183	13004	13678
Vietnam	41058	103657	239	539
Total	6,185,415	7481560	33365	41134
% Change		*21.0*		*23.3*
APEC as % of Total	*67.1*	*64.3*	*66.6*	*65.6*
APEC-non APEC countries	*2035828.5*	*2670965.0*	*11148.5*	*14133.5*
% Change		*31.2*		*26.8*

Source: IATA/SRS, OAG

Table 6: International Passengers and Freight by APEC Hub Airport, 1995-2005

APEC Country	International PAX				International Freight			
	1995	2000	2005	%95-05	1995	2000	2005	%95-05
Australia	5794235	8987777	9800705	69.1	289597	319385	337750	16.6
Canada	2588678	7726553	8070932	211.8	214,472	251,771	222,601	3.8
Chile	2199166	3185531	3983220	81.1	154922	204394	243102	56.9
Chinese Taipei	12585798	16705425	19213399	52.7	734350	1196122	1692447	130.5
China	3240500	5671725	9398980	190.0	118813	246629	253443	113.3
Hongkong	27423744	32130712	39799668	45.1	1457680	2240586	3402247	133.4
Indonesia	4584275	4563136	5799061	26.5	167740	194577	159134	-5.1
Japan	21487798	24022075	27047845	25.9	1606170	1875760	2232687	39.0
Malaysia	7304427	10248822	14337991	96.3	286491	479415	589799	105.9
Mexico	4657930	7164052	8591797	84.5			263958	
New Zealand	3604635	4441189	6191295	71.8	150963	142905	183352	21.5
Peru		2257541	2942603			87336	157324	
Philippines	3560008	7129881	9222006	159.0	274839	286973	296090	7.7
Korea	13366781	17898488	25590675	91.4	1016742	1597111	2120092	108.5
Russia	n/a	7825104	8440724			84022	81329	
Singapore	21743196	26964183	30720366	41.3	1105772	1682489	1833721	65.8
Thailand	15119065	20498280	26821227	77.4	618391	820029	1071386	73.3
US	13405602	17415749	17486263	30.4	659726	911078	996635	51.1
Vietnam	1895670	2657471	4300862	126.9	42999	66957	131085	204.9
Total	*164561508*	*227493694*	*277759619*	68.8	*8899667*	*12687539*	*16268182*	82.8
% Change		*38.2*	*22.1*			*42.6*	*28.2*	

Source: Airports Council International

Table 7: GDP by APEC Economy, 1995-2005 (in Current US$)

	1995	2000	% Change	2005	% Change
Australia	371.2	390.2	5.1	692.4	77.4
Brunei	4.7	6.0	27.7	9.5	58.3
Canada	590.6	725.2	22.8	1132.4	56.2
Chile	71.3	75.2	5.5	115.3	53.3
Chinese Taipei	274.0	321.4	17.3	346.2	7.7
China	728.9	1198.5	64.4	2234.1	86.4
Hongkong	144.2	168.7	17.0	177.7	5.3
Indonesia	223.4	165.5	-25.9	281.3	70.0
Japan	5274.5	4650.9	-11.8	4567.4	-1.8
Malaysia	88.8	90.3	1.7	130.8	44.9
Mexico	286.2	580.8	102.9	768.4	32.3
New Zealand	60.3	52.4	-13.1	108.5	107.1
PNG	4.8	3.5	-27.1	3.9	11.4
Peru	53.6	53.3	-0.6	79.4	49.0
Philippines	75.5	75.9	0.5	98.4	29.6
Korea	517.1	511.9	-1.0	787.6	53.9
Russia	313.4	259.7	-17.1	763.3	193.9
Singapore	84.3	92.7	10.0	116.8	26.0
Thailand	168.0	122.7	-27.0	173.1	41.1
US	7397.6	9816.9	32.7	12455.8	26.9
Vietnam	20.7	31.2	50.7	51.4	64.7
Total	*16753.1*	*19392.9*		*25093.7*	
% Change		*15.8*		*29.4*	

Source: International Monetary Fund

Table 8: Inbound Visitor/Outbound Resident Travel Volumes by APEC Economy, 1995-2005

Country	Inbound Visitors							Outbound Residents						
	1995	% Total	2000	% Total	2005	% Total	%95-05	1995	% Total	2000	% Total	2005	% Total	%95-05
Australia	3725800	1.9	4931369	1.8	5496987	1.8	47.5	2624359	1.5	3498195	1.4	4754046	1.6	81.2
Brunei	498000	0.3	984000	0.4			97.6	375000	0.2	n/a		n/a		
Canada	16968053	8.8	19617400	7.3	18759464	6.1	10.6	18200000	10.4	19163100	7.5	21037243	7.3	15.6
Chile	1539600	0.8	1742407	0.6	2027082	0.7	31.7	1069000	0.6	1812211	0.7	2651135	0.9	148.0
Chinese Taipei	2331934	1.2	2624037	1.0	3378118	1.1	44.9	5188658	3.0	7328784	2.9	8208125	2.8	58.2
China	46386511	23.9	83480918	31.1	120292255	39.1	159.3	4521000	2.6	12133000	4.7	31026000	10.8	586.3
Hongkong	10199994	5.3	13059477	4.9	23359417	7.6	129.0	34442678	19.7	58901071	22.9	72299897	25.1	109.9
Indonesia	4324229	2.2	5064217	1.9	5002101	1.6	15.7	2000000	1.1	n/a		n/a		
Japan	3345274	1.7	4757146	1.8	6727926	2.2	101.1	15298125	8.7	17818590	6.9	17403565	6.0	13.8
Malaysia*	7468749	3.9	10221582	3.8	16431055	5.3	120.0	20642499	11.8	30532094	11.9	33360000	11.6	61.6
Mexico	20242000	10.4	20641358	7.7	21958870	7.1	8.5	8450000	4.8	11080600	4.3	14025205	4.9	66.0
New Zealand	1408795	0.7	1789078	0.7	2382950	0.8	69.1	920107	0.5	1283439	0.5	1871801	0.6	103.4
PNG	41173	0.0	58398	0.0	69250	0.0	68.2	51000	0.0	104175	0.0	37096	0.0	-27.3
Peru	531000	0.3	182000	0.1			-65.7	n/a		n/a		n/a		
Philippines	1760163	0.9	1992169	0.7	2623084	0.9	49.0	1578939	0.9	1670040	0.7	1551802*		
Korea	3753197	1.9	5321792	2.0	6021764	2.0	60.4	3818740	2.2	5508242	2.1	10077619	3.5	163.9
Russia	10290000	5.3	21169000	7.9			105.7	n/a		18371000	7.2	n/a		
Singapore	7136538	3.7	7691399	2.9	8942408	2.9	25.3	2867242	1.6	4443542	1.7	5159403	1.8	79.9
Thailand	6951566	3.6	9578826	3.6	11516936	3.7	65.7	1820254	1.0	1908928	0.7	2758878	1.0	51.6
US	43490000	22.4	51236701	19.1	49401528	16.0	13.6	51285000	29.3	61327000	23.9	63502000	22.0	23.8
Vietnam	1351296	0.7	2140100	0.8	3467758	1.1	156.6	n/a		n.a		n/a		
Total	***193743872***	***100***	***268283374***	***100***	***307858953***	***100***	58.9	***175152601***	***100***	***256884011***	***100***	***288172013***	***100***	64.5
% Change			***38.5***		***14.8***					***46.7***		***12.2***		

Source: Pacific Asia Travel Association, National tourism authorities, American Express

Table 9: No. City Pairs and Bilateral Agreements by APEC Economy, 1995-2005

APEC Country	Hub Airport-Country								No. Bilateral Agreements			
	No. City Pairs				No. International Operators							
	1995	2000	2005	%95-05	1995	2000	2005	%95-05	1995	2000	2005	%95-05
Australia	20	23	26	30.0	41	44	44	7.3	15	15	19	26.7
Brunei	16	16	14	-12.5	13	11	11	-15.4	10	13	13	30.0
Canada	16	24	31	93.8	14	16	14	0.0	14	16	18	28.6
Chile	3	6	7	133.3	8	12	9	12.5	5	5	6	20.0
Chinese Taipei	28	27	22	-21.4	56	51	50	-10.7	13	14	13	0.0
China	9	11	21	133.3	17	25	33	94.1	7	7	17	142.9
Hongkong	63	65	80	27.0	71	67	74	4.2	5	12	18	260.0
Indonesia	16	11	13	-18.8	43	27	34	-20.9	8	9	10	25.0
Japan	40	40	53	32.5	66	66	69	4.5	13	16	18	38.5
Malaysia	28	32	39	39.3	33	36	48	45.5	13	13	15	15.4
Mexico	16	18	25	56.3	18	13	20	11.1	10	11	13	30.0
New Zealand	16	16	20	25.0	26	20	22	-15.4	15	16	18	20.0
PNG	5	3	5	0.0	5	4	4	-20.0	3	4	5	66.7
Peru	6	7	8	33.3	4	11	11	175.0	3	3	5	66.7
Philippines	21	21	26	23.8	40	27	30	-25.0	11	12	13	18.2
Korea	42	56	84	100.0	56	52	63	12.5	12	13	17	41.7
Russia	6	9	6	0.0	11	11	9	-18.2	9	9	18	100.0
Singapore	55	28	56	1.8	87	66	91	4.6	13	16	18	38.5
Thailand	30	32	38	26.7	54	66	82	51.9	11	13	19	72.7
US	25	37	43	72.0	27	28	26	-3.7	14	17	19	35.7
Vietnam	11	13	19	72.7	21	15	31	47.6	13	13	17	30.8
Total	*472*	*495*	*636*	34.7	*711*	*668*	*775*	9.0	217	247	310	42.9
% Change		*4.9*	*28.5*			*-6.0*	*16.0*			*13.8*	*25.5*	

Source: OAG, APEC TPT-WG Surveys, ICAO

Table 10: Analysis of Air Service Agreements in APEC Economies, 2005

Category of Rights	Agreement Provision	No. ASAs Incl.	No. Countries	No. ASAs	% Total ASAs
Passengers	Open Route Schedule	52	20	293.0	16.8
	Restricted Route Schedule	239	21	310.0	77.1
	Open 3rd/4th	170	21	310.0	54.8
	Open 5ths	85	21	310.0	27.4
	Restricted 5ths	152	13	211.0	72.0
	7ths, Other	7	18	286.0	2.4
	Cabotage	2	16	259.0	0.8
	Bilateral Codesharing	166	16	261.0	63.6
	3rd Party Codesharing	130	16	260.0	50.0
Freight	Open Route Schedule	56	18	274.0	20.4
	Restricted Route Schedule	115	18	275.0	41.8
	Open 3rd/4th	74	17	274.0	27.0
	Open 5ths	66	15	254.0	26.0
	Restricted 5ths	106	11	197.0	53.8
	7ths	25	13	221.0	11.3
Tariffs	Double disapproval tariffs	31	17	266.0	11.7
	Double approval tariffs	113	14	214.0	52.8
	No approval	26	13	218.0	11.9
Air Freight	Open	48	12	201.0	23.9
	Some restrictions	111	11	183.0	60.7
Designation	Multiple designation	236	21	310.0	76.1
	Restricted designation	56	21	310.0	18.1
Charters	Liberal Charter	62	14	218.0	28.4
	Restricted Charter	46	14	228.0	20.2
Ownership	Ownership/control	142	13	218.0	65.1
	Effective regulatory control	25	13	218.0	11.5
	Principal place of business	34	13	218.0	15.6
	Other	19	3	52.0	36.5
Doing Business	Single domestic provider	27	10	164.0	16.5
	Competing domestic providers	145	14	231.0	62.8
	Self-handling	73	12	201.0	36.3
	Foreign designated third party handling	32	10	163.0	19.6
	Unrestricted currency conversion	198	14	231.0	85.7
	Unrestricted remittances	206	14	231.0	89.2
	Non-national employment	131	11	182.0	72.0
	Sales & Marketing, right to establish offices	180	13	201.0	89.6
	Computer reservations	99	13	214.0	46.3
	Aircraft maintenance and repair	84	9	163.0	51.5

Note: This shows the number of APEC ASAs to which the listed components apply; the number of economies providing information; and the total number of ASAs for those economies.

Source: APEC TPT-WG Surveys, ICAO

Appendix 5: Reports on APEC Economies

Australia

Performance Indicators, 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	371.2	390.2	5.1	692.4	77.4
	Annual Inbound Visitors (total)	3725800	4931369	32.4	5496987	11.5
	Annual Outbound Residents (total)	2624359	3498195	33.3	4754046	35.9
	No. Primary Airports	24	22	-8.3	22	0.0
	No. Secondary Airports	128	118	-7.8	133	12.7
APEC Country-APEC Country	No. bilateral agreements	15	15	0.0	19	26.7
	No. plurilateral agreements	0	0	0.0	0	0.0
	Average Weekly Seats		218395	n/a	271460	24.3
	Average Weekly Frequencies		815	n/a	1016	24.7
Hub Airport-APEC country	No. City Pairs	20	23	15.0	26	13.0
	No. International Operators	41	44	7.3	44	0.0
Hub Airport-Hub Airport	Av. Weekly Seats	67245	84264	25.3	94789	12.5
	Average Weekly Frequencies	174	255	46.6	308	20.8
Hub Airport-All countries	International freight (tonnes)	289597	319385	10.3	337750	5.8
	International PAX (arrivals/departures)	5794235	8987777	55.1	9800705	9.0

Analysis of APEC Air Service Agreements, 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	1	5.3
	Restricted	18	94.7
	Open 3rd/4th	3	15.8
	Open 5ths	1	5.3
	Restricted 5ths	18	94.7
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	18	94.7
	3rd Party Codesharing	18	94.7
Freight	Open Route Schedule	7	36.8
	Restricted	12	63.2
	Open 3rd/4th	9	47.4
	Open 5ths	7	36.8
	Restricted 5ths	12	63.2
	7ths	3	15.8
Tariffs	Double disapproval tariffs	0	0.0
	Double approval tariffs	11	57.9
	No approval	3	15.8
Air freight	Open	7	36.8
	Some restrictions	12	63.2
Designation	Multiple designation	18	94.7
	Restricted designation	0	0.0
Charters	Liberal Charter	2	10.5
	Restricted Charter	0	0.0
Ownership	Ownership/control	13	68.4
	Effective regulatory control	18	94.7
	Principal place of business	4	21.1
Doing Business	Single domestic provider	0	0.0
	Competing domestic providers	11	57.9
	Self-handling	9	47.4
	Foreign designated third party handling	4	21.1
	Unrestricted currency conversion	17	89.5
	Unrestricted remittances	17	89.5
	Non-national employment	14	73.7
	Sales & Marketing, right to establish offices	13	68.4
	CRS	1	5.3
	MRO	0	0.0

Review of Progress 1995-2005

Australia expanded its air service relationships to include all but two APEC economies by 2005. Its share of APEC capacity as a whole remained roughly the same between 2000 and 2005 (5.5%-5.7%), indicating that it kept pace with region-wide growth. The growth in average weekly seats and frequencies on an economy-to-economy basis was consistent with the rise in GDP, which was especially strong between 2000 and 2005. New Zealand was a significant factor in this growth, lifting its share of Australian capacity from 22.4% to 27.7% over that five-year period. Similarly, seats provided to New Zealand out of Sydney Airport increased from 17.9% of total seats in 1995 to 21.4% in 2005. These trends reflected the benefits of the Single Aviation Market (SAM) agreement between the two economies[46], which provides for designated carriers to operate unlimited services to, from, within and beyond Australia and New Zealand. During this period, capacity and frequencies in a number of Australia's more mature markets declined, for example the US and Japan, largely due to 9/11-related disruption to market patterns. US capacity fell from 10.2% of total capacity in 2000 to 7.7% five years later, while Japan's share dropped from 9.2% to 7.7%. Australia's seats to non-APEC economies doubled between 1995 and 2005, compared with 24.3% growth for Australia-APEC capacity. This is misleading, however, as the sector-sector data counts all Australia-Europe capacity as being between Australia and intermediate points (eg Singapore or Bangkok). Non-APEC capacity, therefore, relates to the Middle East, South Africa and the Pacific islands.

Inbound and outbound traffic continued robust growth. Arrival numbers grew by 47.5% and resident departures by 81.1% between 1995 and 2005. Much of this increase in passenger traffic was concentrated on Sydney Airport, and is reflected in a 69% growth in international passengers over the 10-year period. The rate of inbound growth under-performed the growth achieved by APEC as a whole, indicating the impact on Australia's key tourism markets of terrorist attacks in the US and Asia. However, outbound travel growth was significantly higher than the regional total. International freight at Sydney Airport grew at a much slower rate of 16.6% between 1995 and 2005. Australia has adopted a pro-active policy since 1999 to encourage development of the freight market. Subsequently, open capacity agreements on freight have been concluded with 7 APEC economies (this increased to 8 in 2006). Australia's more liberal approach to ownership regulation has seen the development of designation focused on place of business or incorporation with 4 APEC economies (as of 2005). Multiple designation of carriers is also included in virtually all agreements. The economy has been active in expanding cooperative arrangements, as indicated by the fact that 18 of its 19 bilateral ASAs with APEC economies incorporated codesharing provisions. Australia's progress in terms of access to passenger markets has been more limited with open agreements only in place with one APEC economy (New Zealand). Some restrictions apply in relation to 5th freedom carriage in all but one ASA, and just three agreements include open 3rd/4th access. Australia maintain two agreements which include require no approval on tariffs and two providing for double disapproval, consistent with its policy to eliminate tariff regulation. As well, the Australian standard clause on tariffs is more liberal than the APEC double disapproval target.

[46] The Single Aviation Market came into effect on 1 November, 1996.This includes joint ownership-and-control provisions which provide for at least 50% ownership and effective board control by Australian and/or New Zealand nationals, and requirements for the head office and operational base to be in either country.

Brunei Darussalam

Performance Indicators, 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	4.7	6.0	27.7	9.5	58.3
	Annual Inbound Visitors (total)	498000	984000	97.6	n/a	n/a
	Annual Outbound Residents (total)*	375000	n/a	n/a	n/a	n/a
	No. Primary Airports	1	1	0.0	1	0.0
	No. Secondary Airports	0	0	0.0	0	0.0
APEC Country-APEC Country	No. bilateral agreements	10	13	30.0	13	0.0
	No plurilateral agreements	0	0	0.0	2	
	Average Weekly Seats		13940	n/a	13554	-2.8
	Average Weekly Frequencies		82	n/a	82	0.0
Hub Airport-APEC country	No. City Pairs	16	16	0.0	14	-12.5
	No. International Operators	13	11	-15.4	11	0.0
Hub Airport-Hub Airport	Av. Weekly Seats	11130	9336	-16.1	8463	-9.4
	Average Weekly Frequencies	52	51	-1.9	50	-2.0

Analysis of APEC Air Service Agreements, 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	3	23.1
	Restricted	10	76.9
	Open 3rd/4th	13	100.0
	Open 5ths	9	69.2
	Restricted 5ths	n/a	
	7ths, Other	3	23.1
	Cabotage	1	7.7
	Bilateral Codesharing	3	23.1
	3rd Party Codesharing	0	0.0
Freight	Open Route Schedule	0	0.0
	Restricted	1	7.7
	Open 3rd/4th	n/a	
	Open 5ths	n/a	
	Restricted 5ths	n/a	
	7ths	n/a	
Tariffs	Double disapproval tariffs	n/a	
	Double approval tariffs	n/a	
	No approval	n/a	
Designation	Multiple designation	9	69.2
	Restricted designation	4	30.8
Charters	Liberal Charter	0	0.0
	Restricted Charter	3	23.1
Ownership	Ownership/control	n/a	
	Effective regulatory control	n/a	
	Principal place of business	n/a	

Note: The data/information in relation to Brunei was very limited. The data used was provided by ICAO.

Review of Progress 1995-2005

Brunei Darussalam increased its bilateral agreements with APEC economies by three to 13 between 1995 and 2005. The expansion in ASAs followed its entry into the Multilateral Agreement on the Liberalisation of Air Transportation (MALIAT), which came into force in 2001.

Brunei also participates in multilateral agreements covering the full liberalisation of all cargo services with Singapore, Thailand and Cambodia, and a "3+X" agreement on passenger services with Singapore and Thailand. Both of these agreements are open to accession by other ASEAN members.

Brunei represents less than 1% of total APEC weekly seats and frequencies, with most services focused on other economies in Asia and the Middle East. This percentage actually declined slightly by 2.8% on an economy-to-economy basis between 2000 and 2005, despite the expansion in ASA coverage and an oil-based 58% increase in GDP. Neighbouring Malaysia accounted for 22% of seats in 2005, and remained the largest single market for Brunei.

MALIAT has brought few obvious benefits to Brunei in the period to 2005. Except for services to New Zealand, Royal Brunei has not established flights to the US, Chile or any other members of the multilateral agreement; and average weekly seats to Singapore have fallen by 36% between 2000 and 2005. This trend is consistent with a 24% reduction in APEC-related weekly seats at the country's international airport between 1995 and 2005.

The availability of tourism statistics for Brunei is limited. The Pacific Asia Travel Association provided inbound data for 1995 and 2000, but not for 2005. Arrival numbers doubled between these years, though it is noted that this appears to conflict with the capacity and frequency trends.

Brunei's ASAs are generally very liberal with other APEC economies, with all 13 offering unlimited 3rd/4th freedom access and 9 with unrestricted 5th freedom access. Furthermore, three agreements provide 7th freedom passenger access, Most ASAs concluded with Brunei incorporate multiple designation provisions.

In 2004, Brunei entered into a multilateral agreement with Singapore and Thailand providing for unlimited 3rd/4th freedom access for passenger services on direct routes between the three economies.

As Brunei did not complete a survey return for APEC's Transportation Working Group in 2005, no information was available on tariffs and ownership and it was limited in other areas such as freight. The data provided in the tables was drawn mostly from ICAO.

Canada

Performance Indicators, 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	590.6	725.2	22.8	1132.4	56.2
	Annual Inbound Visitors (total)	16968053	19617400	15.6	18759464	-4.4
	Annual Outbound Residents (total)	18200000	19163100	5.3	21037243	9.8
	No. Primary Airports	33	33	0.0	33	0.0
	No. Secondary Airports	147	151	2.7	151	0.0
APEC Country-APEC Country	No. bilateral agreements	14	16	14.3	18	12.5
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		394225	n/a	336725	-14.6
	Average Weekly Frequencies		4421	n/a	3891	-12.0
Hub Airport-APEC country	No. City Pairs	16	24	50.0	31	29.2
	No. International Operators	14	16	14.3	14	-12.5
Hub Airport-Hub Airport	Av. Weekly Seats	26426	38338	45.1	36299	-5.3
	Average Weekly Frequencies	106	166	56.6	173	4.2
Hub Airport-All countries	International freight (tonnes)	214,472	251,771	17.4	222,601	-11.6
	International PAX (arrivals/departures)	2588678	7726553	198.5	8070932	4.5

Analysis of APEC Air Service Agreements, 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	4	23.5
	Restricted	13	76.5
	Open 3rd/4th	6	35.3
	Open 5ths	1	5.9
	Restricted 5ths	12	70.6
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	14	82.4
	3rd Party Codesharing	12	70.6
Freight	Open Route Schedule	2	11.8
	Restricted	14	82.4
	Open 3rd/4th	3	17.6
	Open 5ths	1	5.9
	Restricted 5ths	12	70.6
	7ths	1	5.9
Tariffs	Double disapproval tariffs	3	17.6
	Double approval tariffs	1	5.9
	No approval	0	0.0
	Other (single disapproval)	13	76.5
Air Freight	Open	2	11.8
	Some restrictions	14	82.4
Designation	Multiple designation	15	88.2
	Restricted designation	2	11.8
Charters	Liberal Charter	1	5.9
	Restricted Charter	2	11.8
Ownership	Ownership/control	16	94.1
	Effective regulatory control	0	0.0
	Principal place of business	1	5.9
Doing Business	Single domestic provider	8	47.1
	Competing domestic providers	1	5.9
	Self-handling	7	41.2
	Foreign designated third party handling	4	23.5
	Unrestricted currency conversion	14	82.4
	Unrestricted remittances	14	82.4
	Non-national employment	9	52.9
	Sales & Marketing, right to establish offices	14	82.4
	CRS	0	0.0
	MRO	0	0.0

Review of Progress 1995-2005

Canada has progressively built on its air service relationships with other APEC economies, increasing ASAs to include 18 economies[47]. As a consequence, the number of city pairs serviced by its designated hub airport (Vancouver) almost doubled to 31, and average weekly seats at the airport expanded by 37%, between 1995 and 2005.

On an economy-to-economy basis, however, Canada lost ground between 2000 and 2005 with its share of APEC-wide seats falling from 9.9% to 7.1% and frequencies from 23.8% to 16.1%. Some 76% of the country's international seat capacity relates to the APEC region. However, this reduced by 7% during the five turbulent years to 2005, due largely to the impact of 9/11 and the moves to bankruptcy protection for Air Canada and a number of major US airlines. During the same period, capacity between Canada and non-APEC destinations increased by 24% as traffic was redeployed away from the US to more profitable European routes.

The US influence on Canadian trends is considerable, reflecting the 1995 trans-border agreement[48] between the two economies (based on the North American Free Trade Agreement) which liberalised air services on a 3rd/4th freedom basis (constraints remained on 5th freedom access). Due to the disruption to the markets, The US share of total Canadian international seats declined from 90% to 87% between 2000 and 2005. During the same period, the expansion of access to China saw non-stop capacity increase from 0.6% to 2%. This coincided with a reduction in Japan's share of Canadian capacity from 3.2% to 2.7% as the focus turned to direct services to other parts of Northeast Asia. The changing patterns were even more noticeable in terms of seats offered from Vancouver Airport, which saw capacity to Japan reduce from 17.6% of total seats to 12.4% between 1995 and 2005, while China's seat share rose from zero to 7.9%.

The wide variation in performance between the two halves of the 10-year period were also reflected in inbound visitor numbers to Canada, which increased strongly between 1995 and 2000 but declined by 4.4% in the subsequent five years. This was consistent with the movement in APEC-related seats at Vancouver, from 45% growth to a 5.3% decline. The impact of SARS, as well as 9/11, contributed to the outcome.

Most of Canada's ASAs with other APEC economies encompass some form of restriction. As of 2005, the country operated 6 agreements with open 3rd/4th freedom access and one with open 5th freedom access for passengers; and three and one respectively for freight. Bilateral/third party codesharing and multiple designation have been incorporated in most ASAs.

Canada still mostly includes substantial ownership/effective control in its ASAs (only one included principal place of business). The Canadian Government has sought to encourage the development of international passenger and freight charters by liberalising regulations in relation to them.

[47] Canada also makes the point in its commentary to the APEC TPT-WG survey that expanded agreements were negotiated with 17 of the 18 APEC bilateral partners between 1995 and 2005.

[48] The trans-border agreement replaced the previous highly restrictive arrangement on air services which limited direct services between major cities. It gave both economies unlimited access to all points within the US and Canada for passenger and freight services. The agreement was liberalised further in 2005 with the signing of an "open skies" agreement which provided greater access to 5th freedom rights.

Chile

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	71.3	75.2	5.5	115.3	53.3
	Annual Inbound Visitors (total)	1539600	1742407	13.2	2027082	16.3
	Annual Outbound Residents (total)	1069000	1812211	69.5	2651135	46.3
	No. Primary Airports	10	12	20.0	12	0.0
	No. Secondary Airports	18	22	22.2	22	0.0
APEC Country-APEC Country	No. bilateral agreements	5	5	0.0	6	20.0
	No. plurilateral agreements	1	1	0.0	1	0.0
	Average Weekly Seats		16021	n/a	16820	5.0
	Average Weekly Frequencies		83	n/a	77	-7.2
Hub Airport-APEC country	No. City Pairs	3	6	100.0	7	16.7
	No. International Operators	8	12	50.0	9	-25.0
Hub Airport-Hub Airport	Av. Weekly Seats	5065	8254	63.0	10054	21.8
	Average Weekly Frequencies	21	46	119.0	46	0.0
Hub Airport-All countries	International freight (tonnes)	154922	204394	31.9	243102	18.9
	International PAX (arrivals/departures)	2199166	3185531	44.9	3983220	25.0

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0
	Restricted	5	83.3
	Open 3rd/4th	5	83.3
	Open 5ths	5	83.3
	Restricted 5ths	n/a	
	7ths, Other	n/a	
	Cabotage	n/a	
	Bilateral Codesharing	n/a	
	3rd Party Codesharing	n/a	
Freight	Open Route Schedule	0	0.0
	Restricted	1	16.7
	Open 3rd/4th	0	0.0
	Open 5ths	0	0.0
	Restricted 5ths	n/a	
	7ths	0	0.0
Tariffs	Double disapproval tariffs	2	33.3
	Double approval tariffs	0	0.0
	No approval	n/a	
Designation	Multiple designation	6	100.0
	Restricted designation	0	0.0
Charters	Liberal Charter	0	0.0
	Restricted Charter	3	50.0
Ownership	Ownership/control	n/a	
	Effective regulatory control	n/a	
	Principal place of business	n/a	

Note: The limited data used in this table was provided by ICAO.

Review of Progress 1995-2005

Chile is another relatively small player in APEC, accounting for 0.4% of average weekly seats between member economies in 2005. This is reflected in its limited coverage with only six bilateral ASAs - a situation that has changed little since 1995. Like Brunei, Chile is a member of MALIAT. However, it withdrew from the Andean Community in 1976[49].

The average weekly seats between Chile and other APEC economies has grown by 5% between 2000 and 2005, compared with 12.7% growth to non-APEC economies for the same period. Services to non-APEC economies (mostly in Latin America) dominate capacity levels in Chile with 71% of total seats.

Capacity is heavily focused on the US, though its share of total seats has fallen from 47% to 40% in the five years to 2005 (consistent with the problems experienced in this market generally and a consequent rationalisation of capacity by US carriers). Chile's other major market, Peru, has also seen a decline in its seat share from 42% to 38%.

An examination of weekly capacity trends for Chile's major airport, Santiago, between 1995 and 2005 shows an even more marked decline in the percentage of total APEC seats to Peru from 91% to 63%. This is due to the growth of other markets to Mexico and fellow MALIAT member New Zealand, in particular. Unlike the modest increase in capacity on an economy-to-economy basis, Santiago has seen seats to other APEC hub airports double in the 10 years to 2005.

The traffic growth experienced between the airport and all countries has been substantial, with an 81% increase in passenger arrivals and departures between 1995 and 2005. International freight has also climbed strongly, by 58% during this period. These trends have been sustained by a 32% rise in inbound visitors for the 10 years, and 150% increase in outbound resident travel (encouraged by improving economic conditions, with GDP up 53% between 2000 and 2005).

According to ICAO, Chile offers open 3rd/4th and 5th freedom access in 5 of its 6 ASAs with APEC economies. Multiple designation is also incorporated in each of the agreements. However, little other information was available in relation to the structure of its bilateral agreements. Chile did not provide a survey return to APEC TPT-WG.

[49] The Andean Pact was founded in 1969 by five Latin American countries to promote economic development and cooperation. In 1991, the Andean Commission established an "open skies" agreement which provided for unlimited 3rd/4th and 5th freedom services between and beyond participating countries, as well as multiple designation and no capacity/frequency restrictions.

China

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$)	728.9	1198.5	64.4	2234.1	86.4
	Annual Inbound Visitors (total)	46386511	83480918	80.0	120292255	44.1
	Annual Outbound Residents (total)	4521000	12133000	168.4	31026000	155.7
	No. Primary Airports	86	115	33.7	174	51.3
	No. Secondary Airports	89	147	65.2	139	-5.4
APEC Country-APEC Country	No. bilateral agreements (APEC)	7	7	0.0	17	142.9
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats (APEC)		212951	n/a	501150	135.3
	Average Weekly Frequencies (APEC)		930	n/a	2432	161.5
Hub Airport-APEC country	No. City Pairs	9	11	22.2	21	90.9
	No. International Operators	17	25	47.1	33	32.0
Hub Airport-Hub Airport	Av. Weekly Seats	32805	51013	55.5	84708	66.1
	Average Weekly Frequencies	99	181	82.8	339	87.3
Hub Airport-All countries	International freight (tonnes)	118813	246629	107.6	253443	2.8
	International PAX (arrivals/departures)	3240500	5671725	75.0	9398980	65.7

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	4	23.5
	Restricted	13	76.5
	Open 3rd/4th	5	29.4
	Open 5ths	0	0.0
	Restricted 5ths	16	94.1
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	16	94.1
	3rd Party Codesharing	10	58.8
Freight	Open Route Schedule	5	29.4
	Restricted	12	70.6
	Open 3rd/4th	6	35.3
	Open 5ths	3	17.6
	Restricted 5ths	12	70.6
	7ths	1	5.9
Tariffs	Double disapproval tariffs	1	5.9
	Double approval tariffs	15	88.2
	No approval	0	0.0
Air Freight	Open	1	5.9
	Some restrictions	16	94.1
Designation	Multiple designation	1	5.9
	Restricted designation	16	94.1
Charters	Liberal Charter	0	0.0
	Restricted Charter	17	100.0
Ownership	Ownership/control	17	100.0
	Effective regulatory control	0	0.0
	Principal place of business	0	0.0
Doing Business	Single domestic provider	0	0.0
	Competing domestic providers	17	100.0
	Self-handling	0	0.0
	Foreign designated third party handling	0	0.0
	Unrestricted currency conversion	17	100.0
	Unrestricted remittances	17	100.0
	Non-national employment	Managerial & above	
	Sales & Marketing, right to establish offices	17	100.0
	CRS	under GATS/WTO	
	MRO	under GATS/WTO	

Review of Progress 1995-2005

China has moved from being a relatively minor player to become a lynchpin for air service growth and liberalisation in the APEC region in the 10 years to 2005. Between 2000 and 2005, its share of total APEC seats has increased from 5.4% to 10.6% (the second largest to Japan).

The sharp rise in economy-economy capacity of 135%, and weekly frequencies of 161%, during the five-year period coincided with an expansion in bilateral agreements with APEC partners from 7 to 17 and doubling in APEC-related city pairs served by China's hub airport, Beijing, to 21. International airlines operating to Beijing increased from 17 in 1995 to 33 10 years later as liberalisation gathered momentum and foreign access strengthened.

Average weekly seats to APEC economies represented 85% of China's total seats at 2005. The highest shares related to *Hong Kong, China* (28%), Japan (24.3%) and Korea (19.2%). However, the broader spread of services to other economies has seen *Hong Kong's* share reduce from 34% in 2000. Korea, meanwhile, has lifted from 13.5% to 19.2% of seats in the five years to 2005; Japan from 23.8% to 24.8%; and Singapore from 6.8% to 7.7%.

China has also achieved a substantial growth in capacity to non-APEC economies of 80.3% between 2000 and 2005 (though considerably short of the growth rate to APEC economies).

The high growth path is underscored by the development of Beijing International Airport, where seats to APEC economies increased by 158% between 1995 and 2005 (Hong Kong's share diminished during this period from 41% to 33.4%). International passenger numbers to all economies almost trebled over the 10 years to 9.3 million in 2005, while freight tonnages through the airport increased by 114%.

This was mirrored by the expansion in both inbound visitors and outbound resident departures of 159% and 586% during the 10 year period, as travel regulations eased for Chinese nationals and the Government promoted tourism through its Approved Destination Status (ADS) programme.

The emergence of China as a major aviation centre has been facilitated by the establishment of a broad range of liberal bilateral ASAs, particularly involving Asian economies with large Chinese populations. China established its first "open skies" agreement with Thailand in 2004, providing for unlimited passenger and freight services and 5th freedom access. More liberal ASAs were also negotiated with Malaysia in 2002; with Australia and Japan in 2003; Korea and New Zealand in 2004; and Indonesia, Singapore, *Hong Kong, China* and Canada in 2005.

Of its 17 ASAs with APEC economies, four provided for open route schedules and 5 for open 3rd/4th freedom access for passenger services; while five provided open route schedules, 6 open 3rd/4th freedom access and 5 open 5th freedom access for freight. Some restrictions still exist in most ASAs in relation to 5th freedom access.

China also maintains substantial ownership/effective control provisions on all its APEC ASAs, and restricted designation in 16 of the 17 agreements. Double approval tariff arrangements are generally in place.

Hong Kong, China

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	144.2	168.7	17.0	177.7	5.3
	Annual Inbound Visitors (total)	10199994	13059477	28.0	23359417	78.9
	Annual Outbound Residents (total)	34442678	58901071	71.0	72299897	22.7
	No. Primary Airports	1	3	200.0	1	-66.7
	No. Secondary Airports	0	0	0.0	1	
APEC Country-APEC Country	No. bilateral agreements	5	12	140.0	17	41.7
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		377107	n/a	512742	36.0
	Average Weekly Frequencies		1325	n/a	2045	54.4
Hub Airport-APEC country	No. City Pairs	63	65	3.2	80	23.1
	No. International Operators	71	67	-5.6	74	10.4
Hub Airport-Hub Airport	Av. Weekly Seats	236516	258809	9.4	319726	23.5
	Average Weekly Frequencies	684	807	18.0	1084	34.3
Hub Airport-All countries	International freight (tonnes)	1457680	2240586	53.7	3402247	51.8
	International PAX (arrivals/departures)	27423744	32130712	17.2	39799668	23.9

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	n/a	
	Restricted	16	94.1
	Open 3rd/4th	15	88.2
	Open 5ths	0	0.0
	Restricted 5ths	n/a	
	7ths, Other	0	0.0
	Cabotage	n/a	
	Bilateral Codesharing	5	29.4
	3rd Party Codesharing	1	5.9
Freight	Open Route Schedule	n/a	
	Restricted	n/a	
	Open 3rd/4th	9	52.9
	Open 5ths	0	0.0
	Restricted 5ths	n/a	
	7ths	0	0.0
Tariffs	Double disapproval tariffs	0	0.0
	Double approval tariffs	17	100.0
	No approval	0	0.0
Air Freight	Open	n/a	
	Some restrictions	n/a	
Designation	Multiple designation	11	64.7
	Restricted designation	1	5.9
Charters	Liberal Charter	n/a	
	Restricted Charter	n/a	
Ownership	Ownership/control	0	0.0
	Effective regulatory control	0	0.0
	Principal place of business	17	100.0
Doing Business	Single domestic provider	n/a	
	Competing domestic providers	17	100.0
	Self-handling	n/a	
	Foreign designated third party handling	n/a	
	Unrestricted currency conversion	17	100.0
	Unrestricted remittances	17	100.0
	Non-national employment	17	100.0
	Sales & Marketing, right to establish offices	17	100.0
	CRS	17	100.0
	MRO	17	100.0

Note: N/A means specific data was not available. TPT-WG survey return by *Hong Kong, China* sometimes provided qualitative information on policy instead of quantifying ASA numbers. Assumptions have been made on numbers of applicable ASAs in a number of cases.

Review of Progress 1995-2005

Hong Kong, China has capitalised on its increasing air service linkages with mainland China in recent years. Its share of total APEC economy seats has risen from 9.5% in 2000 to 10.4% in 2005, reflecting 36% growth over the period.

The main driver of growth was China, which lifted its share of *Hong Kong, China* seats from 19.3% to 28.1% for the five-year period. If China-related seats were removed from the equation, Hong Kong's international capacity would have expanded at a much slower rate of 21%. China also impacted on Hong Kong's level of frequencies, which rose by 54.4% between 2000 and 2005, exceeding capacity growth. The higher rate of frequency growth can be attributed to increased flights with smaller aircraft on short-haul sectors into and out of mainland China.

Hong Kong's most significant route to Taipei saw a slight reduction in capacity from 21.8% to 20.7%, while the other major markets to Japan and Singapore declined from 10.2% and 8.9% shares to 8.2% and 6.4% respectively. The share of offered capacity to the US remained static at 4.6%.

Seats between *Hong Kong, China* and non-APEC economies (Europe) increased by 13.5% between 2000 and 2005, considerably below the APEC-APEC rate. This aligned with the progressive expansion in Hong Kong's bilateral relationships with other APEC economies. The number of APEC-related ASAs has risen from 5 in 1995 to 17 in 2005, underpinning a 26% growth in the city pairs served within the region.

The 35% growth in seats between Hong Kong Airport and other APEC hub airports between 1995 and 2005 was also dominated by China. Hong Kong-Beijing capacity grew during that period from 5.7% to 8.8% of total seats; and Hong Kong-Taipei from 25.9% to 27.6% (the latter route services Chinese Taipei traffic traveling to and from mainland China).

Inbound visitor volumes of *Hong Kong, China* increased by 129% over the 10 year period (a rate exceeded only by China and Viet Nam). Between 1995 and 2005, outbound resident departures also performed very strongly, expanding by 109%. The robust traffic flows were reflected in a 45% growth in international passengers at Hong Kong Airport. Freight tonnages increased by 133%, leveraging off substantial investment by the airport in cargo handling capacity and facilities and higher freight traffic flows, particularly during the second half of the period.

Consistent with its hub development strategy, most of Hong Kong's ASAs provide for open 3rd/4th freedom access for passengers (9 of the 17 also include open 3rd/4th access for freight). However, there were no agreements with open 5th freedom access, as of 2005, though *Hong Kong, China* has recently adopted a more relaxed approach to this and provided 5th freedom rights to London for Australia and New Zealand, albeit still on a highly restricted basis. *Hong Kong, China* generally maintains multiple designation in its ASAs and does not apply restrictions on ground handling and other "doing business" areas of activity. Its response to the APEC-TPT-WG survey was not specific on a number of matters in terms of the number of ASAs where certain aspects were adopted. On ownership, for example, *Hong Kong, China* states that a more liberal stance is taken with the Government requiring *Hong Kong, China* designated airlines to be incorporated and have their principal place of business in the Special Administrative Region. The survey response notes that *Hong Kong, China* is moving to remove restrictions on 3rd,4th and 5th freedom access with APEC partners, and exchange 5th freedom rights on a "mutually beneficial and reciprocal basis".

Indonesia

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	223.4	165.5	-25.9	281.3	70.0
	Annual Inbound Visitors (total)	4324229	5064217	17.1	5002101	-1.2
	Annual Outbound Residents (total)*	2000000	n/a		n/a	
	No. Primary Airports	13	16	23.1	19	18.8
	No. Secondary Airports	35	39	11.4	48	23.1
APEC Country-APEC Country	No. bilateral agreements	8	9	12.5	10	11.1
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		109157	n/a	138449	26.8
	Average Weekly Frequencies		512	n/a	683	33.4
Hub Airport-APEC country	No. City Pairs	16	11	-31.3	13	18.2
	No. International Operators	43	27	-37.2	34	25.9
Hub Airport-Hub Airport	Av. Weekly Seats	68289	55644	-18.5	71016	27.6
	Average Weekly Frequencies	284	235	-17.3	309	31.5
Hub Airport-All countries	International freight (tonnes)	167740	194577	16.0	159134	-18.2
	International PAX (arrivals/departures)	4584275	4563136	-0.5	5799061	27.1

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0.0
	Restricted	10	100.0
	Open 3rd/4th	9	90.0
	Open 5ths	8	80.0
	Restricted 5ths	0	0.0
	7ths, Other	0	0.0
	Cabotage	n/a	
	Bilateral Codesharing	n/a	
	3rd Party Codesharing	n/a	
Freight	Open Route Schedule	0	0.0
	Restricted	2	20.0
	Open 3rd/4th	1	10.0
	Open 5ths	n/a	
	Restricted 5ths	n/a	
	7ths	n/a	
Tariffs	Double disapproval tariffs	n/a	
	Double approval tariffs	n/a	
	No approval	n/a	
Designation	Multiple designation	7	70.0
	Restricted designation	3	30.0
Charters	Liberal Charter	n/a	
	Restricted Charter	n/a	
Ownership	Ownership/control	n/a	
	Effective regulatory control	n/a	
	Principal place of business	n/a	

Note: The limited data used in this table was provided by ICAO.

Review of Progress 1995-2005

Indonesia is a relatively small contributor to the APEC region in terms of airline capacity, but plays an increasingly important role in liberalisation, particularly in Southeast Asia. Its share of APEC-related seats changed little between 2000 and 2005 (2.7% to 2.9%), while frequencies remained the same at 2.8%.

Capacity growth over the five-year period has been moderate at 26.8%, reflecting a slight increase in the number of bilateral agreements held with other APEC economies. However, the mix of seats has changed considerably as Indonesia has developed closer aviation relationships with its neighbors Malaysia and Thailand. Malaysia's share of Indonesia's APEC seats has climbed from 13.2% in 2000 to 23.8% in 2005; and Thailand's from 4.8% to 5.6%. With the sharp growth in services to Malaysia, the share held by Indonesia's largest market, Singapore, has reduced from 46.3% to 36.6%.

APEC-related seats account for 93% of Indonesia's overall capacity. Its capacity to non-APEC economies grew by 156% between 2000 and 2005, largely due to the establishment of stronger service links to the Middle East (these services are used mostly by Indonesian workers traveling to/from employment).

The longer term trends at Jakarta Airport, the hub airport for Indonesia, mirror those seen on an economy-economy basis. Kuala Lumpur's share of Jakarta capacity grew from 5% to 21% between 1995 and 2005; and Bangkok's from 3.2% to 11%. Singapore's share remained robust, but declined from 61.4% to 46.4%. Hub airport-based capacity growth was extremely low for the 10 years at 3.9%, as a consequence of an 18.5% fall between 2000 and 2005 (impacted by, among others, the Asian financial crisis and problems experienced with the national carrier Garuda Indonesia. Indonesia's GDP fell by 25.9% between 2000 and 2005).

International passenger volumes increased by 26.5% between 1995 and 2005, but were flat for the first half of that period. Inbound visitor numbers grew by an even slower rate of 15.7% (no comparative figures were available for outbound resident departures). Freight tonnages fell by 5.1% at Jakarta.

Indonesia operates a relatively liberal market regime for passengers with open 3rd/4th and 5th access on 9 and 8 of the 10 bilateral agreements held with APEC economies[50]. A expansive agreement was struck with Malaysia in 2003 which provided for up to 30 daily B737 frequencies on major trunk routes and 14 frequencies per day on secondary routes. Indonesia also entered into an "open skies" agreement with the US in 2004, and secured a broader agreement with Singapore in 2005.

Multiple designation is also in effect in most of the ASAs. However, access by Low-Cost Carriers is not allowed to Jakarta and 5 other cities.

Freight access appears more restrictive, but only limited information was available for Indonesia on this and other ASA aspects (Indonesia did not provide a TPT-WG survey return for 2005).

[50] Information from ICAO's Database on Air Service Agreements

Japan

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	5274.5	4650.9	-11.8	4567.4	-1.8
	Annual Inbound Visitors (total)	3345274	4757146	42.2	6727926	41.4
	Annual Outbound Residents (total)	15298125	17818590	16.5	17403565	-2.3
	No. Primary Airports	37	44	18.9	46	4.5
	No. Secondary Airports	36	38	5.6	37	-2.6
APEC Country-APEC Country	No. bilateral agreements	13	16	23.1	18	12.5
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		541507	n/a	649971	20.0
	Average Weekly Frequencies		1746	n/a	2360	35.2
Hub Airport-APEC country	No. City Pairs	40	40	0.0	53	32.5
	No. International Operators	66	66	0.0	69	4.5
Hub Airport-Hub Airport	Av. Weekly Seats	181968	159189	-12.5	196508	23.4
	Average Weekly Frequencies	480	453	-5.6	619	36.6
Hub Airport-All countries	International freight (tonnes)	1606170	1875760	16.8	2232687	19.0
	International PAX (arrivals/departures)	21487798	24022075	11.8	27047845	12.6

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0.0
	Restricted	18	100.0
	Open 3rd/4th	0	0.0
	Open 5ths	0	0.0
	Restricted 5ths	18	100.0
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	16	88.9
	3rd Party Codesharing	13	72.2
Freight	Open Route Schedule	0	0.0
	Restricted	18	100.0
	Open 3rd/4th	0	0.0
	Open 5ths	0	0.0
	Restricted 5ths	0	0.0
	7ths	0	0.0
Tariffs	Double disapproval tariffs	0	0.0
	Double approval tariffs	18	100.0
	No approval	0	0.0
Air Freight	Open	0	0.0
	Some restrictions	18	100.0
Designation	Multiple designation	17	94.4
	Restricted designation	1	5.6
Charters	Liberal Charter	18	100.0
	Restricted Charter	0	0.0
Ownership	Ownership/control	17	94.4
	Effective regulatory control	0	0.0
	Principal place of business	1	5.6
Doing Business	Single domestic provider	18	100.0
	Competing domestic providers	18	100.0
	Self-handling	18	100.0
	Foreign designated third party handling	18	100.0
	Unrestricted currency conversion	18	100.0
	Unrestricted remittances	18	100.0
	Non-national employment	18	100.0
	Sales & Marketing, right to establish office	18	100.0
	CRS	18	100.0
	MRO	18	100.0

Review of Progress 1995-2005

Japan has overtaken the US as the most significant single economy within the APEC grouping in terms of seat capacity in the second half of the 10 years under review. At 2005, its share of total APEC seats was 13.7%, several points ahead of the second and third placed *Hong Kong, China* and China.

The current position has been achieved largely by default, with US capacity within APEC diminishing markedly in the post 9/11 era. Japan's seat growth rate during the 2000-2005 period has been modest relative to many other APEC economies at 20%, with frequencies increasing at the faster rate of 35.2%. This reflected in part the weak Japanese economy with GDP declining by 1.8% between 2000 and 2005 (and 13.4% for the full 10 years). Constraints on airport capacity, particularly at Tokyo Narita, also limited growth until 2002 when the second runway opened there[51].

There has also been a substantial shift in the capacity mix, with the US share of Japan seats eroding from 34.8% in 2000 to 25.2% five years later (Canada's share has also reduced from 2.6% to 1.4%). The financial problems experienced by major North American operators such as United Airlines and Air Canada contributed to this outcome, despite the 3rd, 4th and 5th freedom access benefits offered by a considerably expanded air service agreement with the US in 1998[52]. Japan also saw a reduction in services through Tokyo or Osaka to other parts of Asia due to increased non-stop flying across the North Pacific.

During the same period, the provision of more open access to China has seen its share of Japan seats almost double to 18.7%. Korea's share has also grown from 14.5% to 16.9%. Capacity between Japan and non-APEC economies (Europe) actually fell by 8.6% between 2000 and 2005. Narita Airport's growth between 1995 and 2005 was hampered even further by capacity limitations. The airport's seats to other APEC hub airports rose by only 7.9% over 10 years. Narita's US capacity, similar to the economy-economy data, declined from 12.1% to 9.4%; while China's share grew from 6.4% to 8.4%, Hong Kong's from 13.7% to 14.1% and Korea's from 12.9% to 14.4%.

The growth patterns reflected the concentration of Japanese outbound travel on shorter haul routes to North Asia. Departures by Japanese residents increased by only 13.8% between 1995 and 2005, though inbound visitor numbers doubled (albeit off a relatively low base). International passengers through Narita grew by 25.8% over the 10 years, ahead of the 16.1% increase in capacity between Japan and all economies. Freight tonnages were more buoyant with 39% growth. Japan progressively expanded its ASAs with other APEC economies from 13 in 1995 to 18 in 2005, and by doing so lifted the range of city pairs operated out of Narita from 40 to 53. According to its TPT-WG survey return, there are no open 3rds,4th or 5ths within its APEC-related ASAs for either passengers or freight, although restricted 5ths are offered in each agreement. Japan also maintains traditional ownership/control provisions; and double approval tariffs. Multiple designation is provided in most ASAs, liberal charter arrangements and no restrictions on business activities.

[51] Further relief to the capacity situation came with the opening of Chubu International Airport, Japan's third international gateway, in 2005.

[52] The 1998 bilateral agreement also provided for codesharing between US and Japanese carriers for the first time.

Malaysia

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	88.8	90.3	1.7	130.8	44.9
	Annual Inbound Visitors (total)	7468749	10221582	36.9	16431055	60.7
	Annual Outbound Residents (total)*	20642499	30532094	47.9	33360000	9.3
	No. Primary Airports	8	9	12.5	12	33.3
	No. Secondary Airports	11	11	0.0	10	-9.1
APEC Country-APEC Country	No. bilateral agreements	13	13	0.0	15	15.4
	No plurilateral agreements	0	0		0	
	Average Weekly Seats		134458	n/a	180802	34.5
	Average Weekly Frequencies		665	n/a	864	29.9
Hub Airport-APEC country	No. City Pairs	28	32	14.3	39	21.9
	No. International Operators	33	36	9.1	48	33.3
Hub Airport-Hub Airport	Av. Weekly Seats	65167	77777	19.4	103422	33.0
	Average Weekly Frequencies	308	354	14.9	424	19.8
Hub Airport-All countries	International freight (tonnes)	286491	479415	67.3	589799	23.0
	International PAX (arrivals/departures)	7304427	10248822	40.3	14337991	39.9

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0.0
	Restricted	14	93.3
	Open 3rd/4th	12	80.0
	Open 5ths	11	73.3
	Restricted 5ths	n/a	
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	n/a	
	3rd Party Codesharing	n/a	
Freight	Open Route Schedule	0	0.0
	Restricted	3	20.0
	Open 3rd/4th	2	13.3
	Open 5ths	1	6.7
	Restricted 5ths	n/a	
	7ths	n/a	
Tariffs	Double disapproval tariffs	1	6.7
	Double approval tariffs	n/a	
	No approval	n/a	
Designation	Multiple designation	13	86.7
	Restricted designation	2	13.3
Charters	Liberal Charter	n/a	
	Restricted Charter	n/a	
Ownership	Ownership/control	n/a	
	Effective regulatory control	n/a	
	Principal place of business	n/a	

Note: The limited data used in this table was provided by ICAO.

Review of Progress 1995-2005

Malaysia's share of the APEC market has improved slightly in the five years to 2005, by 0.4% to 3.8% of total capacity for the region. The growth in seats of 34.5%, and frequencies of 29.9%, has been achieved partly due to the expansion of the economy's second flag carrier, AirAsia, and the further establishment of Kuala Lumpur as a hub for intercontinental and intra-Asian traffic.

It was also a relatively turbulent period for state-owned Malaysia Airlines, which has undertaken substantial restructuring. The 10 years under review was characterised by selective liberalisation, including increased access to China and a further loosening of the Indonesian ASA. This saw a realignment of market shares between 2000 and 2005, with China and Indonesia's shares of total Malaysian seats increasing from 3.7% to 9.4% and 10.8% to 18.8%. Capacity to Thailand also rose from by almost three percentage points to 13.2%. With the wider spread of market coverage and restrictions still in place on the Kuala Lumpur-Singapore sector, Singapore's share of Malaysian capacity declined from 32.8% to 21.4%.

Malaysia's seats to non-APEC economies, which account for 23.8% of the country's international capacity, increased by 73.5% between 2000 and 2005 – almost twice that for APEC-APEC seats. This mostly relates to Europe, the Middle East and Indian sub-continent.

The reduced dependence on Singapore, and increasing links with other parts of Southeast and North Asia, was also evident in the APEC hub airport-airport trends for Kuala Lumpur International Airport (KLIA). Between 1995 and 2005, the share of Singapore-related seats at KLIA diminished from 51.5% to 27%. CAPA notes that Singapore and Malaysia are currently reviewing their ASA, which limits access to Singapore-KL to the two flag carriers, Malaysia Airlines and Singapore Airlines. Both AirAsia and Tiger Airways, a Joint Venture partly owned by Singapore Airlines, have expressed interest in serving the high volume sector.

Thailand's share of KLIA seats doubled to 16.7% during the 10 years, while Indonesia's increased from 6.5% to 14.4%. International passenger traffic at the airport rose by 96% between 1995 and 2005, in response to the intraregional and transcontinental growth, while freight tonnages doubled. This was broadly consistent with the 120% increase in inbound visitors to Malaysia and 61.6% rise in outbound resident departures.

Malaysia's ASAs with its APEC partners expanded from 13 in 1995 to 15 in 2005. Typical of country's with hub aspirations, open 3rd/4th capacity was provided in 12 of the agreements. Open 5ths was incorporated in 11 agreements. Malaysia also operates multiple designation in most of the ASAs.

Further details of the bilateral agreements with APEC economies are not known. Malaysia did not provide a survey return to the TPT-WG, so CAPA has relied largely on ICAO data for the data used.

Mexico

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	286.2	580.8	102.9	768.4	32.3
	Annual Inbound Visitors (total)	20242000	20641358	2.0	21958870	6.4
	Annual Outbound Residents (total)	8450000	11080600	31.1	14025205	26.6
	No. Primary Airports	34	39	14.7	40	2.6
	No. Secondary Airports	82	90	9.8	81	-10.0
APEC Country-APEC Country	No. bilateral agreements	10	11	10.0	13	18.2
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		212869	n/a	247939	16.5
	Average Weekly Frequencies		1636	n/a	2068	26.4
Hub Airport-APEC country	No. City Pairs	16	18	12.5	25	38.9
	No. International Operators	18	13	-27.8	20	53.8
Hub Airport-Hub Airport	Av. Weekly Seats	16425	14081	-14.3	17950	27.5
	Average Weekly Frequencies	97	84	-13.4	118	40.5
Hub Airport-All countries	International freight (tonnes)	n/a	n/a		263958	
	International PAX (arrivals/departures)	4657930	7164052	53.8	8591797	19.9

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0.0
	Restricted	12	92.3
	Open 3rd/4th	12	92.3
	Open 5ths	5	38.5
	Restricted 5ths	n/a	
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	6	46.2
	3rd Party Codesharing	0	0.0
Freight	Open Route Schedule	0	0.0
	Restricted	1	7.7
	Open 3rd/4th	1	7.7
	Open 5ths	n/a	
	Restricted 5ths	n/a	
	7ths	n/a	
Tariffs	Double disapproval tariffs	n/a	
	Double approval tariffs	n/a	
	No approval	n/a	
Designation	Multiple designation	7	53.8
	Restricted designation	4	30.8
Charters	Liberal Charter	n/a	
	Restricted Charter	n/a	
Ownership	Ownership/control	n/a	
	Effective regulatory control	n/a	
	Principal place of business	n/a	

Note: The limited data used in this table was provided by ICAO.

Review of Progress 1995-2005

Mexico's economic growth has been second only to China, with GDP rising by 169% between 1995 and 2005 (though off a much lower base). Air services, however, have not increased at a comparable rate, due in part to its heavy dependence on US links.

On an economy-to-economy basis, APEC-related capacity grew by 16.5% between 2000 and 2005 and frequencies by 26.4%. That compared with 52.3% growth between Mexico and non-APEC economies in Central and South America and Europe. Given that the latter comprises only 16.5% of total Mexico seats, capacity to all economies expanded by a much more sedate 21.2%.

The US share of Mexican seats declined slightly from 97.2% to 95.5% between 2000 and 2005, but still overwhelmingly dominates the market. Canada's share edged up during the period from 1.2% to 2.5%. As a consequence of this, Mexico has been exposed to the impacts of 9/11 and subsequent Chapter 11 bankruptcy protections affecting US carriers, in particular.

This has tempered development of the market overall, as evidenced by the marginal 8.5% growth in inbound visitors seen between 1995 and 2005. Consistent with this, capacity between Mexico City Airport, the designated hub for Mexico, and other APEC hub airports increased by only 9.2% over the 10 years. Frequencies were up by 21.6% for the same period, as the city pairs covered expanded from 16 to 25.

Reflecting the capacity rationalisation that took place during the second half of the period, the US share of seats at Mexico City Airport reduced from 86.2% in 1995 to 62.6% 10 years later, while the share of several other country airports increased substantially. Chile, for example, rose from 2.6% of capacity to 13.4%, Peru from 6.1% to 13.7% and Canada from 5% to 10.2%.

By contrast, international passenger arrivals and departures at Mexico City were reasonably strong with 84.5% growth between 1995 and 2005, driven by a 66% increase in outbound resident travel fostered by the improving economic conditions.

Mexico expanded its range of air service agreements with APEC economies from 10 to 13 over the 10 years. Open $3^{rd}/4^{th}$ access and multiple designation was incorporated in most of the ASAs, based on information provided by ICAO. As no survey return has been provided to the TPT-WG, other details of APEC economy ASAs were not available.

The US-Mexico ASA was liberalised in 2005 with the number of designated carriers from each economy operating in certain city pair markets increased from two to three.

New Zealand

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	60.3	52.4	-13.1	108.5	107.1
	Annual Inbound Visitors (total)	1408795	1789078	27.0	2382950	33.2
	Annual Outbound Residents (total)	920107	1283439	39.5	1871801	45.8
	No. Primary Airports	2	3	50.0	3	0.0
	No. Secondary Airports	8	10	25.0	11	10.0
APEC Country-APEC Country	No. bilateral agreements	15	16	6.7	18	12.5
	No. plurilateral agreements	0	0		1	
	Average Weekly Seats		72486	n/a	109653	51.3
	Average Weekly Frequencies		313	n/a	482	54.0
Hub Airport-APEC country	No. City Pairs	16	16	0.0	20	25.0
	No. International Operators	26	20	-23.1	22	10.0
Hub Airport-Hub Airport	Av. Weekly Seats	30688	35844	16.8	47034	31.2
	Average Weekly Frequencies	89	123	38.2	175	42.3
Hub Airport-All countries	International freight (tonnes)	150963	142905	-5.3	183352	28.3
	International PAX (arrivals/departures)	3604635	4441189	23.2	6191295	39.4

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	9	47.4
	Restricted	3	15.8
	Open 3rd/4th	9	47.4
	Open 5ths	6	31.6
	Restricted 5ths	4	21.1
	7ths, Other	3	15.8
	Cabotage	1	5.3
	Bilateral Codesharing	16	84.2
	3rd Party Codesharing	14	73.7
Freight	Open Route Schedule	2	10.5
	Restricted	0	0.0
	Open 3rd/4th	4	21.1
	Open 5ths	2	10.5
	Restricted 5ths	1	5.3
	7ths	5	26.3
Tariffs	Double disapproval tariffs	2	10.5
	Double approval tariffs	0	0.0
	No approval	7	36.8
Air Freight	Open	7	36.8
	Some restrictions	0	0.0
Designation	Multiple designation	17	89.5
	Restricted designation	2	10.5
Charters	Liberal Charter	6	31.6
	Restricted Charter	3	15.8
Ownership	Ownership/control	13	68.4
	Effective regulatory control	1	5.3
	Principal place of business/place of incorp.	1	5.3
	Place of business/effect. control/place of incorp.	6	31.6
	Other	4	21.1
Doing Business	Single domestic provider	0	0.0
	Competing domestic providers	8	42.1
	Self-handling	8	42.1
	Foreign designated third party handling	3	15.8
	Unrestricted currency conversion	16	84.2
	Unrestricted remittances	17	89.5
	Non-national employment	14	73.7
	Sales & Marketing, right to establish offices	14	73.7
	CRS	4	21.1
	MRO	0	0.0

Review of Progress 1995-2005

New Zealand has secured bilateral agreements with all but two APEC economies. The generally liberal approach to air service regulation has seen it enter into "open skies" agreements with six economies, including MALIAT and the Single Aviation Market agreement with Australia in 1996.

The expansive nature of New Zealand's policy regime has encouraged above average growth in seats to APEC economies of 51.3% between 2000 and 2005 (the APEC average for this period was 30%). Frequencies similarly have increased by 54%, compared with the APEC average of 35.9% growth.

Australia continued to be New Zealand's largest market throughout the five years, lifting its share of total seats from 67.4% to 68.7%. During this period, the trans-Tasman market's capacity growth accelerated due to the entry of two new operators, the Low Cost Carrier Pacific Blue and Emirates (the latter employing 5th freedom rights). Hong Kong's share of total New Zealand seats increased from 3.3% to 5.7%, while other major markets declined – the US from 12.7% to 9.2%, Singapore from 7.3% to 7% and Japan from 3.8% to 3.4%.

Seats between New Zealand and non-APEC economies (the Pacific islands) expanded by 24.9% between 2000 and 2004, half the rate of APEC-APEC growth. These markets accounted for 10.4% of overall international capacity.

The economy-economy growth was virtually the same as the 53% capacity increase between Auckland International Airport and other APEC hub airports between 1995 and 2005. Frequencies grew at a much faster rate of 96.6% due to the intense use of smaller gauge aircraft on the Tasman by Qantas, Pacific Blue and Air New Zealand.

International passenger volumes between Auckland and all economies rose by 71.8% between 1995 and 2005, generally in line with inbound visitor growth of 69.1%. Outbound resident departures doubled during the 10 years, underlining the underlying strength of the New Zealand economy, particularly during the second half of the period under review (GDP grew by 79.9% between 1995 and 2005, despite to a 13.1% fall in the previous five years). Freight tonnages rose by 21.5%.

New Zealand has entered into three new ASAs with APEC economies, and liberalised a further 14 pre-existing agreements, between 1995 and 2005[53].

This has resulted in an increase in ASAs in relation to passengers with open route schedules from one to 9; a trebling in open 3rd/4th capacity to 9; the introduction of 6 open 5ths capacity and three ASAs with open 7ths. Liberal provisions for codesharing, charter and freight have been incorporated in most agreements, as well as multiple designation and no approval tariffs.

New Zealand also has pursued more liberal ownership criteria in its ASAs than the substantial ownership/effective control model. While it operated 13 agreements with the traditional criteria in 1995, there was a mix by 2005. One had moved to principal place of business/place of incorporation; one to place of business and effective regulatory control; 6 to place of business/effective control/place of incorporation; and two to variations of these.

[53] New Zealand's Reply to Components 2-6, APEC-TPT-WG Survey 2005.

Papua New Guinea

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	4.8	3.5	-27.1	3.9	11.4
	Annual Inbound Visitors (total)	41173	58398	41.8	69250	18.6
	Annual Outbound Residents (total)*	51000	104175	104.3	37096	-64.4
	No. Primary Airports	1	2	100.0	2	0.0
	No. Secondary Airports	13	14	7.7	14	0.0
APEC Country-APEC Country	No. bilateral agreements	3	4	33.3	5	25.0
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		3239	n/a	3283	1.4
	Average Weekly Frequencies		31	n/a	21	-32.3
Hub Airport-APEC country	No. City Pairs	5	3	-40.0	5	66.7
	No. International Operators	5	4	-20.0	4	0.0
Hub Airport-Hub Airport	Av. Weekly Seats	848	537	-36.7	920	71.3
	Average Weekly Frequencies	4	3	-25.0	4	33.3

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0.0
	Restricted	5	100.0
	Open 3rd/4th	4	80.0
	Open 5ths	1	20.0
	Restricted 5ths	n/a	
	7ths, Other	n/a	
	Cabotage	n/a	
	Bilateral Codesharing	n/a	
	3rd Party Codesharing	n/a	
Freight	Open Route Schedule	n/a	
	Restricted	n/a	
	Open 3rd/4th	n/a	
	Open 5ths	n/a	
	Restricted 5ths	n/a	
	7ths	n/a	
Tariffs	Double disapproval tariffs	n/a	
	Double approval tariffs	n/a	
	No approval	n/a	
Designation	Multiple designation	2	40.0
	Restricted designation	2	40.0
Charters	Liberal Charter	n/a	
	Restricted Charter	n/a	
Ownership	Ownership/control	n/a	
	Effective regulatory control	n/a	
	Principal place of business	n/a	

Note: The limited data used in this table was provided by ICAO.

Review of Progress 1995-2005

Papua New Guinea's (PNG) weak economic conditions, volatile local currency and uncertainty over the national carrier Air Niugini contributed to the relatively limited progress achieved in air service development between 1995 and 2005.

PNG is by far the smallest APEC economy. GDP fell by 18.8% over the 10 years, despite slight growth in the second half of that period. During the first five years, PNG's economy reduced by 27.1% with a consequent negative impact on Air Niugini which was heightened by the devaluation of the kina.

The improving circumstances in the five years to 2005 saw marginal growth of 1.4% in international average weekly seats to APEC economies, most of which are concentrated on neighbouring Australia. Australia's share of total PNG capacity reduced from 81.7% in 2000 to 70.8% in 2005, reflecting changes associated with the introduction of a joint services structure between Qantas and Air Niugini.

Other markets increased in significance. Singapore's share of capacity increased from 11.1% to 14% and the Philippines from 5.5% to 7%. Air Niugini also re-established services to Japan during this period. Japan held a 7% share of seats as of 2005.

Flight frequencies overall declined by 32.3% between 2000 and 2005. Capacity between PNG and non-APEC economies (the Pacific islands) fell by 78.5%. However, these services account for only 4% of PNG's total seats.

Between 1995 and 2005, seats between PNG's hub airport at Port Moresby and APEC hub airports made a small gain of 8.5%[54]. Inbound visitor numbers from all economies climbed by 68% over the 10 years, emphasising PNG's focus on tourism and business-related travel. Outbound resident departures declined by 27.3%, however, as an indication of the generally low income levels.

International passenger and freight statistics were not available for Port Moresby for the years under review. There was also very little information on the development of PNG's ASAs with other APEC members. PNG did not provide a return to the TPT-WG survey, and the ASAs details accessible through ICAO were limited (as indicated by the table on APEC ASAs).

The number of agreements has grown from 3 to 5 between 1995 and 2005. Open 3rd and 4th capacity is incorporated in four of these ASAs and open 5ths in one. PNG also operates multiple designation in two agreements.

[54] It should be noted that the seats data for hub airport-hub airport in the Performance Indicators table for PNG does not include Australian seats, as flights from Port Moresby operate to destinations other than Sydney Airport (the designated hub for Australia). This substantially reduces the number of seats shown.

Peru

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	53.6	53.3	-0.6	79.4	49.0
	Annual Inbound Visitors (total)	531000	182000	-65.7	n/a	
	Annual Outbound Residents (total)	n/a	n/a		n/a	
	No. Primary Airports	22	24	9.1	26	8.3
	No. Secondary Airports	11	13	18.2	14	7.7
APEC Country-APEC Country	No. bilateral agreements	3	3	0.0	5	66.7
	No. plurilateral agreements	1	1		1	
	Average Weekly Seats		19393	n/a	22260	14.8
	Average Weekly Frequencies		101	n/a	100	-1.0
Hub Airport-APEC country	No. City Pairs	6	7	16.7	8	14.3
	No. International Operators	4	11	175.0	11	0.0
Hub Airport-Hub Airport	Av. Weekly Seats	5583	8883	59.1	11374	28.0
	Average Weekly Frequencies	28	50	78.6	53	6.0
Hub Airport-All countries	International freight (tonnes)	n/a	87336		157324	80.1
	International PAX (arrivals/departures)	n/a	2257541		2942603	30.3

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	1	20.0
	Restricted	3	60.0
	Open 3rd/4th	1	20.0
	Open 5ths	1	20.0
	Restricted 5ths	0	0.0
	7ths, Other	1	20.0
	Cabotage	0	0.0
	Bilateral Codesharing	1	20.0
	3rd Party Codesharing	0	0.0
Freight	Open Route Schedule	1	20.0
	Restricted	0	0.0
	Open 3rd/4th	n/a	
	Open 5ths	n/a	
	Restricted 5ths	n/a	
	7ths	n/a	
Tariffs	Double disapproval tariffs	0	0.0
	Double approval tariffs	0	0.0
	No approval	1	20.0
Air Freight	Open	1	20.0
	Some restrictions	0	0.0
Designation	Multiple designation	1	20.0
	Restricted designation	0	0.0
Charters	Liberal Charter	1	20.0
	Restricted Charter	0	0.0
Ownership	Ownership/control	0	0.0
	Effective regulatory control	0	0.0
	Principal place of business	1	20.0
Doing Business	Single domestic provider	1	20.0
	Competing domestic providers	1	20.0
	Self-handling	1	20.0
	Foreign designated third party handling	1	20.0
	Unrestricted currency conversion	0	0.0
	Unrestricted remittances	0	0.0
	Non-national employment	1	
	Sales & Marketing, right to establish offices	0	0.0
	CRS	1	20.0
	MRO	1	20.0

Note: This table reflects the open skies agreement signed with the US. Other open skies arrangements are held with members of the Andean Community (the Andean Pact).

Review of Progress 1995-2005

Peru has actively moved to establish itself as a hub in South America through its involvement in the Andean Pact[55] and an "open skies" policy with the US. Its bilateral agreements with other APEC economies have increased from 3 in 1995 to 5 in 2005, including the US, Thailand, Canada, China and Mexico. Peru was originally party to the MALIAT agreement, but withdrew with effect from 2005, ostensibly because of disproportionate benefits accruing to Chilean carriers.

Growth in APEC-related capacity has been relatively modest on an economy-to-economy basis at 14.8% between 2000 and 2005, with frequencies reducing by 1%. This is despite 49% growth in the Peruvian economy during that period. The improvement in GDP followed negative growth of 0.6% in the preceding five years.

Peru's participation in the Andean Pact with other South American economies has seen growth in seats between it and non-APEC economies of 33% in 2000-2005, more than twice the APEC-APEC rate. Non-APEC seats account for 56.7% of total airline seats (one of only four APEC economies where non-APEC seats exceed 50%).

In terms of APEC-APEC average weekly seats, the largest share is associated with the US. This increased from 65.2% to 67.4% between 2000 and 2004, reflecting the "open skies" arrangement between the two economies. The share of Peru's other substantial market, Chile, fell from 34.8% to 29.7% during the same period.

The economy-to-economy growth was much more moderate than that between Peru's hub airport at Lima and other APEC hub airports between 1995 and 2005. Capacity growth out of Lima Airport doubled in the 10 years, with frequencies up by 89.3%. Both the US and Mexico lifted their shares of these seats respectively from 18.8% to 20.1% and from 19.9% to 21.6%, while Chile's share diminished from 63.2% to 58.2%. (The US share for the airport is considerably lower than the country share because it focuses on only one of a number of points served in the US (Los Angeles)).

International passenger arrivals and departures for all economies at Lima grew by 30.3% between 2000 and 2005 (1995 data was not available), slightly ahead of the 24.5% increase in capacity for combined APEC and non-APEC economies. Statistics on inbound and outbound travel were incomplete (other than arrivals data for 1995 and 2000 which showed a 65.7% decline). Freight tonnages were up by 80.1% for that five year period, consistent with the strong economic growth.

Peru's response to the TPT-WG survey of 2005 focused only on the US agreement, which provides for open routes schedules (passengers and freight), open 3rd, 4th and 5th freedom access, multiple designation, no tariff approval, liberal charter, principal place of business and relatively unrestricted business activities. Information on the structure of other APEC bilateral agreements was not available.

[55] The Andean Commission has since 1991 declared "open skies" for member countries on a sub-regional basis, incorporating unrestricted 3rd, 4th and 5th freedom rights for scheduled and non-scheduled passengers and cargo, multiple designation and country of origin tariff arrangements.

Philippines

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	75.5	75.9	0.5	98.4	29.6
	Annual Inbound Visitors (total)	1760163	1992169	13.2	2623084	31.7
	Annual Outbound Residents (total)	1578939	1670040	5.8	n/a	
	No. Primary Airports	9	9	0.0	11	22.2
	No. Secondary Airports	24	28	16.7	26	-7.1
APEC Country-APEC Country	No. bilateral agreements	11	12	9.1	13	8.3
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		89394	n/a	116671	30.5
	Average Weekly Frequencies		311	n/a	451	45.0
Hub Airport-APEC country	No. City Pairs	21	21	0.0	26	23.8
	No. International Operators	40	27	-32.5	30	11.1
Hub Airport-Hub Airport	Av. Weekly Seats	65359	65991	1.0	79709	20.8
	Average Weekly Frequencies	211	218	3.3	255	17.0
Hub Airport-All countries	International freight (tonnes)	274839	286973	4.4	296090	3.2
	International PAX (arrivals/departures)	3560008	7129881	100.3	9222006	29.3

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0.0
	Restricted	13	100.0
	Open 3rd/4th	12	92.3
	Open 5ths	8	61.5
	Restricted 5ths	n/a	
	7ths, Other	n/a	
	Cabotage	n/a	
	Bilateral Codesharing	n/a	
	3rd Party Codesharing	n/a	
Freight	Open Route Schedule	n/a	
	Restricted	n/a	
	Open 3rd/4th	n/a	
	Open 5ths	n/a	
	Restricted 5ths	n/a	
	7ths	n/a	
Tariffs	Double disapproval tariffs	1	7.7
	Double approval tariffs	n/a	
	No approval	n/a	
Air Freight	Open	n/a	
	Some restrictions	n/a	
Designation	Multiple designation	7	53.8
	Restricted designation	6	46.2
Charters	Liberal Charter	n/a	
	Restricted Charter	1	7.7
Ownership	Ownership/control	n/a	
	Effective regulatory control	n/a	
	Principal place of business	n/a	
Doing Business	Single domestic provider	n/a	
	Competing domestic providers	n/a	
	Self-handling		
	Foreign designated third party handling	n/a	
	Unrestricted currency conversion	13	100.0
	Unrestricted remittances	13	100.0
	Non-national employment	n/a	
	Sales & Marketing, right to establish office	n/a	
	CRS	n/a	
	MRO	n/a	

Note: N/A means not available. The Philippines provided information in its TPT-WG Survey return which in most cases did not quantify the number of ASAs to which the particular component applied. Other data used in this table was collected from ICAO.

Review of Progress 1995-2005

The Philippines has been influential in aviation liberalisation developments in Southeast Asia, particularly in the cargo sector. It maintained bilateral agreements with 13 APEC economies at 2005, two more than in 1995.

As a developing economy, the Philippines occupies only a small share of seat capacity in the region (this increased from 2.2% to 2.5% of total APEC seats between 2000 and 2005). However, APEC is extremely important to its air services structure with 91.9% of the country's airline seats offered for APEC-related services.

GDP growth was impacted significantly by the Asian financial crisis in the 1995-2000 period, which limited economic expansion to 0.5% and placed the national carrier Philippine Airlines in a fragile financial position. The domestic economy picked up in the following five years, with 30.3% growth.

As a consequence, APEC-APEC capacity increased by 30.5%, and frequencies by 45%, between 2000 and 2005. Much of this growth was generated by smaller, developing markets. Korea's share of total APEC seats, for example, expanded from 7.5% to 12.3%, China from 1.3% to 2.8%, Chinese Taipei from 0.4% to 6.8% and Viet Nam from 0.5% to 2%. Other largest markets saw a reduction in capacity share – for example, *Hong Kong, China* fell from 28.7% to 21.4%, Japan from 23.4% to 19.9% and the US from 10.1% to 9.2%.

Average weekly capacity between the Philippines and non-APEC economies grew at a much slower rate of 15.7% (these accounted for 8.1% of total capacity). The economy-to-economy trends were repeated in relation to APEC hub airports. Seats between the international airport at Manila and APEC hubs rose by 22% and frequencies by 20.9% between 1995 and 2005. The share of Manila airport-related seats diminished for Japan, Singapore and Thailand for that period. However, Hong Kong's share increased from 23.2% to 28.3%, reflecting the strength of this route in the first five years.

International passenger volumes at Manila (involving arrivals and departures for all countries) were robust for the 10 years, with 159% growth. This stemmed from a 49% increase in inbound visitors to the Philippines between 1995 and 2005 (full data was not available in regard to outbound resident departures). The airport's freight tonnages grew by 7.7% for the same period.

The Philippines operates a mostly liberal environment for air services, with 12 of the 13 APEC-related ASAs incorporating open 3rd/4th access and 8 open 5ths for passengers; and multiple designation for more than half of the agreements. The country's TPT-WG survey return for 2005 did not provide quantified information on the number of ASAs containing various components. It indicated that the Philippines adopts substantial ownership/effective control for its agreements and double approval tariffs. Market access is decided on a case-by-case basis.

The ASA with the US, struck in 1995, provided 7th freedom all-cargo rights, including the ability for operators to operate aircraft from the Philippines, and to determine capacity and aircraft gauge. This enabled express freight operators Federal Express and UPS to establish hub operations at Subic Bay and Clark Air Base respectively to service the Asian region.

Republic of Korea

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	517.1	511.9	-1.0	787.6	53.9
	Annual Inbound Visitors (total)	3753197	5321792	41.8	6021764	13.2
	Annual Outbound Residents (total)	3818740	5508242	44.2	10077619	83.0
	No. Primary Airports	23	20	-13.0	24	20.0
	No. Secondary Airports	10	16	60.0	14	-12.5
APEC Country-APEC Country	No. bilateral agreements	12	13	8.3	17	30.8
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		211315		363942	72.2
	Average Weekly Frequencies		767		1438	87.5
Hub Airport-APEC country	No. City Pairs	42	56	33.3	84	50.0
	No. International Operators	56	52	-7.1	63	21.2
Hub Airport-Hub Airport	Av. Weekly Seats	91298	105728	15.8	140468	32.9
	Average Weekly Frequencies	283	339	19.8	461	36.0
Hub Airport-All countries	International freight (tonnes)	1016742	1597111	57.1	2120092	32.7
	International PAX (arrivals/departures)	13366781	17898488	33.9	25590675	43.0

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0.0
	Restricted	17	100.0
	Open 3rd/4th	16	94.1
	Open 5ths	12	70.6
	Restricted 5ths	n/a	
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	2	11.8
	3rd Party Codesharing	1	5.9
Freight	Open Route Schedule	0	0.0
	Restricted	3	17.6
	Open 3rd/4th	1	5.9
	Open 5ths	0	0.0
	Restricted 5ths	n/a	
	7ths	0	0.0
Tariffs	Double disapproval tariffs	1	5.9
	Double approval tariffs	n/a	
	No approval		
Designation	Multiple designation	11	64.7
	Restricted designation	4	23.5
Charters	Liberal Charter	0	0.0
	Restricted Charter	3	17.6
Ownership	Ownership/control	n/a	
	Effective regulatory control	n/a	
	Principal place of business	n/a	

Note: The limited data used in this table was provided by ICAO.

Review of Progress 1995-2005

The turnaround in the Republic of Korea's economy from the first to the second half of the 10-year period led to a substantial growth in air services and bilateral agreements with other APEC economies. Between 1995 and 2005, Korea lifted the number of ASAs held with APEC economies from 12 to 17.

With the Asian financial crisis, GDP declined by 1% between 1995 and 2000. Korea's economy achieved 53.9% growth in the five years after that, driven by rising exports and improving income levels.

Consistent with the more buoyant economic conditions, average weekly seats associated with APEC economies grew by 72.2% and frequencies by 89.9% in the 2000-2005 period. The high growth reflected the opening of Incheon International Airport in 2001 as a replacement for the constrained Seoul Kimpo Airport, expanded access to China and a series of expanded bilateral agreements entered into by Korea with eight APEC economies. This included the re-establishment in 2004 of the ASA with Chinese Taipei, which had been suspended in 1992 for diplomatic reasons.

China's share of total average weekly seats with APEC economies almost doubled from 13.6% in 2000 to 26.4% five years later. During the same period, Taipei secured 5.2% of APEC seats and Thailand lifted its share from 4.6% to 5.2%. Korea's other major markets, Japan and the US, fell from shares of 37.2% and 18% to 30.4% and 10%.

The capacity growth rate between Korea and non-APEC economies (Europe) from 2000 to 2005 was considerably higher at 184.7% (exceeding that for China), but this had a limited impact as it related only to 5.1% of total airline capacity.

The economy-to-economy pattern was repeated for Korea's hub airport[56], in terms of seats and frequencies between it and other APEC hub airports between 1995 and 2005, albeit at a more moderate level of growth. APEC airport-airport capacity rose by 53.9% over that period, and frequencies by 62.9%. During the 10 years, Beijing's share of the airport capacity climbed from zero to 8.9%. The US share, by contrast, fell from 12.1% to 6.6%.

International passenger growth between the hub airport and all countries was also very strong at 91.4% between 1995 and 2005. This reflected a 60.4% increase in inbound visitors to Korea and 163.9% growth in outbound resident departures. Freight tonnages expanded by 108.5% as Incheon and Korean Air, in particular, continued to develop their cargo handling capability.

As Korea did not provide a return to the TPT-WG survey, information on its ASAs with other APEC economies is relatively limited. According to ICAO, the country maintains open 3rd/4th access in relation to passengers in 16 agreements and open 5th for 12 agreements. The approach to freight is more restrictive, with only one agreement providing open 3rd/4th access and none with open 5ths.

Multiple designation is incorporated in most cases. Korean's renegotiated ASA with China in 2004 provided for multiple designation on all routes (this previously applied only to the Incheon-Beijing route), as well as expanded capacity entitlements.

[56] Seoul Kimpo served as the international airport for Korea until Incheon's opening in 2001. Hub airport data for Korea, therefore, focused on Kimpo for 1995-2005 and Incheon for the subsequent five years.

Russian Federation

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	313.4	259.7	-17.1	763.3	193.9
	Annual Inbound Visitors (total)	10290000	21169000	105.7	n/a	
	Annual Outbound Residents (total)	n/a	18371000		n/a	
	No. Primary Airports	256	234	-8.6	250	6.8
	No. Secondary Airports	108	76	-29.6	129	69.7
APEC Country-APEC Country	No. bilateral agreements	9	9	0.0	18	100.0
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		23441	n/a	29923	27.7
	Average Weekly Frequencies		125	n/a	148	18.4
Hub Airport-APEC country	No. City Pairs	6	9	50.0	9	0.0
	No. International Operators	11	11	0.0	9	-18.2
Hub Airport-Hub Airport	Av. Weekly Seats	12436	11087	-10.8	11001	-0.8
	Average Weekly Frequencies	33	31	-6.1	43	38.7
Hub Airport-All countries	International freight (tonnes)	n/a	84022		81329	-3.2
	International PAX (arrivals/departures)	n/a	7825104		8440724	7.9

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	0	0.0
	Restricted	18	100.0
	Open 3rd/4th	18	100.0
	Open 5ths	0	0.0
	Restricted 5ths	17	94.4
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	10	55.6
	3rd Party Codesharing	4	22.2
Freight	Open Route Schedule	0	0.0
	Restricted	2	11.1
	Open 3rd/4th	2	11.1
	Open 5ths	0	0.0
	Restricted 5ths	11	61.1
	7ths	0	0.0
Tariffs	Double disapproval tariffs	0	0.0
	Double approval tariffs	1	5.6
	No approval	0	0.0
Air Freight	Open	0	0.0
	Some restrictions	n/a	
Designation	Multiple designation	18	100.0
	Restricted designation	0	0.0
Charters	Liberal Charter	0	0.0
	Restricted Charter	2	11.1
Ownership	Ownership/control	0	0.0
	Effective regulatory control	0	0.0
	Principal place of business	0	0.0
Doing Business	Single domestic provider	0	0.0
	Competing domestic providers	18	100.0
	Self-handling	0	0.0
	Foreign designated third party handling	0	0.0
	Unrestricted currency conversion	18	100.0
	Unrestricted remittances	18	100.0
	Non-national employment	0	0.0
	Sales & Marketing, right to establish offices	18	100.0
	CRS	18	100.0
	MRO	18	100.0

Review of Progress 1995-2005

Russian Federation has engaged more expansively with APEC economies since joining the grouping in 1998, doubling its air service agreements with member economies to 18 between 1995 and 2005.

The development of ASAs, and growth generally in air services to the region, has coincided with a resurgence in the economy following a 17.1% decline in GDP for the first half of the 10-year period. By contrast, GDP grew by 193.9% growth between 2000 and 2005.

Average weekly seats to APEC economies increased by 27.7%, and frequencies by 18.4%, between 2000 and 2005. However, APEC-related services still only comprised 12.8% of total Russian Federation seats by 2005 and 0.6% of total APEC airline seats. Russian Federation's seats to non-APEC economies (mostly Europe and the Middle East) grew by 45% over the five years to 2005, twice the APEC-APEC rate.

In terms of APEC economy-to-economy seats, there was a marked shift in emphasis to China which has become Russian Federation's most substantial APEC market. China's share of capacity increased from 24.7% of Russian Federation's APEC seats to 34.6% between 2000 and 2005. During the same period, the US share has reduced from 27.5% to 20% and Japan's from 19.7% to 10.8%. The fourth largest market, Korea, has strengthened its share from 14.1% to 16.3%.

The expansion to China was even more obvious in the analysis of average weekly seats between the designated hub airport, Moscow, and other APEC airports. Between 1995 and 2005, China's share of APEC airport-related seats moved from 4.8% to 35.6%, while Japan's capacity share sank from 72.3% to 22.2%. Korea also gained on this basis, with growth from 13.7% of Moscow's APEC seats to 17.9%.

International passenger traffic at Moscow for all countries grew by 7.9% between 2000 and 2005, while freight tonnages achieved only marginal growth of 0.5% (1995 data was not available for passengers or freight). Tourism volumes for Russian Federation were also incomplete, other than inbound visitor numbers for 1995 and 2000. There was a 105.7% increase between those years.

Russian Federation's response to the TPT-WG survey of 2005 indicated that all of the APEC ASAs incorporated open $3^{rd}/4^{th}$ access for passengers and 5ths freedom access on a restricted basis. Bilateral codesharing was also permitted in 10 of the 18 agreements. While restricted 5ths were provided for in 11 ASAs in relation to freight, only two included open $3^{rd}/4^{th}$ freedom access.

Multiple designation is incorporated in all of the agreements. A mostly liberal approach also has been adopted towards business activities. Russian Federation stated in its survey return that substantial ownership/effective control was still employed for its designated flag carriers.

In the period between 2000 and 2005, Russian Federation established a limited bilateral agreement with Chinese Taipei, providing for charter access. More expansive agreements were also struck with the Republic of Korea and *Hong Kong, China*.

Singapore

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	84.3	92.7	10.0	116.8	26.0
	Annual Inbound Visitors (total)	7136538	7691399	7.8	8942408	16.3
	Annual Outbound Residents (total)	2867242	4443542	55.0	5159403	16.1
	No. Primary Airports	5	3	-40.0	3	0.0
	No. Secondary Airports	4	4	0.0	4	0.0
APEC Country-APEC Country	No. bilateral agreements	13	16	23.1	18	12.5
	No. plurilateral agreements	0	0		3	
	Average Weekly Seats		302923		354061	16.9
	Average Weekly Frequencies		1212		1470	21.2
Hub Airport-APEC country	No. City Pairs	55	28	-49.1	56	100.0
	No. International Operators	87	66	-24.1	91	37.9
Hub Airport-Hub Airport	Av. Weekly Seats	197383	160066	-18.9	227745	42.3
	Average Weekly Frequencies	768	743	-3.3	870	17.1
Hub Airport-All countries	International freight (tonnes)	1105772	1682489	52.2	1833721	9.0
	International PAX (arrivals/departures)	21743196	26964183	24.0	30720366	13.9

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	9	50.0
	Restricted	9	50.0
	Open 3rd/4th	9	50.0
	Open 5ths	4	22.2
	Restricted 5ths	13	72.2
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	14	77.8
	3rd Party Codesharing	12	66.7
Freight	Open Route Schedule	9	50.0
	Restricted	9	50.0
	Open 3rd/4th	9	50.0
	Open 5ths	4	22.2
	Restricted 5ths	13	72.2
	7ths	5	27.8
Tariffs	Double disapproval tariffs	1	5.6
	Double approval tariffs	11	61.1
	No approval	6	33.3
Air Freight	Open	6	33.3
	Some restrictions	12	66.7
Designation	Multiple designation	17	94.4
	Restricted designation	1	5.6
Charters	Liberal Charter	5	27.8
	Restricted Charter	4	22.2
Ownership	Ownership/control	12	66.7
	Effective regulatory control	4	22.2
	Principal place of business	7	38.9
Doing Business	Single domestic provider		0.0
	Competing domestic providers	6	33.3
	Self-handling	5	27.8
	Foreign designated third party handling	2	11.1
	Unrestricted currency conversion	9	50.0
	Unrestricted remittances	14	77.8
	Non-national employment	12	66.7
	Sales & Marketing, right to establish offices	9	50.0
	CRS	4	22.2
	MRO	0	0.0

Review of Progress 1995-2005

Singapore has been a focal point for liberalisation in Southeast Asia through its involvement in several plurilateral agreements, including MALIAT, the "2+X" all-cargo agreement with Cambodia, Thailand and Brunei and the "3+X" agreement on 3rd/4th freedom passenger access with Brunei and Thailand.

Its air services policy emphasises the promotion of a free flow of passengers and goods, consistent with the development of Singapore's position as an entrepot and Changi Airport hub capability. Trade and investment are extremely important to the economy which grew by 38.6% between 1995 and 2005, despite much slower growth of only 10% in the first half of the period due to the impact of Asia's financial crisis in 1997-98.

Average weekly seats between Singapore and other APEC economies expanded at a moderate rate of 16.9% between 2000 and 2005. Flight frequencies grew faster by 21.2%, due in part to the introduction of additional services with smaller gauge aircraft by a number of Low-Cost Carriers. At one stage, three LCCs were based in Singapore (this reduced to two when Jetstar Asia acquired Valuair).

Some growth was achieved in major markets such as Australia, which moved from a 16% share of Singapore's APEC-related seats to 16.8% and Thailand from 12.9% to 14.4% (the latter was driven by the entry of LCCs on the Singapore-Bangkok route). China grew from a 4.6% share in 2000 to 10.9% five years later. As more direct access was provided to mainland China, Hong Kong's share of Singapore APEC capacity fell from 11.2% to 8.9%. The launch of non-stop air services between Singapore and the US in 2004, by Singapore Airlines with long-range A340-500 aircraft, also contributed to the dilution of both *Hong Kong, China* and Chinese Taipei's shares (Chinese Taipei fell from a 4.2% share to 2.9%). Services to the US previously operated via these intermediate points.

Three other substantial markets also experienced reduced market shares between 2000 and 2005 – Indonesia from 16.8% of APEC seats to 14.4%, Malaysia from 13.0% to 10.7% and Japan from 9.2% to 7.2%.

APEC economies account for 79.1% of total Singapore capacity. Singapore's seats to non-APEC economies (Europe, India and the Middle East) grew by 13.8% during the same period.

The economy-economy trends broadly aligned with a 15.4% growth in seats offered between Singapore's hub airport (Changi) and other APEC hub airports between 1995 and 2005. During the first five years, capacity actually fell by 3.3%, but picked up strongly in the remaining period. Frequencies increased by 13.3% for the 10 years, though, like the capacity outcome, negative growth occurred in the first half.

Reflecting the liberal approach to aviation, international passenger traffic to/from all countries at Changi climbed by 41.3% 1995-2005. This exceeded Singapore's inbound visitor growth for the period of 25.3% (outbound resident growth was much higher at 79.9%). Freight tonnages also performed strongly, with 65.8% growth.

Singapore's 18 air service agreements with APEC economies, as of 2005, generally incorporate multiple designation, bilateral codesharing and 5th freedom passenger access (albeit mostly on a restricted basis). Half include open routes schedules and open 3rd/4th access for passengers and freight. Double approval tariffs operates in 11 ASAs. Some progress has been made in liberalising ownership regulations with 7 agreements incorporating principal place of business consistent with government policy.

Chinese Taipei

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$)	274.0	321.4	17.3	346.2	7.7
	Annual Inbound Visitors (total)	2331934	2624037	12.5	3378118	28.7
	Annual Outbound Residents (total)	5188658	7328784	41.2	8208125	12.0
	No. Primary Airports	19	17	-10.5	16	-5.9
	No. Secondary Airports	6	8	33.3	12	50.0
APEC Country-APEC Country	No. bilateral agreements	13	14	7.7	14	0.0
	No plurilateral agreements	0	0		0	
	Average Weekly Seats		244045	n/a	286248	17.3
	Average Weekly Frequencies		815	n/a	1034	26.9
Hub Airport-APEC country	No. City Pairs	28	27	-3.6	22	-18.5
	No. International Operators	56	51	-8.9	50	-2.0
Hub Airport-Hub Airport	Av. Weekly Seats	162754	160066	-1.7	201157	25.7
	Average Weekly Frequencies	508	493	-3.0	669	35.7
Hub Airport-All countries	International freight (tonnes)	734350	1196122	62.9	1692447	41.5
	International PAX (arrivals/departures)	12585798	16705425	32.7	19213399	15.0

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	5	35.7
	Restricted	9	64.3
	Open 3rd/4th	3	21.4
	Open 5ths	1	7.1
	Restricted 5ths	10	71.4
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	6	42.9
	3rd Party Codesharing	5	35.7
Freight	Open Route Schedule	5	35.7
	Restricted	7	50.0
	Open 3rd/4th	4	28.6
	Open 5ths	3	21.4
	Restricted 5ths	6	42.9
	7ths	n/a	
Tariffs	Double disapproval tariffs	2	14.3
	Double approval tariffs	9	64.3
	No approval	1	7.1
Air Freight	Open	5	35.7
	Some restrictions	8	57.1
Designation	Multiple designation	12	85.7
	Restricted designation	2	14.3
Charters	Liberal Charter	0	0.0
	Restricted Charter	2	14.3
Ownership	Ownership/control	3	21.4
	Effective regulatory control	1	7.1
	Principal place of business	1	7.1
	Substantial ownership/effective reg control	8	57.1
Doing Business	Single domestic provider	0	0.0
	Competing domestic providers	13	92.9
	Self-handling	1	7.1
	Foreign designated third party handling	0	0.0
	Unrestricted currency conversion	14	100.0
	Unrestricted remittances	14	100.0
	Non-national employment	14	100.0
	Sales & Marketing, right to establish offices	14	100.0
	CRS	14	100.0
	MRO	14	100.0

Review of Progress 1995-2005

Chinese Taipei has consistently held bilateral agreements with about two-thirds of the APEC membership over the 1995-2005 period. Its share of total APEC seats has remained steady at 6.1% during the second half of this period, despite some rationalisation of the number of city pairs served and airline operators

The 17.3% growth in economy-to-economy average weekly seats achieved between 2000 and 2005 compares to a 50.3% increase in seats between Chinese Taipei and non-APEC economies (mostly Macau, Dubai and Indo-China) during the same period. However, the latter was off a relatively low base as non-APEC capacity comprised only 12% of the economy's total international seats.

Chinese Taipei uses *Hong Kong, China* and Macau as access points to the mainland China market as direct cross-straits scheduled flights are not allowed. However, some limited charters and over-flying have been permitted.

Hong Kong, China and Japan maintained their positions as the leading two APEC destination economies, with their respective shares of Chinese Taipei seats climbing from 33.5% to 35.7% and 19.8% to 20.7% between 2000 and 2005. Viet Nam also grew in stature, with its share rising from 3.3% to 5.4%. The US, by contrast, saw a reduction from a 12.9% share to 9.7% (again reflecting the post 9/11 environment and its impact on air traffic and trade).

The economy-economy trends were matched by those between the hub airport (Taipei) and other APEC hub airports between 1995 and 2005. During this period, seats grew by 22.8% and frequencies by 31.7%, with *Hong Kong, China* lifting its share of capacity from 37.7% to 43.8%. Japan's hub airport-related share slipped by 1.5 percentage points to 13.4%, indicating both the effects of access constraints at Tokyo Narita Airport and development of other airports in Japan.

Inbound visitor numbers increased by 45%, and outbound resident travel by 148%, reflecting the benefits of generally strong GDP growth and improved air access, between 1995 and 2005. International passenger arrivals and departures at Taipei were similarly buoyant, with 53% growth during the 10 years, while freight tonnages expanded by 130%. Chinese Taipei's major carriers EVA Air and China Airlines capitalised on solid trading conditions during this period.

The focus on freight development, including Chinese Taipei's transhipment activities, has fostered a liberal approach to air cargo in bilateral agreements. Chinese Taipei incorporates in relation to freight open route schedules in 5 ASAs; open $3^{rd}/4^{th}$ capacity in four; and open 5ths in three agreements.

Passenger agreements appear more restrictive, with open $3^{rd}/4^{th}$ access available in three ASAs and open 5^{th} in one. Bilateral codesharing is incorporated in 6 of Chinese Taipei's 14 agreements. The economy has moved away from traditional ownership and control regulations by opting for substantial ownership/effective regulatory control in 8 agreements. It has proposes to encourage external investment by relaxing foreign ownership limits for airlines, lifting the ceiling from 33% to 49%.

Chinese Taipei operates few restrictions on ground handling and other airline-related business activities under its ASAs, consistent with its strategic development as a entrepot centre.

Thailand

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	168.0	122.7	-27.0	173.1	41.1
	Annual Inbound Visitors (total)	6951566	9578826	37.8	11516936	20.2
	Annual Outbound Residents (total)	1820254	1908928	4.9	2758878	44.5
	No. Primary Airports	15	17	13.3	17	0.0
	No. Secondary Airports	10	21	110.0	24	14.3
APEC Country-APEC Country	No. bilateral agreements	11	13	18.2	19	46.2
	No. plurilateral agreements	0	0		2	
	Average Weekly Seats		222292	n/a	279759	25.9
	Average Weekly Frequencies		753	n/a	1095	45.4
Hub Airport-APEC country	No. City Pairs	30	32	6.7	38	18.8
	No. International Operators	54	66	22.2	82	24.2
Hub Airport-Hub Airport	Av. Weekly Seats	138265	152262	10.1	201788	32.5
	Average Weekly Frequencies	465	487	4.7	720	47.8
Hub Airport-All countries	International freight (tonnes)	618391	820029	32.6	1071386	30.7
	International PAX (arrivals/departures)	15119065	20498280	35.6	26821227	30.8

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	9	47.4
	Restricted	10	52.6
	Open 3rd/4th	6	31.6
	Open 5ths	1	5.3
	Restricted 5ths	18	94.7
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	16	84.2
	3rd Party Codesharing	14	73.7
Freight	Open Route Schedule	10	52.6
	Restricted	9	47.4
	Open 3rd/4th	8	42.1
	Open 5ths	4	21.1
	Restricted 5ths	15	78.9
	7ths	0	0.0
Tariffs	Double disapproval tariffs	0	0.0
	Double approval tariffs	16	84.2
	No approval	0	0.0
Air Freight	Open	5	26.3
	Some restrictions	14	73.7
Designation	Multiple designation	14	73.7
	Restricted designation	5	26.3
Charters	Liberal Charter	n/a	
	Restricted Charter	n/a	
Ownership	Ownership/control	17	89.5
	Effective regulatory control	0	0.0
	Principal place of business	1	5.3
	Other (Place of business.eff. control)	1	5.3
Doing Business	Single domestic provider	n/a	
	Competing domestic providers	3	15.8
	Self-handling	4	21.1
	Foreign designated third party handling	n/a	
	Unrestricted currency conversion	14	73.7
	Unrestricted remittances	15	78.9
	Non-national employment	n/a	
	Sales & Marketing, right to establish offices	16	84.2
	CRS	n/a	
	MRO	n/a	

Note: N/A refers to areas where data was not provided in the TPT-WG Survey.

Review of Progress 1995-2005

Thailand is an active participant in the APEC aviation liberalisation programme, as demonstrated by its involvement in a number of key bilateral and plurilateral initiatives in the region. These include the "2+X" all-cargo agreement with Singapore, Cambodia and Brunei; and the "3+X" passenger services agreement with Brunei and Singapore[57]. Thailand also secured an "open skies" agreements with China in 2004, removing restrictions on 3rd/4th freedom access, and the US in 2005.

The Thai economy has recovered strongly from the buffeting received during the Asian financial crisis which saw a 27% decline in GDP between 1995 and 2000. GDP subsequently grew by 41% in the five years to 2005, encouraging a 25.9% increase in average weekly airline seats to other APEC economies, and a 45.4% expansion in flight frequencies. This increased Thailand's share of total APEC capacity from 5.6% to 5.9%

The development of the aviation relationship with Singapore, particularly on the Singapore-Bangkok sector, has seen Singapore's share of Thailand's average weekly seats to APEC economies grow from 17.7% to 18.3% between 2000 and 2005. Similarly, the "open skies" agreement with China has expanded China's share from 7.3% to 11.2%. Japan also remains a significant market, increasing its share of seats from 13.8% to 14.1% over the five years.

APEC-related capacity accounts for 67.1% of Thailand's total international capacity. Seats on services between the country and non-APEC economies (Europe, India and the Middle East) grew at 48.5% between 2000 and 2005, a substantially faster rate than that for APEC-APEC seats.

Average weekly seats between Thailand's hub airport, Bangkok, and other APEC hub airports has grown by 45.9%, and frequencies by 54.8%, between 1995 and 2005. This trend gathered pace considerably during the second half of the period, as Thailand secured air service agreements with a further six APEC economies. Singapore's share of Bangkok seats grew from 20.5% to 21.5% and Japan's from 11.3% to 18.1%. China's share also rose from 1.7% to 3.2%, and Korea's from 8.4% to 9.3%. Bangkok's international passenger traffic increased by 77.4% overall (covering both APEC and non-APEC economies served from the airport), applying pressure to its handling capacity. This reflected a 65.7% growth in inbound visitors between 1995 and 2005, and 51.6% growth in outbound resident departures. Freight tonnages also grew strongly by 73.3%.

Thailand's 18 ASAs with APEC economies generally provide 5th freedom access on a restricted basis, multiple designation and expansive codesharing rights (the latter reflecting Thai's role in the Star Alliance). Six agreements carry open 3rd/4th access and 1 open 5ths for passengers. Freight access is more liberal, with 8 ASAs with open 3rd/4th access and four with open 5ths. Most agreements incorporate traditional ownership/control provisions (only one ASA uses principal place of business and one other place of business/effective control). Double approval tariff arrangements are provided for in most ASAs (there are no double disapproval tariff provisions). Some restrictions still apply to business activities.

[57] the "2+X" agreement provides unlimited 3rd,4th and 5th freedom access for all-cargo services between participating economies; the "3+X" enables unlimited 3rd/4th freedom access for passenger services within ASEAN. Both agreements are accessible to other members of ASEAN.

United States

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	7397.6	9816.9	32.7	12455.8	26.9
	Annual Inbound Visitors (total)	43490000	51236701	17.8	49401528	-3.6
	Annual Outbound Residents (total)	51285000	61327000	19.6	63502000	3.5
	No. Primary Airports	389	402	3.3	414	3.0
	No. Secondary Airports	1242	1331	7.2	1402	5.3
APEC Country-APEC Country	No. bilateral agreements (APEC)	14	17	21.4	19	11.8
	No. plurilateral agreements	0	0		1	
	Average Weekly Seats (APEC)		710663	n/a	301761	-57.5
	Average Weekly Frequencies (APEC)		5433	n/a	4856	-10.6
Hub Airport-APEC country	No. City Pairs	25	37	48.0	43	16.2
	No. International Operators	27	28	3.7	26	-7.1
Hub Airport- APEC Hub Airport	Av. Weekly Seats	73287	104906	43.1	98485	-6.1
	Average Weekly Frequencies	180	382	112.2	387	1.3
Hub Airport-All countries	International freight (tonnes)	659726	911078	38.1	996635	9.4
	International PAX (arrivals/departures)	13405602	17415749	29.9	17486263	0.4

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	11	57.9
	Restricted	8	42.1
	Open 3rd/4th	14	73.7
	Open 5ths	11	57.9
	Restricted 5ths	8	42.1
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	9	47.4
	3rd Party Codesharing	16	84.2
Freight	Open Route Schedule	13	68.4
	Restricted	6	31.6
	Open 3rd/4th	14	73.7
	Open 5ths	12	63.2
	Restricted 5ths	8	42.1
	7ths	10	52.6
Tariffs*	Double disapproval tariffs	14	73.7
	Double approval tariffs	4	21.1
	No approval	5	26.3
Air freight	Open	12	63.2
	Some restrictions	7	36.8
Designation	Multiple designation	19	100.0
	Restricted designation	0	0.0
Charters**	Liberal Charter	13	65.0
	Restricted Charter	7	35.0
Ownership	Ownership/control	19	100.0
	Effective regulatory control	0	0.0
	Principal place of business	0	0.0
Doing Business	Single domestic provider	n/a	
	Competing domestic providers	17	89.5
	Self-handling	17	89.5
	Foreign designated third party handling	n/a	
	Unrestricted currency conversion	15	78.9
	Unrestricted remittances	15	78.9
	Non-national employment	16	84.2
	Sales & Marketing, right to establish offices	16	84.2
	CRS	9	47.4
	MRO	n/a	

*Two ASAs include both double disapproval and one treats passenger and cargo differently.

**One agreement treats passenger and cargo differently, hence the total is greater than 19 ASAs

Review of Progress 1995-2005

The US has taken a central role in advancing air service liberalisation across the APEC region through: (1) the development of a system of "open skies" agreements, which covered 10 APEC economies at 2005[58]; and (2) involvement in MALIAT, as a platform for further regulatory reform.

Between 1995 and 2005, the number of bilateral agreements with APEC economies in total increased from 14 to 19, including a new ASA with Viet Nam and an amended one offering additional direct access rights to China.

Capacity associated with services to the APEC region accounted for 15.9% of total US seats at 2005. The US share of APEC-related seats declined sharply from 17.9% (the highest share of the 21 APEC economies) to 6.4% between 2000 and 2005, due to the industry upheaval flowing from 9/11 and subsequent Chapter 11 bankruptcies of US carriers. Average weekly seats between the US and APEC economies reduced by 57.5%, and weekly frequencies by 10.6%, during the five years to 2005. The most significant fall was in the cross-border market, with Canada's share of US APEC seats diminishing from 50% to 46.5%. By comparison, the shares of Asian markets mostly improved, with Japan's share rising from 22.3% to 25.3%, and China's doubling from 1.6% to 3.4%. This suggested that, while capacity declined overall, US international operators redeployed some services to better-performing destinations in Asia.

In contrast to the weak APEC-APEC trend, seat capacity between the US and non-APEC economies (largely Europe and Central/South America) grew by 27% between 2000 and 2005. As a consequence, the fall in total capacity between the US and **all** countries was limited to 3.3%.

The impact of 9/11 and related events is most obvious when comparing the period before the attacks with the one afterwards. International seats operated between the designated US hub airport (Los Angeles) and other APEC hub airports increased by 43.3% between 1995 and 2000, then declined 6.1% between 2000 and 2005. This produced a 34.4% growth in APEC airport seats, and 115% lift in frequencies, for the 1995-2005 period. International passenger traffic at Los Angeles climbed by 30.4% over the 10 years, reflecting a 13.6% improvement in visitor arrivals and 23.8% increase in outbound resident departures. Freight tonnage at the airport rose by 51.1%, as the US economy remained reasonably strong with GDP growth of 68.4%.

The US maintains generally liberal bilateral agreements with APEC economies, with 14 ASAs offering open 3rd/th access and 11 open 5ths for passengers; and 14 incorporating open 3rd/4th access, 12 open 5ths and 10 open 7ths for freight. The US has made greater progress than most other APEC economies in the area of tariffs, with 14 ASAs providing double disapproval arrangements.

All of the agreements incorporate multiple designation, and most have liberal charter provisions and little regulation of business activities. Traditional ownership/control provisions are included in all agreements.

[58] The US signed "open skies" agreements with Indonesia in 2004 and Thailand in 2005. These agreements incorporate multiple designation, unrestricted capacity and frequencies, full 3rd/4th/5th freedom rights, double disapproval tariff arrangements, liberal charters, open codesharing and pro-competitive doing business provisions.

Viet Nam

Performance Indicators 1995-2005

Coverage	Category	1995	2000	% Change	2005	% Change
APEC Country	GDP (US$b)	20.7	31.2	50.7	51.4	64.7
	Annual Inbound Visitors (total)	1351296	2140100	58.4	3467758	62.0
	Annual Outbound Residents (total)	n/a	n/a		n/a	
	No. Primary Airports	11	11	0.0	12	9.1
	No. Secondary Airports	5	4	-20.0	10	150.0
APEC Country-APEC Country	No. bilateral agreements	13	13	0.0	17	30.8
	No. plurilateral agreements	0	0		0	
	Average Weekly Seats		36133	n/a	92857	157.0
	Average Weekly Frequencies		184	n/a	451	145.1
Hub Airport-APEC country	No. City Pairs	11	13	18.2	19	46.2
	No. International Operators	21	15	-28.6	31	106.7
Hub Airport-APEC Hub Airport	Av. Weekly Seats	19258	23264	20.8	50993	119.2
	Average Weekly Frequencies	92	113	22.8	222	96.5
Hub Airport-All countries	International freight (tonnes)	42999	66957	55.7	131085	95.8
	International PAX (arrivals/departures)	1895670	2657471	40.2	4300862	61.8

Analysis of APEC Air Service Agreements 2005

Category of Rights	Agreement Provision	Number	% ASAs
Passengers	Open Route Schedule	1	5.9
	Restricted	15	88.2
	Open 3rd/4th	1	5.9
	Open 5ths	0	0.0
	Restricted 5ths	16	94.1
	7ths, Other	0	0.0
	Cabotage	0	0.0
	Bilateral Codesharing	14	82.4
	3rd Party Codesharing	10	58.8
Freight	Open Route Schedule	1	5.9
	Restricted	15	88.2
	Open 3rd/4th	1	5.9
	Open 5ths	0	0.0
	Restricted 5ths	16	94.1
	7ths	0	0.0
Tariffs	Double disapproval tariffs	3	17.6
	Double approval tariffs	8	47.1
	No approval	3	17.6
	Other (single approval)	1	5.9
Air Freight	Open	2	11.8
	Some restrictions	10	58.8
Designation	Multiple designation	14	82.4
	Restricted designation	1	5.9
Charters	Liberal Charter	16	94.1
	Restricted Charter	0	0.0
Ownership	Ownership/control	15	88.2
	Effective regulatory control	1	5.9
	Principal place of business	0	0.0
Doing Business	Single domestic provider	0	0.0
	Competing domestic providers	16	94.1
	Self-handling	3	17.6
	Foreign designated third party handling	0	0.0
	Unrestricted currency conversion	16	94.1
	Unrestricted remittances	16	94.1
	Non-national employment	16	94.1
	Sales & Marketing, right to establish offices	15	88.2
	CRS	16	94.1
	MRO	16	94.1

Note: No restrictions are applied to 3rd, 4th and 6th freedom rights to Hanoi or Da Nang.

Review of Progress 1995-2005

Viet Nam has a small, but rapidly developing, economy. While it still had the third lowest GDP of the 21 APEC economies in 2005, grow of 148.3% had been achieved during the preceding 10 years (the third highest in the region for the period under review).

Consistent with its economic performance, average weekly seats between Viet Nam and other APEC economies increased by 157%, and frequencies by 145.1%, between 2000 and 2005. This saw the country's share of total APEC seats grow from 0.9% to 2%.

Much of this growth was generated by China, with its share of Viet Nam's APEC-related seats rising from 3.7% to 8.2%, *Hong Kong, China* which increased its share from 13.2% to 15.6%, Korea (7.9% to 10.7%) and Japan (5.4% to 10.8%). The share held by Chinese Taipei reduced from 23.2% to 16.7%, and Thailand from 21.1% to 14.4% as Viet Nam's ASA coverage broadened from 13 to 17 APEC economies.

Capacity on services linking Viet Nam with non-APEC economies also displayed robust growth of 119.3% between 2000 and 2005, though at a lower level than that for APEC-APEC seats (the latter accounts for 89.6% of total seats for Viet Nam).

The economy-to-economy development was similar in scope to that experienced between Viet Nam's hub airport, Ho Chi Minh, and other APEC hub airports between 1995 and 2005. Average weekly capacity on this basis grew by 164.8%, and frequencies by 141.3%, over the 10 years. This was driven in part by Hong Kong, which lifted its share of APEC-related Ho Chi Minh seats by 5.3 percentage points to 18.9% and the development of services to Japan.

International passenger traffic between Ho Chi Minh and all countries reflected the high growth seen on APEC-APEC and APEC-non APEC sectors, with a 126.9% improvement between 1995 and 2005. This was indicative of the development of Viet Nam as a tourism destination, with inbound visitor volumes rising by 156.6% over the 10 years (outbound resident departure data was not available for any of the years).

Freight growth at Ho Chi Minh, at 204.9% between 1995 and 2005, exceeded that for all other APEC airports including Beijing.

Viet Nam's relatively immature stage of economic development is reflected by the limited progress achieved in liberalising air services. Most of its ASAs with other APEC economies apply restrictions to 3rd, 4th and 5th freedom access for both passengers and freight (only one agreement incorporates open 3rd and 4th freedom rights).

Progress has been realised in other areas. Most ASAs with Viet Nam provide for multiple designation, bilateral codesharing, liberal charters and unrestricted business activities. Tariffs are a mix of arrangements, with three incorporating double disapproval, three no approval and eight double approval (one other requires single approval).

Substantial ownership/effective control is provided in most ASAs. One agreement diverts from that with effective control provisions.