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**European aviation
liberalization:
A view from afar**

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ABSTRACT: This paper traces the development of Australia's aviation relationship with European countries and shows how new European air carriers have entered and exited the market. The traffic rights available and the emergence of codes-shares as a marketing presence and network substitute for own aircraft operations is demonstrated. Negotiations between Australia and the European Union for a so-called 'horizontal' agreement to replace the 16 existing air service agreements are discussed and the obstacles to such an agreement identified. Similarly, a review of air service arrangements and operations arising there from both ASEAN states and New Zealand with Europe is conducted. The paper concludes by noting New Zealand's very limited physical operations with Europe whereas ASEAN carriers have extensive physical operations but ASEAN has a very limited capacity to negotiate a horizontal agreement with the European Union. The rise of the Gulf State carriers through geo-political optimization of traffic rights and location has led to the replacement of European service by European carriers with service by carriers from Dubai, Abu Dhabi and Doha.

KEY WORDS: *Aviation, liberalization, European air carriers, Australian air carriers, Gulf State air carriers, operations, traffic rights, code shares, horizontal agreements, Asean.*

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1. Introduction

This paper will trace the development of Australia's aviation relationship with European countries including showing how new European carriers, over time have entered and exited the market. Traffic rights and the emergence of the code-share as a substitute for own aircraft operations will be demonstrated as will be the 2008 and 2009 negotiations concerning the establishment of a horizontal agreement with the EU. Future negotiations are discussed and obstacles identified.

As well, a brief review of the agreements and physical operations between the Asean states and Europe will be undertaken as will a similar review for New Zealand. Whilst there are several aviation relationships between ASEAN states and EU states, and indeed, burgeoning relationship with the EU as an entity, ASEAN as an institution has little current capability to negotiate a comprehensive agreement with the EU. New Zealand, on the other hand, which has a very small operating relationship, has entered into an EU horizontal agreement.

2. Australia's aviation relationship with Europe

2.1 General

Australia now depends upon very few third and fourth freedom airlines to maintain and develop its aviation relationship with Europe. Considerably more direct and indirect service is offered by sixth freedom carriers than is offered by third and fourth freedom carriers. The only European carriers to physically service the Australian market are British Airways, who operate fourteen flights a week to Sydney in a joint service arrangement with Qantas, and Virgin Atlantic Airways who operate an Airbus A 340 - 600 daily to Sydney. Qantas is the only Australian carrier to serve Europe. The Australia-Europe aviation relationship has been a long one: though for many years it was built on British Empire and later Commonwealth ties, the first European airline to operate an aircraft to Australia was KLM who operated a Fokker Trimotor in the 1931 London to Melbourne air race, with scheduled service between Australia and the Netherlands commencing in 1938.

As seen in **Table 1**, sixteen different European airlines have provided, at various times, scheduled service to Australia. In addition there have been scheduled charter services, with Britannia Airways operating a service under Australia's liberal 'test and development' charter policy which allowed fifth freedom rights on intermediate points, carriage of cargo and passenger own stopover rights within Australia.

Table 1: Historic EU carrier operations to Australia

Passenger carrier	Country	From	To	Aircraft types operated
AOM French Airlines	France	Nov 1995	Nov 2000	DC-10-30
Aeroflot Russian Int'l A/I	Russia	May 1993	Mar 1996	767-200
Air France	France	Jan 1993	Oct 1995	B747-300
Alitalia	Italy	Unknown	Oct 2000	DC-8 / DC-10 / 747
Austrian Airlines	Austria	Jul 2005	Mar 2007	777-200 IGW / A340-300
British Airways	UK	July 1938	Current	VC-10 / 707 / 747 / 777
Cargolux Airlines	Luxembourg	Sep 1999	Current	747F
KLM Royal Dutch Airlines	Netherlands	1 st – 1938 Then 1960	Mar 2001	DC-8 / DC-10 / 747 In Jet Era
Lauda Air	Austria	May 1988	Jun 2005	777 - LGW
Lufthansa German Airlines	Germany	Oct 1965 Pax	Oct 1996 All	707 / DC-10-30 / 747
Olympic Airways	Greece	Dec 1984	Nov 2002	707
Union de Transports Aériens	France	Unknown	Dec 1992	DC-8 / DC-10-30
Virgin Atlantic Airways	UK	Dec 2004	Current	A340-600
Yugoslav Airlines	Yugoslavia	Apr 1975	May 1992	707 / DC-10
- Source: Author Research of AVSTATS Data /Schedule Filings				
Cargo Carriers				
Passenger carrier	Country	From	To	Aircraft types operated
Cargolux	Luxembourg	Sep 1999	Current	747
Martinair	Netherlands	Sep 1996	Dec 2008	DC-10 / 747

A number of these carriers no longer exist, whilst others have exited the market in face of costs and 6th freedom competition. Those carriers which still seek a presence in the market generally do so by means of code-share operations. **Table 2** below shows code-share operations as at January 2009.

Table 2: European carriers offering code share services as at January 2009 (not including BA)

European carrier	Operating carrier	Frequency of European carrier
Austrian	Thai International	17 in / 16 out
Finair	Cathay Pacific	19
Air France	Qantas	48
Lufthansa	Singapore Airlines	70 / 63
Alitalia	Thai Airways / Malaysia	12 / 12
KLM	Malaysia	41 / 41
SAS	Thai International	14 / 12
Air Malta	Qantas	14 / 14

Capacity levels are subject to change, especially as some airlines move up to the A380 on some services and downscale on others by replacing B747 aircraft with B777-200 or 300 aircraft. As an example Cathay Pacific Airways, at an earlier time replaced B.747-400 with a heavy A.330-300 on its Melbourne and Sydney service.

Table 3 below, shows actual physical own aircraft operations as at April 2009 between Europe and Australia. This level of service has been constant for two years, with market changes being met by 6th freedom carriers. Singapore Airlines has in early 2009, introduced A330-300 aircraft on Brisbane and Perth services as a replacement for the less economic but larger B.777-200.

Table 3: Australian / European carrier services (April 2009)

Carrier	European departure point	Frequency	Aircraft type	No. of seats	Total weekly seats
QF	LHR	5	380	450	2,250
QF	LHR	23	744	353	8,119
QF	FRA	7	744	412	2,884
BA	LHR	7	744	351	2,457
BA	LHR	7	772	291	2,037
VS	LHR	7	346	213	1,491
TOTAL WEEKLY SEATS (all carriers)					18,384

2.2 Air service agreements: Australia - Europe

There are nineteen air service agreements with EU states and two with European non-EU states (Switzerland and Norway). In some cases (Netherlands and Germany) the basic ASA dates from the 1950s however, of course, the important Memoranda of Understanding (MoUs), which govern capacity and traffic rights, inter alia, are of a more recent date. The most recent ASA was agreed with the Czech Republic in 2008. Australia has adopted a conscious policy of endeavouring to “collect” as many ASAs as possible prior to the negotiation of a horizontal agreement with the EU in 2008/2009.

Table 4: Australia’s air service agreements with Europe

ASA	Capacity available	Treaty	MoU
UK	Yes	1956	2006
Sweden	Yes	New Treaty Interim Effect	16/10/1998 int
Spain	Yes	Initialed	13/02/2007 int
Poland	Yes	2004	
Norway	Yes	Interim Effect	As for Sweden
Switzerland	Yes	1990	
Netherlands	Yes	1951	MoU 1997
Malta	Yes	1996	
Luxembourg	Yes	Interim Effect	Initialed
Italy	Yes	1960	At 1996
Ireland	Yes	1957	MoU 2005
Hungary	Yes	2006	Interim Effect
Greece	Yes	1971	MoU 1998
Germany	Yes	1957	MoU 1998, 1996
France	Yes	1965	1997, 1996
Finland	Yes	1999	Interim Effect
Denmark	Yes	1998	Interim Effect
Czech Republic	Yes	2008	Interim Effect
Croatia	Yes	2007	Interim Effect
Austria	Yes	1967	1999, 2003 2005

2.3 Australian carrier operations to Europe

2.3.1 Physical operations

Qantas is the only Australian designated carrier to operate its own aircraft to Europe. In 2009 Qantas operated 28 flights per week between Australia and London (Heathrow): 14 operated via Singapore and 7 via each of Bangkok and Hong Kong. The B747-400 aircraft is used on the via Hong Kong and Bangkok services, whilst Singapore has a mixture of A380 and B747 aircraft. As Qantas receives further A380 deliveries it will increase London service by that type to daily from five.

The only other European own aircraft services are to Frankfurt which is operated daily by Qantas with B747-400 aircraft configured in business, premium economy, and economy. All London services are operated with four class aircraft. The Frankfurt services operate via Singapore and complex with London flights.

2.3.2 Code share operations

Qantas, as marketing carrier performs a number of code-share operations. The most significant relationship is with British Airways (BA), where, as a result of the Joint Services Agreement, it has 14 code-share flights to London on BA as operating carrier with extensive code-share connections beyond London. The seven weekly BA flights operating via Singapore are on B.777-200 ER aircraft and the seven via Bangkok are on B.747-400 aircraft.

Qantas also acts as marketing carrier with Cathay Pacific from Hong Kong to Rome (and vice-versa) on daily flights and with Air France to Paris via both Singapore and Hong Kong. One short-haul code-share flight is operated within Europe to Budapest, on Malev, from Frankfurt. Details of these code shares are in **Table 5**.

Table 5: Code share: Qantas marketing carrier – to points in Europe

Operating Carrier	Points Served	Originating Point:	Frequency (IN)	Frequency (OUT)
BA	Vienna	LHR	21	14
	Copenhagen	LHR	13	13
	Paris	LHR	17	17
	Lyon	LHR	14	14
	Nice	LHR	14	14
	Germany (various cities)	LHR	141	117
	Amsterdam	LHR	21	19
	Zurich / Geneva	LHR	21	21
CX	Rome	HKG	1	7
AF	Paris	HKG	14	11
	Paris	SIN	7	7
MA	Budapest	FRA	7	7
MK	Malta	LHR	4	14

3. European carriers to Australia

3.1 The history

KLM was the first European Carrier to operate to Australia, even before Imperial Airways, the predecessor of British Airways, by operating a Fokker VII Tri-motor aircraft in 1931 to Melbourne via Karachi and Batavia. The initial flight carried only mail and participated in the MacRobertson Air Race. MacRobertson was an Australian chocolate manufacturer (subsequently acquired by Cadbury), who was fascinated by aviation. He not only used the Air Race to market his products, he established an airline in Western Australia which became MacRobertson Miller and eventually, part of the now defunct Ansett group. It was not until 1938 that KLM was able to obtain traffic rights for regular flights, as a result of the Imperial Airways / Qantas consortium requiring Dutch East Indies (now

Indonesia) landing rights for their joint flying boat service. The initial KLM route was via Leipzig, Budapest, Athens, Alexandria, Lydda, Baghdad, Basra, Jusk, Karachi, Jodhpur, Alla Hakjad, Calcutta, Rangoon, Bangkok, Penang, Malacca, Singapore, Palembang and Batavia (now Jakarta) and Lombok before reaching Australia at Darwin.

A scheduled air service was established between the UK and Australia by use of Imperial Airways flying boats in July 1938. The focus of the service was the carriage of mail rather than passenger or cargo. The flight departed Southampton, England on 28.7.1938 and arrived in Australia at Darwin on 8.8.1938, and Sydney at Rose Bay 2 days later on 10.8.1938. The thrice weekly service was discontinued with the outbreak of World War II.

The post-war migration boom to Australia led to a spate of carriers entering the Australia-Europe market. The carriage of ethnically based visiting friends and relatives (VFR) passengers was the mainstay of these operations although all carriers endeavoured to a greater or lesser extent, to access tourism markets.

As the European ethnic based markets reduced and the 6th freedom carriers developed their services (initially Singapore, Malaysian, and Thai Airways but subsequently Cathay Pacific and later Emirates) the European carriers withdrew their services. Today, as noted, it is 6th freedom carriers that dominate the Australia-Europe routes.

3.2 Current operations

Following the withdrawal of Austrian Airlines in 2007, only the two United Kingdom carriers, British Airways and Virgin Atlantic, continue to provide service, though an Indian Ocean based French carrier, Austral Air has commenced services in 2009. This carrier is based on Reunion Island which is legally part of France unlike the French Pacific Territories, but it can hardly be regarded as a European carrier not withstanding its use of external French traffic rights. Australia has a Tripartite Air Service Agreement with France, which covers in Part One, Metropolitan France, in Part Two, the French Pacific Territory of New Caledonia and in Part Three, the French Pacific Territory of French Polynesia (Tahiti). The extensive code-share services of European carriers are shown in **Table 2**.

4. Cabotage and 5th freedom rights

As will be seen one of the apparently contentious issues between Australia and the EU is the question of new 5th freedom rights and cabotage. Whilst Qantas does not operate any flights which exercise intra-European 5th Freedom Rights, it does, of course, exercise 5th Freedom Rights from points in Asia (Bangkok to London, Singapore to London and Frankfurt, Hong Kong to London – there is a capacity restriction of 50% of aircraft capacity on HKG-LHR-HKG). The only European carriers who exercise 5th Freedom Rights into and out of Australia on own aircraft are British Airways to/from Bangkok and Singapore, and Virgin Atlantic to/from Hong Kong, where again there is a capacity restriction.

Australia does have air service agreements which give to its' carriers 5th freedom rights within Europe, as do a number of South East Asian (ASEAN) countries. Qantas, as an Australian designated carrier code-shares, as observed earlier, on a number of European carriers within Europe. The code-share relationship with Air France crosses Alliance borders, Air France being a lead player in Sky Team, and Qantas being in "oneworld". The relationship with Cathay Pacific Airways, an Asian carrier, to Rome from Hong Kong is of course within the "oneworld" alliance. The largest code-share alliance is with, unsurprisingly, British Airways: with code-share flights to five countries in Europe covering over 260 flights. As a consequence of availability of connecting flights, inbound and outbound code-share flights do not necessarily equate i.e., a carrier often connects in one direction but not the other. The code-shares with BA derive from the Australian Competition and Consumer Commissions approval of the Joint Service Agreement (JSA), between QF and BA. This approval is due for renewal in 2009.

Qantas does not operate any cabotage nor have any cabotage rights within EU countries however as will be seen subsequently, the EU would regard new requests for additional 5th freedom rights within Europe to be a request for cabotage and would expect reciprocation. The Australian Aviation Policy “Green Paper” of 2008 makes it clear that Australia will resist claims for cabotage rights.

Table 6: 5th Freedom physical operation by EU carriers

Country	Airline	Route	Frequency	Aircraft Type
UK	VS	HKG - SYD	7	360
UK	BA	BKK - SYD	7	744
		SINS – SYD	7	772

5. The sixth freedom operators – Australia to Europe

Whilst the majority of all airlines who service Australia and UK offer 6th freedom carriage (and a range of fares to induce that traffic), the “traditional” 6th freedom airlines: Singapore, Thai and Malaysian have been challenged in their carriage in European markets by, initially, Emirates and then, currently, by the rapid growth of Etihad and by the imminent commencement of online operations by Qatar Airways.

The power of these airlines, whilst in a legal sense, is irrelevant to a consideration of Australia’s attitude to European liberalization, is in an economic sense, central to the consideration. **Table 6** below, shows the medium term formal growth prospects for the UAE Gulf State carriers. Capacity is expressed as frequencies of any type.

Table 7: UAE Gulf State ASAs with Australia

ASA Partner	Designated Carrier	Online to Australia	2011 Capacity - ASA	Capacity Utilized	Growth Capacity Available
UAE – Abu Dhabi	Etihad	Yes	28	21	7
UAE – Doha	Qatar	commence Dec 09	14	7 (Dec 2009)	7
UAE – Dubai	Emirates	Yes	84	63	21
Bahrain	Gulf Air	No	7	Nil	7
Kuwait	Kuwait Airways	No	2	Nil	2

From the current operations and the growth opportunities (capacity available to be utilised) it is apparent that not only are third and fourth freedom carriers in a very difficult competitive position, but so are the Asian hubbed 6th freedom carriers. The European networks of the Gulf State carriers are extensive as **Table 8** shows and provide 1 stop service to a significant number of European points, whereas the third and fourth freedom carriers provide 1 stop service to only 2 points with own aircraft.

Thirty points in economic Europe and twenty four in EU Europe are served by the Gulf State carriers. The opportunities for Europe-Australia traffic are not only to restrict growth for Australian carriers in the face of the networks available but also as has been seen, the European carrier response was to focus on code-shares.

Table 8: Gulf State carriers: European networks

Points in Europe	EK	EY	QR	GF	KU
Glasgow	Y	N	N	N	N
Dublin	N	Y	N	N	N
Edinburgh	N	N	N	N	N
Brussels	N	Y	N	N	N
Newcastle	Y	N	N	N	N
Manchester	Y	N	Y	N	N
Birmingham	Y	N	N	N	N
London	Y	Y	Y (LHR + LGW)	Y	Y
Amsterdam	Y	N	N	N	N
Paris	Y	N	Y	Y	Y
Geneva	N	Y	Y	N	Y
Zurich	Y	N	Y	N	N
Nice	Y	N	N	N	N
Malta	Y	N	N	N	N
Minsk*	N	Y	N	N	N
Larnaca*	Y	Y	N	N	N
Athens	Y	N	Y	Y	N
Moscow*	Y	Y	Y	N	N
Istanbul*	Y	Y	Y	Y	N
Rome	Y	N	Y	N	Y
Milan	Y	Y	Y	N	N
Venice	Y	N	N	N	N
Vienna	Y	N	Y	N	N
Munich	Y	N	Y	N	N
Frankfurt	Y	N	Y	Y	Y
Düsseldorf	Y	N	N	N	N
Stockholm	N	N	Y	N	N
Hamburg	Y	N	N	N	N
Madrid	N	N	Y	N	N
Berlin	N	N	Y	N	N

Y = Physical Operation / N = No Operation / *Non EU Points

Source: Carrier Schedules, April 2009

6. The market: Australia – Europe

Qantas in 2007/2008 carried 240, 270 passengers into Australia from the UK and 246,836 out of Australia to the UK. British airlines carried almost 148,000 passengers. The predominance of carriage between UK and Australia is by 6th freedom carriers, not by European carriers.

Table 9: EU Carriers – Carriage to and from Australia 2007/8

Airline	Australia (IN)	UK (OUT)		Intermediate Rights Only (IN)	Intermediate Rights Only (OUT)
BRITISH AIRWAYS	101,933	101,113	BKK SIN	48,597 28,055	45,777 30,005
VIRGIN ATLANTIC	45,942	45,419	HKG	37,379	31,614

Source: AVSTATS

However analysis of carrier data reported to the Commonwealth Government and analysed by Tourism Australia shows following results for the two markets served by the third and fourth freedom carriers.

Table 10: Carrier share of passengers UK/Germany to Australia – 2008

Carrier	Rank	UK Share %	Carrier Rank	Germany Share %
Qantas	1	29	1 Qantas	34
Emirates	2	18	2 Singapore	15
Singapore Airlines	3	15	3 Emirates	14
British Airways	4	6	4 Jetstar / Lufthansa	6
Cathay Pacific	5	7	5 Cathay Pacific	7
Malaysian Airlines	6	4	6 Thai Airways	5
Others	7	21	Other	18
TOTAL		100%		100%

Source: Tourism Australia

Whilst this table is for 2008, the same table for 2003 would show Emirates having a 9% market share ex UK and Germany, doubling over the six years in both markets.

7. Air cargo to and from Europe

Whilst the two European specialist carriers operate their own aircraft to Australia, on circular (non-mirror image) routings, the majority of cargo between Australia and Europe is carried on sixth freedom carriers (eg. Cathay Pacific and Singapore Airlines, both of whom operate their own freighters to Australia, as scheduled services) or as belly hold on the third and fourth freedom carriers (QF/BA/VS). The principal sixth freedom carriers also handle considerable amounts of belly hold cargo, however the carriage is not directly reported in available aviation statistics. Approximations can be drawn at the micro level by cross referencing of city pair data but specific sixth freedom carrier and cargo (not passenger) carriage data is not accurately available. The use of A.340-500 aircraft on non-stop service to Gulf hubs impacts negatively on cargo uplifts. **Table 10** below demonstrates the current and immediate past cargo operators to and from Australasia by European and Australasian carriers.

Table 11: Cargo

Carrier	Routing	Weekly frequency
CARGOLUX	LUX – SIN – WEL – AKL – LAX - LUX	1
AIR NEW ZEALAND*	AKL – MEL – PUG – GVD - FRA - ORD – HNL - AKL	2
MARTINAIR	AMS – BKK – SYD – HKG – SHJ – AMS	2

* Wetlease aircraft

7.1 New Zealand's aviation relationship with Europe

New Zealand has eleven bi-lateral air service agreements with European member states plus a further two with the non-EU states of Norway and Switzerland, as well as with Russia. Agreement has been reached with the Netherlands, but the agreement has not been formally signed. The agreement has been given provisional effect and services are in place (code-share only services are provided). There are no own aircraft operations by designated airlines of either country.

New Zealand signed a horizontal agreement with the EU in 2006 and the agreement has the effect of bringing all of the air service agreements with EU member states into conformity with EU law.

Table 12

ASAs with EU Member States and New Zealand	
State	Commencement
Austria	2002
Belgium	1999
Denmark	2001
France	1964, 1967
Germany	1987
Ireland	1999
Luxembourg	1992
Spain	2002
Sweden	2001
United Kingdom	1982, 2005
ASAs with European NON-EU Member States	
State	Commencement
Norway	2001
Russia	1993
Switzerland	1999

Source: New Zealand Government

7.2 *New Zealand service to Europe*

The only New Zealand airline designated to operate to any point in Europe (EU States) is the majority state owned Air New Zealand who operate twelve times per week to London. Five services per week operate via Hong Kong, seven via Los Angeles (AKL-HKG-LHR was daily until Sept/Dec 2009 when it was progressively reduced to five per week). The Los Angeles - London sector has unrestricted fifth freedom traffic rights however the London – Hong Kong routing is subject to a 50% cap on uplift/discharge at Hong Kong. Aircraft used are Boeing 747-400 and Boeing 777-300 ER.

7.3 *European operations to New Zealand*

There are no physical operations to New Zealand by any European carrier. Neither the OAG nor the Air New Zealand schedule web site show any code-share operations to / from European points in EU states not withstanding Air New Zealand’s participation in the ‘Star Alliance’, however further investigation established that the code-shares in **Table 13** are available for sale.

7.4 *New Zealand and code-shares*

Whilst Air New Zealand is said to operate as partner in more code-share flights than it physically operates, it seemingly operates very few to or within Europe. The New Zealand Ministry of Transport, unlike Australia has not published its schedule filings on its web site. The information in **Table 13** is derived from the Air New Zealand web site route map which shows code-share flights.

Table 13: Air New Zealand: Points served in Europe by code-share (NZ and partnering carrier)

Point	Operating Carrier
AMSTERDAM	BMI
BELFAST	BMI
BERLIN	LUFTHANSA
BRUSSELS	BMI
DUSSELDORF	LUFTHANSA
DUBLIN	BMI
COPENHAGEN	SAS
EDINBURGH	BMI
FRANKFURT	LUFTHANSA
GLASGOW	BMI
HAMBURG	LUFTHANSA
LEEDS (BRADFORD)	LUFTHANSA
MANCHESTER	BMI
MUNICH	LUFTHANSA
NEWCASTLE (TEESIDE)	BMI
PARIS	BMI
STOCKHOLM	SAS
VIENNA	AUSTRIAN AIRLINES

Source: Air New Zealand Route Map

8. ASEAN carrier services to Europe

Singapore Airlines is the carrier offering the most capacity to Europe among the Asean carriers, serving ten points in the EU (and Zurich) with 69 services per week across the ten European cities. Four aircraft types are operated: Airbus A380; and three Boeing types: 747-400, the 777-300 ER or the 777-200 (a higher gross weight version). Appendix IV shows city-pair frequency and weekly seat capacity.

Thai Airways (commonly known as ‘Thai’ or ‘Thai International’) is the second most active Asean carrier to Europe. Although Thai Orient Airways previously operated to Europe, Thailand currently has only the partially state owned Thai Airways Ltd operating to five points plus Zurich for a total of forty five frequencies per week, fourteen of which operate to LHR.

Indonesia’s flag carrier Garuda, has been the subject of a ‘black ban’ by the European Union because of safety performance issues by the carrier and surveillance issues arising in Indonesia’s safety surveillance authority. Indonesia expects that the ban will be lifted in 2009, in the meantime no Indonesian carrier operates to Europe, though European carriers operate to Indonesia. At July 2009 there were media reports that the ban was to be lifted, with Garuda saying it could resume European service in 2010.

Malaysian Airlines serves Paris, Rome, Frankfurt, London and Stockholm. Stockholm is used as an intermediate point to New York though the route is to be suspended in October 2009.

Vietnam Airlines operates from two points in Vietnam, Ho Chi Minh City and Hanoi, to each of Paris (CDG) and Frankfurt, with multiple flights each week by Boeing 777-200 aircraft.

Royal Air Brunei is the only other Asean carrier with European operations, linking Bandar Seri Begawan to London via Dubai. The carrier operates Boeing 767-300 ER aircraft.

A summary of Asean frequency types and seat capacities is at Appendix VI. Points served in Europe from points in Asean by Asean carriers are shown in Appendix VII.

8.1 Singapore and other ASEAN agreements

Only three ASEAN countries have signed horizontal agreements with the EU: Malaysian, Singapore and Vietnam. Singapore has thirty ‘open skies’ agreements, sixteen of which are with European Union member states. There is service by eighty three scheduled airlines to Singapore providing four thousand six hundred weekly services.

Recent Singapore liberal agreements include the major liberalization of the Kuala Lumpur route (to allow, inter alia the introduction of service by low cost carriers). Other agreements are new agreements with Portugal, Romania and Czech Republic, though there are no physical operations to any of these countries.

Table 14: EU-ASEAN state horizontal agreement

State	Years Signed
Malaysia	2007
Singapore	2006
Vietnam	2006

Source: EU website

Indonesia, obviously, will not agree to a horizontal agreement with the EU whilst its carriers remain subject to the EU “black list” because of ongoing issues in airworthiness by operators and airworthiness surveillance by government. Indonesia does have air service agreements with a number of European countries including its former colonial master, The Netherlands. The Philippines also has a number of ASAs with European countries though there is currently no Philippines carrier serving any European point. There is an ambivalent approach to open skies in the Philippines, a strong tourism lobby supported by the academic community strongly supports an ‘open skies’ approach but the airlines, led by Philippine Airlines are opposed.

8.2 Air service to ASEAN state by European carriers

Service to ASEAN states is provided by the mainstream European Carriers and by LTU in the LCC / ITC sector. Thailand receives the highest frequency of flights per week, followed by Singapore. Bangkok serves as a transit point for several carriers, eg. KL to MNL and AF to SGN and HAN. Only six of the states receive European carriers whilst four of those states are served by two or less carriers.

Table 15: European air service to ASEAN states: April 2009 (non code-share)

ASEAN STATE	EUROPEAN CARRIER SERVICE		
	Carrier	Frequency	Type
Brunei	Nil	Nil	Nil
Cambodia	Nil	Nil	Nil
Indonesia	KL LH	7 7	74M 744
Laos	Nil	Nil	Nil
Malaysia	KL LH	7 4	74M 744
Mayanmar	Nil	Nil	Nil
Philippines	KL	7	77W
Singapore	HF	7	77W
	BA	7	777
	KL	7	777
	LH	7	744
Thailand	SK	8	343
	AF	7	744
	LH	4	744
	KL	7	74M
	BA	7	744
	AY	7	M11
	LT	2	332
	OS	7	772
Vietnam	AF	5	744
	LH	3	744

Source: AOG

8.3 ASEAN carriers and Europe fifth freedom operations

The ASEAN carriers have pulled back from fifth freedom operations within, to and from Europe. In 2009 the only ASEAN carrier flying an intra-Europe fifth freedom sector was Singapore Airlines who operate twice weekly SIN-MPX-BCN v.v. service. SQ also operates a beyond Europe flights service from Frankfurt to New York. There no fifth freedom rights beyond Dubai used to EU Europe, but there are to Moscow and to Istanbul. Malaysian operates no fifth freedom sector within Europe but does fly a Stockholm – New York sector three times per week using fifth freedom rights beyond Europe, however this flight is to be suspended in October 2009 as a cost cutting device.

8.4 The US – EU open skies agreement

EU-US: This agreement took effect on 30 March 2008. The impact of the agreement is that any EU airline can operate from any point in the European Union to the United States. The importance of this agreement is that it links the two largest markets in the world, and in total they represent 60% of the global aviation market where approximately fifty million annual passengers commute between the US and the EU. The March 2008 implementation represented the first stage of a multi-staged agreement process, the second stage negotiation took place in May 2008. The progress of the second stage negotiations was slow however the EU recognised that the deal would open up competition and potentially creates 80,000 jobs and Euro 12 billion in economic benefits.

Key elements of the agreement other than the lack of change in relation to cabotage are:

- Removal of restrictions on route rights
- Ability to purchase “no voting” shares in US carriers but retention of 25% voting limits
- A Suspension clause requiring US to open up its domestic market and foreign investment rules by 2010

Many European observers believed that the phased negotiation allows the USA too much “wriggle room” especially in relation to foreign investment. The EU milestones are:

- 30 April 2007: EU and US leaders signed the so-called “open skies” deal during the EU-US Summit in Washington
- 30 March 2008: Accord entered into force
- 15 May 2008: Launch of second-stage negotiations
- 2009: EU due to review the progress of second-stage negotiations
- Mid 2010: Deadline for achieving an ‘Open Aviation Area’

The major outstanding item is that whereas US carriers have very extensive fifth freedom rights within Europe, there is no cabotage within the United States and furthermore the USA seems intent on retaining its limit of 25% foreign investment in US carriers.

8.5 European regulation

Individual countries within the European Union have developed bi-lateral air service agreements with a wide range of non-European states. There has been growth in new routes, especially between North America, Europe and the Middle East. Some of these agreements have “open skies” elements but few are of a full open skies nature. Traditional air service agreements have been based on the notion that ownership and control lies with individuals (personal and corporate) of the states of designation, and while there has been movement towards “principal place of business” as the test, that movement is slow.

In 2002 the European Court of Justice concluded that bilateral air service agreements concluded with the US were discriminatory and this is a breach of European Union Community Law. The case had a major impact in that it clearly established that the Community (as differentiated from individual states) had exclusive responsibilities in external aviation relations. Following the 2002 decision the EU set

about negotiating a new agreement with the USA which had a staged implementation. There were many barriers to this agreement including legislation concerning ownership and control, access to London's Heathrow airport (which is heavily slot constrained), and significant differences in the US and European approaches to cabotage.

The EU has developed an approach based on a two party strategy:

All existing air service agreements of EU member states have to be amended so as to be in conformity with EU Law. It initially enters into a so called "horizontal agreement" to be followed by the creation of a "Common Aviation Area". As an example, EU and Georgia entered into a horizontal agreement in 2007. The agreement came into force on 25 February 2008. The Common Aviation Area is proposed to remove the market restrictions and "associate Georgia to", the EU internal market. In effect non-EU countries who subscribe to a "Common Aviation Area" with EU are subscribed for the purposes of aviation (only) into the EU.

8.6 What is a horizontal agreement?

A horizontal agreement is one negotiated by the European Commission on behalf of member states so as to bring bi-lateral air service agreements into conformity with European Law.

The 2002 landmark decision of the European Court of Justice decided that, an ASA permitting designation only on the basis of carriers being owned and controlled by nationals of the Signatory EU Member State was discriminatory; this is a breach of EU Law. The practical implication is that any EU carrier can operate from any point in the EU to points outside the EU and existing (at that time) Air Service agreements had to be amended to reflect EU Law. The EU Law was contrary to the tradition of the bi-lateral Air Service Agreement (which had its origins in the Chicago Convention of 1944). What the EU has achieved is to recognize that nationals of any EU State can establish, invest in and control airlines located in any EU State. An airline is not (for example) a German airline if it is established in Germany but is a "Community Airline". This concept is supported by the ability of an EU carrier to operate on any route within the EU, as well as the rules on licensing, security and safety are common throughout the EU.

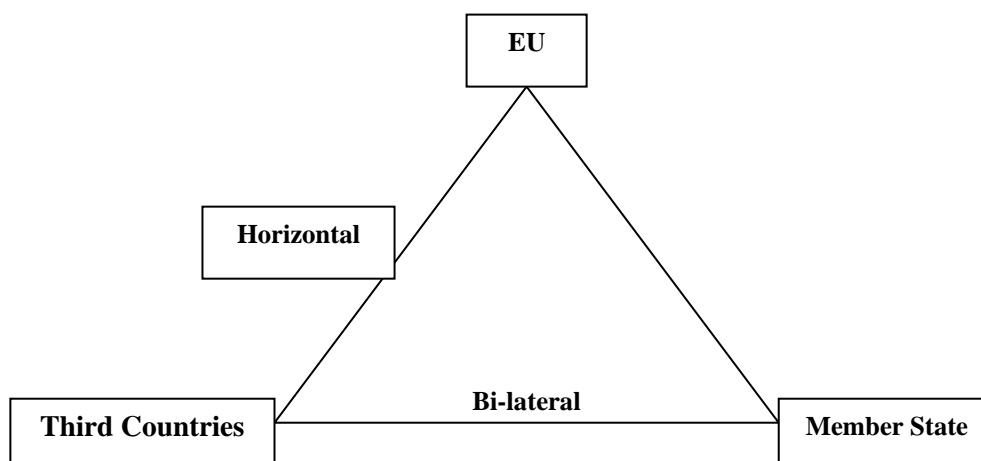
The EU has developed two methods of bringing air service agreements into conformity with EU Law. A state could amend all of its agreements on a separate bi-lateral basis, or there could be the negotiation of a single horizontal agreement, with the Commission acting on behalf of all the EU States.

The results of the approaches between July 2003 and December 2008 were 132 further bi-lateral being altered with sixty states, and by means of the horizontal option, there have been three changes with thirty seven partner states and regional organisations. In total the process of horizontal negotiation led to changes to 651 bi-lateral agreements. The number of designated airlines remains controlled by the air service agreements. Traffic rights existing in the bi-lateral agreements remain, but new ones are subject to negotiation, with the EU taking the stance that the reciprocal of EU 5th freedom rights (eg. FRA-CDG) is a cabotage city-pair (eg., MEL-SYD) in the partner country. This is because the EU no longer sees the city-pair within the EU by a non-EU carrier as being a 5th freedom international sector.

The horizontal agreement and bi-lateral dual systems may result in the EU being able to bring a large number of agreements into conforming to EU Law, but it does create a dual system of agreements, which adds to complexity.

The EU argues that meeting the objectives of bringing air service agreements into conformity with EU Community Law is of vital importance to the EU member countries and third countries.

Diagram 1: EU Horizontal Agreement



In doing so it, it has established that all community operators have the same rights through the principles of non discrimination and freedom of establishment and there is legal certainty. The bi-lateral relations of a state are governed by Regulation (EC 847/2004) which provides for standard clauses and which the EU believes, facilitates the objectives of the EU. In the event that a state cannot reach an agreement with a bi-lateral partner on the insertion of the standard clauses, the EU may allow an agreement to be reached if it does not otherwise breach community law, however, the community designation clauses are sacrosanct and the EU will not allow a breach of these laws as it would be discriminatory.

Horizontal agreements do allow third countries to avoid a large series of individual negotiations to meet Community Law.

8.7 The barriers to an open skies agreement: Australia and Europe

Australia has been in discussion with Europe on several occasions, most recently in 2008 and 2009, concerning the creation of an ‘open skies’ agreement to replace the nineteen agreements that Australia has with countries in Europe. There are two major differences between the parties.

The first relates to traffic rights and the notion of a fair trade for intra European rights. Whilst Australia may retain the fifth freedom rights it has from one European country to another, in order to gain additional fifth freedom rights between European countries it would be necessary for Australia to recognize that the fair trade involves a grant of cabotage to foreign carriers. Australia does not grant scheduled, discrete or continuous cabotage, however there are modified forms whereby some countries have “own stopover” rights, ie. a carrier may uplift a passenger from a point in Australia and deposit it at another point, if it brought that passenger to Australia, or will take it from Australia.

Australia has an extremely liberal approach to ownership of domestic airlines. A domestic airline maybe 100% foreign owned. This policy is sometimes referred to as “investment cabotage”. Cabotage for foreign carriers would seem to be not capable of being able to be agreed on between Europe and Australia. In the 2008 Aviation “Green Paper”, the process which leads to a “White Paper”, then finally a restatement of policy, the Australian Government has made it clear that the existing policy on cabotage will not be altered.

There is foreign investment in Australia’s airlines: the Virgin Group through a company called Cricket SA owns 26% of the Australian domestic carrier Virgin Blue (and its Pacific Blue and V Australia subsidiaries). Tiger Airways of Singapore has a 100% owned low cost operation in Australia, also known as Tiger and there are significant Singapore owner share holdings in the regional carriers Sky West (Perth based), and the NSW based Regional Express (also known as REX).

The second major area of difference is in Environmental Policies. Europe in 2007 prepared to include international aviation in the EU-ETS (Emission Trading Scheme). In the ETS effective 2011, operators would be required to surrender CO₂ allowances for inter EU-flights and from 2012 the scheme would be imposed on all flights to and from European airports.

In February 2007 ICAO, a meeting of ICAO / CAE7P, many countries said that such a scheme could only be applied by mutual consent. Both positions are argued from the basis of the Chicago Convention. In March 2007 the ICAO Council adopted an “ICAO Guidance on Emissions Trading” which includes a forward expressing a view held by the majority of members that an ETS can only operate by mutual consent.

Whilst European delegates to ICAO lodged formal reservations to the ICAO members’ majority position, the ICAO position is evidentially advisory. In late 2009 the matter will come before the European Parliament which proposed a more rapid and onerous regime than that proposed by the European Commission. In December 2007 there was a political agreement reached on flights by aircraft above 5700 KG MTOW which will, from 1st January 2012 be required to surrender CO₂ permits. There are some exemptions: the “de minimis” rule applies and some essential air service flights are exempted as are various training, and technical flights.

In February 2009, European legislation came into force incorporating aviation into the EU Emissions Trading Scheme (ETS) as from 2012 (Directive EC/2008/101). Virtually all airlines with operations to, from and within the EU fall under the scope of the directive, including non-EU airlines.

8.8 *Australia’s approach to climate change and EU emission trading scheme*

Australia is in the process of developing a climate change strategy with a member of the Ministry having climate change as a sole function. There is a long term target of reducing year 2050 emissions by 60% from year 2000 levels. An important element will be a Carbon Pollution Production Scheme (an ETS by another name) which will operate across all sectors of the economy. The Australian position is that it cannot act alone in managing emissions from international aviation. Australia is involved in international fora, including ICAO and APEC seeking global co-operation. Industry led voluntary offsetting schemes are supported¹. The Australian Government is developing a tool for comprehensive carbon monitoring and foot printing. Australia’s ETS is not yet committed to an initially planned 2010 commencement. Based on this approach, it is hardly surprising that Australia finds itself unable to agree with the EU on a carbon emissions pricing scheme when there is no Australian ETS. A second, if unstated reason, is that on the European scheme, Australian carriers would be disadvantaged as against Gulf state carriers.

In preparation for aviation’s inclusion in the EU ETS, the European Commission (EC) is developing guidelines concerning CO₂ emissions. Under the guidelines, airlines captured by the EU ETS must meet certain requirements. In summary, these airlines will have to:

- Submit monitoring plans by end of August 2009
- Monitor tonne-kilometres and CO₂ emissions from 1 January 2010
- Report tonne-kilometres data by 31 March 2011
- Report CO₂ emissions data by 31 March 2011
- Apply for free emissions allowances by 31 March 2011
- Surrender allowances for 2012 emissions by 30 April 2013

¹ Qantas gives persons making a booking on its website the option of making a voluntary additional payment to offset carbon emissions.

Table 16: Comparative distances: Asia – Gulf State: Great circle route

From / To	Singapore		Dubai		Abu Dhabi
Frankfurt	5,546 nm 10,270 km		2,614 nm 4,811 km		2,617 nm 4,846 km
From / To	Singapore	Hong Kong	Bangkok	Dubai	Abu Dhabi
London	5,871 nm 10,873 km	5,205 nm 9,640 km	5,151 nm 9,540 km	2,899 nm 5,494 km	2,989 nm 5,498 km

Whilst distance at first glance may seem to advantage Gulf state carriers, their ability to use lighter aircraft increases the advantage, as the critical factor is not distance but tonne kilometres performed. One example suffices:

Qantas operates a B.747-400 aircraft FRA-SIN, tonne kilometres performed on one way trip are:
Weight of aircraft (396,895kgs) x distance in km (10,270) = 4,076,112 tonne kms

Whereas Emirates operates a B.777-300 aircraft over a lesser distance:

Weight of aircraft (297,500) x distance in km (4,841) = 1,440,198 tonne kms

It is clear that competitive carriers whose hub is more remote and who have to operate very heavy aircraft create more TKMs than the carriers with the nearer hub and who can operate a lighter aircraft.

If carbon credit prices relates to tonne kms performed then Emirates is clearly advantaged over Qantas (and of course, other Asian carriers including Cathay Pacific and Singapore Airlines). Australia's central problem in negotiating an agreement which includes acceptance of an ETS is that its own ETS policy is not yet fully settled. It is more likely that this matter will be dealt with in a way that is akin to the US-EU agreement in that it will be agreed that further discussions on the topic will be held in the future. The meeting that agrees this course of action will be in the category of meetings whose central rationale is to agree another meeting.

9. Conclusion

Australian & Europe have an aviation history dating from the 1930s. The beginning of service development was interrupted by the Second World War however in the 1960s the advent of the long range jet and the growth of the visiting friends and relatives market saw a strong growth in air service by European carriers including Lufthansa, Alitalia & Olympic Airways. Australia maintained until the 1990s a single designation policy, with the government owned Qantas being the sole Australian international carrier.

One of the results of this policy as well as a growing commercialization of Asian national carriers was the strong growth of the so called 6th freedom carriers – Singapore Airlines, Malaysian Airline Systems (as it then was), and Thai International. However, in the 21st century these carriers have found a new level of competition with the very rapid growth of the Gulf state hubs where airline, airports and policy are closely interrelated. As Australia has in 2009 service from Europe by only 2 British carriers and whilst Qantas serves only 2 points in Europe, code-share service on 6th freedom carriers is the dominant service offering.

Australia has collected a significant number of Air Service Agreements with European countries and is engaged with the EU in the negotiation of a "horizontal agreement" however major obstacles remain, particularly the application of the EU ETS to aviation and the consequent disadvantage to the Australian carriers and the issue of 5th freedom rights / cabotage. Whilst there is no immediate practical impact, there are significant policy challenges in the cabotage issue.

New Zealand has no air service by European carriers, but its state controlled carrier Air New Zealand offers service by both Eastern (USA) and Western (Hong Kong) routing to London.

In Asia, whilst the Asean states are liberalising as between themselves, ASEAN is ill-equipped as a body to negotiate either a horizontal agreement or an agreement to establish a common aviation area with the EU.

The Asia-Pacific region has a long aviation relationship with Europe but its future growth is heavily impacted by the rise of a new group of airlines, neither European nor the Asia-Pacific in origin. The Gulf state carriers are rapidly optimizing their geographic position through rapid fleet growth, and active use of available rights.

References

Relevant EU documents

Legislation:

- “Open skies” judgements of 5 November 2002 of the Court of Justice of the European Communities
- Communication from the Commission on relations between the Community and third countries in the field of air transport – COM (2003)94
- Regulation (EC) 847/2004 on the negotiation and implementation of air service agreements between Member States and third countries
- Information note: EU external aviation polity: why does the EU want to modify air service agreements between its Member States and partner countries?
- Draft Horizontal Agreement
- Commission Decision on approving the standard clauses for inclusion in bilateral air service agreements between Member States and third countries jointly lay down by the Commission and the Member States

Status of amendment bilateral agreements:

- Bilateral ASA brought into legal conformity since ECJ judgments on 5 November 2002

Australian Government Sources:

- National Aviation Policy, Green Paper, December 2008

Department of Infrastructure, Transport and Regional Development website

- Aviation

OAG: Official Airlines Guide, April 2009

Tourism Australia

- Website

Qantas History

- Grove – EA: Qantas Aeriana 1920-1954. A detailed history Qantas flight operations including aircraft registrations, crew names etc

Appendix I - European carriers using 5th freedom rights on a code-share basis

Country Designation	of	Marketing Carrier	Operating Carrier	5 th Freedom Sector	Frequency
AUSTRIA		OS	TG	VIE - BKK - MEL VIE - BKK - PER VIE - BKK - SYD	5 3 in / 2 out 7
FINLAND		AY	BA CX	HEL - BKK - SYD HEL - HKG - MEL HEL - HKG - SYD HEL - HKG - PER HEL - HKG - BNE	7 7 7 7 7
FRANCE		AF	QF	CDG - HKG - BNE CDG - HKG - MEL CDG - HKG - SYD CDG - SIN - ADL CDG - SIN - BNE CDG - SIN - MEL CDG - SIN - PER CDG - SIN - SYD	4 7 14 3 7 7 7 7
GERMANY +		BA LH LH LH	QF SQ TG UA	LHR - FRA - SIN LHR - SIN - SYD FRA - SIN - ADL FRA - SIN - BNE FRA - SIN - MEL FRA - SIN - PER FRA - SIN - SYD FRA - BKK - MEL FRA - BKK - PER BKK - PER - HKT FRA - BKK - SYD FRA - BKK - SYD - BRIS LAX - SYD SFO - SYD	7 7 7 14 14 14 21 in / 14 out 4 1 in / 2 out 2 7 7 7 7
HUNGARY *		QF	MA	FRA - BUD	7
ITALY		AZ	MH	KUL - MEL KUL - PER KUL - SYD	4 4 4
MALTA		KM	QF	(LHR-BKK) - SYD (LHR-SIN) - MEL (LHR-SIN) - SYD	7 7 7

+ In addition, QF & BA mutually code-share on all services: QF – 28 per week / BA – 14 per week

* This carriage is entirely within Europe

Appendix I (continued) - European carriers using 5th freedom rights on a code-share basis

Country of Designation	Marketing Carrier	Operating Carrier	5 th Freedom Sector	Frequency
NETHERLANDS	KL	MH	KUL – ADL KUL - BNE KUL – MEL KUL – PER KUL – SYD	4 7 14 9 7
SCANDANAVIAN COUNTRIES	SK	TG	BKK- MEL BKK – PER BKK - SYD	6 in / 8 out 2 in / 3 out 5
UK	VS # BA	SQ QF	SIN – SYD SIN – ADL SIN – BNE SIN – MEL SIN – PER ADL – SIN BNE – AKL BNE – SIN MEL – AKL – LAX MEL – HKG – LHR MEL – SIN – LHR MEL – WLG PER – SIN SYD – AKL SYD – BKK – LHR SYD – CHC SYD – SIN – FRA SYD – SIN – LHR SYD - WLG	21 0 in / 7 out 14 21 in / 14 out 21 in / 14 out 3 7 7 7 7 7 7 14 7 in / 14 out 7 7 7 7 7 2 in / 7 out

VS is not in Star Alliance but SQ is a 49% shareholder in VS

Appendix II

Carriage/Qantas - Europe – 2007/2008

Airline	Australia (IN)	UK (OUT)	Departure / Destination	Australia (IN)	International Flights (OUT)
QANTAS	240,270	246,836	BKK HKG SIN		
Airline	Australia (IN)	Germany (OUT)	Departure / Destination	Australia (IN)	International Flights (OUT)
QANTAS	51,543	53,409	SIN		

Appendix III

Cargo and Mail Carriage 2007/2008 – EU Cargo Carriers to Australia

Carrier	Departure	EU Cargo Carriers (Inbound)	Destination	EU Cargo Carriers (Outbound)
CARGOLUX	LUX SIN	3,886 925	LUX AKL USA	18.4 3,285 1,171
MARTINAIR	AMS	8,061.8	BHH HKG AMS BKK UAE AKL	22.5 281.2 1,672.4 55.8 2,076 1.4

Appendix IV

Asean nations – Flights to Europe

Country	Own Carrier	Foreign Carrier
Brunei	Yes	
Cambodia	No	No
Indonesia +	No	Yes
Laos	No	No
Malaysia	Yes	Yes
Myanmar	No	No
Philippines	No	Yes
Singapore	Yes	Yes
Timor Leste *	No	No
Thailand	Yes	Yes
Vietnam	Yes	Yes

* Not an ASEAN member

+ Anticipated resumption by GA in 2010

Appendix V

Points Served in Europe by ASEAN Countries Carriers

FROM	TO
SINGAPORE	LHR, PAR, AMS, FRA, ROM, MPX, BCN, MAD, ATH
KUALA LUMPUR	LHR, LGW, CDG, FRA, AMS, ROM, STH
BANGKOK	ATH, CDG, FRA, LHR, STH, ZUR*
MANILA	NIL
JAKARTA*+	NIL
YANGON	NIL
HANOI	CDG, FRA
HO CHI MINH CITY	CDG, FRA
BANDAR SERI BEGAWAN	LHR, FRA
VIENTIANE	NIL
PHNOM PIENH	NIL

*NON EU

+ see note in appendix IV

Appendix VI

ASEAN carriers - Services to EU member states and Switzerland

Royal Air Brunei

Departure	Destination	Frequency	Aircraft type	Seats per flight	Weekly seats
BWN	LHR	7	763	205	1,435

Malaysian

Departure	Destination	Frequency	Aircraft type	Seats per flight	Weekly seats
KUL	LHR	14	744	386	5,404
	AMS	7	744	386	2,702
	CDG	7	772	278	1,946
	FRA	5	772	278	1,390
	ROM	4	772	278	1,112
	IST	2	332	229	458
	STH	3	744	386	1,158

Air Asia X

Departure	Destination	Frequency	Aircraft type	Seats per flight	Weekly seats
KUL	STN	5	333	340	1700

Air Vietnam

Departure	Destination	Frequency	Aircraft type	Seats per flight	Weekly seats
HAN	CDG	3	772	307	921
HAN	FRA	3	772	307	921
HCM	CDG	4	772	307	1,228
HCM	FRA	2	772	307	614

Singapore Airlines

Departure	Destination	Frequency	Aircraft type	Seats per flight	Weekly seats
SIN	AMS	7	772	285	1,995
SIN	ATH	2	772	285	570
SIN	BCN*	7	772	285	1,000
SIN	CPH	3	772	285	855
SIN	FRA	14	772 / 744	285 / 375	2,824 / 4,620
SIN	LHR	7 4	744 388	375 471	2,625 1,884
SIN	MAN	5	772	285	1,425
SIN	ROM	3	772	285	855
SIN	MPX*	7	772	285	990
SIN	CDG	10 (to be 7)	77W / 388	332 / 471	3,320 / 3,297

*MPX & BCN – same flights

Thai Airways

Departure	Destination	Frequency	Aircraft type	Seats per flight	Weekly seats
BKK	ATH	3	777	358	1,074
BKK	CDG	7	744	375	2,625
BKK	FRA	7	744	375	2,625
BKK	LHR	14	744	375	5,250
BKK	STH	7	744	375	2,625
BKK	ZUR *	7	346	267	1,869

*NON-EU

Abbreviations:

1. Aircraft

380 = Airbus A380

744 = Boeing 747-400

772 = Boeing 777-200

773 = Boeing 777-300

77W = Boeing 777-300ER

360 = Airbus A340-600

332 – Airbus A330-200

333 – Airbus A330-300

2. Carriers

AF = Air France

AY = Finnair

AZ = Alitalia

BA = British Airways

CX = Cathay Pacific Airways

EK = Emirates

EY = Etihad Airways

LH = Lufthansa

KL = KLM

KM = Air Malta

LU = LTU

MA = Malev (Hungary)

MH = Malaysian

OS = Austrian Airlines

QF = Qantas

QR = Qatar Airways

SK = Scandinavian Airlines System

SQ = Singapore Airlines

TG = Thai Airways

VS = Virgin Atlantic

3. City codes

ADL = Adelaide

AKL = Auckland

BCN = Barcelona

BKK = Bangkok

CDG = Paris Charles de Gaulle

CHC = Christchurch

FCO = Rome

FRA = Frankfurt

HKT = Phuket

HKG = Hong Kong

KUL = Kuala Lumpur

LAX = Los Angeles

LGW = London Gatwick

LHR = London Heathrow

MEL = Melbourne

MPX = Milan Malpensa

PER = Perth

SIN = Singapore

SFO = San Francisco

WLG = Wellington

4. General

ASA – Air Service Agreement

ICAO – International Civil Aviation Organisation

IATA – International Air Transport Association

MoU – Memorandum of Understanding