### CASE STUDY 5 - UK-INDIA RIGHTS FOR A FAR EAST AIRLINE

## A Bangkok-Delhi-Manchester service by Thai International

- This study considers the possible way in which a Far East airline might use en route fifth-freedom rights from a UK regional airport to India to bolster a new third/fourth-freedom service. A Bangkok-Delhi-Manchester route operated by Thai Airways International (Thai) has been chosen as the basis of this analysis. Such a route would directly affect the markets between:
  - Manchester and Delhi;
  - Manchester and Bangkok;
  - Manchester and destinations beyond Bangkok.
- In the UK, Thai only serves Heathrow and it currently operates 13 services a week from Bangkok to Heathrow using 747 aircraft. It also operates 12 747 services a week from Bangkok to Frankfurt, a daily 747 service from Bangkok to Paris, and less frequent services to Copenhagen, Rome, Munich, Stockholm, Milan, and Athens using a variety of 747s and M11s. Thai does not serve Amsterdam or Brussels. Thai has a daily service between Bangkok and Delhi using both A330 and 777 aircraft.
- This suggests that Thai might be reluctant presently to operate to other than relatively large European cities, at least on a dedicated basis. If it were to operate to Manchester, it would more likely to do so on a joint basis with another destination. The service would be likely to be at best daily with one of the smaller aircraft in its fleet, perhaps through-running an A330 or 777 which it currently uses on Delhi.
- The level of existing traffic on the affected markets (see below) is generally quite low and for the purposes of this study it is assumed that Thai operates a four-times weekly Bangkok-Delhi-Manchester service using an A330 with 317 seats (50 Business Class and 267 Economy).

## The UK-Bangkok market

Table 1 displays the current schedule for the airlines presently serving Bangkok from the UK.

#### Table 1 - Current Schedules

Heathrow - Bangkok Thai 13 flights per week BA (a) 7 flights a week Qantas (a) 7 flights per week Eva Airways 5 flights per week Gatwick - Bangkok 5 flights per week

Phuket Air

Source: OAG November 2004

(a) BA and Qantas have a code-share agreement Note:

6 Table 2 shows that since 1994, the number of passengers travelling to Bangkok from Heathrow has more than doubled. The bulk of this growth occurred by 2001. There was a slight reduction in 2002 and 2003 saw a significant fall, presumably as a result of SARS and the Iraq War. But there has been recovery in 2004 with Heathrow-Bangkok traffic levels in the year to August 2004 being higher than those for 2001. In 1994 Qantas operated a service routed Manchester-Heathrow-Bangkok-Australia.

Table 2- UK-Bangkok passenger volumes, 1994-2004

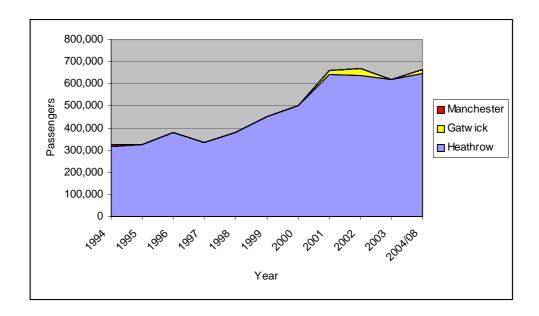
	Heathrow	Gatwick	Manchester	Total
1994	314,724		11,436	326,160
1995	326,034			326,034
1996	379,988			379,988
1997	333,548			333,548
1998	378,871			378,871
1999	453,107			453,107
2000	502,230			502,230
2001	640,002	20,743		660,745
2002	638,614	28,171		667,009
2003	618,415	1,988		620,403
Yr to Aug 2004	646,753	15,510		662,263

Source: CAA Airport Statistics (Reduced by 6% to account for non-revenue passengers)

The totals included a small number of diversions. Note:

Garuda served Bangkok from Gatwick from 2001 until 2003 when the service 7 was withdrawn. Figure 1 displays this graphically. Phuket Air currently operates a five times a week service direct to Bangkok from Gatwick but had both indirect services (over Dubai) and direct services when it began operations earlier in 2004.

Figure 1 – UK-Bangkok passengers, 1994-2004



Source: CAA Airport Statistics (Reduced by 6% to account for non-revenue passengers)

Table 3 offers a more detailed insight into the activity at both Heathrow and Gatwick in the latest available 12 month period.

Table 3 – UK-Bangkok scheduled services in the year to August 2004

		Point to Point		Terminal	Transit	Total		Seat
		Passengers	Flights	Passengers	Passengers	Passengers	Seats	Factor
Heathrow	BA	147,946	732	226,023	0	226,023	256,932	88%
	Eva Air	51,352	503	119,002	0	119,002	137,272	87%
	Qantas	58,163	697	211,626	0	211,626	264,163	80%
	Thai	389,293	1,276	389,293	0	389,293	496,364	78%
Gatwick	Phuket	15,510	27	8,114	0	8,114	13,959	58%
	Total	662,263	3,235	954,058	0	954,058	1,168,690	82%

Source: CAA Airport Statistics (Reduced by 6% to account for non-revenue passengers)

- 9 Until 1995 BA operated one daily service to Australia via Bangkok and one via Singapore. It then gradually increased its Singapore frequency so that by 1999 BA was double-daily on Singapore but still daily on Bangkok. It then increased to ten a week on Bangkok in 2001 (and to 16 on Singapore) before both routes were cut back in the downturn on Far East routes. Qantas followed a similar pattern and now both carriers operate about twice as much capacity through Singapore as Bangkok. The estimated seat factors are relatively high, especially for BA and Eva Air which operates through Bangkok to Taipei. This implies that the normal London replacement assumptions are likely to be appropriate.
- 10 Point-to-point passengers on the flights in Table 3 board the flight in London and leave the flight at Bangkok or *vice versa* but the terminal passenger total includes passengers travelling between London and other points served on the

routeing (Australian points in the case of BA and Qantas, Taipei in the case of Eva Air). Also, London-Bangkok point-to-point passengers may connect with other flights at either London or Bangkok or at both.

Table 4 offers a breakdown of the nature of the journey taken by the point-topoint passengers travelling from Heathrow to Bangkok in 2003. As indicated in Table 2, there was virtually no traffic from Gatwick in that year.

Table 4 – Direct Heathrow-Bangkok passengers by journey type in 2003

		<	Connecting a	t>	
Airline	OD	Heathrow	Bangkok	Both	Total
DA	50.400	50.000	40.000	7.405	400.055
BA	59,139	50,802	16,608	7,105	133,655
	44%	38%	12%	5%	100%
Eva Air	57,756	4,368	11 121	3,062	76 217
Eva Ali	37,730	4,300	11,131	3,062	76,317
	76%	6%	15%	4%	100%
Qantas	45,420	29,073	6,241	12,091	92,825
	49%	31%	7%	13%	100%
Thai	158,566	50,002	143,079	24,655	376,302
	42%	13%	38%	7%	100%
Total	320,882	134,245	177,059	46,913	679,099
	47%	20%	26%	7%	100%

Source: CAA O & D Survey 2003

- In aggregate, less than half of all the London-Bangkok point-to-point passengers began their air journey at Heathrow and ended it in Bangkok ("local" or OD passengers). At airline level, Eva Air carries the greatest proportion of OD traffic, representing 75% of its total passengers. A large proportion of both BA and Qantas's traffic (both in excess of 40%) connect at Heathrow but this proportion is much less for Thai and, in particular, Eva Air. In contrast, about 45% of Thai's traffic connects in Bangkok.
- Table 5 distinguishes the OD passengers identified in Table 4 by their residence and journey purpose. Across all airlines, 83% of passengers were UK residents, and this figure rises to 97% for BA. The route is also predominantly leisure based, with only 14% of total passengers travelling on business.

Table 5 – Direct Heathrow-Bangkok OD traffic by residence and journey purpose in 2003

	<	· UK	> <	Fo	reign	><-	Tot	tal :	>
	Business	Leisure	Total	Business	Leisure	Total	Business	Leisure	Total
BA	8,559	48,639	57,199	1,941		1,941	10,500	48,639	59,139
	14%	82%	97%	3%	0%	3%	18%	82%	100%
Eva Air	3,795	47,373	51,168	3,244	3,343	6,588	7,040	50,716	57,756
	7%	82%	89%	6%	6%	11%	12%	88%	100%
Qantas	8,018	27,757	35,775	324	9,322	9,645	8,341	37,079	45,420
	18%	61%	79%	1%	21%	21%	18%	82%	100%
Thai	6,104	115,518	121,622	12,827	24,117	36,944	18,931	139,635	158,566
	4%	73%	77%	8%	15%	23%	12%	88%	100%
Total	26,476	239,288	265,764	18,336	36,782	55,118	44,812	276,069	320,882
	8%	75%	83%	6%	11%	17%	14%	86%	100%

Source: CAA O & D Survey 2003

### Regional travel via Heathrow

Table 6 shows the surface origin of UK-Bangkok OD passengers travelling directly to Bangkok and ending their journey here. This table includes the passengers who flew from a regional airport to London to connect with a Bangkok flight whereas Table 5 covers only those passengers travelling by surface to London.

Table 6 - Surface origin of direct UK-Bangkok OD Passengers in 2003

By surface/air	Passengers	Share
From		
East Anglia	12,367	3%
East Midlands	11,537	3%
Northern Ireland	2,288	1%
North West	43,517	11%
Northern	9,156	2%
Scotland	13,013	3%
South East	215,775	56%
South West	37,709	10%
Wales	9,695	3%
West Midlands	11,881	3%
Yorkshire & Humberside	16,648	4%
Other	2,059	1%
Total	385,645	100%

Source: CAA O & D Survey, 2003

Note: All passengers in the above table began their journey in one of the named UK regions and ended it in

Bangkok, or vice versa

Passengers travelling by air from, say, Glasgow to Heathrow and then on to Bangkok are classified as

having Scotland as their surface origin.

### Passengers travelling indirectly between Manchester and Bangkok

Table 7 shows the most popular foreign hubs used by indirect passengers starting their journey at Manchester and ending it in Bangkok or *vice versa*. In total 52,000 passengers flew from Manchester to Bangkok over an intermediate foreign hub with Emirates attracting the most traffic through Dubai.

Table 7 – Passengers travelling indirectly from Manchester to Bangkok

Via	Passengers
Dubai	20,324
Amsterdam	11,534
Doha	6,898
Copenhagen	3,669
Paris	2,553
Zurich	2,451
Helsinki	1,230
Istanbul	1,192
Kuala Lumpur	711
Frankfurt	637
Singapore	593
Total	51,792

Source: CAA O & D Survey 2003

Table 7 shows all the connecting passengers who flew from Manchester irrespective of their surface OD in the UK. So, only a proportion of the passengers shown in Table 7 have a North West OD.

### The North West-Bangkok OD market

17 Table 8 summarises the North West-Bangkok OD market in 2003

Table 8 - The OD market between the North West and Bangkok

Mode of	Flying	Via	Passenger
Travel	From		Numbers
By air	Manchester	Direct	
	Manchester	UK	8,872
	Manchester	Other	23,623
By surface	London	Direct	2,899
Total			35,394

Note: The estimate of passengers travelling from the North West over Heathrow to Bangkok is lower than that suggested by Table 6 because it is taken from the Manchester survey. The estimate in Table 6 is based on the survey at Heathrow and includes all passengers flying from Manchester and connecting on to Bangkok. The Heathrow survey does not provide the surface origin region of such passengers and they are assumed to be from the North West. The Manchester survey which is the basis of the estimate in Table 8 does allow this surface origin breakdown but has a much smaller estimate of overall Manchester-Heathrow-Bangkok passengers (16,000 as opposed to 42,000).

### The Manchester-Delhi market

Table 9 displays the current schedule for the airlines presently serving Delhi from the UK. Delhi is served exclusively from Heathrow.

Table 9 - Current Schedules on Heathrow-Delhi

BA 7 flights per week
Air India 5 flights per week
Virgin (a) 3 flights per week

Source: OAG September 2004

(a) Virgin operates a code-share agreement with Air India on this route

Services between the UK and India will change radically in the near future with the airlines of each country able to more than double their overall frequencies. More specifically, UK airlines and their Indian counterparts will each be able to mount double daily services between Heathrow and Delhi.

The Heathrow-Delhi market

Table 10 shows the number of passengers and the corresponding airlines between Heathrow and Delhi between 1994 and 2004.

Table 10 – Heathrow-Delhi point to point passenger volumes, 1994-2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004/08
Air Canada	56,190	58,821	59,776	42,161	19,686	0	0	0	0	0
Air India	89,390	46,742	38,578	41,610	41,871	33,875	35,424	43,399	38,193	23,012
BA	164,209	164,799	160,893	171,337	174,222	189,542	212,304	198,494	220,320	214,325
United	2,595	88,321	96,158	96,817	28,697	0	65,671	0	0	0
Virgin	0	0	0	0	0	24,752	53,999	47,979	56,268	58,273
Total	312,385	358,682	355,406	351,925	264,477	248,168	367,398	289,873	314,782	295,610

Source: CAA Airport Statistics (Reduced by 6% to account for non-revenue passengers)

- Table 10 confirms the point in Study 6 regarding Air Canada and its use in the 1990s of fifth-freedom rights from Heathrow to India. The airline stopped operating the Vancouver-Heathrow-Delhi service at the beginning of 2000. United also offered a fifth-freedom Heathrow-Delhi service during the period 1996 to 2001.
- Many of Air India's Delhi flights begin in Mumbai and, after Heathrow, continue to JFK and Chicago with fifth-freedom rights. After a high of approximately 90,000 passengers in 1995, Air India's point-to-point passengers have averaged about half this number which may represent (see Table 11) increasing levels of transit passengers, i.e. more passengers flying between India and the US over Heathrow, leaving fewer seats available for Heathrow-India passengers. There may also be an element of misreporting in Air India's data, allocating too much of the total traffic to Mumbai and too little to Delhi.
- BA has enjoyed reasonably steady growth since 1994, and overall has experienced a passenger increase of just under 50% in the period 1994-2003. Virgin is the newest carrier operating the route, beginning a direct service in 2000, using rights leased from Air India and under a code-share with Air India.

- Throughout the 1995 to 2004 period, there have been peaks and troughs as airlines have entered and left the market, with the most passengers carried over the last ten years occurring in 2001.
- Table 11 contains the most recent passenger carryings.

Table 11 - Heathrow-Delhi scheduled services in the year to August 2004

	Point to Point		Terminal	Transit	Total		Seat
	Passengers	Flights	Passengers	Passengers	Passengers	Seats	Factor
Air India	38,193	581	107,867	87,764	195,631	245,763	80%
BA	220,320	732	214,325	0	214,325	256,932	83%
Virgin	56,268	298	58,273	0	58,273	75,990	77%
Total	314,782	1,611	380,465	87,764	468,229	578,685	81%

Source: CAA Airport Statistics (Reduced by 6% to account for non-revenue passengers)

- The multi-sector nature of Air India's route is confirmed in the above table. The airline has carried approximately 38,000 passengers who, according to Air India, begin their journey at Heathrow and ended it in Delhi or *vice versa* (point-to-point passengers). It also reported a further 70,000 Heathrow-Mumbai passengers, i.e. 108,000 terminal passengers less the reported Heathrow-Delhi passengers (although this may overstate Mumbai and understate Delhi, see above). In addition there were 88,000 Air India passengers who were transiting Heathrow and travelling between Delhi and the US.
- Table 12 shows the nature of the journey made by point-to-point passengers flying from Heathrow to Delhi in 2003.

Table 12 – Direct Heathrow-Delhi passengers by journey type in 2003

		<>						
	OD	Heathrow	Delhi	Both	Total			
Air India	32,569	17,924	2,976	681	54,149			
	60%	33%	5%	1%	100%			
D.A	400.000	100.001	40.407	0.070	004.044			
BA	120,060	100,681	10,197	3,673	234,611			
	51%	43%	4%	2%	100%			
Virgin	38,735	20,513	612		59,860			
9	65%	34%	1%		100%			
Total	191,364	139,118	13,785	4,354	348,620			
	55%	40%	4%	1%	100%			

Source: CAA O & D Survey 2003

Unusually there does not appear to be much difference between the nature of the traffic from airline to airline. Overall, 55% of passengers begin their journey at Heathrow and end it in Delhi and 40% of total traffic connects at Heathrow but ends its journey at Delhi but the volume of passengers connecting in Delhi is small.

Table 13 differentiates Heathrow-Delhi OD passengers on the direct flights by their country of residence and journey purpose.

Table 13 - Heathrow-Delhi OD Traffic by residence and journey purpose, 2003

	<	UK	>	<i< th=""><th></th><th>&gt;</th><th>&lt; 7</th><th>Total</th><th>-&gt;</th></i<>		>	< 7	Total	->
	Business	Leisure	Total	Business	Leisure	Total	Business	Leisure	Total
Air India	6,160	11,792	17,953	3,677	10,939	14,616	9,837	22,732	32,569
	19%	36%	55%	11%	34%	45%	30%	70%	100%
BA	14,112	56,066	70,177	23,912	25,971	49,883	38,023	82,037	120,060
	12%	47%	58%	20%	22%	42%	32%	68%	100%
Virgin	4,855	22,039	26,894	1,017	10,824	11,841	5,872	32,863	38,735
	13%	57%	69%	3%	28%	31%	15%	85%	100%
Total	25,126	89,897	115,023	28,606	47,735	76,341	53,732	137,632	191,364
	13%	47%	60%	15%	25%	40%	28%	72%	100%

Source: CAA O & D Survey 2003

- 30 Each of the three airlines currently serving the route carried more UK residents that foreign residents in the year 2003. The route is leisure-oriented, with 72% of passengers overall falling into this category. BA carried by far the largest number of business passengers.
- Table 14 shows the surface origin of the passengers travelling from the UK and ending their journey in Delhi.

Table 14 - Surface origin of direct UK-Delhi OD Passengers in 2003

By surface/air	Heathrow	Total
From		
East Anglia	4,738	2%
East Midlands	13,473	7%
Northern Ireland	5,491	3%
North West	4,805	2%
Northern	1,548	1%
Scotland	409	0%
South East	142,018	71%
South West	8,902	4%
Wales	6,111	3%
West Midlands	9,935	5%
Yorkshire & Humberside	2,924	1%
Total	200,353	100%

Source: CAA O & D Survey, 2003 Note: All passengers in the above

All passengers in the above table began their journey in one of the named UK regions and ended it in

Delhi, or vice versa

Passengers travelling by air from, say, Glasgow to Heathrow and then on to Bangkok are classified as having Scotland as their surface origin.

The majority of passengers flying to Delhi originate in the South East. The Midlands regions provide the next most popular originating regions (12% in total) but the North West provides only 2%.

Table 15 shows the number of passengers that travelled indirectly from Manchester to Delhi via foreign hubs. Connectors over Heathrow have already been included in Table 14.

Table 15 – Manchester-Delhi indirect passengers over foreign hubs

Via	Passengers
Dubai	6,954
Paris	2,345
Frankfurt	1,325
Total	10,624

Source: CAA O & D Survey, 2003

Approximately 10,000 passengers flew from Manchester to Bangkok via an intermediate overseas airport. The most popular indirect routeing was over Dubai, flying with Emirates.

# The OD Market between the North West and Delhi

Table 16 provides an estimate of the North West originating-Delhi market.

Table 16 - The North West-Delhi OD market

Mode of	Flying	Via	Passenger
Travel	From		Numbers
By air	Manchester	Direct	
	Manchester	UK	4,072
	Manchester	Other	4.999
By surface	London	Direct	3,726
Total			12,797

### Markets between Manchester and points beyond Bangkok

Table 17 shows the five most popular ultimate airports for passengers who start their journey at Heathrow and who connect in Bangkok.

Table 17 – The main onward cities beyond Bangkok for Heathrow-Bangkok passengers

Onward destination	Passengers	Share of Connectors
Ho Chi Minh City/Saigon	31,142	18%
Sydney	29,330	17%
Phuket	24,856	14%
Hanoi	12,749	7%
Singapore	12,004	7%
	66,978	38%
Total	177,059	100%

Source: CAA O & D Survey 2003

In terms of destination countries, Vietnam, Australia and Thailand are the most popular. Table 18 shows the top five ultimate destination countries of passengers flying from Heathrow and connecting in Bangkok.

Table 18 – Top five onward countries for Heathrow-Bangkok passengers who connect in Bangkok

	Passengers	Share of Connectors
Australia	44,719	25%
Vietnam	43,891	25%
Thailand	40,611	23%
New Zealand	16,009	9%
Singapore	12,004	7%
Total	177,059	100%

Source: CAA O & D Survey, 2003

- Australia as a beyond point was considered in Study 1 and in Study 4 so this study focuses on the Vietnam and Thailand (excluding Bangkok) markets and the results are then scaled to represent the likely losses to UK airlines and benefits to UK consumers of the introduction of additional opportunities of connecting to all onward destinations beyond Bangkok.
- Table 19 indicates that relatively few regional passengers travelled to Heathrow either by surface or by air in order to catch a connecting flight in Bangkok, particularly from the North West. There is a large difference between the proportion of North West passengers in Table 19 (less than 1% of the total) and that in Table 6 where North West passengers account for 11% of the passengers who terminate their air journey at Bangkok. In the case of Table 19, the Heathrow option involves two connections whereas the journey can often be made with one connection from Manchester.

Table 19 – Regional origin of Heathrow-Bangkok passengers connecting in Bangkok in 2003

By surface/air	Passengers	Share
From		
East Anglia	4,114	2%
East Midlands	6,969	4%
Northern Ireland	2,606	1%
North West	717	0%
Northern	5,662	3%
Scotland	6,484	3%
South East	142,981	75%
South West	14,157	7%
Wales	3,454	2%
West Midlands	4,318	2%
Yorkshire & Humberside	349	0%
Other		
Total	191,810	100%

Source: CAA O & D Survey, 2003

Note: All passengers in the above table began their journey in one of the named UK regions, flew non-stop to Bangkok, and then connected there (or vice versa). Passengers travelling by air from, say, Glasgow to Heathrow and then on to Bangkok are classified as having Scotland as their surface origin.

- The passengers from the North West in Table 19 were travelling to Chiang Mai in Thailand and the survey also identified 1,270 passengers who travelled by surface to Heathrow in order to take a connecting flight over Hong Kong to Ho Chi Minh City. (These samples are, of course, so small that the estimates can only be regarded as illustrative).
- Table 20 estimates the number of passengers (from all regions) who flew from Manchester to a hub in order to travel to a point in Vietnam or Thailand (excluding Bangkok).

Table 20 - Manchester- Other Thailand/Vietnam indirect OD traffic in 2003

	Total
Heathrow	4,143
Dubai	1,922
Other	6,023
Total	12,088

Source: CAA O & D Survey, 2003

### The North West-Other Thailand/Vietnam market

From the data above, Table 21 estimates the size of the North West-Other Thailand/Vietnam OD market.

Table 21 - The North West-Thailand/Vietnam OD market

Mode of	Flying	Via	Passenger
Travel	From		Numbers
By air	Manchester	Direct	
	Manchester	UK	1,924
	Manchester	Other	4,354
By surface	London	Indirect	1,987
Total			8,265

### The economic evaluation

# **Assumptions**

- The complexity of the markets served by the Thai service make it difficult to estimate CPIs by analogy with existing services because of the lack of knowledge about the amount of capacity that existing carriers dedicate to the different markets. Accordingly, Thai is assumed to be able to capture 25% (as a fifth-freedom airline) of the Manchester-Delhi market, 33% (as a one-stop third/fourth-freedom airline) of Manchester-Bangkok, and 20% of the markets behind Bangkok.
- Only Manchester-Delhi passengers are assumed to have the time and cost saving benefits of moving from an indirect service to a direct service. Arguably a proportion of these savings could also be allocated to Manchester-Bangkok passengers on the assumption that a through-plane service is likely to be preferable to a one-stop service. However, it could also be argued that the evaluation overstates the benefits in the markets behind Bangkok because it disregards the inconvenience of the stop at Delhi en route to the Bangkok hub.

# Scaling factors

For the Manchester-Delhi and Manchester-Bangkok markets a scaling factor of 2.0 is used in order to convert the results for North West passengers to results for the whole catchment area and for the Manchester-beyond Bangkok market a further scaling factor of 2.08 (1.0/0.48) is used to convert the results for Vietnam and other Thailand into results for all beyond points.

#### Results of the economic evaluation

With these assumptions, the results of the evaluation are shown in Table 22.

Table 22 – Results of the economic evaluation

	MAN- DEL	MAN- BKK	MAN- BEYOND BKK	Total
UK direct passenger benefits (£m) UK indirect passenger benefits (£m)	0.36	4.15	0.86	5.38
	0.56	0.00	0.00	0.56
UK airline revenues (£m) UK airline profits (£m)	-0.37	-0.68	-0.09	-1.15
	-0.36	-0.67	-0.08	-1.11
Aviation-related spend in the UK (£m)	1.00	2.23	1.91	5.14
Aviation-related profit (£m)	0.30	0.68	0.59	1.57
Tourism spend in the UK (£m) Tourism profit (£m)	0.92	0.34	0.39	1.65
	0.12	0.04	0.05	0.21
Net effect on UK (£m)	0.98	4.21	1.42	6.61

Note: The split of the airport related effects between the different segments is purely for the purposes of the calculation.

It should be noted that the estimation process is sensitive to the constituents of the base market, particularly where survey sample sizes are small such as that for the beyond-Bangkok market. The seat factor on the Manchester-Delhi sector produced by these assumptions would be too low to be sustainable indicating that Thai might need to have more impact in markets such as Manchester-Australia than the use of Vietnam/Thailand as typical beyond-points might indicate.