

---

# THE EFFECT OF CORPORATE INFLUENCE IN THE SHORT HAUL BUSINESS TRAVEL MARKET

Keith J. Mason  
Cranfield University Bedfordshire, UK

---

## ABSTRACT

The importance of corporate involvement in the decision making process for business related air travel is being increasingly recognised in the literature. Business travellers consume air services (i.e. they take airline flights), however; they may not be the principal decision-maker in the purchase. Also it is the organisation that employs the traveller that incurs the cost for air travel. Consequently this research addresses the relationship between the traveller and the employing organisation in the purchase of air travel. In this paper traveller opinions on their corporate travel policy are evaluated using a Likert summated rating scale. The benefits sought, by the traveller, from the air service are also investigated and these benefits are used to segment the short haul business air travel market in the EU. Changes in the market for short haul business travel since the full liberalisation of the aviation market in the EU are evaluated by comparing the data to an earlier study of similar travellers in 1992.

## INTRODUCTION

The importance of corporate involvement in the decision making process for business related air travel is being increasingly recognised in the literature. Business travellers consume air services (i.e. they take airline flights), however; they may not be the principal decision-maker in the purchase. Also it is the organisation that employs the traveller that incurs the cost for air travel. Consequently this research addresses the relationship between the traveller and his/her employing organisation in the purchase of air travel.

In this paper traveller opinions on his or her corporate travel policy are evaluated using a Likert summated rating scale. The benefits sought, by the traveller, from the air service are also investigated and these benefits are used to segment the short haul business air travel market in the EU. Changes in the market for short haul business travel since the full liberalisation of the aviation market in the EU are evaluated by comparing the data to an earlier study of similar travellers in 1992.

---

The author would like to thank Elaine Argent of Air UK Ltd. for her help in obtaining authorisation to survey passengers at Stansted airport, and David Edwards who assisted in the collection of the data.

The common notion of business travellers is that they tend to travel more frequently than leisure travellers and they tend to pay higher prices for these services. The business travel sector of the market is prepared to pay higher fares as it is the company and not the individual traveller that bears the cost of the travel. This cost is then subsumed within the costs of the business. Airlines, not surprisingly, value this segment of the market very highly. Airlines can practice price discrimination in fare structures as business travellers have been prepared to pay higher fares to ensure travelling flexibility (i.e. to be able to change their flight bookings freely should, say, a business meeting run-over). In the domestic U.S. market about 50 percent of passengers are travelling for business purposes, however, this market represents two-thirds of passenger revenues (Stephenson, and Bender, 1996). In the EU the passenger number figure may be as high as two-thirds (Doganis, 1991), indicating the revenue figure would be even higher. The business travel market is, therefore, very important to the EU airlines.

The airline industry in the EU until recently has been one in which operators face very little competition. Bilateral agreements between national governments within the EU had ensured that most routes were only served by two airlines. Duopolistic arrangements ensured that consumers were given little choice of airlines, schedules, and prices. The market for short haul air services in the European Union has experienced a period of major change since 1990 when the first effective initiatives to liberalise the market were introduced. The final elements of a single market for airline services, completed in April 1997, has created an regulatory regime where any airline can offer any route within the EU at any price. Evidence suggests that increasing competition can have a significant effect on the market. Studies indicate that when more than two airlines operate on a particular route, tariffs and yields fall significantly, although there tends to be an increase in passenger numbers stimulated by the falling prices (Barratt, 1991; Doganis, 1994). The number of routes where more than two airlines operate has been small (only 2 percent of European routes in 1992) but changes in the industry can be observed. A number of marketing agreements and alliances have been created between short haul operators and larger transcontinental operators in a bid to gain from potential economies of scale and scope, and marketing benefits (e.g. increased interline business through code-sharing agreements, and shared frequent flier programmes) (Williams, 1993, Doganis, 1994). Opportunities to use the tariff as a competitive tool have been taken by a number of start-up airlines. Fourteen new carriers of this nature begun operations between March 1995 and September 1996 (Jones, 1996). These no-frills, low-cost operators can offer lower prices because of the following reasons:

- sell directly to passengers, thereby avoiding travel agency commissions;
- tend not to offer flights through a computer reservation system (CRS) thereby avoiding these costs;
- tend not to offer in-flight food, seat assignments, and interlining;

- outsource as many services as possible; and
- operate from uncongested airports with low charges (Whittiker, 1998).

The concept has proved to be sufficiently popular in the U.S. that major operators have introduced their own low-cost subsidiaries to halt declining market-share. In what can be seen as a similar move, British Airways has also announced its plan for a low-cost subsidiary operating in Europe.

As the supply side of the airline industry with the EU changes, airlines need to assess whether the factors of demand for their services will also change. If the principal concerns of business travellers are having fully flexible tickets, free in-flight food and beverages, and the opportunity to earn points on frequent flier programmes, then increased choice, and reduced tariffs in the traditional market and the introduction of low-cost operations will not greatly affect the business travel sector of the short haul market. If, however, the lack of airline and schedule choice and the non-availability of heavily discounted fares has meant that the market has been required to pay higher fares then a re-assessment of the attitudes and likely future behaviour of the market is appropriate. This paper, therefore, is concerned with investigating the business travel market.

## **THE BUSINESS TRAVEL MARKET**

The behaviour and attitudes of the business travel market has been the focus of a number of recent studies. The most substantive and comprehensive of these studies is the Stephenson and Bender's analysis of the U.S. business travel market (1996). From a noted reduction in the proportion of business related travel in the market from 55 percent in 1979 to 48 percent in 1993, the authors dismiss this reduced proportion as the result of an increase in non-business related travel and investigate the reasons for the reduction in business travel, attempt to determine the effect of air travel substitution by other modes of travel and increased use of telecommunications such as videoconferencing and the internet. The paper is based on two studies; one of 421 corporate travel managers and one of 701 business travellers as part of the 3,061 people surveyed as part of a national travel study. They found that the demand for business related air travel was reducing. This finding was supported by both travel managers and the travellers. They conclude that the primary reason for reduction in business travel is both companies and travellers frustration with high airline prices, and internal corporate pressure to reduce travel expenditure. Evidence was also given for significant substitution by other modes and also alternative communications methods.

The cost of business travel traditionally has been viewed as being not important as the employing company bears the cost. In Stephenson and Bender's (1994) study it is not surprising that cost is identified as being important as they survey corporate travel managers. Corporate involvement in the business travel market has been somewhat limited in the academic literature but more acknowledged in commercial studies of the industry.

Quoting figures from the American Express Travel & Expenditure Expense Survey, Bourne (1991) notes the growth of large companies employing travel managers. For UK companies, this figure had grown from 11 percent in 1986 to 42 percent in 1991. Skapinker (1992) notes pressures by companies on both their travelling employees and on their travel agents to reduce the cost of travel by down-grading (forcing business travellers to travel on economy tickets) and also to evaluate in a more systematic way the purpose and value of travel.

Although liberalisation is leading to more competition, some evidence indicates that its overall effect on cost is not downward. In 1996, spending on travel via the Guild of Business Travel Agents who handle about 75 percent of UK corporate travel increased by 17 percent, while the number of flight increased by 8.5 percent (Cohen, 1997). The author then argues that strong involvement in the management of travel expenditure is vital by corporations that have large travel costs.

Another UK based study of corporate travel (Cook, Davies, and Haver, 1994), undertaken by the University of Westminster, indicates some of the ways that corporations are involved in the business travel market. A survey of 128 companies revealed that 77 percent had a written travel policy, but that 70 percent of these policies granted travel choice discretion to travelling executives. However 20 percent were looking to reduce this choice in future. Indeed IATAs 1997 Corporate Air Travel Survey showed that 70 percent of business travellers were willing to try "no-frills" airlines (IATA, 1997).

Corporate involvement in the purchase of business air travel can be seen in a number of activities. Travel policies either written or unwritten may be used to influence choice of airline, and fare type thus reducing cost. Travel managers or travel departments may be involved in the selection and purchase process of airline tickets. Travel management may include bulk purchasing deals from preferred airlines thereby influencing future travel choices. Travel managers may use their travel agent to find the airline ticket, which gives them the greater perceived value for money.

Individual travellers may be adverse to corporate influence in their travelling behaviour. Corporate choices may be contrary to the preferred choice of the traveller if the traveller is a member of a frequent flier programme (FFP), or if the choice of airline is perceived to reduce the travelling comfort, flexibility, status, or convenience. A number of studies have tried to assess the effectiveness of FFPs to influence airline choice. One empirical study of the U.S. market concluded that FFPs have a significant effect on airline choice (Nako, 1992). This view is partially supported by a study of Australian business travellers. Browne, Toh, and Hu, (1995) found that membership of a FFP was a factor considered by travellers in the purchase decision but not one as important as on-time performance, schedule convenience or low fares. Gilbert (1996) concludes that the proliferation of FFPs and the build-up of unredeemed rewards have affected the effectiveness of these schemes.

Mason and Gray (1995) argue that corporate involvement in the business travel purchase decision is sufficiently important that the market should be treated for marketing purposes as a hybrid market, displaying characteristics of both consumer and industrial markets. A stakeholder model of the purchase decision process is used to analyse the market. They identify three stakeholders in the purchase of air travel; the traveller, the travel organiser and the employing organisation, and argue that each stakeholder will have a set of purchase benefits. The actual purchase benefits sought will be based on the competition between the stakeholders. A sample of 824 business travellers is segmented into three distinct market groupings based on the key purchase benefits and demonstrate that these groupings are affected by corporate involvement in the purchase decision.

This brief consideration of the demand side of the business travel market has shown that the validity of the high consumption, high yield airline passenger is questionable, and that traveller choice may well be influenced by corporate involvement in the purchase. This, combined with the changing supply side of the industry, suggests that further investigation of the business travel market is required so that marketing strategies may be based on a sound understanding of the factors that affect the market.

## METHODOLOGY

To investigate corporate influence in the EU short haul business travel market a quantitative survey was undertaken. The survey was administered in Stansted in the UK over two separate periods. Agreement to survey passengers was gained from Air UK Ltd. that operates the largest number of flights from this airport. The survey was carried out over three days in April 1997 and five days in November 1997. A scale of traveller attitudes towards corporate travel policies was included. Behavioural data regarding the traveller, the travel organiser and the employing organisation were collected. An attitude scale of business traveller purchase benefits previously developed by the author (Mason, 1995) was included to evaluate the importance to travellers of various product elements. An earlier survey of business travellers was undertaken at the same airport on the same target sample in 1992. Thus the new survey provided data to enable an examination of the reliability of this scale, and will allow the investigation of changes in the market over a five-year period. One thousand self-completion survey forms were distributed to short haul international and domestic travellers of which 450 useable survey forms were collected. This represents a 45 percent response rate for distributed survey forms, which is similar to the response rate achieved by Stephenson and Bender (1996) in their Corporate Travel Manager study. Analysis of the passenger figures during the survey period indicates that the sample represents about 5 percent of all Air UK travellers (both leisure and business) from this airport during the survey periods. The sample size allows an estimate of average number of trips to be calculated with 95 percent confidence

within a 1.5 trip interval. Although this does not meet a preferred 1-trip confidence interval as achieved in the earlier survey (Mason & Gray, 1995) this sample is deemed to be acceptable.

Demographic data about the respondent and his or her company were collected. Also collected were data about the respondent's travelling behaviour including the number of trips taken in the past twelve months, how the flight was selected, and booked, and whether the respondent's employing company had a corporate travel policy (CTP) or a travel manager or department. Fifteen attitude statements about corporate travel policies were developed through the views about travel policies comments reported in various trade journals and also from asking a number of business travellers their views about such policies. The most extreme and some fairly neutral comments were kept for inclusion in the survey. These comments were both positive and negative, and are included in Appendix I. Attitude statements regarding twenty-five product attributes were also included in the survey. This list (see Appendix II) is similar to the list included in the earlier survey and reported in Mason and Gray (1995). The authors indicated that repeated survey administration and comparison would provide data to evaluate the validity of the results of the first study and this study will serve this purpose.

## RESULTS

A demographic profile of the respondents did not reveal any surprises. The sample was predominately male (90.3 percent), with the vast majority working in senior roles in their respective organisations. Nearly one-fifth of the respondents indicated that they were company directors, a further one third worked as senior managers, while another one-quarter worked in other management positions. Together this means that 86.9 percent of the respondents fell into the A or B social stratifications. An age profile of the respondents shows business travellers tend to be in middle age with 36.3 percent aged between 35 and 44, and 40.8 percent aged between 45 and 64.

The respondents worked in many different industries and from very small to very large companies. The majority (64.1 percent) of respondents worked in services industries of various types. 27.9 percent of the sample were employed in the manufacturing sector while extractive industries accounted for 19.7 percent of business travellers in the sample. The author believes that the large extractive industries sector is partially influenced by the routes offered by Air UK at Stansted. The east Scottish coast and Stavanger in Norway, both that have significant oil sectors, are both important destinations for Air UK at Stansted. However the large services sector is surprising. One-fifth of the respondents worked for small companies with less than 100 employees. Another 23.2 percent of the sample worked in medium size companies (up to 1000 employees), and the remaining 57.0 percent of the sample worked for companies with more than 1000 employees.

The respondents on average made 19.75 business trips per annum. This may be compared to the figure found in the earlier survey which was 16.61 (Mason, 1995). Assuming the sample to be normally distributed (although it is slightly skewed), the amount of trips made by business travellers in 1997 is significantly higher than in 1992. This results provides some evidence to the on-going importance of the business travel market in the EU and distinguishes this market from the U.S. market where Stephenson and Bender (1996) provide evidence that the market seems to be travelling less. EU short haul business travellers make fairly short business trips. A total of 30.1 percent of the sample were making a day return, with a further 28.1 percent staying just one night. A majority (91.3 percent) of all respondents made trips of no more than two nights away. Respondents, on average were members of 1.99 frequent flier schemes. Free flights were the main benefit claimed from membership of such schemes with, on average, each respondent redeeming 1.03 free flights during the preceding twelve months. This benefit seems about three times more popular than free upgrades, of which 0.34 were claimed by respondents during the year on average.

Business travellers collect information about available flights from three key sources: 40.1 percent of respondents made travel agency enquiries, while 19.0 percent used in-house travel managers or departments to find out about available flights, and 27.7 planned their flights using airline printed schedules. The large amount of flights taken by the sample would infer that travellers become familiar with the available airlines operating from a particular airport and may collect printed schedules directly from the airline. The majority of flights (71.0 percent) are booked through specialist business travel agents, with a further 10.9 percent of flights booked directly with the airline.

The majority (64.0 percent) of short haul business travellers still select their own flight. This figure, however, is significantly lower than the figure in the 1992 survey where 69.8 percent of travellers selected their own flights. Business travellers it would seem are becoming less involved in the purchase decision for air services. This reduced involvement may be explained by greater corporate involvement in the market.

Almost half (42.7 percent) of respondents worked for companies that either employed a travel manager or had a travel department (this figure has risen from 36.3 percent in 1992), and 70.7 percent worked for companies that had a corporate travel policy (60.3 percent in 1992).

The survey does provide some evidence that fewer companies provide their travelling executives with full-fare fully flexible travel. Only 14.4 percent of the sample were travelling on full-fare tickets while this figure was 25 percent in 1992. This figure cannot be fully off-set by a rise in the proportion of travellers that do not know the fare type they are travelling on (29.3 percent, as opposed to 25 percent in 1992), but the fact that such a large proportion of travellers do not know what type of ticket they hold indicates low involvement in the purchase.

This brief analysis shows that business travellers seems to be becoming less involved in the selection and booking of airline services, while travel managers

and travel department have an increasingly important roles to play in this area. The effect of corporate involvement is having some identifiable effect on the selected airline service, where the effect is tending toward cost reduction rather than increased traveller flexibility.

### **An Attitude Scale for Corporate Travel Policies**

A Likert summated rating scale was used to assess business traveller attitude towards corporate travel policies (CTPs). Fifteen attitude statements, some positive and some negative in nature, were developed for use on the scale. Respondents were asked to indicate their level of agreement with each of the statements on a five-point scale, from "strongly agree" to "strongly disagree". Statements that were positive about CTPs were scaled from five for "strongly agree" to one for "strongly disagree," and vice versa for negative statements. A total attitude score for each respondent was calculated by totalling the individual item scores. Therefore the range of potential scores on the total scale was between 15 to 75. The mean score was 50.06 with a standard deviation of 6.21. The lowest score, i.e. most opposed to CTPs, was 27 and the highest 72. The scores were normally distributed, and to assist in the analysis of the scale respondents were divided into three equal groups; respondents against CTPs, respondents with neutral attitudes towards CTPs, and those with positive attitudes towards CTPs. A correlation of the summated scores with the scores given for each individual item shows the statements in the scale that most discriminated between respondents attitudes. These state.

"CTPs are a good idea" ( $r^2 = 0.6036$ )

"CTPs are a constraint which serve no great purpose" ( $r^2 = 0.6395$ )

"CTPs are a hindrance when planning a business trip" ( $r^2 = 0.6399$ )

"CTPs tend to infringe on employment travel benefits" ( $r^2 = 0.6588$ )

A chi-square test of independence was used to identify which demographic and behavioural variables influenced respondent's attitudes towards CTPs. Table 1 below provides a tabulation of variables that were shown, at the 95 percent level, to influence respondent attitude to CTPs.

The table shows that business traveller attitudes towards CTPs are influenced by the size of company that he or she works for. Almost three-fourths (70.6 percent) of respondents who had positive attitudes towards CTPs worked for companies with more than 1000 employees. Compared to the proportion of the respondents with negative attitudes towards CTPs, less than one-half (47 percent) worked for companies with more than 1000 employees. A larger proportion of the group with negative attitudes towards CTPs worked for small companies with less than 100 employees compared to the positive group (35.0 percent compared to 11.8 percent). It would seem therefore that business travellers who work for larger companies are more likely to have positive attitudes towards CTPs.

**Table 1**  
**Business Traveller Attitudes Towards Corporate Travel Policies**

	<i>Anti-CTPs (percent) 33 Percent of Sample</i>	<i>Neutral to CTPs (percent) 33 Percent of Sample</i>	<i>Pro-CTPs (percent) 33 Percent of Sample</i>
Company size			
1-99 employees	35.0	13.4	11.8
100-999 employees	17.9	28.6	17.6
1000 employees or more	47.0	58.0	70.6
Company has a CTP			
Yes	55.2	84.7	93.2
No	44.8	15.3	6.8
Company has travel manager or department			
Yes	33.1	49.6	57.1
No	66.9	50.4	42.9
CTP type			
Written rules to be adhered to	20.0	25.7	35.7
Written guidelines	46.3	50.5	46.4
Written rules open to interpretation	13.8	5.7	7.1
Unwritten rules	20.1	18.1	10.8
Respondent selected own flight	70.9	65.2	63.1
Source of flight information			
ABC, OAG etc.	9.6	9.2	12.5
Airline produced schedule	28.9	36.8	16.1
Travel agent enquiry	51.8	25.0	44.6
Travel manager/Department enquiry	9.6	28.9	26.8
Flight booked by:			
Traveller	30.0	16.2	14.4
Traveller's department	29.1	39.6	32.4
Travel manager/Department	25.5	34.2	36.9
No of trips in last year			
1-5	48.1	53.2	30.9
6-10	26.9	25.2	32.7
more than 10	25.0	21.6	36.4

Business traveller attitudes towards CTPs may be partially explained by knowledge of CTPs based on their experience of working with them. Almost all (93.2 percent) of the group with positive feeling towards CTPs worked for companies with CTPs, whereas only 55.2 percent of the group with negative attitudes did. Those that were anti-CTPs were more likely to select their own flight (70.9 percent), while those with a positive attitude towards CTPs were more likely to allow others for select their flight (36.9 percent did not select their flight). This behaviour may be explained by the frequency with which each group travels. The results show that the negative group had made fewer trips in the last year compared to the positive group.

The presence of a travel manager or department within a company seems to have some effect on business travellers' opinions regarding CTPs. Over one-half (47.1 percent) of the positive group worked for companies that employed travel managers, while this figure was only 33.1 percent for the negative group.

It is surprising that, when questioned about the nature of the CTP employed in their company, a larger proportion of the group positive about CTPs indicated that their CTPs was quite rigid with written rules to be adhered to. About one-half (46.3 percent) of all respondents, however, indicated that the CTP under which they make business trip are written guidelines. This may be compared to the results in Table 2 (below) which shows a cross-tabulation of respondent attitudes towards CTPs and the class of travel accorded to those at different corporate levels within the employing company. It would seem that, while the proportion of traveller allowed to fly on business class increases with corporate status in all groups, the hierarchical bias is most obvious in the group of travellers that hold negative feeling towards CTPs. Business traveller attitudes towards CTPs may be most affected by companies that create travel policies that favour those at the top of the corporate hierarchy.

**Table 2**  
**Hierarchical Corporate Travel Policies and Business Travel Attitudes**

	<i>Anti-CTPs (percent)</i>	<i>Neutral to CTPs (percent)</i>	<i>Pro-CTPs (percent)</i>
Flight allowance for various hierarchical levels in respondents company			
Company Directors			
Business Class	52.9	67.9	64.3
Economy Class	47.1	32.1	35.7
Senior Management			
Business Class	36.7	46.4	44.8
Economy Class	63.3	53.6	55.2
Other Management			
Business Class	15.5	18.7	30.1
Economy Class	84.5	81.3	69.9

Table 1 also shows differences between the groups in terms of the way in which they find out flight information and book their flights. The negative and positive groups were most likely to source flight information from travel agents (51.8 and 44.6 percent respectively), while the neutral group was more likely to make enquiries on in-house travel managers or departments or airline produced schedules. The positive group was also much less likely to book the flight themselves, relying more heavily on others in their departments or in-house travel departments.

The analysis of the scale of traveller attitudes towards CTPs shows that company size obviously will affect the likelihood of a company employing a travel

manager or having a CTPs and thus it would seem that marketing approaches for different size of company may be appropriate. The evidence provided here shows that corporate involvement in the air service purchase is greater in larger companies, and it would seem that these travellers on the whole are positive or at least neutral about this involvement.

### Business Travel Market Purchase Benefits

Each respondent rated the importance of each of twenty-five product elements on a 5-point ranked continuum scale. Principal component analysis of the twenty-five purchase benefit elements was performed to identify any underlying purchase benefits. The data performed well under test of sampling adequacy ( $KMO = .82848$ ) and sphericity (Bartlett = 3046.8, significance = .0000) indicating the suitability of the data for principal component analysis (PCA). Six principal factors identified by PCA accounted for 59.6 percent of the variation in the data set. Tests of the internal consistency of the data (Cronbach's alpha) provided evidence of the reliability of the attitude scale. In the earlier study six factors were also identified with a very similar amount of variation (60.6 percent). Table 3 shows the variables that are closely associated with each factor.

**Table 3**  
**Factor Analysis of Business Travel Purchase Benefits**

<i>Variable</i>	<i>Factor 1</i>	<i>Factor 2</i>	<i>Factor 3</i>	<i>Factor 4</i>	<i>Factor 5</i>	<i>Factor 6</i>
<i>Cronbach Alpha</i>	.7678	.7883	.7202	.7619	.6957	<i>na</i>
<b>Business Class Value</b>						
No ticket restrictions	.57065	.23780	.02897	.15668	.08844	-.19996
Seat allocation	.65922	.31436	.03391	.19398	-.04366	.02103
Return boarding card	.55925	.07233	.09119	.19720	.12523	.35450
Business lounge	.6878	.16340	.32410	-.04926	-.05598	.21021
Business class check-in	.77315	.17992	.19039	-.14428	.00784	.09457
<b>In-flight Comfort &amp; Experience</b>						
In-flight service	.08924	.55975	.49488	.00936	.00112	.02188
Seat comfort	.07395	.76291	.20197	.03497	.00881	.07153
Airline punctuality	.30155	.68146	.02857	.00530	.18568	.14435
Past experience of airline	.23953	.60507	.03287	.11572	.16232	.14435
Airline safety record	.14483	.65546	.06982	.13651	.04056	-.03888
<b>In-flight User Benefits</b>						
Duty free available	.12644	-.01874	.60404	.30118	-.00777	-.14626
Free newspapers	.16246	.19153	.78667	.03470	.10578	.09102
Free beverages	.03503	.20303	.81290	.05237	-.05495	.06001
<b>Price</b>						
Ticket price	.03640	.09447	.08475	.87992	-.05149	.10873
Ticket discount	.02671	.10934	.17720	.88152	-.06530	.13262
<b>Schedule</b>						
Timing of outward flight	-.06644	.08326	-.02686	-.09181	.83461	.09406
Timing of return flight	.08124	.12469	.02307	.03476	.83967	.05213
<b>Airport</b>						
Local airport	.00479	.12538	-.04223	.13195	.05995	.81510

Factors 1, 2, 4, 5, and 6 each have a bundle of product attributes associated with them that are very similar to those discovered in the earlier study. This provides further evidence of the reliability of the attitude scale, and indicates that there are the following purchase factors in the EU short haul business travel market; Business class value, in-flight comfort and experience, price, schedule, and local airport. Factor 3 in this survey includes duty free shopping, and free newspapers and beverages. In the earlier study this factor included ease of reservation, seat allocation, quality of ground service, and was called "air service user-friendliness." Further testing of the attitude scale is needed to investigate the reliability of this area of purchase benefits.

Following the principal component analysis, factor scores for each respondent were calculated and saved, to be used in a cluster analysis to identify segments within the business travel market.

### **Business Travel Segmentation Analysis**

An iterative clustering algorithm was used, and a robust three-cluster solution was reached after only four iterations. To evaluate the validity of the segments, a cross-validation procedure was applied to the solution. The cluster analysis was re-applied to the top half of the sample and each respondent's cluster membership in the validation process stored. The final cluster centres of this process were then used as the initial cluster centres in the application of the cluster analysis in the bottom half of the sample. Again the validation cluster memberships were stored. The validation cluster membership data were correlated with the original cluster membership data, the correlation coefficient was 0.8799 for the top of the sample, and 0.7701 for the bottom. The result of the cross-validation procedure was deemed satisfactory.

The chi-square test of independence was used to identify the variables that differ significantly between the clusters. The variables that influenced segment membership were; management level/social classification, size of employing company, age (at the 90 percent level), the number of trips taken during the past twelve months, whether the company had a CTP, and the Likert score on the CTP attitude scale. Details of the differences are shown in Table 4.

Analysis of variance was used to examine the different importance placed by each segment on product elements 1 to 25. This process revealed significant differences for product elements 1 to 22. These differences are significant at the 95 percent level. In the attitude scale, scores can range from 1 (highly important) to 5 (low importance). Table 5 shows the mean attitude score for a number of purchase element for each segment and is organised to show the most important factors first. The segment that rates each product element the highest is highlighted.

These tables are used as a basis to develop a profile of each segment.

**Profile of Segment 1.** The first segment is made up of 20.5 percent of the respondents of the survey. A large proportion of members is employed in senior management positions. The age profile of this group is fairly even across the

**Table 4**  
**Business Travel Segmentation Profile**

	<i>Segment 1 (percent)</i>	<i>Segment 2 (percent)</i>	<i>Segment 3 (percent)</i>
	20.5 percent of sample	34.8 percent of sample	44.7 percent of sample
Management Level			
Company director	18.2	17.4	32.9
Senior management	66.2	67.4	57.8
Other management	15.6	15.2	9.2
Age (significance 0.09982)			
25-43	27.3	30.5	17.6
35-44	37.7	34.4	38.2
45-64	35.1	35.1	44.1
Number of Trips in Last 12 Months			
1-5 trips	48.1	56.5	36.9
6-10	19.5	24.4	33.3
More than 10	32.5	19.1	29.8
Company Size			
1-99 employees	15.6	15.3	26.2
100-999	23.4	26.7	19.2
More than 1000	61.0	58.0	54.7
Company has CTP			
Yes	75.0	77.9	65.1
No	25.0	22.1	34.9
Views of CTP			
Anti-CTPs	11.7	39.6	34.5
Neutral to CTPs	35.0	30.2	35.2
Pro-CTPs	53.3	30.2	30.3

**Table 5**  
**Purchase Benefits Sought By Business Travel Segments**

	<i>Segment 1 Mean Attitude Score</i>	<i>Segment 2 Mean Attitude Score</i>	<i>Segment 3 Mean Attitude Score</i>
Most Important Purchase Factors			
Timing of outward flight	1.0519	1.9015	1.0058
Timing of return flight	1.3247	2.1818	1.1503
Flight from local airport	1.2597	1.7803	1.5202
Airline punctuality record	1.4545	1.8939	1.6127
Seat comfort	1.4416	1.8106	1.7341
Fast-track check-in	1.6047	1.9615	1.6716
In-flight service	1.8961	2.1818	2.1445
Lack of ticket restrictions	2.7532	2.2803	2.0405
Frequent flier programme	2.6134	2.4987	2.0142
Ease of reservation	3.1169	2.3712	1.9191
Business lounge available at airport	2.7662	2.5758	2.4220
Ticket price	3.4675	2.5227	2.1792
Duty free available	4.0260	2.4091	3.4162

spectrum, however, the largest proportion of the segment (37.7 percent) are aged between 35-44. This is consistent with the management positions they hold.

With regard to business travel consumption, the largest proportion of the segment (48.1 percent) have made five trips or less in the last twelve months. However, when compared with the other segments, this segment has the largest proportion of the members who have made more than ten trips in the last year (32.5 percent). Members of this segment are most likely to work for large companies, with 61 percent of the group working for companies with more than 1000 employees. Three-fourths of members of this segment work for companies that have a CTP, with 53.3 percent of the group holding positive attitudes towards these policies.

By identifying the product attributes that most closely associate with the purchase factors identified in the factor analysis above, we can see that segment 1 seems to rate factors 2 (in-flight comfort and experience) and 6 (local airport) most highly. A flight from a local airport is the most important purchase item to members of this segment. Members of this segment are keen to ensure that their time is not wasted, and thus airline punctuality and fast-track check-in are important purchase considerations. It is interesting to note that it is this group that rates airport business lounges least highly of the three segments, but this may reflect the groups propensity not to waste time. Once onboard members of this segment rate seat comfort and in-flight service more highly than members of the other segments, but places least importance on the price of the airline service.

This segment, therefore, works for large companies, is not interested in the price of the product but wants a smooth and pleasant product delivery during the consumption of the service. As long as these items are met, members of this segment would be least bothered by corporate involvement in their travel arrangements.

**Profile of Segment 2.** Representing 34.8 percent of the sample, a similar proportion of this segment is employed in senior management positions (67.4). The age distribution of this segment is similar to that found in segment 1, however this group tends to travel the least of all the groups. 56.5 percent of this segment have made five or less trips in the last twelve months. Although a smaller proportion of this group work for very large companies (58.0 percent), 77.9 percent of this group work for companies that have CTPs. The effect of corporate size on attitudes towards CTPs may explain the high proportion of the group with negative attitudes towards CTPs.

As can be seen by Table 5, members of this segment, on average, do not rate any product attributes more highly than members of other segments with the exception of duty free shopping. Consequently, to investigate this segment we will look at the product attributes they rated most highly and also look at those product attributes where this group recorded a similar score to segment that scored the product highest. The most important factor to this group is flight from

a local airport, which is rated higher than the timing of the outward flight. Punctuality and seat comfort are also important. The availability of a business lounge is relatively important, as is the ease in which tickets may be reserved.

The profile indicates that members of this segment tend to travel less than the other segments. As they travel less the evidence suggest they get more involved in the purchase of their flights, and have negative feelings towards CTPs. To market to this segment, airlines should concentrate on the traveller not the corporation, promote ease of access to the local airport, the connections available from the airport, and quality of the duty free shopping and the business lounge facilities.

**Profile of Segment 3.** Representing 44.7 percent of the sample, this segment is the largest group of business travellers. One-third (32.9 percent) of the segment indicated that they work as company directors, with a further 57.8 percent working in senior management. This segment has the largest proportion of members who work for small companies (26.2 percent), although over one-half (54.7 percent) work for companies with more than 1000 employees. Members of this group are fairly evenly distributed in the frequency of business trips made. Less than one-third (29.8 percent) of the group have made more than ten trips in the last year but 36.9 percent have made five or less. The age distribution is more distinctive, however, with 44.1 percent of the group being aged 44 or over.

Members of this segment were the least likely of all segments (65.1 percent versus 75.0 and 77.9 percent) to work for a company that had a CTP. However, the high percentage of companies with CTPs demonstrates the reach they have in the business travel market. Attitudes towards CTPs were fairly evenly distributed between members of this segment, the largest proportion holding neutral opinions (35.2 percent).

The identifiable characteristics of this segment however are the purchase factors that they rate highly. Table 5 shows the large amount of product elements that members of this segment rated more highly than members of other segments. The scheduling factors were most important but members of this segment also rated purchase factors 1 (Business class value), and 4 (price), more highly than other segments.

This segment represents a large section of the short haul business travel market that want good schedules at low prices but also want to have the ability to change their flight bookings without restriction and want to use well-equipped business class lounges.

These factors combined with the slight tendency of this segment towards smaller companies possibly indicate that travellers in this segment have a greater involvement in the purchase decision than, particularly, segment 1 where there seems to be more evidence of corporate involvement. Airlines or travel agents may wish to develop products aimed at this market segment that reduces the need for traveller involvement and makes the purchase easier.

Travel agency management of smaller companies travel expenditure accounts may be mutually beneficial for the companies and agents.

This research has identified and profiled three market segment within the EU short haul market that are not obviously comparable with the market segments identified in the earlier study. The most striking difference between the earlier study and this research is that company size can be used to distinguish between segments in this study, whereas this was not possible in the earlier study. Company size is obviously a useful segmentation basis and when combined with the findings regarding corporate travel policies and corporate involvement in the purchase decision and procedures, the findings in this survey are very useful.

## CONCLUSION

This paper has provided additional information regarding the business traveller and his or her employing organisation in the purchase of air travel. The scale for traveller attitudes towards CTPs can be evaluated by its application in other markets. Other attitude statements could be developed that might gain greater insight into business traveller attitude constructs. The scale for purchase attributes which was previously developed has been assessed and surprisingly similar results were found in terms of the key purchase attributes in the short haul business travel market which provide strong evidence of the key purchase benefits sought by the business travel market. A new market segmentation based on these product elements reaped further insight into the market and how it has changed in the last five years.

## REFERENCES

- Barratt, S. (1991), "European airline deregulation," in Banister, D. and Button, K. *Transport in a Free Market Economy*, London, Macmillan, pp. 242-249.
- Bourne, J. (1991), "How to control runaway expenses," *Business Traveller*, June, pp. 15-17.
- Browne, W., Toh, R., and Hu, M. (1995), "Frequent-Flier Programs: The Australian Experience," *Transportation Journal* 35, No. 2, Winter, pp. 35-44.
- Cohen, A. (1997), "Corporate travel: Serious travel budgets need serious management," *The Times*, 6/2/97, page not known.
- Cook, A., Davies, M., and Haver, P. (1994), *Corporate Travel Survey*, Unpublished survey for the Institute of Travel Management, July/Aug., Transport Studies Group, University of Westminster.
- Doganis, R. (1991), *Flying Off Course: The Economics of International Airlines*, 2nd edit., Harpers Collins, London.
- Doganis, R. (1994), "The impact of liberalization on European airline strategies and operations," *Journal of Air Transport Management* 1, No. 1, March, pp. 15-26.
- Gilbert, D. (1996), "Relationship marketing and airline loyalty schemes," *Tourism Management* 17, No. 8, pp. 575-582. IATA, (1997), "Cost conscious business travellers will try non frills airlines," *International Air Transport Association, Press release*, No: PS/13/9, 27/1/97.

- Jones, L. (1996), "Off to a Head Start," *Airline Business*, September, pp. 60-66.
- Mason, K. J. (1995), *A Stakeholder Approach to the Segmentation of the Short Haul Business Air Travel Market*, Unpublished PhD, Faculty of Science, University of Plymouth.
- Mason, K. J., and Gray, R. (1995), "Short haul business travel in the European Union: a segmentation profile", *Journal of Air Transport Management* 2, No. 3/4, pp. 197-205.
- Nako, S. (1992), "Frequent Flyer Programs and Business Travellers: An Empirical Investigation", *Logistics and Transportation Review* 28, No. 4, pp. 395-414.
- Skapinker, M. (1992), "Travel expenditure: Cost-cutting in the air", Contracted Business Services Survey, *Financial Times*, 20/2/92, p. III.
- Stephenson, F., and Bender, A., (1996), "Watershed: The Future of U.S. Business Air Travel," *Transportation Journal* 35, No.3., Spring, pp. 14-32.
- Whittiker, R. (1998), "Blue Sky faces a storm of protest," *Airline Business*, January, pp. 7-7.
- Williams, G. (1993), *The Airline industry and the Impact of Deregulation*, Ashgate, Hants, England.

## APPENDIX I

1. CTPs are a good idea.
2. CTPs make the whole process of travel more easy.
3. CTPs are a constraint which serve no great purpose.
4. CTPs benefit those at the top of the hierarchy.
5. CTPs take transport decisions away from the individual traveller.
6. CTPs allow the company to save money on travel.
7. CTPs are a sensible business decision.
8. CTPs are a hindrance when planning a business trip.
9. CTPs force travellers onto other transport modes for short distance travel (up to 300 miles).
10. CTPs tend to infringe of employment travel benefits.
11. CTPs require advance planning of business trips.
12. CTPs downgrade the class of travel allowed.
13. CTPs have resulted in companies having preferred airlines.
14. Frequent flier points should be awarded to the company rather than the traveller.
15. CTPs increase the use of video conferencing and e-mail while reducing air travel.

## APPENDIX II

1. Timing of the outward flight
2. Timing of the return flight
3. Flight frequency
4. Ticket price
5. Ticket discount
6. Ease of reservation
7. Lack of ticket restrictions
8. Direct route
9. Seat allocation at reservation
10. Fast-track check-in
11. Quality of ground service
12. Flight from local airport
13. Return boarding card on departure
14. Business lounge available at airport
15. Automated check-in
16. Exclusive Business Class check-in
17. In-flight service
18. Seat comfort
19. Duty Free available
20. Free daily newspapers
21. Free beverages
22. Frequent flier programme
23. Airline punctuality record
24. Past experience of an airline
25. Airline safety record