

# The Channel Tunnel and its impact on Tourism in the United Kingdom

Soutetsu Sen

Geographical Paper No. 172

February 2004

The author is an Assistant Professor of Tourism at Kyushu Sangyo University, Japan  
Email: [sen@ip.kyusan.ac.jp](mailto:sen@ip.kyusan.ac.jp)  
and was a Visiting Academic in 2002-3 in the Department of Geography  
The University of Reading Whiteknights  
Reading RG6 6AB UK

Series Editor: A.M. Mannion  
[a.m.mannion@reading.ac.uk](mailto:a.m.mannion@reading.ac.uk)

## 1. Introduction

The Grand Tour of Europe started about 1763 when treaties were signed that ended century-long hostilities in Europe. Thereafter, despite renewed warfare between Britain and France and assorted revolutions on either side of the Atlantic, travelling for pleasure grew popular across the European continent (Inglis 2002). Then, 230 years after the beginning of the Grand Tour, the \$15 billion Channel Tunnel between England and France was opened in 1994.

Before the opening of the Channel Tunnel, many studies examined the way that it might influence changes in the development of the region and tourist flows. Several articles considered the impact on local, regional and national industries. For example, Kay *et al* (1989) assessed the likely growth in tourist traffic following the tunnel's opening, the potential effect on the ferry industry and the different scenarios which might occur if a price war broke out between the ferry operators and Eurotunnel. Other economists pointed out the possibility for regional development in Scotland<sup>1</sup> (Mckinnon 1994), South East England (Button 1994) and the Nord-Pas-de-Calais region of France (Bruyelle and Thomas 1994). Knowles and Farrington (1998) pointed out that a coordinated programme of investment in infrastructure and intra European services may have a significant effect on regional development. Geographers assessed the regional implications of the tunnel (Vickerman 1994) and the way in which potential environmental impacts were considered in the development of a transport corridor between London and the tunnel portal (Goodenough and Page 1994). Transport geographers looked at the implications for tourism of new transport infrastructures, particularly the high-speed rail link through Kent (Page 1994) and ways in which these innovations may affect patterns of recreational and tourism activity into the late 1990s and the twenty-first century. Tourism analysts also pointed to the potential effect of the tunnel's opening for European rail travel in terms of a possible renaissance in this form of tourist transport for intra-European travel (Page 1993). Barbara *et al* (1998) pointed

out that improved access by the Channel Tunnel promised more visitors to the area, although it implied that there was a threat to Canterbury's tourism industry from a range of competing destinations in Kent, Nord-Pas-de Calais and further afield.

With the growing interest in the Channel Tunnel's effect on tourism and other forms of economic activity, there has been a proliferation of reports and academic papers published since the tunnel opened in 1994. The opening has directly and indirectly affected physical and cultural tourism environments. Changing accessibility to particular destinations relative to others is regarded as an important influence on destination shares of total international tourism flows. This paper presents a descriptive analysis of the change in inbound tourism into the UK by the Channel rail tunnel since 1994. The sources of information for this analysis are mainly based on the International Passenger Survey (IPS)<sup>2</sup> (ONS 2002) and Transport Statistics (DETR 2002).

## **2. The Channel Tunnel**

The Channel Tunnel consists of 3 interconnected tubes: one rail track each way plus one service tunnel. Two of the three tunnels are for railway traffic (shuttles and trains). The tunnels lie on average 40 m below the Channel seabed. The length is 50.5kms, of which 37kms are underwater. Train services carry passengers, freight and vehicles between Folkestone, England, and Coquelles, France.

### **2.1 A long history**

Plans for such a tunnel were first drawn up nearly 200 years ago and the first of several tunnelling efforts was aborted over 100 years ago (Berentsen & Hoffman 1997). Digging first began in 1880, but stopped in 1882 because of the potential threat to national security and the need to preserve Britain's insular character (Gerondeau 1997).

In 1957, a plan for an underground railway system was launched again. Work began in 1973, close to the Tunnel dug in 1882. However, an economic crisis resulting from the 1973 oil crisis affected Britain, and the site was abandoned in 1975. Work began again in 1987 and 7 years later in 1994 the plan materialized. However, the Channel rail Tunnel did open a few months late and over budget (Berentsen et al 1997) (Table 1).

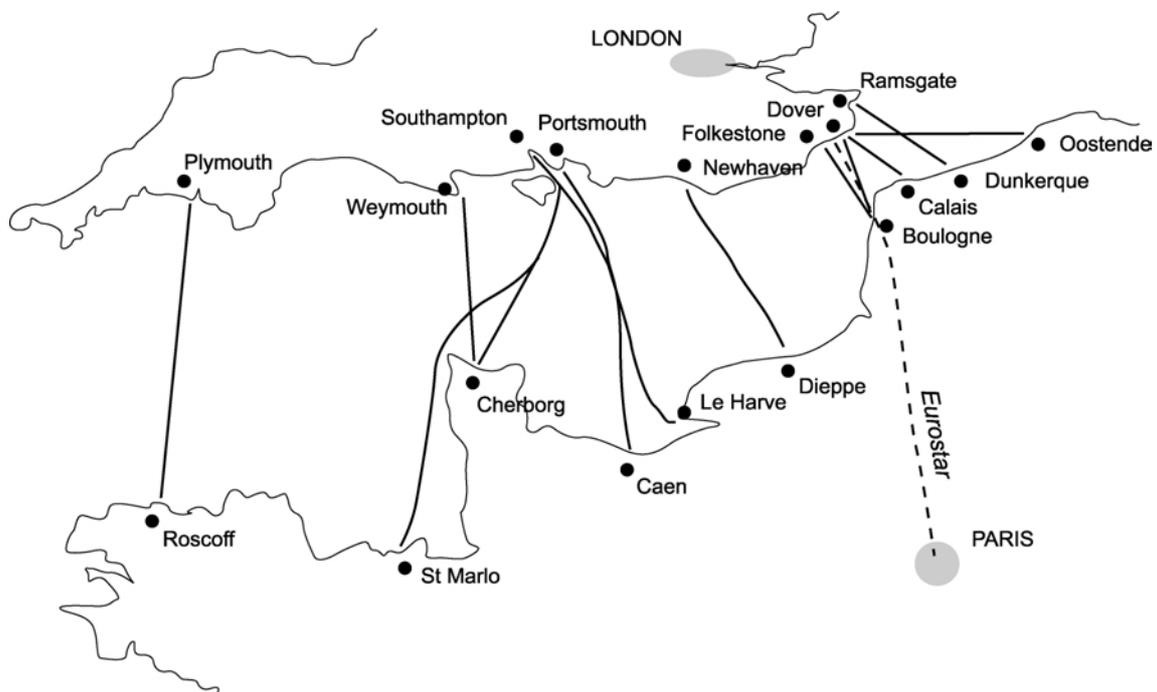
### **Table 1 Timeline**

1801	First plan for a fixed cross-Channel link, by the French engineer Albert Mathieu.
1833	Aimé Thomé de Gamond studies different plans before choosing an underground railway tunnel in 1844. He is considered the 'father of the Channel Tunnel'
1880	First digging works stopped in 1882 following British opposition to the tunnel. 2,000m have been dug on the English side, 1,800m on the French.
1957	Creation of GETM(Groupement franco-anglais d'études du tunnel sous la Manche), which in 1963 proposes building a railway tunnel of two main tunnels and a service tunnel.
1973	Digging starts, from the tunnels dug in the late nineteenth century. The works are abandoned in January 1975 by the British government, for financial reasons.
1981	10-11 September: relaunch of the building plan at the Anglo-French Summit.
1986	The Eurotunnel project is officially approved. 12 February: signing of the Canterbury Treaty
1987	29 July: approval of the Channel Tunnel Treaty by Margaret Thatcher, British Prime Minister, and Francois Mitterrand, President of France. 15 December: digging starts again.
1990	1 December: historic joining of the service tunnel. Handshake between workmen Philippe Cozette and Graham Fagg.
1993	Work finishes. In December, the builders TML hand over control to Eurotunnel
1994	Opening of the tunnel. 6 May: official inauguration. July: the Tour de France passes through.

Source: Francis Kochert(1994) The Channel Tunnel, Wayland

## **2.2 Its geographical location**

The Channel Tunnel lies in a central position linking a number of European Capital Cities and Regions, stretching from London to Paris and from Paris to Brussels (Fig.1). Some of Europe's most advanced capital and infrastructure development, high-tech industrial activities and centres of prosperity are located in these areas. These nations can be regarded as European gateway countries (Eurostat 1999).



**Fig.1 Eurostar and Cross-Channel ferry services**

### **2.3 Private-sector-funded transport**

The decision to construct the Channel Tunnel was taken jointly by the British and French national governments in January 1986, on condition that the project was paid for by private money (Holliday *et al* 1991). Eurotunnel P.L.C. and the French counterpart Eurotunnel S.A make up the Eurotunnel Group which owns and operates the Channel Tunnel and its railway system.

In the UK, the privatisation of public transportation began in 1979. Since then, most of the transport industries have returned to private ownership with an emphasis on the benefits of commercial disciplines and competition. Throughout the 1980s and early 1990s, government policy emphasised the need to liberalize, deregulate and privatise the transport sector. As a result, free-market principles were applied to public transport with the deregulation of coach services in 1980 and bus services in 1985, in the belief

that competition would lead to better and more efficient services at a reduced cost in public subsidy (Gibb and Essex 1994). By 1988 the Thatcher government had considered rail privatisation, which was later introduced in the White Paper of 1992. In order to encourage the free market and to reduce levels of public expenditure, public-sector involvement in a range of industries and services was contracted out through privatisation (Bell and Cloke 1989). It could be said that government policies relied on the operation of the free market to decide on the appropriate level of investment for the regions, and so the government gave responsibility for the financing, construction and operation of the fixed rail link across the channel to private enterprises.

British Rail's European Passenger Services (EPS)<sup>3</sup> company, in partnership with French and Belgian Railways, was granted a monopoly of international rail services between Great Britain and Europe. British Rail was then privatised in 1996. The operation of EPS was deregulated under a remit to operate commercially, but without any prescribed minimum level of services or any government controls over fares (Knowles and Farrington 1994). Attention has focused on the planning strategies adopted by British Rail, the government and local authorities, and their ability to maximize the benefits and minimize the detrimental costs associated with a cross-Channel fixed link.

Consequently, the British response towards the tunnel and supporting transport infrastructure has been concerned primarily with establishing the necessary regulatory structures needed for the tunnel's construction and operation, rather than ensuring that the regions can fully exploit its opportunities. This is in complete contrast to the planning of the project in France, where policy networks extend from the centre to the periphery in a sequenced fashion, with the result that a degree of coordination of national and local policies has been attained (Smith 1992). Decisions concerning the Channel Tunnel in France have been taken in close consultation with the regions, whereas in Britain decisions have been taken centrally

### **3. Inbound tourism and the Tourist industry**

Tourism plays an important role in the British economy, comprising a 3.8% share of GDP in 1996 (Eurostat 1998). The tourism-related industries account for over 6% of the total employed labor force. The number of people employed in accommodation and other tourism-related industries was estimated at 1.9million in 1996 (WTO 1998; Eurostat 1998).

#### **3.1 Tourism policy**

There was a major change in British tourism policy for the inbound tourism industry in 1969 with the establishment of the British Tourist Authority (BTA), along with the national boards for England, Scotland and Wales, sponsored by the Board of Trade and Industry and the Development of Tourism Act (1969). Prior to the BTA (Authority), there was the BTA (Association), a limited company, set up in 1922 to market and promote Britain overseas and originally named the “Come to Britain” tourism movement. However, before 1969, tourism was largely ignored by the national government.

Table 2 lists the Government and BTA’s promotions and advertising campaigns to attract overseas visitors from 1970 to the present. The promotions for inbound tourism since 1970 can be divided into three phases, the expansion of inbound tourism in the 1970s, operations to overcome off peak periods in the 1980s and an emphasis on the UK as a tourist destination within the EU in the 1990s.

**Table 2 Promotion and Advertising campaign by Government and BTA**

1970	May flower 70	350 <sup>th</sup> anniversary of the sailing of the Pilgrim Fathers
1971-72	Song of Britain	Promotional film* <sup>1</sup>
1972-73	Britain-a Treasure	Britain's first world advertising campaign House of History
1975	Village festival architectural	heritage competitions for young people and helps develop tours, trails and town works
1976-77	Operation Friendship	BTA's campaign to promote visits to Britain during the Queen's Silver Jubilee Year
1977-78	Inside Britain	BTA's radio programme. The 15-minute, fortnightly features are used by stations from Australia and the Far East, to the USA for the next 15 years
1979-80	Welcome to Britain Wells Cathedral-800	TIC handle over 200,000 personal, phone and written enquires BTA's film
1986-87	Great Britain: Great Incentive	travel workshops and study tour for 40 top overseas buyers
1987-88	Ladies Britain* <sup>2</sup> 21 years of workshops	a new Japanese marketing drive targeting female office workers bringing Britain's travel producers face to face with overseas buyers
1995-98	Competing with the Best Festival of Arts and Culture	Government's agenda for tourism BTA's the world's largest arts promotion
	World Travel Market Britain: Now is the Time	travel trade fair campaign for the millennium

\*1 This is being shot specially for the Japanese market "10 Days in England," with two Japanese TV' stars, Yoko and Hiroyuki Negate.

\*2 Britain welcomes Japan

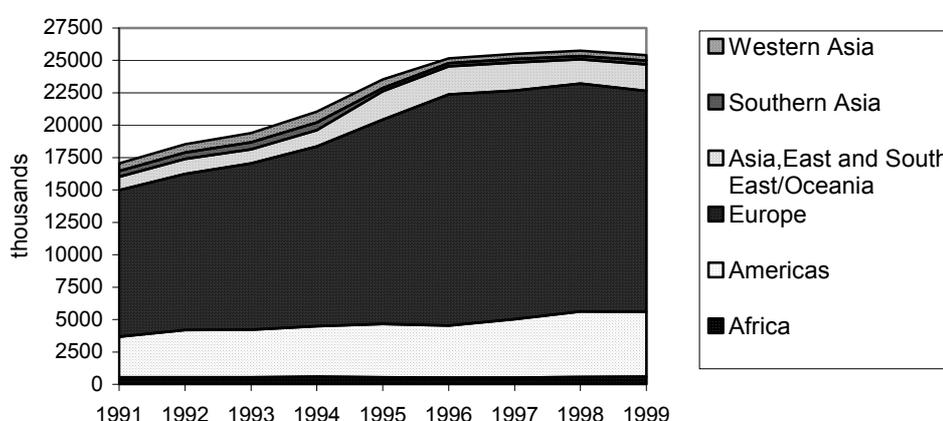
Source: Visit Britain (2003)

### 3.2 The trend of inbound tourism

Tourism is one of the largest industries in the UK, worth approximately £74 billion in 2001. The number of overseas visitors who came in 2001 was 22.8 million and they spent £11.3 billion in the UK. The UK ranks seventh in the international tourism earnings league behind the USA, Spain, France, Italy, China and Germany.

Figure 2 shows tourist arrivals in the UK by region of origin from 1991 to 1999. In 1991, foreign visitor arrivals totalled 17.1 million and by 1999 this had risen to about 25 million. Visitor arrivals have been rising steadily over the past decade and more; they have increased by 34 per cent since 1980. The main origins of visitors are USA, France, Germany, Ireland, Italy and Canada. Europe accounts for 67 per cent of all arrivals. In

1994, the number of visitor arrivals increased by 8 per cent and the number of day visitors climbed by 30 per cent, reflecting in particular the efforts to market tourist areas in the south of England as well as improved cross-Channel sea services. In 1995, the UK received 23.7 million visitors, an increase of 13% over 1994, spending £11.9 billion, an increase of 20%. The number of foreign visitors increased steadily until 1996, but tourist arrivals have tended to slightly decrease in the late 1990s.



**Fig.2 Tourist/Visitor arrivals by region or origin**

Source: WTO (1997, 2002)

#### 4. Expected impact of the Channel Tunnel on the development of tourism

It was expected that the Tunnel would profoundly change the flow of passengers journeying without cars between London and Paris and London and Brussels as it would not only compete with sea ferries, but also air travel. British Rail estimated that within two years of the opening the Tunnel, about 13 million passengers per year would be travelling on international trains between Britain and Continental Europe. The impact was not expected to be confined to London and the South-East of England, with approximately 30 per cent of these passengers coming from, or travelling to, destinations beyond London (Davidson 1992). Eurotunnel also estimated (October 1988) that 15.3 million passengers would be “shuttled” through the Tunnel and 15.4

million rail journeys would be made on through trains during the first full year of operation. The forecasts for 2003 were that these numbers would increase to 21.5 million (+41%) and 19.8 million (+29%) respectively. These figures were based on diverting ferry traffic, passengers diverted from air transport, and the generation of additional traffic. It was estimated that, 2.2 million passenger journeys in 1993 and 5.2 million in 2003 would be new business (BTA 1989). Likewise, BTA estimated that by 1993, UK would have some 20 million overseas visitors a year, 27 per cent more than in 1988, and they would spend some £13.2 billion. It was considered that any further expansion of the tourist industry would be partially dependent upon the success of the Channel Tunnel and the provision of high quality transport infrastructure (Davidson 1992).

In 1995, the first full year of operation, 3 million passengers used the Tunnel instead of the forecasted 15 million. However, in June 1996, a record of 438,000 Eurostar<sup>4</sup> passengers was recorded (Gerondeau 1997), which resulted in nearly 5 million passengers in 1996. Since 30 million passengers crossed the English Channel by ferry each year, most of them with their cars, Eurotunnel was hoping to capture a large part of this existing market and also to create a specific market as often happens when a new supply increases the options open to users. However, Eurotunnel traffic only reached 178,000 cars for the month of June 1996. Channel Tunnel traffic for 1994-2000 is shown in Table 3.

Table 3 Channel Tunnel: traffic to and from Europe: 1994-2000

	thousands						
	1994 <sup>a</sup>	1995	1996 <sup>b</sup>	1997	1998	1999	2000
Number of vehicles on shuttles:							
Passenger	82	1,246	2,135	2,383	3,448	3,342	2,864
Freight	65	391	519	268	705	839	1,133
All vehicles	147	1,637	2,654	2,651	4,153	4,181	3,997
Number of passenger on shuttles	315	7,081	12,799	14,613	18,496	17,424	17,152 <sup>c</sup>
Through-train freight (thousand tonnes)	452	1,411	2,361	2,925	3,141	2,865	2,947

a. Opened for freight services in June and for through passenger services in November.

Passenger shuttle services opened in December.

b. Figures for 1996 and 1997 were affected by a fire on 16 Nov 1996.

Tourist shuttle resumed services on 10 Dec 1996 with full freight services resuming on 15 June 1997.

c. The figures in this table are outside the scope of National Statistics.

Source : International Passenger Survey, ONS 2002; passenger and freight operators

Conversely, Britain's tourist industry has faced a serious challenge by the opening of the Channel tunnel rail. While providing a new gateway into Britain for tourists from France, Belgium, the Netherlands and Germany, the tunnel has also made it much easier for British people to leave Britain and spend their holidays and short-breaks in Continental Europe.

Table 4 Overseas travel: visit to and from the UK: 1991-2000

	Visits to the United Kingdom <sup>*1</sup>			Visits abroad by United Kingdom Resident <sup>*2</sup>		
	Air	Sea/Channel <sup>*3</sup>	Total	Air	Sea/Channel <sup>*3</sup>	Total
1991	11,614	5,511	17,125	20,408	10,401	30,809
1992	12,778	5,756	18,534	23,357	10,479	33,836
1993	13,694	6,170	19,864	25,254	11,366	36,620
1994	14,465	6,329	20,794	27,624	12,007	39,631
1995	15,754	7,783	23,537	28,097	13,248	41,345
1996	16,279	8,884	25,163	27,907	14,144	42,051
1997	16,858	8,656	25,514	30,341	15,617	45,958
1998	17,479	8,266	25,745	34,283	16,589	50,872
1999	17,284	8,110	25,394	37,510	16,371	53,881
2000	17,831	7,378	25,209	41,392	15,445	56,837

\*1 Mode shown is that for departure from the United Kingdom

\*2 Mode shown is that for return to the United Kingdom

\*3 Consists with cars, with coach, others, and Irish Sea

Source: IPS (ONS 2002)

Table 4 shows the number of inbound and outbound flows by traffic modes between 1991 and 2000. Over this period, both inbound and outbound travel grew, but with an increase of 47 per cent in inbound and 85 per cent in outbound travel. Inbound tourism is increasing steadily, whereas outbound tourism is expanding

rapidly. Air traffic continued to increase, even in 1995 following the opening of the Channel Tunnel, but sea traffic to Europe has declined.

## 5. The Impact of the Channel Tunnel on the tourism industry

### 5.1 Channel Tunnel versus Ferry

Passenger services through the tunnel have had a major impact on current cross-Channel modes of transport. Figure 3 shows the number of passengers travelling between the UK and continental Europe, and the market share of Channel Tunnel passengers travelling on Eurostar services from London to both Paris and Brussels. Although it is difficult to make direct comparisons between Channel Tunnel traffic and ferry traffic because the train has few or no stops until the end of the line, the Channel ports-Dover, Ramsgate, Folkestone-share of cross-Channel passenger traffic decreased from 67 per cent in 1993 to 43 per cent in 1999. The number of channel tunnel passengers in 1998-1999 was just slightly lower than those using the Dover Strait ferries. The year 1999 also saw a fall in Channel Tunnel traffic and ferry passenger numbers which coincided with the abolition of duty free sales within the EU from 1 July 1999, previously a strong motivation for choosing to travel by sea. Both English Channel and North Sea ferry passenger numbers to continental Europe have declined markedly since 1993, by 26 per cent to five million passengers on English Channel routes and by 16 per cent to just over three million on North Sea routes.

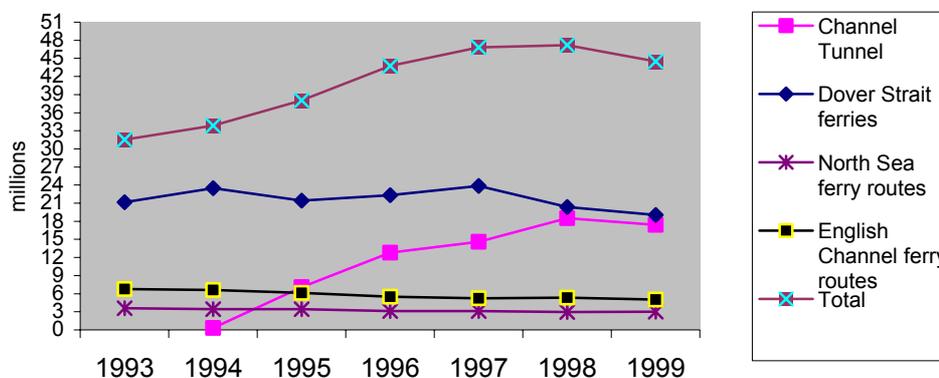


Figure 3 International passenger numbers between the UK and continental Europe, 1993 to 1999(millions)

Source: DETR (2002)

Figure 4 gives the number of accompanied passenger cars travelling between the UK and continental Europe. Over the period 1993 to 1999, the number of accompanied passenger cars increased by 55 per cent to more than 8.1 million vehicles, with the Channel Tunnel responsible for over 40 per cent of the total traffic in 1999. However, all ferry sectors experienced absolute falls in passenger vehicle carryings in 1999.

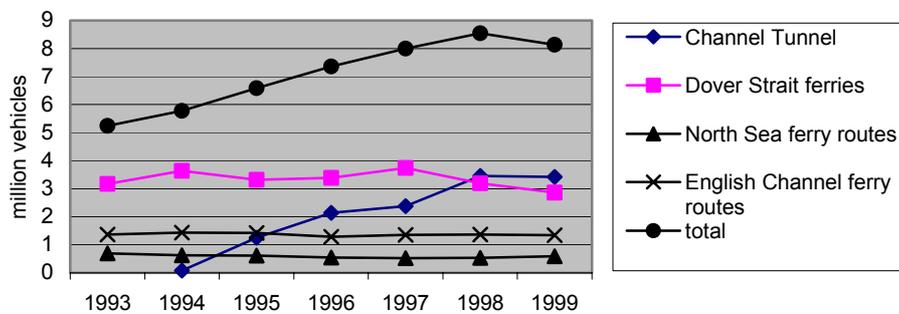


Figure 4 Accompanied passenger vehicles between the UK and continental Europe, 1993 to 1999

Source: DETR (2002)

The routes with the largest decrease were Ramsgate – Dunkirk, Ramsgate-Ostend and Newhaven-Dieppe. In the case of passenger cars several ports including Great Yarmouth, Ipswich, Medway (Sheerness), Ramsgate, Folkstone, Newhaven and Southampton that previously competed in the shorter crossing market, have now lost some or all of their ferry services.

## 5.2 Channel Tunnel versus Air

The third phase of European air transport liberalization during the 1990s, characterised by vertical and horizontal integration to gain economies of scale and market power, has encouraged the growth of air services between the British

regions and Europe. As a result, the market for air travel between the British regions and Paris has grown considerably since 1992(Fig.5) and the market for air travel to Belgium has grown even more rapidly.

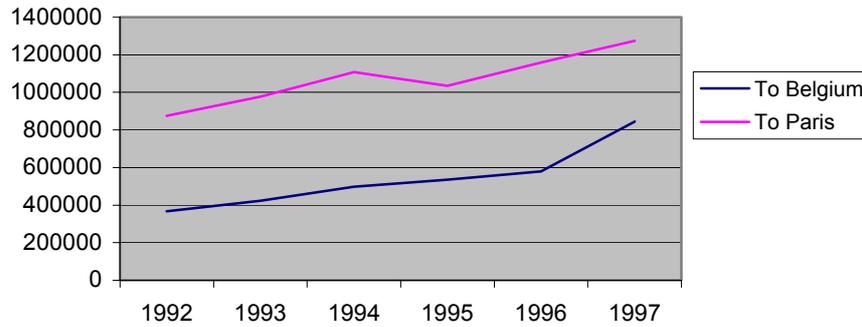


Figure 5 Air passenger traffic between Britain's region<sup>1</sup>,Belgium<sup>2</sup> and Paris 1992-1997

Notes: 1 excluding Heathrow, Gatwick, London City, Stansted, Jersey and Guernsey

2 Antwerp and Brussels

Source: Civil Aviation Authority, 1994-1997

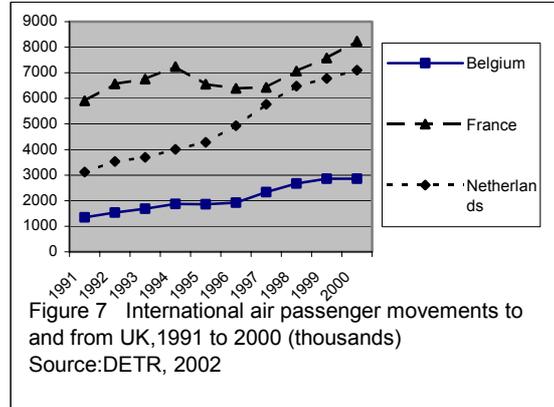
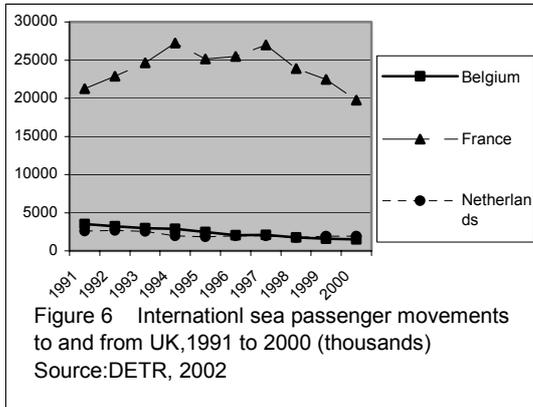
The increase in travel to Belgium can be ascribed to the activities of the Belgium airline Sabena, which developed Brussels as a hub, in a similar way to KLM's development of Amsterdam. Sabena used their feeder airline Delta Air transport, and offered very competitive fares, particularly for business travel. This was the context for the proposals for regional Channel Tunnel rail services in 1997, to further reduced regional day services, eliminated day trains to Brussels, and drop all regional overnight sleeper trains (Knowles and Farrington 1998). More recently, the expansion of flights by low cost, budget airlines has further increased the number of air passengers and proved an added competition to the channel tunnel route.

### 5.3 Traffic modes for international tourism

The majority of Tunnel travellers to Britain are expected to originate from France, Germany, The Netherlands and Belgium. These nations already generated a high

proportion of the traffic passing through Dover and other overseas visitors travelling via South East ports. In 1987 three quarter, some 2.6million, of overseas visitors travelling via South Eastern ports, originated in the EC.

Figures 6 and 7 show international passenger traffic between Belgium, France, The Netherlands and the U.K. by different traffic modes. International passenger movements to the UK decreased from all countries in the case of sea travel, whereas, air passenger movements showed a large increased. The increase in air movements between The Netherlands and the UK are particularly large. The most recent figures for international passenger traffic to the UK (Figure 8) shows that, the movements between the UK and other countries decreased between 2000-2001, even in the case of air. This indicates that the increase in numbers between the UK and its main tourist market in Europe are largely from the UK and not to the UK. It would seem that the impact on the tourism industry by Channel tunnel rail is not that large.



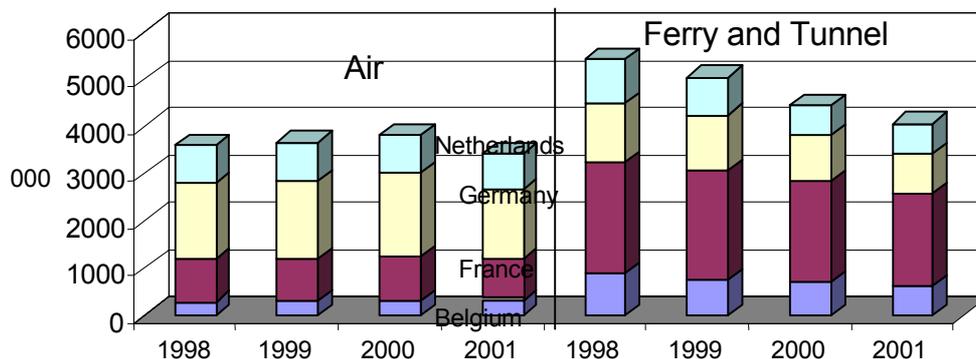


Figure 8 Number of overseas visits to the UK by country of residence  
Source: DETR, 2002

#### 5.4 Tourism in London

London is the major destination for visitors to the UK. It accounted for 9.98 million staying visits or 66 per cent of all visitors to the twenty most popular towns in the UK. In Europe an estimated 48 per cent of urban tourism trips are associated with business/professional reasons, compared to only 27 per cent for leisure and recreation (Graber 1997). However, for the UK, the percentage of leisure and recreation visitors is about 71 per cent, higher than all other European countries. London has many qualities, such as the focus of decision-making for the British state, many of the most important retail opportunities and cultural sites, as well as being home to one of the world's most important, financial and commercial command and control centres (Hamilton 1991). This has meant that for centuries, London has attracted many visitors. Therefore, the increase in accessibility to London with the Channel Tunnel as a trans-frontier development with links to a much wider transport network, has implications for the further development of tourism in London.

Although the number of passengers travelling on international trains between the UK and Continental Europe has fallen short of expectations, the Tunnel has contributed to the growth of tourism in London. The Tunnel is attractive to

travellers who wish to travel directly between London and Paris/Brussels and who are curious to go through the Tunnel. Tourist numbers to London increased during the 1990's (Table 9) with a high annual increase of 8.3 per cent between 1991 and 1992 and 11.6 per cent for 1994-95. Over this period the rate of increase of overseas visitors was 53 per cent. What is more, these rates of increase were much higher than for world tourism of 28%, measured in terms of arrivals from abroad, (WTO 1997). Clearly London was performing remarkably well during this time at attracting visitors.

One of BTA's key objectives is to spread the economic benefit of tourism to Britain more widely, and in particular, to areas with tourism potential and higher than average levels of unemployment (BTA 1989). A major concern of policy makers is the potential of the tunnel to create a corridor effect, in which tourists are merely transported more efficiently to more remote destinations, (Grayson 1995). However, the rail Tunnel does not seem to have any special appeal for the leisure travellers who make a journey beyond London. Almost 80% of rail tunnel travellers are repeat visitors, According to the International Passenger Survey, roughly one in eight of European visits to Britain are day trips, mainly from France, The Netherlands and Belgium. In terms of travel pattern, European passenger services beyond London are very important in order to lengthen travellers' staying time, and to create new travellers.

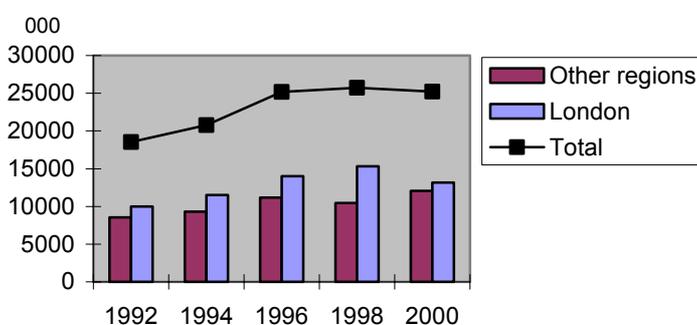


Figure 9 Overseas Tourist visits to London

Source: LTB (London Tourism Board) and Convention Centre 2002, London Tourism Statistics

## 6. Summary and Conclusions

A number of findings can be drawn from this study. First, the Channel Tunnel rail link has had important influences on the UK's tourism industry. The lack of a high-speed rail link between the Channel Tunnel and London and beyond, does not appear to be an important influence on inbound tourism. Second, the market for air travel between the British regions and Paris and Belgium has grown considerably, even with the new rail tunnel. Third, Channel tunnel rail has contributed to the growth of tourism in London.

In general, accessibility strongly influences the type of transport used by travellers and their port of entry. The Channel tunnel has considerable potential to create additional opportunities for tourist travel in terms of a new form of tourist transport infrastructure. However, despite the huge investment in infrastructure and the expectation that the flow of travellers would increase considerably, so far there is no major increase in inbound tourism to the U.K. There are some reasons why the market has not been created for Channel Tunnel regional passenger rail services and incoming tourists have not been increased. First, the high-speed railway link between the Channel tunnel and London and beyond is not yet constructed, partly due to local opposition in London, Kent and Essex. The majority of travellers to Britain come from Europe, which offers the greatest potential increase since, almost 80% of all leisure travellers are repeat visitors. Therefore, it is important to promote inbound tourism by targeting repeat travellers who might stay longer and have the time and desire to travel beyond London and the South-east of England. Secondly, there is the Government's approach towards the Channel Tunnel. As Gibb *et al.* (1994) observe, market-led planning policies tend to be based on the short-term maximization of profit, which can preclude the long-term investment necessary to achieve self-sustaining economic prosperity. Vickerman (1994) also pointed out that the tunnel itself would appear to have only

a relatively small independent effect on visitor numbers. The major impact would come with the improvement in the whole network such as a high-speed rail network linking the major metropolitan centres and the completion of links in the major road network.

## Notes

<sup>1</sup>Vickerman (1998) pointed out that Channel Tunnel excludes some of the core manufacturing areas of the UK, when accessibilities to export markets is critical. The northern region is disadvantaged by location relative to markets in the European core, and that this disadvantage will compound the Channel Tunnel effects, without efficient internal accessibility to airports.

<sup>2</sup> Most of the elements of tourism behaviour are collected in two major UK surveys, the International Passenger Survey (IPS) for people entering and leaving the UK and the United Kingdom Tourism Survey (UKTS) for tourism within the UK.

<sup>3</sup> This was sold during the year to London & Continental Railways, the successful bidder for the operation of Eurostar service and the construction of the Channel Tunnel Rail Link. Eurostar passenger services from London to Brussels and Paris started when the Channel Tunnel opened in 1994.

<sup>4</sup> The Eurostar service means that travellers can be in Lille within one hour, Paris in two and Brussels within two hours, while connections serve Rotterdam, Amsterdam, Cologne, the Rhineland, Frankfurt and the south of France.

## References

- Barbara, L.P. and Laws, E. 1998, *A Stakeholder-Benefits approach to tourism Management in a Historic City Centre: The Canterbury City Centre initiative*, in Laws, E et al (ed.) *Embracing and Managing Change in Tourism: International Case Studies*, London Rout ledge
- Bell, P. and Cloke, P. 1989, *The Changing Relationship between the Private and Public Sectors: Privatisation and Rural Britain*, *Journal of Rural Studies*, 5(1), 1-15
- Berentsen, W.H. and Hoffman, G.W. 1997, *Contemporary Europe: A Geographic Analysis*, John Wiley & Sons
- Bruyelle, P. and Thomas, P.R. 1994, *The Impact of the Channel Tunnel on Nord-Pas-de-Calais*, *Applied Geography*, 14, 87-104
- British Tourist Authority (BTA) 1989, *The Channel Tunnel-Will Britain's Tourism Industry and Infrastructure be ready for 1993?*
- Button, Kenneth. 1994, *The Channel Tunnel and the Economy of Southeast England*, *Applied Geography*, 14, 107-121
- Civil Aviation Authority. 1994-97, *Passenger Transport Statistics*
- Davidson, R. 1992, *Tourism in Europe*, Pitman
- DETR (Department of the Environment, Transport and Regions) 2002 *Transport Statistics 2002*
- Eurostat 1998, *Tourism: Monthly Statistics*, Eurostat Theme 7
- Eurostat 1999, *Statistics in focus: Air transport passenger traffic, 1993-1997*
- Gerondeau, C. 1997, *Transport in Europe*, Artech house
- Gibb, R.A. and Essex, S.J. 1994, *The Role of Local Government in the Planning and Consultation Procedures for the Channel Tunnel*, *Applied Geography*, 14(1), 51-67

- Goodenough, R. and Page, S.J. 1994, *Evaluating the environmental impact of a major transport infrastructure project: the Channel Tunnel rail link*, Applied Geography, 14(1), 26-50
- Graber, K. (ed.) 1997, *International City Tourism*, Pinter
- Grayson, L. 1995, *Channel Tunnel: The Link to Europe: An Overview and Guide to the Literature*, The British Library.
- Hamilton, F.E.I. 1991, *A New Geography of London's Manufacturing*, in Hoggart, K and Green, D.R. (ed.), *A New Metropolitan Geography*, Edward Arnold
- Holliday, I.M. and Marcou, G. et al. 1991, *The Channel Tunnel: Public Policy, Regional Development and European Integration*, Belhaven Press
- Inglis, F. 2000, *The Delicious History of The Holiday*, Routledge
- Kay, J., Manning, A. and Szymaski, S. 1989, *Economic benefits of the Channel Tunnel*, Economic Policy, April, 211-234
- Knowles and Farrington 1998, *Why has the market not been created for Channel Tunnel regional passenger rail services?*, Area, 30.4, 359-366
- Kochert, F. 1994, *The Channel Tunnel*, Wayland
- LTB and Convention Center 2002, *London Tourism Statistics*
- Mckinnon, A.C. 1994, *Channel Tunnel freight services between Scotland and continental Europe: an examination of the opportunity and constraints*, Applied Geography, 14, 68-86
- ONS 2002, *On-line Statistical Database Service*, Office for National Statistics (<http://www.statistics.gov.uk>)
- Page, S.J. 1993, *Highlight on the Channel Tunnel: Tourism Management*, December, 419-423
- Page, S.J. 1994, *Spatial perspectives on the Channel Tunnel: an introduction*, Applied Geography, 14, 51-67
- Page, S.J. 1999, *Transport and Tourism*, Longman
- Smith, D. 1992, *The Channel Tunnel rail link: Opportunity and Problems for Regional Economic Development*, PhD Thesis, University of Plymouth

Vickerman, R.W. 1994, *The Channel Tunnel and Regional Development in Europe-An Overview*, Applied Geography, 14, 9-25

Vickerman, R.W. 1998, *Transport Provision and Regional Development*, in Banister, D. (ed.) *Transport Policy and the Environment*, E&FN SPON

Visit Britain 2003, *On-line Statistical Database Service*, UK Research Liaison Group

WTO 1997, *Yearbook of Tourism Statistics*, Vol. :49

WTO 1998, *Yearbook of Tourism Statistics*, Vol.50

WTO 2002, *Yearbook of Tourism Statistics*, Vol. 54