

Terms of reference and conduct of the inquiry

Terms of reference

1. On 29 October 2012, the OFT sent the following reference to the CC:
 1. In exercise of its duty under section 22(1) of the Enterprise Act 2002 ('the Act') to make a reference to the Competition Commission ('the CC') in relation to a completed merger, the Office of Fair Trading ('the OFT') believes that it is or may be the case that:
 - (a) a relevant merger situation has been created in that:
 - (i) enterprises carried on by or under the control of Groupe Eurotunnel S.A. have ceased to be distinct from enterprises comprising certain assets of former SeaFrance S.A.; and
 - (ii) the condition specified in section 23(3) of the Act is satisfied; and
 - (b) the creation of that situation has resulted or may be expected to result in a substantial lessening of competition within any market or markets in the UK for goods or services, including the supply of passenger and freight transport services on the short sea channel crossing.¹
 2. Therefore, in exercise of its duty under section 22(1) of the Act, the OFT hereby refers to the CC, for investigation and report within a period ending on 14 April 2013, on the following questions in accordance with section 35(1) of the Act:
 - (a) whether a relevant merger situation has been created; and
 - (b) if so, whether the creation of that situation has resulted or may be expected to result in a substantial lessening of competition within any market or markets in the UK for goods and services.

Amelia Fletcher
Office of Fair Trading
29 October 2012

¹ The short-sea route consists of routes across the narrowest sections of the English Channel and the Belgian Straits.

Conduct of our inquiry

2. On 30 October 2012, we posted on our [website](#) an [invitation to express views to us](#) about the merger, and on 15 November 2012, we posted an [administrative timetable](#) for our inquiry.
3. We also invited a wide range of interested third parties to comment on the merger, including competitors, customers, port operators, shipbrokers and trade associations. We sent detailed questionnaires to competitors, customers and port operators and we gathered oral evidence through seven hearings with selected third parties. Evidence was also obtained through telephone contacts and through further written requests. Summaries of our hearings with third parties are published on our [website](#).
4. Members of the Inquiry Group, accompanied by staff, visited GET's offices and travelled on the Eurotunnel and MFL ferry service. They were also given a presentation by GET on the operation of its business.
5. On 17 December 2012, we published an [issues statement](#) on our website, setting out the areas of concern on which the inquiry would focus.
6. We received written evidence from GET, and [a non-confidential version of its main submission](#) is on our website. We also held a hearing with GET on 17 January 2013.
7. In the course of our inquiry, we sent to GET and other parties some working papers and extracts from those papers for comment.
8. A non-confidential version of the provisional findings report has been placed on our [website](#).

9. We would like to thank all those who have assisted in our inquiry so far.

Interim measures

10. We took steps to ensure the separate and independent operation of GET and the acquired SeaFrance assets during the course of our inquiry.
11. GET gave [initial undertakings](#) to the OFT under [section 71](#) of the Act on 12 July 2012 for the purpose of ensuring the separate management of GET and the acquired SeaFrance assets whilst the OFT proceedings were ongoing.
12. The CC adopted these undertakings on 30 October 2012. We then considered whether any further changes were necessary to prevent pre-emptive action by the parties which might prejudice the reference or impede the application of effective remedies at the end of our inquiry should they be required, including assessing the need for a hold-separate manager or a monitoring trustee.
13. After considering evidence from GET on the post-merger structure of the companies and the arrangements between the parties, we decided that the appointment of a monitoring trustee was necessary and issued directions for the appointment of a monitoring trustee on 21 December 2012. The monitoring trustee was required to:
- (a) ascertain the current level of compliance by GET with the Undertakings; and
 - (b) assess the arrangements made by GET for compliance with the Undertakings and what changes to those arrangements, if any, are necessary to preserve the possibility of the CC taking any remedial action, if required.

The monitoring trustee continues to perform this function and report to the CC on a monthly basis.

Merger parties' financials

Groupe Eurotunnel SA: financial performance

1. GET is a public company and its shares are quoted on the stock markets in London and Paris. At 14 November 2012 it had a market capitalization of €3.2 billion (£2.7 billion). Its shares are widely held by retail and institutional investors, in the latter case often in long-term infrastructure funds. According to GET's most recent Registration Document¹ for the year ended 31 December 2011 and filed with the French Markets Authority on 1 March 2012, as at 22 September 2011 The Goldman Sachs Group Inc held 15.64 per cent of the company's share capital (giving it 26.05 per cent of the voting rights) on behalf of funds managed by it. As of 6 February 2012, no other party owned more than 5 per cent of GET's share capital.
2. The summarized consolidated financial results of GET taken from its annual financial report for the three years ended 31 December 2009, 2010 and 2011 are set out in Table 1.

¹ A [document](#) containing the Annual Report and other submissions required in accordance with French financial regulations to be filed with the *Autorité des marchés financiers* (French market authority). Prior to 2011 it was called the Reference Document.

TABLE 1 Summarized financial results of GET, 2009 to 2011

€ million

Years ended 31 December

	2009	2010	2011
Turnover	640.3	736.6	854.2
Operating expenses	-195.3	-234.8	-266.5
Employee expenses	-120.0	-165.7	-184.4
Depreciation	-163.9	-156.3	-156.1
Trading profit	161.1	-179.8	247.2
Other operating income/expense	0.2	10.1	24.8
Operating profit	161.3	189.9	272.0
Net cost of financing	-192.2	-248.1	-263.8
Other financial income/charges	32.5	1.8	3.6
Income tax	-0.2	-0.4	-0.5
Profit/loss for the year	1.4	-56.8	11.3
EBITDA*	325.2	336.1	403.3
EBITDA margin† (%)	44.8	45.6	46.6
Exchange rate £1=€	1.119	1.169	1.148

Source: GET annual financial reports.

*Earnings before interest, taxation, depreciation and amortization (excluding other operating income/expense).

†Calculated as EBITDA divided by turnover (after adjusting for €69 million of exceptional revenue in 2009 and €9 million of exceptional revenue in 2011).

3. GET's turnover grew by roughly one-third or €214 million between 2009 and 2011.

This was largely attributable to the acquisition of the French Europorte companies in November 2009, and GBRf in May 2010. This business accounted for turnover of €158 million in 2011. EBITDA grew by €78.1 million or 24 per cent over the same period and the EBITDA margin (after adjusting for the exceptional income in 2009 and 2011) increased slightly from 44.8 per cent in 2009 to 46.6 per cent in 2011 (Europorte made a small EBITDA loss in both years). GET's stated rationale in acquiring Europorte and GBR was to create an integrated logistics chain to be a new growth vehicle for the group.²

4. GET's main business was significantly affected by a fire in the tunnel on 11 September 2008. A section of the tunnel remained closed until 9 February 2009 and (according to GET) both the financial years 2009 and 2010 experienced a reduction of turnover as a consequence of the ongoing commercial impact of the fire on

² GET Reference Document for the year ended 31 December 2010, paragraph 6.3.1.

freight traffic. Insurance covered losses, including loss of trading profits arising from the fire for a period of two years (ie until September 2010), but the amount of the insurance payment to GET was only finally agreed with insurers in November 2012. Accounting for part of these insurance indemnities was reflected in the reported results in 2009 and 2011, with €69 million and €9 million respectively of compensation being included in the results for these years which has been added back in calculating the EBITDA margin in Table 1.

5. Table 2 sets out the summarized consolidated balance sheets of GET at 31 December 2009, 2010 and 2011.

TABLE 2 Summarized balance sheets of GET, 2009 to 2011

	<i>€ million</i>		
	<i>31 December</i>		
	<i>2009</i>	<i>2010</i>	<i>2011</i>
Assets			
<i>Non-current assets</i>			
Intangible assets	-	29.1	28.9
Tangible assets	6,763.1	6,691.3	6,626.8
Financial assets	<u>12.3</u>	<u>2.3</u>	<u>133.5</u>
	<u>6,775.4</u>	<u>6,722.7</u>	<u>6,789.2</u>
<i>Current assets</i>			
Stocks	-	1.4	2.3
Debtors	133.0	142.9	150.7
Cash at bank	<u>260.5</u>	<u>316.8</u>	<u>275.5</u>
	<u>393.5</u>	<u>461.1</u>	<u>428.5</u>
Total assets	<u>7,168.9</u>	<u>7,183.8</u>	<u>7,217.7</u>
Equity and liabilities			
Equity	<u>3,071.2</u>	<u>2,820.4</u>	<u>2,400.4</u>
<i>Non-current liabilities</i>			
Retirement benefit obligations	17.7	29.8	26.2
Financial liabilities and derivatives	<u>3,927.7</u>	<u>4,147.1</u>	<u>4,599.5</u>
	<u>3,945.4</u>	<u>4,176.9</u>	<u>4,625.7</u>
<i>Current liabilities</i>			
Provisions	5.9	8.7	2.3
Financial liabilities	10.7	5.3	5.1
Creditors	<u>135.7</u>	<u>172.5</u>	<u>184.2</u>
	<u>152.3</u>	<u>186.5</u>	<u>191.6</u>
Total equity and liabilities	7,168.9	7,183.8	7,217.7

Source: GET annual financial reports.

6. GET is financed by a mixture of equity and debt. At 31 December 2011, equity amounted to €2.4 billion and the debt was principally provided by a term loan. The

term loan comprises a number of tranches, with different conditions attached to each tranche, and amounts in total to €3.8 billion. The average effective rate of interest on the term loan at 31 December 2011 was 5.83 per cent. These figures exclude the interest rate hedging contracts in place.

Financial information on the Fixed Link

7. The Fixed Link generates revenue from three sources: the provision of Shuttle services, payments from other users of the railway through the tunnel and from other revenues, principally retail activities in the passenger terminal buildings.
8. Table 3 sets out the revenues and profits of the Fixed Link for the four years to 31 December 2010, 2011, 2012 (forecast) and 2013 (budget). These figures have been extracted from management accounting information and from forecasts and budgets provided to the CC by GET.

TABLE 3 GET: profitability of the Fixed Link, 2010 to 2013

	€ million			
	Years ended 31 December			
	2010	2011	Forecast* 2012	Budget† 2013
<i>Revenue</i>				
Cars	[x]	[x]	[x]	[x]
Coaches	[x]	[x]	[x]	[x]
Trucks	[x]	[x]	[x]	[x]
Shuttle Services	371.0	407.9	[x]	[x]
Railway Network	266.6	284.2	[x]	[x]
Other revenue	<u>9.9</u>	<u>9.9</u>	[x]	[x]
Revenue	647.5	702.0	[x]	[x]
Operating losses indemnity	-	<u>9.3</u>	[x]	[x]
Turnover	647.5	711.3	[x]	[x]
Tunnel expenses	[x]	[x]	[x]	[x]
Corporate expenses	[x]	[x]	[x]	[x]
EBITDA	346.3	415.3	[x]	[x]
Depreciation	<u>-151.9</u>	<u>-148.9</u>	[x]	[x]
Trading profit	194.4	266.4	[x]	[x]
EBITDA margin‡	53.5	57.8	[x]	[x]
Freight yield§	[x]	[x]	[x]	[x]
Cars yield§	[x]	[x]	[x]	[x]

Source: GET management accounts, 2012 forecast and 2013 budget.

*Forecast October 2012.

†Budget and five-year plan dated 21 December 2011.

‡EBITDA (excluding operating losses indemnity) divided by revenue.

§Yield is derived by dividing revenue by volume.

9. The financial result in 2011 was a significant improvement on 2010. Aside from the exceptional impact of the insurance indemnity credit of €9.3 million on turnover, this was due to increased revenues from cars and trucks. GET's share of the truck market fell significantly following the fire in 2008 but by 2011 it had recovered to its former level. Revenue from the railway network also increased in 2011, with the start of new services [✂].

10. [✂]

Event analysis—freight and passenger cross-Channel ferry and tunnel services

Introduction

1. This appendix analyses data on the volume and price of cross-Channel ferry and tunnel services. The primary focus is a number of significant events over the last five years that occurred in the short-sea region of the English Channel and led to significant volume shifts between modes and/or competitors. The analysis has a number of key objectives:
 - (a) To analyse the competitive interaction between services provided via the channel tunnel and those provided by ferry. A key objective is to demonstrate empirically the extent to which services provided via the tunnel and ferries are relatively close substitutes and the extent of diversion of volumes between these modes of transport.
 - (b) To analyse the competitive interaction between ferry operators. As well as the general relationship between the tunnel and the competing ferry operators, we are interested in examining the way that any volume diverted either from Eurotunnel or from other ferry operators is distributed between the other competing ferry operators.
 - (c) To analyse the extent of competitive interaction between the short-sea routes and other neighbouring ferry routes. The primary objective is to investigate empirically whether there is evidence of significant or relatively limited interaction with geographically neighbouring routes, or whether there is any evidence of significant diversion to other modes of travel or exit from the market (as evidenced by significant reductions in volumes travelling by tunnel or ferry that have not been re-captured on neighbouring routes).

2. We acknowledge that this type of analysis depends on the assumptions made on the counterfactual scenarios, and many factors can influence the distribution of volumes between operators in practice, some of them unobservable. At the same time, it is not the goal of this analysis to estimate the diversion between operators precisely, but instead to establish whether such diversion exists and whether it is significant.

Data

3. The main source of the data for this appendix is the IRN Ferrystat data for freight and passengers provided to us by GET. IRN Research is an external market research company that consolidates historic data each month for ferry operators and Eurotunnel. This data includes volumes (passengers, cars, coaches, accompanied and unaccompanied freight traffic), as well as sailings/departure numbers for each route.
4. For passengers, the data set covers short sea, Western Channel and North Sea routes for 2007 to 2012. For freight, the data set covers short sea and Western Channel for 2004 to 2012 and North Sea routes for 2007 to 2012. Some North Sea operators do not submit their figures to IRN Research, but GET submitted that the key figures for around 75 per cent of the routes on the North Sea corridor were provided.

Freight analysis

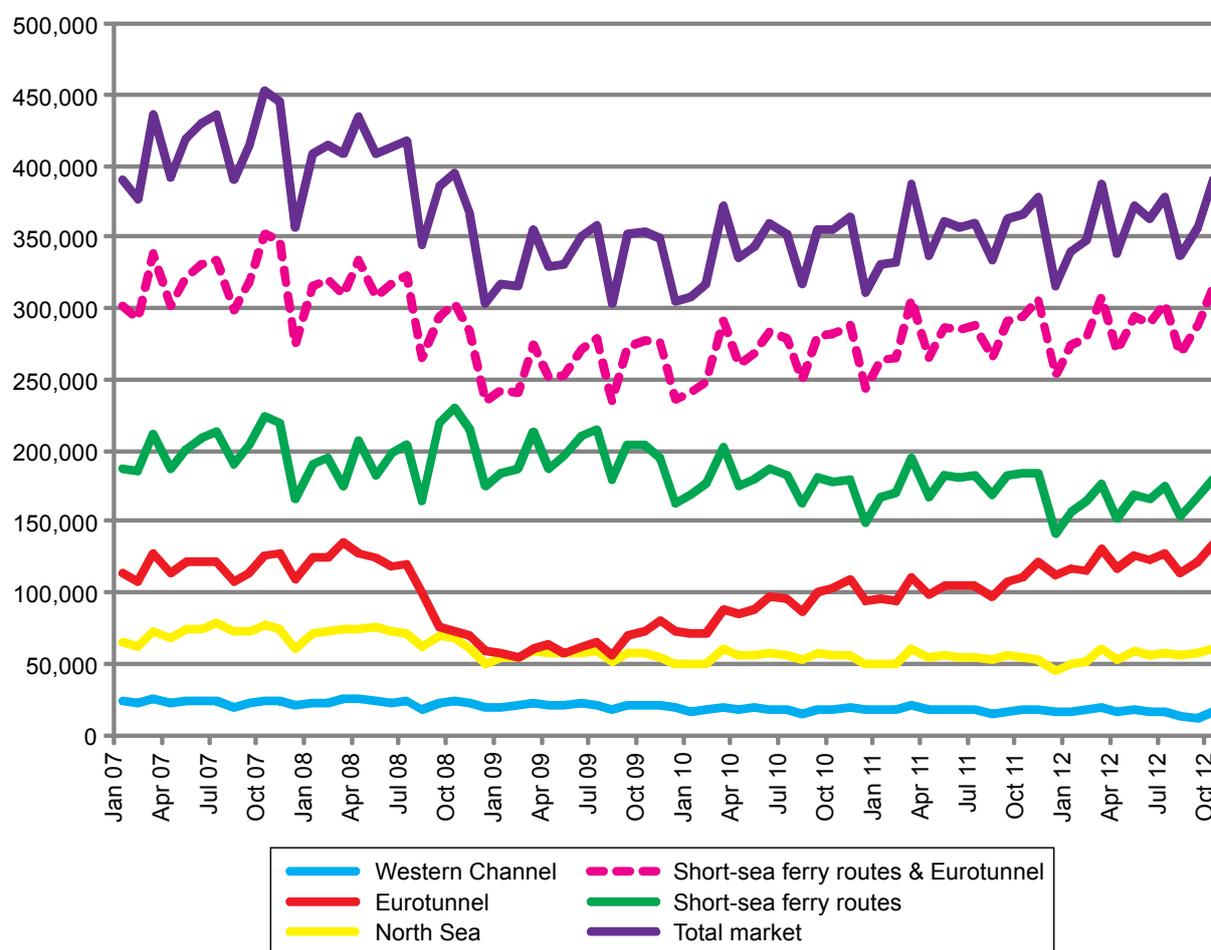
General market dynamics and the relationship between the short sea, Western Channel and North Sea ferry routes

5. Figure 1 below provides an analysis of the volumes of freight traffic across the main routes between the UK and the north-west region of the Continent. These are grouped by the main regions recognized by the industry—known as the ‘short-sea’ routes (in the vicinity of Dover–Calais), the North Sea routes that cross from the east coast of the UK to north-west of the Continent and the Western Channel routes that

are west of the short sea and cross between the south coast of the UK and the north of France.

FIGURE 1

**Freight traffic on the short sea, Western Channel and North Sea
(number of vehicles), 2007 to 2012**



Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

6. The volume analysis exhibits a number of features of interest:

(a) The commanding position the short sea (including Eurotunnel) as a trade route is evident. The short-sea ferry and tunnel routes accounted for 80 per cent of volume¹ in 2012, whereas the North Sea² accounted for 16 per cent and the Western Channel only 4 per cent.

¹ Including both accompanied and unaccompanied traffic.

- (b) There is some seasonality in freight volumes. This is driven by factors such as commercial quiet periods coinciding with major holiday periods (for example, freight volumes fall in August and over the Christmas/New Year holiday period) and differences in the length of months throughout the year.
- (c) A significant fall in overall volumes is evident between 2007 and 2009 due to the onset of the financial crisis.
- (d) One of the most significant events of the last five years—the fire that affected Eurotunnel in September 2008—is clearly visible. We note the lack of any significant volume increase on the North Sea and Western Channel routes at the time of this event.

7. There is evidence that the short sea has been gaining share of volume over time when compared with the North Sea and Western Channel routes. The Western Channel in particular appears to be in steady decline (see Table 1).

TABLE 1 **Shares of freight traffic on the short sea, Western Channel and North Sea (by number of vehicles), 2007 to 2012**

Year	<i>per cent</i>		
	<i>Short sea</i>	<i>Western Channel</i>	<i>North Sea</i>
2007	77	6	17
2008	77	6	17
2009	77	6	17
2010	79	5	16
2011	80	5	15
2012 Jan–Oct	80	4	16

Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

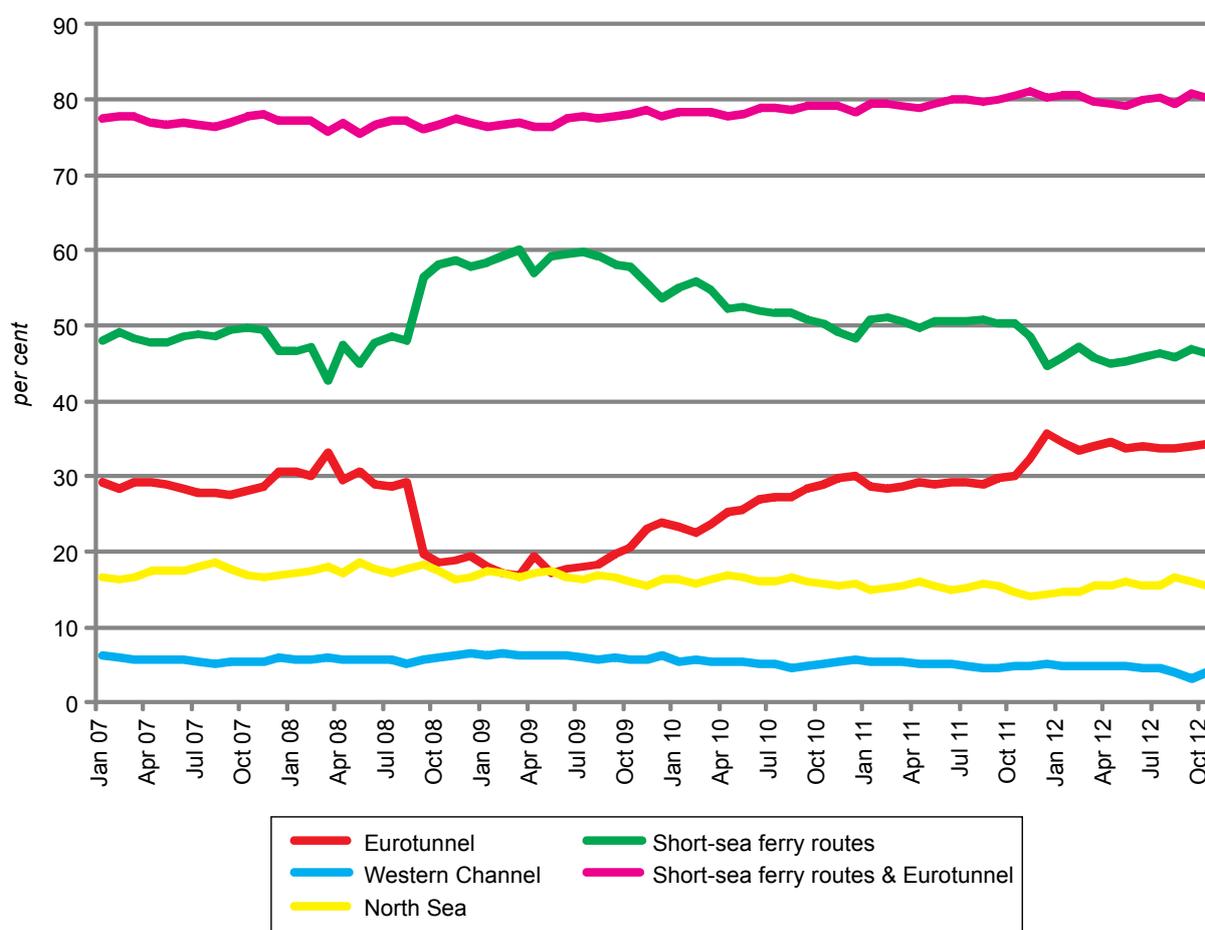
8. The impact of the fire which caused a severe reduction in the capacity available from Eurotunnel from September 2008 onwards is shown in Figure 2, which provides an analysis of volume shares over time across regions. The movement in volume share from Eurotunnel to the competing ferry operators on the short-sea routes is evident in

² As indicated above, we only have partial data for the North Sea (around 75 per cent by volume, as stated by GET), but even when accounting for this fact, the major importance of the short-sea routes remains a valid conclusion.

the data. It is notable that at the time of the fire the overall share of the short-sea ferry operators and Eurotunnel remains relatively static at just under 80 per cent of total volumes while the volume shares of the North Sea and Western Channel routes remained relatively static. This supports the view that there is little, if any, competitive interaction between the short sea, North Sea and Western Channel routes. This event is studied in more detail in the following section.

FIGURE 2

Relative shares of short sea, Western Channel and North Sea (percentage of total freight market), 2007 to 2012



Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

9. Table 2 and Figure 3 show average yearly prices for freight of Eurotunnel, short sea ferries and in the Western Channel and North Sea. We note that the pricing trend in the short sea has been quite different from that of the North Sea and Western

Channel. Short-sea ferry prices have decreased steadily since 2008, whereas North Sea and Western Channel prices have increased over time. This observation is inconsistent with the North Sea and Western Channel being in the same economic market.³

TABLE 2 **Average freight prices for one crossing, 2007 to 2012**

Operator	£					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Short sea ferries	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
North Sea: P&O	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Western Channel: Brittany Ferries	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Operators, CC calculations.

Notes:

1. P&O price is based on Hull–Zeebrugge and Hull–Rotterdam routes; BF price is based on Caen–Portsmouth, Cherbourg–Poole, Roscoff–Plymouth and St Malo–Portsmouth routes.
2. N/A = not available.

FIGURE 3

Average freight prices, £, 2007 to 2012

[✂]

Source: Operators, CC calculations.

Note: P&O price is based on Hull–Zeebrugge and Hull–Rotterdam routes; BF price is based on Caen–Portsmouth, Cherbourg–Poole, Roscoff–Plymouth and St Malo–Portsmouth routes.

Seasonality and market event analysis

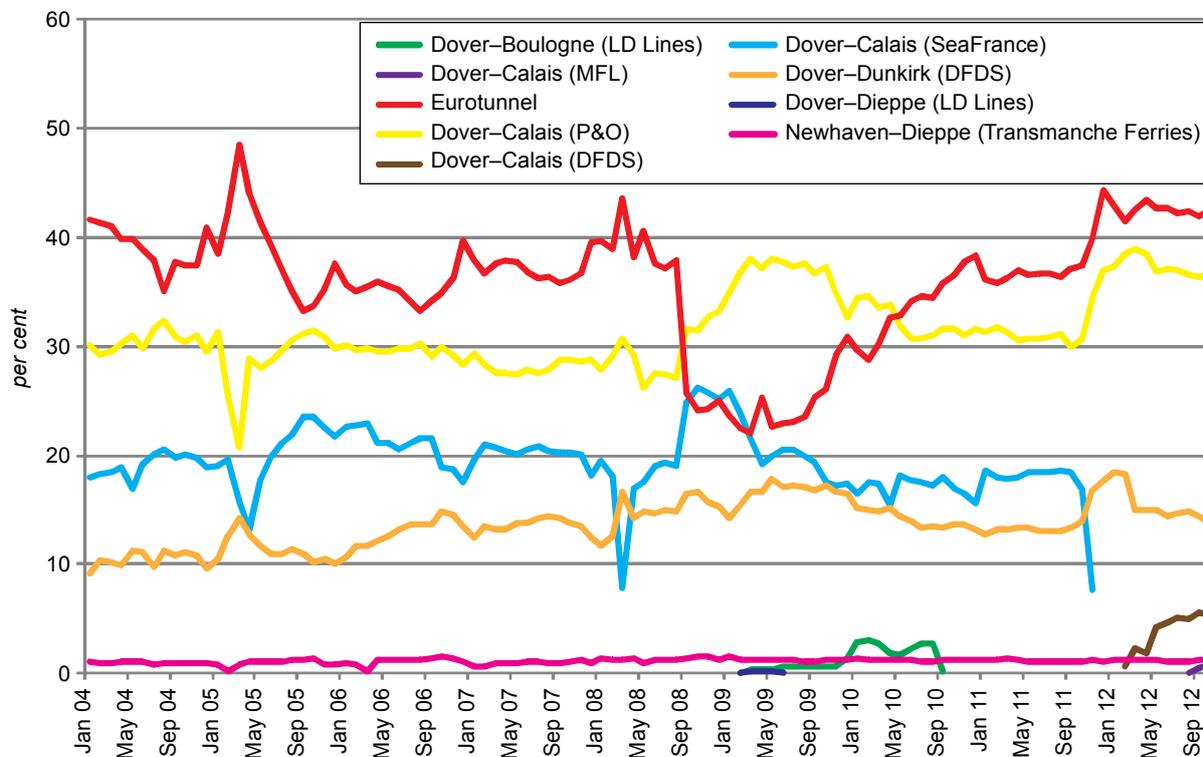
10. As noted above, freight traffic exhibits reasonably predictable seasonal patterns. However, we note that while Eurotunnel experiences similar seasonal patterns for most of the year, it typically sees its share slightly contracting during August compared with ferries, while in December its volumes (compared with November) decline to a lesser extent than those of ferry operators, resulting in increased market share. This can also be seen from the market share shown in Figure 4. We think this is due to capacity constraints in the tunnel in August during the peak holiday period, while at Christmas the volumes are low so the tunnel is able to absorb a greater share of the

³ If the regions were in the same economic market price levels might differ, but we would expect price trends to be similar.

seasonal traffic. In August, Eurotunnel usually decreases its freight shuttle services in favour of more passenger shuttle services.

FIGURE 4

Market shares in freight traffic on the short sea, 2004 to 2012 (per cent)



Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

Event analysis

Event selection

11. We have selected for detailed analysis a number of events that significantly affected the short-sea market. The relevant events have been chosen by comparing lists of potentially competitively important events submitted by GET and third parties with the market data to identify events that both appeared likely to be significant and resulted in significant shifts of freight volume. We have focused on events during the last five years. The chosen events are:

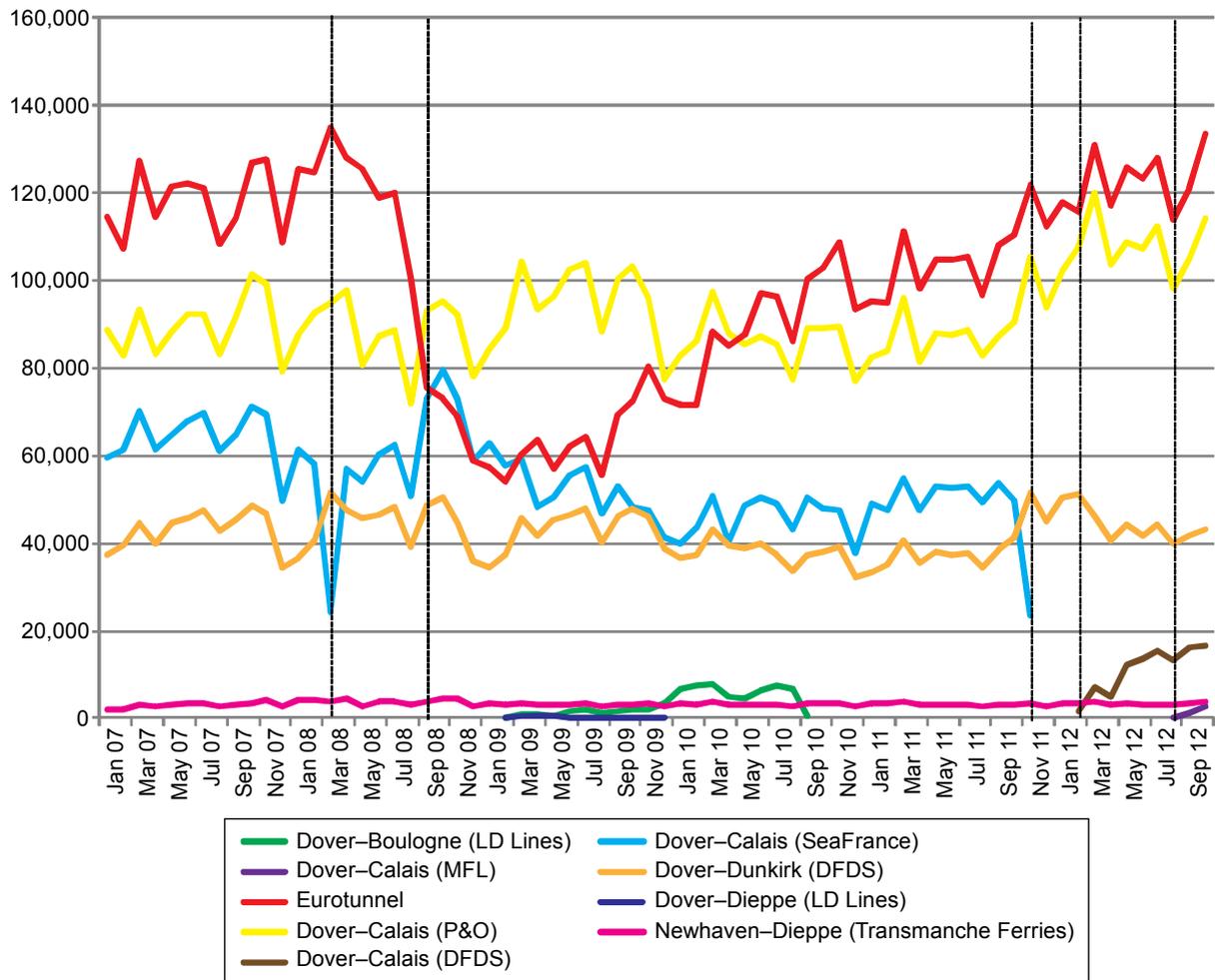
- (a) the exit of SeaFrance in November 2011 and the subsequent entry on to the Dover-Calais route of DFDS in February 2012 and MFL in August 2012;

- (b) a strike by SeaFrance staff in March 2008; and
- (c) the fire in Eurotunnel in September 2008.

12. These events are marked in Figure 5.

FIGURE 5

Freight traffic on the short sea (number of vehicles), 2007 to 2012



Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

SeaFrance exit in 2011

13. SeaFrance ceased sailings in November 2011. Its exit created a significant reduction of capacity on the market in the short run, which from February 2012 onwards was reversed by entry events. The exit of SeaFrance provides a natural experiment which allows us to review the redistribution of ex-SeaFrance customers to see which oper-

ators or routes gained business as a result. Because the exit of SeaFrance was followed relatively quickly by entry events that constitute significant competitive events in their own right, we have split the analysis in a number of ways. First, in this section we analyse the redistribution of SeaFrance business both in the period immediately following the exit (but before new entry takes place) and then over the longer period from exit until the latest data we hold. The analysis is therefore split into a comparison of:

- (a) volumes immediately after the SeaFrance exit but before DFDS entry to the Dover–Calais route (December 2011 to January 2012) with the same period 12 months before (December 2010 to January 2011); and
- (b) volumes after the SeaFrance exit until the most recent data period available (December 2011 to October 2012) with the same period 12 months before (December 2010 to October 2011).

14. In the following section we look in more detail at the DFDS and MFL entry events.

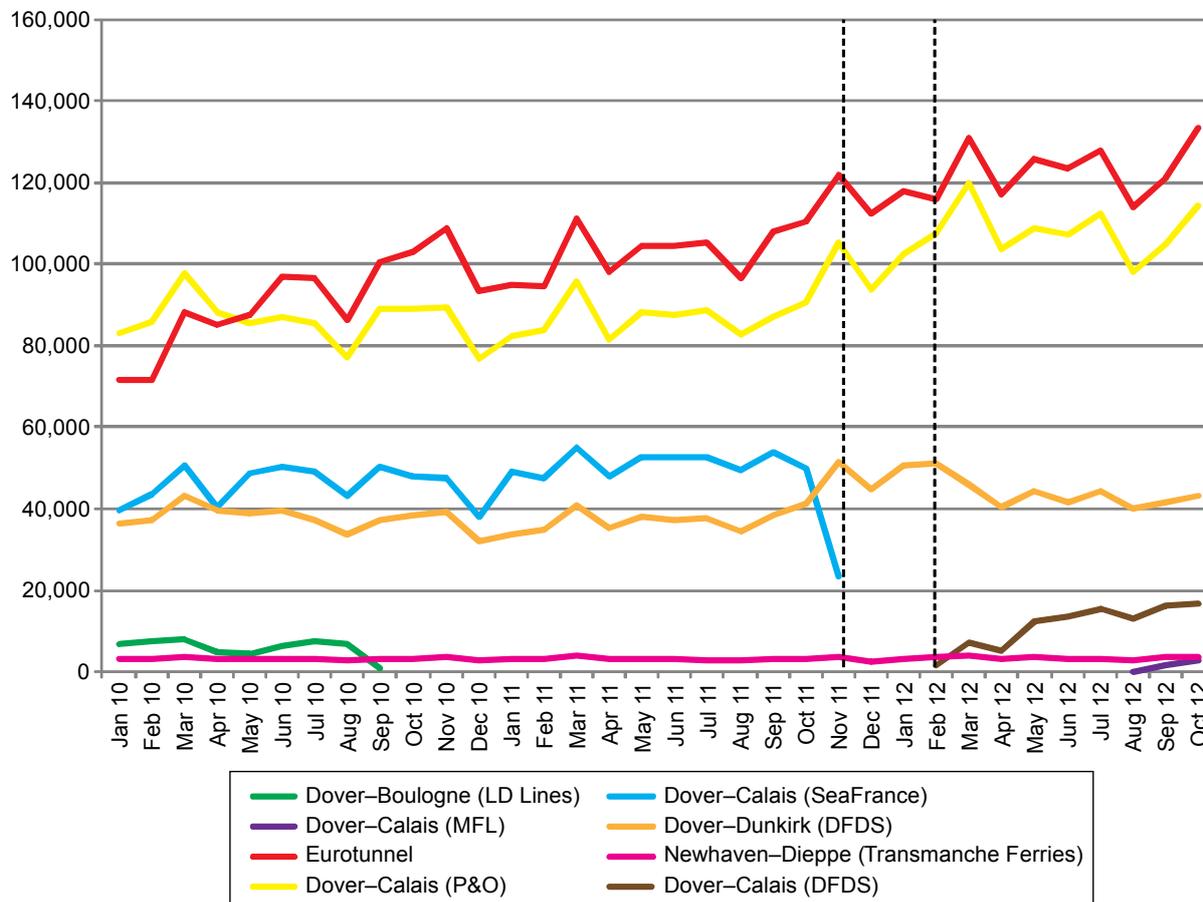
Overview of the SeaFrance exit

15. Figure 6 shows the freight traffic in the short sea between January 2010 and October 2012. The exit of SeaFrance in November 2011 is marked, as is the launch of the DFDS Dover–Calais service in February 2012. Following the exit of SeaFrance, it can be seen that the freight volumes of P&O, DFDS and Eurotunnel went up significantly. Overall volumes on the short sea grew by 4.2 per cent (year-on-year) in the period December 2011 to January 2012. This compares with overall growth of trade between the UK and the Continent of 0.7 per cent. Similarly volume grew during the longer analysis period of December 2011 to October 2012 by 2.9 per cent (year-on-year) compared with overall decline of trade between the UK and the Continent of –3.5 per cent. This suggests strongly that effectively all SeaFrance freight business

was recaptured by short-sea providers and that there was no material substitution to more geographically remote routes.

FIGURE 6

Freight traffic on the short sea (number of vehicles), 2010 to 2012



Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

16. As noted, overall volumes on the short sea have grown over the period of our analysis. In order to analyse diversion of ex-SeaFrance business, we need to allow for this growth. To do this, we have calculated the total traffic growth in the relevant analysis period (for December 2011 to January 2012, traffic grew by 4.2 per cent compared with the same period 12 months before) and then using this growth have calculated a hypothetical (projected) volume for each operator in the relevant period assuming that market shares had remained constant. We then calculated an estimate of the volume gain associated with the exit of SeaFrance using the difference

between the factual volumes and our hypothetical forecast volumes. Finally, we calculated the diversion ratios by dividing the difference between the forecast and actual volumes for each operator by the total projected volume that might otherwise have been carried by SeaFrance (90,000 vehicles).

Immediate post-SeaFrance exit analysis

17. Table 3 summarizes the results of the analysis of the period immediately after the exit but before the DFDS entry, to separate a ‘pure’ effect of the SeaFrance exit effect during December 2011 to January 2012.

TABLE 3 Diversion of freight volumes from SeaFrance to other operators, December 2011 to January 2012

Operator	Dec 2010–Jan 2011			Dec 2011–Jan 2012				Diver- sion from SeaFrance, % H=G/90
	Volume, '000	Share, %	Share, % (excluding SeaFrance)	Volume, '000	Share, %	Projected volume, '000	Differ- ence, '000	
	A	B	C	D	E	F=A x 1.042	G=D–F	
Dover–Calais (P&O)	159	31	38	196	37	166	30	33.3
Dover–Dunkirk (DFDS)	66	13	16	95	18	68	27	29.8
Dover–Calais (SeaFrance)	87	17	-	-	-	90	-90	-
Eurotunnel	188	37	45	230	44	196	34	37.4
Newhaven–Dieppe (Transmanche Ferries)	6	1	1	6	1	6	0	-0.5
Total short sea	506	100	100	528	100	528	0	100

Source: IRN Research, CC calculations.

Note: Includes accompanied and unaccompanied traffic. Volumes do not sum precisely due to rounding.

18. Our calculations show that 33.3 per cent of SeaFrance volumes diverted to P&O, 37.4 per cent to Eurotunnel, and 29.8 per cent to the DFDS Dover–Calais route. Approximately two-thirds of traffic substituted to competing ferry operators, while one-third diverted to Eurotunnel. This can be interpreted as showing that all three competitors (DFDS, P&O and Eurotunnel) were similarly close substitutes for ex-SeaFrance freight customers. We note that Eurotunnel captured a smaller proportion (37.4 per cent) of SeaFrance volumes than its market share (45 per cent) would predict. Both P&O and DFDS increased their capacities immediately following the SeaFrance exit; at the same time Eurotunnel capacity utilization in December to

January was quite high, which, together with the fact that ferries are closer substitutes to each other than Eurotunnel is, may explain higher diversion to ferries.

19. Following the SeaFrance exit, absolute as well as relative prices on the short sea has not experienced any dramatic changes. The relative price of Eurotunnel versus ferries remained stable in October 2011 to April 2012. Prices in the Western Channel somewhat decreased in the course of 2012 compared with 2011, and prices in the North Sea remained on the same level.

Extended SeaFrance exit analysis

20. Table 4 shows how the volumes of SeaFrance were redistributed between other short-sea operators under our second approach, comparing December 2011 to October 2012 and December 2010 to October 2011. We used the same methodology as above, calculating that total traffic in December 2011 to October 2012 grew by 2.9 per cent compared with the same period 12 months before. To allow for this growth, we calculated a hypothetical (projected) volume for each operator in December 2011 to October 2012 assuming that market shares had remained constant by multiplying their volumes in December 2010 to October 2011 by 1.029. We then calculated an estimate of the volume gain associated with the exit of SeaFrance using the difference between the factual volumes and our hypothetical forecast volumes. Finally, we calculated the diversion ratios by dividing the difference between the forecast and actual volumes for each operator by the total projected volume that might otherwise have been carried by SeaFrance (564,000 vehicles).

TABLE 4 Diversion of freight volumes from SeaFrance to other operators, December 2011 to October 2012

Operator	Dec 2010–Oct 2011			Dec 2011–Oct 2012			Differ- ence, '000 G=D-F	Diversion from SeaFrance, % H=G/564
	Volume, '000 A	Share, % B	Share, % (excluding SeaFrance) C	Volume, '000 D	Share, % E	Projected volume, '000 F=Ax1.029		
Dover–Calais (DFDS)				101	3	-	101	17.9
Dover–Calais (P&O)	945	31	38	1,173	37	973	200	35.5
Dover–Dunkirk (DFDS)	404	13	16	488	16	416	72	12.8
Dover–Calais (MFL)				4	0	-	4	0.8
Dover–Calais (SeaFrance)	548	18		-	-	564	-564	N/A
Eurotunnel	1,122	37	45	1,340	43	1,155	185	32.8
Newhaven–Dieppe (Transmanche Ferries)	35	1	1	37	1	36	1	0.2
Total short sea	3,054			3,143		3,143	0	100

Source: IRN Research, CC calculations.

Notes:

1. Includes accompanied and unaccompanied traffic.
2. N/A = not applicable.

21. Our calculations show that over the longer period for which we have data (and given subsequent entry events) we estimate that 35.5 per cent of SeaFrance volumes diverted to P&O, 32.8 per cent to Eurotunnel, 17.9 per cent to the DFDS Dover–Calais route, and 12.8 per cent to the DFDS Dover–Dunkirk route. If we compare these diversion ratios with operators' market shares in December 2010 to October 2011 (excluding SeaFrance), we notice that Eurotunnel captured a smaller proportion (32.8 per cent) of SeaFrance volumes than its market share (45 per cent) would predict. This is consistent with the view that for ferry customers the closest possible substitute to a SeaFrance crossing was another ferry on the same route, although it is clear that Eurotunnel is a significant competitive option. We also note that Eurotunnel's share of ex-SeaFrance business (32.8 per cent) has fallen significantly when compared with the immediate two months post SeaFrance exit, which we estimated at 37.4 per cent. This understates the actual fall as the second period of analysis includes periods both with and without entry by DFDS and MFL. This is consistent with the view that entry by ferry operators directly (adversely) impacts Eurotunnel freight volumes.

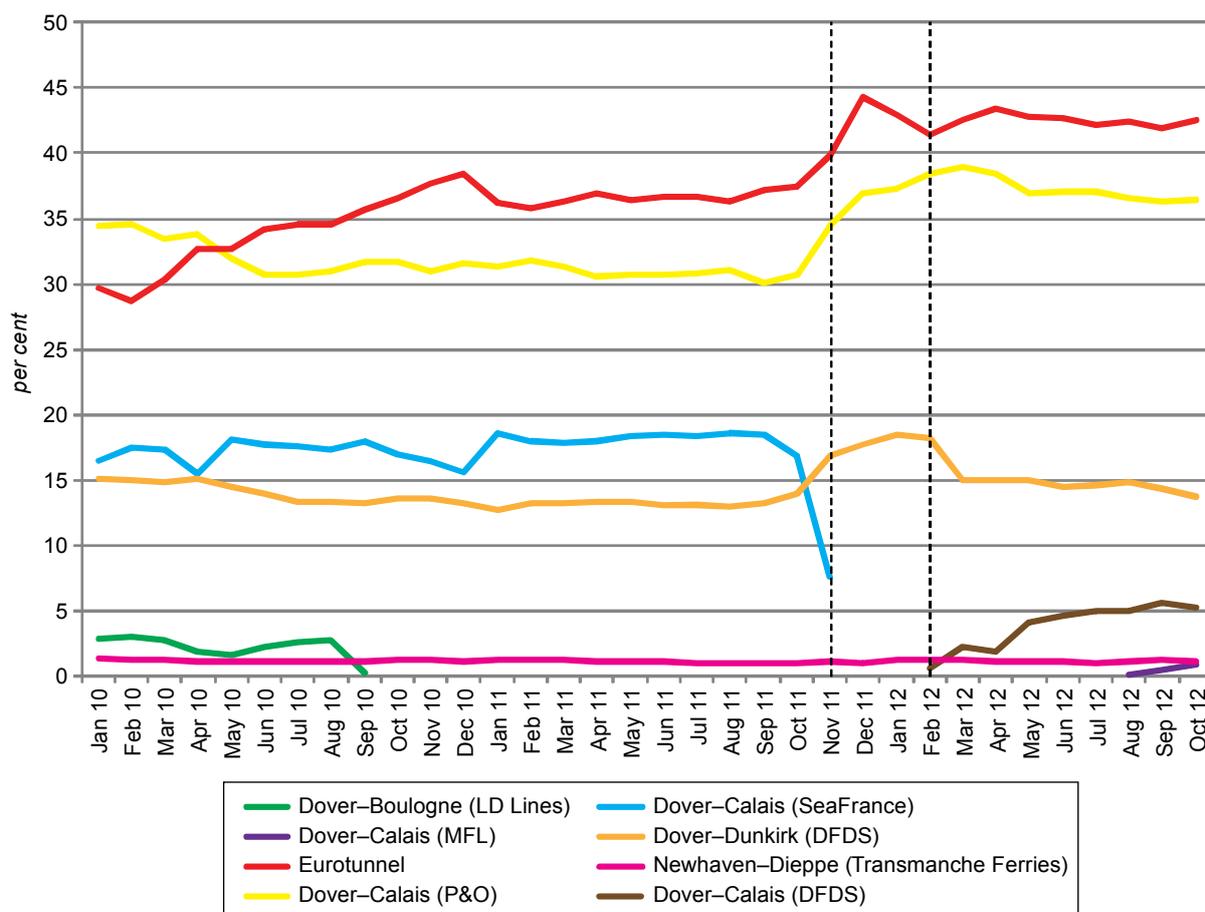
DFDS and MFL entry on the Dover–Calais route in 2012

22. In February 2012, DFDS launched a ferry service on the Dover–Calais route, and MFL entered the same route in August 2012. We note that due to the short period of time that has passed since the entry of MFL, it is difficult to judge its effects. The evolution of volumes can be seen in Figure 6 above. A particular point of interest in the analysis is the relationship between DFDS's Dover–Dunkirk route and the effect of its entry on Dover–Calais on business on that route.

23. Figure 7 shows the volume shares of short-sea operators between January 2011 and October 2012. For DFDS, we show market shares of its individual routes (Dover–Dunkirk and Dover–Calais) as well as its combined market share. After the initial increase in market shares of the remaining operators after the exit of SeaFrance, market shares of P&O (Dover–Calais) and DFDS on the Dover–Dunkirk route seem to have suffered after the entry of DFDS to the Dover–Calais route. We note that P&O increased capacity at the time of the DFDS Dover–Calais entry, which is likely to have limited its loss of market share somewhat.

FIGURE 7

Market shares in freight traffic on the short sea, 2011 to 2012 (per cent)



Source: IRN Research, CC calculations.

Note: Includes accompanied and unaccompanied traffic.

24. In Table 5 we compare market shares of the operators over two periods: (a) February 2012 to April 2012 (initial stage of entry of DFDS), and (b) May 2012 to October 2012 (after DFDS volumes in the Dover–Calais route have stabilized somewhat). Over the period between May and October 2012, DFDS on the Dover–Calais route achieved market share of 5 per cent, which seems to have come mostly at the expense of DFDS’s Dover–Dunkirk route and P&O.

TABLE 5 Change in freight market shares following DFDS entry in February 2012

Operator	per cent		
	Feb 2012– Apr 2012	May 2012– Oct 2012	Change in share
Dover–Calais (DFDS)	1.6	5.0	+3.4
Dover–Dunkirk (DFDS)	16.1	14.5	–1.6
DFDS total	17.7	19.5	+1.8
Dover–Calais (P&O)	38.6	36.7	–1.9
Eurotunnel	42.5	42.5	0.0
Newhaven–Dieppe (Transmanche Ferries)	1.2	1.1	–0.1
Dover–Calais (MFL)	-	0.2	+0.2

Source: IRN Research, CC calculations.

Note: Includes accompanied and unaccompanied traffic. Numbers do not sum up perfectly due to rounding.

25. In Table 6, we assess what the distribution of volumes would have looked like in May to October 2012 if the market shares remained on the level of February to April 2012. Again, it appears that the growth of DFDS on the Dover–Calais route came primarily from P&O and DFDS’s Dover–Dunkirk route, and Eurotunnel’s volumes were not significantly affected by it.

TABLE 6 Change in freight volumes following DFDS entry in February 2012

Operator	Actual market shares, Feb– Apr 2012 %	Volumes in May–Oct 2012 distributed according to market shares in Feb–Apr 2012 '000	Actual volumes, May 2012–Oct 2012 '000	Difference '000
Dover–Calais (DFDS)	1.6	28.3	87.5	+58.8
Dover–Dunkirk (DFDS)	16.1	282.2	255.0	–33.7
DFDS total	17.7	310.5	342.2	+31.7
Dover–Calais (P&O)	38.6	679.2	645.6	–33.7
Eurotunnel	42.5	746.4	745.7	–0.7
Newhaven–Dieppe (Transmanche Ferries)	1.2	21.6	20.0	–1.6
Dover–Calais (MFL)	-	-	4.3	+4.3
Total		1,757.8	1,757.8	0

Source: IRN Research, CC calculations.

Notes:

1. Includes accompanied and unaccompanied traffic.
2. Numbers do not sum perfectly due to rounding.

SeaFrance strike in March 2008

26. In March 2008, SeaFrance employees went on strike for at least eight days.⁴ As Figures 4 and 5 show, this event coincides with a sharp (but temporary) decline in

⁴ www.aferry.co.uk/news/SNCF_called_upon_to_break_SeaFrance_deadlock-994.htm. Accessed on 21 December 2012.

both volumes and market share of SeaFrance, and an increase of volumes and market shares of its competitors.

27. SeaFrance market share fell in March 2008 to 8 per cent, compared with its market share of 19 per cent in the previous six months. Its volumes contracted by 66 per cent compared with March 2007, and by 58 per cent compared with February 2008 (as opposed to average expected growth of 13 per cent that SeaFrance usually experienced in March compared with February). However, immediately after the strike, the market share of SeaFrance recovered to an average 18 per cent over the period April to August 2008.

28. Since this was a single event and volumes and market shares seem to have recovered immediately after this incident, we use the average market shares of the previous six months to construct hypothetical volumes in March 2008 that operators would have had if there were no strike. Table 7 contains our calculations.

TABLE 7 Change in freight volumes following SeaFrance strike in March 2008

Operator	Actual volumes in Mar 2008 '000	Actual market shares, Mar 2008 %	Actual market shares, Sep 2007–Feb 2008 %	Hypothetical volumes in Mar 2008 '000	Difference '000	Diversion ratio from SeaFrance %	For comparison: actual volume shares excluding SeaFrance, Sep 2007–Feb 2008 %
Dover–Calais (P&O)	95.0	31	29	88.6	+6.4	17.9	35.5
Dover–Dunkirk (DFDS)	51.5	17	13	40.5	+11.0	30.7	16.8
Dover–Calais (SeaFrance)	24.2	8	19	60.1	-35.9	-	-
Newhaven–Dieppe (Transmanche Ferries)	3.7	1	1	3.5	+0.2	0.5	1.4
Eurotunnel	135.1	44	38	116.8	+18.3	51.0	46.8
Total	309.5	100	100	309.5	-	-	-

Source: IRN Research, CC calculations.

Notes:

1. Includes accompanied and unaccompanied traffic.
2. Numbers do not sum up perfectly due to rounding.

29. Our analysis estimates that due to the strike SeaFrance lost volume of 35,900 single trips in March 2008, of which 51 per cent of the total was diverted to Eurotunnel, 31 per cent to DFDS and only 18 per cent to P&O. If we compare these ratios with

actual market shares of these operators in the six months preceding the strike (excluding SeaFrance), we note that during this event P&O captured a much smaller proportion of SeaFrance customers than its market share would suggest, and the biggest 'winner' was DFDS, which captured 31 per cent of SeaFrance's lost volumes compared with its share of 17 per cent. This provides some evidence that the Dover–Dunkirk route is a relatively close substitute for Dover–Calais crossings. The very small level of substitution to Transmanche is evidence that routes outside the immediate short-sea area are of limited competitive importance. There was no significant change of volumes in the North Sea or Western Channel either.

30. It is possible that some other event affected P&O's ability to accommodate SeaFrance's customers. We observe that even with the SeaFrance strike, volumes of P&O in March 2008 grew by only 2 per cent compared with February 2008, as opposed to usual average growth in March of 14 per cent. We did not observe any significant changes in capacity or frequency around that time period that could explain this.⁵

Tunnel fire in September 2008 and its aftermath

31. A fire occurred on 11 September 2008 in the Channel Tunnel, and its service was suspended for 36 hours.⁶ [X] This incident had a long-lasting effect on both volumes and market share of Eurotunnel, which was able to reach the pre-fire volume levels only in [X].
32. The fire was a very significant event that considerably constrained Eurotunnel's capacity for an extended period. All else equal, we would expect to see a significant drop in Eurotunnel business and a similar increase in ferry traffic if the relevant

⁵ GET stated that the SeaFrance strike in March 2008 led to the port of Calais being completely blocked, which may explain the low diversion to P&O, which uses Calais as well.

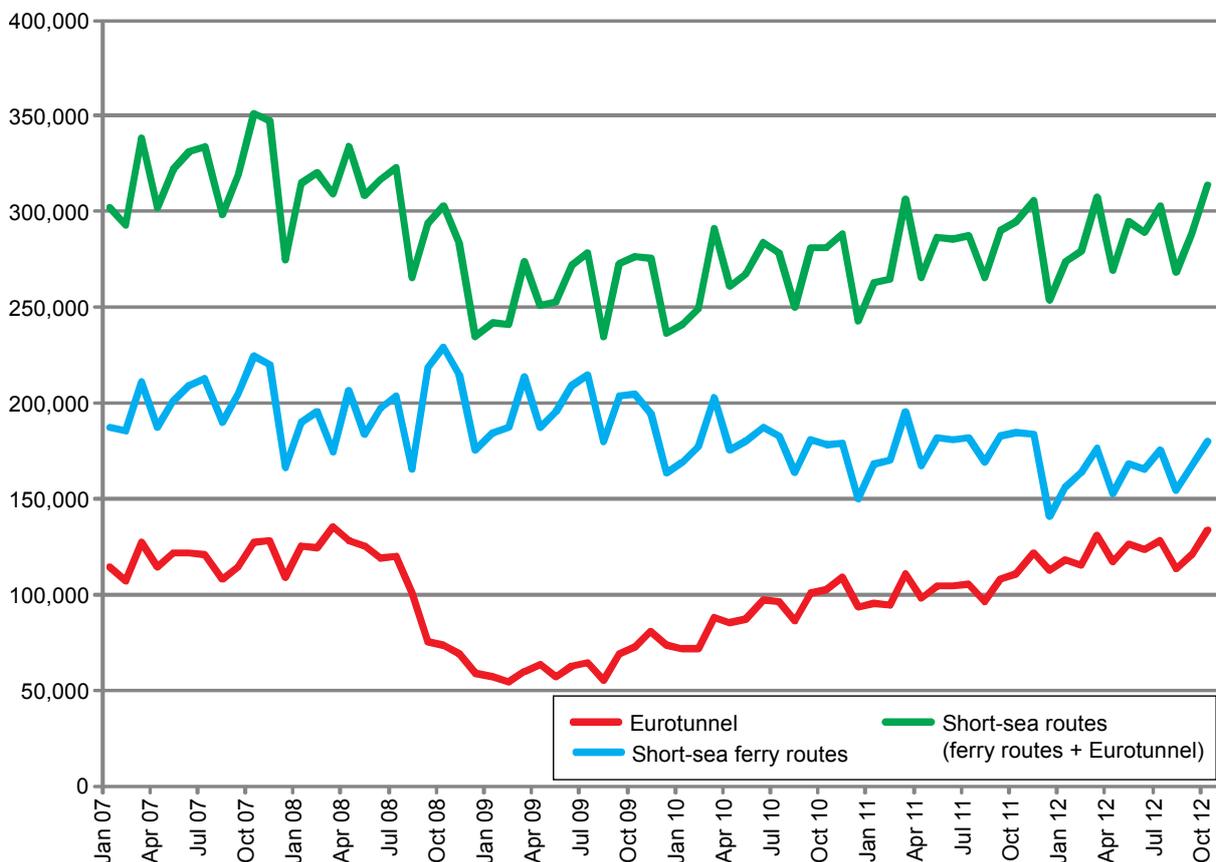
⁶ <http://news.bbc.co.uk/1/hi/world/europe/7610919.stm>. Accessed on 23 December 2012.

market is the short sea and the ferries have sufficient capacity to accommodate the volume shift.

33. Figure 8 shows the evolution of volumes transported via the short sea during the period 2007 to 2012. We do see a volume drop that is consistent with Eurotunnel’s statement that capacity was reduced to about 40 per cent of its normal total. However, we do not see a large jump in ferry volumes; rather, the volumes are broadly static. The reason for this appears to be that the market shrank overall during this period, as shown by the following analysis.

FIGURE 8

Freight traffic on the short sea (number of vehicles), 2007 to 2012



Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

34. There are two likely explanations for the overall fall in volume in the short sea during the period of the fire. Either the volume migrated to other routes (or modes), or the

market shrank due to the financial crises that struck during 2008, as these events coincide with the beginning of the financial crisis. The UK economy started to contract in Q2 2008, and quarter-on-quarter GDP growth remained negative until Q2 2009.⁷ UK trade volumes with the EU started to contract year-on-year in Q4 2007 and exhibited negative growth until Q1 2010.⁸

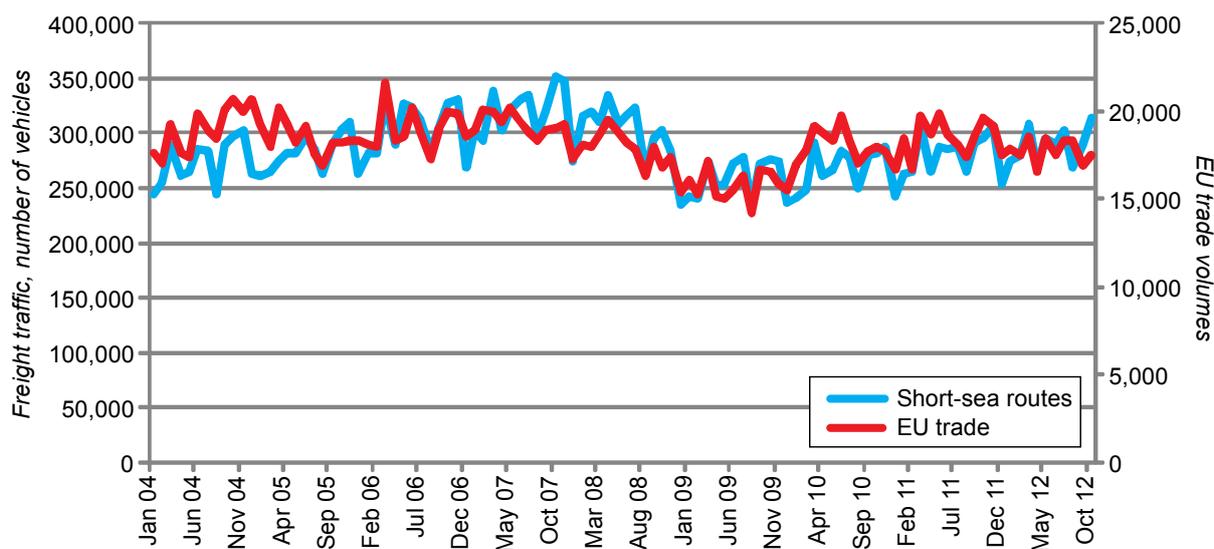
35. To test whether the fall in volume on the short sea is primarily driven by the overall economic downturn or might indicate migration to other routes or modes, we have compared the change in volume on the short sea with the overall level (and change in level) of goods traded between the UK and the EU. Figure 9 shows that the total volume of freight transported via short-sea ferries and Eurotunnel mirrors the total volumes of trade between the UK and the EU relatively closely. In 2008/09 UK–EU trade showed a marked decline. The analysis suggests that the primary cause of the fall in demand on the short sea was an overall fall in demand for freight transport, which led to a decline in the total freight traffic via the short sea.

⁷ ONS, *Economic Review*, July 2012. www.ons.gov.uk/ons/dcp171766_274087.pdf.

⁸ CC calculations based on data from www.uktradeinfo.com/Statistics.

FIGURE 9

Freight traffic on the short sea and UK–EU trade, 2004 to 2012



Source: IRN Research, www.uktradeinfo.com.

Notes:

1. Includes accompanied and unaccompanied traffic.
2. EU trade is a sum of arrivals (proxy for imports) and dispatches (proxy for exports).

36. The view that the fall in demand overall resulted from the economic downturn rather than substitution to other modes or routes is reinforced by the observation that freight volumes on the North Sea and Western Channel also fall over this period. Between 2007 and 2009, volumes on the North Sea fell by 21 per cent and volumes on the Western Channel fell by 12 per cent.

37. The evidence suggests that at the time of the fire the overall market was contracting substantially. However, because of the fire the ferry operators were able to benefit from volumes that diverted from Eurotunnel broadly maintaining their volumes. The evidence is also consistent with the diversion of business from Eurotunnel following the fire remaining virtually exclusively on the short sea.

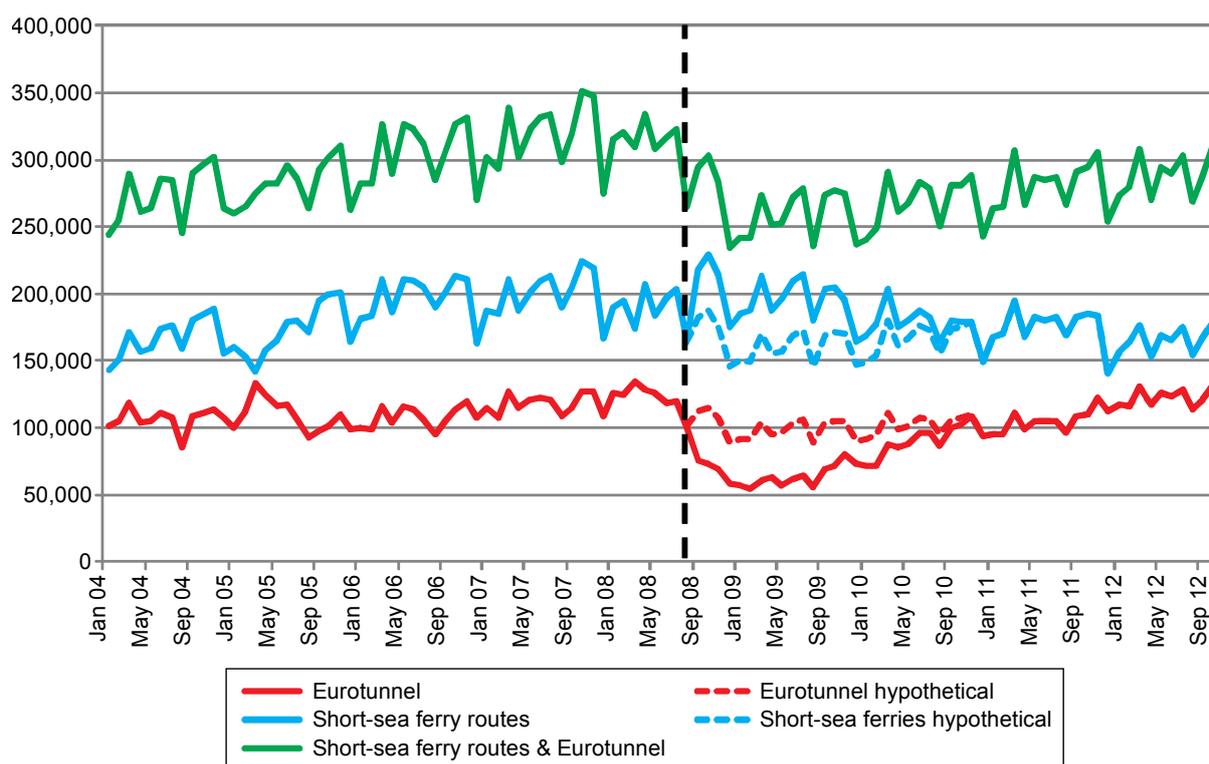
Analysis of diversion within the short sea following the fire

38. The next step in our analysis of diversion following the Eurotunnel fire is to construct an estimate of the traffic volumes that Eurotunnel and the ferries would have serviced

if the fire had not occurred. We note that although both the economic crisis and the decline in EU trade had started before September 2008, the market shares of Eurotunnel and ferry operators remained relatively stable. Therefore we assume that the economic downturn itself was likely to affect all operators in a similar fashion (absent the fire), and thus we use the average market shares over the period of September 2007 to August 2008 (excluding March 2008 when the SeaFrance strike occurred) in order to construct a hypothetical volume distribution. We apply these market shares to the total volume of short-sea traffic between September 2008 and November 2010, when Eurotunnel regained its pre-fire market share of 38 per cent. This analysis is shown in Figure 10.

FIGURE 10

Freight traffic on the short sea, 2004 to 2012



Source: IRN Research, CC calculations.

Note: Includes accompanied and unaccompanied traffic.

39. Tables 8 and 9 below show our analysis of diversion from Eurotunnel to ferry operators in two periods: (a) September 2008 to February 2009 (the period following the

fire itself and associated reduced capacity of Eurotunnel), and (b) September 2008 to August 2009 to capture a longer time period. We take pre-September 2008 market shares (average shares in September 2007 to August 2008, once again excluding March 2008 when SeaFrance experienced a strike), and apply them to the two time periods we analyse to calculate the hypothetical volumes of operators.

40. According to our analysis in Table 6, in September 2008 to February 2009, SeaFrance captured 47 per cent of volumes diverted from Eurotunnel, followed by P&O (38 per cent) and DFDS (14 per cent). However, if we extend the period until August 2009, Table 7 shows that P&O increases its share capturing 51 per cent of Eurotunnel's volumes, followed by SeaFrance with 27 per cent and DFDS with 18 per cent. Diversion to Newhaven–Dieppe is minimal over both periods of analysis.

TABLE 8 Change in freight volumes following Channel tunnel fire in September 2008 to February 2009

Operator	Actual volumes in Sep 2008–Feb 2009 '000	Actual market shares, Sep 2008–Feb 2009 %	Actual market shares,* Sep 2007–Aug 2008 %	Hypothetical volumes in Sep 2008–Feb 2009 '000	Difference '000	Diversion ratio from Eurotunnel %	For comparison: actual market shares* excluding Eurotunnel, Sep 2007–Aug 2008 %
Dover–Calais (P&O)	532.0	33.3	28.1	449.8	82.2	37.6	45.4
Dover–Dunkirk (DFDS)	251.2	15.7	13.8	220.5	30.7	14.0	22.2
Dover–Calais (SeaFrance)	404.7	25.3	18.9	302.6	102.0	46.6	30.5
Newhaven–Dieppe (Transmanche Ferries)	21.8	1.4	1.1	18.3	3.5	1.6	1.8
Eurotunnel	388.0	24.3	38.0	606.9	-218.9	-	-
Total	1,598.1	100	100	1,598.1	-	-	-

Source: IRN Research, CC calculations.

*Excluding March 2008.

Notes:

1. Includes accompanied and unaccompanied traffic.
2. Numbers do not sum perfectly due to rounding.
3. LD lines routes Dover–Boulogne and Dover–Dieppe were included in calculations but not shown due to their low volumes.

TABLE 9 Change in freight volumes following Channel tunnel fire in September 2008 to August 2009

Operator	Actual volumes in Sep 2008–Aug 2009 '000	Actual market shares, Sep 2008–Aug 2009 %	Actual market shares*, Sep 2007–Aug 2008 %	Hypothetical volumes in Sep 2008–Aug 2009 '000	Difference '000	Diversion ratio from Eurotunnel %	For comparison: actual market shares* excluding Eurotunnel, Sep 2007–Aug 2008 %
Dover–Calais (P&O)	1,120.7	35.5	28.1	889.8	230.9	51.3	45.4
Dover–Dunkirk (DFDS)	518.4	16.4	13.8	436.2	82.2	18.3	22.2
Dover–Calais (SeaFrance)	722.2	22.8	18.9	598.7	123.5	27.4	30.5
Newhaven–Dieppe (Transmanche Ferries)	40.4	1.3	1.1	36.1	4.3	1.0	1.8
Eurotunnel	750.7	23.7	38.0	1,200.6	-449.9	-	-
Total	3,161.4	100	100	3,161.4	-	-	-

Source: IRN Research, CC calculations.

*Excluding March 2008.

Notes:

1. Includes accompanied and unaccompanied traffic.
2. Numbers do not sum perfectly due to rounding.
3. LD lines routes Dover–Boulogne and Dover–Dieppe were included in calculations but not shown due to their low volumes.

41. Overall the analysis shows strong diversion from Eurotunnel to the ferry operators.

The analysis of changes in total market volumes across the short sea suggests strongly that little, if any, volume diverted outside of the short-sea region.

Passenger analysis

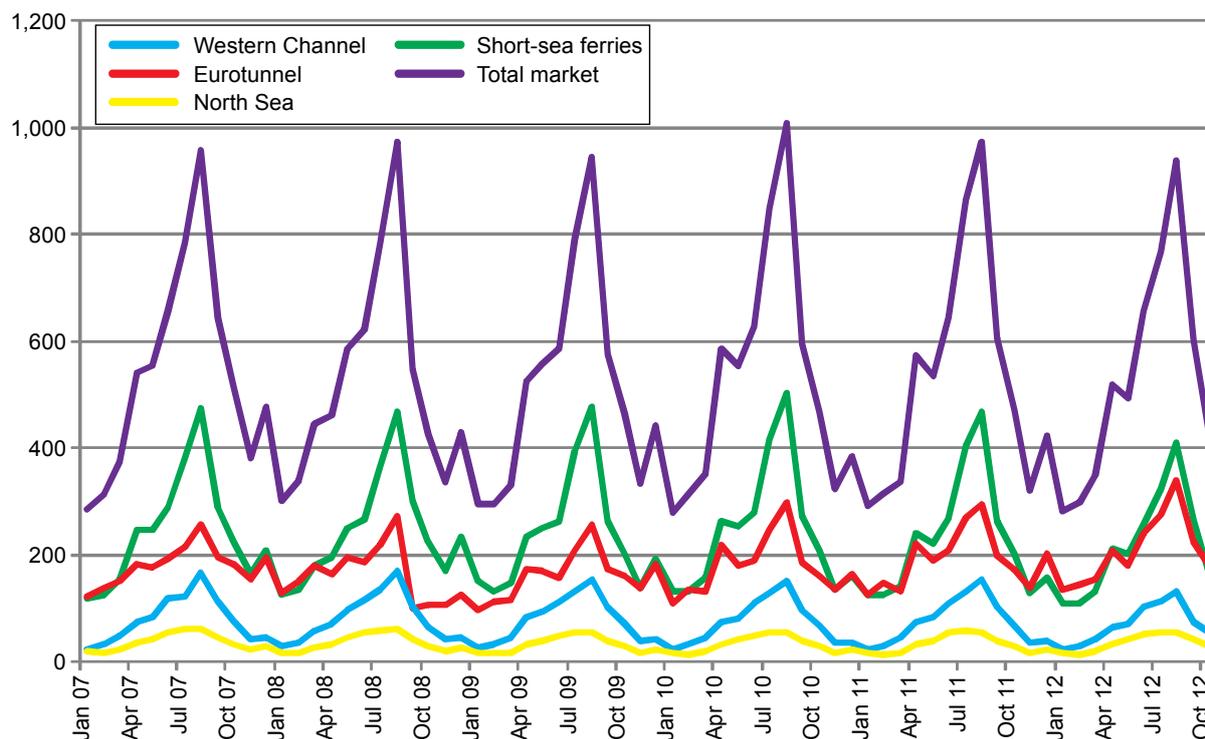
General market dynamics

Cars

42. Passenger traffic is much more seasonal than freight traffic, with much of the traffic concentrated in the summer months of May to August—see Figure 11. Traffic peaks sharply in August, with another smaller peak in December during the Christmas/New Year holiday period.

FIGURE 11

Passenger traffic on the short sea, Western Channel and North Sea ('000 cars), 2007 to 2012



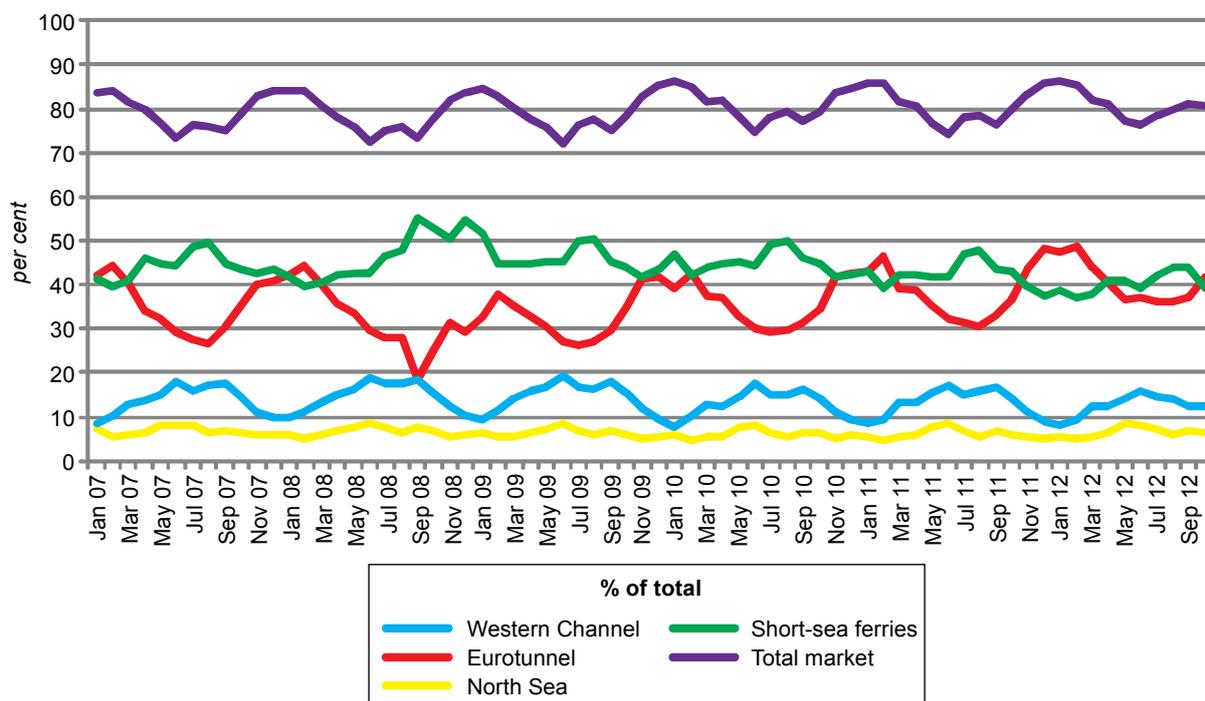
Source: IRN Research.

Note: Cars only.

43. Figure 12 shows the relative shares of short sea, Western Channel and North Sea in percentage of the total market. These shares follow a seasonal pattern as well, with short-sea share going up in winter and falling in summer (due particularly to the relatively limited winter season travel on the Western Channel and North Sea routes relative to the short sea). Similarly to the freight market, the short sea accounts for the majority of passenger traffic—averaging about 80 per cent of all traffic.

FIGURE 12

**Relative shares of short sea, Western Channel and North Sea
(percentage of total passenger market), 2007 to 2012**

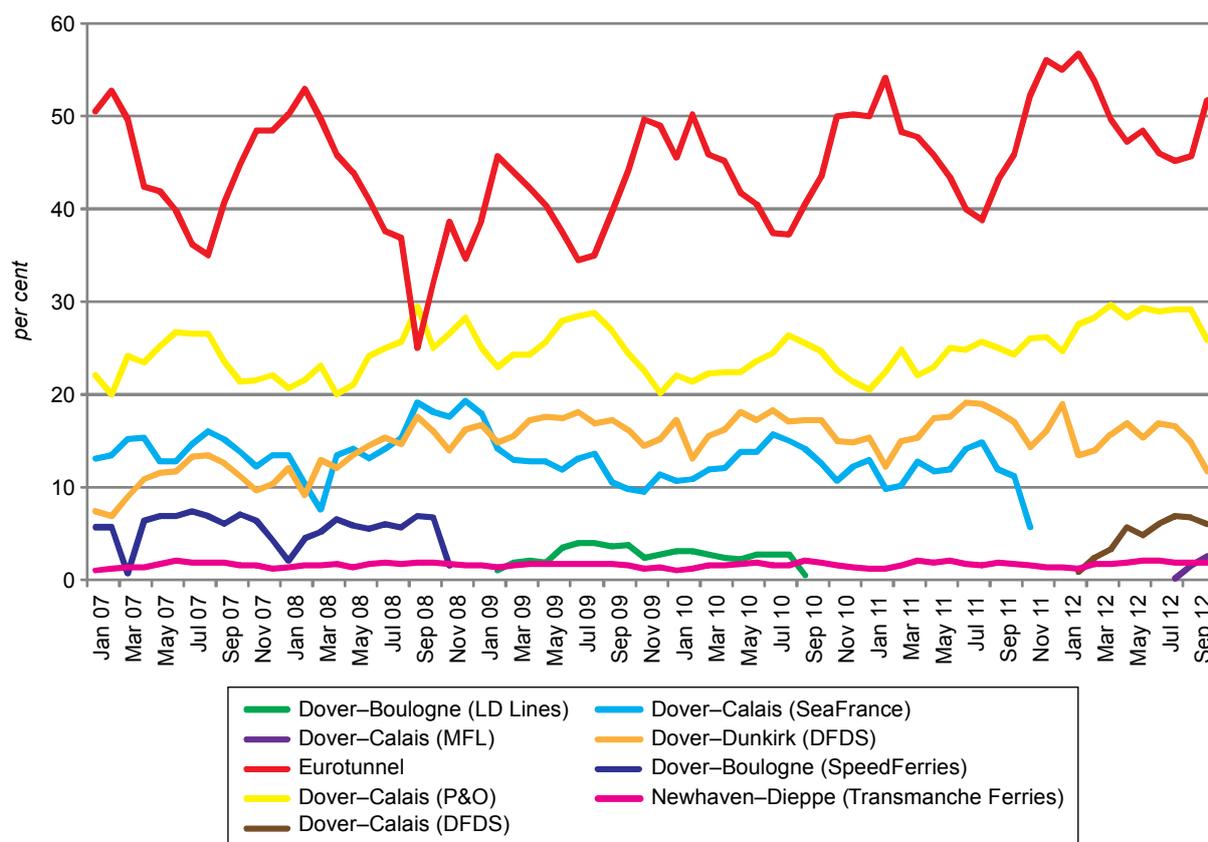


Source: IRN Research.
Note: Cars only.

44. Figure 13 shows that market shares of individual operators are also seasonal. In particular (and similar to the freight market), Eurotunnel’s market share seasonally fluctuates, typically peaking around 50 per cent in December to February and reaching a low 35 to 37 per cent in August. This could be driven by capacity limits in August in the tunnel, and/or by greater preference of passengers to use ferries in the summer. The major ferry operators (P&O in particular) exhibit a broadly inverse pattern to that of Eurotunnel. Further data tables showing the yearly dynamic of operators’ volumes, market shares and growth of volumes over time are at [Annex 1](#).

FIGURE 13

Market shares in passenger traffic on the short sea, 2007 to 2012 (per cent)



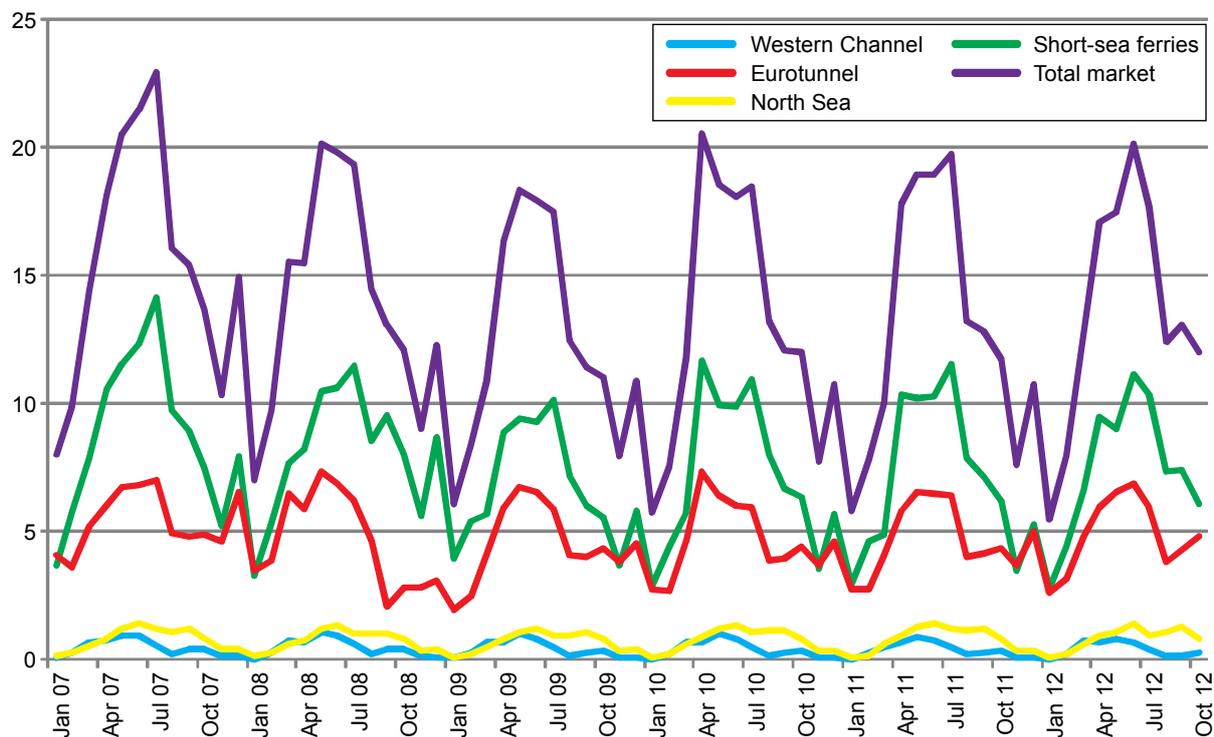
Source: IRN Research.
 Note: Cars only.

Coaches

45. Coach traffic exhibits a seasonal pattern similar to car traffic—see Figure 14. The short sea dominates coach travel to an even greater extent than it does passenger and freight traffic—accounting for 91 per cent of volume in January to October 2012.

FIGURE 14

Coach traffic on the short sea, Western Channel and North Sea ('000 coaches), 2007 to 2012

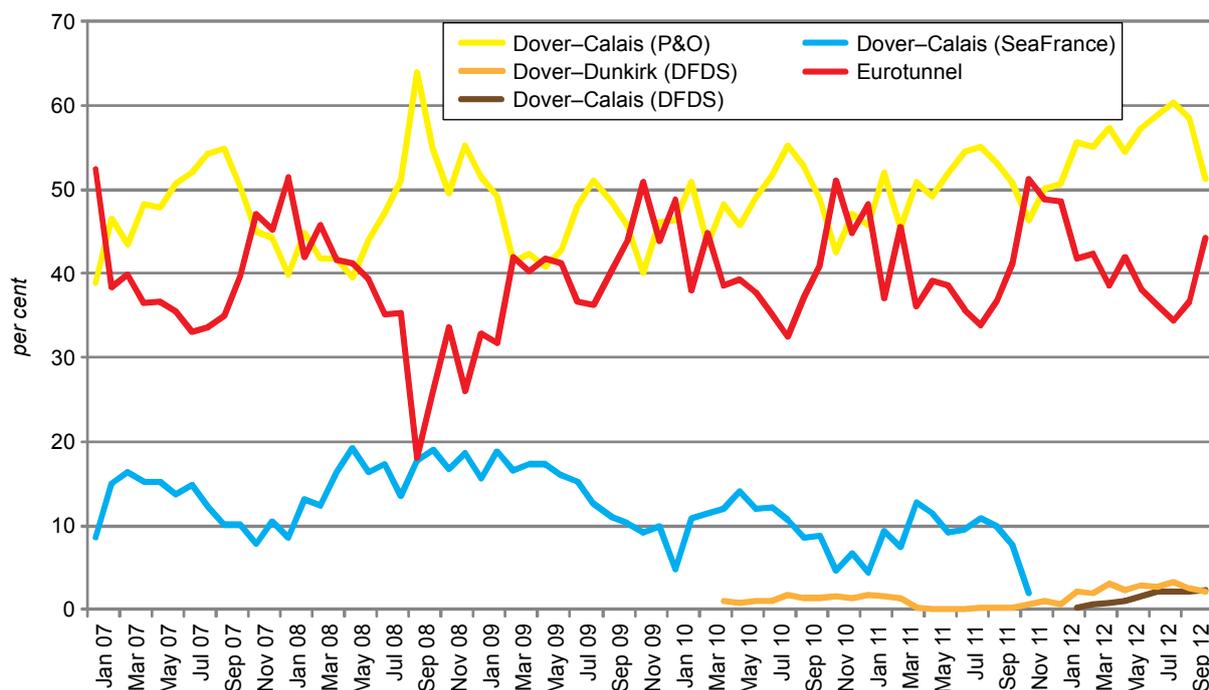


Source: IRN Research.

46. As well as being highly concentrated on the short-sea route, coach traffic is almost all carried by the major competitors on the Dover–Calais route—P&O is generally the market leader, followed by Eurotunnel and then SeaFrance (prior to its exit). Figure 15 shows that prior to the exit of SeaFrance, P&O and Eurotunnel typically accounted for more than 80 per cent of traffic. Since the exit of SeaFrance, these two competitors have maintained well over 90 per cent of the market.
47. Figure 15 also suggests that after SeaFrance stopped its operations, P&O’s share in coach traffic seems to have increased on average, while Eurotunnel’s share seems to keep fluctuating around the same level.

FIGURE 15

Market shares in coach passenger traffic on the short sea, 2007 to 2012 (per cent)



Source: IRN Research.

48. Coach traffic accounts for a relatively small proportion of passenger traffic, accounting for approximately [X] per cent of Eurotunnel passenger revenue (see Table 10). Therefore, for the purposes of the event analysis we will concentrate on car volumes, which account for the majority of the market.

TABLE 10 Revenue from car traffic as a percentage of total revenue from passenger traffic, 2007 to 2012

Operator	per cent					
	2007	2008	2009	2010	2011	2012 YTD
Eurotunnel	[X]	[X]	[X]	[X]	[X]	[X]
P&O Dover-Calais	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover-Dunkirk	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover-Calais	[X]	[X]	[X]	[X]	[X]	[X]
MFL	-	-	-	-	-	[X]

Source: Operators' sales data, CC calculations.

Note: The remaining revenue is attributed to coaches.

Event analysis

49. We have analysed the same events as used for the freight market, with the exception of the SeaFrance strike in March 2008. This is because the lost volume and market share are relatively low, particularly given that March is a low month for passenger traffic. The low volumes combined with the high variability and seasonality of both volumes and shares in the passenger market means that we are not confident of being able to construct an appropriate hypothetical counterfactual scenario against which to measure diversion during this event. The events analysed are therefore:
- (a) the exit of SeaFrance in November 2011 and the subsequent entry to the Dover–Calais route of DFDS in February 2012 and MFL in August 2012; and
 - (b) the fire in Eurotunnel in September 2008.

SeaFrance exit in 2011

50. SeaFrance ceased sailings in November 2011. Its exit created a significant reduction of capacity on the market in the short run, which from February 2012 onwards was reversed by entry events. The exit of SeaFrance provides a natural experiment which allows us to review the redistribution of ex-SeaFrance customers to see which operators or routes gained business as a result. Because the exit of SeaFrance was followed relatively quickly by entry events that constitute significant competitive events in their own right, we have split the analysis in a number of ways. First, in this section we analyse the redistribution of the SeaFrance business both in the period immediately following the exit (but before new entry takes place) and then over the longer period from exit until the latest data we hold. The analysis is therefore split into a comparison of:
- (a) volumes immediately after the SeaFrance exit but before DFDS entry to the Dover–Calais route (December 2011 to January 2012) with the same period 12 months before (December 2010 to January 2011); and

(b) volumes after the SeaFrance exit until the most recent data period available (December 2011 to October 2012) with the same period 12 months before (December 2010 to October 2011).

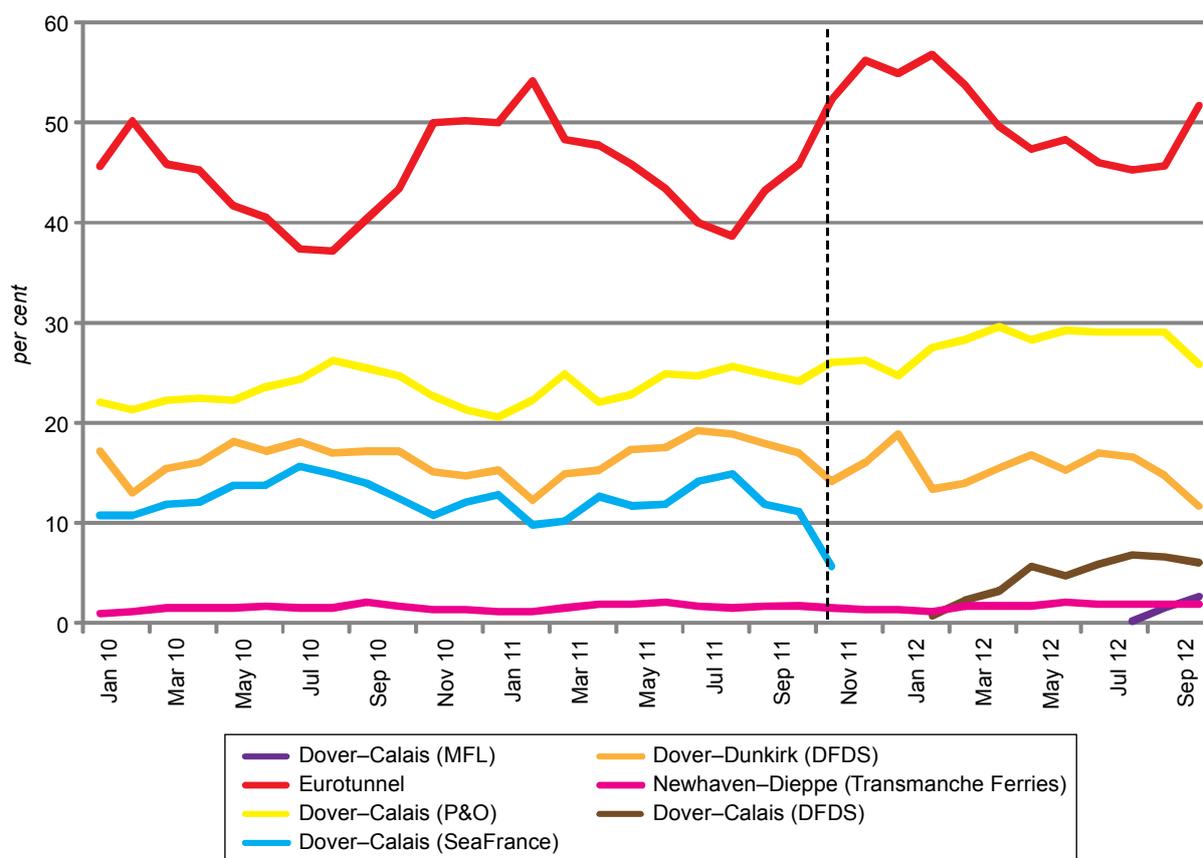
51. In the following section we look in more detail at the DFDS and MFL entry events.

Overview of the SeaFrance exit

52. Figure 16 shows market shares of passenger traffic on the short sea from January 2010 to October 2012. The fact that both volumes and market shares change over time in a seasonal pattern means that the effect of SeaFrance's exit is not as readily visible in the data as in the freight market. In order to analyse the effect of the exit, we construct and estimate of what individual operators' volumes would have been absent SeaFrance's exit, using the percentage change of the total short-sea traffic between the period of our analysis and the prior year's volume similar to the approach we used in the freight market.

FIGURE 16

Market shares in passenger traffic on the short sea, 2010 to 2012 (per cent)



Source: IRN Research, CC calculations.

Note: Cars only.

Immediate post-SeaFrance exit analysis

53. In order to separate the ‘pure’ effect of the SeaFrance exit from subsequent entry effects, we initially analyse the period of December 2011 to January 2012. The general approach is the same as we used for the freight market. We calculated that the total traffic in December 2011 to January 2012 grew by 4.8 per cent compared with the same period 12 months before. Based on this, we calculated hypothetical forecast volumes for each operator in December 2011 to January 2012 by multiplying their volumes in December 2010 to January 2011 by 1.048. Then we calculated the difference between the factual volumes and our hypothetical volumes, and assumed that this difference is due to gains because of the exit of SeaFrance. Then we calculated the diversion ratios by dividing the difference between hypothetical and actual

volumes for each operator by the total projected volume 'lost' by SeaFrance (76,000 vehicles). The results are shown in Table 11.

TABLE 11 Diversion of volumes from SeaFrance to other operators, December 2011 to January 2012

Operator	Dec 2010–Jan 2011			Dec 2011–Jan 2012			Differ- ence, '000 G=D–F	Diversion from SeaFrance, % H=G/76
	Volume, '000 A	Share, % B	Share, % (excluding SeaFrance) C	Volume, '000 D	Share, % E	Projected volume, '000 F=Ax1.048		
Dover–Calais (P&O)	122	21	24	156	26	128	28	37
Dover–Dunkirk (DFDS)	87	15	17	105	17	91	14	18
Dover–Calais (SeaFrance)	72	12	-	0	-	76	-76	-
Eurotunnel	290	50	57	337	56	304	34	44
Newhaven–Dieppe (Transmanche Ferries)	8	1	1	9	1	8	1	1
Total short sea	578	100	100	606	100	606	0	100

Source: IRN Research, CC calculations.

Note: Cars only.

54. Our calculations estimate that 37 per cent of SeaFrance volumes diverted to P&O, 44 per cent to Eurotunnel, and 18 per cent to the DFDS Dover–Dunkirk route. We note that Eurotunnel is estimated to have captured a larger share of SeaFrance customers than P&O, though less than its share of volume (excluding SeaFrance). At the same time, P&O seems to have captured a larger proportion of SeaFrance customers than its market share would predict.
55. We have not seen any evidence of significant diversion to North Sea or Western Channel routes. In December 2011 to January 2012, traffic in North Sea contracted by 3 per cent and traffic in Western Channel did not change compared with the same period 12 months before. Table 12 and Figure 17 show average yearly passenger prices of Eurotunnel, short-sea ferries and ferries crossing the Western Channel and North Sea.

TABLE 12 **Average prices (passenger), 2007 to 2012**

Operator	£					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel, cars only	[X]	[X]	[X]	[X]	[X]	[X]
Short-sea ferries, cars only	[X]	[X]	[X]	[X]	[X]	[X]
North Sea: P&O	[X]	[X]	[X]	[X]	[X]	[X]
Western Channel: BF	[X]	[X]	[X]	[X]	[X]	[X]

Source: Operators, CC calculations.

Notes:

1. P&O price is based on Hull–Zeebrugge and Hull–Rotterdam routes; BF price is based on Caen–Portsmouth, Cherbourg–Poole, Roscoff–Plymouth and St Malo–Portsmouth routes.
2. N/A = data not available.

FIGURE 17

Average prices (passenger), £, 2007 to 2012

[X]

Source: Operators, CC calculations.

Note: P&O price is based on Hull–Zeebrugge and Hull–Rotterdam routes; BF price is based on Caen–Portsmouth, Cherbourg–Poole, Roscoff–Plymouth and St Malo–Portsmouth routes.

56. As in the freight market, we note that the pricing trend in the short sea has been quite different from that of the North Sea and Western Channel. Short-sea ferry and tunnel prices have been stable since 2008, whereas North Sea and Western Channel prices have increased over time. This observation is inconsistent with the North Sea and Western Channel being in the same economic market.⁹

Extended SeaFrance exit analysis

57. Using the same overall approach, we calculated that the total traffic in December 2011 to October 2012 fell by 2.5 per cent compared with the same period 12 months before, and calculated a hypothetical forecast volume for each operator in December 2011 to October 2012 by multiplying their volumes in December 2010 to October 2011 by 0.975. Then we calculated the difference between the factual volumes and our hypothetical volumes, and assumed that this difference occurred because of the exit of SeaFrance. Finally, we calculated the diversion ratios by dividing the differ-

⁹ If the regions were in the same economic market price levels might differ, but we would expect price trends to be similar.

ence between hypothetical and actual volumes for each operator by the total projected volume 'lost' by SeaFrance (584,000 vehicles). Table 13 shows the results of our analysis.

TABLE 13 Diversion of passenger volumes from SeaFrance to other operators, December 2011 to October 2012

Operator	Dec 2010–Oct 2011			Dec 2011–Oct 2012				Diver- sion from SeaFrance, %
	Volume, '000	Share, %	Share, % (excluding SeaFrance)	Volume, '000	Share, %	Projected volume, '000	Differ- ence, '000	
	A	B	C	D	E	F=Ax0.975	G=D–F	
Dover–Calais (DFDS)	-	-	-	211	5	0	211	36
Dover–Calais (P&O)	1,139	24	27	1,313	28	1,111	202	35
Dover–Dunkirk (DFDS)	811	17	19	725	16	791	-66	-11
Dover–Calais (MFL)	-	-	-	19	0	0	19	3
Dover–Calais (SeaFrance)	599	13	-	-	-	584	-584	-
Eurotunnel	2128	45	51	2,289	49	2,075	214	37
Newhaven–Dieppe (Transmanche Ferries)	81	2	2	84	2	79	5	1
Total short sea	4,758	100	100	4,640	100	4,640	0	100

Source: IRN Research, CC calculations.

Note: Cars only.

58. Our calculations estimate that in the longer term, and following the entry of DFDS on Dover–Calais, 35 per cent of SeaFrance volumes diverted to P&O, 37 per cent to Eurotunnel and 36 per cent to the DFDS Dover–Calais route. The DFDS Dover–Dunkirk route appears to have lost volume overall compared with its projected level. If we view both DFDS routes together, then they have jointly captured 36%–11% = 25% of ex-SeaFrance volumes.

59. We have not seen any evidence of significant diversion to North Sea or Western Channel routes. Between December 2011 and October 2012, traffic in the North Sea contracted by 1 per cent and in the Western Channel by 13 per cent compared with the same period 12 months before. At the same time, prices fell slightly on both of these routes compared with 2011.

60. Overall we note that in both analyses Eurotunnel captures less than its share of volume (excluding SeaFrance), which is consistent with Eurotunnel being somewhat differentiated from the ferries. Nonetheless a significant proportion of volume diverts

to Eurotunnel, consistent with the view that it is nonetheless a close competitor to the ferries. We also note that, similar to the analysis of the freight market, the entry of DFDS appears to have taken volume from Eurotunnel.

DFDS and MFL entry on to the Dover–Calais route in 2012

61. In February 2012, DFDS launched a ferry service on the Dover–Calais route, and MFL entered the same route in August 2012. Due to the short period of time that has passed since this entry, as well as its proximity to the exit of SeaFrance, it is difficult to judge its effects. The evolution of volumes and market shares can be seen in Figures 4 and 5 above.
62. We use several steps in our analysis in order to construct a counterfactual that allows for the exit of SeaFrance and then the introduction of MFL and DFDS on the Dover–Calais route:
- (a) We project the operators' individual volumes in May to October 2012 using the total market's growth percentage compared with May to October 2011¹⁰ (total volume declined by 3.2 per cent, thus we apply this figure to individual operators' volumes to obtain the projected volumes).
 - (b) We redistribute projected SeaFrance volumes among Eurotunnel, DFDS and P&O using two alternative approaches:
 - (i) using market shares (excluding SeaFrance) in May to October 2011; and
 - (ii) using diversion ratios calculated in the previous section for December 2011 to January 2012.
 - (c) We compare projected volumes (after redistribution of SeaFrance volumes) with actual volumes achieved and find the main sources of volumes of the new entrants: DFDS and MFL.

¹⁰ We start in May because that was the first month when DFDS volumes became more stable following the period of initial entry in February to April.

63. Table 13 shows our analysis. If we compare the hypothetical situation in which each operator's volumes changed in line with change in total market and SeaFrance volumes were redistributed according to operators' market shares in May to October 2011 with the actual situation with DFDS and MFL operating, we can see that P&O actually appears to have benefited from the entry, gaining volume against its counterfactual forecast. This apparently perverse result reflects that there are other changes taking place at the time—in particular, P&O expanding capacity in February 2012 with *Spirit of France*. DFDS's Dover–Dunkirk route seems to have suffered the most, as with its own entry on Dover–Calais and capacity expansion by P&O volume that had moved to Dover–Dunkirk immediately after the exit of SeaFrance migrated back to Dover–Calais, being distributed across P&O, MFL and DFDS (Dover–Calais).

TABLE 14 Diversion of passenger volumes to DFDS and MFL on Dover–Calais route, May to October 2012: Approach 1 (diversion using market shares)

	P&O	Sea France	MFL	DFDS D–C	DFDS D–D	Newhaven –Dieppe	Eurotunnel	Total
Volume, May–Oct 2011	786	413	-	-	579	57	1,337	3,171
Actual shares, May–Oct 2011 (%)	24.8	13.0	-	-	18.2	1.8	42.2	100
Share excl SeaFrance (%)	28.5	-	-	-	21.0	2.0	48.5	100
Projected volume, May–Oct 2012 (3.2% decline)	761	399	-	-	560	55	1,294	3,070
Volume after redistribution of SeaFrance volumes	875	-	-	-	644	63	1,488	3,070
Actual volume, May–Oct 2012	881	-	19	188	480	60	1,442	3,070
Actual shares (%)	28.7	-	0.6	6.1	15.7	1.9	47.0	100
Difference between projected and actual volumes	6	-	19	188	-163	-3	-46	0

Source: IRN Research, CC calculations.

Note: Cars only.

64. It should be noted that (as our analysis in previous section shows) market shares in 2011 excluding SeaFrance may not be the best predictor of where the SeaFrance customers diverted to. Therefore we repeat our analysis, using diversion ratios calculated in the previous section to construct the predicted volumes. Table 15 shows this approach.

TABLE 15 Diversion of passenger volumes to DFDS and MFL on Dover–Calais route, May to October 2012: Approach 2 (diversion ratios pre-DFDS entry)

	P&O	Sea France	MFL	DFDS D–C	DFDS D–D	Newhaven –Dieppe	Eurotunnel	Total
Volume, May–Oct 2011	786	413	-	-	579	57	1,337	3,171
Actual shares, May–Oct 2011 (%)	24.8	13.0	-	-	18.2	1.8	42.2	100
Projected volume, May–Oct 2012 (3.2% decline)	761	399	-	-	560	55	1,294	3,070
Diversion ratio from SeaFrance (%)	37.0	-	-	-	17.8	0.8	44.4	-
Volume after redistribution of SeaFrance volumes	909	-	-	-	631	58	1,472	3,070
Actual volume, May–Oct 2012	881	-	19	188	480	60	1,442	3,070
Actual shares (%)	28.7	-	0.6	6.1	15.7	1.9	47.0	100
Difference between projected and actual volumes	-28	-	19	188	-151	2	-30	0

Source: IRN Research, CC calculations.

Note: Cars only.

65. If we compare the hypothetical situation in which each operator's volumes changed in line with change in the total market and SeaFrance volumes were redistributed according to the diversion that occurred in December 2011 to January 2012 with the actual situation with DFDS and MFL operating, we can see that all main operators (P&O, DFDS's Dover–Dunkirk route and Eurotunnel) lost volumes to the new entrants. As noted, the DFDS Dover–Dunkirk route seems again to have suffered the most, as its volume moved back to the short sea (to MFL and DFDS Dover–Calais in particular).
66. Both approaches above are based on a hypothetical situation. However, if we look at the actual 'net result' of the exit of SeaFrance and entry of DFDS and MFL in Dover–Calais, by looking at volumes and market shares in May to October 2011 and in May to October 2012, we can note that although the total market declined by 3.2 per cent, P&O volumes increased by 12 per cent and Eurotunnel's by 8 per cent, while DFDS's Dover–Dunkirk volume fell by 17 per cent. P&O and Eurotunnel saw an increase in their market shares from 25 to 29 per cent and from 42 to 47 per cent respectively, while DFDS's Dover–Dunkirk share fell from 18 to 16 per cent. However, as seems clear, DFDS cannibalized a significant amount of its own business from the Dover–Dunkirk route when it entered Dover–Calais, therefore it is likely to be better to look

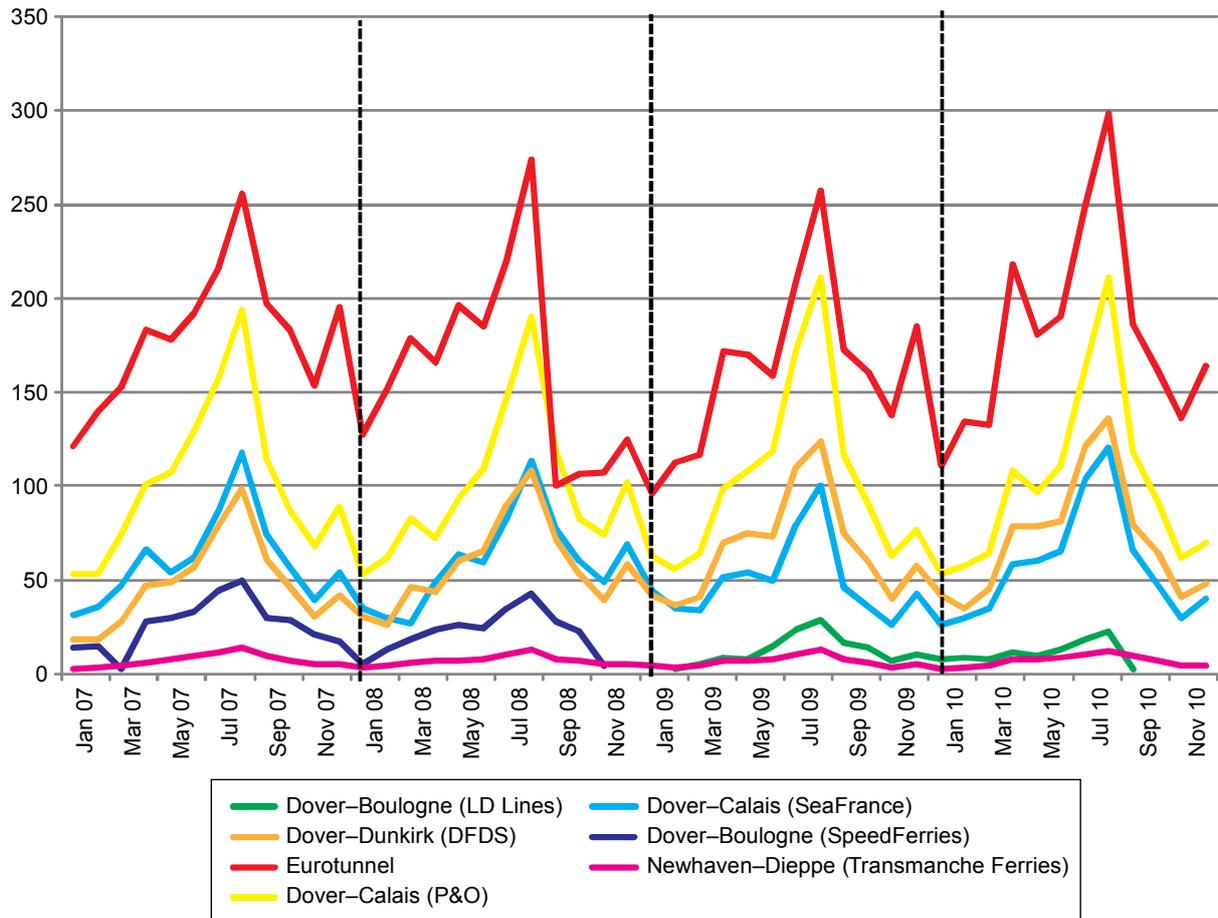
at both DFDS routes together. Using this approach, total DFDS volumes grew by 15 per cent in May to October 2012 compared with May to October 2011, and DFDS market share (combined) grew from 18 to 22 per cent. Also, irrespective of the approach used (see Tables 14 and 15 above), DFDS as a whole experienced a net gain from the entry to the Dover–Calais route, as it gained volumes compared with both hypothetical situations.

Tunnel fire in September 2008 and its aftermath

67. Figure 18 shows the evolution of volumes transported via the short sea in 2007 to 2010, and Figure 19 shows market shares in the same period. Analysing the effects of the fire is more difficult in passengers than in freight, because at the same time SpeedFerries (which had a material passenger volume) was exiting the market and LD Lines was entering it (February 2009), and similar to freight the economic crisis was a significant background factor complicating these events.

FIGURE 18

Passenger traffic on the short sea ('000 cars), 2007 to 2010



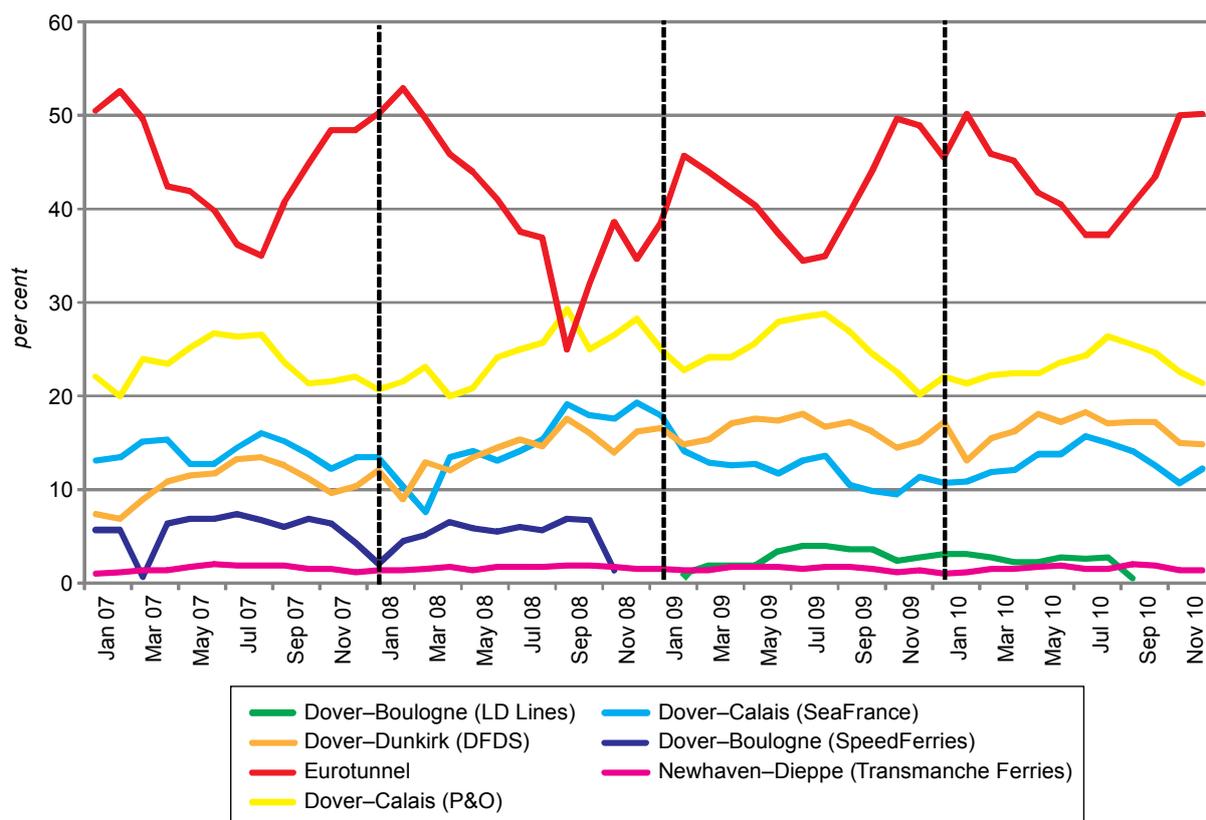
Source: IRN Research.

Notes:

1. Cars only.
2. Dotted lines show January.

FIGURE 19

Market shares in passenger traffic on the short sea, 2007 to 2010



Source: IRN Research, CC calculations.
 Note: Cars only. Dotted lines show January.

68. [Annex 1](#), Tables 1 to 3, show that in 2008 the total market contracted by 5 per cent, Eurotunnel's volumes fell by 11 per cent and its market share fell from 43 per cent in 2007 to 40 per cent in 2008. However, different dynamics appear if we look at different time periods within the year—see Table 16.
69. During the first eight months of 2008 the total market remained quite stable compared with the same period in 2007 (see first section of Table 16). At the same time, individual operators saw their volumes change quite a lot. P&O and SeaFrance were losing volumes whereas DFDS and Eurotunnel were gaining them.

TABLE 16 Change in volumes following Channel Tunnel fire in September 2008

	<i>Speed Ferries</i>	<i>P&O</i>	<i>SeaFrance</i>	<i>DFDS</i>	<i>Trans- manche</i>	<i>Euro- tunnel</i>	<i>Total short sea</i>
Volume, Jan–Aug 2007 ('000)	215	870	500	394	59	1,438	3,476
Volume, Jan–Aug 2008 ('000)	189	809	458	469	58	1,499	3,482
<i>Change (year-on-year) (%)</i>	-12.2	-6.9	-8.5	19.2	-1.5	4.2	0.2
Market share, Jan–Aug 2007 (%)	6	25	14	11	2	41	100
Market share, Jan–Aug 2008 (%)	5	23	13	13	2	43	100
Volume, Sep–Oct 2007 ('000)	58	202	131	107	16	381	894
Volume, Sep–Oct 2008 ('000)	50	201	137	124	14	207	734
<i>Change (year-on-year) (%)</i>	-13.3	-0.4	4.6	16.2	-8.6	-45.7	-17.9
Market share, Sep–Oct 2007 (%)	6	23	15	12	2	43	100
Market share, Sep–Oct 2008 (%)	7	27	19	17	2	28	100
Hypothetical volume, Sep–Oct 2008, using market shares in Sep–Oct 2007 ('000)	47	166	107	88	13	312	734
Difference from actual volume, Sept–Oct 2008 ('000)	2.7	35.4	29.4	36.6	1.5	-105.5	0
Diversion ratio (%)	3	34	28	35	1		
Market shares (excl Eurotunnel), Sep–Oct 2007 (%)	11	39	25	21	3		

Source: IRN Research, CC calculations.

Note: Cars only.

70. In order to separate the effect of the exit of SpeedFerries, we analyse the period of September to October 2008 (see Table 16). We apply the market shares of September to October 2007 to the total market volume in September to October 2008. However, as noted above, it may be the case that some Eurotunnel volumes left the market and thus total market volume reduced. Also, looking at pre-September 2008 dynamics, we see that DFDS was gaining market share, and so applying 2007 market shares may underestimate the volumes it gained from Eurotunnel. With these caveats in mind, we find that in September to October 2008, 34 per cent of volumes lost by Eurotunnel went to P&O, 28 per cent to SeaFrance, and 35 per cent to DFDS. DFDS seems to outperform other operators in capturing Eurotunnel's customers when compared with looking at the potential distribution of volumes according to market shares.
71. Looking at other routes, in the first eight months of 2008 passenger volumes in the North Sea contracted by 2 per cent compared with January to August 2007, and in the Western Channel they grew by 7 per cent. However, similar to the short sea,

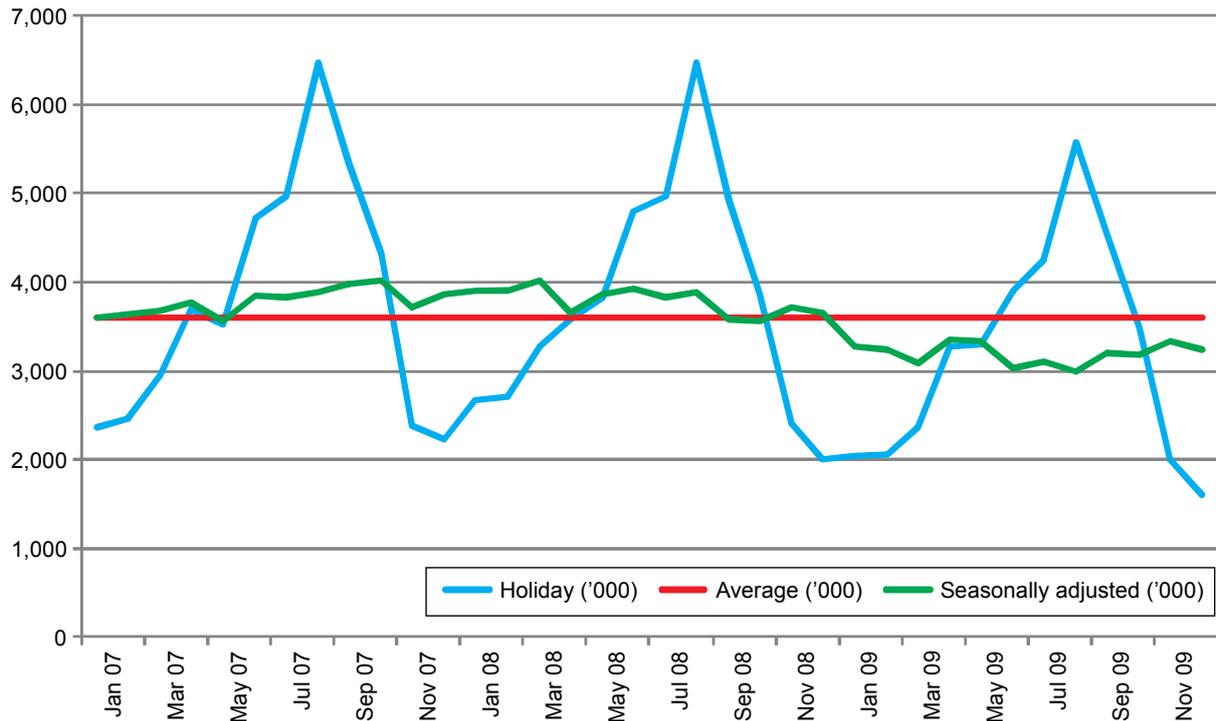
September to October 2008 was disappointing, and volumes on both routes contracted year on year by 8 per cent and 12 per cent respectively.

72. To determine whether the decline of passenger traffic at the end of 2008 reflected the general dynamics in the tourism market, we looked at 2007 to 2009 monthly data provided by the Office for National Statistics (ONS) on UK residents travelling overseas. We looked at both the number of people travelling on holiday and the number of people travelling to the EU15 and find very similar trends as shown in the figures below. After seasonal adjustments,¹¹ we find that the number of travellers started to fall around October 2008 following the effects of the economic downturn. However, a sharper decline did not occur until mid-2009. This is consistent with the hypothesis that a sharp decline in Eurotunnel's passenger volumes was not absorbed by ferry operators and brought the short-sea passenger market down as opposed to the freight market.

¹¹ Seasonal adjustments are calculated by first finding the residual volume for each month (actual number of passengers minus the monthly average across all three years). The residuals for the same month across the three years are then averaged to produce the seasonal factor. Finally, the seasonally adjusted value is produced by the sum of the actual volume and the seasonal factor.

FIGURE 20

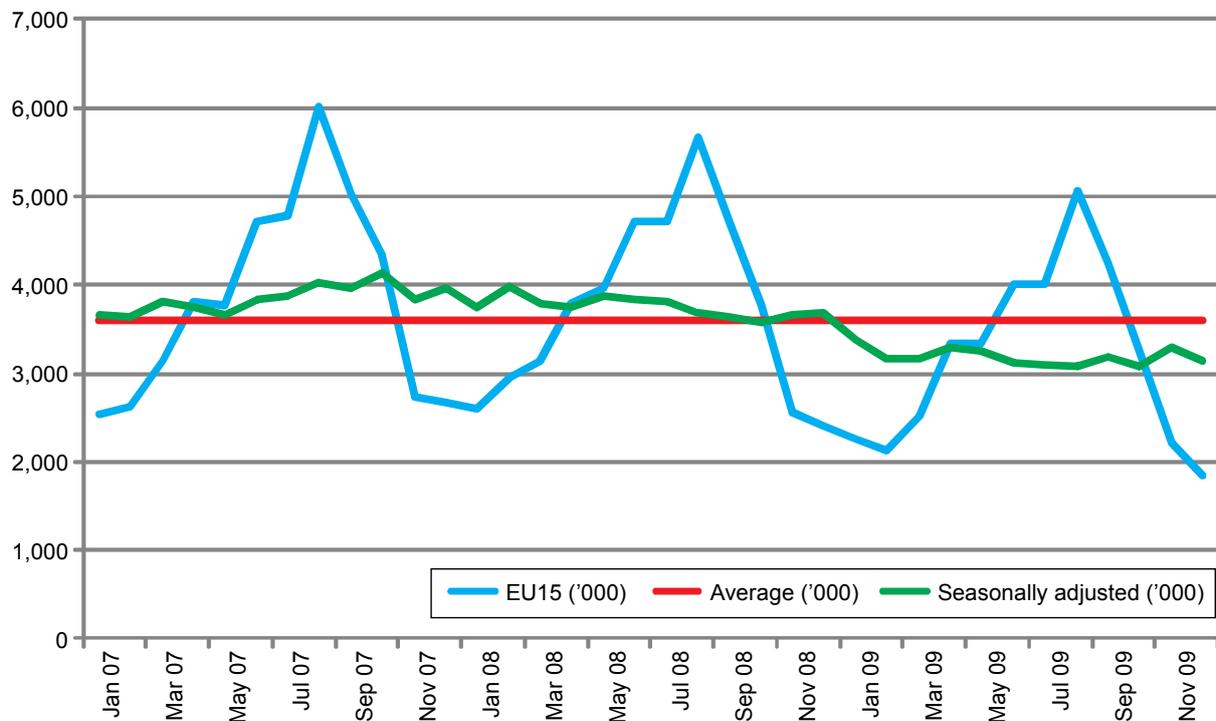
UK residents' overseas holiday travel, 2007 to 2009



Source: Overseas Travel and Tourism, Dec 2009, Table 5b (provided by the ONS).

FIGURE 21

UK residents' overseas travel to EU15, 2007 to 2009

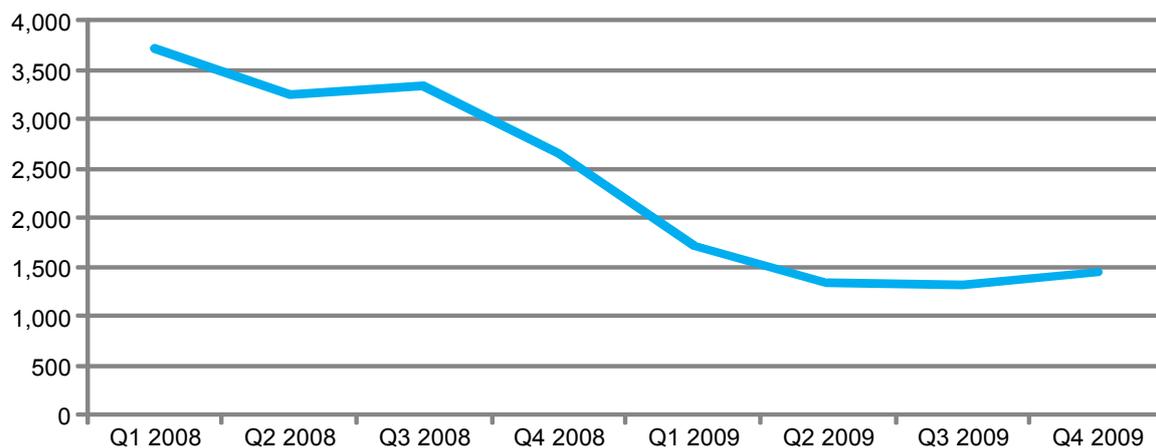


Source: Overseas Travel and Tourism, Dec 2009, Table 4b (provided by the ONS).

73. At the same time, we note that the expenditure on the tourism sector as part of GDP took a significant hit in around the fourth quarter in 2008. This is shown in Figure 22 using data provided and seasonally adjusted by the ONS. The downward trend shows a more dramatic drop starting in Q4 2008 and continuing in Q1 2009.

FIGURE 22

Household expenditure on tourism (2005 prices), seasonally adjusted



Source: Quarterly National Accounts, Fourth Quarter 2009, Table E3 Household Final Consumption Expenditure by Purpose – Chained Volume Measures.

Passenger data tables

TABLE 1 **Passenger traffic on the short sea, 2007 to 2012**

Operator	'000 cars					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Dover–Boulogne (LD Lines)	-	-	138	100	-	-
Dover–Boulogne (SpeedF)	311	243	-	-	-	-
Dover–Calais (DFDS)	-	-	-	-	-	211
Dover–Calais (P&O)	1,229	1,186	1,238	1,206	1,235	1,218
Dover–Calais (SeaF)	724	712	600	679	575	-
Dover–Calais (MFL)	-	-	-	-	-	19
Dover–Dunkirk (DFDS)	573	691	802	850	859	667
Newhaven–Dieppe (Transmanche Ferries)	84	83	77	82	86	79
Short-sea ferries	2,921	2,914	2,855	2,917	2,754	2,192
Eurotunnel	2,168	1,938	1,949	2,161	2,307	2,085
Total short sea	5,089	4,852	4,804	5,078	5,061	4,278

Source: IRN Research.

Note: Cars only.

TABLE 2 **Market shares, passenger traffic on the short sea, 2007 to 2012**

Operator	per cent					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Dover–Boulogne (LD Lines)	-	-	3	2	-	-
Dover–Boulogne (SpeedF)	6	5	-	-	-	-
Dover–Calais (DFDS)	-	-	-	-	-	5
Dover–Calais (P&O)	24	24	26	24	24	28
Dover–Calais (SeaF)	14	15	12	13	11	-
Dover–Calais (MFL)	-	-	-	-	-	0
Dover–Dunkirk (DFDS)	11	14	17	17	17	16
Newhaven–Dieppe (Transmanche Ferries)	2	2	2	2	2	2
Short-sea ferries	57	60	59	57	54	51
Eurotunnel	43	40	41	43	46	49
Total short sea	100	100	100	100	100	100

Source: IRN Research.

Note: Cars only.

TABLE 3 **Growth of volumes of passenger traffic of selected operators on the short sea, 2007 to 2012**

Operator	per cent				
	2008	2009	2010	2011	2012 Jan–Oct*
Dover–Calais (P&O)	-3	4	-3	2	14
Dover–Calais (SeaF)	-2	-16	13	-15	-
Dover–Dunkirk + Dover– Calais (DFDS)	20	16	6	1	15
Short-sea ferries	0	-2	2	-6	-11
Eurotunnel	-11	1	11	7	6
Total short sea	-5	-1	6	0	-3

Source: IRN Research.

*Compared with January–October 2011.

Note: Cars only.

Freight data tables

TABLE 1 Freight traffic on the short sea, 2007 to 2012

Operator	'000 vehicles					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Dover–Boulogne (LD Lines)	-	-	16	53	-	-
Dover–Calais (DFDS)	-	-	-	-	-	101
Dover–Calais (P&O)	1,076	1,061	1,139	1,034	1,068	1,079
Dover–Dieppe (LD Lines)	-	-	2	-	-	-
Dover–Dunkirk (DFDS)	518	536	517	452	468	443
Dover–Calais (MFL)	-	-	-	-	-	4
Dover–Calais (SeaFrance)	771	712	628	549	533	-
Newhaven–Dieppe (Transmanche Ferries)	36	45	37	38	38	34
Short-sea ferries	2,400	2,354	2,340	2,127	2,107	1,662
Eurotunnel	1,415	1,254	769	1,089	1,263	1,228
Short sea total	3,815	3,608	3,109	3,216	3,371	2,889

Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

TABLE 2 Market shares, freight traffic on the short sea, 2007 to 2012

Operator	per cent					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Dover–Boulogne (LD Lines)	-	-	1	2	-	-
Dover–Calais (DFDS)	-	-	-	-	-	3
Dover–Calais (P&O)	28	29	37	32	32	37
Dover–Dieppe (LD Lines)	-	-	0	-	-	-
Dover–Dunkirk (DFDS)	14	15	17	14	14	15
Dover–Calais (MFL)	-	-	-	-	-	0
Dover–Calais (SeaFrance)	20	20	20	17	16	-
Newhaven–Dieppe (Transmanche Ferries)	1	1	1	1	1	1
Short-sea ferries	63	65	75	66	63	58
Eurotunnel	37	35	25	34	37	42
Short sea total	100	100	100	100	100	100

Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

TABLE 3 Growth of volumes of freight traffic of selected operators on the short sea, 2007 to 2012

Operator	per cent					
	2007	2008	2009	2010	2011	2012 Jan–Oct*
Dover–Calais (P&O)	-1	-1	7	-9	3	24
Dover–Dunkirk + Dover– Calais (DFDS)	9	3	-3	-13	4	46
Dover–Calais (SeaFrance)	1	-8	-12	-13	-3	-
Short-sea ferries	2	-2	-1	-9	-1	-7
Eurotunnel	9	-11	-39	42	16	19
Short sea total	4	-5	-14	3	5	3

Source: IRN Research.

*Compared with January to October 2011.

Note: Includes accompanied and unaccompanied traffic.

Prices and volumes

Freight analysis

Introduction

1. In this section of the appendix we present the dynamics of prices and volumes of freight in the short sea, Western Channel and North Sea in 2007 to 2012.

Data

2. The data used in this section was provided by GET, P&O, DFDS and Brittany Ferries. We excluded internal traffic from GET data.

Composition of freight traffic

3. Freight represents around [X] per cent of the total revenues of ferry operators¹. For Eurotunnel since 2009 it has been around [X] per cent. Table 1 shows relative shares of freight in total revenues (from freight and passengers) of operators in 2007 to 2012.

TABLE 1 Freight share in total revenues, 2007 to 2012

Operator	per cent					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel	[X]	[X]	[X]	[X]	[X]	[X]
P&O	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Dunkirk	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Calais						[X]
MFL						[X]

Source: Operators, CC calculations.

4. A significant number of customers directly negotiate their rates with operators. We have detailed information only for Eurotunnel and P&O—see Table 2.

¹ We excluded revenue from foot passengers for P&O.

TABLE 2 Types of accounts by volume, 2007 to 2012

Operator	2007	2008	2009	2010	2011	per cent
						2012 Jan–Oct
<i>Eurotunnel*</i>						
Negotiated account	[X]	[X]	[X]	[X]	[X]	[X]
Standard rate	[X]	[X]	[X]	[X]	[X]	[X]
Distributor	[X]	[X]	[X]	[X]	[X]	[X]
<i>P&O</i>						
Negotiated account	[X]	[X]	[X]	[X]	[X]	[X]
Standard rate	[X]	[X]	[X]	[X]	[X]	[X]
Distributor	[X]	[X]	[X]	[X]	[X]	[X]

Source: Operators, CC calculations.

*For Eurotunnel, the type of account was provided as of 2012.

5. DFDS informed us that on average, [X] per cent of its volumes were sold at negotiated rates, distributors accounted for [X] per cent and standard rates applied to [X] per cent.
6. For P&O, the volume of traffic is generally balanced in both directions, to and from the Continent, whereas for Eurotunnel the volume traffic coming from France is usually slightly greater—see Table 3. There are no significant monthly changes in these patterns.

TABLE 3 Volume by direction of travel, 2007 to 2012

Operator	2007	2008	2009	2010	2011	per cent
						2012 Jan–Oct
<i>Eurotunnel</i>						
Calais–Folkestone	[X]	[X]	[X]	[X]	[X]	[X]
Folkestone–Calais	[X]	[X]	[X]	[X]	[X]	[X]
<i>P&O</i>						
Calais–Dover	[X]	[X]	[X]	[X]	[X]	[X]
Dover–Calais	[X]	[X]	[X]	[X]	[X]	[X]

Source: Operators, CC calculations.

7. The largest proportion of volumes for both P&O and Eurotunnel is accounted for by large vehicles—see Table 4. For Eurotunnel, there is a difference in traffic composition between negotiated accounts and standard account holders, with smaller vehicles being quite important for the latter. For P&O, there is no significant differ-

ence in traffic composition for different types of accounts. There do not seem to be significant differences in traffic composition depending on direction of travel.

TABLE 4 Volume by type of vehicle (freight), 2007 to 2012

Operator	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel						
<i>Negotiated account</i>						
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
<i>Standard account</i>						
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
P&O—all types of account						
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]

Source: Operators, CC calculations.

8. For Eurotunnel, we also have data about which currency was used for billing—euros or British pounds (GBP)—see Table 5.

TABLE 5 Eurotunnel share of freight volume billed in euros, 2007 to 2012

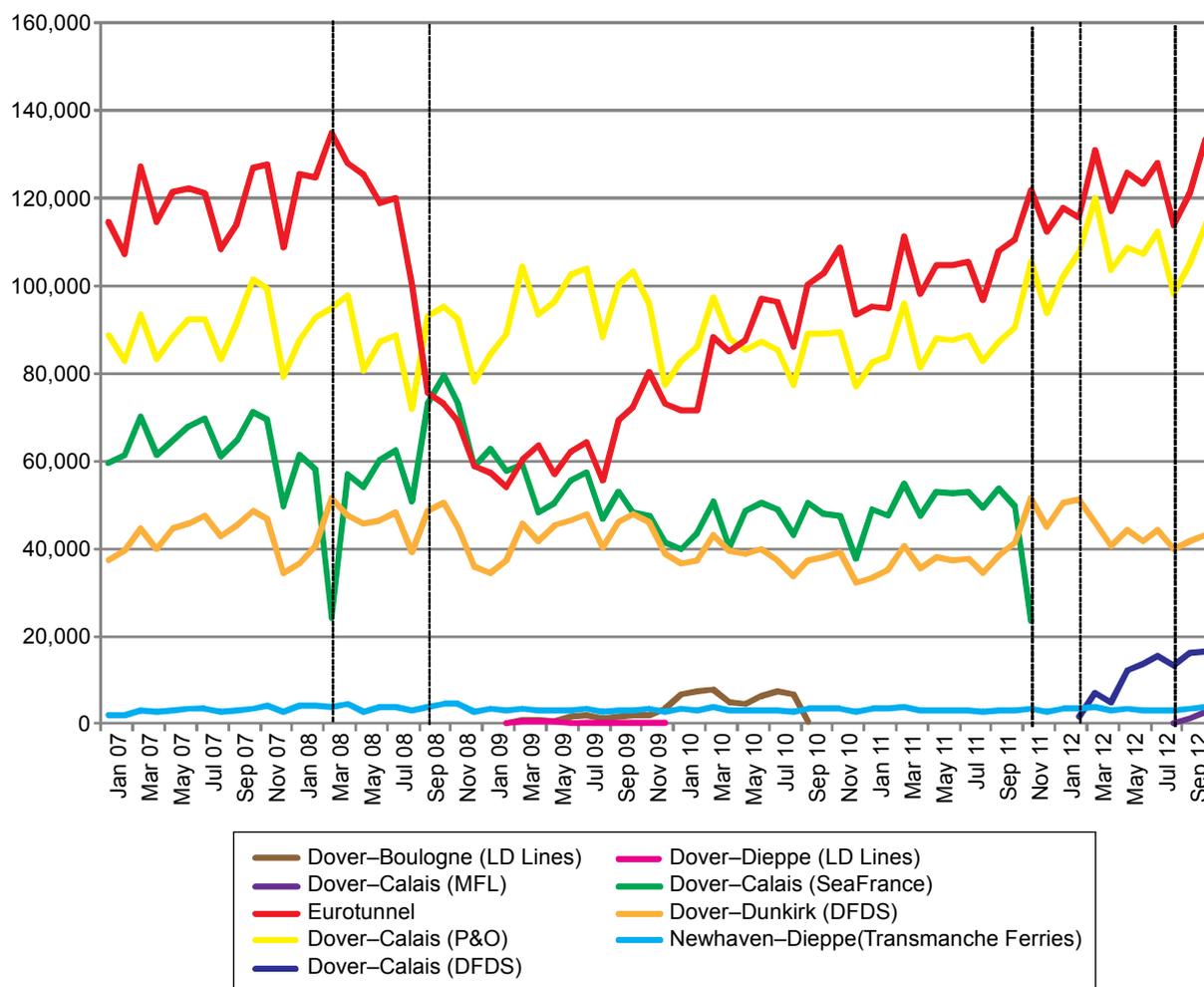
	2007	2008	2009	2010	2011	2012 Jan–Oct
[X]	[X]	[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]	[X]	[X]

Source: GET, CC calculations.

9. Figure 1 shows the volume dynamics in the short sea in 2007 to 2012. Dotted lines represent significant events. We do not have volume data for the Ramsgate–Ostend route operated by Transeuropa.

FIGURE 1

Freight traffic on the short sea (number of vehicles), 2007 to 2012



Source: IRN Research.

Note: Includes accompanied and unaccompanied traffic.

Price dynamics

10. Table 6 shows average yearly prices in GBP for one single-leg vehicle.² Table 7 shows the respective prices recalculated in euros using average monthly exchange rates. These average prices include all account types and all vehicle types.

² These are not prices billed in GBP only, but average prices where all revenue is recalculated into GBP using average monthly exchange rates, and then divided by total volume (excluding internal traffic). Then we apply monthly exchange rates to calculate the same prices in euros, which, again, are not the same as average prices billed in euros.

TABLE 6 **Average freight prices, GBP, 2007 to 2012**

Operator	£					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel	[X]	[X]	[X]	[X]	[X]	[X]
P&O	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Dunkirk	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Calais						[X]
MyFerryLink						[X]

Source: Operators, CC calculations.

TABLE 7 **Average freight prices, euros, 2007 to 2012**

Operator	€					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel	[X]	[X]	[X]	[X]	[X]	[X]
P&O	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Dunkirk	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Calais						[X]
MyFerryLink						[X]

Source: Operators, CC calculations.

11. [X]

12. Figures 2 and 3 show yearly price dynamics in GBP and euros respectively (these are based on Tables 6 and 7 above). [X] It seems that changes in the exchange rate between the euro and the British pound have affected the price dynamics.

FIGURE 2

Freight price per crossing, GBP, 2007 to 2012

[X]

Source: Operators, CC calculations.

FIGURE 3

Freight price per crossing, euros, 2007 to 2012

[X]

Source: Operators, CC calculations.

13. Figure 4 shows that there is significant premium of Eurotunnel's price when compared with DFDS and P&O prices. In 2009, the premium increased significantly. Eurotunnel's price went up relative to ferry operators in 2009, from [X] per cent in 2008 to [X] per cent, and then fell again in 2010, and has remained relatively stable since then.

FIGURE 4

Eurotunnel's 'premium' over prices of DFDS and P&O, 2007 to 2012 (per cent)

[X]

Source: Operators, CC calculations.

14. Figures 5 and 6 show monthly price dynamics and show the relevant exchange rates (on the right-hand axis). As in the discussion above, these are average prices expressed in either GBP or euros, and cover all volumes irrespective of currency in which they were billed in (we analyse prices by billing currency in sections below). Figure 5 shows that Eurotunnel's prices expressed in GBP seem to follow the exchange rate very closely, which would be consistent with prices being set in euros and most volumes being billed in euros as well. When the GBP exchange rate against the euro went from 0.79 in October 2008 to 0.92 in January 2009 (16 per cent depreciation), Eurotunnel's prices went up by [X] per cent. There was another Eurotunnel price increase in March 2009, when price went from £[X] to £[X] ([X] per cent increase), whereas exchange rate went up by only 3 per cent.
15. The ferries' prices experienced a short-lived increase in December 2008, but by only [X] per cent, and then prices went down again. This is consistent with a scenario where Eurotunnel bills a larger proportion of volume in euros than ferry operators. Alternatively, ferry operators may have been quicker to react to a change in the exchange rate.

16. P&O informed us that in 2008, [redacted] per cent of its volumes were billed in euros, then in 2009 and 2010 [redacted].

TABLE 8 P&O: currency used for billing

per cent

<i>Dep year</i>	£	€
2007	[redacted]	[redacted]
2008	[redacted]	[redacted]
2009	[redacted]	[redacted]
2010	[redacted]	[redacted]
2011	[redacted]	[redacted]
2012	[redacted]	[redacted]

Source: P&O.

17. As discussed further below, it appears that some of Eurotunnel's price increase was (at least initially) primarily due to exchange rate movements where the tunnel chose to maintain its euro rates and become less competitive in GBP. It appears that towards the end of the period of post-fire capacity restriction on the tunnel, a decision was made to attempt to maintain a high price premium. This resulted in significant market share loss to the short-sea ferries, and ultimately a reversal of the policy during 2009 and 2010. These developments are illustrated in the following analysis.

FIGURE 5

Monthly freight prices, GBP, 2007 to 2012

[redacted]

Source: Operators, CC calculations.

FIGURE 6

Monthly freight prices, euros, 2007 to 2012

[redacted]

Source: Operators, CC calculations.

18. Figure 7 shows the ratio of Eurotunnel's price to the average price of P&O and DFDS, and how this ratio is related to Eurotunnel's market share. It seems that while the initial drop in market share Eurotunnel experienced in September 2008 can be

explained by the fire, the extended period of low market share was precipitated by the price ratio rising significantly following the period effect by the fire.

FIGURE 7

Relative prices versus market shares, 2007 to 2012

[✂]

Source: Operators, CC calculations.

Prices billed in different currencies

19. Figures 8 and 9 show price dynamics for Eurotunnel, separately for volumes billed in euros and pounds, only for types of vehicles '[✂]'. GET confirmed that the currency in which volume is billed is the same currency in which the price was set, and so separating prices billed in each currency would eliminate the effect of the exchange rate changes.

FIGURE 8

Eurotunnel's prices for vehicles above 15m, billed in GBP, 2007 to 2012

[✂]

Source: GET, CC calculations.

FIGURE 9

Eurotunnel's prices for vehicles above 15m, billed in euros, 2007 to 2012

[✂]

Source: GET, CC calculations.

20. Prices billed in GBP have been rising slowly in 2007/08, and then there was a spike in February to March 2009, when average price went up from £[✂] in January 2009 to £[✂] in March, an increase of [✂] per cent. In April 2010, there was a slight drop in prices, and after that they have been slowly rising, reaching £[✂] in October 2012.
21. Prices billed in euros exhibit a different pattern, remaining more or less constant in 2007/08, then increasing from €[✂] to €[✂] in January to March 2009 (a [✂] per

cent increase), then gradually dropping to €[REDACTED] in July to August 2010, and then slowly rising since then, reaching €[REDACTED] in October 2012.

22. These figures suggest that the initial increase of October 2008 to January 2009 that we see in Figure 5 can be attributed to the change in exchange rates. However, subsequent increase in February to March 2009 occurred in both currencies and was not related to exchange rate changes. We note that this increase occurred around the time of the return of the tunnel to normal operating capacity in February.

23. [REDACTED]

Prices by vehicle and account type

24. We have detailed data by type of vehicle and account only for P&O and Eurotunnel. Figures 10 and 11 below show prices for vehicles [REDACTED] (for Eurotunnel) and tractor trailers for P&O. For Eurotunnel we show standard and negotiated accounts and for P&O negotiated accounts only. Figure 10 shows prices in GBP (unlike the previous section, this price includes all volumes billed in all currencies recalculated into pounds using monthly exchange rates), and Figure 11 shows the same price, but recalculated in euros using monthly exchange rates.

25. [REDACTED]

FIGURE 10

Prices for vehicles above 15m and tractor trailers, GBP, 2007 to 2012

[REDACTED]

Source: Operators, CC calculations.

FIGURE 11

Prices for vehicles above 15m and tractor trailers, euros, 2007 to 2012

[REDACTED]

Source: Operators, CC calculations.

26. [✂]

Western Channel and North Sea

27. Figure 12 shows prices per vehicle on Brittany Ferries' Western Channel routes, and Figure 13 shows prices on P&O's North Sea routes.

FIGURE 12

Prices in Western Channel, GBP, 2009 to 2012

[✂]

Source: Operators, CC calculations.

FIGURE 13

Prices in the North Sea, GBP, 2007 to 2012

[✂]

Source: Operators, CC calculations.

28. Table 9 and Figure 14 show average yearly prices of Eurotunnel, short-sea ferries and in Western Channel and North Sea. We note that the pricing trend in the short sea has been quite different from that of the North Sea and Western Channel. Short-sea ferry prices have decreased steadily since 2008, whereas North Sea and Western Channel prices have increased over time. This observation is inconsistent with the North Sea and Western Channel being in the same economic market.³

TABLE 9 Average freight prices, GBP, 2007 to 2012

Operator	£					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Short-sea ferries	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
North Sea: P&O	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Western Channel: BF	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Operators, CC calculations.

Notes:

1. P&O price is based on Hull–Zeebrugge and Hull–Rotterdam routes; BF price is based on Caen–Portsmouth, Cherbourg–Poole, Roscoff–Plymouth and St Malo–Portsmouth routes.

2. N/A = not available.

³ If the regions were in the same economic market, price levels might differ, but we would expect price trends to be similar.

FIGURE 14

Average prices, GBP, 2007 to 2012



Source: Operators, CC calculations.

Note: P&O price is based on Hull–Zeebrugge and Hull–Rotterdam routes; BF price is based on Caen–Portsmouth, Cherbourg–Poole, Roscoff–Plymouth and St Malo–Portsmouth routes.

Passengers: prices and volumes

Introduction

29. In this section, we present the dynamics of prices⁴ and volumes of passenger traffic in the short sea, Western Channel and North Sea in 2007 to 2012.

Data

30. The data used in this section was provided by GET, P&O, DFDS and Brittany Ferries. We excluded foot passengers from P&O data. We excluded ‘no ticket’ type of traffic from Eurotunnel volumes and financial adjustment from its passenger revenues, as it was not clear how this adjustment should be applied across vehicle types and directions of traffic.

Composition of passenger traffic

31. There are two broad types of passenger traffic on the short sea, car and coach, with car representing a significant majority of revenue—see Table 10.

⁴ GET expressed its concern about our use of the term ‘average yearly prices’. Eurotunnel uses the term ‘average yearly yield (passenger)’, as there are many ticket types for the same vehicles. The combination of these produces an average yield (and there may not actually be any tickets sold at that ‘price’). However, we refer to ‘price’ as the price of a crossing by a vehicle and we believe that this term is not misleading to a reader in this context.

TABLE 10 Revenue shares of cars in passenger traffic, 2007 to 2012

Operator	2007	2008	2009	2010	2011	per cent
						2012 Jan–Oct
Eurotunnel	[X]	[X]	[X]	[X]	[X]	[X]
P&O	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Dunkirk	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Calais						[X]
MFL						[X]

Source: Operators, CC calculations.

32. For P&O and Eurotunnel, we have data at a more disaggregated level. For Eurotunnel, the category ‘car’ includes sub-categories: campervan, campervan towing, car, car + caravan, car + trailer, clubclass, large van, large van towing, minibus, minibus towing, and motorcycle, with subcategory ‘car’ representing [X] per cent of both volume (calculated as number of vehicles), and revenue of the category ‘car’.
33. For P&O, the category ‘car’ consists of subcategories: cars, large tourist, Motorcycle, other, towed vehicles, and van. ‘Cars’ account for [X] per cent of volume and [X] per cent of revenue of the category ‘car’. For DFDS, we do not have information about sub-categories of car and coach. Therefore, for consistency we use only the two types of passenger traffic: car and coach, simply summing up the volume of the sub-categories in each category.
34. Car traffic is evenly balanced in both directions for both Eurotunnel and P&O.

TABLE 11 Volume by direction of travel (passenger), 2007 to 2012

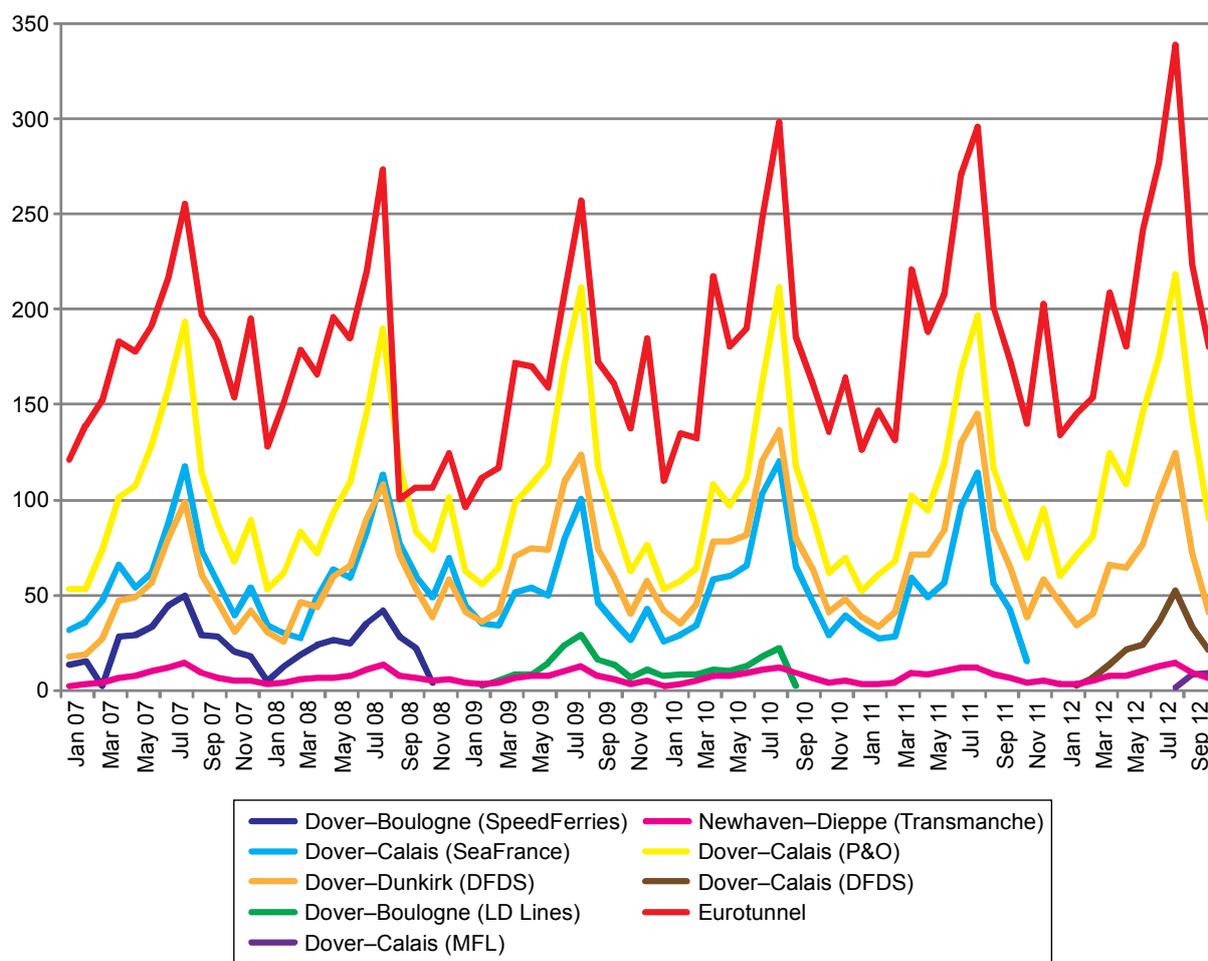
Operator	2007	2008	2009	2010	2011	per cent
						2012 Jan–Oct
Eurotunnel, car:						
Calais–Folkestone	[X]	[X]	[X]	[X]	[X]	[X]
Folkestone–Calais	[X]	[X]	[X]	[X]	[X]	[X]
Eurotunnel, coach:						
Calais–Folkestone	[X]	[X]	[X]	[X]	[X]	[X]
Folkestone–Calais	[X]	[X]	[X]	[X]	[X]	[X]
P&O, car:						
Calais–Dover	[X]	[X]	[X]	[X]	[X]	[X]
Dover–Calais	[X]	[X]	[X]	[X]	[X]	[X]
P&O, coach:						
Calais–Dover	[X]	[X]	[X]	[X]	[X]	[X]
Dover–Calais	[X]	[X]	[X]	[X]	[X]	[X]

Source: Operators, CC calculations.

35. Figure 15 shows the volume dynamics in the short sea in 2007 to 2012. We do not have volume data for the Ramsgate–Ostend route operated by Transeuropa.

FIGURE 15

Passenger traffic on the short sea ('000), 2007 to 2012



Source: IRN Research.
 Note: Cars only.

Price dynamics

36. Table 12 shows average yearly prices⁵ in GBP for a car trip. Eurotunnel is [%] per cent more expensive than P&O, and [%] per cent more expensive than DFDS.

⁵ Passenger prices are highly seasonal. For 2012, we show only the average price for January–October; therefore without November and December, the average price in 2012 seems higher than price of previous years.

TABLE 12 Average yearly prices (passenger), car, 2007 to 2012

Operator	£					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel	[X]	[X]	[X]	[X]	[X]	[X]
P&O	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Dunkirk	[X]	[X]	[X]	[X]	[X]	[X]
DFDS Dover–Calais						[X]
MFL						[X]

Source: Operators, CC calculations.

37. Only Eurotunnel and P&O have experienced a steady volume of coach traffic. Table 13 shows average prices for a coach. For coaches, unlike for cars, Eurotunnel's prices are at broadly the same level as P&O's.

TABLE 13 Average prices, coach, 2007 to 2012

Operator	£					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel	[X]	[X]	[X]	[X]	[X]	[X]
P&O	[X]	[X]	[X]	[X]	[X]	[X]

Source: Operators, CC calculations.

38. Passenger traffic is very seasonal. For ferries, summer months account for about [X] per cent of the yearly traffic, for Eurotunnel [X] per cent.

39. Figure 16 shows monthly car prices. Prices also follow a seasonal pattern, with hikes in August, January and around holidays.

FIGURE 16

Monthly passenger prices for cars, GBP, 2007 to 2012

[X]

Source: Operators, CC calculations.

40. Figure 17 shows the price ratio of Eurotunnel over average ferry prices for car traffic. Unlike in freight, relative prices for passenger traffic have been relatively stable in 2007 to 2012, fluctuating around [✂].

FIGURE 17

Relative price of Eurotunnel, 2007 to 2012

[✂]

Source: Operators, CC calculations.

Western Channel and North Sea

41. Figure 18 shows prices per vehicle on Brittany Ferries' Western Channel routes, and Figure 19 prices on P&O's North Sea routes.
42. P&O provided data on total number of vehicles and total revenue on these routes, without separation between cars and coaches; therefore the price is the mix of the two. However, according to Ferrystat data, coach traffic is very low across the North Sea: in January to October 2012 P&O transported [✂] coaches and [✂] cars through Hull–Rotterdam and Hull–Zeebrugge routes.
43. Brittany Ferries also did not separate passenger traffic between car and coach, but as with the North Sea, coach traffic across the Western Channel is limited: according to Ferrystat, in January to October 2012 a total of [✂] coaches were transported via all Western Channel routes, together with [✂] cars. Therefore we believe that the prices shown are a good approximation of prices for cars only.

FIGURE 18

Prices in Western Channel (passenger), GBP, 2009 to 2012

[✂]

Source: Operators, CC calculations.

FIGURE 19

Prices in the North Sea (passenger), GBP, 2006 to 2012



Source: Operators, CC calculations.

44. Table 14 and Figure 20 show average yearly passenger prices of Eurotunnel, short-sea ferries and ferries crossing the Western Channel and North Sea.

TABLE 14 **Average prices (passenger), 2007 to 2012**

Operator	£					
	2007	2008	2009	2010	2011	2012 Jan–Oct
Eurotunnel, cars only	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Short-sea ferries, cars only	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
North Sea: P&O	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Western Channel: BF	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Operators, CC calculations.

Note: P&O price is based on Hull–Zeebrugge and Hull–Rotterdam routes; BF price is based on Caen–Portsmouth, Cherbourg–Poole, Roscoff–Plymouth and St Malo–Portsmouth routes.

FIGURE 20

Average prices (passenger), GBP, 2007 to 2012



Source: Operators, CC calculations.

Note: P&O price is based on Hull–Zeebrugge and Hull–Rotterdam routes; BF price is based on Caen–Portsmouth, Cherbourg–Poole, Roscoff–Plymouth and St Malo–Portsmouth routes.

45. As in the freight market, we note that the pricing trend in the short sea has been quite different from that of the North Sea and Western Channel. Short-sea ferry and tunnel prices have been stable 2008, whereas North Sea and Western Channel prices have increased over time. This observation is inconsistent with the North Sea and Western Channel being in the same economic market.⁶

⁶ If the regions were in the same economic market, price levels might differ, but we would expect price trends to be similar.

Bundling of tunnel- and ferry-based services

Bundling and potential competition concerns

1. A number of third parties raised concerns that as a result of the acquisition Group Eurotunnel is potentially able to sell a bundle of its shuttle and MFL services, and that this might raise competition concerns.¹ With the exception of coach operators, all the third parties we have spoken to confirm that most passengers are occasional rather than frequent users of cross-Channel services, and hence there is little likelihood of bundling strategies being employed in this market.² The concerns raised, and the analysis below, focus on the freight market.
2. In analysing the potential for competitive harm from bundling, the first question to consider is whether it is likely that a bundling strategy would involve pure or mixed bundling. Pure bundling means that the goods will only be available as a bundle (this strategy can also be referred to as ‘tying’). Mixed bundling means that the goods can be purchased as either a bundle or on a stand-alone basis. The distinction is important because the likely theories of harm differ between the two types of bundling.
3. A company with a very strong market position in a particular product might be able to leverage this position by unilaterally imposing a pure bundling strategy without offering additional benefits to customers. The most likely competition concern that would arise from a pure bundling strategy is customer foreclosure—that is, a concern that the strategy would reduce the demand available to the company’s competitors, perhaps to the extent that competitors are forced to exit the market. As noted above, with a pure bundling strategy there may be little or no offsetting benefit to customers.

¹ For example, submission from [REDACTED], 29 November 2012.

² The conditions of competition for coach operators are very similar to those for freight customers. Our views on the issues raised by bundling in the freight market therefore also apply to coach operators.

4. A mixed bundling strategy implies that customers' option to purchase individual services is maintained. In this case, the bundle is normally sold by offering some form of additional benefit to customers from purchasing the bundle (most likely to be some form of discount). With mixed bundling, competitive foreclosure concerns tend to be reduced as not all customers are likely to purchase the bundle, meaning that competitors that supply only part of the bundle still have some customers available to them.

5. In this case, a pure bundling strategy would involve requiring freight customers that want to use Eurotunnel to *only* use MFL on short-sea routes. We received mixed feedback from third parties when we asked whether it was likely that such a strategy would be practical to implement, and if so, how it might be implemented. Most thought it unlikely that GET could force a bundle on customers. However, at least one third party suggested that GET might achieve this by requiring key customers that require the speed of the tunnel also purchase crossings on MFL in exchange for maintaining reserved space on the tunnel during peak demand periods. We note that if this involved freight customers who would otherwise use rival ferry operators with more attractive crossing schedules to MFL, then this strategy would amount to a form of price increase to customers who required access to the tunnel at peak times. We would expect that if Eurotunnel were able to increase price to customers of this type, it would already have done so pre-merger (to the maximum extent possible), which in turn suggests that it is unlikely that Eurotunnel would be able to extract further value from the customer via a bundling strategy.

6. We have found no evidence in GET's internal documents suggesting that a pure bundling strategy has been contemplated by GET.

7. Under a mixed bundling strategy, freight customers would be able to purchase GET tunnel and ferry services either individually or as a bundle. This would require GET to offer an incentive to customers to purchase the bundle. The most likely incentive would be a discount on either the ferry or the tunnel, or both. Whatever the precise form of the discount, the effect would be that the customer would be offered lower prices for using a combination of both the tunnel and ferry services in order to incentivize increased use of its ferry services. Similarly, whether the discount was offered on the price of the ferry or the tunnel crossing or both, the net economic effect within GET would be that it would be discounting ferry services. This is because the incremental sales that would be achieved would be additional ferry sales, and similarly any incremental cost in the form of reduced revenue due to the discount offered would also be associated with those additional ferry sales. Similarly, whatever the precise form of the discount offered by GET, the economic effect on its ferry-based competitors is that in order to prevent business being lost, they would need to offer a similar level of discount on their own ferry services.

Anti-competitive concerns—mixed bundling

8. Mixed bundling sold by way of offering a discount would result in lower prices to customers. In itself, this is not anti-competitive. Freight customers benefit at least in the short run from the lower prices achieved. For bundling to become a theory of competitive harm, we would need to be satisfied that this was likely to lead to increased prices to customers in the longer term. The most obvious way this might occur is via customer foreclosure. If the strategy successfully attracted sufficient traffic away from GET's rival ferry operators, the combination of low demand and low prices in the supply of ferry services could lead to the exit of DFDS (or P&O). This might then, under certain assumptions, allow the surviving operators to increase prices above the competitive level.

Compass Lexecon report on bundling and profit sacrifice

9. Compass Lexecon submitted on behalf of GET an analysis of a possible bundling strategy. The report considers whether there is the potential for anti-competitive bundling to occur by recognizing that the most aggressive form of anti-competitive bundling is equivalent to a predation strategy in the supply of ferry services: that is, a strategy that applies a discount (via a bundle) such that the effective price³ in the supply of ferry services is less than the average avoidable cost of a ferry operator. This is because once prices are below average avoidable cost, a ferry operator will (putting considerations of strategic behaviour aside) find it optimal to shut down and exit the market.

10. Using this predation-based approach to the issue,⁴ Compass Lexecon calculated the likely cost of such a strategy which showed that the implied financial costs were very significant. The costs were estimated to be in the region of [X] per cent of Eurotunnel's freight revenue, assuming Eurotunnel was required to offer the full discount to all customers, while if it was possible to avoid offering the discount to 'captive' customers who must use the tunnel, the cost could be lowered to [X] per cent of freight revenue. Compass Lexecon argued that for the strategy to be economically rational, it would be necessary for GET to be able then to expect to recoup the losses incurred in forcing the exit of a ferry competitor, and that this would require a very significant increase in MFL prices and profits after exclusion. Compass Lexecon argued that this would not be plausible, as any increase in prices would attract entry or re-entry of a ferry operator given the limited barriers to entry on the short sea, and GET would still face strong competition from the remaining actual competitors. Finally, Compass Lexecon noted that as the bundling strategy only applied in the

³ The term 'effective price' here refers to the net price achieved on the sale of the ferry service, after discounts have been subtracted from the pre-bundle ferry price that would otherwise have applied, if the ferry service was purchased outside the bundle.

⁴ We note that as the strategy modelled involves selling the services of MFL at less than AAC of a ferry operator, this would be considered predation. See, for example, European Commission, [Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings](#), paragraphs 63–64.

freight market and not the passenger market, and short-sea ferry operators serve both markets, the strategy was even less likely to be successful than suggested by the analysis of the potential cost of the strategy and argued lack of ability to recoup the lost profits.

11. The Compass Lexecon report provides a useful framework for evaluating the costs of a hypothetical anti-competitive bundling strategy in the short-sea freight market. In principle, we agree with the choice of average avoidable cost (AAC)⁵ as a benchmark for examining exclusionary effects, which is in line with guidelines issued by the European Commission and the UK competition authorities.⁶

12. We think that the estimated costs of a hypothetical bundling strategy calculated by Compass Lexecon are more likely to be an upper bound estimate of the likely costs of the strategy than a central estimate. This is for two reasons. First, while it is correct that AAC is a useful benchmark in that a ferry operator forced to price below AAC should choose to shut down, it may not be necessary to price this low, as losses will be made if prices are below average total cost. Exit may occur at higher prices (than AAC) if the competitor does not believe that prices will cover total costs in the longer term.⁷ Second, the model used assumes that the full discount needed to drive prices below AAC in the supply of ferry services is applied to all the units sold in the bundle. This is a reasonable assumption if prices are posted. However, in a business-to-business market with individual contract negotiation, it would be possible to employ non-linear pricing strategies with targeted discount structures that resulted in deep discounts being offered on marginal sales of MFL services rather than all GET sales.

⁵ We note that Compass Lexecon used an estimate of 40 per cent for the variable/avoidable ship costs, based on publicly available estimates of the operating costs of a fast car ferry services.

⁶ See, for example, European Commission, *Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*, 2009.

⁷ Though we note that pricing above AAC may result in a longer time period before exit, increasing the likely total cost of forcing exit.

This could have the effect of driving prices below AAC in the supply of ferry services, but at a significantly reduced overall cost.

13. Compass Lexecon argued that it would be difficult to recoup any significant costs incurred via higher prices on MFL. We agree that it is unlikely that MFL would be able to increase its price unilaterally above the competitive level in the supply of ferry services to recoup the costs of a bundling strategy. However, we note that if a competitor exited the market, significant incremental profit could result from higher volumes on MFL even if prices did not rise above the competitive level. We also note that a full analysis of the profit impact would require consideration of any price and volume benefits that might accrue to Eurotunnel should a competing ferry operator exit the market.

Undertakings to the French competition authority

14. We note that GET has given undertakings to the French competition authority that it will not bundle shuttle and ferry services for a period of five years. We note that by the time these undertakings expire it would be reasonable to expect that if MFL is still operating, GET would by then have succeeded in establishing MFL as a viable ferry operator. This suggests that, even if an incentive to bundle currently existed to assist in the development of MFL, there could be less incentive to offer bundles that would involve significant discounts at the time of the expiry of the undertakings.

The ability of DFDS to bundle

15. GET submitted to us that it faced competitors that were capable of engaging in their own bundling strategies. In particular, GET submitted that DFDS and P&O operated a network of ferry routes across Europe and that they were able to bundle across these routes, potentially offering a more attractive bundle than GET could offer via

Eurotunnel and MFL. GET provided documents showing that this was DFDS's stated strategy.

16. DFDS [REDACTED].⁸
17. An analysis of volumes over time on the short sea shows that when DFDS purchased the former Norfolkline ferry operation on Dover–Dunkirk at the end of 2009, the Dover–Dunkirk route had an approximate share of the short-sea market of 15 per cent. We note that in 2010 and 2011, operating under DFDS the route maintained a share of 15 per cent. The lack of market share growth after acquisition of this route by DFDS is consistent with the argument [REDACTED].

Conclusions

18. Bundling is a strategy that might be used to assist in the process of forcing a competitor out of the short sea via customer foreclosure. Our analysis shows that the question of interest from a competition policy perspective is whether the MFL operation is likely to displace one of the other ferry operators on the short sea taking into account the likely short-run costs of intensive competition. We deal with this concern in our consideration of whether we think it likely that one of the ferry operators is likely to withdraw some or all of its service from the short sea.

⁸ [DFDS hearing summary](#), paragraph 7.

Horizontal unilateral effects

Effect of the transaction on pricing incentives in a differentiated product market

1. Cross-Channel transport services provided by Eurotunnel shuttle and ferry are differentiated services. As noted in the Merger Guidelines,¹ where products are differentiated, effects are more likely where the merger companies' products compete closely. In order to assess whether the merger results in unilateral effect concerns, the CC may analyse the change in the pricing incentives of the merger companies created by bringing their differentiated products under common ownership or control.

2. Unilateral effects may arise because a price increase becomes less costly when the products of the two companies are brought under common ownership or control. Without the merger, it is costly for one of the merger companies to raise its prices because it will lose the profit on diverted sales as a result. The cost is composed of two elements:
 - (a) the profit on lost sales from customers who switch to the products of the other merger company; and
 - (b) the profit on lost sales from customers who switch to the products of companies other than the other merger company.

3. After the merger, it is no longer as costly for the merged company to raise the price of any of the products: it will recoup the profit on recaptured sales from those customers who would have switched to the products of the other merger company. In the context of this transaction, the concern is that pre-merger the value of business lost by Eurotunnel to the ferries is entirely lost from GET. Post-merger, however, if

¹ See the Guidelines, [section 5.4](#).

Eurotunnel increase prices, some proportion of its lost customers are likely to divert to MFL, retaining within the Eurotunnel group some previously lost profit.

4. The scale of this incentive will depend on the diversion ratio between the two businesses (how much lost volume is 'recaptured' by MFL) and the relevant margin on the MFL business.²

Incentive analysis

5. In order to gain additional insight into the implications of the merger for GET's incentives to compete, we have calculated two metrics intended to be relatively simple tools that provide an indication of the change in incentives caused by the merger. These tests are known as the 'Indicative Price Rise' indicator (IPR) and the 'Gross Upward Pricing Pressure Index' (GUPPI). Both IPR and GUPPI require two main inputs—estimates of diversion ratios between the merging products and the margin on the 'target' product in the merger (in this case, the MFL ferry service).

Estimating diversion ratios

6. MFL has only been operating for a brief period, and is expected by GET to grow over time. We therefore do not have direct evidence of the likely diversion ratio between Eurotunnel and MFL based on historical analysis of events on the short sea. To calculate likely diversion ratios we have assumed that lost tunnel sales divert to MFL broadly in proportion to its expected future share of ferry volumes. This seems a reasonable approach in this case as ferry operators are differentiated by frequency of sailings and destination (Calais versus Dunkirk in particular), and it seems reasonable to assume that market shares broadly capture the effects of these differences and hence the likelihood of diversion to a particular ferry operator. This approach is,

² There could also be a similar effect from MFL to Eurotunnel. However, we view the ferries as being relatively homogeneous competitors, and therefore think this effect is likely to be small as most volume would be likely to divert to competing ferry operators if MFL unilaterally increased its price on the short sea. This is explained in more detail below.

in our view, supported by the evidence provided in our event analysis. It is also in line with the approach used by the parties' economic adviser, Compass Lexecon.

7. Eurotunnel typically has a share of freight volume crossing the short sea of around 40 per cent (of total ferry and tunnel volume), implying that ferry operators account for approximately 60 per cent of volume on average.³ GET's initial target market share for MFL is [X] per cent.⁴ At [X] per cent, the diversion ratio from Eurotunnel to MFL is estimated as being [X] per cent in the freight market.⁵ For the passenger market, Eurotunnel typically maintains a higher share of the market, so for passengers we have assumed that Eurotunnel has (on average) a market share of 45 per cent of the market, with ferries carrying the remaining 55 per cent of volume.⁶ GET's initial target market share for MFL is [X] per cent of passengers.⁷ This generates an estimated diversion ratio of [X] per cent in passengers.

8. The table below shows the short-sea market shares of the two smaller but established ferry operators in 2010, the year prior to the exit of SeaFrance. These operators provide an independent estimate of the scale of operation of smaller but mature ferry competitors on the short sea that have operated recently. The data shows that SeaFrance and DFDS (Calais–Dunkirk) had market shares in the range of 13 to 17 per cent.

³ Excluding the year of the fire and its aftermath (2008 and 2009), Eurotunnel has had freight market shares of between 35 and 44 per cent since 2000. We note that Eurotunnel typically has a higher share of the passenger market (4 per cent higher in 2012).

⁴ *Draft global offer for the acquisition of the operating assets of SeaFrance*, Presentation to the GET SA Board meeting : 11 April 2012. We note that the plans forecast freight share to grow to [X] per cent by [X].

⁵ Calculated as [X].

⁶ The tunnel has had passenger market shares between 40 and 48 per cent of the market since 200.

⁷ *Draft global offer for the acquisition of the operating assets of SeaFrance*, Presentation to the GET SA Board meeting : 11 April 2012. We note that the plans forecast passenger share to grow to [X] per cent by [X].

TABLE 1 Short-sea market shares of DFDS and SeaFrance, 2010

	<i>per cent</i>	
	<i>Freight</i>	<i>Passengers</i>
SeaFrance	17	13
DFDS (Dunkirk)	14	15

Source: IRN Research.

9. The market shares of SeaFrance and DFDS in 2010 suggest that MFL’s initial share targets (of [X] per cent in the freight market and [X] per cent in passenger) are likely to be a conservative estimate of the stable market share of a smaller but committed competitor on the short sea. A 15 per cent market share equates to a 25 per cent diversion ratio in freight, and 27 per cent in passengers.

10. Based on the analysis above, we have based our calculations on a likely range of diversion ratios from Eurotunnel to MFL of between [X] and [X] per cent. These diversion ratios are equivalent to assuming that MFL stabilizes at a share of ferry volumes in the freight market that lies between approximately [X] and [X] per cent, while in passengers MFL achieves a market share between approximately [X] and [X] per cent. We note that these are conservative assumptions, when compared with the actual market shares of DFDS and SeaFrance prior to the exit of SeaFrance.

Margin assumptions

11. There are two margins that may be relevant to the analysis. The first is a short-run margin estimate. This margin measures the value of adding additional passengers or freight volume to a ferry, on the assumption that the ferry has sufficient spare capacity to accommodate the additional volume. The relevant costs are those that vary with the addition of a car and its passengers or an HGV and its driver to a particular sailing. The second margin of potential interest is a longer-run margin that allows for the common (but avoidable) costs of additional ferry sailings—in other words, a

margin that captures the (much higher) costs involved if volume changes cause more or less sailings to be required.

12. Compass Lexecon estimated short-run margins on MFL as being greater than [redacted] per cent and long-run margins of [redacted] per cent for MFL based on data from GET/MFL.⁸
13. We received information from P&O on its operating margins. [redacted] We also received margin data from DFDS. DFDS's short-run margin estimates were [redacted]. The overall DFDS service margin is not comparable due to the higher cost of the Dover–Dunkirk route.
14. P&O and DFDS's data [redacted] estimates [redacted] margin for a ferry operator than that used by Compass Lexecon in its analysis of MFL. We think that P&O's data is likely to be a reliable source of margin data on the Dover–Calais route, given its long history on this route. We have therefore used P&O data as our primary source of short-run margin data. [redacted] We note that this is close to the long-run margin calculated by Compass Lexecon using data from GET of [redacted] per cent. Given that the relationship with the SCOP means that MFL could have a slightly different cost structure from P&O, and that the estimates from third party sources are relatively close to the GET/Compass Lexecon margin estimate, we have used the [redacted] per cent estimate for MFL as the best estimate of an appropriate long-run margin in our calculations.

Adjusting for onboard sales

15. For both freight and passenger markets, the value of a sale on Eurotunnel is greater than on the ferry, if the cost of travel only is considered. Our analysis of prices shows

⁸ We note that the report estimates a long-run margin of [redacted] per cent for freight, and [redacted] per cent for passengers. Given that the cost of the ferry is common to both services, it is not clear what this difference assumes. For the purposes of this analysis, we have used the overall average of [redacted] per cent. We note that in the data supplied to us neither DFDS nor P&O had attempted to measure an overall service margin split by passengers/freight.

that, in general, Eurotunnel maintains a premium in freight of about [X] per cent, while in passengers the premium is typically around [X] per cent. This implies that, considering only the cost of purchasing a ticket on either Eurotunnel or a ferry, the ferry ticket is generally considerably cheaper (to the customer) and less profitable.⁹ However, this is offset to some extent when onboard ferry sales are considered. Ferry operators have the ability to provide services other than just transport across the Channel—in particular, meals on board, foreign exchange sales and shopping. This increases the value of a sale diverted from Eurotunnel to a ferry. We have used data supplied to us by P&O and GET to estimate the effect of onboard sales on the prices and margins that are relevant to our analysis.

16. P&O provided us with data [X].¹⁰
17. We received a board presentation from GET that included revenue forecasts for MFL broken down into cars, coaches, HGVs and onboard sales.¹¹ [X] We therefore recalculated the relative value of a sale on MFL using this data. To do this, we made the conservative assumption that [X] per cent of onboard sales would be due to cars (passengers, excluding coaches) and, given the [X] value of onboard sales revenue forecast for MFL, that no additional value would be earned on freight sales.¹² This calculation resulted in the relative value of a sale on the ferry increasing from [X] to [X] per cent for MFL after allowing for onboard sales, while the relative value of a freight sale (with no allocation) [X]. We used these adjusted figures in our GUPPI calculation, as the formula specifically allows for the differing value of sales on a ferry compared with Eurotunnel. We used the same allocation of onboard sales to adjust the margin figures that we had calculated (based on P&O data) [X]. The adjusted

⁹ We note that Eurotunnel also makes some revenue from value added sales. However, the amount is [X] and was budgeted to account for less than [X] per cent of the passenger division revenue in 2012.

¹⁰ See Appendix D. Prices used for comparing tunnel and ferry prices were 2012 year-to-date prices, in £.

¹¹ *Draft global offer for the acquisition of the operating assets of SeaFrance*, Presentation to the GET SA Board meeting : 11 April 2012.

¹² By 'conservative' here we mean using assumptions that lower the value of sales on MFL, and hence result in lower IPR and GUPPI figures than if we used figures closer to those of P&O.

margins were [X] per cent for passenger traffic on MFL, and [X] per cent for freight traffic.

Whether long- or short-run margins are appropriate to the analysis

18. Our view is that short-run margins are most relevant to our analysis in this case. It is clear that frequency and reliability of service are key to success in this market, and as a result the size of MFL's fleet will be dictated for the immediate future by the need to have at least three ships in service in order to support a competitive schedule. GET's business plans and our calculations show that these ships will provide more than sufficient capacity to accommodate the share of the market MFL is aiming to capture.¹³ Furthermore we note that the competitors on the short sea have the ability to discriminate significantly in their pricing, setting different prices for different times of the day, days of the week and seasons. In the passenger market, we note that both Eurotunnel and the ferries use yield management systems of the type employed by airlines. These systems allow prices to be adjusted in the short run to account for how demand is developing over time. This suggests that in the passenger market in particular, prices and volumes could be optimized in the short run across Eurotunnel and MFL, in which case the short-run margins are clearly the relevant margins to take into account. We therefore do not think that marginal gains in traffic on MFL following price increases on Eurotunnel are likely to result in investment in new vessels solely for the purpose of accommodating that traffic.

Indicative price rise analysis

19. A purely illustrative indicator of post-merger price rises can be calculated using the following formulae where d is the diversion ratio and m the margin:
- (a) change in price = $md/(2(1 - d))$ for linear demand; and

¹³ Draft global offer for the acquisition of the operating assets of SeaFrance, Presentation to the GET SA Board meeting : 11 April 2012.

(b) change in price = $md/(1 - m - d)$ for isoelastic demand.

20. The model makes a number of assumptions. It assumes that the company faces a downward-sloping demand curve for the relevant product: that is, that the company has the ability to set its price.¹⁴ It also assumes the form of the demand curve (linear or isoelastic), and that all other factors remain constant—so, for example, competitors do not respond by changing their prices, and the price (and margin) of the product that demand is diverted to does not change as a result of the additional demand.¹⁵ The simple formula used here assumes that the model is symmetric and does not allow for different prices being charged across the merging products. We deal with this issue by also calculating GUPPI estimates that specifically allow for the possibility of asymmetry.
21. If the IPR framework is to provide useful information in this case, it needs to be reasonable to treat the option to customers of using either Eurotunnel or the ferry as a choice between differentiated products and for competition to be primarily price driven (the underlying model is one of ‘Bertrand’ competition). We think these are reasonable assumptions based on the facts and evidence we have gathered for both the freight and passenger market.
22. For the freight market, we have given additional consideration to whether the framework is appropriate, given the evidence we have gathered on the level of the price premium that Eurotunnel is able to charge over the ferry price in the freight market. The submissions of GET, corroborated by information that we have gathered during the investigation, suggests that the Eurotunnel freight price appears to be set at the

¹⁴ This can be contrasted with markets where price is exogenous to the firm and is set by the market. For example, a farmer selling a product like wheat where the farmer has not ability to set the price, but rather receives the market price for whatever volume he or she may have produced.

¹⁵ See Bishop, Simon and Mike Walker (2010) *The Economics of EC Competition Law*, Sweet and Maxwell: London, for a discussion of the derivation of these formulae.

ferry operators' prices plus a margin of €[redacted] that appears to be primarily cost-based—reflecting the cost of driving additional kilometres to Dover (compared with boarding a shuttle at Folkestone) and driver time cost savings. This suggests that the Eurotunnel price is normally set by the propensity of marginal freight customers that do not pay much extra (if anything) for the frequency advantage to switch to the ferries if the price exceeds these cost benefits of using Eurotunnel. In turn, this could suggest that the freight demand curve may be more elastic if prices are increased beyond this premium than assumed in the IPR calculation. In other words, Eurotunnel's demand curve might be somewhat 'kinked' at the point where the premium is approximately equal to the cost-based advantage over the ferries.

23. The facts available to us, however, suggest that demand is not so elastic at a particular point that the IPR model is invalid. We note that GET told us that it had during this year's freight contract round [redacted] per cent of price on Eurotunnel, for which GET thought Eurotunnel might [redacted] per cent of market share. We also note that the scenario analysis analysed below indicates an ability to trade yield for market share. These observations suggest that Eurotunnel has the ability to make the type of trade-off between price and volume that is assumed by the model.

24. Importantly, there does not seem to be any equivalent issue (of any potential step change in demand elasticity) on the passenger market, where Eurotunnel maintains a larger premium over the ferry price than on the freight market.¹⁶ As a result, we think the IPR framework is useful in both passengers and freight. However, on the basis of our analysis of the source of the freight premium, we do not think the

¹⁶ We note that GET told us that [redacted].

isoelastic formulation of IPR is appropriate in this market, and we have therefore not calculated isoelastic IPR estimates.¹⁷

25. The results of the IPR calculation are shown in Tables 2 and 3.

TABLE 2 Indicative price rise calculations: freight

	<i>per cent</i>			
	<i>Diversion</i>			
Margin	[X]	[X]	[X]	[X]
	[X]	[X]	[X]	[X]

Source: CC calculations.

TABLE 3 Indicative price rise calculations: passengers

	<i>per cent</i>			
	<i>Diversion</i>			
Margin	[X]	[X]	[X]	[X]
	[X]	[X]	[X]	[X]

Source: CC calculations.

26. The figures in bold indicate our base case assumptions—a (short-run) estimated margin of [X] per cent and diversion ratio of [X] per cent for freight (assuming [X] per cent market share in freight) and an estimated [X] per cent margin, and a diversion ratio of [X] per cent for passenger (assuming [X] per cent market share in passengers).

27. We do not interpret the ‘change in price’ in these formulae as a prediction of actual post-merger price rises. However, we do regard the formulae as providing guidance on how to combine margin and diversion ratio data to evaluate the relative lessening of competitive constraints that results from the combination of a ferry business and Eurotunnel on the short sea.

¹⁷ If demand is isoelastic, the price elasticity of demand is constant at different price levels. If demand is linear, the price elasticity rises as price rises which seems more reasonable in this market, particularly if the price rise on Eurotunnel does not coincide with an equivalent increase in the price of ferry crossings of the Channel .

Upward price pressure analysis

28. 'Upward pricing pressure' tests do not attempt to estimate an actual price rise, but rather measure the strength of the internalization incentive by measuring the value of sales that is recaptured as margin post-merger. This value is estimated by multiplying the margin on each unit sold on MFL by the proportion of Eurotunnel's lost sales that MFL would be likely to pick up (the diversion ratio). Finally, in the formula we use in this test a correction is applied to adjust for the relative value of sales. This adjustment accounts for the fact that if the value of a sale on MFL is lower (or higher) than Eurotunnel, then the incentive effect will be reduced (or increased).¹⁸ The formula we have used is sometimes referred to as a GUPPI test.¹⁹ The formula used is:

GUPPI = $md(p_2/p_1)$, where m is the margin on MFL, d is the assumed diversion ratio of sale lost from Eurotunnel to MFL, p_2 is the price (sales value in revenue terms) of a sale on MFL and p_1 is the price of a sale on Eurotunnel.

29. A GUPPI of 10 per cent means that, once relative price differences are allowed for, 10 per cent of the revenue lost on Eurotunnel if prices are increased is recaptured as margin on MFL. The larger the GUPPI measure, the more profit is retained in the merged company post-merger due to the internalization effect, and the stronger the incentive to increase price. This is because the additional profit (that did not exist pre-merger) has the effect of lowering the cost of increasing prices leading to a change in incentives in favour of a higher price.

30. Based on the inputs discussed above, the results of our GUPPI calculations are shown in Tables 4 and 5.

¹⁸ As explained in detail above, after correcting for onboard sales (using forecasts for the MFL business), the ratio of ferry price to tunnel price that we used in our model is [§] per cent for passengers and [§] per cent for freight. We note that if MFL ultimately makes levels of onboard sales similar to those of P&O, [§]. In our base case of a [§] per cent diversion ratio in passengers, [§] the value of GUPPI is [§] per cent.

¹⁹ For a detailed discussion the derivation and value of upward pricing pressure tests including GUPPI in merger analysis, see *The 2010 U.S. Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, Carl Shapiro at: www.justice.gov/atr/public/articles/263528.htm.

TABLE 4 **GUPPI: freight**

per cent

Diversion

Margin	[X]	[X]	[X]	[X]
	[X]	[X]	[X]	[X]

Source: CC calculations.

TABLE 5 **GUPPI: passengers**

per cent

Diversion

Margin	[X]	[X]	[X]	[X]
	[X]	[X]	[X]	[X]

Source: CC calculations.

31. The figures in bold indicate our base case assumptions. These are a short-run margin of approximately [X] per cent in freight combined with a [X] per cent diversion ratio (assuming [X] per cent market share in freight), and a margin of [X] per cent combined with a diversion ratio of [X] per cent for passenger (assuming [X] per cent market share in passenger). As noted above, these market share and diversion ratios [X] when compared with actual market shares achieved by DFDS and SeaFrance prior to the exit of SeaFrance.

32. We regard the GUPPI formulae as providing guidance on how to combine margin and diversion ratio data to evaluate the relative lessening of competitive constraints that result from the combination of a ferry business and Eurotunnel on the short sea. The results suggest that the combination a tunnel and ferry operation is likely to have a material impact on pricing incentives.

The Compass Lexecon critical loss analysis

33. Compass Lexecon provided us with a report that estimates the critical volume loss (in lane metres) by Eurotunnel that would be required to (just) make a hypothetical price

increase by Eurotunnel unprofitable. Compass Lexecon first modelled the critical loss excluding any consideration of the existence of MFL, and then modified the formula to allow for the potential effect of MFL recapturing some of the lost volume. Compass Lexecon’s conclusions are summarized on page 2 of the report. With respect to the impact of MFL, Compass Lexecon stated:

We also calculate the pre-Transaction critical loss and find that there is a relatively small change in Eurotunnel’s critical loss as a result of the Transaction. The change in the critical loss does not represent more than [X] per cent and [X] per cent of Eurotunnel’s sales for a [X] per cent and a [X] per cent price increase respectively. This implies that the Transaction is unlikely to materially affect Eurotunnel’s incentives to raise prices, which we consider to be low on the specific facts of this case.

34. We do not think that the observation that the change in critical loss is small relative to Eurotunnel’s overall sales is relevant to the question of the impact of MFL on Eurotunnel’s pricing incentives. Rather, the question is whether the addition of MFL significantly changes Eurotunnel’s incentives. In other words, the question is how significant the change in critical loss volume is compared with the pre-merger critical loss volume. The impact on the change in critical loss, based on Compass Lexecon’s calculations, is shown Table 6. It suggests that the change in incentives is significant.

TABLE 6 Change in critical loss (metres, allowing for customer variable costs)

	Critical loss (metres)	Change in loss due to MFL	
Freight	[X]	[X]	[X]
Passengers	[X]	[X]	[X]
Total	[X]	[X]	[X]

Source: Compass Lexecon.

35. We have calculated the change in critical loss using the formula supplied by Compass Lexecon and assuming a diversion ratio of [redacted] per cent and the long- and short-run costs used in the report, with the exception of the ferry margin where we have used a [redacted] short-run ferry margin [redacted]. The results are shown in Table 7. As discussed above, our view is that the higher ferry margin is the most relevant to our analysis of the transaction.

TABLE 7 **Change in critical loss due to addition of MFL to GET**

	<i>per cent</i>		
	<i>Tunnel margin</i>		
MFL margin	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]

Source: CC calculations.

36. In summary, the results of analysing the changes in incentives by way of analysing the change in critical loss volume with the addition of MFL are, in our view, broadly consistent with the results of our analysis using IPR and GUPPI.

The effect on competitive incentives of increasing market share on the short sea

37. A second unilateral concern is that MFL has less incentive to compete vigorously than an independent ferry competitor, with ‘independent’ in this context meaning an operator that has no corporate affiliation with Eurotunnel. Before explaining the nature of this concern in more detail, we explain the view we have formed of the nature of ferry competition, and how that relates to the constraint imposed on Eurotunnel.

38. Our analysis of the prices of major ferry operators and Eurotunnel on the short sea shows that while there is a significant difference between the price of a tunnel cross-

ing and that of a ferry crossing in both the passenger and freight market,²⁰ there is relatively little difference in the price of the major ferry operators. For the freight market, this can be seen in Figure 1 below, which illustrates freight prices over time on the short sea. It shows that Eurotunnel operates at a significant premium to the ferry operators in the freight market, while [✂].

FIGURE 1

Monthly freight prices, £, 2007 to 2012

[✂]

Source: Operators, CC calculations.

39. Figure 2 below provides the same analysis for the passenger market. The general pricing relationships are very similar to those in the freight market, except that the Eurotunnel premium (in percentage terms) is markedly higher, and there is evidence that DFDS [✂].

FIGURE 2

Monthly passenger prices for cars, £, 2007 to 2012

[✂]

Source: Operators, CC calculations.

40. Our general conclusion from the pricing analysis is that although there is some differentiation between the main ferry competitors on the short sea in terms of frequency of service and routes served, the level of differentiation is quite small in terms of the valued place on it by customers. For this reason, we view competition between the major ferry operators with a competitive departure schedule as being competition between firms offering a broadly homogeneous service offering. The implication is that we do not think individual ferry operators will be able to price unilaterally at a level that is significantly different from that of the other major ferry operators on the

²⁰ On average, the Eurotunnel price is typically [✂] per cent more expensive than a ferry crossing in the passenger market and [✂] per cent more expensive in the freight market (excluding onboard sales). See Appendix D.

short sea without risking losing large volumes of business. This is the reason that we have not calculated IPR and GUPPI estimates for MFL, measuring the incentive of MFL to increase its price due to the internalization within GET of any volume that would divert to Eurotunnel from MFL as a result. Our view is that MFL will not be able to win a sustainable share of the market while operating at a price that is materially above its ferry competitors.

41. Given the analysis above, our view is that the intensity of competition between the ferry operators will affect the overall level of prices for ferry crossings on the short sea. The price of ferry crossings in turn, however, constrains the price Eurotunnel can charge. This is because although Eurotunnel is significantly differentiated from the ferries by way of its advantages in terms of departure frequency, speed of crossing and location advantage (shorter distance for hauliers in particular), ferry sailings are nonetheless the closest available substitute to crossings via Eurotunnel's shuttle. The evidence supports GET's statement that Eurotunnel operates at a premium, typically around €[X], compared with the ferry price in the freight market, while the figures above illustrate that tunnel profits are optimized when it maintains a broadly consistent premium above the ferry operators. This relationship provides a relatively direct link between the prices charged by ferry operators and on the ferry market overall, and the price that Eurotunnel can charge.

42. The link between the price level on the ferry market and tunnel prices means that if MFL expands aggressively by adding capacity to try to gain market share in the ferry business, it is likely to drive down both ferry prices (in general, until other ferry competitors accommodate and reduce capacity) and Eurotunnel's price. As a result, GET (MFL plus Eurotunnel combined) will experience a greater cost than an independent ferry operator in the same situation. MFL will experience a similar loss of revenue from existing sales if it discounts prices to that of an equivalent independent

operator. However, the Eurotunnel Group will also experience a significantly greater cost in lost revenue due to lower prices and/or fewer sales through Eurotunnel.

Assuming that GET recognizes these interactions and manages Eurotunnel and MFL in a way that optimizes group profits, this effect will weaken competition between ferry operators as GET will have less incentive than an independent ferry operator to expand capacity on the short sea, with the associated risk of increased price competition.

43. We note that this is not a novel theory of harm. Rather, it reflects the fact that given the relatively close links between Eurotunnel and ferry markets, the combined market shares of a combined ferry and tunnel operator need to be taken into account. This concern is the traditional concern that as companies gain very large shares of a market, they will have increasingly less incentive to discount due to the increasing cost to their existing business of discounting.

44. We are aware that in the counterfactual case—DFDS purchasing the ex-SeaFrance vessels and operating them on the Dover–Calais route—DFDS would experience a similar effect due to the depressing effect on its profits on its existing Dover–Dunkirk business should it expand capacity on the Dover–Calais route. However, we think the effect is more concerning in the case of MFL. This is because if the decision being contemplated is the addition of a vessel by either DFDS or MFL on its Dover–Calais route, the impact on capacity and prices on the short sea will be similar, and the potential benefit from expansion will also be similar. But both the volume and value of DFDS’s existing business on Dover–Dunkirk is significantly lower than that of GET’s business through Eurotunnel. This is illustrated in Table 8. DFDS’s volume on Dover–Dunkirk is approximately 15 per cent of the volume of the short-sea market, whereas Eurotunnel has a 40 to 45 per cent share of volume. This means that the cost to existing business will be much higher for GET than for DFDS, implying that it

is less likely that MFL and GET will consider future capacity expansion on the short sea to be profitable overall.

TABLE 8 Volume and value shares of existing business on the short sea, GET and DFDS, 2012

<i>Factual</i>	<i>MFL</i>	<i>ET</i>	<i>GET combined</i>
<i>Volume</i>			
Freight	[REDACTED]	40.0	[REDACTED]
Passenger	[REDACTED]	45.0	[REDACTED]
<i>Value</i>			
Freight	[REDACTED]	[REDACTED]	[REDACTED]
Passenger	[REDACTED]	[REDACTED]	[REDACTED]
<i>Counterfactual</i>	<i>DFDS-DC</i>	<i>DFDS-DD</i>	<i>DFDS combined</i>
<i>Volume</i>			
Freight	[REDACTED]	15.0	[REDACTED]
Passenger	[REDACTED]	15.0	[REDACTED]
<i>Value</i>			
Freight	[REDACTED]	[REDACTED]	[REDACTED]
Passenger	[REDACTED]	[REDACTED]	[REDACTED]

Source: Operators, CC calculations.

Compass Lexecon comments on unilateral effects concerns

45. Compass Lexecon provided us with a report raising a number of issues with our analysis. We provide our view on the arguments put forward that relate to our unilateral effects concerns in this section. We only reply to those points that are not adequately addressed elsewhere in the provisional findings.
46. In relation to our business internalization concern, Compass Lexecon raised two key issues:
- (a) the static nature of IPR/GUPPI analysis and the constraint from the strength of ferry competition on the short sea, particularly given the level of excess ferry capacity on the market; and
 - (b) the need to take into account the counterfactual.
47. Compass Lexecon also provided further arguments and evidence on the relevant diversion ratios for our analysis. We consider each point in turn.

Static nature of IPR/GUPPI and the impact of excess capacity

48. Compass Lexecon noted that IPR/GUPPI analysis was static, and did not take into account the response of competitors. This is correct, but we do not think it is a significant weakness of our analysis in this case.
49. Our internalization concern relates to the fact that the incentives within GET change due to the incorporation of a short-sea ferry operation in the Group in a way that will, all else equal, increase Eurotunnel's optimal price. The size of the incentive is a function of the scale of MFL and the likely diversion ratio, and the profitability of the ferry business. Dynamic considerations would then involve considering whether competitive entry or repositioning would remove the concern over possible price increases. As the primary concern is an increase in optimal Eurotunnel prices and Eurotunnel is significantly differentiated from the ferry businesses, the first question is whether a small increase in Eurotunnel prices might incentivize entry into the Eurotunnel segment of the market. We do not think any party has suggested that this is likely. The next issue would be whether the diversion of some volume of business to the ferries might change the ferry segment such that prices would fall materially on the ferries, which might in turn then cause Eurotunnel to lower its price again. It is not clear to us how or why this would happen. On the basis of Compass Lexecon's own analysis, the marginal changes in volume would be likely to be small and the ferry segment typically supplies sufficient spare capacity to accommodate marginal changes in volume. There is therefore no obvious mechanism for a small increase in volume in the ferry segment to cause a fall in ferry prices. It is more likely that, if anything, it would cause prices to rise due to the increased demand which would allow Eurotunnel to further increase price. We therefore do not think dynamic considerations alter our analysis.

50. Compass Lexecon argued that we had not taken into account the level of excess capacity in our analysis of either the business internalization or competition weakening concerns. This is in our view incorrect. The IPR and GUPPI analysis implicitly assume the ferry-based competitors can fully accommodate any diverted capacity and do so at current market prices; in other words, spare capacity is an underlying assumption. Furthermore this is, for the reasons outlined above, a conservative assumption—relaxing this assumption and introducing capacity constraints would tend to result in larger price increases than IPR would suggest. Similarly our ‘competition weakening’ analysis considers the incentive of MFL and GET to expand capacity. We agree that this is not a concern at the current time due to the excess capacity that exists today in the ferry market. However, it may become a significant concern in the future should ferry capacity exit the short sea.

Impact of the counterfactual

51. Compass Lexecon argued that we needed to consider any SLC against our counterfactual, and that the counterfactual of DFDS purchasing the ex-SeaFrance vessels would in itself involve concerns over horizontal unilateral effects. This was because DFDS would have similar internalization incentives as GET, except instead of between Eurotunnel and MFL, the same mechanism would operate between DFDS’s operations on Dover–Dunkirk and Dover–Calais, with the merger providing DFDS with an incentive to increase prices on Dover–Dunkirk.
52. The reason we think this does not raise the same concerns is explained in the section above, where we outline our view that competition between the major ferry operators is best approximated as competition between (relatively) homogeneous services. The IPR/GUPPI analysis is based on there being sufficient differentiation that a company has some degree of freedom to balance price against volume for the modelled products.

53. In support of this view, we note that, [REDACTED]. This shows that the price on Dover–Dunkirk is tightly constrained by ferry prices on Dover–Calais. For passengers, it appears that [REDACTED]. We also note that following the SeaFrance exit, significant volumes migrated rapidly to the Dover–Dunkirk route, but then returned equally rapidly to Dover–Calais when additional capacity was introduced on the Dover–Calais route.²¹ These facts support the view that it would not be possible for DFDS profitably to increase price on Dover–Dunkirk. We therefore do not think that the counterfactual involves similar unilateral effects concerns as the MFL transaction.

Diversion ratio estimation

54. Compass Lexecon argued that diversion ratios based on MFL target market shares might be too high because:

- (a) The target market shares are above the current market shares.
- (b) Our calculation ignores possible switching outside the short sea routes.
- (c) Market shares do not allow for the differences in service quality (number of departures in particular).
- (d) Eurotunnel freight customers that might switch to ferry services would be more time sensitive than the average existing ferry customer.

55. Merger analysis is inherently prospective. The CC needs to form a view on the impact on competition of the merger over an appropriate time horizon. When considering entry, the horizon is normally considered as being at least two years, though the appropriate time horizon is decided on a case-by-case basis.²² In this case, we do not think it is reasonable to base our analysis on current market shares when the MFL business is clearly expected to grow significantly over the next [REDACTED] years and is

²¹ See Appendix C.

²² *Merger Assessment Guidelines*, CC2, [paragraph 5.8.11](#).

targeted with achieving the market shares we have used in our analysis by the end of [REDACTED], and is expected to grow beyond these shares by [REDACTED].²³

56. With respect to switching outside the short sea, we have conducted analysis of a number of significant short-sea events and found that there is no material evidence of switching outside the short sea (in either freight or passengers) even in response to major disruptions within the short-sea market. The analysis also supports the view that in broad terms market shares are a reasonable proxy for rates of diversion. The analysis is contained in Appendix C.
57. Market shares on the short sea will, in our view, take into account the difference in service quality, and in particular the differences in the number of rotations, and are therefore likely to be a good proxy for diversion ratios.²⁴ Compass Lexecon noted that our analysis of the Eurotunnel fire showed that DFDS on Dover–Dunkirk captured about a [REDACTED] per cent less share of diverted business while P&O captured some [REDACTED] per cent more than its market share. This is consistent with the geographic differentiation one would expect—customers using Eurotunnel (which goes to Calais) would be expected to be somewhat more likely to divert to a Dover–Calais ferry than a Dover–Dunkirk crossing. As MFL will be operating to Calais, it would not be subject to differentiation due to this factor.
58. Compass Lexecon argued that Eurotunnel freight customers might be more time sensitive than average ferry customers, and hence might be more inclined to switch to P&O than MFL. We think this argument is dealt with by our analysis of actual diversion, and the comments above. However, we also note that this argument is inconsistent with the evidence and argument put forward by GET that the Eurotunnel

²³ Presentation to the GET Board, 1 - 2012 CA Presentation Draft Global Offer 11 avril.

²⁴ We note that if the service quality differences did not exist, capacity share could have been a better proxy for likely diversion ratios.

premium that exists today in the freight market is broadly related to cost (distance and driver time), which suggests that marginal freight customers of Eurotunnel may not be significantly different from other ferry customers.

59. Compass Lexecon provided an analysis of a number of periods during November and December when, due to operational difficulties, Eurotunnel lost significant volumes of freight business. Compass Lexecon calculated estimates of the level of diverted traffic and found that (depending upon the approach) the weighted average diversion rate ranged between 3 and 7 per cent. GET told us that MFL had a market share of [REDACTED] per cent in November, and [REDACTED] per cent in December. Assuming that ferries account for approximately 60 per cent of the market (by volume), a diversion ratio estimated by market share would therefore be [REDACTED] per cent. All of Compass Lexecon's estimates exceed this amount (two of the three by a considerable amount). We think the analysis supports the view that market shares are a reasonable, or perhaps conservative, proxy for the likely diversion ratio from Eurotunnel to MFL.

GET pre-merger business planning documents

60. GET provided us with documents relating to the decision to bid for the ex-SeaFrance vessels and launch MFL. These include a high-level financial model assessing the possible revenue impacts of the decision to start supplying ferry services.²⁵ Some of the key assumptions in the plan are summarized in Table 9.

²⁵ Eurotunnel - Présentation chiffrée.

TABLE 9 Scenario analysis

Scenario	ET yield €	Ferry price €	ET share %	ET revenue €m	Increment €m
1. SF exit, no replacement	[REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]
2. P&O/DFDS/Other ferry op (three ships, aggressive price)		[REDACTED]			
(a) Eurotunnel aggressive price	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
(a) Eurotunnel soft price	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3. P&O/DFDS/Other ferry op (three ships, rational price)		[REDACTED]			
(a) Eurotunnel aggressive price	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
(a) Eurotunnel soft price	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
4. ET Enters with MFL	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: GET.

61. The purpose of assessing the assumptions in the model is to understand the extent to which those assumptions are consistent or otherwise with concerns over potential unilateral effects. The primary focus is therefore the pricing assumptions shown for Eurotunnel and the ferry operators. With these objectives in mind, our interpretation of the model is that it shows the following features of interest: [REDACTED].²⁶

62. GET explained the logic behind the scenario 4 calculations. It told us that scenario 4(c) in the model assumed that MFL operated like any other ferry operator and there was no commercial coordination with the Eurotunnel operation. Hence the assumed Eurotunnel yield and market share assumptions ([REDACTED]) are the same as Eurotunnel's optimal position in scenario 3 when another operator purchases the ex-SeaFrance assets and operates them employing a rational pricing strategy. We note that this implies that MFL will operate with a rational pricing strategy and will avoid aggressively chasing volume based on price (illustrated in scenario 2).

63. The other scenario of interest in the model was labelled 4(a). This scenario assumed a higher tunnel yield and market share ([REDACTED]), and a higher price but substantially

²⁶ These are shown to be less profitable than the lower price strategy, which is consistent with the current premium (about €[REDACTED]) being optimal given the current traffic mix on the short sea and with GET having no ownership in interest in a short-sea ferry operator.

lower market share on MFL ([REDACTED]). GET told us that the higher yield did not indicate higher prices, but rather a mix benefit, as yield is an average price measure. The benefit resulted from diverting lower-value traffic [REDACTED]. Diverting low-value traffic to MFL while maintaining all else constant would increase yield without increasing the actual price paid by existing high-value traffic, but it would also (all else equal) imply lower volume and market share. The higher yield and volume combination assumed therefore implies that the volume of vehicles paying higher prices has increased substantially, more than replacing the lower-value traffic sacrificed, which in our view represents an overall assumed price increase. We also note that customers that previously used the premium Eurotunnel service at the lower discounted prices have now been moved to a lower-quality service, which is, from the perspective of a competition authority, a reduction in the quality of service for those customers.

64. Overall, the model appears to be broadly consistent with potential concerns over unilateral effects noted above. The relatively high assumed price for MFL is consistent with the view that GET will prefer MFL not to compete aggressively in the provision of ferry services if it optimizes its portfolio of businesses, though we accept that MFL operating as a 'rational' ferry competitor is one of the modelled options.²⁷ We also think there is some evidence of the business internalization effect, which implies that the optimal tunnel price will be higher if the businesses are considered together.

²⁷ 'Rational' here means not pricing aggressively, but also not pricing *higher* than the high end price likely to be set by any other competitor that should operate the ex-SeaFrance assets.

Likelihood of entry

Introduction

1. Entry (or threat of entry) by a potential entrant, or expansion (or threat of expansion) by an operator that is already active on the short-sea crossing could prevent any lessening of competition resulting from the acquisition. For this to be the case, entry and expansion needs to be likely, sufficient and timely. In this appendix, we consider the factors that affect the ease with which a ferry operator could start a new service on the short-sea crossing in competition with existing operators or could expand its existing services on the short-sea crossing, and the likelihood that it would do so.¹ Our assessment was focused on the Dover–Calais route, given that it is the route on which MFL operates and our preliminary views that other short-sea routes do not exert a significant competitive constraint on this route and we do not foresee circumstances in which they would do so.

Considerations regarding entry

2. We have identified the following factors that might affect the ease and likelihood of entry and expansion on the short-sea crossing, particularly the Dover–Calais route:
 - (a) scale and reliability (see paragraphs 3 to 5);
 - (b) lead time (see paragraph 6);
 - (c) financial risk (see paragraph 7);
 - (d) excess capacity (see paragraph 8);
 - (e) views on the number of viable operators (see paragraph 9);
 - (f) vessel costs (see paragraphs 10 to 12);
 - (g) vessel availability (see paragraphs 13 to 19);
 - (h) availability of berthing slots (see paragraphs 20 to 26); and

¹ We have not discussed entry into the short-sea market by way of opening a new tunnel link between England and France as it is not a feasible option given that the construction of such a tunnel would need approval by the UK and French Governments and would take many years and very considerable financial investment.

(i) regulation (see paragraphs 27 and 28).

Scale and reliability

3. GET told us that it was feasible for an operator to enter the short-sea market with one or two vessels given that the fixed costs of operating a ferry service, such as maintaining an office and advertising, were relatively small compared with the variable costs, such as the number staff required, fuel costs and the port fees payable which depend on the number of ships operated and number of crossings made. On the other hand, GET also told us that it was important for a new operator to offer sufficient sailings to attract freight customers who typically would not book a sailing at a given time but instead would take the first available ferry, as otherwise these customers would use an operator providing a more frequent service.
4. DFDS told us that on the Dover–Calais route a ferry operator needed to offer a minimum of eight crossings in each direction (ie eight rotations) per day, which would require a minimum of two vessels, in order to provide a sufficiently frequent service to attract freight customers.
5. Several major freight customers told us that critical considerations for them in determining which ferry operator to use were the frequency and reliability of the service because it was important that lorries and drivers were not waiting in port for long periods before the next sailing. They also noted that the credibility of new operators was important because a feature of the short-sea freight market was that freight companies and ferry operators agreed annual contracts around the calendar year end, and if the freight companies used a ferry operator which withdrew from the route partway through the year, they might fail to benefit from volume discounts or rebates with one of the remaining operators.

Lead time

6. DFDS noted that entry on a new service was subject to a lead time for planning. It estimated that the lead time to establish a new service, assuming that suitable vessels were available, would be six months if the operator already had a presence at the relevant ports and at least nine months if it did not have an existing presence.

Financial risk

7. We identified that the combination of the lead time which might be required to build freight and passenger traffic on a route and the cost of operating a ferry might increase an operator's perception of the financial risk of entry and therefore deter entry:

(a) Lead time to build volume:

- GET told us that it would take time to build freight traffic as freight customers would delay entering into a contract with a new operator until they were convinced that the operator would provide a reliable service.
- P&O noted that freight customers could switch to a new service quickly, but tourist traffic took longer to build as it relied to some extent on brand recognition.
- [REDACTED]
- As noted in paragraph 24, a feature of the short-sea freight market is that freight companies and ferry operators agree annual contracts around the calendar year end, so it may be difficult for a new entrant to build up freight volume during the course of the year in which it enters.

(b) Cost of operating a ferry:

- P&O submitted that the annual cost of operating a ferry between Dover and Calais was between £[REDACTED] million and £[REDACTED] million per year.
- DFDS told us that the cost of operating a ferry on the short sea was between €20 million and €30 million per year.

- GET noted that restrictions on sulphur emissions from vessels in connection with the international convention for the prevention of pollution from ships were expected to come into effect in 2015 and would require modifications to non-compliant vessels. GET estimated that it would need to invest €[X] million to make the *Berlioz* and the *Rodin* compliant.

Excess capacity

8. Excess capacity is another factor that might influence an operator's perception of the financial risk of entry and therefore the likelihood of entry:

(a) In the period from 2004 to September 2012, GET estimated that no ferry operator on the short-sea crossing achieved average capacity utilization of greater than 60 per cent.

(b) An equity research report by Nordea estimated that in June 2012, P&O and DFDS were achieving capacity utilization of just over 50 per cent and approximately 40 per cent respectively on their short-sea services.²

(c) The Nordea equity research report also noted that freight traffic on the short-sea crossing was expected to grow by 2 to 3 per cent per year, which implies that the level of capacity utilization experienced by the ferry operators would not increase significantly in the medium term if the same amount of capacity continued to be deployed.

Views on the number of viable operators

9. An operator's perception of the financial risk of entry might also be influenced by the equity market's perception that only two ferry operators can be viable on the Dover–Calais route:

² Nordea equity research report on DFDS dated 10 September 2012.

- (a) The Nordea equity research report commented: ‘DFDS or MyFerryLink has to give in eventually ... we do not believe that the [Dover–Calais] route will leave room for four operators in the long term’.³
- (b) The Nordea equity research report also estimated that DFDS would make a loss of DKK 129 million (approximately €17.3 million)⁴ on the Dover–Calais route in 2013.⁵
- (c) In an equity research report dated 24 October 2012, Exane BNP Paribas stated that it believed that three ferry services on the Dover–Calais route and one on Dover–Dunkerque route was unsustainable and that DFDS would decide to exit because of the losses it was making.⁶

Vessel costs

10. A London shipbroker estimated that the cost of a new vessel similar to the *Berlioz* or the *Rodin* now operated by MFL would be at least €150 million.⁷ P&O’s new ferries, the *Spirit of Britain* and *Spirit of France*, which came into service on the Dover–Calais route in 2011 and 2012 respectively, cost €180 million each.⁸ These ferries have been called ‘super-ferries’ as they are the largest to operate on the cross-Channel routes and have 2,700 lane metres of capacity capable of carrying up to 180 lorries or 1,000 cars. For comparison, the *Berlioz* and *Rodin* each have 2,000 lane metres of capacity and can carry up to 120 lorries or 700 cars.
11. The capital cost of acquiring vessels in the second-hand market is likely to be less than new vessels. The minutes of the Court’s judgment on the liquidation of SeaFrance (the Court Minutes)⁹ record that the shipbrokers who were invited to

³ *ibid.* The four operators at the time were Eurotunnel, P&O, DFDS and MFL.

⁴ €1 = DKK 7.4608 at 9 January 2013.

⁵ *ibid.*

⁶ Exane BNP Paribas, 24 October 2012.

⁷ [38]

⁸ www.poferries.com/tourist/content/pages/template/_footer_About_about_P&O_Ferries_press_releases_PR_-_Delivery_of_second_new_ship.htm.

⁹ Paris Commercial Court, Order Notification No. 2012035500, 11 June 2012.

tender for the appointment to assist the Receiver with the sale of the vessels estimated the value of the *Berlioz* at between €43 million and €80 million and the *Rodin* at between €42 million and €69 million (before taking account of refurbishment costs estimated at €[redacted] million). The bids submitted for the *Berlioz* and *Rodin* in the liquidation of SeaFrance were in the range of €25–€30 million.

12. The capital cost of acquiring a vessel can be avoided by chartering a vessel. A London shipbroker estimated that the cost of chartering a suitable vessel would be €8,500 to €10,000 per day.¹⁰ DFDS told us that it would prefer to own the combined freight and passenger ferries it used on the short sea as when a vessel was chartered the charterer only benefited from expenditure on modifications and improvements to a vessel during the term of the charter.

Vessel availability

13. Entry with a new vessel is subject to a lead time while the vessel is constructed. P&O commented that it might take up to three years for a new vessel to be delivered. When P&O entered into a contract with a shipyard for the *Spirit of Britain* and *Spirit of France* in August 2008, they were expected to enter into service in January 2011 and September 2011 respectively.
14. Acquiring a second-hand vessel or chartering a vessel can enable a new entrant to enter the market more quickly than with a new vessel. DFDS commenced operations on the Dover–Calais route with a vessel chartered from Louis Dreyfus Lines, the *Norman Spirit*,¹¹ three months after SeaFrance ceased operations, and added a second vessel, the *Barfleur*, two months later. DFDS/LD subsequently chartered the *Moliere* (which had formerly been operated by SeaFrance) to replace the *Barfleur*.

¹⁰ [redacted]

¹¹ The ownership of the Norman Spirit was subsequently transferred to DFDS/LD

Brittany Ferries, which operates in the Western Channel, commented that it would be reasonably easy for a new entrant on the cross-Channel market to find one or more vessels to charter, and CLdN Group, which operates in the North Sea, also noted that it would be relatively easy for a new entrant in the cross-Channel market to acquire vessel capacity in the current market.

15. However, the availability of vessels suitable for the Dover–Calais route is affected by the design of the berths at Dover and Calais where, unlike most ports, the loading ramps are part of the port infrastructure. Therefore vessels which are not designed for the route and have integral ramps may need some modification for use at Dover and Calais. DFDS also noted that in order to keep the turnaround time in port to a minimum and achieve the required frequency of crossings, vessels needed ‘drive-through’ capability on several decks and sufficient engine power and manoeuvrability. In addition, the short time required for the short-sea crossing meant that fewer cabins were required than in vessels used on longer crossings. Similarly, P&O noted that optimal fuel consumption could only be achieved on the short-sea route by vessels with specific propeller, thruster and engine configuration, and that the short-sea vessels were designed for a 90-minute crossing and so had facilities that were relevant for this length of crossing (eg self-service restaurants designed to feed high numbers quickly and no passenger cabins).
16. DFDS told us that it was very difficult to find vessels suitable for the short sea in the chartering market and that there were no second-hand vessels available (at December 2012). DFDS noted that when it chartered the *Barfleur*, the vessel needed extensive structural modifications to enable it to use the berths at Dover and Calais, which cost €1.5 million. Moreover, once the *Barfleur* was in operation, DFDS found that the vessel did not have sufficient power to keep to schedule when delayed by bad weather or operational problems.

17. A London shipbroker told us that it would not be easy to charter a suitable vessel, and that the last suitable vessel to become available, the *Moliere*, was chartered by DFDS/LD (and renamed the *Dieppe Seaways*) in October 2012.¹²
18. On the other hand, GET told us that there were a large number of vessels that could easily be operated on the short sea, the Western Channel or the North Sea routes, including vessels currently serving routes from Plymouth and Portsmouth and Irish Sea and Scandinavian routes. GET commented that when DFDS/LD chartered the *Barfleur* for use on the Dover–Calais route, it had been reported that the modifications cost in the order of €5 million, and GET’s view was that given this moderate investment, many vessels could be relocated to the short sea. The *Barfleur* had previously been used on the Poole–Cherbourg route. GET also noted that there were other examples of ferries having been transferred to the Dover–Calais route from other routes, including:
- (a) the *Norman Spirit*, which had previously operated on Dover–Dunkerque, Portsmouth–Le Havre, Ramsgate–Ostend, Dover–Boulogne and Dover–Ostend; and
- (b) the *Dieppe Seaways*, which previously operated on Dover–Dunkerque and Hanko–Rostock.
19. P&O told us that the time it would take for a new entrant to commence operations would depend, among other things, on the availability of suitable ships and how much modification would be required to fit the port infrastructure.

Availability of berthing slots

20. P&O and Stena both noted that the availability of port capacity and berthing slots was a potential barrier to entry. CLdN Group noted that obtaining good sailing slots might

¹² [X]

be difficult for a new entrant in the cross-Channel market. DFDS told us that it had not been able to obtain berthing slots in Calais while SeaFrance was calling there. DFDS also told us that, in its view, it was more difficult for a non-French ferry operator to obtain berthing slots in Calais than for a French ferry operator. [REDACTED] GET told us that it had had no difficulty obtaining berthing slots at Calais.

21. Brittany Ferries noted that berthing slots were available at the following Channel ports: Plymouth, Poole, Weymouth, Roscoff, Saint Malo, Cherbourg, Le Havre, Dieppe, Boulogne and Ouistreham. Brittany Ferries noted that it was not able to comment on the availability of berthing slots at Dover and Calais.
22. GET told us that MFL had experienced no problems in obtaining berthing slots at Dover and Calais.
23. The Dover Harbour Board told us that:
 - (a) Ferry operators were granted slots to use a berth at a certain time. Operators did not have exclusive use of slots, although certain vessels tended to use particular berths owing to the configuration of the ship and berth, and operators did not have an automatic right to use a berth outside the slot time.
 - (b) The Dover ferry terminal had six berths and a maximum of 114 slots per day, assuming that all six berths were available and allowing for 1-hour slots plus 15 minutes for manoeuvring the vessels in and out of the berths, of which 59 were allocated. There were slots available to be allocated throughout the day.
 - (c) All ferry operators were subject to the same charges.
 - (d) The charges comprised harbour dues based on gross tonnage of the vessel (subject to a minimum charge), passenger dues paid according to the number of passengers, wharfage charges paid per vehicle and charges for the provision of security paid per vehicle.

(e) Factors that the Dover Harbour Board would take into account before granting approval of a new operator as a scheduled ferry operator would include whether:

- the Dover Harbour Board deemed the operator to be financially capable of sustaining a cross-Channel ferry service on a regular basis for at least one year;
- the operator appeared to be capable of managing its proposed schedule efficiently;
- the traffic forecast by the operator could be accommodated and managed by the manpower available to handle it; and
- the vessels that the operator proposed to use were capable of using the berths safely and speedily.

Before approving a new operator, the Dover Harbour Board would also consult with existing ferry operators, the cargo terminal operator and the UK and French border agencies.

24. CCI Cote d'Opale (CCICO), the operator of the ports of Calais and Boulogne, told us:

(a) With its existing capacity, it would be difficult for the port of Calais to accommodate more than the ten ferries that were operating from the port in December 2012.

(b) Calais had five berths, but CCICO's policy was to treat one as 'spare' to allow normal service to be maintained while maintenance or repairs were undertaken. The maximum number of sailings to/from a berth was 17 per day, not including night-time slots between 11pm and 5am when operators had little interest in running services because of the lack of passenger demand. However, the practical optimum was 13 or 14 sailings (ie 52 to 56 per day using four berths) because the port had to keep some capacity in reserve to accommodate delays due to weather conditions or unforeseen incidents. CCICO noted that P&O and DFDS ferries generally made five return crossings (rotations) per day and MFL ferries

made four rotations, which would equate to 48 sailings, although at peak times ferries could make up to six rotations on the Dover–Calais route. On 3 December 2012 there were 44 scheduled sailings (26 by P&O, 10 by DFDS/LD and 8 by MFL).

- (c) Operators were not granted exclusive use of any of the berths. Some ferries could not access all the berths (for example, because they were too long or less manoeuvrable).
- (d) The ferries used at Calais had to be designed or adapted to use the double-deck ‘linkspans’ (bridge structures linking the quay to the ferry) which enabled the upper and lower vehicle decks to be unloaded simultaneously. In CCICO’s view, it would be difficult to acquire a ferry capable of operating from Calais.
- (e) The space available at the port area for vehicle movements was also a constraint on the capacity at Calais.

25. The capacity of the Calais port will be increased by the Calais port 2015 development scheme, which is intended to enable the port to accommodate the traffic forecast for 2020 to 2025. However, the first berths are not expected to enter service until 2017/18.

26. The Port of Ramsgate told us that it had spare capacity for additional ferry services. It had three berths, one of which was used to facilitate the offshore energy business based at Ramsgate. Number 3 berth had ‘Dover-style’ loading ramps which were lowered on to ships’ decks. Number 1 and Number 2 berths were adjustable free-board pontoon berths so were suitable for use by vessels with their own ramps. The Port of Ramsgate told us that it could provide 32 slots per day at Number 2 and Number 3 berths (allowing 1.5 hours for the arrival and departure of each vessel) of which, in December 2012, four were being used by Transeuropa Ferries. The Port of Ramsgate noted that the new ferry service to Boulogne proposed by Euroferries

could require up to four of the available slots. The Port of Ramsgate also noted that the only constraint on vessels that could use the port was that the dimensions of the approach channel meant that vessels could not be longer than 180 metres or have a draught greater than 7 metres. For comparison, the *Rodin* was 186 metres in length and had a draught of 6.5 metres.¹³

Regulation

27. GET told us that ferry operators in European waters were subject to a range of international, European and national regulations on technical and commercial aspects of operating vessels at sea.
28. As the regulations apply equally to existing operators and new entrants, we do not consider the regulations to be a barrier to entry.

Considerations regarding expansion

29. We identified two means by which an existing operator could expand its operations on a route:
 - (a) expansion based on existing capacity by increasing the frequency of sailings; and
 - (b) expansion based on additional capacity by adding new ships.
30. DFDS told us that it could increase the number of sailings made by each vessel on its Dover–Dunkerque and Dover–Calais services. However, it noted that the vessels would need to operate at a higher speed to achieve additional crossings and that fuel cost increased significantly with speed. DFDS told us that on the Dover–Dunkerque route it would not be profitable to increase the number of sailings by a full rotation or even a single sailing per vessel because of the additional fuel cost, and that on the

¹³ www.marinetraffic.com/ais/shipdetails.aspx?mmsi=227022800.

Dover–Calais route very high-capacity utilization would be required to cover the cost of an additional rotation.

31. P&O told us that it could expand its operations with its existing fleet by increasing the number of sailings, although the maximum number of sailings was limited by speed at which ferries could cross the Channel. The extra sailings would be during the night when P&O did not currently have the demand to justify a full timetable. The costs involved in increasing the number of sailings were principally the variable costs associated with each crossing (ie fuel and port dues), and the cost of a second crew when vessels were operated for more than 12 hours a day.
32. Brittany Ferries also submitted that it could, in response to additional demand, increase the number of sailings with its existing ferries, though it noted that there was less flexibility on the Western Channel routes because of the time taken to make the longer crossing. It also noted that whilst it could, in theory, modify the frequency of its sailings rapidly, brochures and timetables were issued in advance for the following year.
33. CLdN commented that it could relatively easily increase the capacity of its existing services by increasing the frequency within certain lines and/or switching larger and smaller vessels in its fleet between different routes. [REDACTED]¹⁴
34. An existing operator that wished to expand by adding additional ships would face the same constraints as a new entrant in relation to acquiring additional ships and the availability of berthing slots at ports. However, GET noted that if an operator owned a vessel that could be rerouted, the cost of expansion would be very low, comprising just additional staff and fuel costs and harbour dues. We considered that, in addition,

¹⁴ [REDACTED]

it might be easier for an existing operator to expand than for a new entrant to enter a route because it would already have an established relationship with the relevant port operators (see paragraphs 16 and 25), and it might have a greater financial incentive as it would be better known to customers as an operator on that route and therefore might need less time to build brand recognition and traffic volumes.

Glossary

Accompanied freight	Freight transported on driver-accompanied freight vehicles.
Act	Enterprise Act 2002.
Bareboat Charter	The hiring of a ship for a stipulated period on terms which give the charterer possession and control of the ship, including the right to appoint the master and crew.
Capital cost	Depreciation and opportunity cost of financing.
CC	Competition Commission.
Channel Tunnel	Comprises two railway tunnels under the English Channel and a third service tunnel with terminals at Folkestone in Kent, UK, and Coquelles in Pas-de-Calais, France.
Contract rates	Rates that are covered by a contract between Eurotunnel and the relevant freight operator (rather than on a 'turn-up-and-go' basis). This term is used for every freight operator which has an account with Eurotunnel and the contract rate applies regardless of time of travel, varying only according to vehicle type.
DFDS	DFDS A/S, a ferry operator and land-based logistics provider, operating in northern Europe.
EBITDA	Earnings before interest, taxation, depreciation and amortization.
EBITDAc	Earnings before interest, taxation, depreciation, amortization and charter costs.
EBT	Earnings before tax.
Europorte SAS	Eurotunnel controls Europorte, the holding company controlling a range of rail freight subsidiaries, port infrastructure (including responsibility for maintenance at Dunkerque Sea Port).
Eurotunnel	Eurotunnel is the operator within the GET group of the freight and passenger vehicle shuttle business through the Channel Tunnel .
Fast craft	A high-speed tourist-only ro-ro ferry.
FCA	French competition authority .
Flash-docking	A process designed to return vessels to an operational state.
Freight unit	A driver-accompanied freight vehicle, an unaccompanied trailer , or a container.
French Commercial Court of Paris	The Tribunal de Commerce de Paris. SeaFrance was placed in administration by the French Commercial Court of Paris on 30 June 2010.

French competition authority	L'Autorité de la Concurrence.
GET	Groupe Eurotunnel SA. The parent company of the Eurotunnel group of businesses. The company is registered in France and listed on the London and Paris stock exchanges. It was the successful bidder to acquire three former vessels and other assets from the liquidator of SeaFrance .
Guidelines	The <i>Merger Assessment Guidelines, CC2</i> , form part of the advice and information published by the OFT and the CC under sections 106(1) and (3) respectively of the Act .
GUPPI	Gross upward pricing pressure index.
GVA	Gross value added. The contribution to the economy of each individual producer, industry or sector in the UK. An input into GDP calculation.
HSS vessel	High-speed ship, a fast ro-ro catamaran designed for fast loading and unloading.
Hot lay-by	A minimum operating mode designed to maintain the condition of the ship, for example by running the engines regularly.
Interavailability agreements	These agreements provide that one operator will carry passengers for the other in the event that they are unable to carry passengers due to circumstances out of their control. These agreements are not entered into in relation to freight customers.
IC	Incremental contribution.
IPR	Indicative price rise.
IRR	Internal rate of return.
KPIs	Key performance indicators.
Lane metre	An area of the deck of a ferry measuring 1 metre by 2 metres. Lane metres are used as units of measurement for the capacity of ferries.
Lo-lo	A ferry with lift-on/lift-off vehicular access.
Linkspan	A gangway between shore and ship suitable for vehicles.
MFL	MyFerryLink. A ferry company operating on the Dover–Calais route. The vessels used by MFL are owned by GET and chartered to the SCOP . MFL recommenced operation of the transferred assets on the Dover–Calais route on 20 August 2012 (<i>Rodin</i> and <i>Berlioz</i> vessels) under this name. (The <i>Nord Pas-de-Calais</i> was expected to enter into service on a permanent basis in February 2013.)
MIT	Motor inclusive travel. In essence, MIT customers are tour operators/travel agencies offering a package including Eurotunnel travel. The price for the Shuttle crossing is as agreed with

Eurotunnel and the end tour operator customer will not be aware of this, being charged an overall package price for their holiday that includes the crossing.

MoU	Memorandum of Understanding.
Negotiated rates	Rates which have been negotiated individually between Eurotunnel and a particular customer, and thus vary from contract to contract depending mainly on the volume that a particular freight operator offers to bring to Eurotunnel (thus enabling Eurotunnel to forecast traffic and make some degree of savings on costs).
North Sea	The North Sea routes consist of routes between ports on the east coast of England and ports in Continental Europe, other than the Ramsgate–Oostende route.
NPV	Net present value.
OFT	Office of Fair Trading.
P&O	The Peninsular and Oriental Steam Navigation Company and its subsidiary companies.
Parimar Franchecharte	Shipbroking firm appointed by the Commercial Court of Paris to assist with the sale of SeaFrance 's three ships (<i>Berlioz</i> , <i>Rodin</i> and <i>Nord Pas de Calais</i>) and other assets.
Passenger vehicles	Cars, vans, coaches, caravans and campervans, whether used for tourism or business travel.
Passengers	Foot passengers or individuals travelling with passenger vehicles . Excludes drivers accompanying freight.
Pc	Passenger capacity.
Peak sailing	A freight ferry departure, in the direction Great Britain to island of Ireland typically at night-time and on a weekday, for which the highest prices are charged.
ROCE	Return on capital employed.
ROIC	Return on invested capital.
Ro-ro	A ferry with roll-on/roll-off vehicular access.
Ro-pax	Ro-ro ferries with a larger passenger deck.
RPI	Retail price index.
SCOP	Société Cooperative et Participative. A group of former SeaFrance employees who established a workers cooperative, with the initial purpose of acquiring the SeaFrance business.

SeaFrance	SeaFrance SA, the company which ran a fleet of passenger and freight ferries between Dover and Calais. SeaFrance was placed into receivership on 30 June 2010.
Short sea	The short-sea route consists of routes across the short French sea (routes between Dover, Folkestone, Ramsgate, Newhaven in the UK and Calais, Dieppe, Boulogne, Dunkirk in France, as well as the Channel Tunnel) and the routes across the Belgian Straits (Ramsgate/Ostend).
Shuttle/Le Shuttle	The passenger and freight rail shuttle services operated by Eurotunnel and travelling between Folkestone and Coquelles via the Channel Tunnel . The services are marketed under the 'Le Shuttle' brand.
SLC	Substantial lessening of competition.
SNCF	Société Nationale des Chemins de fer Français. The French state railway company and former owner of SeaFrance .
SPA	Sale and purchase agreement.
Standard rates	The rates available to any freight operator who has an account with Eurotunnel with no or very low-volume forecast. These rates are therefore set across the board and do not vary depending on the customer. There are no volume discounts, and the rates are identical regardless of the identity of the customer with whom the contract is made.
Transferred assets	The assets acquired by Eurotunnel from the liquidator of SeaFrance , including the vessels, SeaFrance logos, brand and the trade name, computer software, websites and domain names, IT systems, customer records, and the inventory of technical and spare parts as well as IT hardware and office equipment.
TUPE	The Transfer of Undertakings (Protection of Employment) Regulations 2006.
Unaccompanied freight	Freight units carried on ferries and not accompanied by a driver.
Unaccompanied trailer	The trailer of an articulated lorry without the tractor unit and, hence, a driver.
The Vessels	The three vessels acquired by Eurotunnel: SeaFrance Berlioz , SeaFrance Rodin , and SeaFrance Nord-Pas-de-Calais .
Western Channel	The Western Channel routes consist of routes between ports on the south coast of England and ports on the north coast of France, other than the short-sea routes.
WACC	Weighted average cost of capital.