Appendix F

Market shares, capacity and utilization

Introduction

1. Great Britain–Ireland ferries carry a number of different types of traffic including tourist cars (cars accompanied by drivers and in some cases passengers), accompanied freight and unaccompanied freight.

Market size

2. Table 1 shows the total size of the market in 1996 to 2002. The tourist sector has shown some growth over the period as a whole but freight traffic has grown more rapidly. Growth was high in the period 1996 to 2000: from 2000 to 2002, tourist traffic declined and freight increased less than 2 per cent. Accompanied freight increased more rapidly than unaccompanied (although we have heard from a number of parties that future developments, such as the working time directive and road user charging, might favour unaccompanied freight). The central corridor has increased most rapidly followed by the southern corridor, probably reflecting the rapid growth of the Republic of Ireland economy.

TABLE 1 **Market size**

Units per year ('000)

	1996	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*
Northern corridor							
Tourist cars	494.5	468.4	484.7	512.8	592.8	551.8	567.1
Freight (accompanied)	245.2	262.0	266.0	268.9	292.0	302.0	297.7
Freight (unaccompanied)	393.2	422.7	484.8	507.4	510.4	493.0	468.2
Freight total	638.4	684.7	750.8	776.3	802.4	795.0	766.0
Central corridor							
Tourist cars	421.7	419.0	497.9	477.4	513.3	485.8	515.7
Freight (accompanied)	141.4	174.5	203.0	221.6	238.6	266.5	286.7
Freight (unaccompanied)	241.0	255.3	266.3	304.8	322.6	326.8	329.8
Freight total	382.5	429.8	469.3	526.4	561.2	593.3	616.5
Southern corridor							
Tourist cars	284.3	342.1	320.1	317.1	357.2	309.7	321.9
Freight (accompanied)	43.2	46.1	57.7	64.4	68.2	68.2	67.4
Freight (unaccompanied)	20.7	24.1	27.0	28.9	28.7	31.6	30.7
Freight total	63.9	70.2	84.7	93.3	96.9	99.8	98.1
Total (all corridors)							
Tourist cars	1200.5	1229.5	1302.7	1307.3	1463.2	1347.3	1404.7
Freight (accompanied)	429.9	482.6	526.7	554.9	598.8	636.7	651.9
Freight (unaccompanied)	654.9	702.1	778.2	841.1	861.7	851.4	828.7
Freight total	1084.8	1184.6	1304.8	1395.9	1460.5	1488.1	1480.6

Source: Stena and P&O.

Note: Some ferries also carry foot passengers which are excluded from the table (as are tourist coaches). Trade cars (cars being transported by manufacturers or traders for which the ferry operator is responsible for loading and unloading) are included in freight (unaccompanied) and freight total on the basis that five trade cars are equivalent to one freight unit. The only lo/lo services included are Coastal Container Line's Liverpool/Belfast and Liverpool/Dublin services: containers carried on these services are included in freight (unaccompanied) and freight total.

Capacity

3. Table 2 summarizes vehicle capacity on central and northern corridor ro/ro crossings in thousand lane metres per year (see notes to the table for the assumptions used). Since 1996, capacity has increased by about two-thirds on the central corridor and a quarter on the northern corridor.

4. Figure 1 illustrates the growth in capacity on the central corridor: the main increases have occurred as a result of Norse Merchant Ferries commencing its Liverpool–Dublin service[1] (1999), Irish Ferries introducing the *Jonathan Swift* fastcraft (1999)

[1] Norse Merchant Ferries now sails from river berths at Birkenhead but we continue to refer to it as a Liverpool service: Liverpool should therefore be taken as referring to all routes from Merseyside.

and the *Ulysses* (2001), P&O increasing its ship size on its Liverpool service and starting the Mostyn service (2001) and Stena introducing the *Adventurer* (2003).

5. The *Adventurer* has increased capacity by 1,500,000 lane metres per year, while the closure of Mostyn would reduce capacity by 1,760,000 lane metres per year. Another recent development is that Norse Merchant Ferries has changed the vessels used on its Liverpool–Dublin crossing, replacing a ropax vessel with a freighter, with the result that its Liverpool–Dublin accompanied capacity is reduced.

6. Measuring capacity in lane metres will tend to overstate the importance to the freight market of the shorter sea crossings, both because the shorter crossings carry some tourist vehicles and because they carry a high proportion of accompanied freight vehicles (which occupy more metres of space than unaccompanied). Figure 2 shows central corridor notional freight capacity in freight units.[2] Figure 2 includes only capacity that can be used by freight vehicles.[3] The resulting numbers are slightly difficult to interpret (since some of the notional freight capacity will inevitably be used by tourist vehicles) but may give a better picture of capacity from the point of view of the freight market.

7. Figure 3 illustrates the growth in capacity on the northern corridor: here the increases in capacity are smaller and have come principally from P&O which has increased its ship size on both diagonal and Scottish routes and gone from two to three vessels on Fleetwood–Larne.

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[2]The following assumptions are made [✂]: short-sea multi-purpose vessels carry 75 per cent accompanied (assuming average accompanied length of 16m and unaccompanied of 12.5m this gives average lane metres per unit of 15.1); short-sea ropax 60 per cent (14.6m); long-sea ropax and multi-purpose vessels 30 per cent (13.6m) and ro/ro freighters 6 per cent (12.7m).

[3]Fastcraft are excluded and HSS is limited to 30 units.

Capacity utilization

8. Table 2 also shows estimated capacity utilization based on estimated average capacity and volume in each year and assumptions about the space occupied by different types of vehicle (see notes to the table). These figures only give a rough idea of capacity utilization in each year due to the amount of approximation involved. Capacity utilization is higher for the long sea crossings than the short sea crossings and has tended to decline in recent years.

9. Hauliers have told us that, with the exception of the frequent services from Loch Ryan to Belfast and Larne, peak night-time services are often full or overbooked and that, due to this, it is not uncommon for them to be informed on the day that freight units (usually unaccompanied trailers) cannot be shipped and that occasionally unaccompanied trailers are left on the quayside. P&O told us that it was currently operating at full capacity on many peak sailings on Liverpool–Dublin. Stena told us that, since the introduction of the *Adventurer*, it has had spare capacity on all sailings including peak night-time ones with the exception of two westbound Thursday night sailings.

10. We have looked in more detail at Stena's Holyhead–Dublin crossing and P&O's Mostyn–Dublin and Liverpool–Dublin crossings.

Capacity and utilization: Stena Holyhead–Dublin

11. Table 3 shows daily peak and off-peak estimated capacity utilization during 2002 (before the introduction of Stena's new larger vessel, the *Stena Adventurer*). [✄].

Capacity and utilization: P&O Mostyn–Dublin and Liverpool–Dublin

12. Table 4 summarizes capacity utilization for peak, off-peak and weekend sailings in 2002 on P&O's services. On the Mostyn crossing, average peak utilization was [✂] per cent and on the Liverpool crossing it was [✂] per cent (of which containers accounted for [✂] per cent). Given that volumes are likely to be lower on some peak nights and times of year (for example, August), these numbers are consistent with the Liverpool crossings being full on many peak sailings. Total estimated capacity utilization in Table 4 is lower than in Table 1, which appears to reflect a higher number of sailings per year than assumed in Table 1 (which used a P&O assumption of 12 sailings per week whereas in 2002 there were actually up to 14 per week).

Market shares—tourist

13. Table 5 shows shares of the tourist market (reflecting the number of tourist cars):

(a) P&O's Fleetwood–Larne crossing carries few tourists, accounting for only 2 per cent of the northern corridor. In the northern corridor as a whole, Stena's share is 46 per cent and would increase post-merger to 48 per cent (P&O's share would decline from 30 to 28 per cent[4]).

(b) P&O's central corridor crossings are primarily freight routes and its share of the central corridor is only 3 per cent.

Stena has the largest share of the three corridors for tourist cars (northern, central, southern) but this is not changed by the merger.

Market shares and competition—freight

14. Table 6 shows shares of the total number of freight units (Tables 7 and 8 cover the accompanied and unaccompanied market segments).

[4]Traffic on P&O's Scottish crossings, which it will retain post-merger.

Northern corridor

15. Stena's share of the northern corridor is currently 17 per cent and would rise to 36 per cent post-merger; however, P&O's share is currently 48 per cent and would fall to 29 per cent. Stena's share might be expected to increase, at P&O's expense, when it moves to Cairnryan. Post-merger, there would remain three significant operators on the northern corridor: two on the Scottish routes and also two on the diagonal routes with one operator common to both—P&O pre-merger and Stena post-merger. The merger reduces concentration on the northern corridor.

16. We have considered the closeness of competition within the northern corridor. Respondents to our quantitative survey who were regular users of P&O Fleetwood–Larne were asked whether they would switch freight to a different crossing if P&O increased the price on this crossing and all other prices stayed the same. Most respondents indicated that they would definitely or possibly switch but, when asked about a specific price increase of 5 per cent, only 31 per cent said that they would switch freight.[5] Table 9 summarizes responses to questions about how much freight respondents would switch to each crossing. Given the small sample size of switchers (14), Table 9 also shows responses from the remainder of P&O Fleetwood–Larne users (47 respondents), who were asked which crossing they would use instead if they were unable to use P&O Fleetwood–Larne users. Taking account of both categories of respondent, the most popular alternative crossings were Norse Merchant Ferries' two diagonal crossings and the Loch Ryan crossings of Stena and P&O. Among the small sample of switchers, there was also some support for Stena's Holyhead–Dublin Bay and P&O's Liverpool–Dublin crossings.

[5]The percentage who would switch freight increased to 81 per cent for a price increase of 50 per cent.

17. In interpreting the results of the survey, we have taken into account that the survey was based on a sample of Stena and P&O users and this may have impacted on responses, as it is possible that some of the respondents who were regular users of P&O Fleetwood–Larne came from the Stena sample and, if so, such respondents would be more likely to select Stena crossings as alternatives.

Central corridor

18. P&O's share in 2002 of the central corridor was 33 per cent and Stena's was 17 per cent, with Norse Merchant Ferries and Irish Ferries in between at 25 and 20 per cent. We have calculated notional market shares after the closure of Mostyn on the assumption that its accompanied volume is divided between the two Holyhead–Dublin crossings and its unaccompanied traffic is divided between the two Liverpool–Dublin crossings. Since accompanied volume is [✂] per cent of Mostyn's total, this results in Stena and Irish Ferries gaining [✂] per cent each of Mostyn's volume and P&O and Norse Merchant Ferries gaining [✂] per cent each. On these assumptions, P&O's share declines to 25 per cent and Stena's increases to 19 per cent. Responses to our quantitative survey suggested that Mostyn users would switch a somewhat higher proportion of freight to Stena Holyhead–Dublin (24 per cent on average) and P&O Liverpool–Dublin (36 per cent) and less to Irish Ferries and Norse Merchant Ferries than implied by these assumptions and would also switch some freight (17 per cent) to crossings outside the central corridor[6] while analysis of what happened when Mostyn opened in November 2001 suggests that much of its traffic transferred from P&O's Liverpool–Dublin crossing.[7]

[6]The survey was based on a sample of Stena and P&O users which may have an impact on responses.
[7]Table 6 shows that P&O's share of the central corridor remained broadly constant between 2000 and 2002 as the development of Mostyn's traffic was offset by a decline in P&O's Liverpool traffic.

19. Post-merger, the four main competitors on the central corridor will reduce to three and Stena will have a 44 per cent market share (based on 2002 numbers and using the same assumptions about the Mostyn business). The notional 2002 shares may understate Stena's future post-merger position because our assumptions about Mostyn might understate the proportion of Mostyn traffic that switches to Stena's post-merger crossings (see paragraph 18) and also because in 2002 Stena had not yet introduced its new larger vessel (*Stena Adventurer*) on its Holyhead–Dublin crossing.

20. Table 7 shows shares for the accompanied sector of the market. Stena's notional share after the closure of Mostyn is [✂] per cent, which may be understated for the reasons given in paragraph 19; and P&O's is [✂] per cent, which is also likely to be understated both due to our assumption on Mostyn and because P&O Liverpool–Dublin has in 2003 increased its share of accompanied central crossing freight to around [✂] per cent (P&O's increased share has come at the expense of Norse Merchant Ferries which has reduced accompanied capacity on its Liverpool–Dublin crossing). Table 8 shows shares in the unaccompanied sector: overlap in the central corridor is limited as Stena's current share of unaccompanied is only [✂] per cent.

21. We have also considered the closeness of competition within the central corridor. Respondents to our quantitative survey who were regular users of P&O Liverpool–Dublin were asked whether they would switch freight to a different crossing if P&O increased the price on this crossing and all other prices stayed the same. Most respondents indicated that they would definitely or possibly switch but, when asked

about a specific price increase of 5 per cent, only 35 per cent said they would switch freight.[8]

22. Table 10 summarizes responses to questions about how much freight respondents would switch to each crossing. The most popular alternative routes for those (29 respondents) of P&O Liverpool–Dublin users who said they would switch in response to a 5 per cent price increase were Stena Holyhead–Dublin Bay (to which 23 per cent of these respondents' freight would be switched), Irish Ferries Holyhead–Dublin (10 per cent) and Norse Merchant Ferries Liverpool–Dublin (10 per cent) and Norse Merchant Ferries Heysham–Dublin (4 per cent). Among respondents with no unaccompanied business, there was a stronger preference for switching freight to Stena Holyhead–Dublin Bay (31 per cent) and Irish Ferries Holyhead–Dublin (19 per cent) compared with Norse Merchant Ferries' two crossings (5 per cent). Given the small sample size of switchers, we have also considered responses from the remainder of P&O Liverpool–Dublin users (55 respondents), who were asked which crossing they would use instead if they were unable to use P&O Liverpool–Dublin. The most popular alternative crossings were Norse Merchant Ferries Liverpool–Dublin (25 per cent), Stena Holyhead–Dublin Bay (24 per cent), Irish Ferries Holyhead–Dublin (18 per cent), P&O Mostyn–Dublin (16 per cent) and Norse Merchant Ferries Heysham–Dublin (5 per cent). Again, results for respondents with no unaccompanied business showed a stronger preference for Stena Holyhead–Dublin Bay (32 per cent) than did others.

23. Respondents to our quantitative survey using Stena Holyhead–Dublin Bay were asked the same questions as those using P&O Liverpool–Dublin—see Table 10. Results were fairly similar to those for P&O Liverpool–Dublin except that Irish Ferries

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[8] The percentage who would switch freight increased to 69 per cent for a price increase of 50 per cent.

Holyhead–Dublin emerged as clearly the strongest alternative and Stena's northern and southern corridor routes also received some support as alternatives (more than Norse Merchant Ferries' crossings). Thus P&O Liverpool–Dublin emerged as a somewhat less strong alternative to Stena Holyhead–Dublin Bay than vice versa. Nevertheless P&O Liverpool–Dublin was still the second most strongly supported alternative to Stena Holyhead–Dublin Bay (after Irish Ferries Holyhead–Dublin) and P&O Dublin–Mostyn also received support. As noted in paragraph 15, we have taken into account the basis and size of the sample when interpreting the results of the quantitative survey.

TABLE 2 **Estimated capacity and capacity utilization, 1996 to 2003**

	Avg 1996	*Avg 1997*	*Avg 1998*	*Avg 1999*	*Avg 2000*	*Avg 2001*	*Avg 2002*	*Avg 2003*	*End 2003*
Estimated effective annual capacity								*'000 lane metres per year*	
Stena Stranraer–Belfast	4,555	5,170	5,170	5,170	5,170	5,170	4,373	4,234	4,234
P&O Troon–Larne	500	500	500	461	375	374	429	375	375
P&O Cairnryan–Larne	4,842	5,466	5,460	4,589	5,407	6,861	7,033	7,399	7,399
P&O Fleetwood–Larne*	1,524	1,525	1,524	1,659	1,996	2,248	2,716	2,322	2,322
NMF Liverpool–Belfast	1,242	1,840	1,840	1,840	1,840	1,840	2,310	2,208	2,208
NMF Heysham Belfast	1,539	2,149	2,152	2,333	2,266	2,495	1,883	1,271	1,271
Seatruck Heysham–Warrenpoint	598	750	750	750	750	750	750	750	750
NMF Liverpool–Dublin	0	0	0	1,979	1,979	1,979	1,977	1,988	2,003
NMF Heysham–Dublin	1,626	1,626	1,545	950	950	950	950	950	950
P&O Liverpool–Dublin	2,568	2,550	2,299	2,468	2,467	2,627	2,018	2,018	2,018
P&O Mostyn–Dublin	0	0	0	0	0	243	1,760	1,760	1,760
IF Dublin–Holyhead	2,428	2,204	2,207	3,111	3,111	4,630	5,426	5,426	5,426
Stena Dublin–Holyhead	4,032	4,032	4,032	4,032	4,032	4,114	4,256	4,899	5,763
Northern corridor	14,798	17,399	17,395	16,802	17,803	19,739	19,494	18,558	18,558
Central corridor	10,653	10,412	9,504	12,540	12,539	14,542	16,387	17,041	17,920
Estimated effective capacity utilization							*per cent*		
Stena Stranraer–Belfast									
P&O Troon–Larne									
P&O Cairnryan–Larne									
P&O Fleetwood–Larne*									
NMF Liverpool–Belfast									
NMF Heysham Belfast									
Seatruck Heysham–Warrenpoint					✂				
NMF Liverpool–Dublin									
NMF Heysham–Dublin									
P&O Liverpool–Dublin									
P&O Mostyn–Dublin									
IF Dublin–Holyhead									
Stena Dublin–Holyhead									
Northern corridor									
Central corridor									

Source: CC calculations based on data supplied by P&O and Stena.

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*Includes Liverpool–Larne in 2002.

Notes:

1. NMF = Norse Merchant Ferries, IF = Irish Ferries.
2. Capacity represents all ro/ro capacity of freight ferry operators (including any tourist-only fastcraft operated by freight ferry operators). Capacity excludes lo/lo vessels and vessels operated by tourist-only ferry operators (SeaContainers and Isle of Man Steam Packet). Where a vessel was only deployed on a crossing for part of the year, annual nominal capacity has been multiplied by the number of days it was deployed divided by 365.
3. Effective capacity for each vessel is assumed to be 85 per cent of nominal capacity, except for short-sea conventional vessels for which it is assumed to be 80 per cent. Annual nominal capacity for each vessel is its capacity in lane metres multiplied by its number of sailings per week multiplied by its assumed availability in weeks per year. Assumed availability is 50 weeks for HSS and short-sea ropax vessels, 49.2 weeks for multi-purpose vessels; 49 weeks for ro/ro freighters and 48.5 weeks for long-sea ropax vessels. [✂]
4. Effective capacity utilization is annual volume divided by capacity with both measured in lane metres. Volume (lane metres) assumes accompanied freight vehicles average 16 route metres; unaccompanied trailers 12.5m; cars 3.2m and coaches 12.8m (based on one car being equivalent to 0.2 and one coach 0.8 accompanied trade vehicles).

TABLE 3 **Capacity and utilization on Stena's Holyhead–Dublin crossing, 2002**

	Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*	*Saturday*	*Sunday*	*Total*	*Length (m) assumed*
Holyhead–Dublin peak									
Volumes									
Accompanied									16.0
Unaccompanied									12.5
Trade cars*									16.0
Total (units)†									
Total (lane metres)†									
Capacity and utilization									
Capacity per sailing (lane metres)								2,000	
Utilization‡ (%)									
Dublin–Holyhead peak									
Volumes									
Accompanied									16.0
Unaccompanied									12.5
Trade cars*									16.0
Total (units)†									
Total (lane metres)†									
Capacity and utilization									
Capacity per sailing (lane metres)								2,000	
Utilization‡ (%)									
Holyhead–Dublin off-peak									
Volumes									
Accompanied									16.0
Unaccompanied									12.5
Trade cars*									16.0
Total (units)†									
Total (lane metres)†									
Capacity and utilization									
Capacity per sailing (lane metres)								2,000	
Utilization‡ (%)									
Dublin–Holyhead off-peak									
Volumes									
Accompanied									16.0
Unaccompanied									12.5
Trade cars*									16.0
Total (units)†									
Total (lane metres)†									
Capacity and utilization									
Capacity per sailing (lane metres)								2,000	
Utilization‡ (%)									
All									
Volumes									
Total excluding cars (units)									
Total excluding cars (lane metres)									
Tourist traffic§									16.0
Total including tourist (units)									
Total including tourist (lane metres)									
Capacity and utilization									
Capacity per sailing (lane metres)								2,000	
Utilization excluding tourist‡ (%)									
Utilization including tourist‡ (%)									

Source: Stena.

Note: [ ]

*Freight unit equivalents (number of cars divided by 5).
†Excluding tourist cars.
‡Assumes operation for 49.2 weeks per year (actual figures not available).
§Freight unit equivalents (number of tourist cars divided by 5 plus number of tourist coaches divided by 1.25).

TABLE 4 **Capacity and utilization on P&O's Mostyn and Liverpool crossings, 2002**

	Peak	*Intermediate*	*Off-peak*	*Weekend*	*Total*	*Length (m)*
Mostyn–Dublin						
Volume						
Accompanied						16
Unaccompanied						12.5
Containers						12.5
Trade cars*						16
Ferrymasters unacc						12.5
Ferrymasters acc			✂			16
Other						12.5
Total (units)						
Total (lane metres)†						
Tourist cars*						16
Total incl tourist (units)						
Total incl tourist (lane metres)†						
Capacity and utilization						
Capacity per sailing (lane metres)					1,942	
No of sailings	474		410	253	1,137	
Capacity (lane metres)						
Capacity utilization (%):						
Excluding tourist						
Including tourist						
Liverpool–Dublin						
Volume						
Accompanied						16
Unaccompanied						12.5
Containers			✂			12.5
Trade cars*						16
Ferrymasters unacc						12.5
Ferrymasters acc						16
Other						12.5
Total (units)						
Total (lane metres)†						
Tourist cars*						16
Total incl tourist (units)						
Total incl tourist (lane metres)†						
Capacity and utilization						
Capacity per sailing (lane metres)					2040	
No of sailings	505		446	328	1,279	
Capacity (lane metres)						
Capacity utilization (%):						
Excluding tourist						
Including tourist			✂			
Spare capacity:						
Excluding tourist						
Including tourist						

Source: P&O.

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*Freight unit equivalents (number of cars divided by 5).
†Number of units times length of unit.
Note: Volume is number of units (except for cars).

TABLE 5 **Shares of tourist cars**

Tourist cars (per cent)

	1996	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*After closure of Mostyn**	*After merger*
Northern corridor									
Stena Stranraer–Belfast (%)	56.6	56.7	53.5	55.5	46.6	45.5	45.7	45.7	45.7
Stena Fleetwood–Larne	-	-	-	-	-	-	-	-	1.9
Stena total	**56.6**	**56.7**	**53.5**	**55.5**	**46.6**	**45.5**	**45.7**	**45.7**	**47.6**
P&O Troon–Larne	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
P&O Cairnryan–Larne	40.8	38.7	39.4	37.5	26.4	26.6	28.0	28.0	28.0
P&O Fleetwood–Larne	0.0	0.0	0.6	1.1	0.8	1.5	1.9	1.9	0.0
P&O total	**40.8**	**38.7**	**40.0**	**38.7**	**27.2**	**28.1**	**30.0**	**30.0**	**28.1**
Norse Merchant Ferries Liverpool–Belfast	**2.5**	**4.6**	**6.5**	**5.8**	**5.7**	**6.9**	**7.1**	**7.1**	**7.1**
Seacontainers Heysham–Belfast	0.0	0.0	0.0	0.0	6.9	6.0	4.2	4.2	4.2
Seacontainers Stranraer–Belfast	0.0	0.0	0.0	0.0	13.5	13.6	13.0	13.0	13.0
Seacontainers total	**0.0**	**0.0**	**0.0**	**0.0**	**20.4**	**19.6**	**17.3**	**17.3**	**17.3**
HHI‡	**4,882**	**4,732**	**4,502**	**4,608**	**3,365**	**3,286**	**3,334**	**3,334**	**3,400**
Market size ('000)	494.5	468.4	484.7	512.8	592.8	551.8	567.1		567.1
Central corridor									
Stena Holyhead–Dublin	0.3	3.3	5.9	8.2	7.5	6.5	8.4	8.7	8.7
Stena Holyhead–Dun Laoghaire	68.2	64.3	61.4	49.9	44.7	42.4	40.5	40.5	40.5
Stena Liverpool–Dublin	-	-	-	-	-	-	-	-	2.6
Stena total	**68.4**	**67.6**	**67.3**	**58.1**	**52.2**	**48.8**	**48.9**	**49.1**	**51.7**
P&O Liverpool–Dublin	0.0	0.0	0.0	0.6	0.8	1.6	2.3	2.6	0
P&O Mostyn–Dublin *	0.0	0.0	0.0	0.0	0.0	0.1	1.2	0	0
P&O total	**0.0**	**0.0**	**0.0**	**0.6**	**0.8**	**1.8**	**3.4**	**2.6**	**0.0**
Irish Ferries Holyhead–Dublin	**31.6**	**32.4**	**32.7**	**40.2**	**44.2**	**45.9**	**45.0**	**45.3**	**45.3**
Norse Merchant Ferries Liverpool–Dublin	**0.0**	**0.0**	**0.0**	**1.0**	**2.8**	**3.5**	**2.7**	**3.0**	**3.0**
HHI‡	**5,679**	**5,619**	**5,600**	**4,994**	**4,689**	**4,505**	**4,427**	**4,480**	**4,731**
Market size ('000)	421.7	419.0	497.9	477.4	513.3	485.8	515.7	515.7	515.7
Southern corridor									
Stena Fishguard–Rosslare	**70.7**	**53.9**	**59.1**	**60.2**	**54.1**	**50.1**	**51.9**	**51.9**	**51.9**
Irish Ferries Pembroke–Rosslare	**29.3**	**46.1**	**40.9**	**39.8**	**36.7**	**37.3**	**35.6**	**35.6**	**35.6**
Swansea–Cork†	**0.0**	**0.0**	**0.0**	**0.0**	**9.2**	**12.6**	**12.4**	**12.4**	**12.4**
HHI‡	**5,857**	**5,030**	**5,167**	**5,209**	**4,355**	**4,062**	**4,122**	**4,122**	**4,122**
Market size ('000)	284.3	342.1	320.1	317.1	357.2	309.7	321.9	321.9	321.9
Total (all corridors)									
Stena	64.1	59.6	60.2	57.6	50.4	47.8	48.3	48.4	49.3
P&O	16.8	14.7	14.9	15.4	11.3	12.1	13.4	13.0	12.1
SeaContainers	0.0	0.0	0.0	0.0	8.3	8.0	7.0	7.0	7.0
Norse Merchant Ferries	1.0	1.8	2.4	2.7	3.3	4.1	3.9	4.0	4.0
Irish Ferries	18.0	23.9	22.5	24.3	24.5	25.1	24.7	24.8	24.8
Swansea–Cork†					2.3	2.9	2.8	2.8	2.8
HHI‡	**4,719**	**4,347**	**4,354**	**4,153**	**3,351**	**3,148**	**3,190**	**3,198**	**3,266**
Market size ('000)	1,200.5	1,229.5	1,302.7	1,307.3	1,463.2	1,347.3	1,404.7	1,404.7	1,404.7

Source: P&O and Stena.

*One-quarter of Mostyn tourist traffic has been assumed to transfer to each of the two Liverpool–Dublin and Holyhead–Dublin crossings.
†Figures not available prior to 2000.
‡Herfindahl-Hirschmann Index of concentration (calculated by summing squared percentage market shares).

TABLE 6 **Shares of total freight**

Total freight (per cent)

	1996	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*After closure of Mostyn**	*After merger*
Northern corridor									
Stena Stranraer–Belfast	19.8	21.6	19.4	18.9	20.2	18.6	17.1	17.1	17.1
Stena Fleetwood–Larne	-	-	-	-	-	-	-	-	18.9
Stena total	**19.8**	**21.6**	**19.4**	**18.9**	**20.2**	**18.6**	**17.1**	**17.1**	**35.9**
P&O Troon–Larne	5.1	5.4	4.9	4.7	3.8	3.4	3.5	3.5	3.5
P&O Cairnryan–Larne	23.3	21.2	23.0	22.3	21.1	22.6	25.6	25.6	25.6
P&O Fleetwood–Larne	15.8	13.5	12.3	13.9	14.9	16.1	18.9	18.9	0
P&O total	**44.2**	**40.1**	**40.1**	**40.9**	**39.8**	**42.2**	**48.0**	**48.0**	**29.1**
Norse Merchant Ferries Heysham–Belfast	12.5	13.1	13.3	13.5	12.7	12.4	10.7	10.7	10.7
Norse Merchant Ferries Liverpool–Belfast	12.8	12.1	14.4	14.2	14.6	14.1	13.1	13.1	13.1
Norse Merchant Ferries total	**25.4**	**25.3**	**27.7**	**27.7**	**27.3**	**26.5**	**23.8**	**23.8**	**23.8**
Coastal Liverpool–Belfast	**6.3**	**5.9**	**5.4**	**5.2**	**5.6**	**5.7**	**3.9**	**3.9**	**3.9**
Seatruck Heysham–Warrenpoint	**4.3**	**7.2**	**7.4**	**7.3**	**7.1**	**7.0**	**7.2**	**7.2**	**7.2**
HHI‡	**3,044**	**2,800**	**2,839**	**2,878**	**2,819**	**2,911**	**3,226**	**3,226**	**2,772**
Market size ('000)	638.4	684.7	750.8	776.3	802.4	795.0	766.0	766.0	766.0
Central corridor									
Stena Holyhead–Dublin	9.5	10.5	11.0	9.9	9.4	9.2	10.6	12.9	12.9
Stena Holyhead–Dun Laoghaire	6.2	9.8	11.0	9.4	8.4	7.5	6.1	6.1	6.1
Stena Liverpool–Dublin	-	-	-	-	-	-	-	-	24.7
Stena total	**15.7**	**20.3**	**22.1**	**19.3**	**17.8**	**16.7**	**16.7**	**19.0**	**43.6**
P&O Liverpool–Dublin	40.0	35.6	34.1	31.4	32.4	30.2	21.1	24.7	0.0
P&O Mostyn–Dublin*	0.0	0.0	0.0	0.0	0.0	1.4	11.6	0.0	0.0
P&O total	**40.0**	**35.6**	**34.1**	**31.4**	**32.4**	**31.6**	**32.7**	**24.7**	**0.0**
Irish Ferries Holyhead–Dublin	**19.1**	**19.7**	**21.1**	**19.6**	**19.1**	**20.3**	**20.1**	**22.4**	**22.4**
Norse Merchant Ferries Liverpool–Dublin	0.0	0.0	0.0	14.7	17.3	17.8	15.8	19.3	19.3
Norse Merchant Ferries Heysham–Dublin	18.8	18.6	17.5	10.4	9.0	9.7	9.5	9.5	9.5
Norse Merchant Ferries total	**18.8**	**18.6**	**17.5**	**25.0**	**26.4**	**27.4**	**25.2**	**28.8**	**28.8**
Coastal Liverpool–Dublin	**6.4**	**5.7**	**5.2**	**4.6**	**4.4**	**3.9**	**5.2**	**5.2**	**5.2**
HHI‡	**2,604**	**2,452**	**2,430**	**2,391**	**2,444**	**2,460**	**2,417**	**2,324**	**3,259**
Market size ('000)	382.5	429.8	469.3	526.4	561.2	593.3	616.5	616.5	616.5
Southern corridor									
Stena Fishguard–Rosslare	**62.8**	**49.6**	**40.8**	**38.1**	**39.1**	**34.7**	**38.3**	**38.3**	**38.3**
Irish Ferries Pembroke–Rosslare	**28.1**	**42.1**	**53.1**	**56.5**	**56.7**	**62.0**	**59.1**	**59.1**	**59.1**
Swansea–Cork	**9.1**	**8.3**	**6.1**	**5.4**	**4.2**	**3.4**	**2.6**	**2.6**	**2.6**
HHI‡	**4,811**	**4,299**	**4,518**	**4,676**	**4,764**	**5,054**	**4,969**	**4,969**	**4,969**
Market size ('000)	63.9	70.2	84.7	93.3	96.9	99.8	98.1	98.1	98.1
Total (all corridors)									
Stena	20.9	22.8	21.7	20.3	20.5	18.9	18.3	19.3	39.3
P&O	40.1	36.1	35.4	34.6	34.3	35.1	38.4	35.1	15.0
Norse Merchant Ferries	21.6	21.4	22.2	24.8	25.1	25.1	22.8	24.3	24.3
Coastal	6.0	5.4	5.0	4.6	4.8	4.6	4.2	4.2	4.2
Irish Ferries	8.4	9.6	11.0	11.2	11.1	12.3	12.3	13.2	13.2
Seatruck	2.6	4.1	4.3	4.1	3.9	3.8	3.7	3.7	3.7
Swansea–Cork	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2
HHI‡	**2,620**	**2,420**	**2,383**	**2,390**	**2,391**	**2,409**	**2,516**	**2,399**	**2,568**
Market size ('000)	1,084.8	1,184.6	1,304.8	1,395.9	1,460.5	1,488.1	1,480.6	1,480.6	1,480.6

Source: P&O and Stena.

*See notes to Tables 7 and 8.
‡Herfindahl-Hirschmann index of concentration (calculated by summing squared percentage market shares).
Note: The only lo/lo services included are Coastal Container Line's Liverpool–Dublin and Liverpool–Belfast services.

TABLE 7 **Shares of accompanied freight**

Accompanied freight (per cent)

	1996	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*After closure of Mostyn**	*After merger*
Northern corridor									
Stena Stranraer–Belfast									
Stena Fleetwood–Larne									
Stena total									
P&O Troon–Larne									
P&O Cairnryan–Larne									
P&O Fleetwood–Larne									
P&O total					✂				
Norse Merchant Ferries Heysham–Belfast									
Norse Merchant Ferries Liverpool–Belfast									
Norse Merchant Ferries total									
Coastal Liverpool–Belfast									
Seatruck Heysham–Warrenpoint									
HHI‡	**3,861**	**3,746**	**3,626**	**3,735**	**3,850**	**4,017**	**4,247**	**4,247**	**4,058**
Market size ('000)	245.2	262.0	266.0	268.9	292.0	302.0	297.7	297.7	297.7
Central corridor									
Stena Holyhead–Dublin									
Stena Holyhead–Dun Laoghaire									
Stena Liverpool–Dublin									
Stena total									
P&O Liverpool–Dublin									
P&O Mostyn–Dublin*									
P&O total									
Irish Ferries Holyhead–Dublin					✂				
Norse Merchant Ferries Liverpool–Dublin									
Norse Merchant Ferries Heysham–Dublin									
Norse Merchant Ferries total									
Coastal Liverpool–Dublin									
HHI‡	**2,965**	**3,247**	**3,373**	**3,010**	**2,832**	**2,770**	**2,793**	**3,149**	**4,051**
Market size ('000)	141.4	174.5	203.0	221.6	238.6	266.5	286.7	286.7	286.7
Southern corridor									
Stena Fishguard–Rosslare									
Irish Ferries Pembroke–Rosslare					✂				
Swansea–Cork									
HHI‡	**4,985**	**4,431**	**4,499**	**4,601**	**4,655**	**4,865**	**4,839**	**4,839**	**4,839**
Market size ('000)	43.2	46.1	57.7	64.4	68.2	68.2	67.4	67.4	67.4
Total (all corridors)									
Stena									
P&O									
Norse Merchant Ferries									
Irish Ferries					✂				
Coastal									
Seatruck									
Swansea–Cork									
HHI‡	**3,046**	**3,104**	**2,992**	**2,885**	**2,883**	**2,808**	**2,869**	**2,834**	**3,273**
Market size ('000)	429.9	482.6	526.7	554.9	598.8	636.7	651.9	651.9	651.9

Source: P&O and Stena.

*One half of Mostyn accompanied traffic has been assumed to transfer to each of the two Holyhead–Dublin crossings.
‡Herfindahl-Hirschmann index of concentration (calculated by summing squared percentage market shares).
Note: The only lo/lo services included are Coastal Container Line's Liverpool–Dublin and Liverpool–Belfast services.

TABLE 8 **Shares of unaccompanied freight**

Unaccompanied freight (per cent)

	1996	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*After closure of Mostyn**	*After merger*
Northern corridor									
Stena Stranraer–Belfast									
Stena Fleetwood–Larne									
Stena total									
P&O Troon–Larne									
P&O Cairnryan–Larne									
P&O Fleetwood–Larne									
P&O total					✂				
Norse Merchant Ferries Heysham–Belfast									
Norse Merchant Ferries Liverpool–Belfast									
Norse Merchant Ferries total									
Coastal Liverpool–Belfast									
Seatruck Heysham–Warrenpoint									
HHI‡	**2,964**	**2,811**	**2,883**	**2,929**	**2,835**	**2,896**	**3,149**	**3,149**	**2,483**
Market size ('000)	393.2	422.7	484.8	507.4	510.4	493.0	468.2	468.2	468.2
Central corridor									
Stena Holyhead–Dublin									
Stena Holyhead–Dun Laoghaire									
Stena Liverpool–Dublin									
Stena total									
P&O Liverpool–Dublin									
P&O Mostyn–Dublin *									
P&O total					✂				
Irish Ferries Holyhead–Dublin									
Norse Merchant Ferries Liverpool–Dublin									
Norse Merchant Ferries Heysham–Dublin									
Norse Merchant Ferries total									
Coastal Liverpool–Dublin									
HHI‡	**3,379**	**3,207**	**3,134**	**3,157**	**3,264**	**3,363**	**3,296**	**3,301**	**3,477**
Market size ('000)	241.0	255.3	266.3	304.8	322.6	326.8	329.8	329.8	329.8
Southern corridor									
Stena Fishguard–Rosslare									
Irish Ferries Pembroke–Rosslare					✂				
Swansea-Cork Swansea–Cork									
HHI‡	**4482**	**4182**	**4576**	**4911**	**5174**	**5595**	**5348**	**5348**	**5348**
Market size ('000)	20.7	24.1	27.0	28.9	28.7	31.6	30.7	30.7	30.7
Total (all corridors)									
Stena									
P&O									
Norse Merchant Ferries									
Coastal					✂				
Irish Ferries									
Seatruck									
Swansea–Cork									
HHI‡	**2,895**	**2,718**	**2,714**	**2,782**	**2,761**	**2,831**	**2,956**	**2,924**	**2,575**
Market size ('000)	654.9	702.1	778.2	841.1	861.7	851.4	828.7	828.7	828.7

Source: P&O and Stena.

*One-half of Mostyn unaccompanied traffic has been assumed to transfer to each of the two Liverpool–Dublin crossings.
‡Herfindahl-Hirschmann Index of concentration (calculated by summing squared percentage market shares).
Note: The only lo/lo services included are Coastal Container Line's Liverpool–Dublin and Liverpool–Belfast services.

TABLE 9 **Information from quantitative survey on northern corridor switching**

Switching to	*P&O Fleetwood–Larne* Switchers: mean % volume respondents would switch (at 5%)* *All*	*Non-switchers: % of respondents quoting each as alternative* *All*	*Accomp only†*
Norse Merchant Ferries Belfast–Liverpool	16	26	25
Stena Belfast–Stranraer	10	21	25
P&O Larne–Cairnryan	10	17	13
Norse Merchant Ferries Belfast–Heysham	14	11	6
P&O Dublin–Liverpool	9	6	6
Seatruck Heysham–Warrenpoint		6	
Stena Dublin Bay–Holyhead	15	2	6
Irish Ferries Rosslare–Pembroke		2	6
P&O Dublin–Mostyn	8		
Norse Merchant Ferries Dublin–Liverpool	2		
Number of respondents	14 (21)‡	55	19

Source: ORC, CC calculations.

*Mean percentage for each crossing excludes respondents who refused to answer and those stating they did not know what percentage they would switch to that crossing.
†Respondents who have no unaccompanied business on any route.
‡First number is the number answering questions about the percentage of freight they would switch to each crossing. Figure in brackets is the percentage stating they would definitely switch freight in response to 5 per cent price increase by P&O and Stena respectively.
Note: The survey was based on a sample of Stena and P&O users and this may impact on results. Figures for switchers who had no unaccompanied business are not shown as there were only five respondents.

TABLE 10 **Information from quantitative survey on central corridor switching**

	Route							
	P&O Liverpool–Dublin				*Stena Holyhead–Dublin*			
Switching to	*Switchers: mean % volume respondents would switch (at 5%)**		*Non-switchers: % of respondents quoting each as alternative*		*Switchers: mean % volume respondents would switch (at 5%)**		*Non-switchers: % of respondents quoting each as alternative*	
	All	*Accomp only‡*	*All*	*Accomp only‡*	*All*	*Accomp only‡*	*All*	*Accomp only‡*
Stena Dublin Bay–Holyhead	23	31	24	32				
P&O Dublin–Liverpool					14	13	18	13
Norse Merchant Ferries Dublin–Liverpool	10	2	25	21	3	2	6	4
Irish Ferries Dublin–Holyhead	10	19	18	16	25	32	48	45
Norse Merchant Ferries Dublin–Heysham	4	3	5	5	4	0	1	
Norse Merchant Ferries Belfast–Heysham	4				1	3	1	
P&O Dublin–Mostyn	3	3	16	21	9	14	5	4
Stena Belfast–Stranraer	2	5	2	5	9	7	8	9
P&O Larne–Fleetwood	1				5	1	4	4
Norse Merchant Ferries Belfast–Liverpool	1				1	2	2	
Stena Rosslare–Fishguard	1	1			13	9	7	8
Number of respondents	25 (29)†	12 (15)†	55	19	27 (34)†	13 (16)†	85	53

Source: ORC, CC calculations.

*Mean percentage for each crossing excludes respondents who refused to answer and those stating they did not know what percentage they would switch to that crossing.
‡Respondents who have no unaccompanied business on any route.
†First number is the number answering questions about the percentage of freight they would switch to each crossing. Figure in brackets is the percentage stating they would definitely switch freight in response to 5 per cent price increase by P&O and Stena respectively.
Note: The survey was based on a sample of Stena and P&O users and this may impact on results.

FIGURE 1

Vehicle capacity on the central corridor

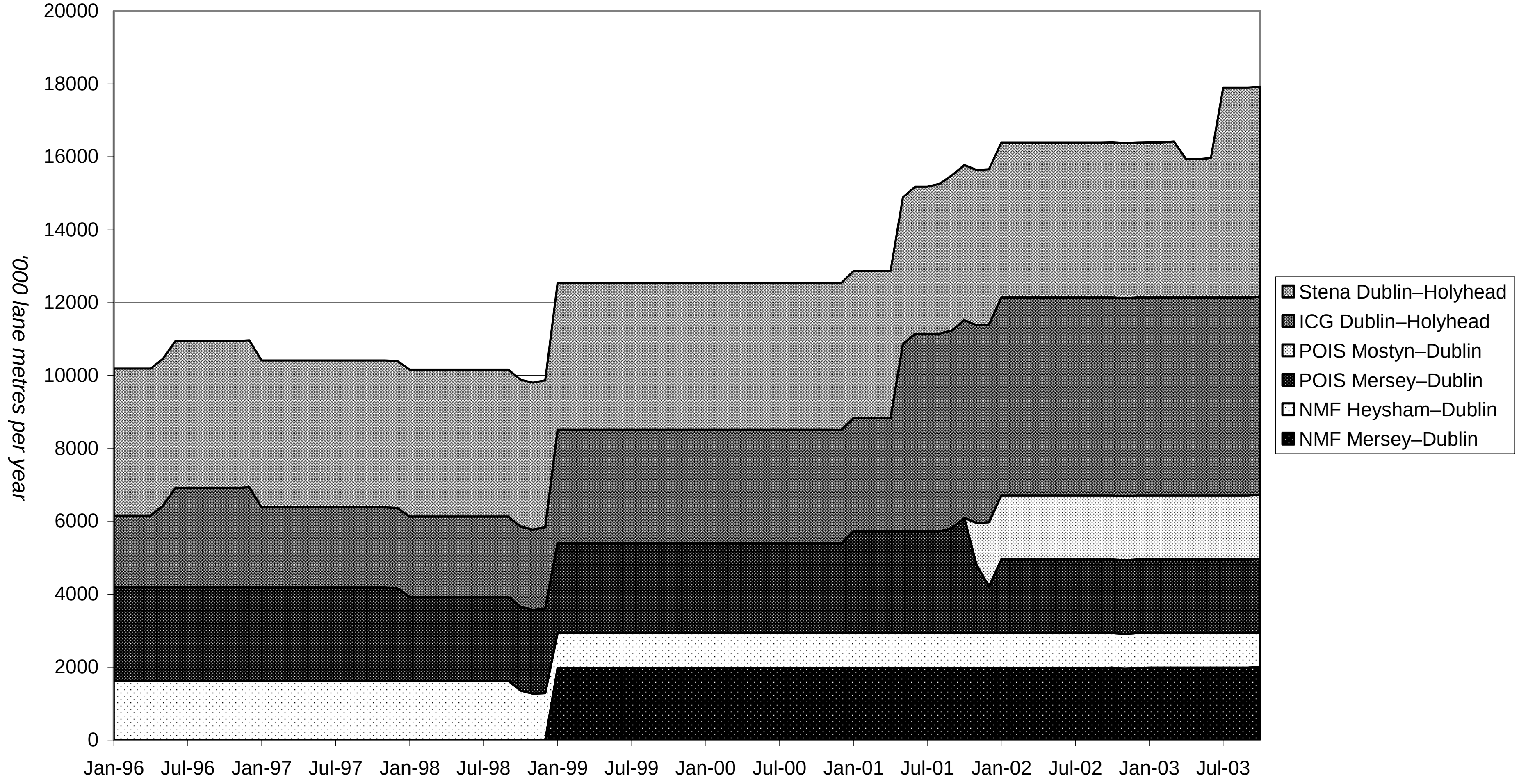


FIGURE 2

Freight capacity on the central corridor

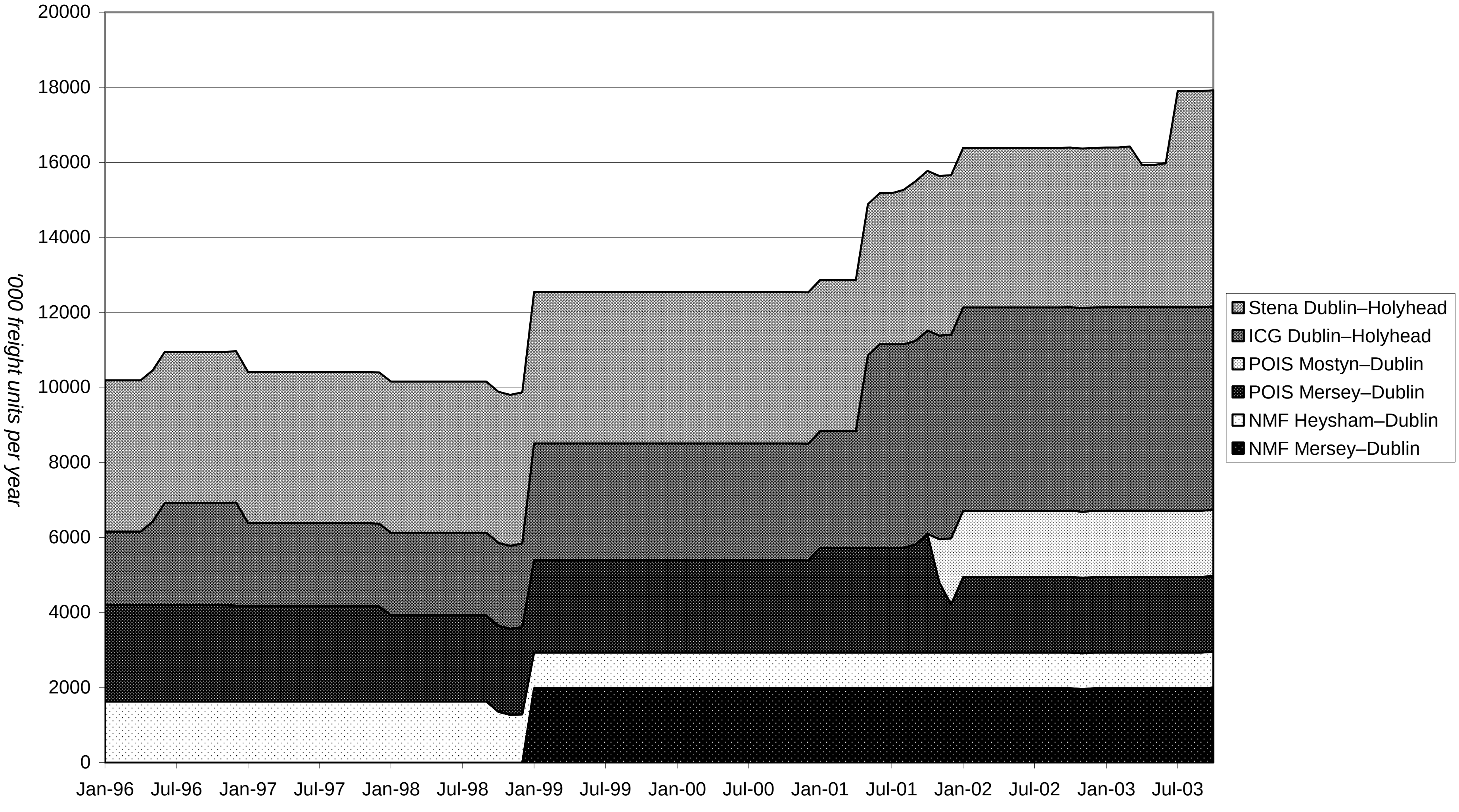
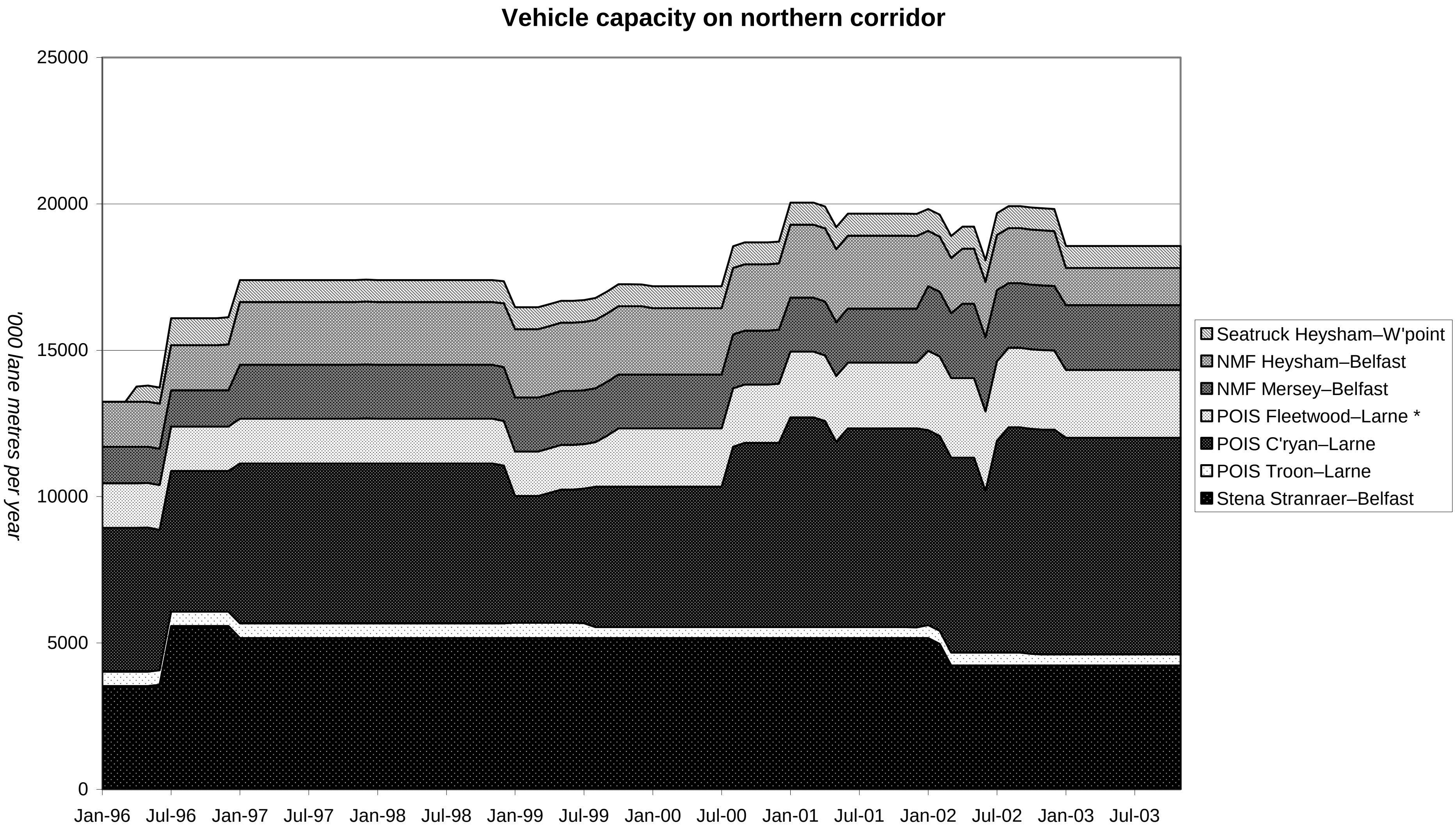


FIGURE 3


Vehicle capacity on northern corridor
25000
20000
15000
10000
5000
0
'000 lane metres per year
Jan-96
Jul-96
Jan-97
Jul-97
Jan-98
Jul-98
Jan-99
Jul-99
Jan-00
Jul-00
Jan-01
Jul-01
Jan-02
Jul-02
Jan-03
Jul-03
Seatruck Heysham–W'point
NMF Heysham–Belfast
NMF Mersey–Belfast
POIS Fleetwood–Larne *
POIS C'ryan–Larne
POIS Troon–Larne
Stena Stranraer–Belfast