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CAMIS Maritime Transport and Intermodality

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Stage 1 evidence review

TRANSPORT
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DEVELOPMENT
PLANNING
URBAN DESIGN
ECONOMICS
MARKET RESEARCH

colinbuchanan.com

CAMIS Maritime Transport and Intermodality

Stage 1 evidence review

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20 Eastbourne Terrace,
London,
W2 6LG
Telephone: 020 7053 1300
Fax: 020 7053 1301
Email : London@cbuchanan.co.uk

Prepared by:	Approved by:
Jon Hale	James Goldman

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1 Introduction

1.1 Background

1.1.1 Colin Buchanan (CB) was commissioned by the South East England Development Agency (SEEDA) in August 2010 to conduct a study into the capacity of hinterland infrastructure of the major ports on both sides of the English Channel, and the capability of the transport networks serving the ports in terms of the efficient and sustainable distribution of traffic and goods.

1.1.2 The study involved analysing and documenting the volume of goods handled at each port throughout the study area by mode and by destination, in addition to determining conditions on the road and rail networks serving the ports. Much of the information collected constituted baseline evidence, supplemented by some data on forecast growth to 2015 and 2020.

1.2 Study area

1.2.1 The map shown in Figure 1.1 indicates all the ports in the study area on both the UK and French sides of the Channel.

Figure 1.1: CAMIS study area ports

1.2.2 On the UK side, the study area stretches from Falmouth in Cornwall to the Medway ports (including Thamesport, Rochester, Chatham, Gillingham, Ridham Dock, Queenborough, and Sheerness). On the French side, the study area encompasses Brest in the west and Dunkerque in the east, and includes the port at Rouen, accessible via the Seine river from Le Havre.

1.3 Data and sources

1.3.1 Data for the UK was obtained by CB from the following sources:

- **Maritime services** – sourced directly from the ports, or from the Maritime statistics report 2008;
- **Road network conditions** – sourced from the Highways Agency (HA) National Traffic Model (NTM) for a range of time periods;
- **Rail passenger line-flow data** – sourced from the DfT's PLANET rail passenger model, and the following documents:
  - Kent Route Utilisation Strategy (RUS), Network Rail (2009);
  - Sussex RUS, Network Rail (2009);
- **Rail passenger station data** – sourced from Office of Rail Regulation (ORR) station entry and exit counts (2008/9);
- **Rail freight data** – sourced from Network Rail's Freight RUS (March 2007);
- **Air transport data** – sourced from the Civil Aviation Authority's (CAA) UK airport statistics (2009).

1.3.2 Data on the French side of the study area was supplied by the Technology Transfer and Innovation Regional Centre for Transport and Logistics (CRITT-TL), based in Le Havre.

1.4 This report

1.4.1 This report details the findings of Stage 1 of the study, which presents the baseline data. Stage 2 of the study will then build on this work with more detailed data analysis and recommendations on the measures required to mitigate the transport impacts of forecast growth at the ports to 2015 and 2020.

2 Baseline data

2.1 Introduction

2.1.1 This chapter focuses on the presentation of the baseline data collected by CB as outlined in the previous chapter. Current conditions are summarised according to the following categories:

- Maritime services;
- Port capacity;
- Road network;
- Rail network;
- Air transport.

2.1.2 Data collected for the UK ports is included in tabulated format in Appendix A of this report with the exception of road and rail network data, which was initially sourced in mapping format. Data received from CRITT-TL is included in Appendix B.

Future forecasts

2.1.3 In addition to the baseline data described above, we have provided some limited information on the impact of forecast growth at ports up to 2020. This includes traffic flow data from Highways Agency (HA) National Traffic Model (NTM) runs for 2015 and 2020.

2.1.4 It should be noted that at present, forecasting likely growth at the ports is problematic. Most of the larger ports in the study area are in the process of developing masterplans and in some cases, the timescale for completion is up to two years away due to the emphasis placed on stakeholder consultation.

2.1.5 Given the current economic climate, some growth assumptions should be regarded as aspirational. For example, traffic forecasts produced prior to 2007 generally assumed an underlying growth of approximately 3% per year for ro-ro and 4% for containers. However, some ports subsequently experienced falls in throughput of up to 18%. The DfT has until recently assumed that traffic would resume this level of growth but from a reduced base, but the market is still uncertain. The best information available currently is that published by the ports at Dover and Southampton.

2.2 Maritime services

2.2.1 This section summarises the current maritime services operating out of the UK and French ports, in terms of passengers and freight. There can be a great deal of flexibility in the operation of ports, with some trades moving from one port to another with very little lead-time. For example, the import of bananas has recently moved from Southampton to Portsmouth, with the former port redeveloping the relevant quays for cruise vessels in order to off-set a loss in trade.

Passengers

2.2.2 The number of passengers using ferry services in the UK has declined in recent years due to the opening of the Channel Tunnel in 1995 and the proliferation of budget airlines offering low cost flights to European destinations. Figure 2.1 indicates that between 1994 and 2008, the number of visits abroad made by UK residents by sea decreased from 12m to 8.1m. A similar pattern is evident in terms of the number of overseas residents visiting the UK, as shown in Figure 2.2.

Figure 2.1: UK residents' visits abroad by mode (1980 to 2008)[1]

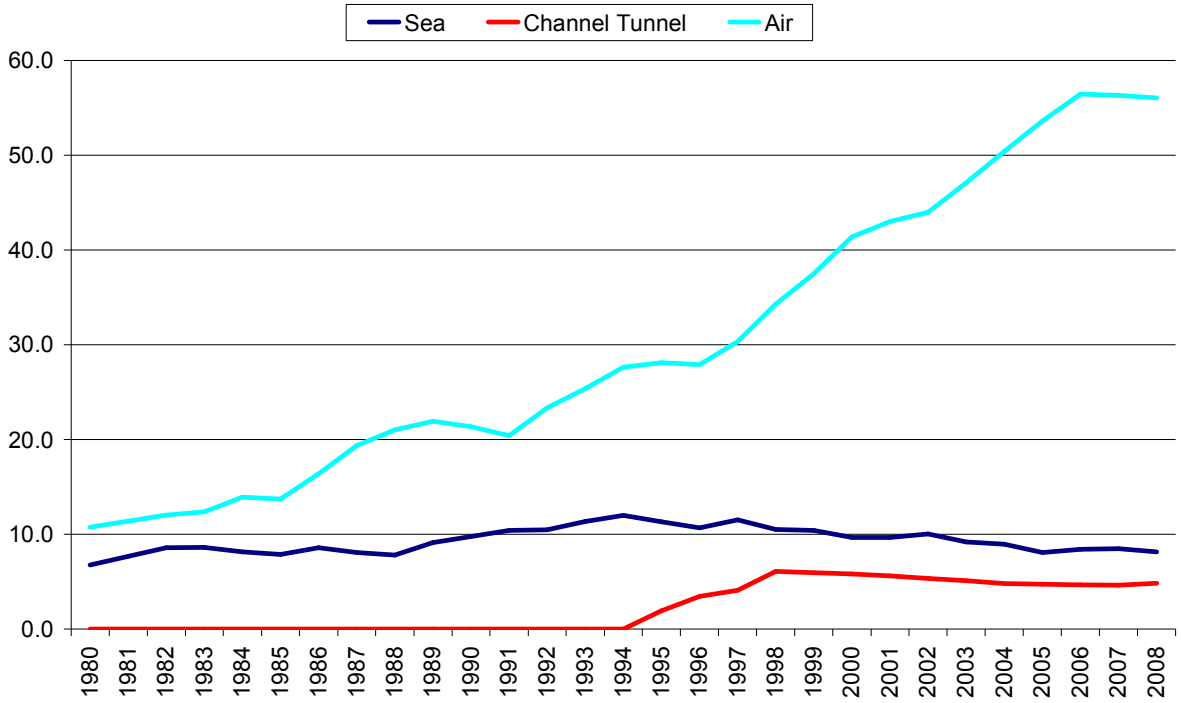
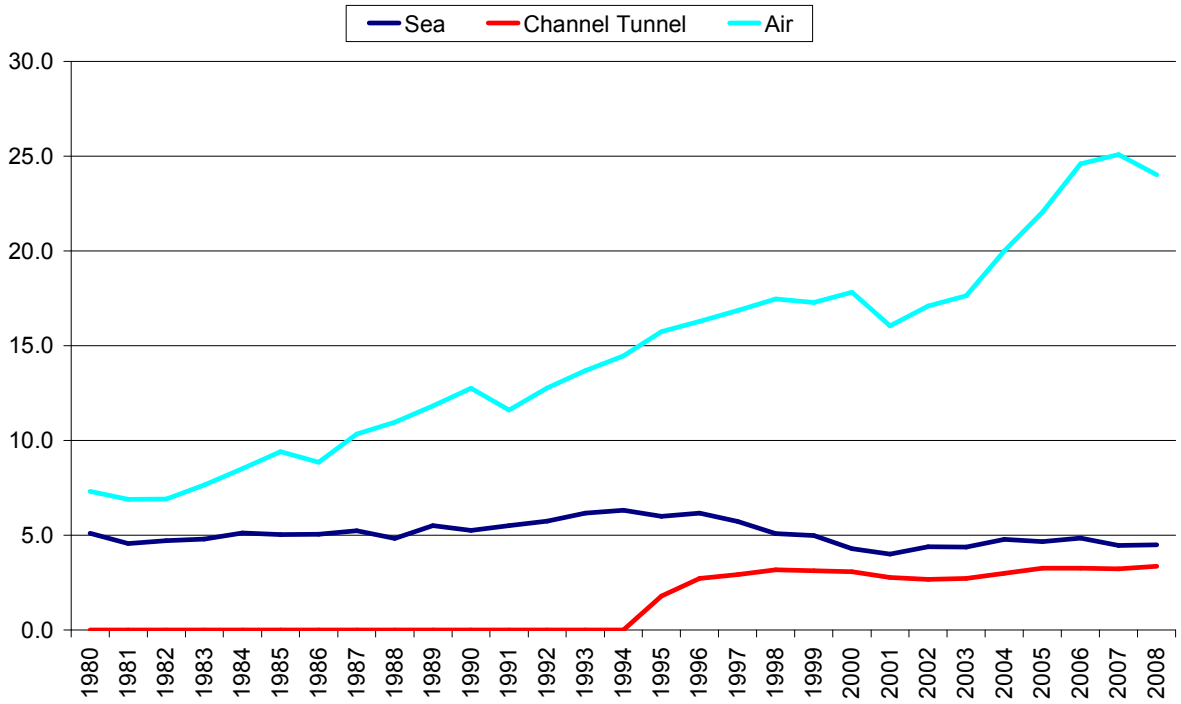


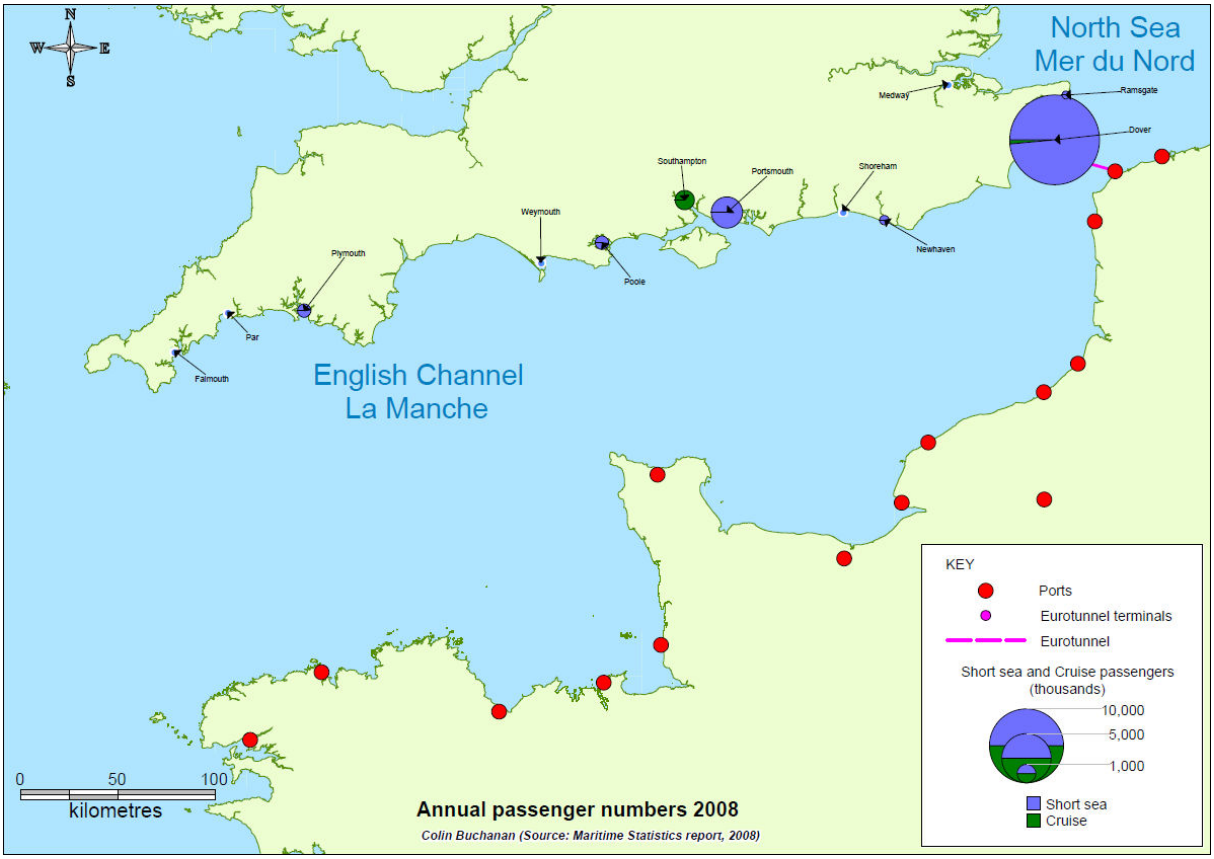
Figure 2.2: Overseas residents' visits to the UK by mode (1980 to 2008)



[1] Source: DfT Transport Trends 2009 – Ports and Airports

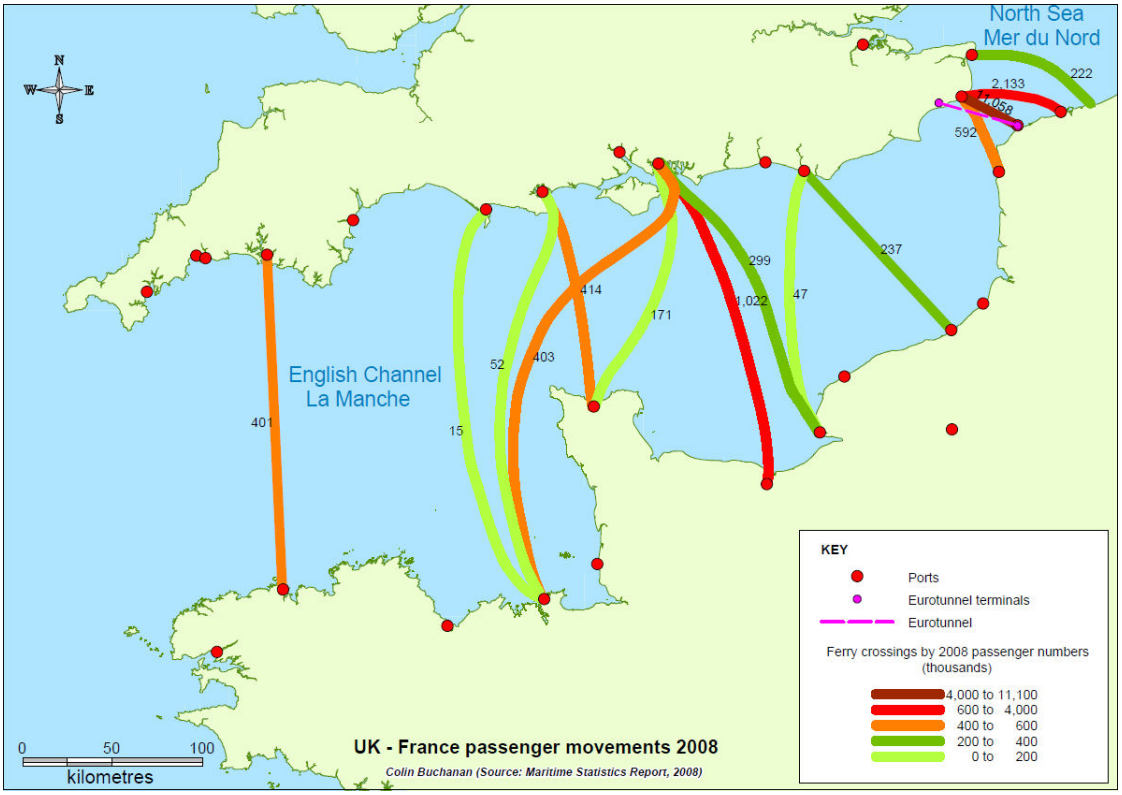
2.2.3 Passenger numbers to the ports in the study area are presented in Figure 2.3. This indicates the dominance on the UK side of Dover, which handled a total of 13.8m passengers on short-sea ferry journeys and a further 223,000 on cruises in 2008. During the same year, the second-busiest UK port in the study area, Portsmouth, handled 2.1m short-sea passengers, while Southampton handled 889,000 cruise passengers.

Figure 2.3: Annual passenger numbers 2008



2.2.4 Figure 2.4 presents short-sea passenger flows between UK and French ports, again highlighting the dominance of Dover on the UK side, and the flow of passengers between Dover and Calais. Other key flows occur between Dover and Dunkerque, and Portsmouth and Caen.

Figure 2.4: Short-sea passenger numbers between UK and France (2008)



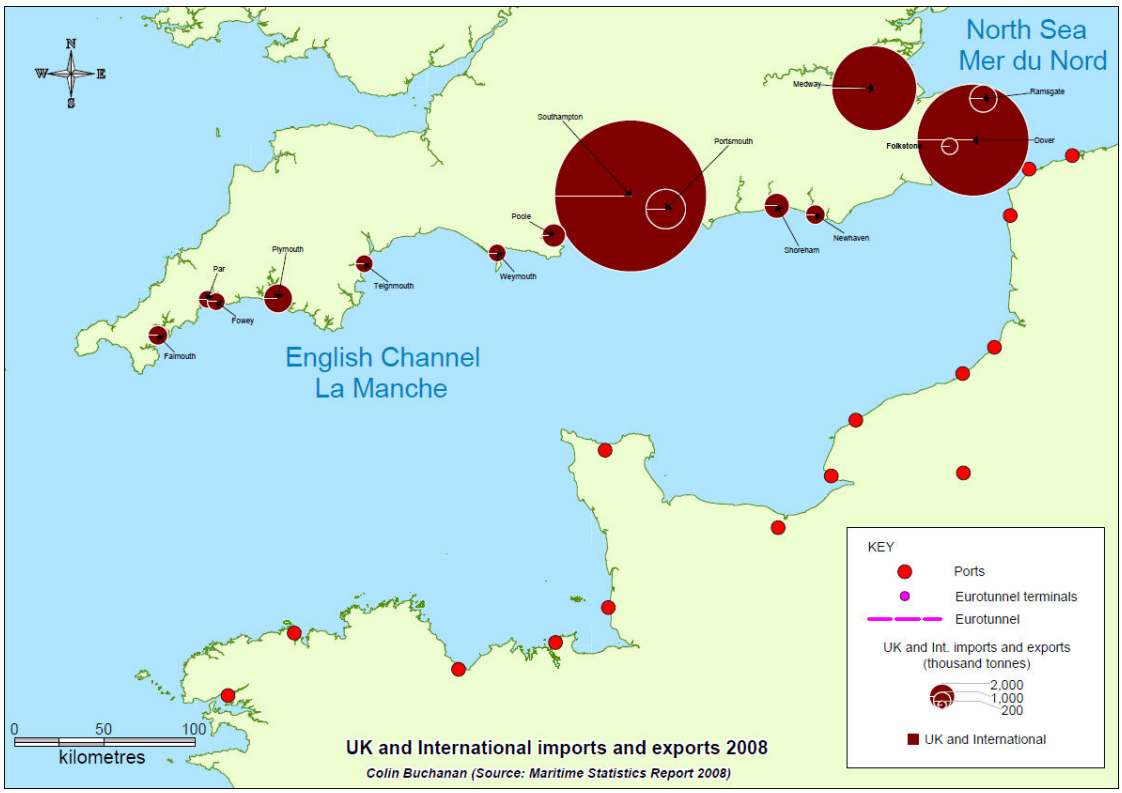
2.2.5 There is relatively little data available on the onward mode of transport used by ferry passengers at ports on either side of the Channel. However, on the UK side, the majority of passengers access the ports by road.

2.2.6 The Port of Southampton Masterplan 2009-2030 states that "the majority of the Port's cruise passengers arrive and leave the Port by road, either by car or coach. Many also choose to use the train, including special charter trains which can have direct access to the Port's cruise terminals."

Freight

2.2.7 In terms of freight flows, Figure 2.5 shows the total freight tonnage handled by ports in the study area. On the UK side, the three main ports are Southampton (which handled 41m tonnes in 2008), Dover (24m) and the Medway Ports (15m).

Figure 2.5: Total freight tonnage handled by ports (2008)



2.2.8 In addition to total freight tonnage, the following maps show total annual maritime freight in terms of:

- Transhipped (domestic) freight tonnage (Figure 2.6);
- International freight tonnage (Figure 2.7);
- Imported freight tonnage (Figure 2.8); and
- Exported freight tonnage (Figure 2.9).

2.2.9 Southampton is the dominant port within the study area for transhipped freight on the UK side, handling 7.7m tonnes in 2008, compared to 2.4m tonnes at the Medway Ports. The Medway Ports and Dover account for a greater share of international freight, handling 12.6m and 24.2m tonnes respectively in the same year, compared to 33.3m at Southampton.

2.2.10 In terms of imported freight, Southampton, Dover and Medway are all major hubs, accounting for 25.7m, 15m, and 12.6m tonnes in 2008, while in terms of exports, the two key hubs are Southampton (15.3m) and Dover (9.3m).

Figure 2.6: Total transhipped (domestic) freight at ports (2008)

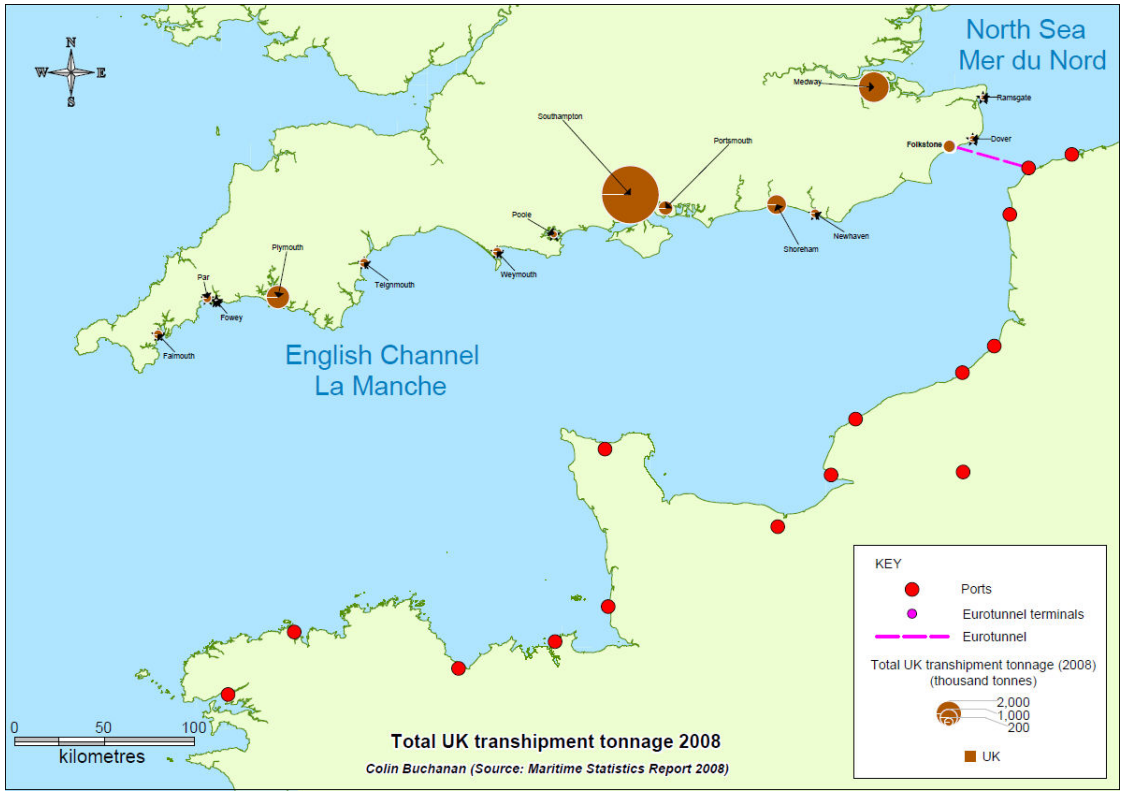


Figure 2.7: Total international freight at ports (2008)

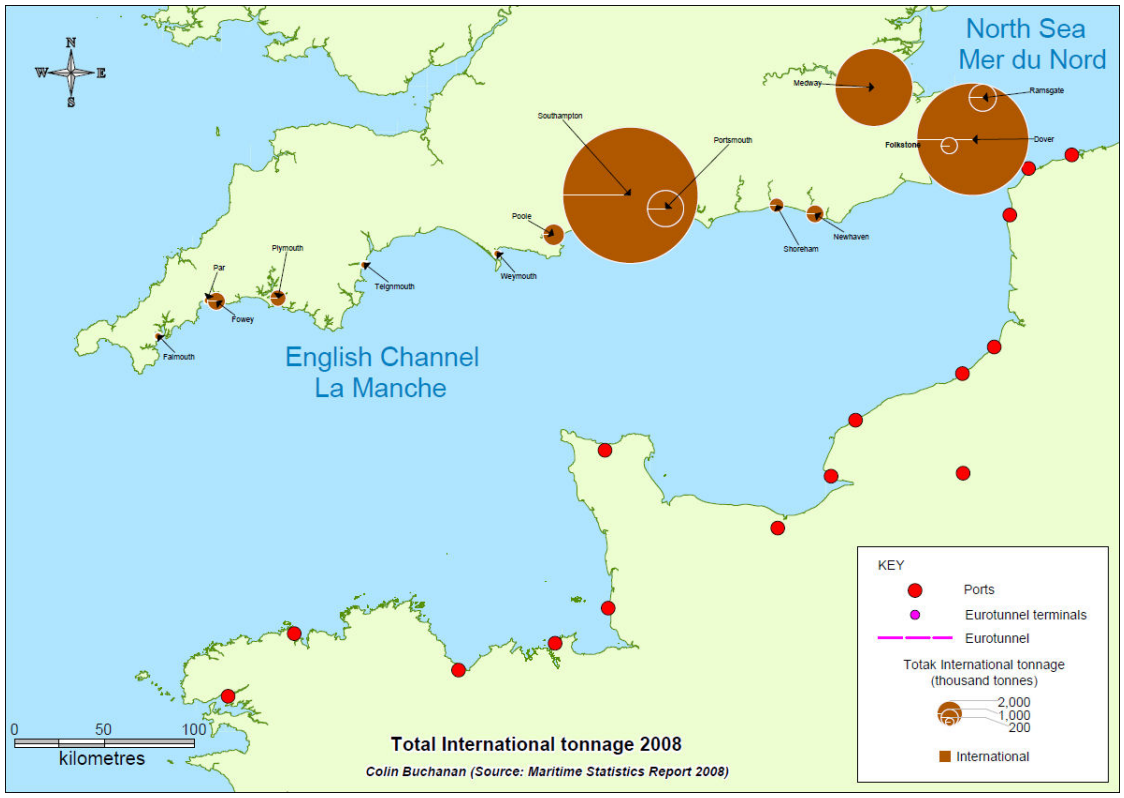


Figure 2.8: Total imported freight at ports (2008)

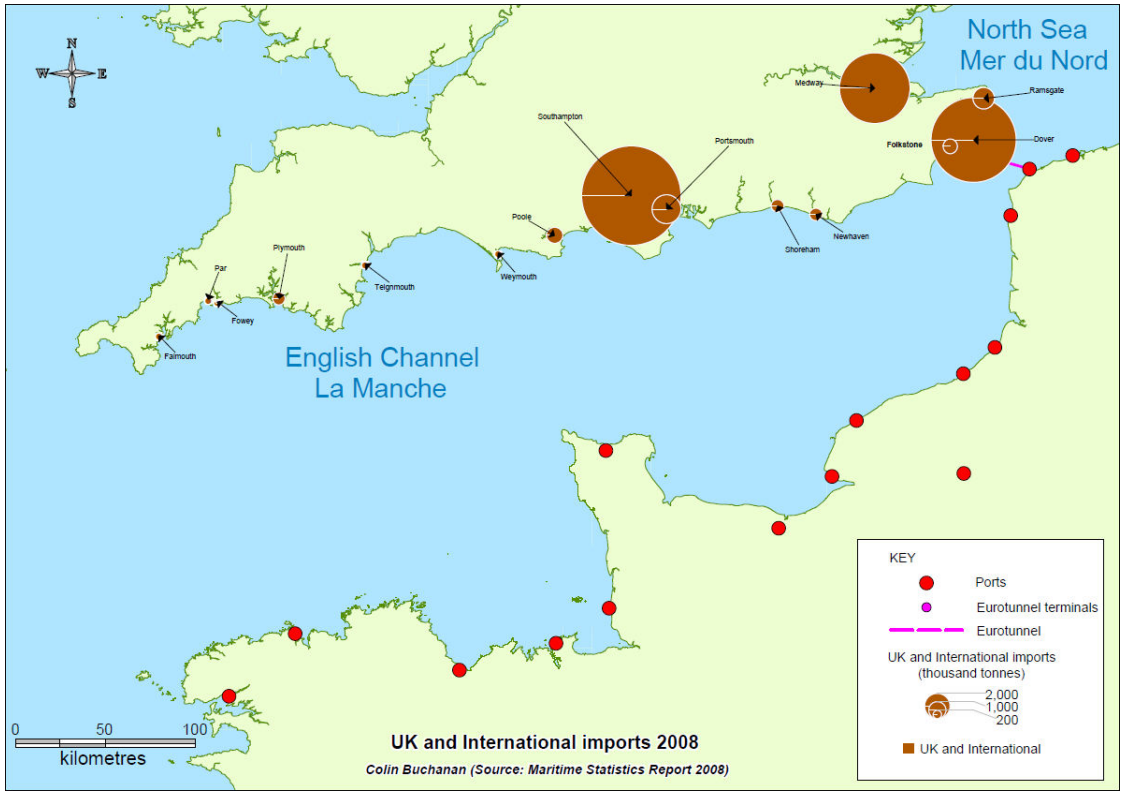
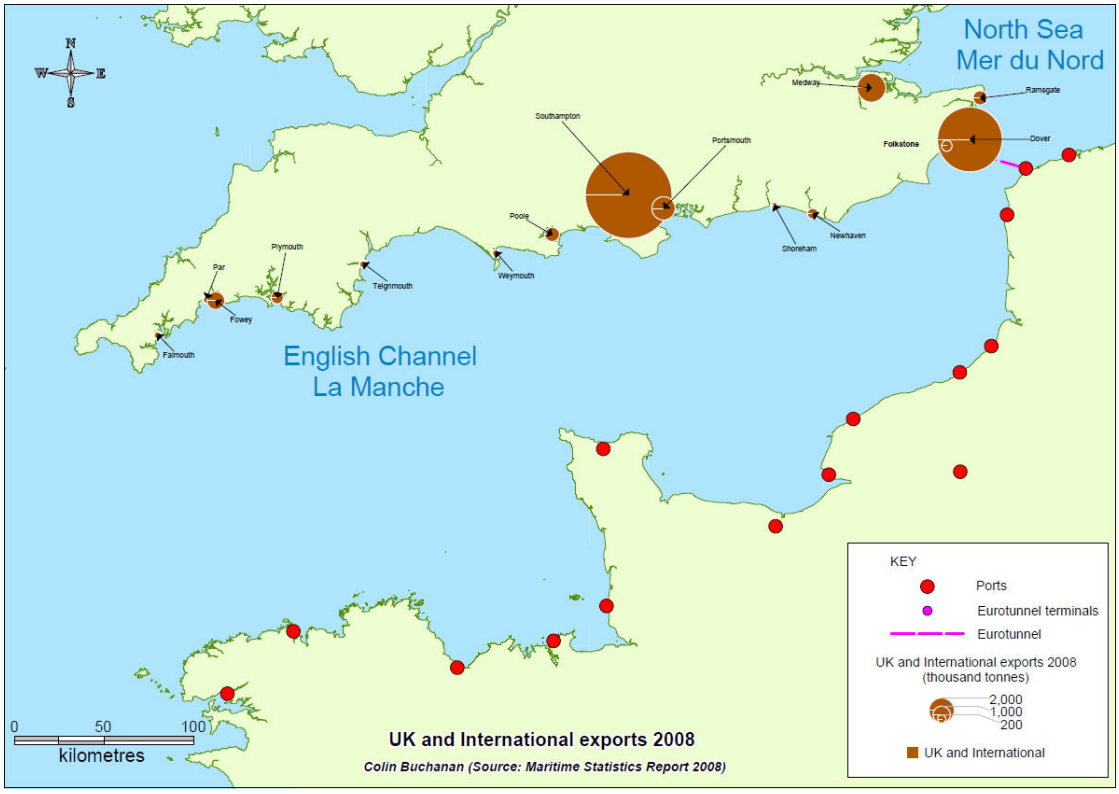


Figure 2.9: Total exported freight at ports (2008)



2.2.11 As with ferry passengers, there is little data currently available on the onward mode of freight from the ports in the UK. This was noted in a House of Commons Transport Committee Report of Session on Ports, published in 2003, which stated that "no reliable or comprehensive statistics are available on the movement of goods to and from ports by modes of transport".

2.3 Port capacity

2.3.1 Port capacity is difficult to quantify in a standardised way. Although ports often regard themselves in isolation, they are effectively small nodes in a more complex end-to-end journey by the freight unit or passenger. A number of parts of the port operation need to handle the freight to avoid bottlenecks caused by any one element. This 'pipeline' generally consists of the following parts:

- Port facilities, including loading and unloading and storage capacity;
- Sea room within the port;
- Sea approaches;
- Types of vessel in operation;
- Inland infrastructure, including the road and rail networks;
- Impact of adverse conditions (i.e. including weather/strike action);
- Ability of partner ports at the other end of the sea leg to handle the flows.

2.3.2 Many constraints are not immediately apparent – for example, the port of Fowey can handle ships up to 165m long but only if they turn some way outside the port and are towed backwards upstream, as the sea room within the port is not sufficient to allow them to turn. On a larger scale, part of the reason for the need for a new outer harbour at Calais is that there is insufficient room to turn a vessel any larger than the ferries currently in use.

2.3.3 The ports must respond to the demands of their customers, i.e. the current or possible future shipping operators. At the time of writing, the operator Maersk was reportedly ordering a new large class of container vessel with a capacity of 16,000 Twenty-foot Equivalent Units (TEU) – the largest vessels used at present can carry up to 14,000 TEU. As a result, it is likely that major ports will have to respond or risk losing trade to another facility. At the other end of the spectrum the current capacity of a ferry port is dictated by the shipping provided on the route – doubling the frequency of service or doubling the size of the ships may double the capacity of that port.

2.3.4 With the caveats above in mind, the maps below (Figure 2.10 – total berths available, and Figure 2.11 – total storage space available) provide some indication of the relative scale of activity at each port, which is related indirectly to port capacity.

Figure 2.10: Freight and passenger berths

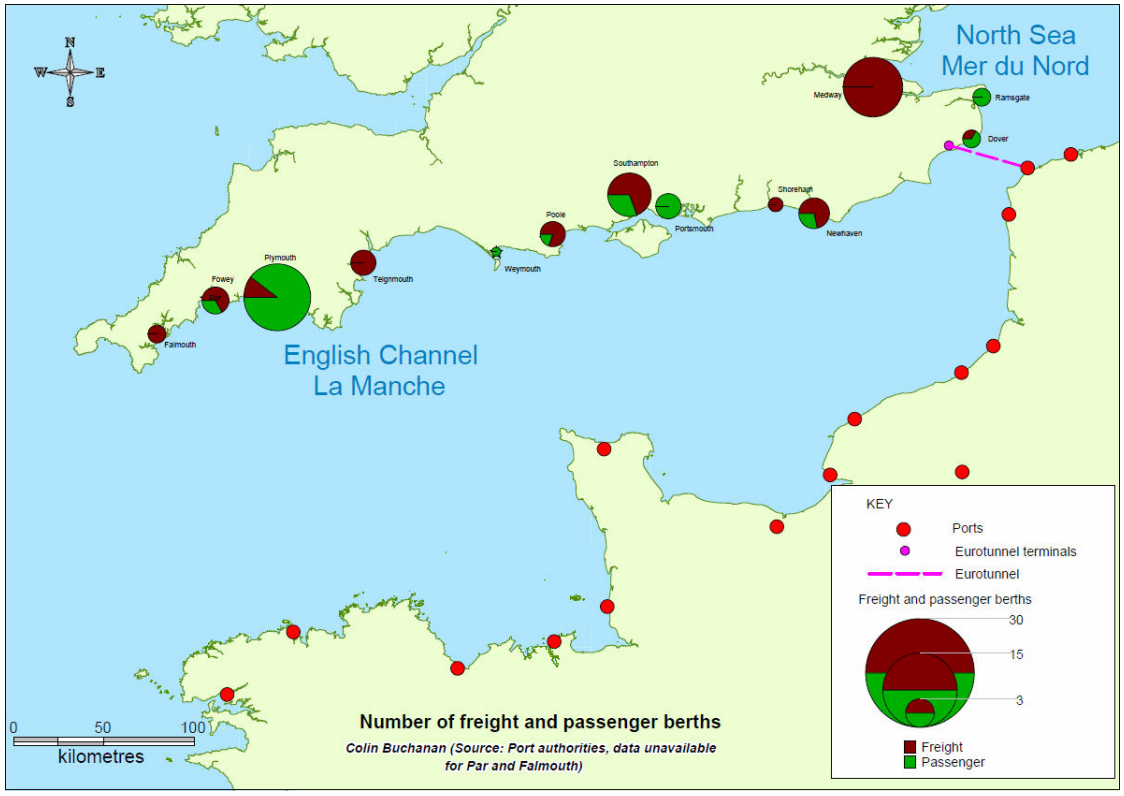
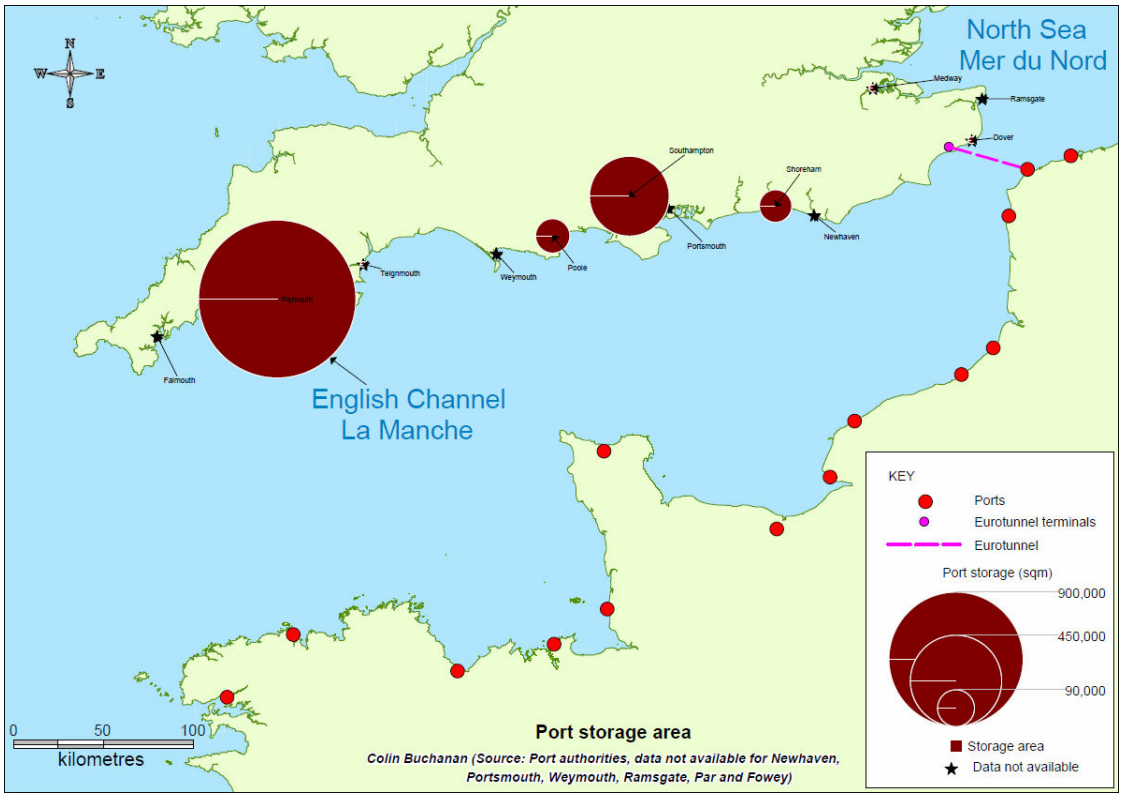


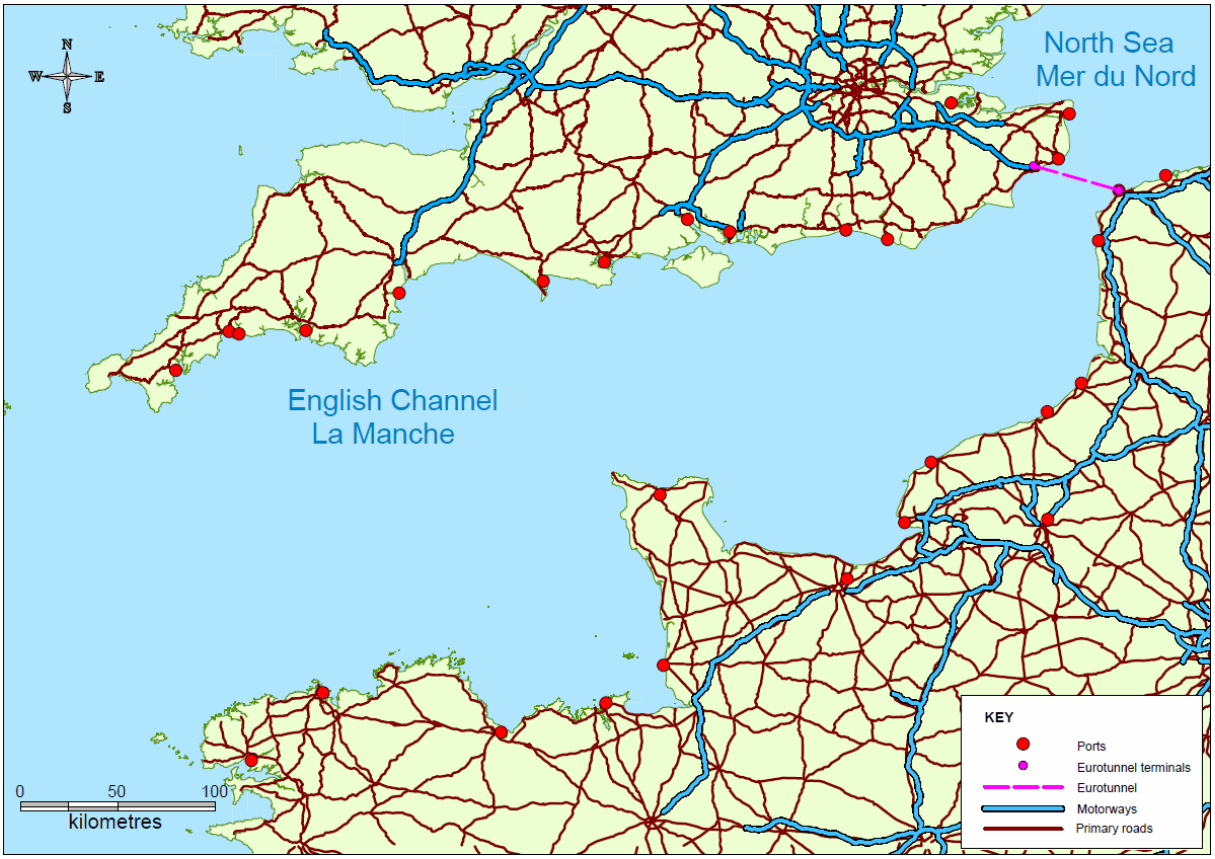
Figure 2.11: Port storage area



2.4 Road network

2.4.1 The principal road network serving the ports on both sides of the Channel is shown in Figure 2.12.

Figure 2.12: CAMIS – major roads



2.4.2 Figure 2.13, Figure 2.14, Figure 2.15 and Figure 2.16 all show AM peak traffic flow on the road network serving the ports in 2010, sourced from the Highways Agency (HA) National Traffic Model (NTM), with the latter three figures focussing on specific ports within the study area.

2.4.3 On the UK side, the maps illustrate high traffic flows on radial routes from the ports to the M25 London Orbital, including the M3 to Southampton and Portsmouth, the M23/A23 to Shoreham and Newhaven, and the M2/M20 to the ports in Kent.

2.4.4 In addition, the M27 between Southampton and Portsmouth, the A31/A338 between Southampton and Poole, and the M5 connecting Bristol with Devon and Cornwall, are also heavily-trafficked routes – the latter indicating the importance to the south-west of England of the M4 corridor in terms of access to London.

Figure 2.13: AM peak traffic flow 2010

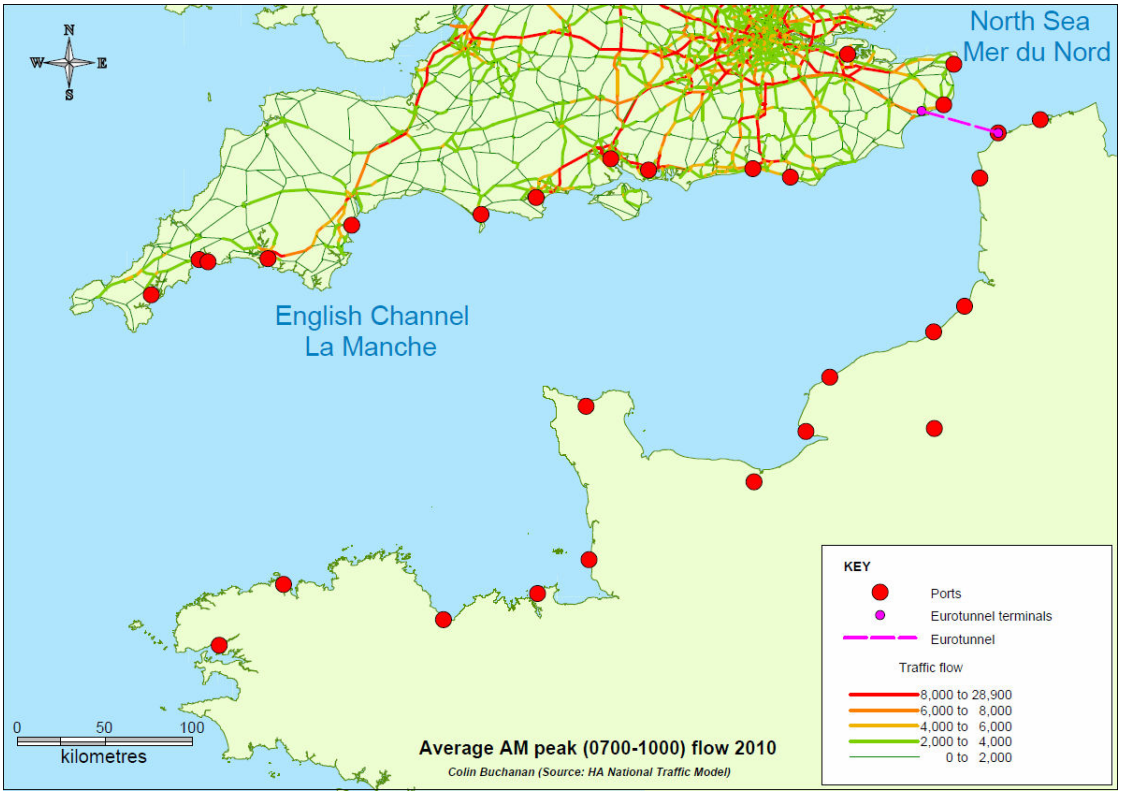


Figure 2.14: AM peak traffic flow 2010 (Hampshire and Dorset)

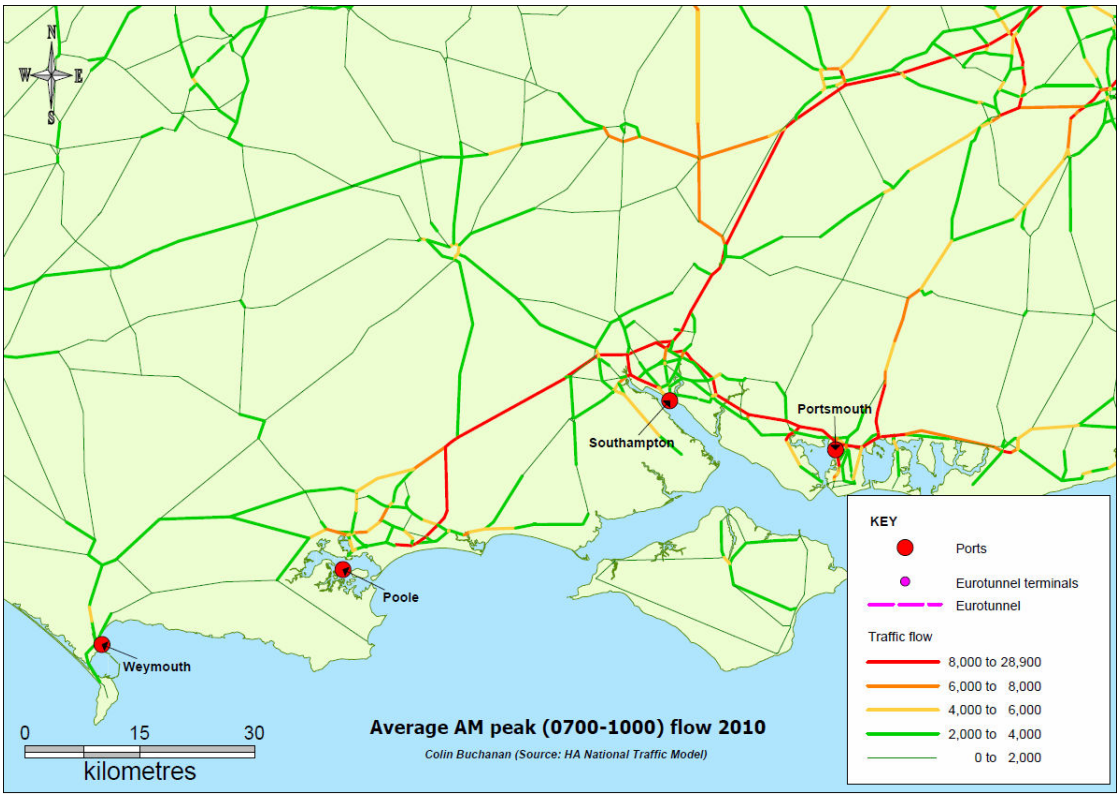


Figure 2.15: AM peak traffic flow 2010 (Kent and Sussex)

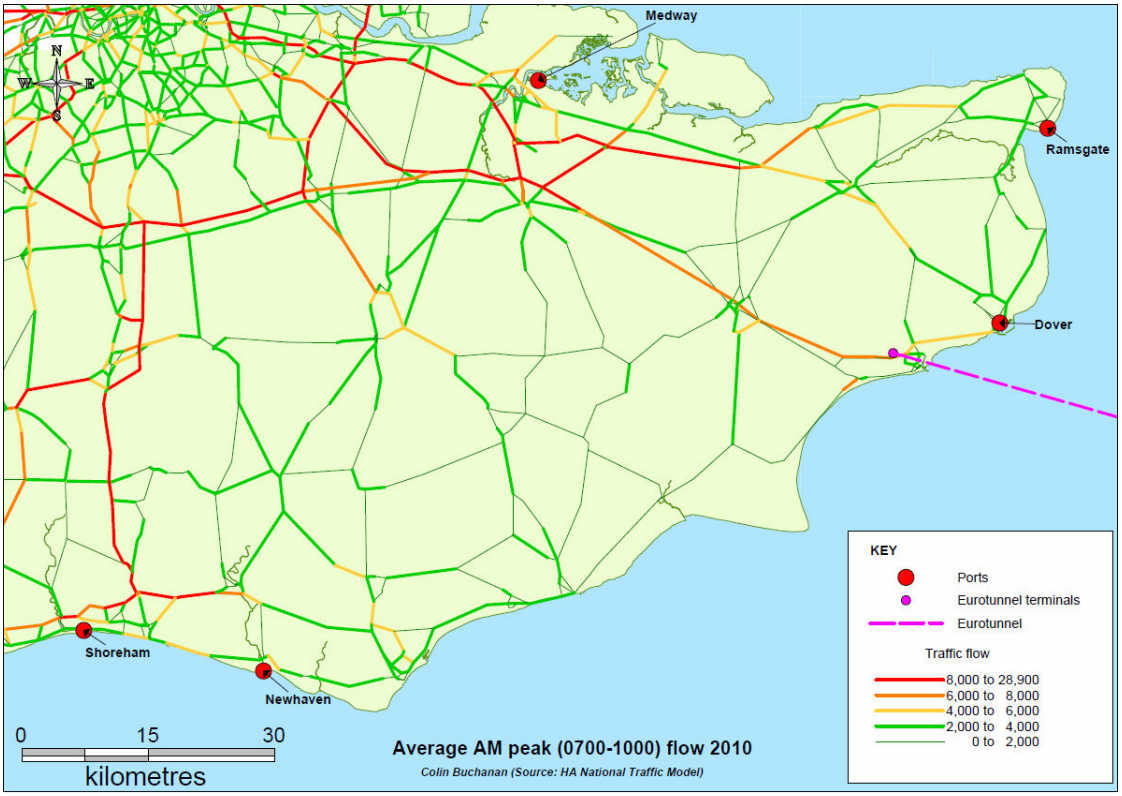
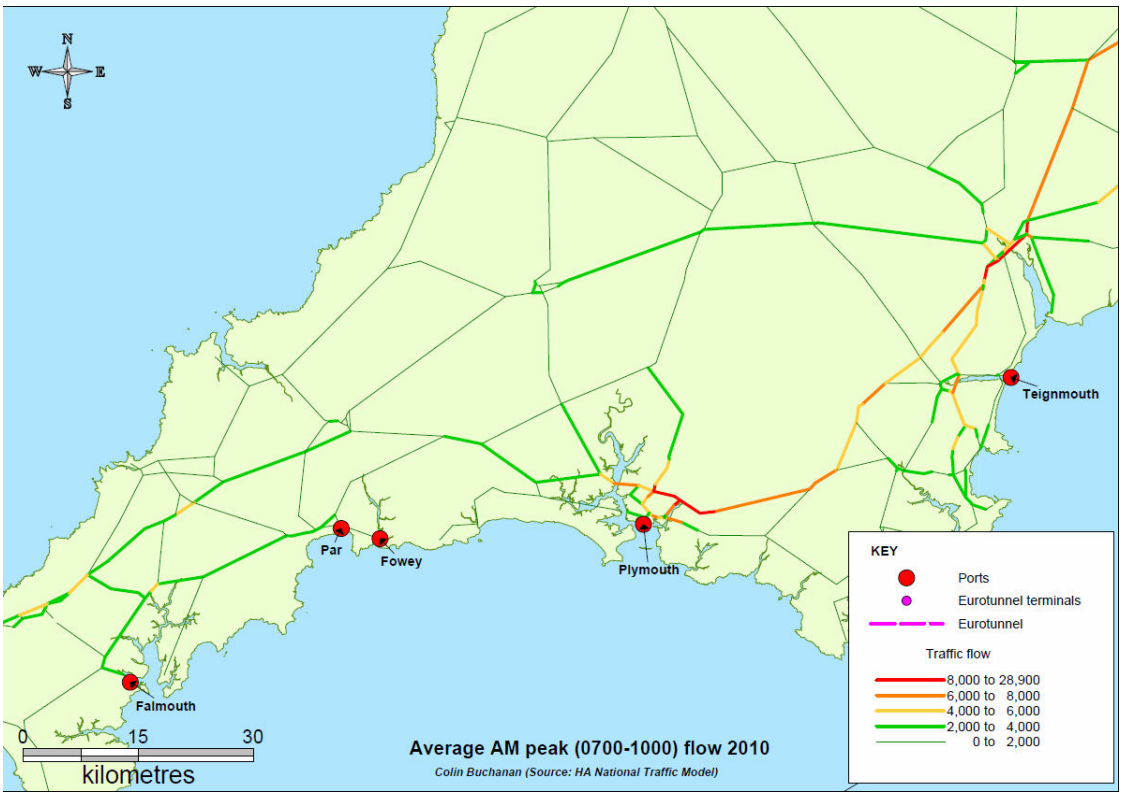
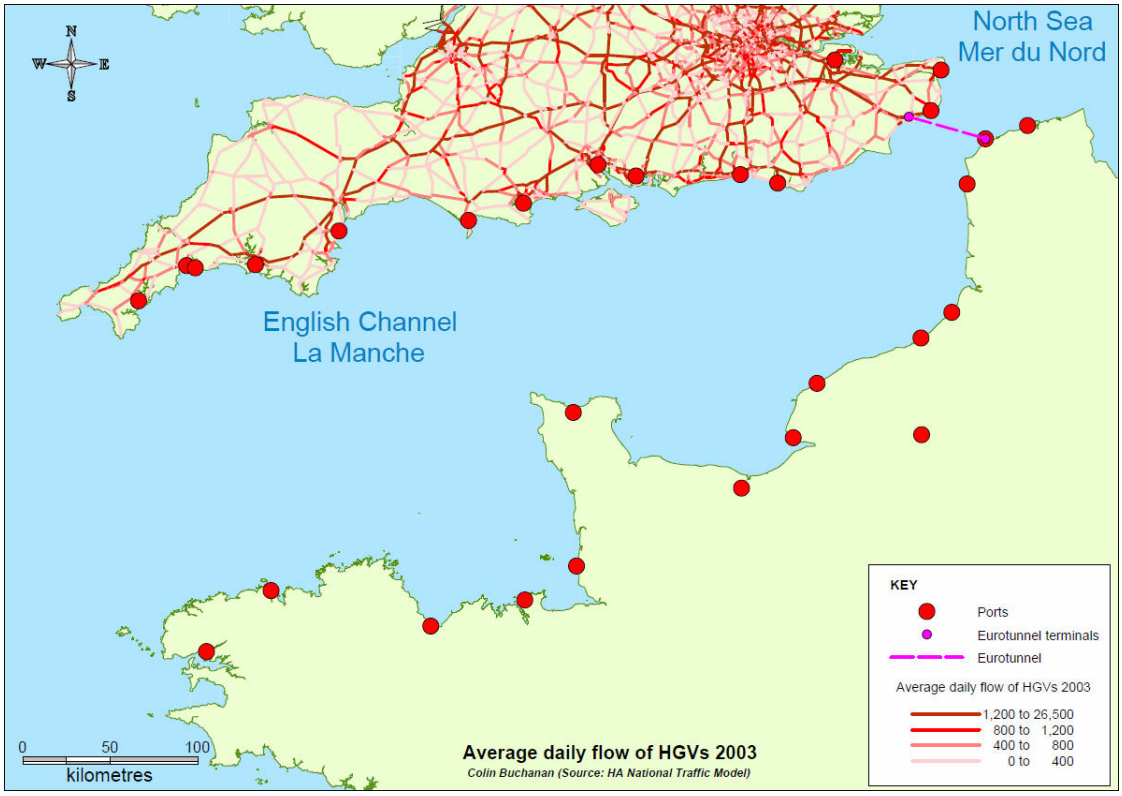


Figure 2.16: AM peak traffic flow 2010 (Devon and Cornwall)



2.4.5 Figure 2.17 indicates the daily flow of HGVs on the principal road network in the UK. In addition to the corridors identified in the previous figures, this map suggests that a number of other roads are important secondary routes for freight, including the A30 and A38 connecting Devon and Cornwall to the M5, the A303 (which serves as an alternative to the M4/M5 route, connecting Exeter with the M3 south of Basingstoke), and the A3 between Portsmouth and London.

Figure 2.17: Average daily flow of HGVs 2003



2.4.6 At large ports such as Dover the handling of freight could be improved. For example, it is estimated that overall, vessels using the port currently operate at a little more than 50% of total capacity, but lorries are often queued up outside the port on midweek evenings as a result of schedules that are dictated by factors such as delivery slots at Regional Delivery Centres (RDC) and lorry ban hours. The port at Dover did propose a scheme to construct an external parking area to assist in balancing the flows, but this could not be progressed due to environmental restrictions (the site identified was within an Area of Outstanding Natural Beauty (AONB)).

2.4.7 Congestion on the road network caused by lorries during port closures (due to bad weather or industrial action) or the closure of the Eurotunnel (due to fire or derailments etc) is also an issue at Dover. As a result of such events, Kent Police have implemented a scheme to park lorries on sections of the M20 (referred to as 'Operation Stack') over 75 times since its inception 20 years ago.

2.4.8 The maps in Figure 2.18 and Figure 2.19 indicate NTM forecasts for growth in AM peak traffic flows up to 2015 and 2020. Traffic flows on most links are expected to grow by between 10 and 15% by 2020, although in some particular locations such as the A31 north-east of Poole, growth of up to 30% is forecast.

Figure 2.18: Growth in AM peak flow (2010 – 2015)

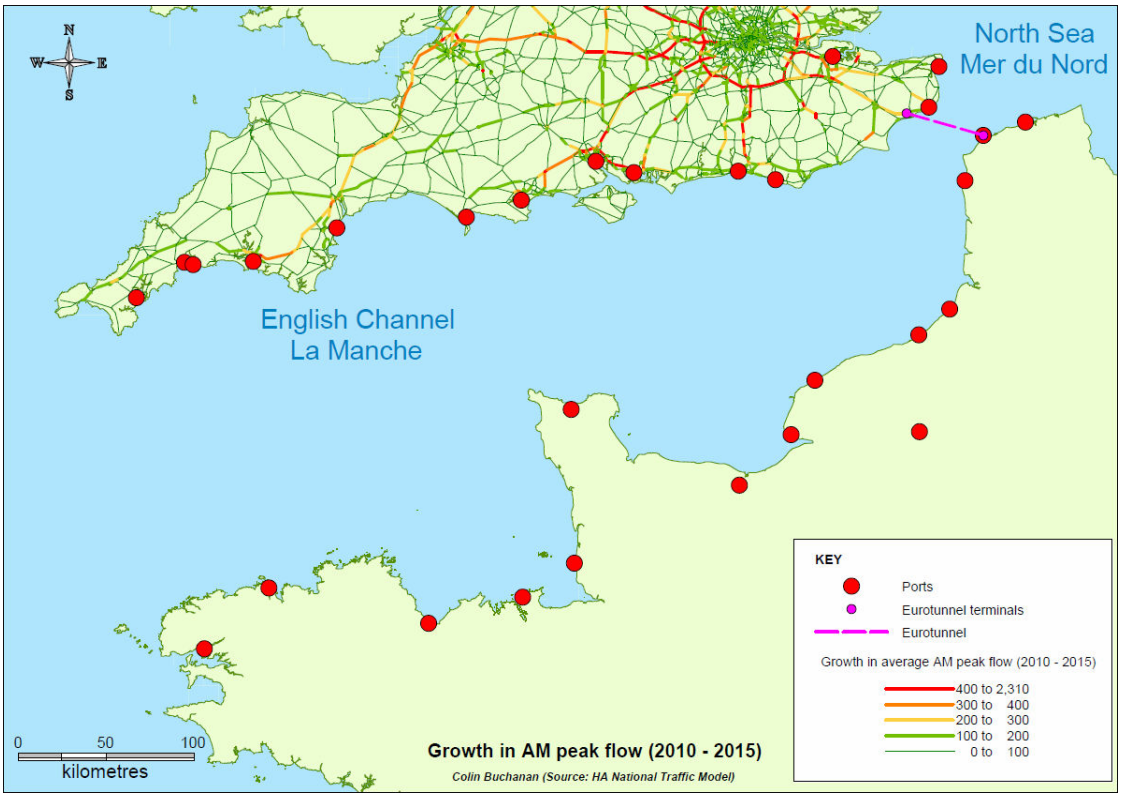
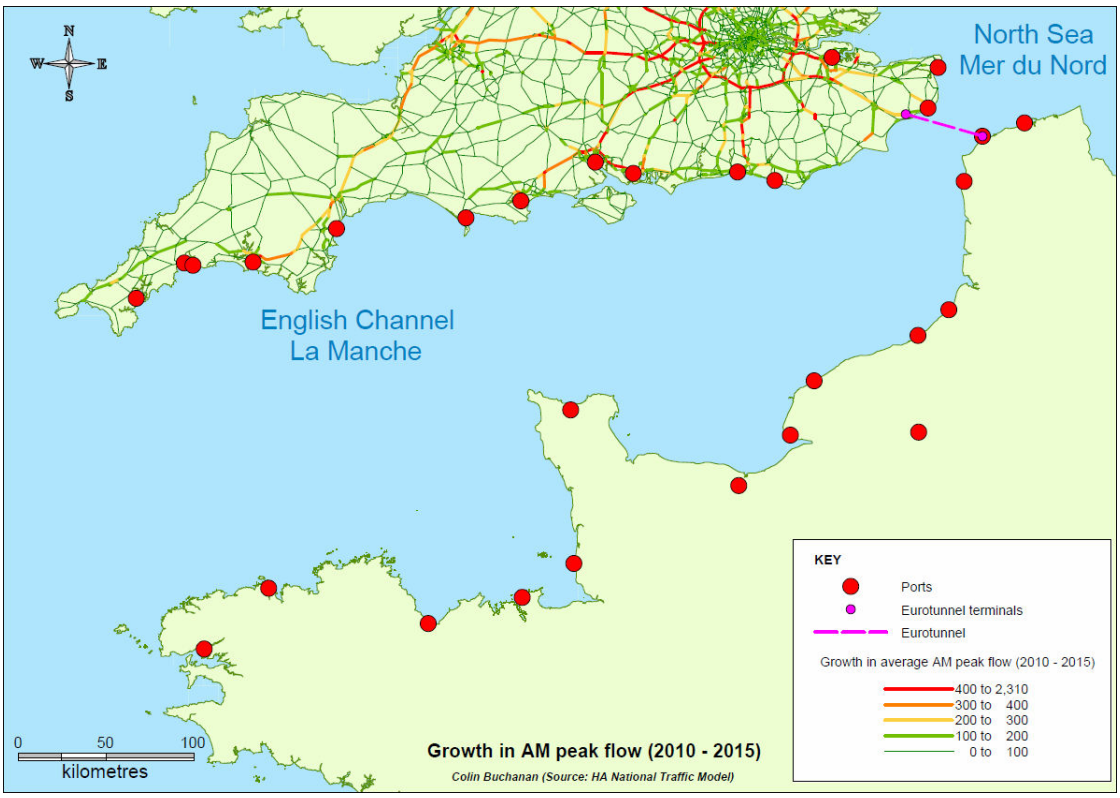


Figure 2.19: Growth in AM peak flow (2010 – 2020)



2.4.9 The following six maps figures show AM peak total delay (measured in total hours) and vehicle delay (total delay divided by traffic flow) on the road network in the UK in 2010, 2015 and 2020 according to the HA NTM.

2.4.10 The maps for 2020 indicate that significant levels of congestion are anticipated on the main road network around a number of ports, particularly Poole, Southampton, Portsmouth and Shoreham. Delays on stretches of roads in these areas could reach up to 60 seconds per vehicle km travelled during the AM peak.

Figure 2.20: AM peak total delay on road network (2010)

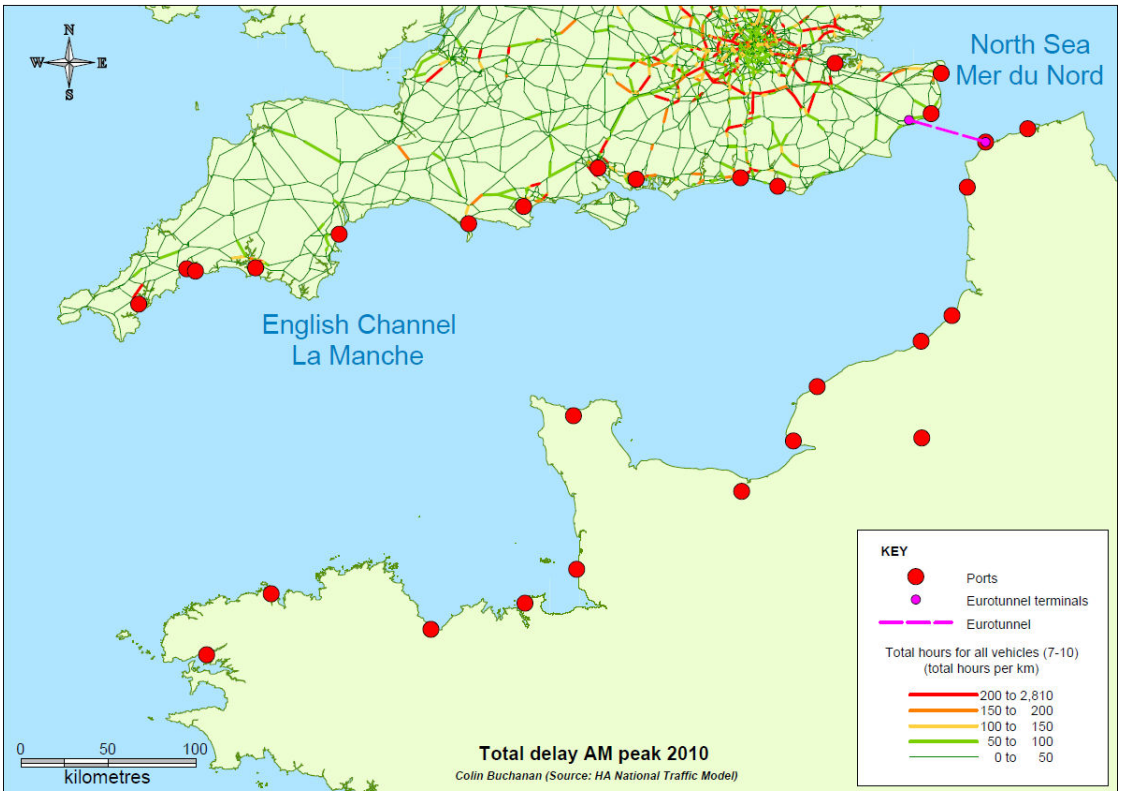


Figure 2.21: AM peak vehicle delay on road network (2010)

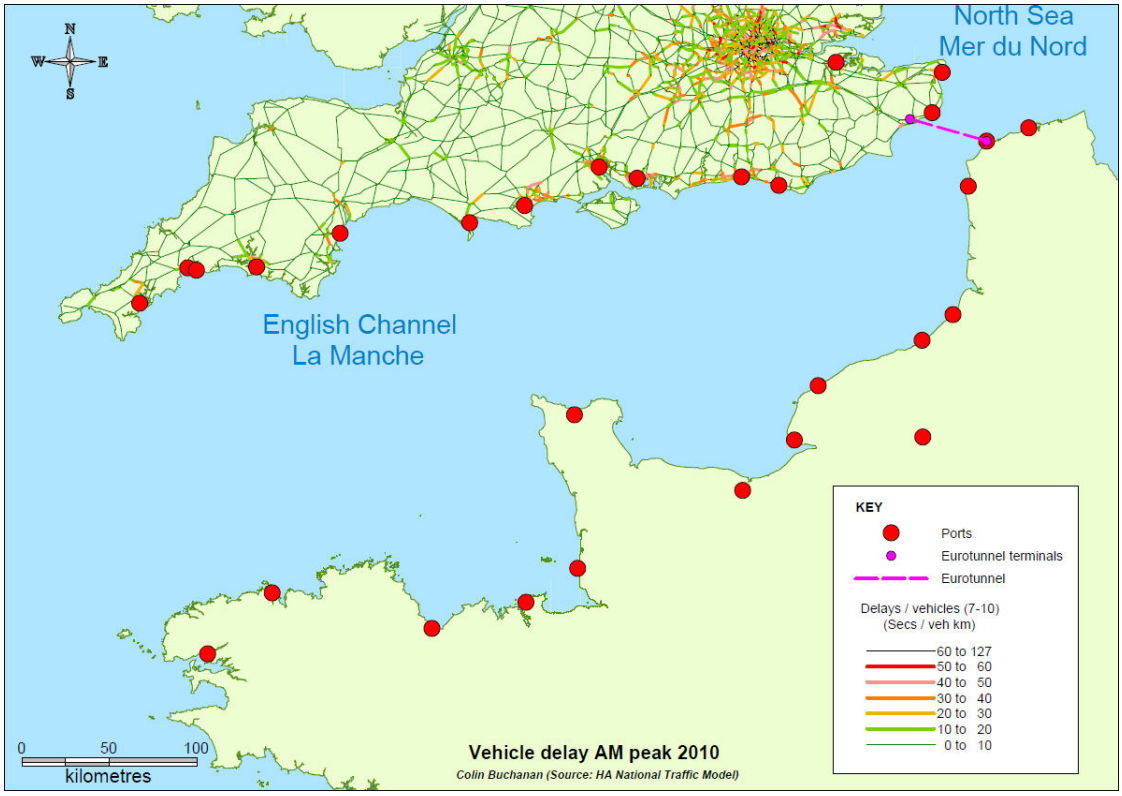


Figure 2.22: AM peak total delay on road network (2015)

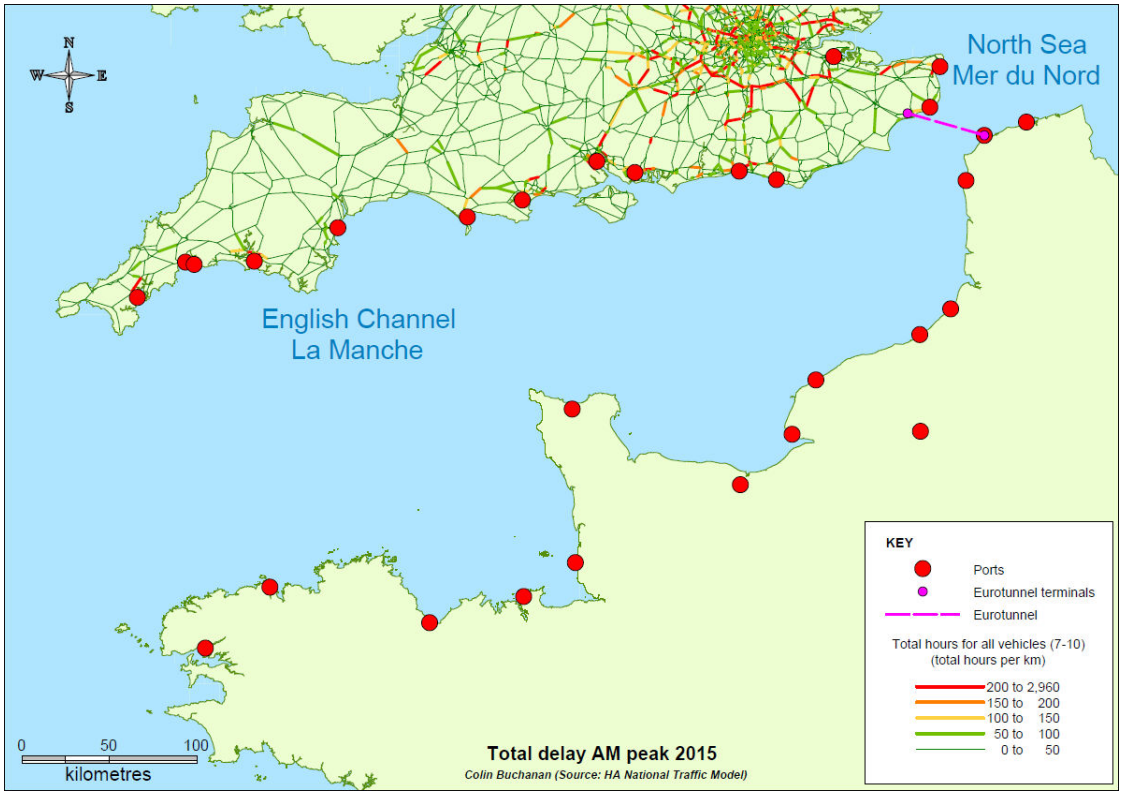


Figure 2.23: AM peak vehicle delay on road network (2015)

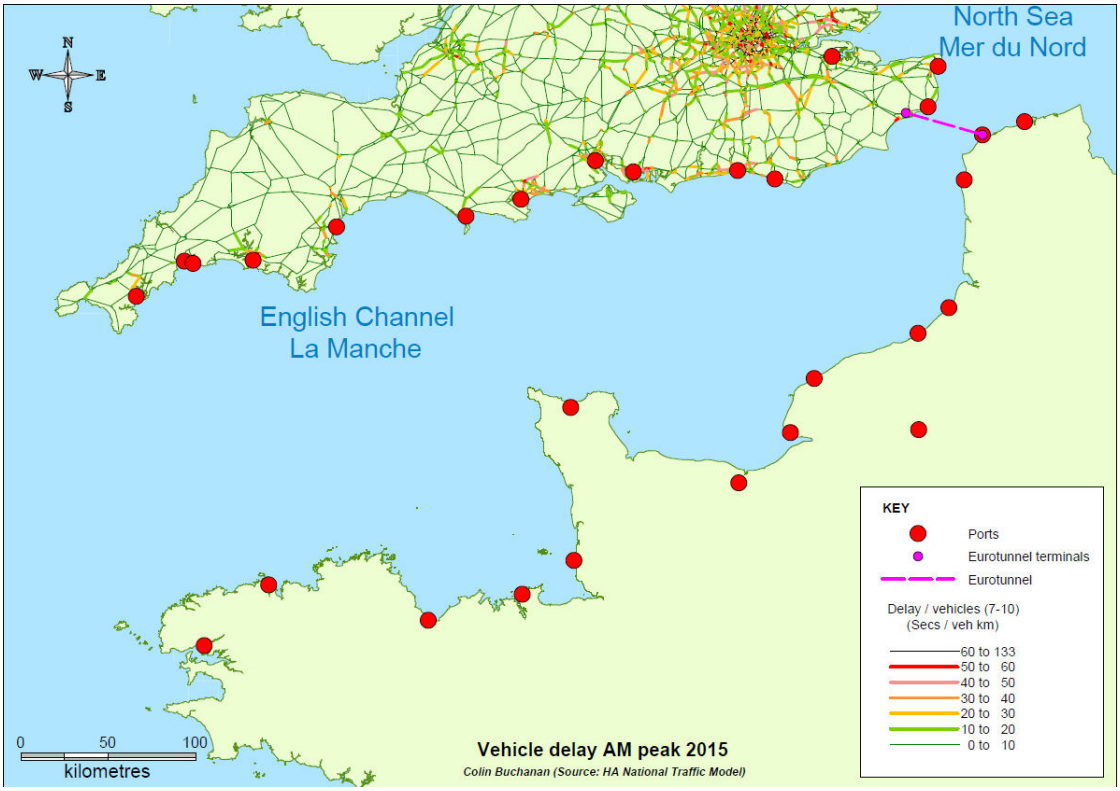


Figure 2.24: AM peak total delay on road network (2020)

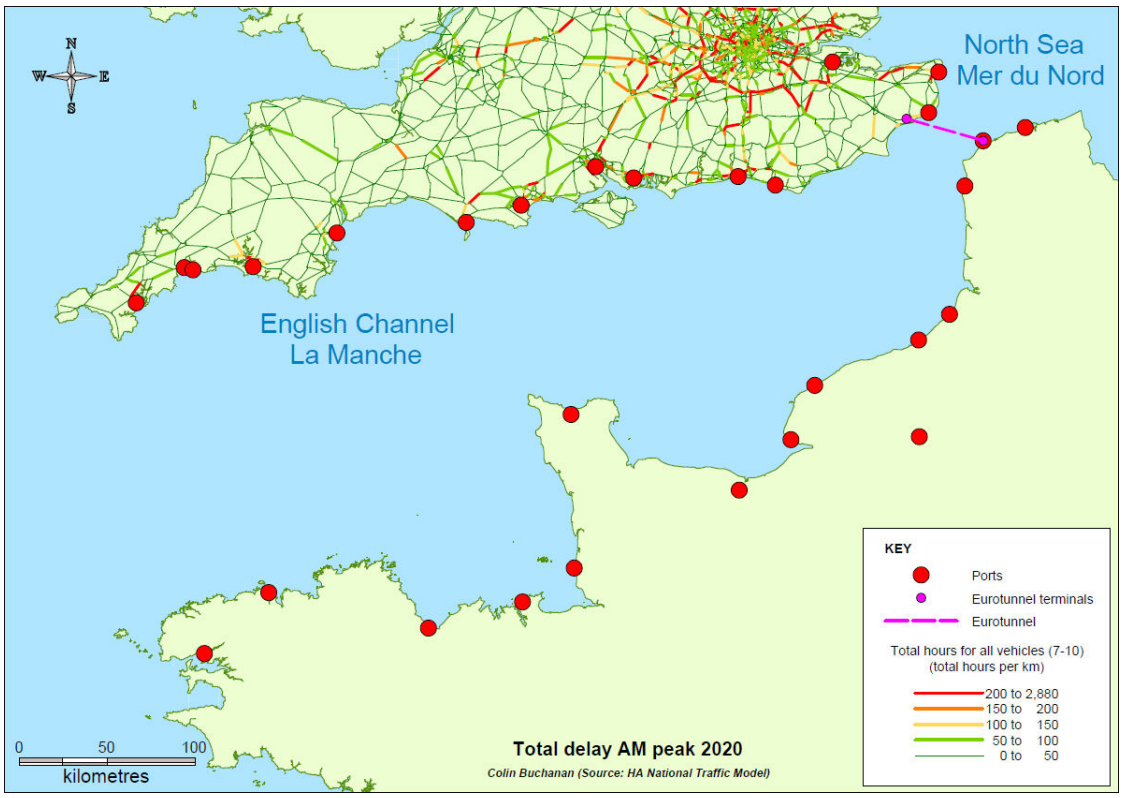
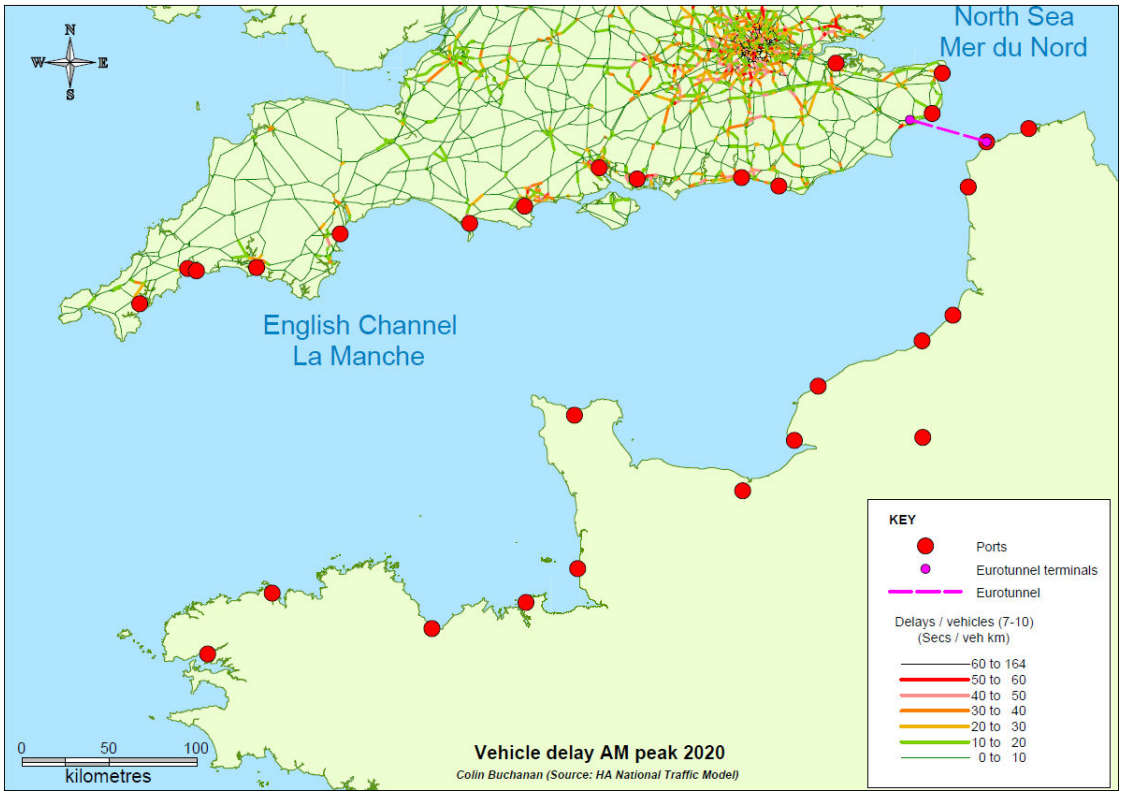


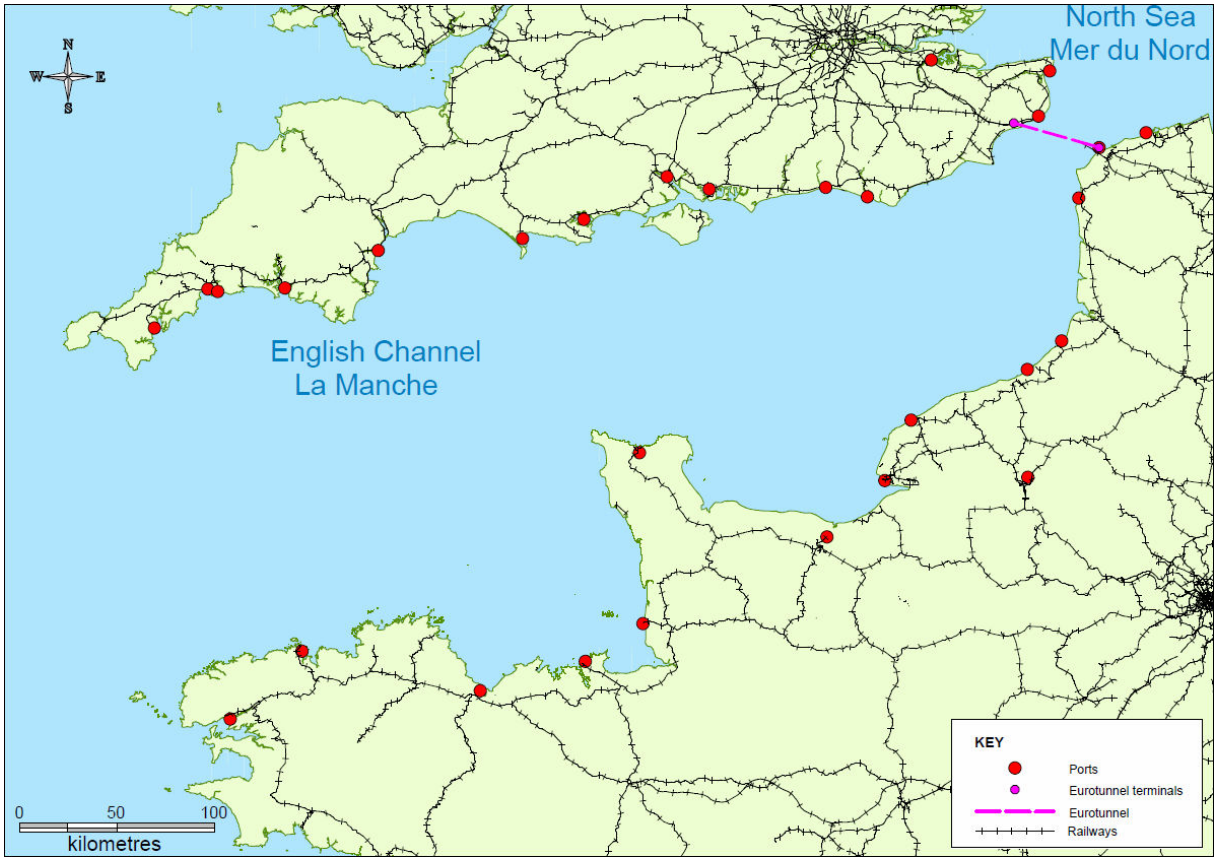
Figure 2.25: AM peak vehicle delay on road network (2020)



2.5 Rail network

2.5.1 The rail networks in the UK and France serving the ports in the study area are shown on the map in Figure 2.26.

Figure 2.26: CAMIS - Rail



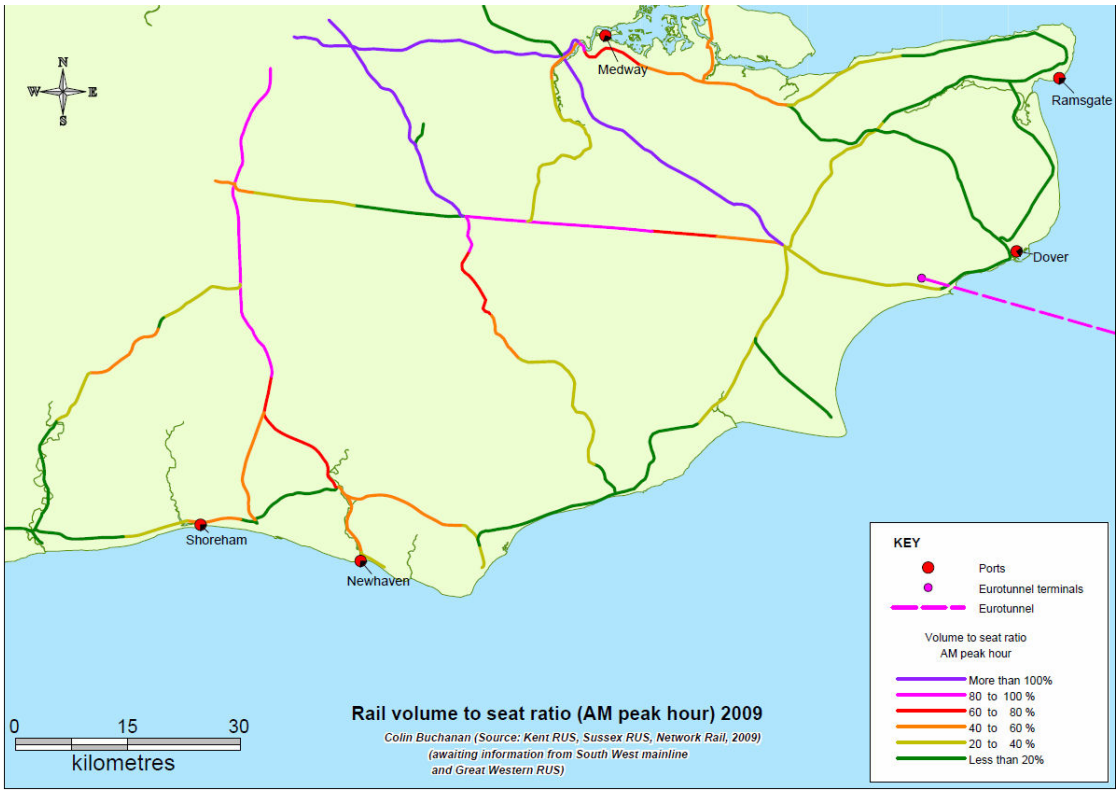
Rail passengers

2.5.2 In terms of rail passenger services on the UK side, data is difficult to obtain for the entire study area, as network planning tends to be undertaken on a regional basis. Since 2006, Network Rail has been developing Route Utilisation Strategies (RUS) for rail corridors in the UK, and the CAMIS study area includes four such corridors, primarily focussed on access to London:

- Great Western Mainline (GWML) – covering services to Bristol, Devon and Cornwall via Reading;
- South West Mainline (SWML) – covering services to Southampton and Portsmouth;
- Sussex – covering services to Brighton and the south coast;
- Kent – covering services to Kent, including the Channel Tunnel rail link.

2.5.3 Each RUS was developed at a different time, and since the strategies for the GWML and the SWML were developed relatively early, much of the data included in later RUS documents was not developed for these corridors. For example, Figure 2.27 indicates rail crowding (measured as the ratio of passengers to seats) on AM peak services in the Sussex and Kent RUS corridors. Similar data is currently not available from Network Rail for the GWML or the SWML.

Figure 2.27: AM peak volume to seat ratio in Sussex and Kent



Rail freight

2.5.4 In contrast to its planning approach to rail passenger services, Network Rail plans for rail freight on a national scale, and published a UK Freight RUS in 2007. As a result, while much of the information is now not as up-to-date as that available from other sources, it does cover the entirety of the UK side of the study area.

2.5.5 The following maps indicate:

- Gross freight tonnage carried by rail in 2004/5 (Figure 2.28);
- Average daily freight trains in a single direction in 2004/5 (Figure 2.29);
- Actual freight train utilisation on key sections of the network (Figure 2.30);
- Gauge clearance (Figure 2.31);
- Key rail capacity gaps (Figure 2.32).

2.5.6 The main rail routes for freight from the ports on the UK side in terms of volume handled are the lines from Southampton and the Eurotunnel terminals, with the former carrying over 8m tonnes in 2004/5. Network Rail's Freight RUS indicates that "the route between

Southampton Port and the WCML via Reading and Oxford is the key route for deep sea container services from Southampton and has seen growing use in recent years".

2.5.7 The importance of the rail route from Southampton Port is also evident from the maps showing average daily freight trains in a single direction (up to 30), and the utilisation of freight train paths (up to 80%).

2.5.8 In 2004/5 the line was only cleared for W8 gauge use. Network Rail modelling has indicated that even if the route was upgraded to W10 gauge, forecast demand for an additional six trains per day in the busier direction by 2014/15 would result in a capacity issue between Southampton and Basingstoke, where only two freight paths per hour would be available between off-peak passenger services.

Figure 2.28: Gross freight tonnage 2004/05

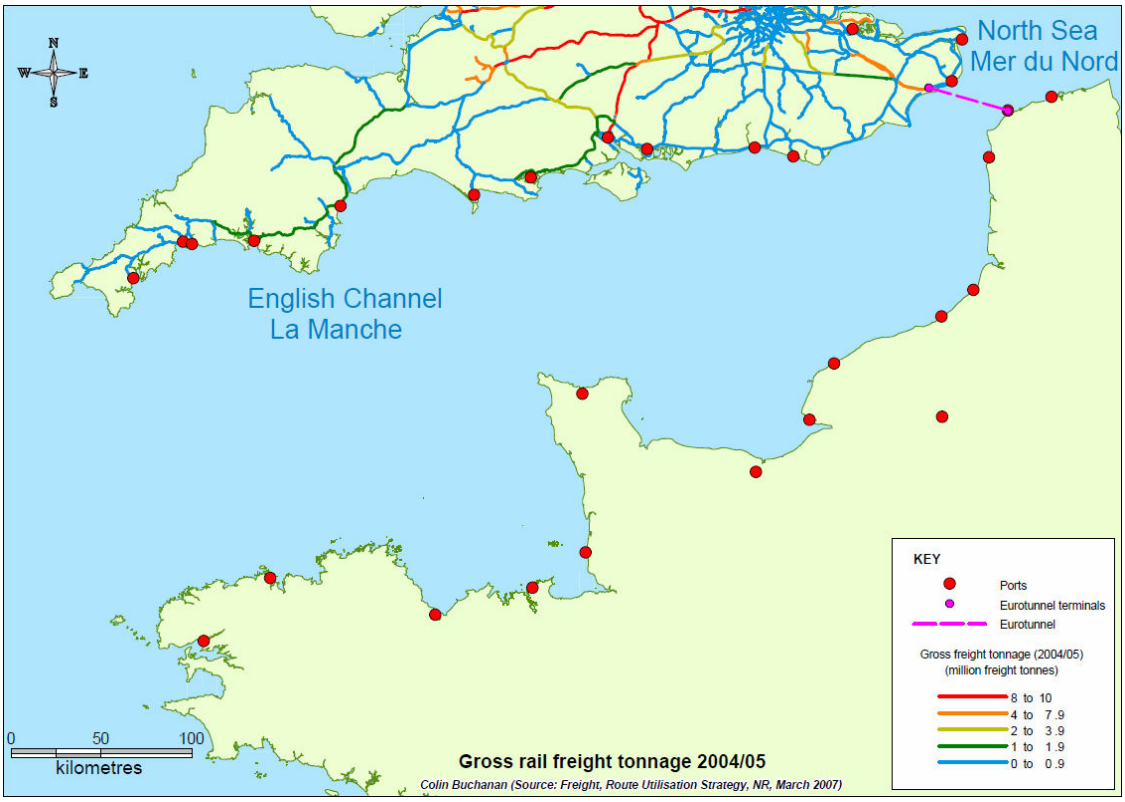


Figure 2.29: Average daily freight trains in single direction 2004/05

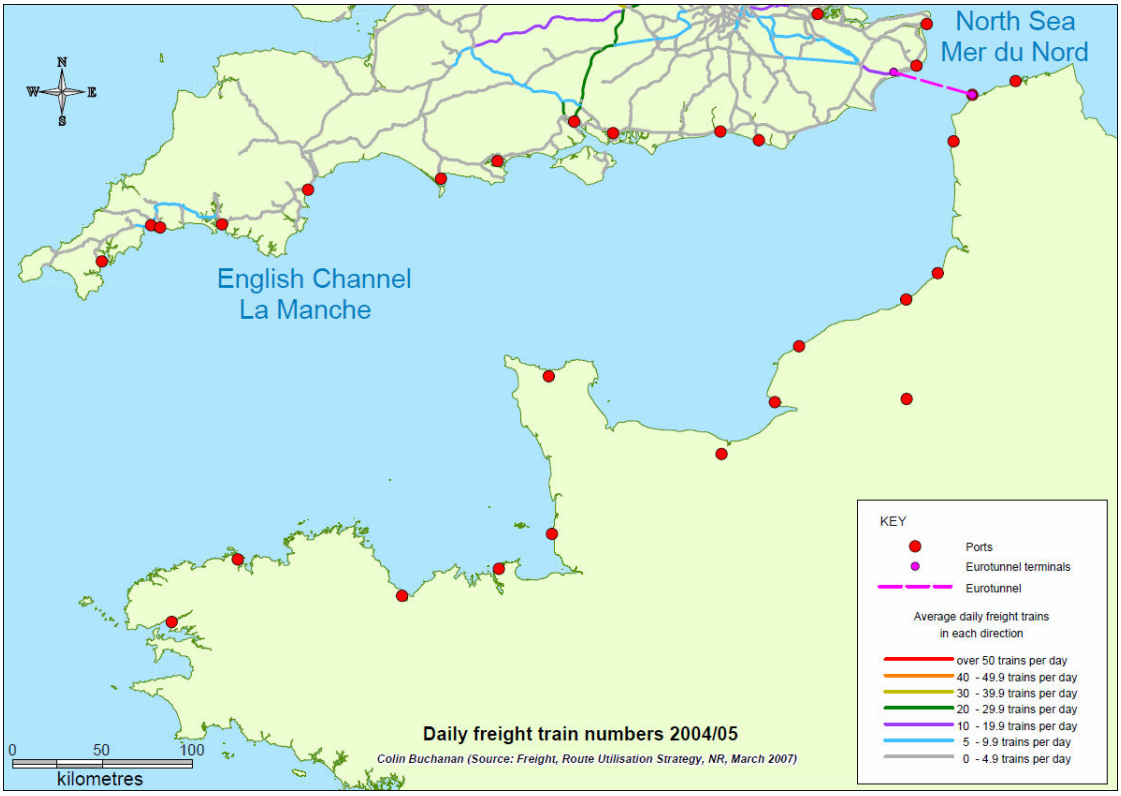


Figure 2.30: Actual freight train utilisation on key sections

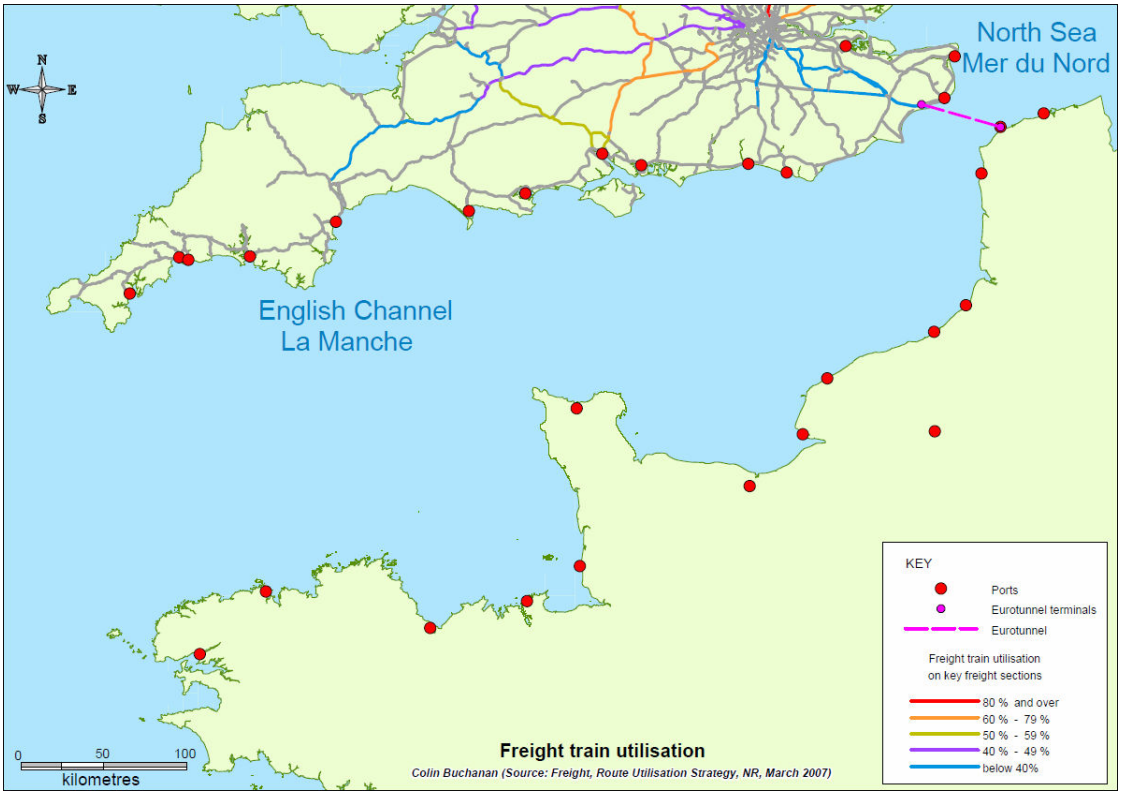


Figure 2.31: Gauge clearance map

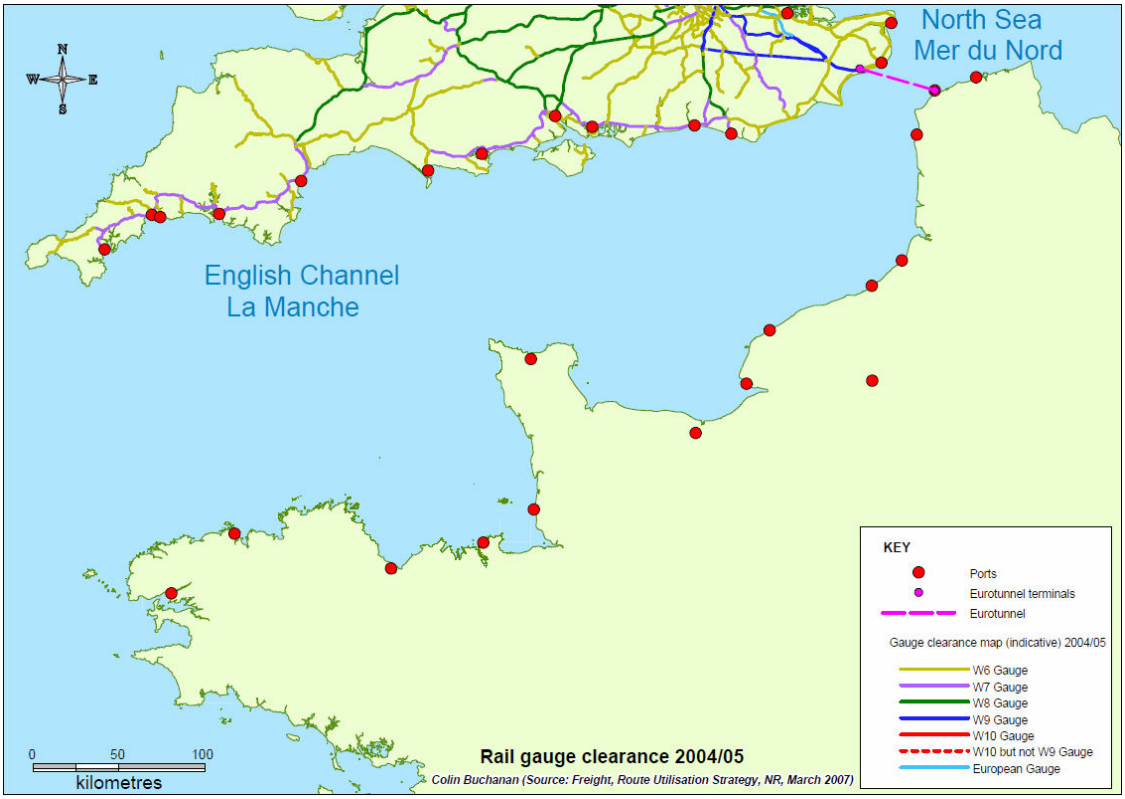
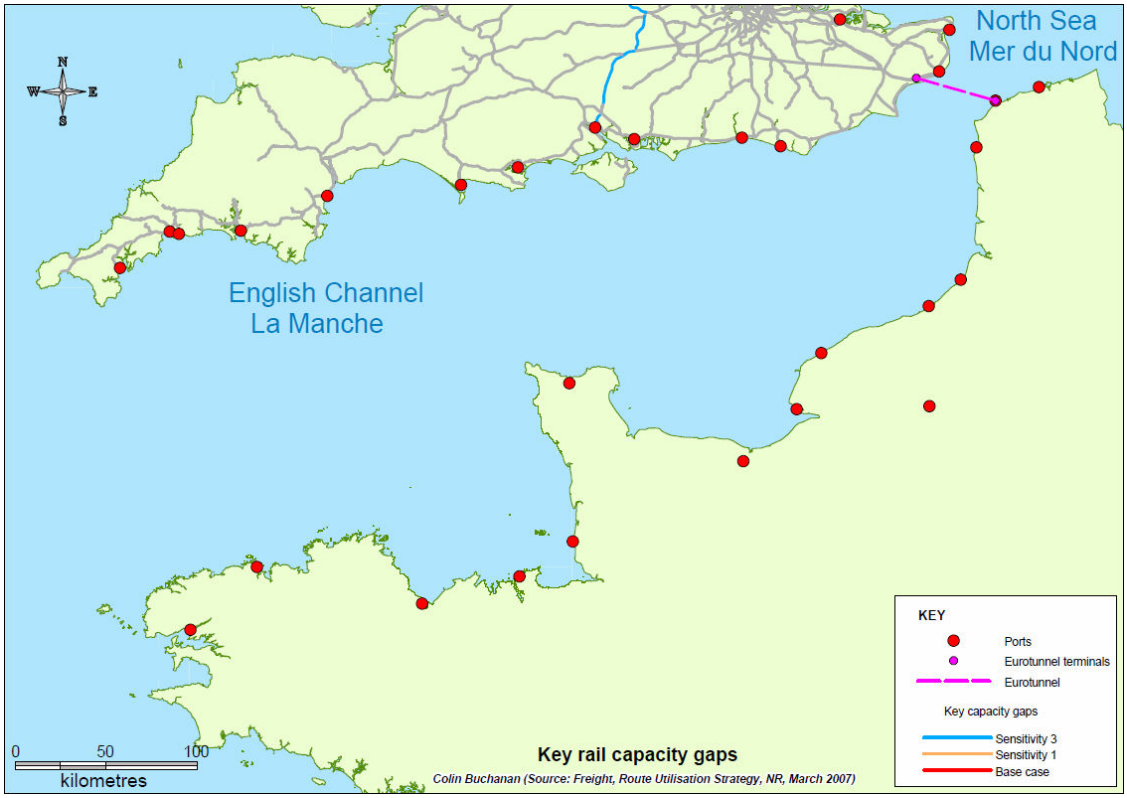


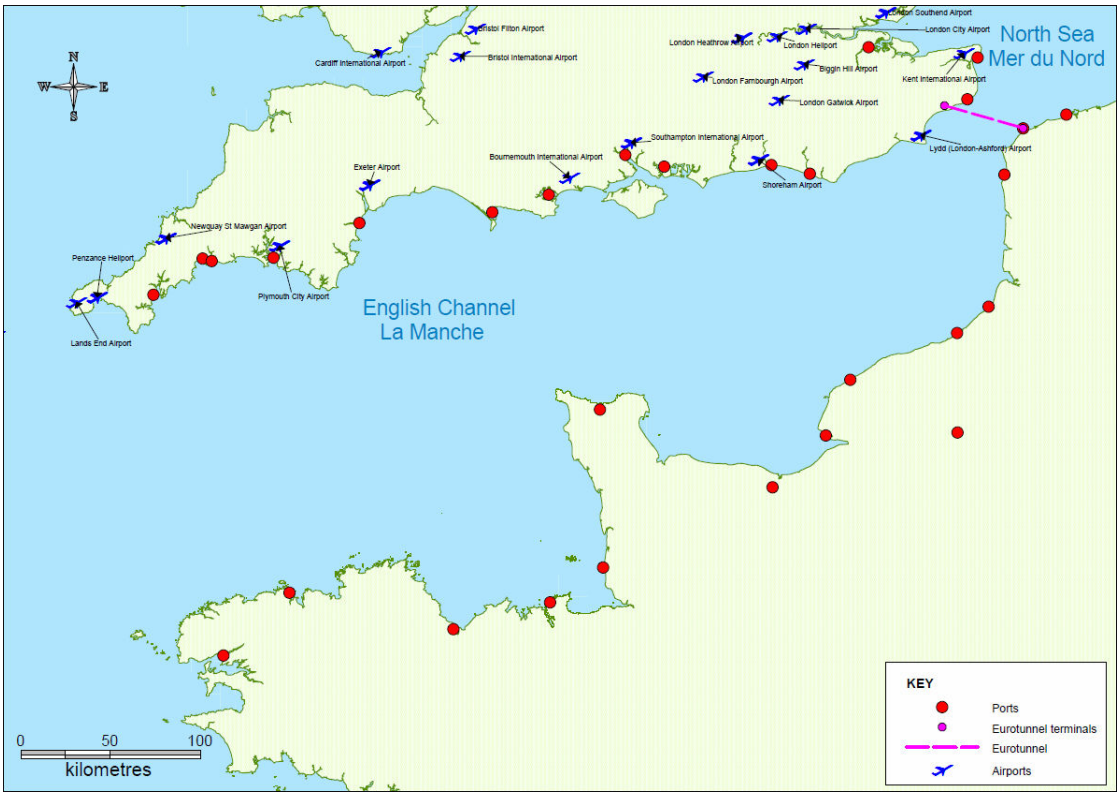
Figure 2.32: Key rail capacity gaps



2.6 Air transport

2.6.1 Figure 2.33 illustrates the airports located within the study area.

Figure 2.33: CAMIS - airports



2.6.2 The main airports in the study area on the UK side in terms of passenger numbers are Heathrow and Gatwick, which together handled over 98m passengers in 2009 as shown in Figure 2.34. The busiest airport outside London (including Heathrow, Gatwick, Stansted, Luton and City) was Southampton, handling 1.8m passengers, with Bournemouth handling close to 900,000 and Exeter close to 800,000.

2.6.3 Heathrow and Gatwick were also the two busiest airports when domestic and foreign passengers were considered separately. However, outside London, Bournemouth was the busiest airport in the study area for passengers on overseas flights, handling close to 750,000 in 2009. In contrast, Southampton was the busiest airport outside London for domestic passengers, handling 1.1m in the same year.

2.6.4 Heathrow was also the dominant airport in the study area in terms of freight handled, accounting for 1.3m tonnes of freight in 2009 as shown in Figure 2.35. Stansted handled over 180,000 tonnes, while Gatwick accounted for nearly 75,000. The busiest airport outside London in terms of freight was Kent International, handling just over 30,00 tonnes.

Figure 2.34: Number of passengers (Domestic and foreign)

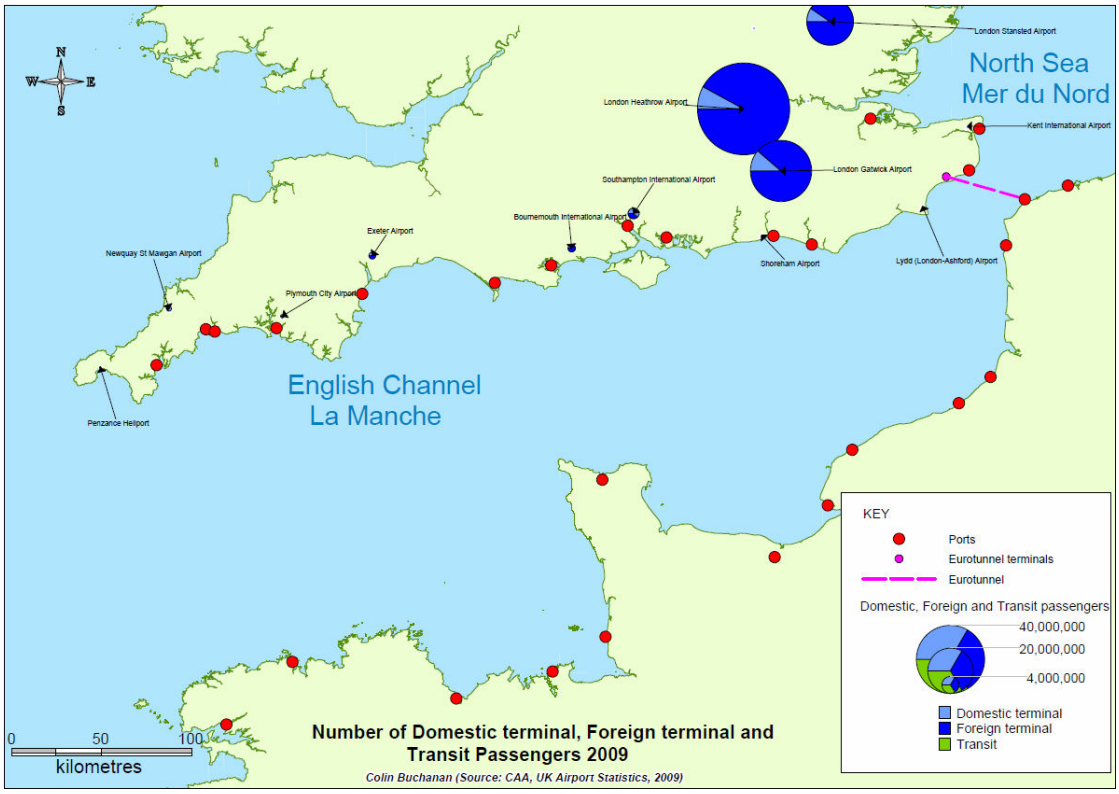
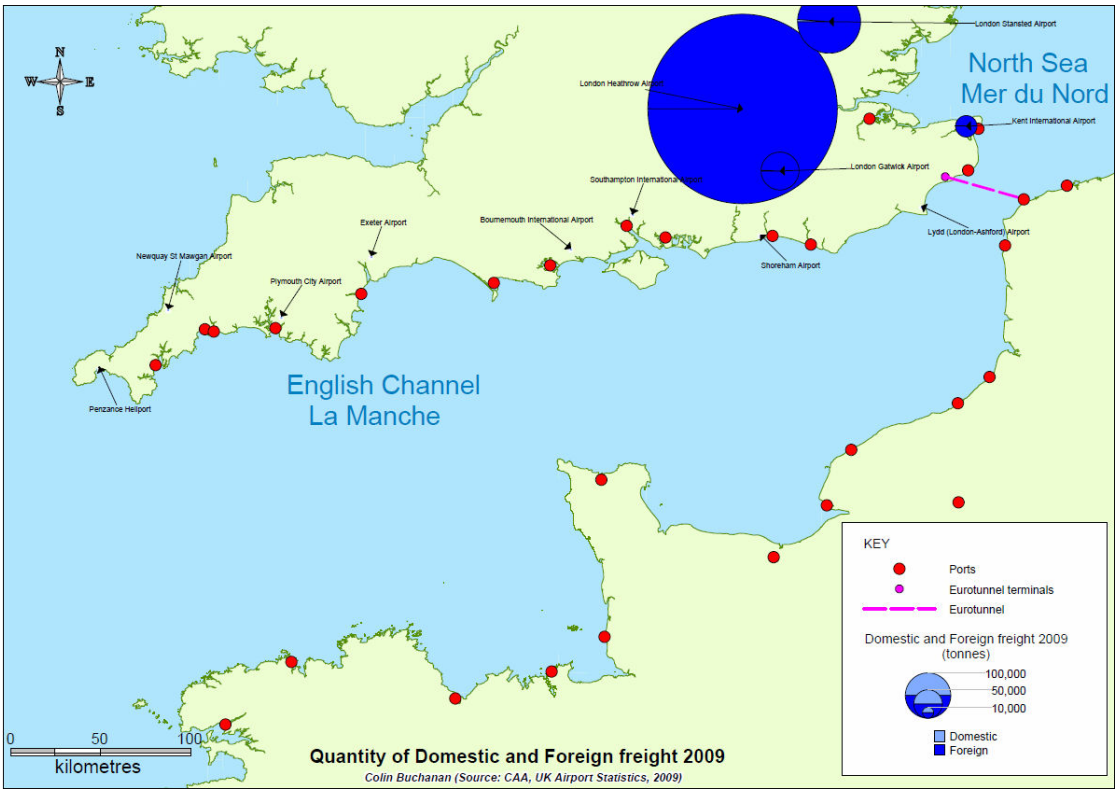


Figure 2.35: Quantity of freight (Domestic and foreign)



3 Summary of findings

3.1 Conclusions

3.1.1 The collection of baseline data on UK and French ports has allowed us to draw the following key conclusions:

- Maritime passenger numbers at ports in the UK have declined since 1994 due to the opening of the Channel Tunnel and the proliferation of budget airline flights:
  - Seaborne visits abroad by UK residents declined from 12m in 1994 to 8.1m in 2008;
  - Seaborne visits to the UK by foreign residents declined from 6.3m to 4.5m over the same period;
- Dover is the dominant port for maritime passenger services on the UK side, handling 14m short-sea ferry and cruise passengers in 2008, some 76% of all maritime passengers handled by UK ports in the study area;
- A total of 11.1m passengers travelled between Dover and Calais in 2008, accounting for 66% of all passenger movements between UK and French ports in the study area – other significant flows included 2.1m between Dover and Dunkerque, and 1m between Portsmouth and Caen;
- Southampton, Dover and the Medway Ports are the three key ports on the UK side in terms of freight, handling 41m, 24m, and 15m tonnes respectively in 2008 – this accounted for 85% of all freight handled by UK ports in the study area;
- Port capacity is difficult to quantify in a standardised way as ports are effectively small nodes in a more complex end-to-end journey by the freight unit or passenger;
- Radial routes from the ports to the M25 London Orbital (the M3 to Southampton and Portsmouth, the M23/A23 to Shoreham and Newhaven, and the M2/M20 to the ports in Kent) have the highest traffic flows in the study area;
  - Other key routes are the M27 between Southampton and Portsmouth, the A31/A338 between Southampton and Poole, and the M5 connecting Bristol with Devon and Cornwall;
- Traffic growth is forecast to be between 10 and 15% between 2010 and 2020 on most major road links in the study area;
- Delays on key sections of road could reach 60 seconds per vehicle km during the AM peak in 2020;
- The main rail routes for freight from the ports on the UK side in terms of volume handled are the lines from Southampton and the Eurotunnel terminals, with the former carrying over 8m tonnes in 2004/5;
- Forecast demand is likely to result in a significant rail freight capacity issue between Southampton and Basingstoke by 2015;
- Heathrow is the busiest airport in the study area in terms of both passengers and freight, with Southampton the busiest passenger airport outside London and Kent International handling the most freight.

3.2 Next steps

3.2.1 The findings from this study will feed into Stage 2 of the CAMIS Maritime Transport and Intermodality study. This will include a more in-depth study of existing conditions and future growth at ports in the UK and France, and will involve the development of priorities for ensuring that future infrastructure plans are sufficient to cope with forecast demand.

Appendix A – UK ports data

Maritime services

Table A 1: Passengers handled by UK ports in 2008 (thousands)

Port	Short sea passengers	Cruise passengers	TOTAL
Ramsgate	222	0	222
Dover	13,783	223	14,006
Newhaven	284	0	284
Portsmouth	2,087	0	2,087
Southampton	0	889	889
Poole	474	0	474
Weymouth	15	0	15
Plymouth	571	0	571

Table A 2: Passengers on UK-France routes in 2008 (thousands)

Route	Passengers
Ramsgate - Dunkirk	0
Dover - Boulogne	592
Dover - Calais	11,058
Dover - Dunkirk	2,133
Folkestone - Boulogne	0
Newhaven - Dieppe	237
Newhaven - Le Havre	47
Portsmouth - Caen	1,022
Portsmouth - Cherbourg	171
Portsmouth - Le Havre	299
Portsmouth - St Malo	403
Southampton - Cherbourg	0
Poole - Cherbourg	414
Poole - St Malo	52
Weymouth - St Malo	15
Plymouth - Roscoff	401

Table A 3: Freight handled by UK ports in 2008 (thousand tonnes)

Port	Domestic imports	Domestic exports	Foreign imports	Foreign exports	Total domestic	Total foreign	TOTAL
Ramsgate	20	0	1,257	690	20	1,948	1,968
Dover	181	8	14,836	9,318	190	24,154	24,344
Folkestone	15	0	510	440	15	950	965
Shoreham	1,129	19	549	96	1,147	644	1,792
Newhaven	280	4	570	341	284	912	1,196
Littlehampton	0	0	0	0	0	0	0
Portsmouth	449	285	2,025	1,179	734	3,204	3,937
Cowes	0	0	0	0	0	0	0
Southampton	6,896	809	18,786	14,484	7,705	33,269	40,974
Poole	104	59	810	545	163	1,355	1,518
Weymouth	0	0	0	0	0	0	0
Teignmouth	0	0	0	0	0	0	0
Plymouth	1,342	167	392	421	1,509	813	2,322
Fowey	0	31	30	874	31	904	935
Par	0	0	0	0	0	0	0
Falmouth	0	0	0	0	0	0	0
Medway	2,248	148	10,369	2,206	2,396	12,575	14,971

Port capacity

Table A 4: Port capacity data

Port	Storage (sqm)	Freight berths	Passenger berths
Medway	11,400	24	
Ramsgate			3
Dover	13,000	1	2
Newhaven		5	2
Shoreham	162,365	2	
Portsmouth			5
Southampton	800,000	9	4
Poole	180,000	4	1
Weymouth			
Teignmouth	9,300	5	
Plymouth	2,669,320	3	26
Fowey		4	2
Par			
Falmouth		3	
ET			

Air services

Table A 5: Passengers at UK airports (2009)

Airport	Domestic terminal	Foreign terminal	Transit	TOTAL
London Heathrow Airport	5,254,605	60,652,036	130,316	66,036,957
London Stansted Airport	1,894,941	18,054,748	7,388	19,957,077
London Gatwick Airport	3,662,113	28,698,660	31,747	32,392,520
London Luton	1,178,008	7,937,319	5,219	9,120,546
London City	592,159	2,204,731	0	2,796,890
Kent International Airport	1,710	3,625	239	5,574
Lydd (London-Ashford) Airport	59	529	0	588
Shoreham Airport	419	794	0	1,213
Southampton International Airport	1,107,016	682,427	458	1,789,901
Bournemouth International Airport	124,495	743,950	2,309	870,754
Exeter Airport	311,465	478,268	5,988	795,721
Plymouth City Airport	110,200	5,054	42,679	157,933
Newquay St Mawgan Airport	311,029	36,007	39,834	386,870
Penzance Heliport	85,911	0	0	85,911

Table A 6: Freight handled by UK airports in 2009 (tonnes)

Airport	Domestic freight	Foreign freight	TOTAL
London Heathrow Airport	825	1,276,825	1,277,650
London Stansted Airport	2,018	180,792	182,810
London Gatwick Airport	485	74,194	74,680
London Luton	1,462	27,182	28,643
Kent International Airport	0	30,038	30,038
Southampton International Airport	207	2	209
Bournemouth International Airport	4	0	4
Exeter Airport	23	1	25
Penzance Heliport	156	0	156

Appendix B – French ports data

Higher Normandy

Table A 7: Maritime transport lines

Ports connected		Frequency of service	Type of service	No. of shipping companies	No. of passengers	Quantity of freight (tons)
Le Havre	Portsmouth	2/ day	Ro-ro and passengers	1	319,000	2,100,000
Le Havre	Felixstowe	1/ week	LoLo	1		
Le Havre	Liverpool	2/week	LoLo	2		
Le Havre	Southampton	1/week	RoRo	1		
Le Havre	Teesport	1/week	RoRo	1		
Rouen	Felixstowe	1/ week	LoLo	1		
Dieppe	Newhaven	2/ day	Ro-ro and passengers	1	252,138	1,246,842

Table A 8: Maritime transport port traffic

Port	Overall Traffic 2009 (tons)	Treatment capacity - Draught (meter)	Traffic 2009 by products (tons)	
LE HAVRE	74 048 023 t	17		
	2 240 714 TEU			
	493 079 passengers			
			petrol.prod. and liquid bulk	45,580,840
			Dry bulk	3,876,630
			General cargo	24,310,032
			Others	280,521
ROUEN	23 302 829 t	10.3		
	122 000 TEU			
	27 509 passengers			
			petrol.prod. and liquid bulk	11,585,000
			Dry bulk	9,787,000
			General cargo	1,931,000
DIEPPE	453 589 t		Trucks	39,156

Table A 9: Maritime transport future plans

Port	Project	Future Capacity	Planned date
Le Havre	Multimodal hub	330 000 TEU river/rail/year	2013
Rouen	Increasing of draught to 11,70 m		2014

Table A 10: Rail transport lines

Railway stations connected	Frequency of connections	Type of service	Number of TOCs
Le Havre - Bordeaux	7/week	Combined transport	2
Le Havre - Cognac	5/week	Combined transport	1
Le Havre - Dijon	5/week	Combined transport	1
Le Havre - Lille	2/week	Combined transport	1
Le Havre - Lyon	7/week	Combined transport	2
Le Havre - Marseille	2/week	Combined transport	1
Le Havre - Milan	5/week	Combined transport	1
Le Havre - Paris Valenton	5/week	Combined transport	1
Le Havre - Strasbourg	2/week	Combined transport	1
Le Havre - Turin	5/week	Combined transport	1

Table A 11: Railway station traffic (freight)

Railway station	Overall Traffic 2009 (tons)
Le Havre	5 600 000 t

Table A 12: Rail transport future plans

Railway station	Project	Future Capacity	Planned date
Le Havre	Multimodal hub	150 000 TEU rail/year	2013

Table A 13: River transport lines

Ports connected	Frequency of connections	Type of service	Number of companies
Le Havre - Radicatel - Rouen - Limay - Gennevilliers	3/week	Containers and bulk	2
Le Havre - Radicatel - Gennevilliers	1/week	Containers and bulk	1
Le Havre - Radicatel - Rouen	5/week	Containers and bulk	1
Le Havre - Rouen - Limay - Gennevilliers - Bonneuil-sur-Marne	1/week	Containers and bulk	1
Le Havre - Rouen - Gennevilliers - Bonneuil-sur-Marne	1/week	Containers and bulk	1
Le Havre - Rouen - Limay - Gennevilliers	2/week	Containers and bulk	1
Le Havre - Limay - Gennevilliers	1/week	Containers and bulk	1
Le Havre - Gennevilliers	3/week	Containers and bulk	2
Le Havre - Nogent-sur-Seine	2/week	Containers and bulk	1
Le Havre - Gron	1/week	Containers and bulk	1

Table A 14: River transport traffic

Port	Overall Traffic 2009 (tons)	Traffic 2009 by products (tons)	
Higher Normandy	12 194 374 t	Construction material	5,575,709
		General cargo	1,888,590
		Agricultural product	1,688,490
		petrol.prod.	891,821
		Others	2,146,764
dont Le Havre	4 375 215 t		
dont Rouen	4 991 854 t		

Table A 15: River transport future plans

Port	Project	Future Capacity	Planned date
Le Havre	Multimodal hub	150 000 TEU river/year	2013

Table A 16: Air transport lines

Airports connected	Frequency of connections	Type of service	Number of companies	Number of passengers
Le Havre - Lyon	2/day	Passengers	1	18,706

Lower Normandy

Table A 17: Maritime transport lines

Ports connected		Frequency of services	Type of service	No. of shipping companies	No. of passengers	Quantity of freight (tons)
Cherbourg	Portsmouth	2 to 4 / day	Ro-ro and passengers	1	700,000	70 000 trucks or 2 MT
Caen	Portsmouth	3 to 4 / day	Ro-ro and passengers	1	1,000,000	110 000 trucks or 2,85 MT

Table A 18: Maritime transport port traffic

Port	Overall Traffic 2009 (tons)	Treatment capacity	Equipements spécifiques	Traffic 2009 by products (tons)	
Caen-Ouistreham	3,250,000	Draught : 9 meter			
		100 000 m²			
		ships up to 180 meters	2 gangways RoRo		
				Transchannel	2,850,000
				General cargo	400,000
Cherbourg	2,100,000	Draught : 13 meter	6 gangways RoRo		
				Transchannel	2,040,000
				General cargo	30,000
Honfleur	400,000			General cargo	400,000

Table A 19: Maritime transport future plans

Port	Project	Future Capacity	Planned date
Caen-Ouistreham	Extension of ferry terminal	+ 4,2 ha; 140 trucks ; 7 lines of loading	2012
Cherbourg	Off shore port		end of 2010
	lengthening of "quai des Flamands"		2013 ?

Table A 20: Rail transport freight lines

Railway stations connected	Frequency of connections	Type of service	Number of TOCs
Honfleur - Port / Vignats quarry	3/day	bulk	1
Cherbourg - Valognes		special	1

Table A 21: Air transport lines

Airports connected	Frequency of connections	Type of service	Number of companies	Number of passengers
Caen - Lyon	3/day	Passengers	1	70,000
Caen - Orly	3/day	Passengers	1	5,000
Caen - Nice	1/week	Passengers	1	5,000
Caen charter fly		Passengers		20,000
Deauville charter fly		Passengers		87,000
Deauville - London		Passengers	1	launch in 2010

Table A 22: Air transport freight traffic

Airport	Overall Traffic 2009 (tons)
Deauville	134 horses

Table A 23: Road transport future plans

Area	Project	Future Capacity	Planned date
Saint Lo – Cherbourg	creation 2 x 2 ways		2012

Brittany

Table A 24: Maritime transport lines

Ports connected		Frequency of service	Type of service	No. of shipping companies	No. of passengers	Quantity of freight (tons)
Saint-Malo	Portsmouth	1 / day	Ro-ro and passengers	1		
Saint-Malo	Weymouth	1 / day	Ro-ro and passengers	1		
Saint-Malo	Channel Islands	6 / day	Ro-ro and passengers	1	441,289	68,163

Table A 25: Maritime transport port traffic

Port	Overall Traffic 2009 (tons)	Treatment capacity	Equipements spécifiques	Traffic 2009 by products (tons)	
Brest	2,815,821				
Lorient	2,550,345				
Saint-Malo	1,629,949				

Table A 26: Air transport lines

Airports connected	Frequency of connections	Type of service	Number of companies	Number of passengers
Caen - Lyon	3/day	Passengers	1	70,000
Caen - Orly	3/day	Passengers	1	5,000
Caen - Nice	1/week	Passengers	1	5,000
Caen charter fly		Passengers		20,000
Deauville charter fly		Passengers		87,000
Deauville - London		Passengers	1	launch in 2010

Table A 27: Air freight transport

Airport	Overall Traffic 2009 (tons)
Deauville	134 horses

Table A 28: Road transport future plans

Area	Project	Future Capacity	Planned date
Saint Lo - Cherbourg	creation 2 x 2 ways		2012