

Case Study 3 How Scottish lamb is exported to France

A RO-RO END-TO-END FREIGHT JOURNEY

A Ro-Ro End-to-End Freight Journey considers the road journey of lambs from collection on a farm to the abattoir and onwards through the Channel Tunnel to France. It concludes with a summary of the journey through France and the lorry's return journey to Britain. It focuses on efficiencies, causes of delay, delivery challenges, modal shift opportunities and issues that the ro-ro sector faces.

The case study is based on a single journey undertaken in early 2008. The journey was chosen at random and is not intended to carry the weight of statistical evidence; rather, its purpose is to illustrate some of the common issues faced by freight operators and to assist readers in understanding where opportunities for efficiency improvements may exist. This case study is complemented by Case Study 4 ("A Food and Drink End-to-End Freight Journey: How Californian wine gets to the store in Manchester") which provides insight into the movement of bulk wine in containers and key facts about the transport of food and drink in Britain.



Background

Roll on-roll off vessels (ro-ro) are ships designed to carry wheeled cargo such as cars, trailers or lorries. Ro-ro vessels are designed with ramps to enable vehicles to “roll on and roll off” at the port, as opposed to cargo that is “lift-on and lift-off” by crane (lo-lo).

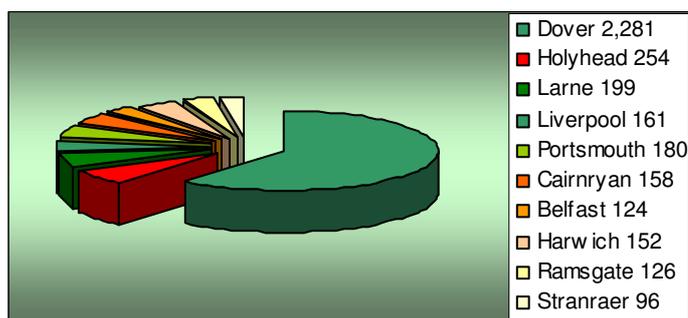
Ro-ro freight services in the UK can be divided into a number of distinct markets: cross-channel traffic to Northern France and Belgium is dominated by the Port of Dover and the Channel Tunnel, where the primary traffic is driver-accompanied vehicles. Driver-accompanied ferry operations also operate from the South West (eg Poole) to France and Spain. Further north along the east coast of Britain a larger number of medium and small sized shipping operations provide services across the North Sea and to the Baltic. Much of the traffic on these longer routes consists of unaccompanied trailers. Irish Sea services between mainland Britain and Ireland may be either domestic (to North Ireland) or international (to the Republic of Ireland), with a mix of accompanied and unaccompanied traffic. Other domestic services operate to the Scottish Islands, the Isle of Man and the Channel Islands.

Our analysis considers the movement of freight by ro-ro, focusing on the Dover Straits route that includes traffic through the Port of Dover and the Channel Tunnel Shuttle. The end-to-end journey considers the movement of a refrigerated vehicle using the Channel Tunnel Shuttle. The Shuttle and Channel ferries compete for accompanied ro-ro traffic in close proximity and are, for our purposes, considered equivalents. By contrast, the through-train freight services using the Channel Tunnel could be considered competing with unaccompanied ro-ro, or container, short-sea crossings.

Key Facts about ro-ro

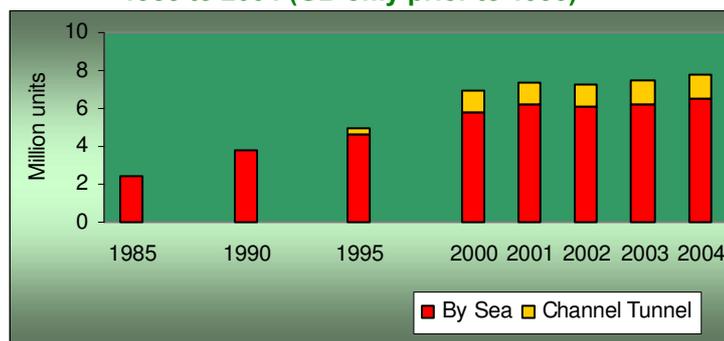
- The Port of Dover is the UK’s busiest ro-ro port (Figure 1).
- In 2005, 94 million tonnes moved through UK ports by ro-ro; compared to 54 million tonnes in containers and 16.6 million tonnes lifted in the Channel Tunnel (Maritime Statistics, DfT).
- In 2006, 7 million goods vehicles and unaccompanied trailers passed through UK ports by ro-ro, and 1.3 million goods vehicles used the Channel Tunnel (Figure 2).
- Commodity flows through Dover are notable for their diversity: the largest exports and imports through Dover are foodstuffs, machinery, miscellaneous manufactured goods, other miscellaneous goods, chemicals and steel products (see Figures 3 and 4).
- The East and West Midlands are the largest import destination (at 33%), followed by the South East at 21%. Only 5% of vehicles are destined for Greater London (CSRGT, DfT, 2006). However these statistics do not always represent the final journey leg and ultimate importation destinations are not reflected in the data.
- 19% of all lorries travelling to mainland Europe in 2007 were UK-registered vehicles (DfT, 2008).

Figure 1: Major ports utilised traffic, main freight units by port: 2006: foreign and coastwise traffic: Top 10 ports (thousand units)



Source: Maritime Statistics, DfT (2006)

Figure 2: Road goods vehicles through UK ports 1985 to 2004 (GB only prior to 1990)



Source: Maritime Statistics, DfT (2006)

Case Study 3 How Scottish lamb is exported to France

Figure 3: Exports through Dover: 2004-2006 (share of tonnes lifted by UK registered vehicles only)

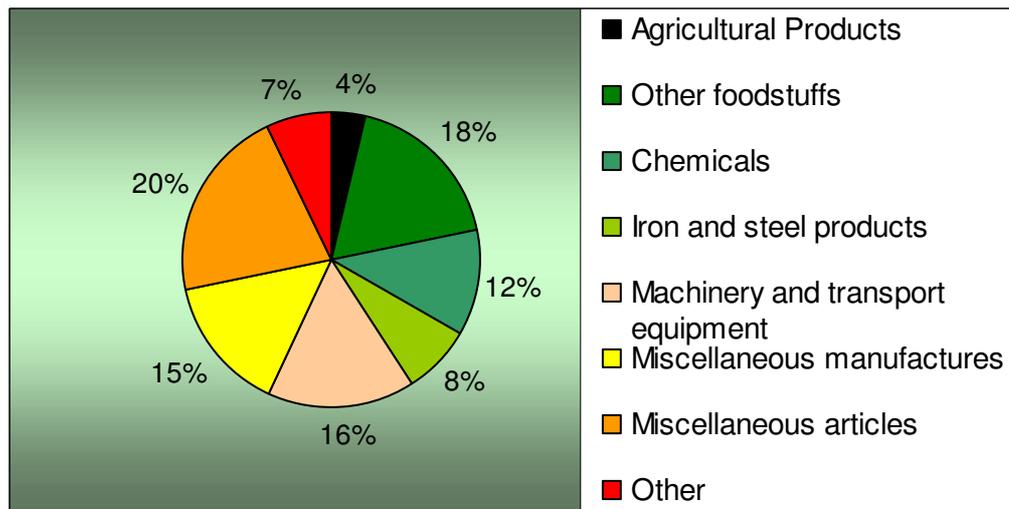
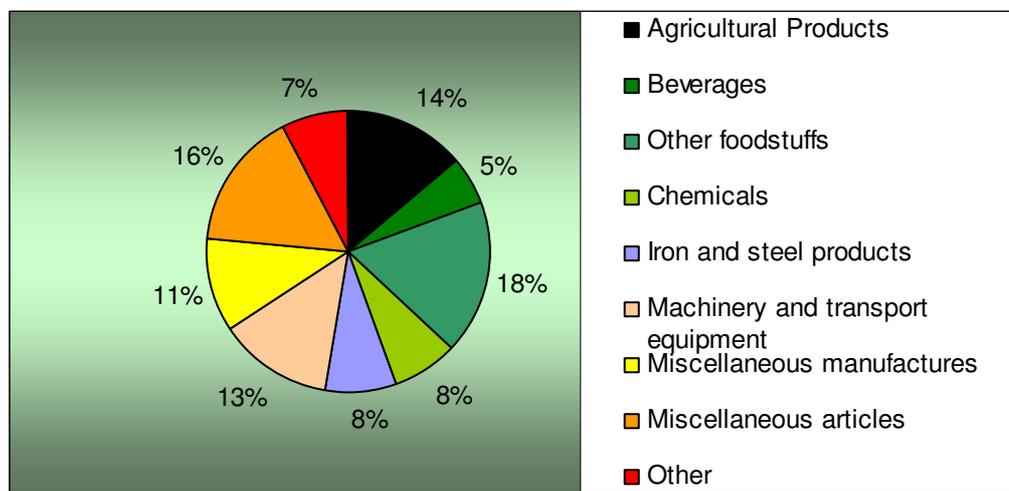


Figure 4: Imports through Dover: 2004-2006 (share of tonnes lifted by UK registered vehicles only)

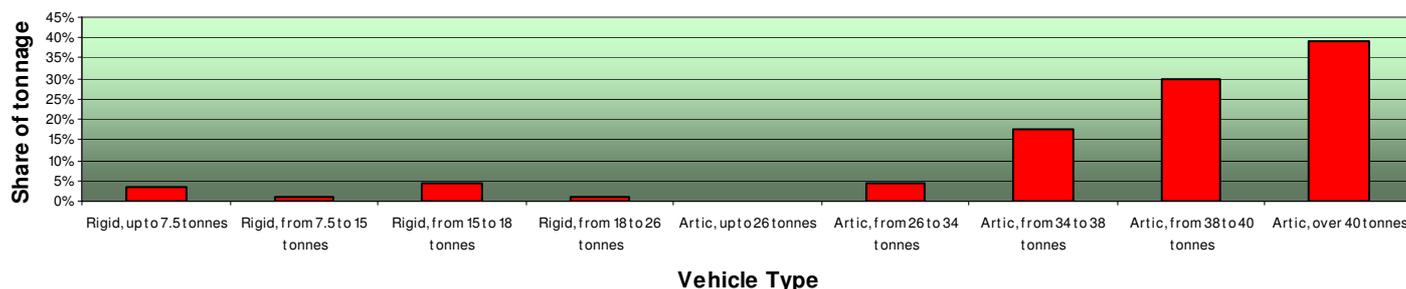


Source: Continuing Survey of Road Goods Transport, DfT (2006)

Between 2004 and 2006:

- The number of vehicles using the port varies depending on the day of the week: Department surveys indicate that 37% of all exports through Dover are on a Monday (1.2 million tonnes in 2006), with the next biggest day Tuesday with 16% (520,000 tonnes).
- Imports have a more even spread, with Friday the biggest day at 26% (1 million tonnes), followed by Tuesday at 21% (850,000) and Wednesday and Thursday both 17% (around on 700,000 each day).
- Most UK registered vehicles carrying imports and exports through Dover are working on hire or reward (96% exports and 97% of imports).
- Artics between 34 and 44 tonnes are the most common vehicle types at Dover (Figure 5).

Figure 5: Ro-Ro Dover Exports by Vehicle Type and Size - 2004 to 2006 (Share of tonnes lifted by UK Registered Vehicles only): plated weight



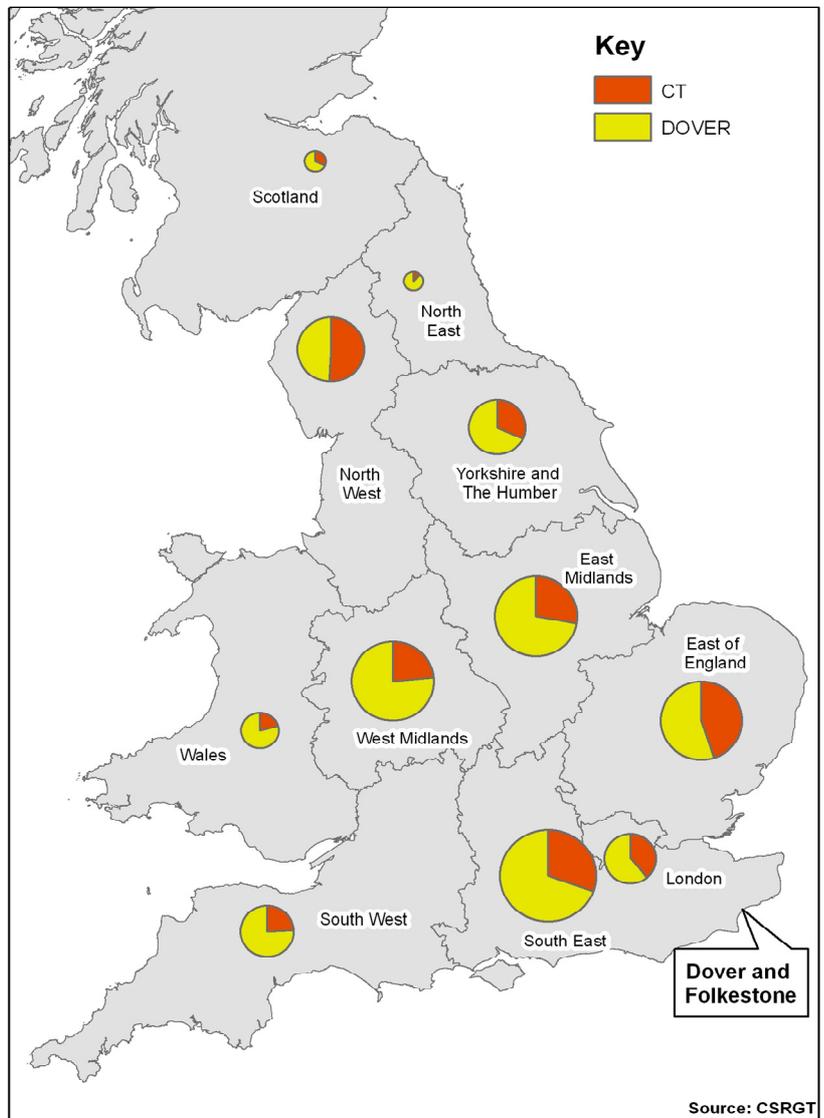
Source: CSRG, DfT (2006)

Figure 6: Share of tonnage by destination region from Dover Ro-Ro and Channel Tunnel: 2004-2006 (UK registered vehicles only)

Where inbound vehicles are destined in the UK: Dover and the Channel Tunnel

Figure 6 represents tonnage, tonne kms and vehicle kms by destination region for three years (2004 to 2006). The sample is drawn from GB vehicles only.

The overall picture is a port that is servicing a wide range of destinations but the highest percentage of gross tonnes are destined for the Midlands and the South East (some 45% of goods lifted). This reflects the location of the port and the economic importance of the Midlands, notably in terms of warehousing and distribution. It is noted that these are not the final destinations for many of the goods transported across the Channel which may be transported onwards to distribution centres, stores and homes.



Source: CSRG, DfT (2006)

Forecasts to 2030

The Department published updated UK ro-ro traffic growth forecasts in 2007. Forecasts for freight carried by ferry and shuttle in the South East are anticipated to grow from 3.8 million tonnes in 2005 to 7.1 million tonnes in 2030 – representing an annual average increase of 2.6%.

By comparison, the forecast growth rate on the Southern North Sea (Thamesport and Harwich Haven) is an annual average increase of 3.2% (1.3 million tonnes in 2005 to 2.8 million tonnes in 2030) (UK Port Demand Forecasts to 2030, DfT, 2007).

The scenario

A road haulage company is contracted to transport 1,200 Scottish lambs twice weekly from an abattoir in Shropshire to France, delivering 600 lambs to the Paris markets at Rungis and 600 lambs to a meat processing plant in Brittany.

This case study takes each stage of the journey in turn. Figure 7 provides a simplified overview of the end-to-end journey through both Dover and the Channel Tunnel, considering each segment of the journey: what happens, who has delivery and accountability responsibilities and who has regulatory and policy roles.

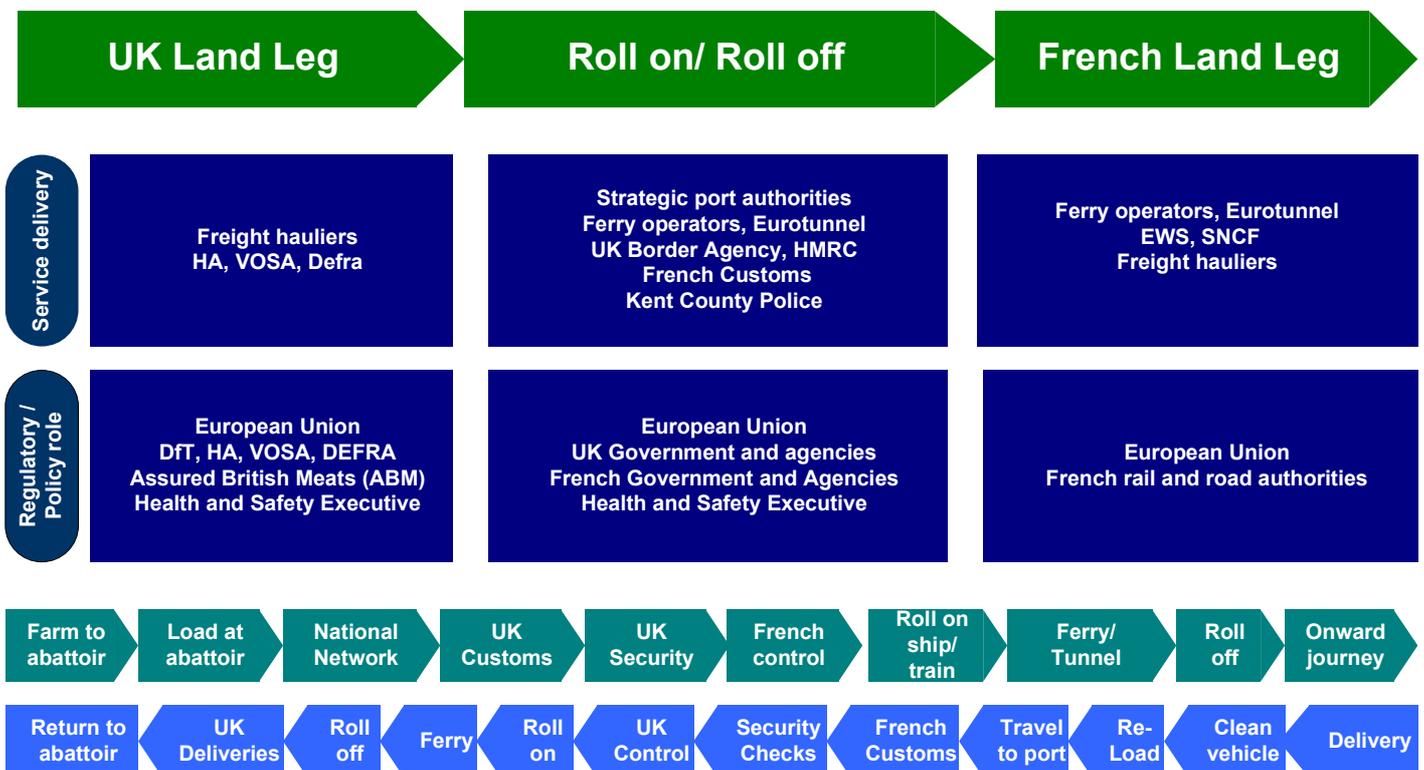


Courtesy of Rungis Marche International

The Scottish Executive calculates that in a typical four month period in 2006, approximately 600,000 sheep were slaughtered in Scotland and 500,000 were transported to abattoirs in England and Wales. Scottish lamb exports out of the UK are valued at around £20 million per annum.

The journey described is a case study only: there is a diverse range of users, origins and destinations, journey paths and commodities utilising ro-ro, and different journeys will have different components with their own delivery and regulatory aspects. For example, the movement of lambs in refrigerated vehicles brings Department for Environment, Food and Rural Affairs (Defra) into the end-to-end journey to ensure and monitor correct food handling and refrigeration standards.

Figure 7: An end-to-end journey of lamb from Shropshire to France: Ferry and the Channel Tunnel



Source: Department for Transport (2008)



Please Note: all times referred to in the end-to-end journey are Greenwich Mean Time.

UK Land Leg

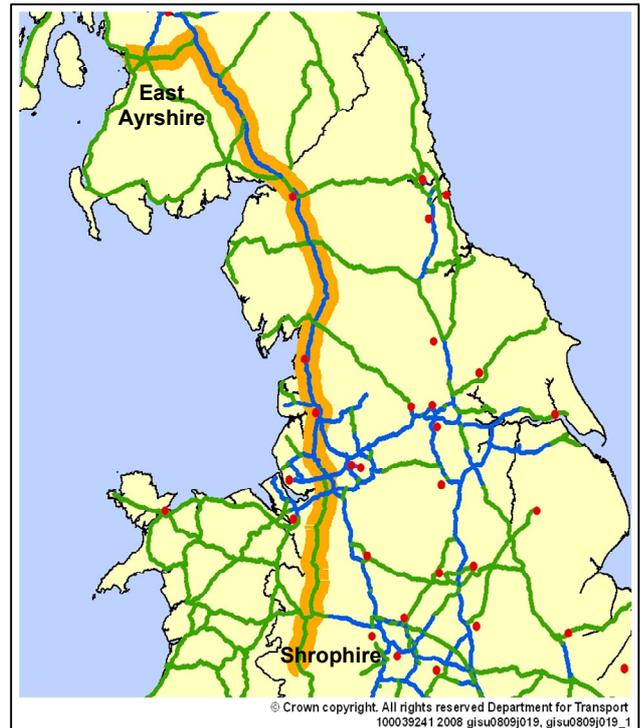
Roll on/ Roll off

French Land Leg

The journey from Scotland

Day 1 Livestock transport hauliers collect the live lambs from farms in East Ayrshire. Practices vary and the lambs may be transported to the markets or directly to the abattoir, but in this case study the lambs have already been purchased and are transported to an abattoir in Shropshire. The haulier completes collections by Midday and travels south from Kilmarnock on the A71, M74, A74 and M6. The driver breaks for 45 minutes at a Motorway stop outside of Lancaster on the M6 then continues to Jn 11 where he turns west onto the M54 and south onto the A49. The driver experiences congestion outside Manchester and Wolverhampton but it was planned into the journey times and he arrives at the abattoir in Shropshire on schedule at 7pm on Day 1. The lambs are immediately processed at the abattoir.

The trailers have watering and feedings systems to ensure that the lambs are transported in humane conditions and to reduce bruising or stress that can impact upon the quality of the meat. Some livestock transport hauliers may also be certified by Assured British Meats (ABM) which sets beef and lamb assurance standards throughout the whole supply chain, including farm, transport, market and abattoir.



Nearly half of all Scottish lambs are slaughtered in England or Wales. Many abattoirs are located in or near Wales where the greater number of lambs are sourced and this reduces the need for more abattoirs in other regions but increases the journey time of livestock on the road.

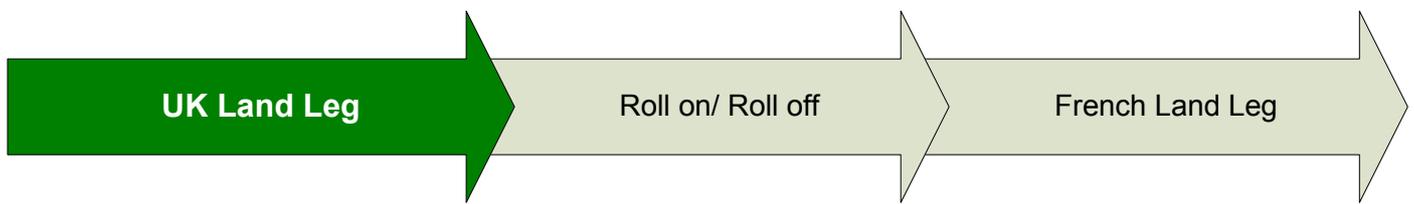
Day 2 The lambs slaughtered late on Day 1 are processed overnight with heads, hooves, organs, and skins removed. The carcasses weigh 7-15 kg a piece and are refrigerated at the abattoir until 4am on Day 3.

The refrigerated lorry arrives at the abattoir at 5pm on Day 2. The driver has completed another job and now spends an hour washing the inside of the trailer, satisfying food and meat handling standards. He then positions the lorry at the loading bay and sleeps in the cabin overnight.

Cooling the lamb

When a lamb is slaughtered its average body temperature is 28°C. To ensure that the lamb can be tender for consumption it is usual to slowly reduce the body temperature to 12°C, and then rapidly reduce it from 12°C to 2°C, the optimum temperature for chilled lamb meat.

It is standard practice in the meat processing industry that the abattoir has responsibility for the initial reduction in temperature and the second reduction in temperature takes place during transportation of the slaughtered lambs. Abattoirs rely on an efficient supply chain and time spent on the road is not only transportation but is in effect an essential part of the production line.

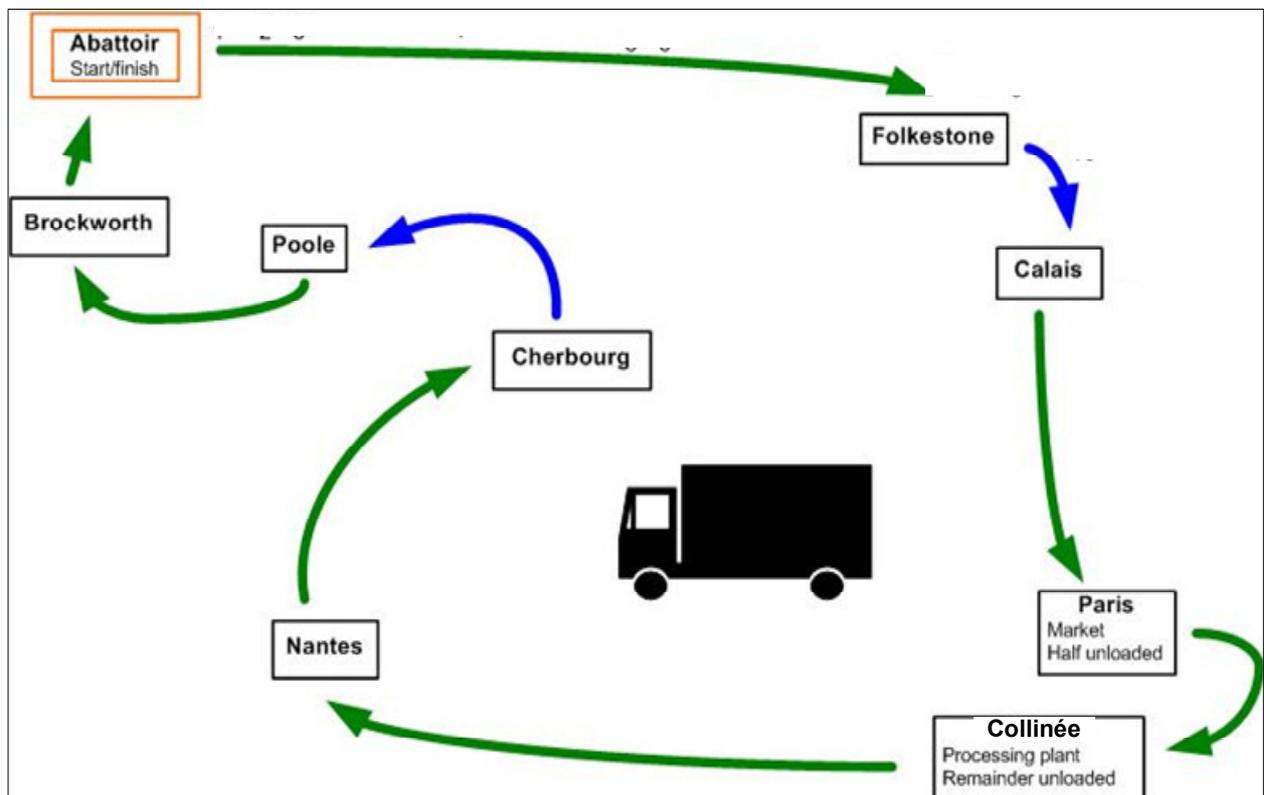


The journey to the port

Day 3 From 4am abattoir staff begin loading lambs into the refrigerated trailer, with eight lambs per hook and a total of 1,200 lambs. This is undertaken in two hours and loading is complete at 6am. This represents 100% of the weight capacity of the vehicle. The journey is mapped in Figure 8 below (the numbers refer to points along the journey).

Day 3 The lorry departs the abattoir at 6.25am. The driver has completed his daily rest period of 11 hours and has a standard daily driving limit of 9 hours ahead of him (or 10 hours twice a week: see Case Study 1 for more information about drivers' hours). The lorry travels north on the A49 to the A5/M54 and travels east to Jn 11 at the M6. At 7.35am the driver purchases diesel fuel at Wolverhampton and drives east to the M6 tollway.

Figure 8: An end-to-end journey of Scottish lamb to France: Diagram



Source: Department for Transport (2008)

Day 3 The lorry turns south onto the M6 toll where he maintains the maximum permitted speed of 90 km per hour. The toll by-passes Birmingham and costs £9.00 one way; it is preferred by this haulage company because morning peak hour traffic is building and the driver needs to ensure an early arrival at the port. (The M6 toll allows the driver to keep at an optimum speed and ensures journey reliability.)

Day 3 The lorry comes off the M6 toll at 8.10am and joins the M42 where the driver merges with heavy morning peak hour congestion and his speed is reduced from 90 to 76 km per hour and then to 24 kms per hour.

Day 3 The driver travels south on the M42 and turns south east onto the M40 where he continues in heavy congestion. At 8.50am, due to the traffic congestion, he breaks for 1.25 hours at a Motorway stop near Jn 12 on the M40. This is taken only 2.5 hours after commencing the journey when drivers' hours allow the driver a continuous driving period of 4.5 hours; however, by taking his break during peak hour he expects to have a clear run to the port with less traffic and no further rest stops.

Day 3 The journey resumes at 10.05am after the peak traffic period has ended. The lorry keeps a speed of around 90 km per hour and arrives at Folkestone at 1.05pm and proceeds through the Channel Tunnel checks. The haulage company has a choice between the Channel Tunnel and ro-ro ferry services and in this case has chosen to use the Tunnel. Slaughtered lambs exist in chilled temperatures for only 12 days before they begin to deteriorate (unless they are frozen or vacuum packed) therefore the haulage company's clients at the Paris markets and meat processing plants, who will on-sell the meat throughout Europe, require the lambs 24-48 hours after death.

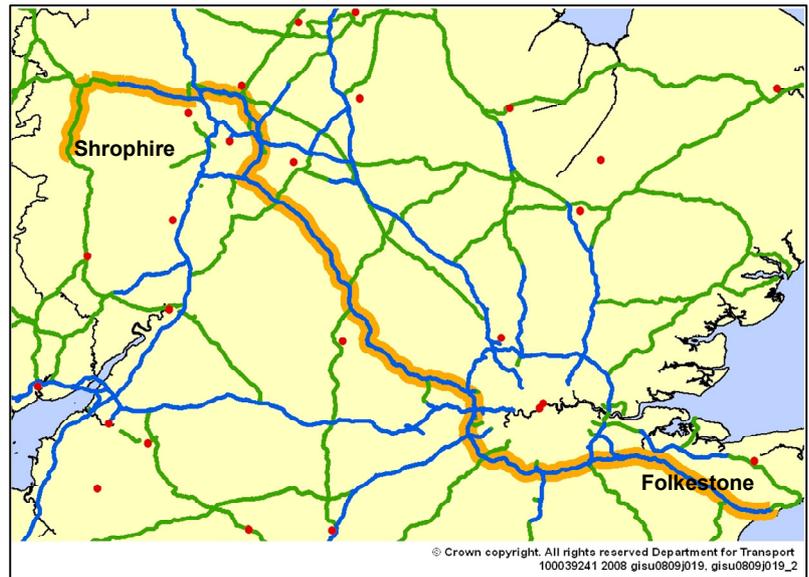


Image: copyright © Eurotunnel.

The Channel Tunnel

- The Channel Tunnel is an alternative and complementary mode of cross-Channel transport for both passengers and freight. It extends 50 kms from Folkestone in Kent to Coquelles, Calais.
- Channel Tunnel freight consists of vehicles travelling on the Eurotunnel Shuttle (90%) and through-train freight services (10%). Total freight traffic through the Channel Tunnel accounts for about 4% of UK trade.
- In 2007, 1.4 million freight vehicles and 2.2 million passenger vehicles (including cars and coaches) used the shuttle service through the Channel Tunnel (Eurostar press releases 2007-08).



Arrival at the port

Day 3 The Channel Tunnel Terminal is off the M20. By arriving at the terminal in the early afternoon, the driver avoids longer queues that are expected from 3pm each weekday.



On this day there is a strike in France that is impacting upon the Dover ferry service and Operation Stack will be implemented by the Kent County Police from 4pm. This would have impacted upon the driver should he have arrived later as Channel Tunnel and Dover-bound lorry queues may merge on the M20 after Junction 12 (where traffic leaves the M20 for the Channel Tunnel). Even without the strike, the average queuing times are dependent on time of day, weather conditions, events in France and operational difficulties.

Operation Stack

Kent Police have responsibility for implementing Operation Stack. Once the decision has been made to use Operation Stack, Kent Police use their own emergency powers to close the M20. Channel-bound lorries are parked on the M20 coast bound carriageway between J11-12 (Phase 1), while other traffic is diverted along the A20 via J11. When full, the coast bound carriageway between Ashford and Maidstone is also closed for lorry parking (Phase 2). Between 2003 and mid 2008, Operation Stack has been implemented 43 times (14 times Phase 2) for an average of 18 hours per operation. The main reasons are adverse weather conditions, industrial action in France and port congestion. Much has been done to reduce waiting times during Operation Stack, with the trial of automated movable barriers by the Kent Police and the Kent County Council has proposed additional lorry parking in the vicinity.

Surface access at Dover

The case study does not use Dover. Nonetheless, Dover is the principal gateway for ro-ro services in the UK and we have included key information about surface access for freight users into and through Dover.

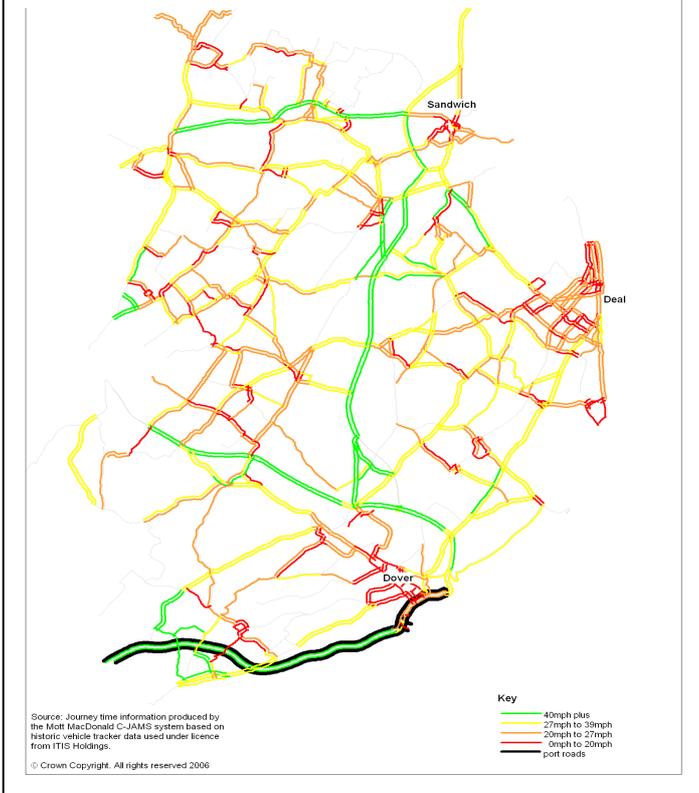
Dover experiences the slowest average lorry speeds in its town centre. The black lines in Figure 9 indicate the lorry route to the Port of Dover which bypasses the town centre. The average lorry speed is at 40 mph or over until the last mile to the port gates, where average speeds are reduced to 20 to 27 mph average. In contrast, roads in central Dover have average speeds of under 20 mph.

Figures 10 and 11 summarise the results of a Departmental analysis of congestion around ports using data taken from lorries equipped with Global Positioning System (GPS) devices. The purpose of the analysis was to test the theory that the road systems supporting port areas are more congested than similar roads on the network. If this was the case then average speeds on port roads should be slower than on roads not carrying port traffic, and slower inbound (due to queuing) than outbound. The results for port roads generally, **shows that there is little or no evidence to suggest that ports are particularly congested.**

This analysis looks at roads in the same area with similar characteristics (road class, speed limit and number of carriageways) to the port roads. The variant road speeds in Figures 10 and 11 are, in part, a product of the nature of the roads being looked at. The port roads of both Dover and Teesport are partly dual carriageway and hence likely to have faster speeds than Southampton or Liverpool, or roads near the town centre (source: Statistics Roads, DfT 2006).



Figure 9: Average lorry speeds (mph) in Dover



Source: Statistics Roads, DfT (2006)

Figure 10: Average lorry speeds (mph): port road and similar road comparison

Port	Average lorry speed (mph)	
	Port roads	Similar roads
Dover	37	41
Felixstowe	31	29
Hull	29	25
Liverpool	21	22
Teesport	33	39
Tilbury	42	46
Southampton	22	27
Bristol	36	25

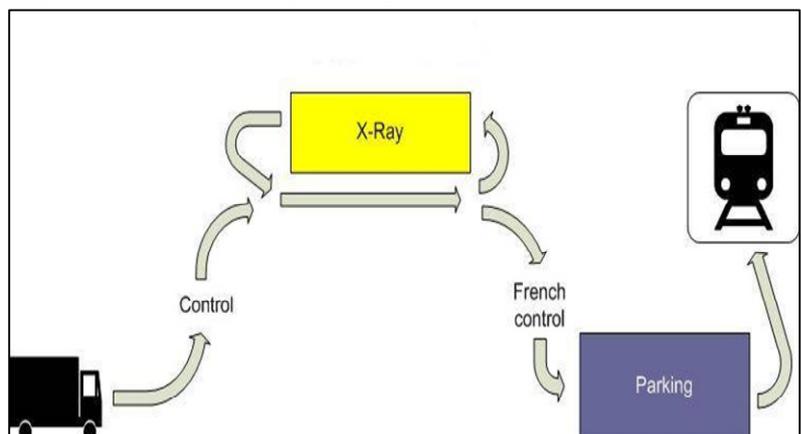
Figure 11: Average lorry speed (mph): inbound and outbound comparison by port: 2006

Port	Average lorry speed (mph)	
	Inbound	Outbound
Dover	36	37
Felixstowe	32	33
Hull	29	30
Liverpool	21	20
Teesport	35	31
Tilbury	44	40
Southampton	24	23
Bristol	35	36

Source: Statistics Roads, DfT (2006)

Day 3 The lorry arrives at Folkestone at 1.05pm and proceeds immediately to the Channel Tunnel checks at the terminal: the lorry has an e-ticket and is booked to use the service on this day. The check point constitutes a control point (conducted by Kent County Police and VOSA), an x-ray security checkpoint and French customs. **VOSA conducts enforcement checks for compliance with drivers' hours rules and vehicle road worthiness (both UK and foreign vehicles) to ensure that drivers and their vehicles are safe.** Vehicle selection at each of these checkpoints is random (with an average selection rate of vehicles going through x-ray being about one in two); if a vehicle is not selected for any checks the process can take 5-10 minutes, if it is selected for all three it can take 30 minutes (Figure 12). The lorry is not selected for any of the checks, and passes through all controls at 1.15pm.

Figure 12: The journey through the Channel Tunnel checks



Source: Department for Transport (2008)

The lorry is driven into a parking bay where the driver waits for a train to be available. **The service rate is generally four trains an hour.**

Day 3 The driver waits 19 minutes and at 1.34pm proceeds 700 metres down a ramp onto the train. Once the vehicle is in position, the driver is bussed with the other drivers to the amenity carriage at the front of the train. One train has capacity for 56 artics.



Through the Tunnel

Day 3 The Eurotunnel freight shuttle train from Folkestone departs at 2.05pm and travels a distance of 50.4 kms (38 kms of which is under the English Channel) and arrives at the French terminal at 2.46pm. The driver's time spent in the shuttle is non-driving time, but will contribute to his daily working hours. Eurotunnel schedules shuttle trains 24 hours a day, but the frequency of trains varies depending on external circumstances. The journey time of the train is 35 minutes from terminal to terminal.

Day 3 At the Coquelles terminal at Calais the drivers are bussed back to their vehicles and at 3.06pm (UK time) the lorry drives off the shuttle and onto the French motorway network towards Paris. It took the driver two hours to proceed through the Channel Tunnel from his entry into Folkestone to accessing the motorway at Coquelles. The journey can take up to four hours depending on road congestion, works, and operational practices.

The day of the week can have an impact on journey times (see *Key facts about ro-ro*) with more tonnage passing through the port Mondays and Tuesdays. For these reasons, our road haulage stakeholders report that they plan for three hours to get through the Channel Tunnel, from initial queuing at Folkestone to departure from Coquelles, Calais.



Truck drivers entering the amenity carriage of a Truck Shuttle for the Channel Tunnel crossing. Image: copyright © Eurotunnel.

Stakeholders in the haulage industry tell us that the journey through the port takes longer after 3pm as congestion builds later in the afternoon. The message is that journey times vary widely, which impacts upon journey reliability and efficiency.

There can be up to 65 daily ferry departures from Dover. Ferry crossings are cheaper than the Shuttle but typically take longer due to their reliance on weather conditions, surface access congestion and industrial action. The larger numbers of lorries utilising the ferries also means that congestion levels at the ports are higher (for example, queuing and ro-ro times are increased by the higher number of vehicles per ship compared to the Channel Tunnel shuttle per journey).



The journey in France

Day 3 Once in Calais, the haulage company contacts another driver in Paris to prepare for an arrival at 7pm. This driver had finished a previous job earlier that day and has completed his daily rest period. The lorry travels directly to the Paris market at Rungis on the French tollway network and arrives on schedule at 7pm.

Once in Paris, the driver's working hours in this period have ended and he will rest at the market's depot where there are truckstop facilities. He has driven nearly 10 hours in this period, which is permissible twice a week. Meanwhile, 600 lambs are removed from the trailer for the Paris market and the trailer is decoupled and attached to another vehicle with the second driver. The first driver will undertake a new job between France and the UK once he has completed his rest break. Meanwhile the second driver departs at 8.30pm and travels 420 kms on the French motorway network (with a planned 45 minute break at a mid-point).



Rungis market, Paris. Courtesy of Rungis Marche International

Day 4 The lorry arrives at a meat processing plant in Collinée, Brittany, at 1.30am where the remaining lambs are unloaded. The lambs are processed, packaged and distributed to supermarkets and retailers throughout Europe within four days of their collection on the farm in Scotland. When unloading is completed the inside of the trailer is washed by the driver to ensure health requirements for food and meat transportation are satisfied. The driver also refuels and departs Collinée at 3.50am.

Day 4 The lorry travels by motorway to Nantes (in Western France) and arrives at a dairy plant at 7.10am where the driver takes his daily rest period sleeping in his cabin at the dairy plant. The lorry is stocked by warehouse staff with packaged yoghurt while the driver is asleep in the cabin and he commences his working day at 7.35pm. The lorry travels north to Cherbourg in Normandy where it arrives at the ferry terminal at 10.50pm.

The Cherbourg-Poole ferry service operates three times a day (9.30am, 6.30pm and 11.45pm) and the haulage company has planned the route to ensure that the driver has an hour to get through the port and be on the ferry. The Channel crossing takes two hours and 15 minutes and this period is also a rest break for the driver.

The return journey

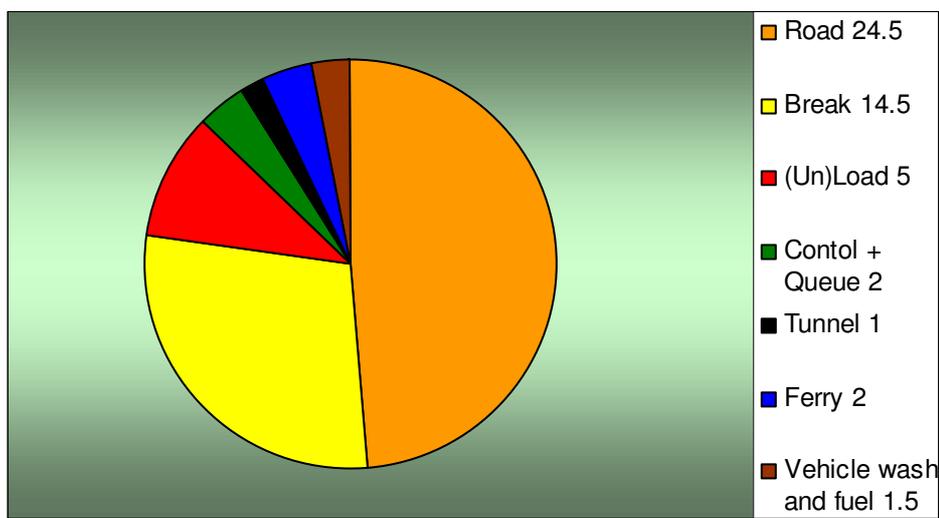
Day 5 At 2am the lorry departs Poole and travels 160 kms north to deliver the yoghurt at a distribution warehouse at Brockworth, Gloucestershire. The driver experiences no congestion at this hour and arrives early at the warehouse (at 4.10am for a 4.30 – 5am delivery window). The driver queues for 20 minutes before the yoghurt is unloaded and departs the warehouse empty at 5.35am.

Thus a refrigerated trailer has made three deliveries of lamb and yoghurt travelling over 1,400 kilometres over three days with two drivers; the trailer has crossed two countries and the Channel on road, train and ferry, and utilised its return journey to France to bring dairy produce into the UK.

Summary

The journey from the abattoir in Shropshire (not including the overnight loading of the lambs) to the final drop at the warehouse in Gloucester was a total of 50.5 hours. Figure 13 graphs the proportion of time spent on this journey and shows the time on the road, breaks, loading/ unloading, time on the ferry and tunnel and washing the vehicle. Of the 50.5 hour journey, 24.5 hours (48% of the time) was spent on the road. This is above average in comparison to the 2007 Food and Drink KPI benchmarking report that found food vehicles were on the road 30% of the time (see Case Study 4; however the KPI survey was over a 24 hour period where it would be expected to have more off-road time). The increased productivity is likely to be due to the utilisation of different drivers and vehicles in a swap operation to transport the refrigerated trailer, the timing of the lorry's arrival at Dover/Folkestone, the absence of major congestion at the gateways and fine weather on Day 5. By comparison, the trailer spent just 9% of its time crossing the English Channel (inclusive of the Channel Tunnel, the ferry, queuing and control).

Figure 13: The end-to-end journey of a refrigerated trailer from Shropshire to Gloucestershire, via France: hours



Source: Department for Transport (2008)

The impacts of international haulage

The Haulage Industry Task Group was a joint task group formed between HM Treasury, the Department for Transport and key haulage industry bodies to build a better understanding of the issues raised in the 2005 Burns Inquiry into fuel prices, freight taxes and foreign competition.

The Task Group found that trading conditions in the haulage sector have become progressively tougher over the past two decades, and fierce competition is the key driver of falling margins. Haulage has become an increasingly 'commoditised' market, with a significant number of operators working at reduced rates in order to win or retain business.

Over the past decade, foreign hauliers have significantly increased their share of international freight movements to/from the UK - this reflects shifts in manufacturing trade and exchange rate movements. We have seen an increase in foreign hauliers bringing in loads from abroad or taking loads from the UK overseas, and foreign operators picking up and dropping off the same load within the UK ("cabotage").

UK and foreign vehicle prohibition comparison

Recognising the growth in foreign vehicles entering the UK, primarily by ferry and the Channel Tunnel, the Department has compared UK and foreign vehicle compliance rates between June 2006 and May 2007. There were over 100 traffic encounters with vehicles registered in 24 countries and Figure 14 compares UK vehicles against vehicles from nine countries with the highest roadworthiness encounters. The compliance indicators are prohibition rates of drivers' hours, overloading, and vehicle and trailer roadworthiness.

Figure 14: UK and foreign vehicle prohibition comparison: Top Ten Roadworthiness encounters: June 2006-May 2007

	Roadworthiness Encounters	Traffic Encounters	Hours Prohibition Rate	Overloading Prohibition rate	Goods Vehicles Roadworthiness Prohibition Rates	Roadworthiness Prohibition
UK	53,056	47,054	10.3%	23.5%	33.9%	41.0%
Eire	5,779	5,910	34.7%	33.8%	35.1%	62.0%
Poland	4,442	3,626	15.9%	23.3%	50.1%	45.5%
Netherlands	3,562	3,821	22.0%	28.7%	31.3%	42.8%
Spain	2,982	2,245	14.6%	40.4%	37.0%	62.8%
France	1,790	1,419	7.9%	31.2%	31.4%	46.3%
Germany	1,755	1,845	30.1%	26.5%	43.7%	28.2%
Italy	1,607	1,218	25.9%	18.9%	43.4%	54.0%
Belgium	1,286	1,070	17.4%	27.9%	42.1%	50.8%
Hungary	898	929	23.6%	17.2%	48.2%	41.4%

Source: Department for Transport (2007)

The results indicate that foreign vehicles have a higher than average prohibition rate than UK vehicles across all compliance indicators. In response, the UK Government has introduced a number of measures, and are planning to introduce a system of graduated fixed penalties and deposits in 2009, whereby offenders who do not have a UK address suitable for later proceedings will be required to pay a deposit equivalent to the fixed penalty.

Stakeholder views

Listening to industry stakeholders in the context of the end-to-end journey we have heard the following challenges from end users of ro-ro facilities:

Bottlenecks at the ports and rail terminals are generally measured in the industry by queuing time at the ports and terminals. They are caused by how infrastructure is utilised, such as the queues for the ferries blending with the queues for the Channel Tunnel on the M20 in Kent. Congestion is also a challenge on UK motorways and road hauliers plan congestion into schedules to ensure journey reliability. Bottlenecks at ro-ro ports are further exacerbated by ferry cancellations or limited services caused by inclement weather and industrial action.

Fuel prices The volatility in the oil market is the primary concern for hire reward road hauliers who are running small businesses and not in strong bargaining positions to renegotiate haulage prices. Road transport profit margins are slim and increases in fuel prices *that are not foreseen* impact directly onto these margins. While France has cheaper fuel, the volatility is widespread across all of Europe.

Driver shortages are not currently widespread across all sectors in the road haulage industry, or indeed in all refrigerated trailer sectors; but it is a growing challenge for haulage companies crossing the English Channel by ro-ro because the long distances involve night shifts and weekend work.

Foreign vehicle prohibition rates The growth of foreign hauliers undertaking international journeys (and with it cabotage), is a concern for domestic road hauliers due to the above average rate of non-compliance of drivers' hours and roadworthiness of foreign vehicles.

Road hauliers responding to volatile lamb prices The price of lamb is volatile and depends on many factors, including world competition, weather and outbreaks of foot and mouth disease – any events that impact upon the levels of supply and demand. This has a direct impact on road hauliers who need to be flexible in their response to increased (and decreased) demand. This is best illustrated by the sheep farmer who waits for Easter when the price for lamb is high before selling his stock on the market.

Summary

- The time of day that the infrastructure is being used is critical for performance and reliability.
- Drivers' hours and breaks can be used strategically to avoid the heaviest congestion in circumstances where the schedule permits.
- The transportation of meat becomes part of the processing line because the refrigeration is factored into the meat's cooling requirements. This places critical import on the lorry arriving at the abattoir on time and impacts upon the refrigerated trailer's emissions outputs. It also places a higher degree of maintenance and upkeep on the hauliers.
- Hauliers rely on a balance between Channel Tunnel and ferries and multiple crossing points between France and England dependent on where they are loading and unloading.

