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DRYPORT

Rosyth – Zeebrugge Ferry Service: Business Impacts – Data Refresh

Final Report November 2011

European Union The European Regional Development Fund

The Interreg IVB North Sea Region Programme

SEStran South East of Scotland Transport Partnership

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1 Introduction

1.1 Introduction

SEStran is a key partner in the Food Port Project, which is an Interreg IVB North Sea Region project, funded by the European Regional Development Fund (ERDF). The project aims to optimise and coordinate logistic chains in the North Sea region within the food sector, and to promote the development of multi-modal and transnational corridors and efficient and effective logistic solutions in the food supply chain in particular. In parallel SEStran is also a key partner in Dryport, another European-funded project, which is examining the critical role that dryports can play in maximising the capacity and efficiency of seaports, while also shifting traffic away from the road network on to other modes.

In this context, the Rosyth – Zeebrugge ferry service is an important route as it provides the only direct link between Scotland and the industrial heartlands of Northern Europe. Currently DFDS operate a freight-only service with three sailings per week in each direction.

1.2 Research objectives and scope of work

SEStran commissioned The Spyria Partnership to undertake research regarding the Rosyth – Zeebrugge ferry service, with a view to identifying actions that could enhance the long term viability of the service, such as proposals for marketing, identification of potential funding sources or operational enhancements.

The research involved engaging with representatives from the haulage sector, particularly users of the ferry service at present, but also non-users. A workshop was also held with a sample of hauliers, as well as a discussion with the current operator, DFDS. The purpose of this stakeholder engagement was to obtain an understanding of current issues perceived and experienced by the haulage industry and shippers, as well as information on usage and benefits associated with the service.

This Report presents:

- A picture of current usage of the ferry service, based on data that were available at the time of writing;
- A summary of the critical factors that were raised during stakeholder engagement;
- An overview of export and import sectors in terms of current performance, and the potential for increasing volumes from these sectors; and

- Identification of actions that could enhance the long term viability of the service, such as proposals for marketing, identification of potential funding sources or suggested operational enhancements.

1.3 Structure of this report

The remainder of this report is structured as follows:

- Chapter 2: Rosyth – Zeebrugge Ferry Service;
- Chapter 3: Haulage industry perspectives;
- Chapter 4: Business sector perspectives; and
- Chapter 5: Conclusions.

2 Rosyth – Zeebrugge Ferry Service

2.1 Introduction

This section provides an overview of the ferry service between Rosyth and Zeebrugge in Belgium, covering the following aspects:

- What impact the ferry service has on Scotland's economy;
- Chronological history of the Rosyth – Zeebrugge ferry service; and
- Current service provision.

2.2 Impact of a new connection between Scotland and Europe

When Superfast, a Greek ferry operator, commenced a daily ferry service between Rosyth and Zeebrugge in 2002 it was regarded as a major boost for the Scottish economy. The original objectives of the ferry service were to:

- Increase the number of tourists and tourist spend in Scotland;
- Improve the performance and competitiveness of Scottish importers and exporters through improved logistics; and
- Improve the image of Scotland as a more 'connected' location.

In 2006 Scottish Enterprise, the national agency for economic development in Scotland, commissioned consultants to undertake an evaluation of the Rosyth – Zeebrugge ferry service, with the aim of ascertaining the value of the service in terms of what economic gain Scotland had experienced as a result of its introduction.

The evaluation comprised a large work programme of primary data research with businesses, tourists and residents to investigate if, and how, the ferry had affected transport and travel choices, and whether such changes had resulted in real economic impacts.

From this study, hauliers stated that they used the ferry service for a number of reasons:

- Perceived the service as an effective option rather than routeing through English ports;
- Better utilisation of equipment and drivers;
- Proximity to origin / destination; and
- 'Patriotic' reasons prompted some hauliers to use the service.

In the survey undertaken as part of the 2006 study, over half of hauliers stated that they had made a cost saving per unit load or through

reduced mileage; but over time some believed that the cost saving had been eroded.

None of the hauliers saw potential to enter new markets as a result of the ferry service – but that it had opened up opportunities for logistics operations, located in Scotland and Zeebrugge.

Importers and exporters were not that interested in the routes taken, as they did not make the decisions regarding transportation routes. However, businesses in some sectors did care about the mode of transport in relation to security, delivery and arrival times in Europe, as well as reliability and price.

Principal markets comprised Germany, France, Italy, Spain and the Benelux countries. Approximately 80% of outbound volumes were destined for the Benelux countries, Germany and France.

The survey highlighted that logistics providers tended to use a mixture of routes, which varied depending on the origin and destination of goods and the nature of timing requirements.

The evaluation concluded that benefit arising from a reduction in road miles was in the order of £3.8 million per annum.

The findings also highlighted the difficulty in providing a service that meets everyone's needs simultaneously, and that the main challenge is one of market size – given the size of Scotland it is difficult to sustain such a range of services. If Scotland could extend its hinterland area for distribution to the northern half of England and to Ireland, such an expanded market could assist in making more services viable and sustainable.

It is the case that many of the findings from this piece of work in 2006 remain valid today:

- There is an environmental benefit associated with removing lorry miles from the road network;
- The size of the market in Scotland is a key issue;
- Logistics providers continue to use a mixture of routes;
- It is difficult to operate a service that suits everybody;
- Importers and exporters in the main are still remote from decisions regarding mode and route; and
- There is a cost advantage but some feel that the margins are being eroded at present.

2.3 Chronological history of the Rosyth – Zeebrugge ferry service

Since the service commenced operation in 2002, there have been several major changes regarding the operator, vessel and timetable.

Following the cessation of the service by Superfast in 2008 and subsequent period of no service provision, the commencement of the Norfolkline operation in 2009 was seen as a boost for Scotland.

Since the acquisition of Norfolkline by DFDS, there have been a number of further changes including a move to a freight-only service, a reduction in the number of vessels serving the route and reduction in the number of sailings.

These operational changes, while often implemented with a view to maintaining viability (e.g. a ferry operator is a commercial entity and must take into consideration network optimisation, market demand and operating costs), present a picture of uncertainty for the business community, which in turn impacts on the attractiveness of the service. Businesses need to have confidence that the service will exist in the longer, even medium term.

Table 1 provides a summary of the chronological history of the ferry service.

Table 1 Chronological history of the Rosyth – Zeebrugge ferry service

Year	Timetable	No. vessels	Type of cargo	Operator
May 2002	6 sailings per week in each direction	2	Freight / Passengers	Superfast
Nov 2005	3 sailings per week in each direction	1	Freight / passengers	Superfast
Sep 2008	Cessation of service			
May 2009	3 sailings per week in each direction	1	Freight / Passengers	Norfolkline
Jul 2010	3 sailings per week in each direction	1	Freight / Passengers	DFDS acquires Norfolkline
Jan 2011	4 sailings per week in each direction	2	Freight only	DFDS
May 2011	3 sailings per week in each direction	1	Freight only	DFDS

2.4 Current service provision

DFDS currently operate a freight-only service with one vessel, the Tor Finlandia, which has a capacity of 1,666 lane metres, equivalent to 120 trailers. There are three sailings per week in each direction. Table 2 presents the current timetable.

Table 2 Current timetable

Depart Rosyth	Arrive Zeebrugge
Tue 8pm	Wed 8pm
Fri 4am	Sat 4am
Sun 12pm	Mon 12pm
Depart Zeebrugge	**Arrive Rosyth**
Mon 6pm	Tue 4pm
Wed 12am	Thu 10pm
Sat 10am	Sun 8am

It is clear from both the previous analysis undertaken and current research, that shippers and hauliers prefer a higher frequency of services, as this gives them greater flexibility in terms of shipping loads and utilising vehicles efficiently. In this respect a daily service would be much more beneficial and attractive.

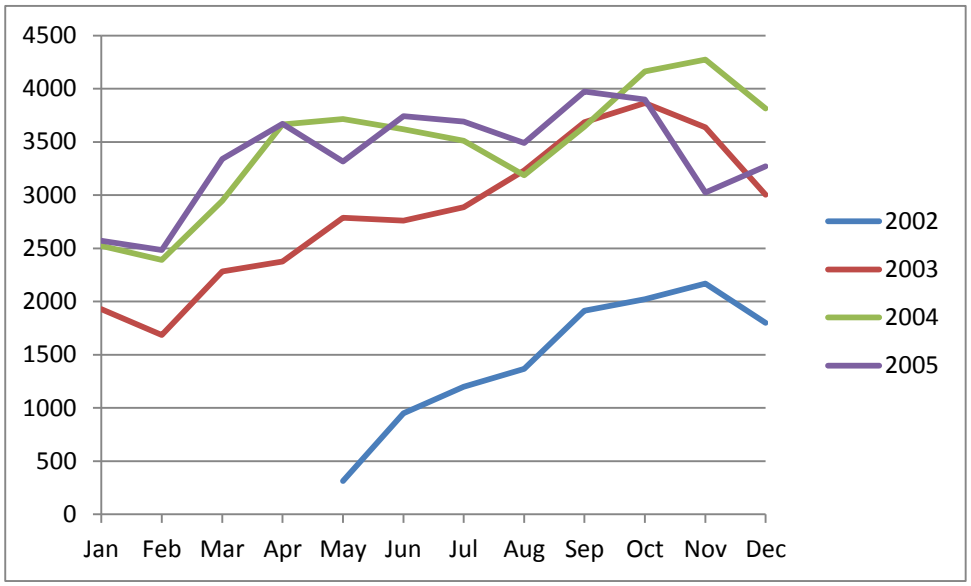
The duration of the crossing is currently 23 hours. This is significantly longer than with previous vessels (e.g. Superfast at one time made the crossing in 18 hours), and is primarily due to the vessel in operation and the present high cost of fuel – slower steaming is a common activity employed by shipping lines and ferry operators in the last few years to reduce operating costs.

2.5 Volumes and key customers

When the service first commenced there was consistent growth during the first two years of operation, with the number of freight units increasing by 20% between 2003 and 2004. The ferry service carried in the order of 40,000 units (both directions) in 2004 and 2005 respectively. Figure 1 presents the approximate number of freight units carried per month between 2002 and 2005[1].

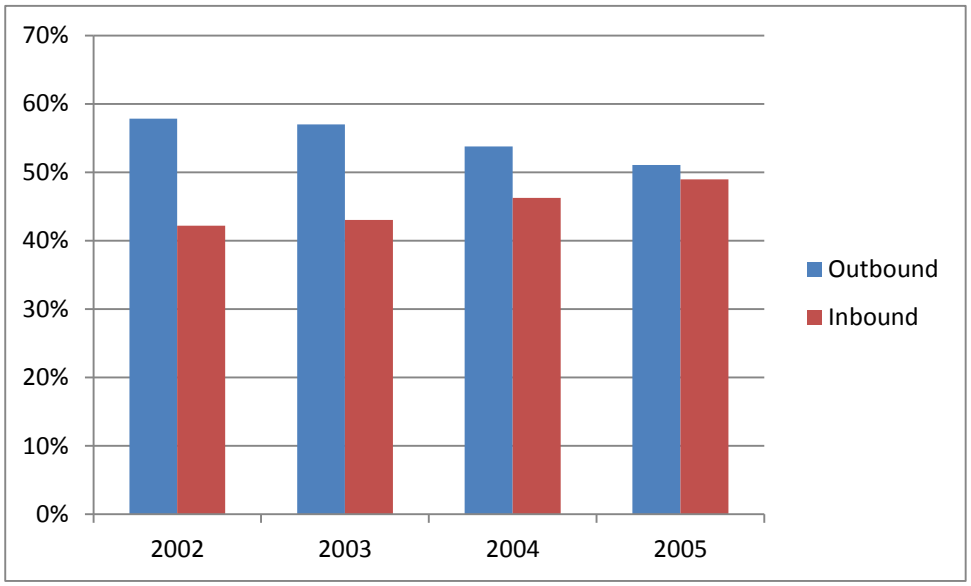
[1] Rosyth – Zeebrugge Ferry Service Economic Evaluation, 2006.

Figure 1 Rosyth – Zeebrugge freight volumes 2002 – 2005



While outbound movements dominated in 2002, 2003 and 2004 when compared with inbound volumes, it is clear that there was gradual convergence between the two over the first few years of operation, as shown in Figure 2.

Figure 2 Convergence of inbound and outbound freight movements 2002 – 2005



Today, there is continued balance between outbound and inbound unaccompanied cargo volumes in particular. Trade car business is an obvious exception where volumes are all inbound.

Table 3[2] presents a summary of accompanied and unaccompanied freight units transported on the service in 2010. Excluding trade vehicle imports, around 14,500 units were transported in either direction.

Table 3 Freight units (accompanied and unaccompanied) 2010

Unit type	Inbound	Outbound
Accompanied	609	1,453
Trade vehicles	16,770	300
Unaccompanied	14,030	12,654
Total	31,409	14,407

Approximately 65 – 70% of units are containerised (dry short-sea boxes and bulk tank containers), transported on mafi trailers. The majority of units are unaccompanied, which is mainly due to the fact that the vessel currently deployed is not overly suited to the driver accompanied market.

Regarding empty units, these tend to be dedicated containers (e.g. food and chemical grade tanks or reefers), and there is almost no re-positioning taking place currently.

The main products being carried are whisky, other alcohol, paper, foodstuffs, chemicals, tyres, carpets and steel; which is not dissimilar to the range of goods carried on the service in previous years.

The main constraints associated with the service from the perspective of the ferry operator are:

- Increasing fuel costs;
- Lack of direct Scottish imports; and
- Limited customer base.

2.6 Funding support

The Rosyth – Zeebrugge ferry service has received funding in the past, from European and Scottish Government sources. When the service first commenced, European funding was obtained for the construction of the necessary port-side infrastructure, while Waterborne Freight Grant (WFG) and Freight Facilities Grant (FFG) support was subsequently received through the Scottish Government.

It is likely that only limited funding will be available in the short term from Scottish Government sources due to state aid restrictions and the current economic climate.

[2] DFDS.

While there is regular dialogue between the operator and Government agencies with a view to monitoring performance and identifying issues, there may be opportunities for DFDS to work closer with agencies such as Scottish Enterprise, Scottish Development International (SDI), Scottish Council for Development and Industry (SCDI), as well as other industry organisations and local authorities to gain a better understanding of local manufacturing / export sectors, through participation in research and marketing activities undertaken and funded by these organisations.

There are potential opportunities for financial support in the short to medium term from a number of European sources, particularly TEN-T funding and other EU projects, such as the Food Port Project.

New guidelines have been drafted with regard to the trans-European transport network (TEN-T), which include a revised definition of the TEN-T network. The TEN-T network aims to achieve *the interconnection and interoperability between national transport networks, allowing seamless and sustainable passenger and freight movements within the Union as well as adequate accessibility for all regions of the Union*. Within the revised core network maritime ports are now included as key nodes: Forth is one of these nodes, which suggests that there might be opportunities to apply for TEN-T funding in the coming years.

There are a number of ERDF funded research projects, which concentrate on logistics and the flows of goods. For example, The Food Port Project focusses on increasing collaboration in the food and drink sector, with a view to creating sustainable 'food corridors' across northern Europe. There may be opportunities for the Rosyth – Zeebrugge service to benefit from research and marketing activities undertaken as part of such research projects.

3 Haulage industry perspectives

3.1 Introduction

This section sets out the findings of stakeholder engagement with the haulage industry in Scotland. Two levels of engagement took place, with a view to:

- Understanding current issues facing the haulage industry and shippers moving freight between Scotland and continental Europe;
- Obtaining a picture of current freight usage on the Rosyth – Zeebrugge ferry service; and
- Identifying if more volumes could be shipped on the ferry service and any potential actions that might support this.

A workshop was held with a sample of Road Haulage Association (RHA) members, and in-depth interviews were conducted with a small sample of major Scottish hauliers.

3.2 Workshop with RHA members

Key points raised during the workshop were as follows:

- There is positive support for the ferry service within the haulage community;
- The service is seen as competitive with alternative routes via English ports;
- In terms of frequency, a daily service would be ideal for the Scottish economy;
- Four of the six sailings are well suited to business – the other two are not suitable for getting goods to market at the start of the week;
- Attracting additional westbound traffic could, in the view of some hauliers, encourage higher volumes of eastbound traffic out of Rosyth: the potential for collaboration between Scottish and continental European hauliers would increase, as operators on both sides seek efficient utilisation of equipment;
- 24 hour access to the terminals in Zeebrugge and Rosyth would have a positive impact on volumes; and
- Additional marketing of the service and its benefits is required in order to attract more volumes.

3.3 Survey of major Scottish hauliers

A sample of 11 major Scottish hauliers was identified including users and non-users of the Rosyth – Zeebrugge ferry service. Nine

companies took part in the survey. A detailed questionnaire (attached at Appendix A) provided the basis for an in-depth discussion with each of these businesses to ascertain:

- Their usage / non-usage of the ferry service;
- What are the primary reasons governing logistics / route decisions; and
- Views on the Rosyth – Zeebrugge ferry service in terms of benefits, issues and potential actions.

The following paragraphs present a summary of key findings from this element of the stakeholder engagement.

3.4 Volumes, routes and journey times

The respondents provided information about volumes shipped between Scotland and Europe. Based on this information, the respondents collectively transport circa 16,000 units per annum from Scotland to destinations across Europe, using a variety of modes and routes.

Around 80% of these units are accompanied, with the remainder being unaccompanied.

Goods are originating mainly in North East and Central Scotland, while the main destinations in Europe are Holland, Germany, France and Belgium, with smaller volumes of goods also being shipped to Italy, Spain and Greece. Holland features as a main destination and hub, with two respondents owning depots in Holland where goods for onward distribution are stored.

In terms of routes used to ship goods destined for Holland, Germany and France, a range of ferry routes are used, such as:

- Hull to Rotterdam;
- Newcastle to Amsterdam; and
- Dover to Calais / Channel Tunnel.

In contrast, respondents shipping unaccompanied units tend to use either the Rosyth – Zeebrugge or Teesport – Zeebrugge routes.

Table 4 provides a summary of goods transported, indicating the main destinations, goods and primary routes used.

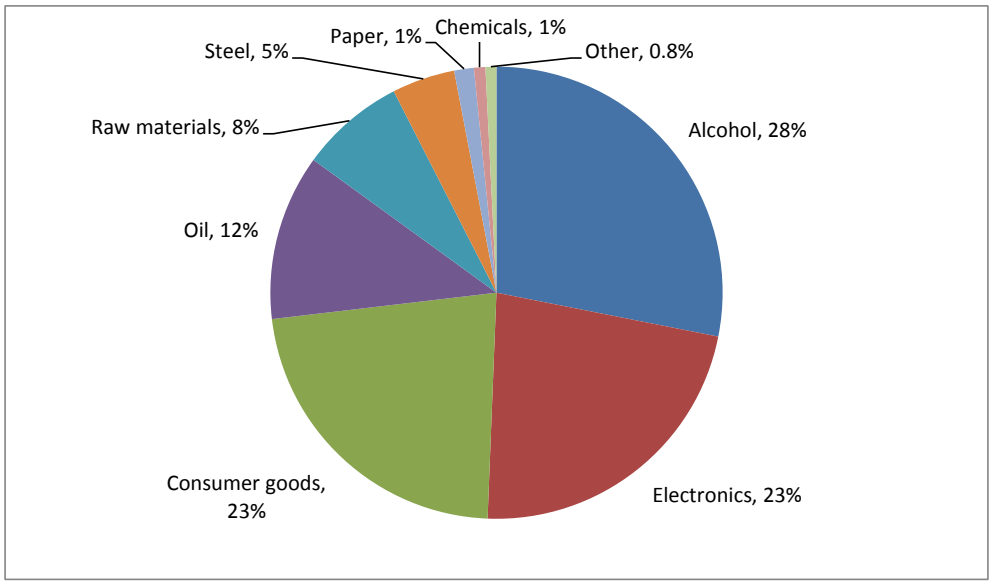
Table 4 Volumes transported by survey respondents (all routes)

Unit type	Main destinations	Main products	Main routes used
Accompanied (80%)	Holland, Germany, France	Alcohol, oil, electronics, consumer goods, agricultural products, raw materials	Hull – Rotterdam, Newcastle –Amsterdam, Channel routes
Unaccompanied (20%)	Belgium, Holland, France, Germany	Steel, oil, alcohol, paper, chemicals	Rosyth – Zeebrugge, Teesport – Zeebrugge

With regard to goods shipped, it is clear that alcohol (likely that the primary product is whisky) is a key export, comprising 28% of goods shipped by survey respondents. Respondents also stated other products such as 'consumer goods' and 'raw materials', though it was not clear what actual goods these categories covered. Shipments relating to the oil and gas industry accounted for 12%. Steel, paper and chemical products together account for 7% of goods shipped from Scotland by respondents to the survey.

While respondents indicated what goods were shipped, the actual volume per type of good was not necessarily indicated. From the data provided, it is possible to make an assessment regarding the overall split between different goods, as is shown in Figure 3.

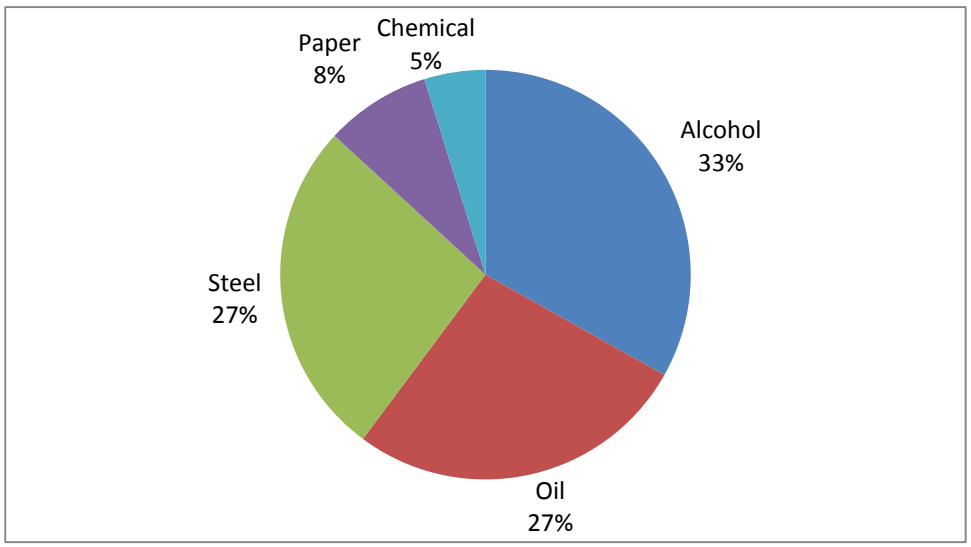
Figure 3 Cargo type by volume (transported via all routes)



Around 17% of volumes transported by respondents are shipped on the Rosyth – Zeebrugge service currently, which is circa 3,000 units. This is mostly unaccompanied trailers destined for Belgium, France,

Holland and Germany. The main cargoes shipped via the Rosyth – Zeebrugge ferry service by respondents comprise high value products, such as alcohol (e.g. whisky), oil industry products and steel, as well as chemicals and paper.

Figure 4 Cargo type by volume (Rosyth – Zeebrugge route only)



3.5 Decision-making and contractual arrangements

All respondents indicated that they have responsibility in the main for making decisions about what mode and route are used to ship goods. There are occasions where customers do wish to influence mode and route, which can be based on carbon footprint savings, for example.

3.6 Benefits of the ferry service

Respondents were asked to say what they felt were the main benefits of the Rosyth – Zeebrugge ferry service. The main benefit of the Rosyth – Zeebrugge ferry service expressed was **location** of Rosyth as it was located centrally serving Scotland or company depots. Location was the main reason cited for influencing use of the service also.

One respondent indicated that Rosyth is convenient if there are issues with equipment such as defective trailers (e.g. if a problem happens en route to an English port, it is less easy to deal with).

Other benefits cited included the ability to spend less on fuel and that shipping via Rosyth involved 'less hassle' than using other routes.

The perceived benefits of the ferry service today are not dissimilar to those expressed in the previous survey. As reported in the 2006 Economic Evaluation, some hauliers stated that they used the ferry service for the following reasons:

- More cost effective option than routeing through English ports (although some respondents to this survey also felt that at that time rate increases were eroding any cost advantage);
- Better utilisation of equipment and drivers; and
- Proximity to origin / destination.

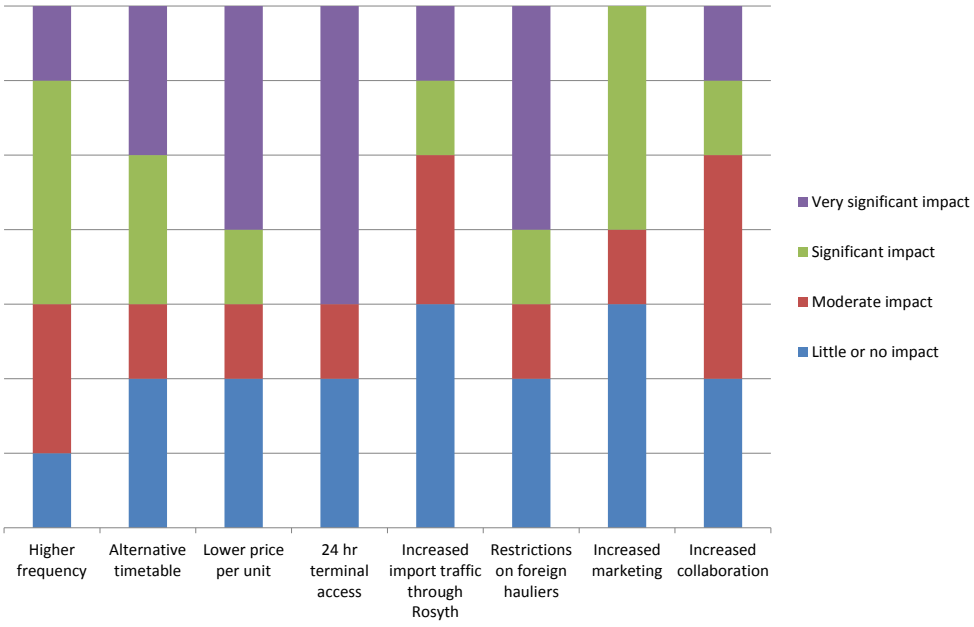
3.7 Factors influencing route decision-making

Survey respondents were asked to rate[3] a number of factors in terms of what kind of impact each would have on their decision to use the Rosyth – Zeebrugge ferry service.

In terms of having a 'very significant' impact, 24 hour terminal access was seen as the factor most likely to influence decision-making, closely followed by a lower price per unit and restrictions on foreign hauliers operating in Scotland.

Factors that have a 'significant' or 'very significant' impact comprise a higher frequency and alternative timetable. Figure 5 presents a summary of results.

Figure 5: Factors likely to influence usage of the Rosyth – Zeebrugge ferry service



[3] On a scale of 1 to 5 where 1 = No impact and 5 = Very significant impact.

24 hour terminal access

Some respondents felt strongly that 24 hour access to the terminals at Rosyth and Zeebrugge would have a positive impact on usage of the service and on volumes.

In Zeebrugge, the terminal can only be accessed from 6am. It would be more convenient if the terminal could be accessed at an earlier time in order to enable earlier arrival at onward destinations. It would also assist in the ability to obtain backloads for the return trip.

Price

Price is a key factor for most businesses, particularly the manufacturing and haulage sectors. The increasing cost of fuel and raw materials is having a major impact on the sector at present.

With regard to the cost of shipping goods, everybody would like to see a reduction in cost, as one would expect.

Hauliers who are not currently using the Rosyth – Zeebrugge service would consider it, if there was a major cost advantage.

Some hauliers believe that it is price competitive with alternative routes (e.g. a road leg from Scotland to an English port and alternative ferry route, via Teesport, for example).

While the price difference is possibly small per unit, some respondents indicated that this price difference is in tandem with greater operational efficiency in terms of equipment positioning, particularly for unaccompanied trailers.

Several comments were made regarding price and fuel surcharge increases, particularly during 2011, which are regarded as substantial. The fuel surcharge in particular is eroding the price differential: and this could impact on volumes, particularly if there were to be further increases. Some respondents indicated that their customers were not happy with these price increases.

Foreign hauliers operating in Scotland

While this is regarded as a potential issue by several respondents it is also recognised that foreign hauliers are operating in a free market and that there is possibly little that can be done without political intervention.

Foreign hauliers transport a significant amount of goods to and from Scotland. For export loads, foreign hauliers are able to offer competitive prices, which is attractive to the Scottish manufacturing sector. One of the reasons for this is the ability to run on cheaper fuel prices, and self-drive from England to Scotland for return loads to Europe. Greater collaboration between hauliers on both sides of the North Sea is needed to counter competition from this market in order to maximise the efficiency of unaccompanied trailers.

Frequency and timetable

Numerous respondents indicated that a daily service would be the most beneficial in terms of frequency, although it was recognised that this is not necessarily viable, given costs associated with running a ferry service and the fact that a substantially greater volume of goods would be required in order to make it viable. On the other hand, one respondent felt that the current timetable was acceptable.

Frequency is a key issue that directly impacts on decisions regarding choice of ferry route, and non-users and some users may opt for other ferry routes out of England (particularly Teesport – Zeebrugge and Hull – Zeebrugge), given the higher frequency of services available. The following points were made by respondents:

- The timetable does not enable arrival and departure times required by customers to be met (e.g. depending on the destination, some respondents indicated that it is not possible to collect on day one and deliver on day two within the current timetable);
- Where goods need to be delivered early morning this is not possible within the current timetable; and
- Where goods need to be shipped at short notice, or where there is a surge in demand that requires shipping immediately, a route with greater frequency may be preferential.

Some comments were made on the transit time of the service, that it is too slow and has a major impact on the attractiveness of the route.

Regarding the current timetable, evidence gathered during the current survey of hauliers indicates that while most of the sailings suit business requirements (or businesses have adapted to fit sailing times) there is an issue with timings at the beginning of the week, particularly the Sunday departure from Rosyth. The arrival time in Zeebrugge at 12pm on Monday is too late for Monday deliveries further afield than Zeebrugge / Belgium.

On the return leg, departing on Monday evening from Zeebrugge, there is limited time to make deliveries and obtain a re-load in order to be back at the quay for 4pm, for the departure at 6pm.

At the same time, some companies have tailored their businesses and influenced their customer's business to an extent to suit the timings of the ferry service.

Operator marketing

There were a number of comments that the Rosyth – Zeebrugge ferry service could be marketed and promoted more effectively, with a view to indicating the benefits of the service over other ferry routes and promoting the service to non-users.

While a number of respondents felt that there could be more focus on marketing the service, it is worth noting that there were positive

comments about the current operator: namely that DFDS communicates sufficiently in terms of keeping the customer up to date, and that staff personnel based at Rosyth are helpful.

Vessel

No real issues were expressed with regard to the vessel, only that it would be beneficial if containers could be double-stacked.

3.8 Funding and support

There were limited comments regarding funding and support. One question raised was whether there was any justification for funding on the basis of distance from Scotland to the industrial centre of Europe.

3.9 Key factors inhibiting usage of the ferry service

When asked what the main blockers are preventing usage of the service, four key actors were highlighted:

- Imbalance of trade: the majority of inbound goods to Scotland come from the Midlands as the Scottish market is only a small percentage of the total UK market. This is viewed as a challenging issue;
- Timetable in terms of frequency and departure / arrival times;
- Transit time is too slow; and
- Price.

It is interesting to note that perceived constraints stated in the haulier survey in 2006 are not dissimilar to those highlighted today: fuel prices, trade imbalance and freight rates were the three primary perceived constraints, while some respondents perceived the ferry schedule to be inadequate, and some perceived the presence of foreign hauliers to be a constraint. Other issues were raised in 2006 that did not feature in responses to the present survey, such as 'driver shortage' and 'lack of storage' at Rosyth.

3.10 What actions are required to grow volumes

In terms of actions needed, there was a range of responses:

- Better promotion / marketing and re-educating public perceptions about the service and its benefits;
- Networking and collaboration with a view to growing volumes;
- Adapting the timetable and transit times;
- Consideration of alternative routes; and
- Increasing opening hours at Rosyth and Zeebrugge port terminals.

4 Business sector perspectives

4.1 Introduction

This section sets out perspectives from the business sectors that may be importing or exporting goods via the Rosyth – Zeebrugge ferry service. The following paragraphs consider:

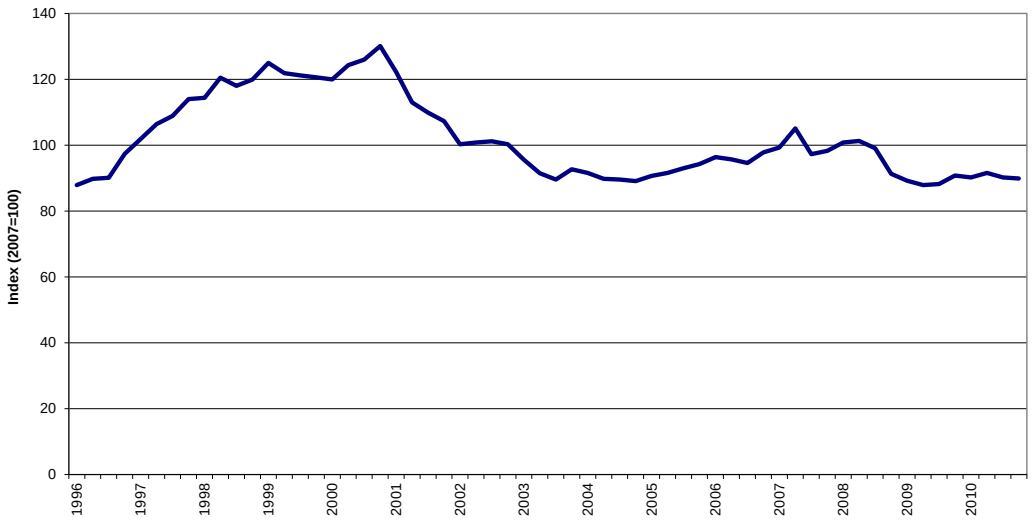
- Key Scottish export / import sectors; and
- Business sector impacts and decision-making with regard to the Rosyth – Zeebrugge ferry service.

4.2 Overview of Scottish manufacturing sectors

In terms of exports from Scotland, the main source is from the manufacturing sector. Traditional manufacturing in Scotland, as elsewhere in Europe, has been in general decline, due to key factors such as on-going productivity improvements, outsourcing of activities to overseas plants and the general loss of international competitiveness coupled with increasing costs.

Figure 6 shows growth in Scottish manufactured export sales (in constant prices) over the last 15 years, indicating a sharp decline between 2000 and 2004, some recovery in 2007 and then a further decline in 2009 at the time of the last recession.

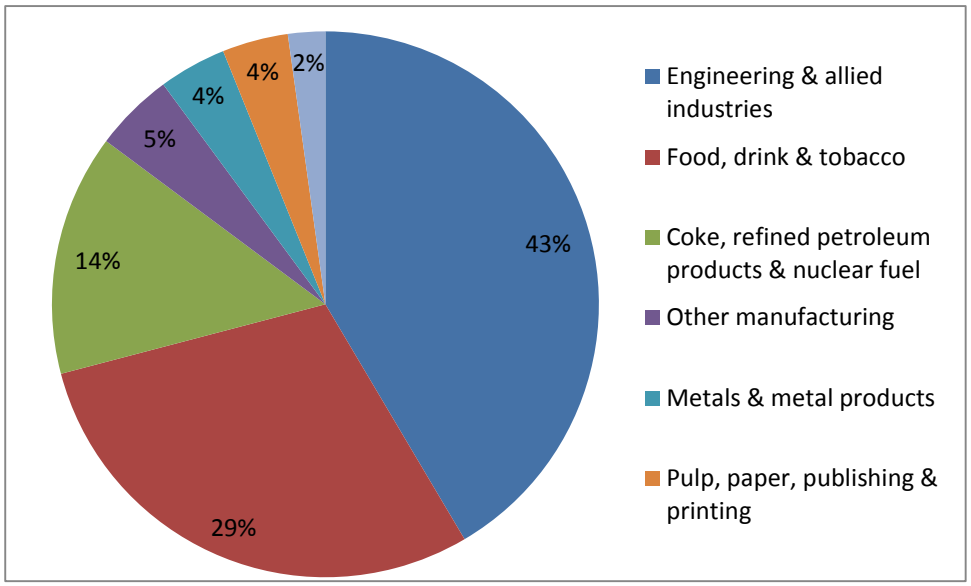
Figure 6 Index of Scottish Manufactured Exports [4]



[4] Index of Manufactured Exports, which is published quarterly providing information on the change in the growth of overseas exports sales (in constant prices) for each quarter from 2002 Q1.

In 2010 the most prominent industry in the manufacturing sector was 'engineering & allied industries', accounting for 43% of total manufactured exports, closely followed by 'food, drink and tobacco' which accounted for 29% of total manufacturing exports (See Figure 7).

Figure 7 Scottish manufactured export sales by sector, 2010[5]



In terms of recent manufactured sales, the latest Index of Manufactured Exports (Q1 2011) indicated an increase of 2.2% when compared with the previous four quarters. Over the year, growth was experienced in all sectors apart from 'engineering and allied industries', which declined by 2.2% over the previous year. The largest contributors to annual growth were:

- Metals and metal products (+20.7%);
- Food and drink (+2.2%);
- Other manufacturing (+13.1%); and
- Pulp, paper, publishing and printing (+11.6%).

There is continued pressure on the manufacturing sector given the current economic situation globally and the rising cost of raw materials and fuel. According to the Office for National Statistics (ONS), the input costs (e.g. predominantly materials and fuel) for manufacturing companies has risen markedly during 2011, 14.2%[6] in January to 18.3% in July. Latest figures show a slight improvement with input prices falling by 1.9% in August to 16.2% compared with July[7].

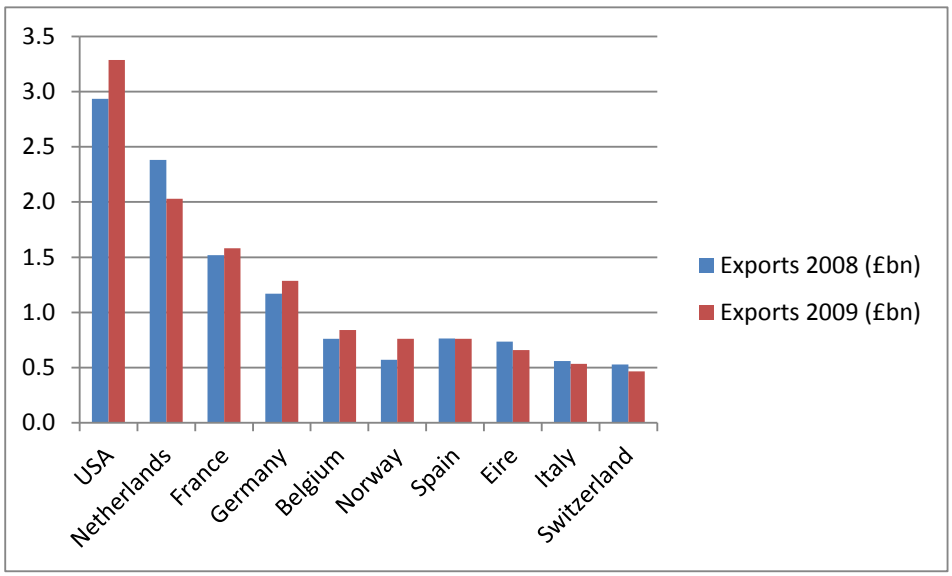
Notwithstanding this, there is still significant pressure on the manufacturing sector in terms of input costs – particularly when there

[5] Index of Manufactured Exports.
[6] Not seasonally adjusted.
[7] ONS Producer Prices Indices, which monitor the price changes of goods bought and sold by UK manufacturers: input prices are the prices of materials and fuel bought.

is little room for passing on such costs to customers: prices charged to customers increased by only 0.1% between July and August this year.

Around 45% by value of all international exports from Scotland are bound for Europe. It is estimated that in 2009 Scottish international exports reached £21.1 billion and that exports to the value of £9.6 billion were exported to destinations within the European Union[8].

Figure 8 Scottish exports by destination country



The Netherlands is the primary European destination, receiving £2.0 billion in exports from Scotland in 2009, closely followed by France (£1.6 billion) and Germany (£1.3 billion). While Scotland exports slightly less to Belgium (£0.8 billion) it is evident that the Benelux countries are the primary European trading partners of Scotland.

The top five exporting industries in 2009 were food & beverages (£3.6 billion), chemicals (£2.7 billion), business services (£2.7 billion), electrical and instrument engineering (£2.0 billion) and the mechanical engineering sector (£1.5 billion). Together these industries accounted for well over half of total exports from Scotland.

Food and drink

The food and drink manufacturing sector is a key contributor to the economy of Scotland. Gross Value Added (GVA) increased by 16% between 2008 and 2009, reaching almost £4 billion and accounting for 31% of Scotland's total GVA. Total turnover (or sales) for the whole sector stood at £11.9 billion – of this £9.2 billion was attributable to food and drink manufacturing[9].

The figures indicate that the industry reached an all-time high despite the economic downturn in 2009, which reflects the strength and value

[8] Global Connections Survey 2009. No data were available for 2010 or 2011.
[9] Scottish Annual Business Statistics, published 31 August 2011.

of this key sector. The food and drink sector has set itself targets for the coming years, namely to achieve £12.5 billion turnover by 2017.

A key export from Scotland is whisky, and recent reports indicate that exports rose by 22% in the first six months of 2011, with strong growth in emerging markets. Total global shipments of whisky rose to £1.8 billion in this period, compared with £1.47 billion for the same period in 2010[10]. France, Germany and Spain are in the top ten export markets for Scotch whisky.

Scotland is a major supplier of fresh and frozen seafood and farmed salmon to Europe and further afield. Whitefish, shellfish, salmon and pelagic fish (mackerel and herring) are all landed and processed in Scotland and transported to market in trailers, containers and bulk reefer vessels in the case of large consignments of pelagic fish. In the past some volumes of seafood were shipped on the Rosyth – Zeebrugge ferry service.

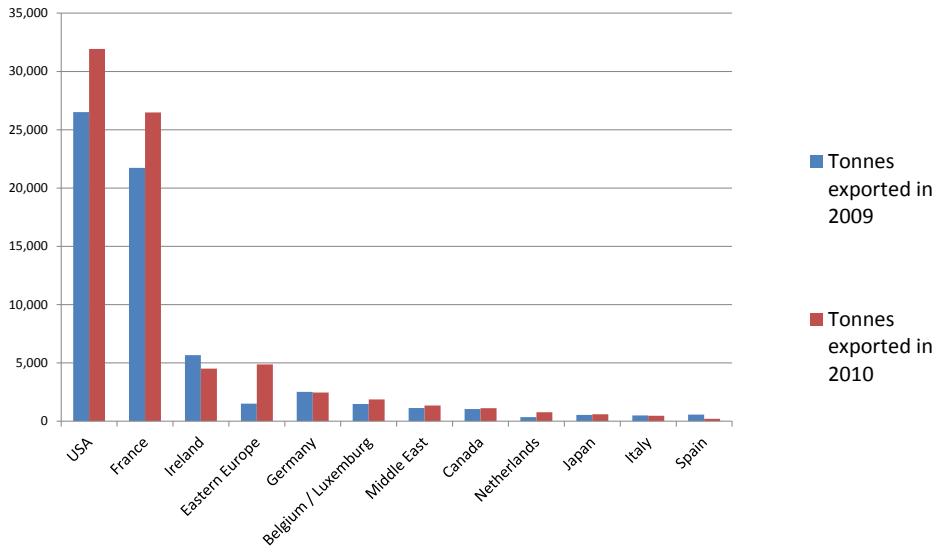
Scotland is the largest producer of farmed Atlantic salmon in the European Union and the third largest globally, behind Norway and Chile. Scottish farmed salmon is showing record export growth, with latest figures indicating a 37% increase for the first four months of 2011 when compared with the same period in 2010[11].

It is expected to be confirmed soon that Scottish salmon production increased to over 150,000 tonnes in 2010, which would be a third successive annual increase.

Key importers are the USA, France, Belgium, the Netherlands, Germany, Italy, Spain, Ireland, Eastern Europe and Japan. Figure 9 indicates tonnage of fresh salmon exported from the UK in 2009 and 2010 – it can be assumed that a significant proportion is sourced from Scotland. It is clear that France is by far the main European importer, and that Eastern Europe is a growing market. There are also volumes destined for Germany, Belgium, the Netherlands and Luxembourg.

[10] Scotch Whisky Association.
[11] www.scotland.gov.uk

Figure 9 Fresh Salmon Exports from the UK



While the export market of fish is strong, no volumes are currently shipped on the Rosyth – Zeebrugge ferry service. For many exporters the main markets are in France and therefore routes such as Dover – Calais and the Channel Tunnel are regarded as preferable and perceived as cheaper.

Another key factor that influences the choice of route is customer delivery time. The arrival time into Zeebrugge is regarded as too late by many in the sector, and that an earlier arrival time would enable deliveries to be made to customers across the Benelux countries and even further afield, while also making the service more attractive.

Other manufacturing sectors

The manufacture of **chemical** products remains a key industry in Scotland, and is one of the top five export industries currently. Chemical products continue to be shipped via the Rosyth – Zeebrugge ferry service, mostly in unaccompanied tankers.

As reported in the Index of Manufacturing Exports (IME) the **wood, paper, publishing and printing** sector increased 11.6% on an annual basis up to the end of Q1 2011. While there has been contraction within the paper and pulp manufacturing industry in Scotland (for example, notable plant closures at BPB Paperboard and Arjo Williams), the prospects for the sector as a whole remain relatively positive; the *Roots for Future Growth strategy for Forest and Timber Industries* sets out ambitious targets for growth in the sector, both in terms of timber production and market share.

There has been a recent significant increase in the value of **metal and metal products**, with significant growth in exports on an annual basis up to end of Q1 2011 (20.7%).

Renewable energy, oil and gas

The **wave and tidal sectors** offer limited potential to the Rosyth – Zeebrugge ferry services at this time as they are still at the development stage in their lifecycle, and there are no established supply chains let alone logistics patterns as of yet. That said, the growth of the marine renewables industry up to 2020 and beyond, accompanied with the growth of offshore wind, will lead to significant new infrastructure and supply chain demand in Scotland and to / from Europe.

By way of example as to the potential demand for particularly links to / from Europe from the sector, Denmark already exports around 99% of its wind energy manufacturing capacity, worth an annual £2.4 billion to their balance of trade[12].

Potential volumes could be generated from the onshore and offshore wind sector in the future, particularly import cargoes bound for fabrication and manufacturing businesses based in Fife operating in the sector, such as Burntisland Fabrications and the Fife Energy Park at Methil.

The equipment and construction supply chains for offshore windfarms are still at the development stage. Although there are a number of players who are making good progress, there is still a lack of capacity and competition overall, particularly in the production of key components such as large bearings, electrical equipment, export cables, and the vessels required to install them. The Department of Energy and Climate Change reports that investment is also needed in manufacturing sites and port infrastructure to facilitate deployment, stimulate the associated supply chain, and lowers costs[13].

The Scottish Government has also introduced a £70 million National Renewables Infrastructure Fund, designed to strengthen port and manufacturing facilities and supply chain provision for manufacturing offshore wind turbines and related components. The Fund will leverage significant private sector investment over the next four years and help deliver an estimated 28,000 jobs and £7.1 billion in value to Scotland's economy over the coming decade.

In terms of the mainstream **oil and gas** industry, the service offers one transport corridor for the oil and gas industry in the North East of Scotland: from research it is believed that Rotterdam and the Netherlands constitute some of the primary origins and destinations for this traffic.

Imports into Scotland

One of the main issues that affect the viability of the Rosyth – Zeebrugge ferry service is the way in which the majority of imports to

[12] Marine Energy Road Map for Scotland.
[13] Department of Energy and Climate Change: UK Renewable Energy Map, July 2011. http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/renewable-energy/2167-uk-renewable-energy-roadmap.pdf

Scotland are transported. A high proportion of imports are delivered to ports in England and un-stuffed and re-distributed up to Scotland via road or rail. This practice is due mostly to consumer demand and population density, but is probably also historical.

A knock-on effect of this trend is the impact on utilisation of equipment, and in turn decisions about route choice: Scottish hauliers can easily find backloads from England to Scotland, so considering alternative ferry routes into Europe can be beneficial, particularly for the accompanied market.

In the past, there was a significant focus on trying to attract the major supermarket chains to use the ferry, importing directly into Scotland. A number of retailers did express an interest though no plans came to fruition.

A large volume of fresh produce is imported into Scotland on a daily basis from the Netherlands, France, Italy and Spain. These consignments are dependent on being able to access their particular markets in the early morning.

Amazon has a fulfilment centre located in Dunfermline, several miles from the port of Rosyth (the centre covers circa one million square feet). The internet contributed around £100 billion to the UK economy in 2010 and it is estimated that the UK is a global leader in e-commerce, with the highest online spending per capita in the world[14]. Given the current boom in internet shopping, and the proximity of Amazon to the port, there is potential to grow volumes in this area.

There continues to be a steady volume of trade cars imported into Scotland via the Rosyth – Zeebrugge ferry service: it is still the case that the majority of car imports come into the UK at other ports and are transported to Scotland via road or rail.

The previous evaluation concluded that attracting more volumes directly into Scotland would be beneficial, namely 'un-stuffing' and distribution not only across Scotland but also northern England and potentially Ireland – it would enable better utilisation of equipment in Scotland.

4.3 Business sector decision-making and impacts

It is evident from this research and also previous analysis that the logistics companies tend to make decisions regarding route choice and mode. There are some exceptions to this, particularly where major companies seek to reduce environmental impact.

Manufacturing companies interviewed during the economic evaluation study indicated that they were in the main remote from decisions regarding routes and modes. Those companies who do have some say in their logistics decisions did not view the ferry service as a major element of the supply chain. Indeed, some of the companies

[14] Boston Consulting Group index.

interviewed did not even know whether or not their goods were transported on the ferry service.

4.4 Conclusions

Despite the economic recession, it is clear that the Scottish manufacturing sector remains strong, with sustained exports to Europe. There is definite potential for higher volumes to be transported on the Rosyth – Zeebrugge ferry service, particularly from the food and drink sector.

While the renewables sector does not offer potential for new volumes in the short term, there will be opportunities in the longer term, particularly with the proximity of key sites, such as Methil and Burntisland. At the same time, the oil and gas sector remains a key source of volume for this service.

Increasing the level of import volumes is key to the future sustainability of the Rosyth – Zeebrugge ferry service, as well as improving efficiency for Scottish businesses and hauliers in terms of equipment utilisation. Targeted discussions with key importers would assist in ascertaining if any volumes could be achieved, such as Amazon and the major supermarket chains.

5 Conclusions

5.1 Introduction

From the research undertaken a number of key areas have been identified where there may be potential to take action and enhance the future sustainability of the Rosyth – Zeebrugge ferry service.

While not all aspects could easily be implemented, the following provides a useful start point for the current operator DFDS and supporting Government bodies to develop into a concrete list of actions.

5.2 Key areas for consideration

Public confirmation of continued operation

There is regular dialogue between DFDS and Scotland's Government agencies, with a view to monitoring performance of the route and identifying any issues. While DFDS are clearly committed to the operation, some form of 'public' statement reaffirming the benefits of the service as well as on-going commitment to the short and medium term future of the service may be beneficial, offering considerable comfort to existing and prospective users of the service. It is recommended that DFDS, together with the Scottish Government consider whether it is possible to make such a statement on a regular basis.

24 hour access to Rosyth and Zeebrugge terminals

This was seen as having a positive impact on usage of the service, as it could offer greater flexibility to users.

Consideration of alternative routes

One or two respondents in the survey commented that the main industrial heartland of Europe is not in Belgium, and that routes into Holland are preferable. At the same time DFDS is expanding its business, with the recent acquisition of a lease for the RoRo terminal in Gothenburg. A high level SWOT analysis of potential routes is recommended to ascertain whether there are any viable options worth further consideration.

Revised timetable and quicker transit time

While the ideal is daily services with faster transit times, these are not feasible. The research indicated that some of the existing sailings are not optimal in terms of arrival time. Given that there is one vessel in operation, there is unlikely to be any real possibility to change the timetable in any significant way. However, it is recommended that DFDS consider whether or not it is possible to optimise the timetable further – or whether there are other actions that could be implemented

to increase volumes on these legs – e.g. offering an attractive discount to users.

Marketing activities

Based on the analysis of business sectors and on comments received during the survey, there are a number of areas where marketing and research activities could be undertaken with a view to increasing volumes on the service. These areas are described in the following paragraphs.

Increased marketing with existing users: while many current users are satisfied with the level of engagement by DFDS, more intense dialogue could assist in sustaining and growing volumes with these existing users, giving them greater confidence in the future viability of the service and deepening the relationship between operator and customers. The operator could for example, monitor and publicise the price differential between the Rosyth – Zeebrugge service and competing routes, particularly at a time when fuel costs are rising and there are some perceptions that the price differential is being eroded.

Targeted marketing with hauliers, importers and exporters who do not presently use the service: there is a real need to target haulier non-users in particular, with a view to re-educating against perceptions, and demonstrating the benefits of using the Rosyth – Zeebrugge ferry service over other routes. A short to medium term action plan focussed on building relationships with non-users could be a beneficial tool in attracting more volumes.

With regard to importers and exporters, a number of initiatives could be developed with a view to targeted marketing at a sector level, covering retail, on-line retail, as well as sub sectors within the Scottish export community (e.g. food and drink, metals, chemicals, etc.).

Growing volumes

Research to better understand how goods are moving to market: there are many smaller companies across Scotland, which export goods all over the world – however, little information is known about how these companies actually move their goods. Indeed, there are many smaller companies who could export, but do not at present. Dedicated research into the (potential) exporting market in Scotland could assist in growing volumes on the service.

Network and collaboration: a key tool in generating volumes is bringing businesses together in order that they collaborate – and do business with each other. This collaboration can take place in a number of ways:

- Scottish hauliers + continental European hauliers;
- Importers / exporters + hauliers;
- Importers + exporters; and
- Exporters + exporters / importers + importers.

Greater collaboration between hauliers on each side of the water will lead to better efficiency and utilisation of equipment, particularly the unaccompanied trailer market, which is the key market for the Rosyth – Zeebrugge ferry service.

Differential pricing: given the current economic climate, it is unlikely that this could be a viable option. However, there could be an opportunity for DFDS to offer differential pricing with a view to attracting volumes on the sailings that are currently not popular.

Attracting financial support

It is likely that only limited funding will be available in the short term from Scottish Government sources due to state aid restrictions and the current economic climate. However, there are potential sources of assistance, whether that be financial or technical:

- On-going support from public sector agencies in Scotland, with a view to research, marketing and growing volumes;
- With the new TEN-T guidelines, there is now a real opportunity to apply for funding from the TEN-T programme; and
- Involvement with and support from ERDF research projects, such as The Food Port Project.

5.3 Summary of findings

In summary, there are a number of positive outcomes from this research:

- The Rosyth – Zeebrugge ferry service does offer efficiency and cost advantages over other alternative ferry services between the UK and continental Europe – as evidenced by current users;
- There is potential to grow volumes, through actively demonstrating the benefits of the service to non-users, increased marketing and promotional activities, and encouraging collaboration and networking within the business community;
- There are a number of potential actions that could have a positive impact on the longer term viability of the Rosyth – Zeebrugge ferry service, some of which can be implemented easily and cheaply; and
- With regard to financial assistance, there are concrete opportunities to draw upon the resources and activities currently underway as part of EU-funded projects, and to develop an application for TEN-T funding.

Appendix A – Questionnaire

Q1 **Name of company / contact and position**

Q2 **Location(s)**

- HQ
- Scotland
- Mainland Europe

Q3 **Describe the nature of your MAIN freight flows (inbound and outbound) between Scotland and mainland Europe:**

- Origin – destination
- Volume
- Type of good / product
- Type of unit
- Current journey route, mode, information on time, distance and cost if possible

Q4 **Have alternative modes / routes been used in the past – and what prompted any change in route decision making?**

Q5 **For the main flows of goods what kind of contractual arrangement is in place (e.g. what is the decision making process, etc.)?**

Q6 **Are there any plans in the next 12 – 24 months for new flows of goods, or for changes to existing flows?**

Q7 **What are the key factors that influence your choice of logistics / route (e.g. arrival windows, markets, etc)?**

Q8 **Do you collaborate with other hauliers, either in Scotland or in Europe [if yes, explain how]?**

Q9 **Regarding usage of the Rosyth – Zeebrugge (R-Z) ferry service, which of the following statements are true:**

- We have used the R-Z ferry service in the past
- We have never used the R-Z ferry service – **GO TO Q13**
- We are currently using the R-Z ferry service – **GO TO Q15**

YOU HAVE USED THE R-Z FERRY SERVICE IN THE PAST…

Q10 Describe how you used the R-Z ferry service in the past (e.g. nature of volumes)?

Q11 How are these volumes shipped today?

Q12 What are the MAIN reasons for not using the R-Z ferry service to ship these volumes now?

GO TO Q17

YOU HAVE NEVER USED THE R-Z FERRY SERVICE…

Q13 What are the main reasons as to why you have never considered the R-Z ferry service as an option for shipping volumes?

Q14 What factors or actions could be taken in order that you might consider the R-Z ferry service as a viable option?

GO TO Q17

YOU CURRENTLY USE THE R-Z FERRY SERVICE…

Q15 What is the nature of the volumes currently shipped on the service (e.g. OD, units, volumes, etc as per above)? *Note: may be answered previously*

Q16 What are the MAIN reasons for using the R-Z ferry service to ship these volumes?

Q17 What are the MAIN FACTORS that govern your choice of route (e.g. whether that be Rosyth or Teesport / Hull)?

Q18 What would you say are the key BENEFITS or POSITIVE ATTRIBUTES of the R-Z ferry service?

Q19 What are the main DISBENEFITS of the R-Z service that impact on your decision making with regard to using the service to ship volumes?

Q20 Which of the following factors would have a positive impact on your decision to using the R-Z ferry service (rate 1 to 5, 1 indicating the least significant impact, 5 the most significant impact)?

- Higher frequency of service
- Alternative timetable
- Lower price per unit
- 24 hour terminal access
- Increased westbound / import traffic through Rosyth
- Restrictions on foreign hauliers operating in Scotland
- Increased marketing by the ferry operator

- Increased cooperation and collaboration with hauliers and manufacturers in Europe

Q21 Can you provide your views on the following aspects:

- Frequency
- Timetable
- Ferry operator marketing and communication
- Price
- Vessel
- Port access
- Foreign hauliers operating in Scottish market
- Funding / financing and public / industry support for the R-Z service

Q22 Establishing additional volumes for the service is paramount to supporting its viability in the future: what are your views on where new volumes could be found?

Q23 What are the MAIN blockers preventing additional usage of the service?

Q24 What actions need to be taken in order to promote the service and grow volumes?